

Monkeybread FileMaker Plugin Documentation

Christian Schmitz

March 8, 2020

0.1 Introduction

This is the PDF version of the documentation for the FileMaker Plug-in from Monkeybread Software Germany.

0.2 Content

• 1 List of all topics	5
• 3 List of all functions	13
• 4 Functions for Mac OS X	223
• 5 Functions for Windows	415
• 6 Functions for Server	553
• 7 New in version 6.0	675
• 8 New in version 6.1	679
• 9 New in version 6.2	685
• 10 New in version 6.3	695
• 11 New in version 6.4	699
• 12 New in version 6.5	703
• 13 New in version 7.0	711
• 14 New in version 7.1	715
• 15 New in version 7.2	719
• 16 New in version 7.3	725
• 17 New in version 7.4	733
• 18 New in version 7.5	739
• 19 New in version 8.0	743
• 20 New in version 8.1	747
• 21 New in version 8.2	749
• 22 New in version 8.3	755
• 23 New in version 8.4	759
• 24 New in version 8.5	763
• 25 New in version 9.0	769

<i>0.2. CONTENT</i>	3
• 26 New in version 9.1	773
• 27 New in version 9.2	777
• 28 New in version 9.3	783
• 29 New in version 9.4	785
• 30 New in version 9.5	789
• 31 New in version 10.0	791
• 32 New in version 10.1	797

Chapter 1

List of topics

• 33 Addressbook	799
• 34 App	909
• 35 AppleScript	925
• 36 Archive	943
• 37 Audit	955
• 38 AVAsset	987
• 39 AVExport	1027
• 40 AVPlayer	1057
• 41 AVRecorder	1089
• 42 Backdrop	1135
• 43 Barcode	1137
• 44 BinaryFile	1171
• 45 BlueThermProbe	1201
• 46 Bonjour	1223
• 47 Calendar	1229
• 48 Certificates	1345
• 49 CGImageSource	1383
• 50 CLGeocoder	1415
• 51 Clipboard	1435

• 52 ColorPanel	1461
• 53 Compression	1473
• 54 Contacts	1527
• 55 Container	1605
• 56 ContinuityCamera	1661
• 57 CoreImage	1667
• 58 CoreLocation	1669
• 59 CoreML	1709
• 60 CUPS	1733
• 61 CURL	1761
• 62 Debugger	2333
• 63 Dialog	2339
• 64 DialogModifications	2393
• 65 Dictionary	2397
• 66 DirectoryWatcher	2437
• 67 DNSLookup	2451
• 68 DocumentCameraScan	2463
• 69 DragDrop	2479
• 70 DynaPDF	2549
• 71 EIDSDK	3367
• 72 EmailParser	3403
• 73 Encryption	3445
• 74 EnvironmentVariables	3485
• 75 EventMonitor	3493
• 76 Events	3505
• 77 FileDialog	3709
• 78 Files	3771
• 79 FM	3883
• 80 FMSQL	4065

• 81 Folders	4169
• 82 Font	4193
• 83 FSEvents	4205
• 84 GameKit	4239
• 85 GraphicsMagick	4337
• 86 Hash	4785
• 87 HealthKit	4817
• 88 HotKey	4831
• 89 IKPictureTaker	4859
• 90 IKSlideShow	4891
• 91 ImageCapture	4921
• 92 ImagePicker	5033
• 93 ImageView	5091
• 94 iOSApp	5113
• 95 iOSDevice	5133
• 96 iOSKeyboard	5147
• 97 Java	5157
• 98 JavaScript	5181
• 99 JavaScriptMac	5215
• 100 JSON	5231
• 101 Keychain	5357
• 102 LDAP	5363
• 103 List	5417
• 104 ListDialog	5563
• 105 MailComposer	5609
• 106 MapView	5637
• 107 Markdown	5749
• 108 Math	5753
• 109 Matrix	5779

• 110 MatrixDongle	5823
• 111 MediaLibraryBrowser	5847
• 112 Menu	5853
• 113 Menubar	5993
• 114 MessageComposer	6005
• 115 MetaDataQuery	6031
• 117 NetworkInterfaces	6089
• 118 Notification	6095
• 119 NSEventFilter	6103
• 120 OCR	6109
• 121 Path	6135
• 122 PDFKit	6153
• 123 PHP	6247
• 124 Plugin	6261
• 125 PortMidi	6341
• 126 Preferences	6373
• 127 PrintDialog	6383
• 128 Printer	6449
• 129 Process	6477
• 130 ProgressDialog	6493
• 131 Proj	6545
• 134 QuickLook	6615
• 135 RegEx	6643
• 136 Registry	6679
• 137 RemoteControl	6693
• 138 RichText	6713
• 139 RunTask	6755
• 140 Schedule	6785
• 141 Screenshot	6837

• 142 ScriptWorkspace	6849
• 143 SendMail	6875
• 144 SerialPort	6931
• 145 ServerSocket	6983
• 146 ServiceProvider	6993
• 147 SharedMemory	6997
• 148 Shell	7001
• 149 Sign	7061
• 150 SmartCard	7087
• 151 SNMP	7123
• 152 Social	7127
• 153 SocialComposer	7159
• 154 Socket	7185
• 155 Speech	7275
• 156 SQL	7291
• 157 SSH	7479
• 158 StoreKit	7537
• 159 SyntaxColoring	7553
• 160 System	7647
• 161 SystemInfo	7651
• 162 SystemUIMode	7719
• 163 TAPI	7725
• 164 Text	7767
• 165 TextView	7877
• 166 Time	7925
• 167 Toolbar	7937
• 168 TouchBar	7959
• 169 Twain	7987
• 170 UNNotification	8065

• 171 Updater	8129
• 172 URLScheme	8141
• 173 USB	8147
• 174 UserNotification	8157
• 175 Utility	8229
• 176 UUID	8247
• 177 Validate	8255
• 178 Variables	8259
• 179 Vision	8273
• 180 WebView	8281
• 181 WIA	8493
• 182 Window	8531
• 183 WindowsScript	8675
• 184 WindowsUserNotification	8711
• 185 WindowTransition	8733
• 186 WinSendMail	8739
• 187 WMFP	8767
• 188 WMIQuery	8801
• 189 WordFile	8813
• 190 XL	8849
• 191 XML	9253

Chapter 2

Statistics

Last change: 07.03.20

Number of functions: 6136

Number of components: 159

Number of examples inside reference: 4385

Number of examples databases:602

Chapter 3

List of all functions

• 38.1 AVAsset.AvailableMetadataFormats	987
• 38.2 AVAsset.Duration	989
• 38.3 AVAsset.Framerate	990
• 38.4 AVAsset.HasProtectedContent	991
• 38.5 AVAsset.Image	992
• 38.6 AVAsset.ImageActualTime	994
• 38.7 AVAsset.IsComposable	995
• 38.8 AVAsset.IsExportable	996
• 38.9 AVAsset.IsPlayable	997
• 38.10 AVAsset.IsReadable	998
• 38.11 AVAsset.Loaded	999
• 38.12 AVAsset.Lyrics	1000
• 38.13 AVAsset.Metadata	1001
• 38.14 AVAsset.MetadataKeys	1002
• 38.15 AVAsset.NaturalHeight	1004
• 38.16 AVAsset.NaturalWidth	1005
• 38.17 AVAsset.OpenContainer	1006
• 38.18 AVAsset.OpenFile	1008
• 38.19 AVAsset.OpenURL	1010

• 38.20 AVAsset.PreferredRate	1012
• 38.21 AVAsset.PreferredVolume	1013
• 38.22 AVAsset.Release	1014
• 38.23 AVAsset.RequestImageTimePrecision	1016
• 38.24 AVAsset.TimeCodes	1018
• 38.25 AVAsset.TrackCount	1019
• 38.26 AVAsset.TrackInfo	1020
• 38.27 AVAsset.URL	1024
• 38.28 AVAsset.WaitForLoaded	1025
• 39.1 AVExport.AllExportPresets	1027
• 39.2 AVExport.CancelExport	1029
• 39.3 AVExport.Duration	1030
• 39.4 AVExport.Error	1031
• 39.5 AVExport.EstimatedOutputFileLength	1032
• 39.6 AVExport.ExportAsynchronously	1033
• 39.7 AVExport.ExportSession	1035
• 39.8 AVExport.ExportSessionMerge	1038
• 39.9 AVExport.GetOutputFileType	1040
• 39.10 AVExport.GetOutputPath	1041
• 39.11 AVExport.GetOutputURL	1042
• 39.12 AVExport.GetShouldOptimizeForNetworkUse	1043
• 39.13 AVExport.GetTimeRange	1044
• 39.14 AVExport.OutputFileExtension	1045
• 39.15 AVExport.PresetName	1046
• 39.16 AVExport.Progress	1047
• 39.17 AVExport.Release	1048
• 39.18 AVExport.SetOutputFileType	1049
• 39.19 AVExport.SetOutputPath	1050
• 39.20 AVExport.SetOutputURL	1052

	15
• 39.21 AVExport.SetShouldOptimizeForNetworkUse	1053
• 39.22 AVExport.SetTimeRange	1054
• 39.23 AVExport.Status	1055
• 39.24 AVExport.SupportedFileTypes	1056
• 40.1 AVPlayer.FindPlayers	1057
• 40.2 AVPlayer.GetAsset	1059
• 40.3 AVPlayer.GetDuration	1060
• 40.4 AVPlayer.GetFinishedEvaluate	1061
• 40.5 AVPlayer.GetFinishedFileName	1062
• 40.6 AVPlayer.GetFinishedScriptName	1063
• 40.7 AVPlayer.GetMuted	1064
• 40.8 AVPlayer.GetProgressEvaluate	1065
• 40.9 AVPlayer.GetProgressInterval	1066
• 40.10 AVPlayer.GetRate	1067
• 40.11 AVPlayer.GetTime	1068
• 40.12 AVPlayer.GetVolume	1069
• 40.13 AVPlayer.OpenContainer	1070
• 40.14 AVPlayer.OpenFile	1072
• 40.15 AVPlayer.OpenURL	1074
• 40.16 AVPlayer.Pause	1075
• 40.17 AVPlayer.Play	1076
• 40.18 AVPlayer.Release	1078
• 40.19 AVPlayer.ReleaseAll	1079
• 40.20 AVPlayer.SetFinishedEvaluate	1080
• 40.21 AVPlayer.SetFinishedScript	1081
• 40.22 AVPlayer.SetMuted	1082
• 40.23 AVPlayer.SetProgressEvaluate	1083
• 40.24 AVPlayer.SetProgressInterval	1085
• 40.25 AVPlayer.SetRate	1086

- 40.26 AVPlayer.SetTime 1087
- 40.27 AVPlayer.SetVolume 1088
- 41.1 AVRecorder.AddPreviewToWindow 1089
- 41.2 AVRecorder.AudioDeviceCount 1091
- 41.3 AVRecorder.AudioDeviceInfo 1092
- 41.4 AVRecorder.AuthorizationStatusForMediaType 1094
- 41.5 AVRecorder.CaptureStillPhoto 1095
- 41.6 AVRecorder.ClosePreview 1097
- 41.7 AVRecorder.CurrentQRCode 1098
- 41.8 AVRecorder.EncoderCount 1099
- 41.9 AVRecorder.EncoderInfo 1100
- 41.10 AVRecorder.GetAudioDevice 1101
- 41.11 AVRecorder.GetAutomaticallyAdjustsVideoMirroring 1102
- 41.12 AVRecorder.GetEncoder 1103
- 41.13 AVRecorder.GetFilePath 1104
- 41.14 AVRecorder.GetVideoDevice 1105
- 41.15 AVRecorder.GetVideoMirrored 1106
- 41.16 AVRecorder.HasQRCode 1107
- 41.17 AVRecorder.Init 1108
- 41.18 AVRecorder.IsRecording 1111
- 41.19 AVRecorder.IsVideoMirroringSupported 1112
- 41.20 AVRecorder.Release 1113
- 41.21 AVRecorder.RequestAccessForMediaType 1114
- 41.22 AVRecorder.SetAudioDevice 1115
- 41.23 AVRecorder.SetAutomaticallyAdjustsVideoMirroring 1116
- 41.24 AVRecorder.SetEncoder 1117
- 41.25 AVRecorder.SetFilePath 1118
- 41.26 AVRecorder.SetScreenInput 1119
- 41.27 AVRecorder.SetVideoDevice 1121

	17
• 41.28 AVRecorder.SetVideoMirrored	1122
• 41.29 AVRecorder.ShowPropertyDialog	1123
• 41.30 AVRecorder.StartPreview	1125
• 41.31 AVRecorder.StartQRCodeDetection	1126
• 41.32 AVRecorder.StartRecording	1128
• 41.33 AVRecorder.StopQRCodeDetection	1129
• 41.34 AVRecorder.StopRecording	1130
• 41.35 AVRecorder.VideoDeviceCount	1131
• 41.36 AVRecorder.VideoDeviceInfo	1132
• 33.1 Addressbook.Account.Name	799
• 33.2 Addressbook.Account.Type	801
• 33.3 Addressbook.Account.URL	802
• 33.4 Addressbook.Account.isMainAccount	803
• 33.5 Addressbook.LocalizedPropertyOrLabel	804
• 33.6 Addressbook.NewGroup	805
• 33.7 Addressbook.NewPerson	806
• 33.8 Addressbook.Notification.Clear	808
• 33.9 Addressbook.Notification.Evaluate	809
• 33.10 Addressbook.Notification.GetChangedExternally	810
• 33.11 Addressbook.Notification.GetDeletedRecords	811
• 33.12 Addressbook.Notification.GetInsertedRecords	812
• 33.13 Addressbook.Notification.GetProcessID	813
• 33.14 Addressbook.Notification.GetProcessName	814
• 33.15 Addressbook.Notification.GetUpdatedRecords	815
• 33.16 Addressbook.Notification.GetUserUID	816
• 33.17 Addressbook.Notification.Set	817
• 33.18 Addressbook.Record.Account	818
• 33.19 Addressbook.addRecord	819
• 33.20 Addressbook.allAccounts	822

• 33.21 Addressbook.defaultAccount	823
• 33.22 Addressbook.enabledAccounts	824
• 33.23 Addressbook.formattedAddress	825
• 33.24 Addressbook.group.addMember	826
• 33.25 Addressbook.group.addSubgroup	827
• 33.26 Addressbook.group.members	828
• 33.27 Addressbook.group.parentGroups	829
• 33.28 Addressbook.group.removeMember	830
• 33.29 Addressbook.group.removeSubgroup	831
• 33.30 Addressbook.group.subgroups	832
• 33.31 Addressbook.groups	833
• 33.32 Addressbook.hasUnsavedChanges	834
• 33.33 Addressbook.me	835
• 33.34 Addressbook.multivalued.New	837
• 33.35 Addressbook.multivalued.addAddress	839
• 33.36 Addressbook.multivalued.addValue	841
• 33.37 Addressbook.multivalued.count	844
• 33.38 Addressbook.multivalued.identifierAtIndex	846
• 33.39 Addressbook.multivalued.identifiers	847
• 33.40 Addressbook.multivalued.indexForIdentifier	848
• 33.41 Addressbook.multivalued.indexForLabel	849
• 33.42 Addressbook.multivalued.insertValue	850
• 33.43 Addressbook.multivalued.labelAtIndex	851
• 33.44 Addressbook.multivalued.labelForIdentifier	853
• 33.45 Addressbook.multivalued.labels	854
• 33.46 Addressbook.multivalued.primaryIdentifier	855
• 33.47 Addressbook.multivalued.removeValueAndLabelAtIndex	856
• 33.48 Addressbook.multivalued.replaceLabelAtIndex	857
• 33.49 Addressbook.multivalued.replaceValueAtIndex	858

	19
• 33.50 Addressbook.multivalue.setPrimaryIdentifier	860
• 33.51 Addressbook.multivalue.valueAtIndex	862
• 33.52 Addressbook.multivalue.valueForIdentifier	864
• 33.53 Addressbook.multivalue.valueForLabel	865
• 33.54 Addressbook.multivalue.values	866
• 33.55 Addressbook.people	867
• 33.56 Addressbook.persistentAccounts	868
• 33.57 Addressbook.person.EditInAddressbook	869
• 33.58 Addressbook.person.ExternalUID	870
• 33.59 Addressbook.person.GetImage	871
• 33.60 Addressbook.person.SetBirthdayComponents	872
• 33.61 Addressbook.person.SetImage	873
• 33.62 Addressbook.person.ShowInAddressbook	874
• 33.63 Addressbook.person.linkedPeople	875
• 33.64 Addressbook.person.parentGroups	876
• 33.65 Addressbook.person.vCardRepresentation	877
• 33.66 Addressbook.personFromVCardRepresentation	878
• 33.67 Addressbook.personFromVCardTextRepresentation	879
• 33.68 Addressbook.record.SetValueForProperty	880
• 33.69 Addressbook.record.UniqueID	884
• 33.70 Addressbook.record.displayName	885
• 33.71 Addressbook.record.isReadOnly	887
• 33.72 Addressbook.record.removeValueForProperty	888
• 33.73 Addressbook.record.valueForProperty	889
• 33.74 Addressbook.recordsMatchingSearchElement	893
• 33.75 Addressbook.removeRecord	895
• 33.76 Addressbook.save	896
• 33.77 Addressbook.searchElementForConjunction	899
• 33.78 Addressbook.searchElementForProperty	900

- 33.79 Addressbook.searchGroupsWithName 902
- 33.80 Addressbook.searchPeopleWithCreationDate 903
- 33.81 Addressbook.searchPeopleWithEmail 904
- 33.82 Addressbook.searchPeopleWithModificationDate 905
- 33.83 Addressbook.searchPeopleWithName 906
- 33.84 Addressbook.searchPersonWithExternalUID 907
- 33.85 Addressbook.setMe 908
- 34.1 App.CancelUserAttentionRequest 909
- 168.1 App.ClearTouchBar 7959
- 34.3 App.CompactMemory 911
- 34.4 App.EffectiveUserID 912
- 34.5 App.GetDockBadgeLabel 913
- 34.6 App.GetDockIcon 914
- 34.7 App.GetProcessName 915
- 34.8 App.GetProcessPath 916
- 34.9 App.MemoryUsed 917
- 34.10 App.OpenFile 918
- 34.11 App.ProcessID 919
- 34.12 App.RequestUserAttention 920
- 34.13 App.SetDockBadgeLabel 921
- 34.14 App.SetDockIcon 922
- 34.15 App.SetProcessName 923
- 34.16 App.UserID 924
- 35.1 AppleScript.Close 925
- 35.2 AppleScript.Compile 927
- 35.3 AppleScript.Execute 928
- 35.4 AppleScript.GetPropertyName 929
- 35.5 AppleScript.GetPropertyValue 931
- 35.6 AppleScript.LastError 932

	21
• 35.7 AppleScript.LastErrorMessage	933
• 35.8 AppleScript.PropertyCount	934
• 35.9 AppleScript.Run	935
• 35.10 AppleScript.SetPropertyValue	940
• 35.11 Applescript.DeterminePermissionToAutomateTarget	941
• 36.1 Archive.Compress	943
• 36.2 Archive.Content	946
• 36.3 Archive.Extract	948
• 36.4 Archive.FileList	949
• 36.5 Archive.LibVersion	950
• 36.6 Archive.LibVersionDetails	951
• 36.7 Archive.SupportedFormats	952
• 36.8 Archive.Verify	953
• 37.1 Audit.Backup	955
• 37.2 Audit.Backup2	957
• 37.3 Audit.Changed	958
• 37.4 Audit.Changed2	962
• 37.5 Audit.ClearCaches	964
• 37.6 Audit.Delete	965
• 37.7 Audit.Delete2	967
• 37.8 Audit.FieldIDForName	968
• 37.9 Audit.FieldNameForID	969
• 37.10 Audit.GetEnabled	970
• 37.11 Audit.GetIgnoreCalculations	971
• 37.12 Audit.GetIgnoreSummaryFields	972
• 37.13 Audit.GetIgnoreUnderscoreFieldNames	973
• 37.14 Audit.GetIgnoredFieldNames	974
• 37.15 Audit.GetLogAccess	975
• 37.16 Audit.GetUUIDField	976

- 37.17 Audit.SetEnabled 977
- 37.18 Audit.SetIgnoreCalculations 978
- 37.19 Audit.SetIgnoreSummaryFields 979
- 37.20 Audit.SetIgnoreUnderscoreFieldNames 980
- 37.21 Audit.SetIgnoredFieldNames 981
- 37.22 Audit.SetLogAccess 983
- 37.23 Audit.SetUUIDField 984
- 37.24 Audit.TableIDForName 985
- 37.25 Audit.TableNameForID 986
- 42.1 Backdrop.Close 1135
- 42.2 Backdrop.Install 1136
- 43.1 Barcode.Detect 1137
- 43.2 Barcode.DrawBarcode 1140
- 43.3 Barcode.EANChecksum 1142
- 43.4 Barcode.Generate 1143
- 43.5 Barcode.GenerateJSON 1149
- 43.6 Barcode.GetInputMode 1151
- 43.7 Barcode.GetOption 1152
- 43.8 Barcode.GetPrimary 1153
- 43.9 Barcode.ISBNChecksum 1154
- 43.10 Barcode.LibVersion 1156
- 43.11 Barcode.SetInputMode 1157
- 43.12 Barcode.SetOption 1159
- 43.13 Barcode.SetOptions 1161
- 43.14 Barcode.SetPrimary 1164
- 43.15 Barcode.UPCChecksum 1166
- 43.16 Barcode.WriteFile 1167
- 44.1 BinaryFile.Append 1171
- 44.2 BinaryFile.Close 1173

• 44.3 BinaryFile.Create	1174
• 44.4 BinaryFile.EOF	1176
• 44.5 BinaryFile.Length	1177
• 44.6 BinaryFile.Open	1178
• 44.7 BinaryFile.Position	1180
• 44.8 BinaryFile.ReadByte	1181
• 44.9 BinaryFile.ReadContainer	1182
• 44.10 BinaryFile.ReadFloat	1183
• 44.11 BinaryFile.ReadHex	1184
• 44.12 BinaryFile.ReadInt	1186
• 44.13 BinaryFile.ReadPDF	1187
• 44.14 BinaryFile.ReadText	1189
• 44.15 BinaryFile.Seek	1191
• 44.16 BinaryFile.WriteByte	1192
• 44.17 BinaryFile.WriteContainer	1193
• 44.18 BinaryFile.WriteFloat	1194
• 44.19 BinaryFile.WriteHex	1195
• 44.20 BinaryFile.WriteInt	1197
• 44.21 BinaryFile.WriteText	1199
• 45.1 BlueThermProbe.ConnectToDevice	1201
• 45.2 BlueThermProbe.ConnectedDevices	1203
• 45.3 BlueThermProbe.Device	1204
• 45.4 BlueThermProbe.DeviceSensor	1205
• 45.5 BlueThermProbe.Devices	1207
• 45.6 BlueThermProbe.DisconnectFromDevice	1208
• 45.7 BlueThermProbe.Initialize	1209
• 45.8 BlueThermProbe.IsBluetoothAvailable	1210
• 45.9 BlueThermProbe.IsInitialized	1211
• 45.10 BlueThermProbe.RemoveDevice	1212

- 45.11 BlueThermProbe.SendCommand 1213
- 45.12 BlueThermProbe.SetBatteryLevelScript 1214
- 45.13 BlueThermProbe.SetDeviceUpdatedScript 1215
- 45.14 BlueThermProbe.SetDisconnectedScript 1216
- 45.15 BlueThermProbe.SetNewDeviceScript 1217
- 45.16 BlueThermProbe.SetNotificationReceivedScript 1218
- 45.17 BlueThermProbe.SetSensorUpdatedSScript 1219
- 45.18 BlueThermProbe.StartDeviceScan 1220
- 45.19 BlueThermProbe.StopDeviceScan 1221
- 45.20 BlueThermProbe.VersionNumber 1222
- 46.1 Bonjour.Browse 1223
- 46.2 Bonjour.JSON 1225
- 46.3 Bonjour.Register 1227
- 46.4 Bonjour.RegisteredName 1228
- 49.1 CGImageSource.ClearProperties 1383
- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389
- 49.6 CGImageSource.Export 1390
- 49.7 CGImageSource.FileName 1392
- 49.8 CGImageSource.HasProperty 1393
- 49.9 CGImageSource.ImageAtIndex 1394
- 49.10 CGImageSource.Keys 1396
- 49.11 CGImageSource.Properties 1398
- 49.12 CGImageSource.Property 1401
- 49.13 CGImageSource.Release 1403
- 49.14 CGImageSource.SetProperty 1405
- 49.15 CGImageSource.Status 1407

	25
• 49.16 CGImageSource.SupportedExportTypes	1409
• 49.17 CGImageSource.SupportedTypes	1410
• 49.18 CGImageSource.ThumbnailAtIndex	1411
• 49.19 CGImageSource.Type	1413
• 175.1 CGPSConverter.Convert	8229
• 50.1 CLGeocoder.Cancel	1415
• 50.2 CLGeocoder.Cancelled	1417
• 50.3 CLGeocoder.Close	1418
• 50.4 CLGeocoder.Distance	1419
• 50.5 CLGeocoder.Done	1421
• 50.6 CLGeocoder.Error	1422
• 50.7 CLGeocoder.ErrorMessage	1423
• 50.8 CLGeocoder.GeocodeAddressString	1424
• 50.9 CLGeocoder.JSON	1426
• 50.10 CLGeocoder.PlacemarkCount	1428
• 50.11 CLGeocoder.PlacemarkValue	1429
• 50.12 CLGeocoder.ReverseGeocodeLocation	1432
• 54.1 CNContact.AddEmailAddress	1527
• 54.2 CNContact.AddInstantMessage	1529
• 54.3 CNContact.AddInstantMessageJSON	1530
• 54.4 CNContact.AddPhoneNumber	1531
• 54.5 CNContact.AddPostalAddress	1532
• 54.6 CNContact.AddPostalAddressJSON	1534
• 54.7 CNContact.AddRelation	1535
• 54.8 CNContact.AddSocialProfile	1536
• 54.9 CNContact.AddSocialProfileJSON	1538
• 54.10 CNContact.AddURLAddress	1539
• 54.11 CNContact.DeleteValue	1540
• 54.12 CNContact.EditInAddressbook	1542

• 54.13 CNContact.IsUnifiedWithContact	1543
• 54.14 CNContact.JSON	1544
• 54.15 CNContact.MailingAddress	1546
• 54.16 CNContact.Name	1547
• 54.17 CNContact.SetValue	1548
• 54.18 CNContact.Show	1550
• 54.19 CNContact.ShowInAddressbook	1552
• 54.20 CNContact.UnifiedContacts	1553
• 54.21 CNContact.Value	1554
• 54.22 CNContactPicker.Close	1557
• 54.23 CNContactPicker.Current	1558
• 54.24 CNContactPicker.SetTrigger	1559
• 54.25 CNContactPicker.Show	1560
• 54.26 CNContactStore.AddContact	1562
• 54.27 CNContactStore.AddGroup	1564
• 54.28 CNContactStore.AddMember	1566
• 54.29 CNContactStore.AddSubgroup	1567
• 54.30 CNContactStore.AuthorizationError	1568
• 54.31 CNContactStore.AuthorizationStatus	1569
• 54.32 CNContactStore.Contacts	1570
• 54.33 CNContactStore.ContactsInContainer	1571
• 54.34 CNContactStore.ContactsInGroup	1572
• 54.35 CNContactStore.ContactsMatchingName	1573
• 54.36 CNContactStore.ContactsWithData	1574
• 54.37 CNContactStore.ContainerForContact	1575
• 54.38 CNContactStore.ContainerForGroup	1576
• 54.39 CNContactStore.Containers	1577
• 54.40 CNContactStore.Country	1578
• 54.41 CNContactStore.DataWithContacts	1579

• 54.42 CNContactStore.DefaultContainerIdentifier	1580
• 54.43 CNContactStore.DeleteContact	1581
• 54.44 CNContactStore.DeleteGroup	1582
• 54.45 CNContactStore.GroupHierarchy	1583
• 54.46 CNContactStore.Groups	1585
• 54.47 CNContactStore.GroupsByName	1587
• 54.48 CNContactStore.GroupsForContact	1588
• 54.49 CNContactStore.GroupsInContainer	1589
• 54.50 CNContactStore.NewContact	1590
• 54.51 CNContactStore.RemoveMember	1592
• 54.52 CNContactStore.RemoveSubgroup	1593
• 54.53 CNContactStore.RenameGroup	1594
• 54.54 CNContactStore.RequestAccesss	1595
• 54.55 CNContactStore.SetChangeScript	1597
• 54.56 CNContactStore.Subgroups	1598
• 54.57 CNContactStore.UnifiedMeContact	1599
• 54.58 CNContactStore.UpdateContact	1601
• 54.59 CNContainer.Name	1602
• 54.60 CNContainer.Type	1603
• 54.61 CNGroup.Name	1604
• 60.1 CUPS.CancelJob	1733
• 60.2 CUPS.GetDefaultPrinterName	1735
• 60.3 CUPS.GetJobCompletionTime	1736
• 60.4 CUPS.GetJobCreationTime	1737
• 60.5 CUPS.GetJobFormat	1738
• 60.6 CUPS.GetJobID	1739
• 60.7 CUPS.GetJobIndex	1740
• 60.8 CUPS.GetJobPrinter	1741
• 60.9 CUPS.GetJobPriority	1742

• 60.10 CUPS.GetJobProcessingTime	1743
• 60.11 CUPS.GetJobSize	1744
• 60.12 CUPS.GetJobState	1745
• 60.13 CUPS.GetJobTitle	1746
• 60.14 CUPS.GetJobUser	1747
• 60.15 CUPS.GetJobsCount	1748
• 60.16 CUPS.GetPrinterCount	1750
• 60.17 CUPS.GetPrinterDefault	1751
• 60.18 CUPS.GetPrinterName	1752
• 60.19 CUPS.LastErrorCode	1753
• 60.20 CUPS.LastErrorMessage	1754
• 60.21 CUPS.PrintData	1755
• 60.22 CUPS.PrintDataEncoding	1757
• 60.23 CUPS.PrintFile	1759
• 61.1 CURL.AddInputFile	1761
• 61.2 CURL.AddInputGIF	1763
• 61.3 CURL.AddInputJPEG	1764
• 61.4 CURL.AddInputPDF	1765
• 61.5 CURL.AddInputPNG	1766
• 61.6 CURL.AddInputText	1768
• 61.7 CURL.Cancel	1770
• 61.8 CURL.Check	1771
• 61.9 CURL.Cleanup	1772
• 61.10 CURL.CloseDebugFile	1775
• 61.11 CURL.CloseHeaderFile	1776
• 61.12 CURL.CloseInputFile	1777
• 61.13 CURL.CloseOutputFile	1778
• 61.14 CURL.CreateDebugOutputFile	1780
• 61.15 CURL.CreateHeaderOutputFile	1782

• 61.16	CURL.CreateOutputFile	1784
• 61.17	CURL.ErrorCode	1788
• 61.18	CURL.ErrorMessage	1791
• 61.19	CURL.Features	1792
• 61.20	CURL.FileInfos	1793
• 61.21	CURL.FormAddKeyContainer	1796
• 61.22	CURL.FormAddKeyContainerContentType	1798
• 61.23	CURL.FormAddKeyFile	1800
• 61.24	CURL.FormAddKeyFileContentType	1802
• 61.25	CURL.FormAddKeyText	1804
• 61.26	CURL.FormAddKeyTextContentType	1806
• 61.27	CURL.FormAddKeyValue	1808
• 61.28	CURL.FormAddKeyValueContentType	1810
• 61.29	CURL.FormClear	1812
• 61.30	CURL.FormFinish	1813
• 61.31	CURL.GetActiveSocket	1815
• 61.32	CURL.GetAppConnectTime	1816
• 61.33	CURL.GetBatchCurrentFileName	1817
• 61.34	CURL.GetBatchCurrentFilePath	1818
• 61.35	CURL.GetBatchDestinationPath	1819
• 61.36	CURL.GetBatchFileNames	1820
• 61.37	CURL.GetCertInfo	1821
• 61.38	CURL.GetConditionUnmet	1823
• 61.39	CURL.GetConnectTime	1824
• 61.40	CURL.GetContentLengthDownload	1825
• 61.41	CURL.GetContentLengthUpload	1826
• 61.42	CURL.GetContentType	1827
• 61.43	CURL.GetCookieList	1828
• 61.44	CURL.GetDebugAsText	1831

• 61.45	CURL.GetDebugLength	1834
• 61.46	CURL.GetDebugWithData	1835
• 61.47	CURL.GetDebugWithProgress	1836
• 61.48	CURL.GetDebugWithTime	1837
• 61.49	CURL.GetEffectiveURL	1838
• 61.50	CURL.GetFTPEntryPath	1840
• 61.51	CURL.GetFileTime	1841
• 61.52	CURL.GetFinishedEvaluate	1842
• 61.53	CURL.GetFinishedFileName	1843
• 61.54	CURL.GetFinishedScriptName	1844
• 61.55	CURL.GetFormData	1845
• 61.56	CURL.GetHTTPAuthAvail	1847
• 61.57	CURL.GetHTTPConnectCode	1848
• 61.58	CURL.GetHTTPVersion	1849
• 61.59	CURL.GetHeaderAsText	1850
• 61.60	CURL.GetHeaderLength	1852
• 61.61	CURL.GetHeaderSize	1853
• 61.62	CURL.GetInputAsText	1854
• 61.63	CURL.GetInputLength	1856
• 61.64	CURL.GetLastSocket	1857
• 61.65	CURL.GetLocalIP	1858
• 61.66	CURL.GetLocalPort	1859
• 61.67	CURL.GetMultiOptionChunkLengthPenaltySize	1860
• 61.68	CURL.GetMultiOptionContentLengthPenaltySize	1861
• 61.69	CURL.GetMultiOptionMaxConcurrentStreams	1862
• 61.70	CURL.GetMultiOptionMaxConnects	1863
• 61.71	CURL.GetMultiOptionMaxHostConnections	1864
• 61.72	CURL.GetMultiOptionMaxPipelineLength	1865
• 61.73	CURL.GetMultiOptionMaxTotalConnections	1866

	31
• 61.74 CURL.GetMultiOptionPipelining	1867
• 61.75 CURL.GetMultiRunningTransfers	1868
• 61.76 CURL.GetNameLookupTime	1869
• 61.77 CURL.GetNumConnects	1870
• 61.78 CURL.GetOSErrorNo	1871
• 61.79 CURL.GetOptionConnectTo	1872
• 61.80 CURL.GetOptionHTTP200Aliases	1873
• 61.81 CURL.GetOptionHTTPHeader	1874
• 61.82 CURL.GetOptionMailRecipients	1875
• 61.83 CURL.GetOptionPostQuote	1876
• 61.84 CURL.GetOptionPreQuote	1877
• 61.85 CURL.GetOptionProxyHeader	1878
• 61.86 CURL.GetOptionQuote	1879
• 61.87 CURL.GetOptionResolve	1880
• 61.88 CURL.GetOptionTelnetOptions	1881
• 61.89 CURL.GetPreTransferTime	1882
• 61.90 CURL.GetPrimaryIP	1883
• 61.91 CURL.GetPrimaryPort	1884
• 61.92 CURL.GetProgressCurrentDownload	1885
• 61.93 CURL.GetProgressCurrentUpload	1886
• 61.94 CURL.GetProgressEvaluate	1887
• 61.95 CURL.GetProgressFileName	1888
• 61.96 CURL.GetProgressPercent	1889
• 61.97 CURL.GetProgressScriptName	1890
• 61.98 CURL.GetProgressTotalDownload	1891
• 61.99 CURL.GetProgressTotalUpload	1892
• 61.100 CURL.GetProtocol	1893
• 61.101 CURL.GetProxyAuthAvail	1894
• 61.102 CURL.GetProxySSLVerifyResult	1895

- 61.103 CURL.GetRTSPCSEQRecv 1896
- 61.104 CURL.GetRTSPClientCSEQ 1897
- 61.105 CURL.GetRTSPServerCSEQ 1898
- 61.106 CURL.GetRTSPSessionID 1899
- 61.107 CURL.GetRedirectCount 1900
- 61.108 CURL.GetRedirectTime 1901
- 61.109 CURL.GetRedirectURL 1902
- 61.110 CURL.GetRequestSize 1904
- 61.111 CURL.GetResponseCode 1905
- 61.112 CURL.GetResultAsContainer 1907
- 61.113 CURL.GetResultAsData 1910
- 61.114 CURL.GetResultAsEMailList 1912
- 61.115 CURL.GetResultAsEmail 1914
- 61.116 CURL.GetResultAsGIF 1916
- 61.117 CURL.GetResultAsJPEG 1918
- 61.118 CURL.GetResultAsMime 1920
- 61.119 CURL.GetResultAsPDF 1922
- 61.120 CURL.GetResultAsPNG 1924
- 61.121 CURL.GetResultAsText 1926
- 61.122 CURL.GetResultLength 1930
- 61.123 CURL.GetSSLEngines 1931
- 61.124 CURL.GetSSLVerifyResult 1932
- 61.125 CURL.GetScheme 1933
- 61.126 CURL.GetSizeDownload 1934
- 61.127 CURL.GetSizeUpload 1935
- 61.128 CURL.GetSpeedDownload 1936
- 61.129 CURL.GetSpeedUpload 1937
- 61.130 CURL.GetStartTransferTime 1938
- 61.131 CURL.GetTag 1939

• 61.132	CURL.GetTotalTime	1940
• 61.133	CURL.Host	1941
• 61.134	CURL.IsRunning	1942
• 61.135	CURL.LibIDNVersion	1943
• 61.136	CURL.LibSSHVersion	1944
• 61.137	CURL.LibSSLVersion	1945
• 61.138	CURL.List	1946
• 61.139	CURL.New	1947
• 61.140	CURL.NumberOfRunningTransfers	1950
• 61.141	CURL.OpenInputFile	1951
• 61.142	CURL.Perform	1954
• 61.143	CURL.PerformAsync	1963
• 61.144	CURL.PerformInBackground	1965
• 61.145	CURL.Protocols	1967
• 61.146	CURL.ReceiveData	1968
• 61.147	CURL.ReceiveText	1970
• 61.148	CURL.Reset	1973
• 61.149	CURL.RunningTransfers	1974
• 61.150	CURL.SendData	1975
• 61.151	CURL.SendText	1977
• 61.152	CURL.SetBatchDestinationPath	1979
• 61.153	CURL.SetDebugWithData	1981
• 61.154	CURL.SetDebugWithProgress	1983
• 61.155	CURL.SetDebugWithTime	1985
• 61.156	CURL.SetFinishedEvaluate	1987
• 61.157	CURL.SetFinishedScript	1989
• 61.158	CURL.SetInputFile	1991
• 61.159	CURL.SetInputGIF	1994
• 61.160	CURL.SetInputJPEG	1996

- 61.161 CURL.SetInputPDF 1998
- 61.162 CURL.SetInputPNG 2000
- 61.163 CURL.SetInputText 2002
- 61.164 CURL.SetMultiOptionChunkLengthPenaltySize 2005
- 61.165 CURL.SetMultiOptionContentLengthPenaltySize 2006
- 61.166 CURL.SetMultiOptionMaxConcurrentStreams 2007
- 61.167 CURL.SetMultiOptionMaxConnects 2008
- 61.168 CURL.SetMultiOptionMaxHostConnections 2009
- 61.169 CURL.SetMultiOptionMaxPipelineLength 2010
- 61.170 CURL.SetMultiOptionMaxTotalConnections 2011
- 61.171 CURL.SetMultiOptionPipelining 2012
- 61.172 CURL.SetOptionAbstractUnixSocket 2013
- 61.173 CURL.SetOptionAcceptEncoding 2014
- 61.174 CURL.SetOptionAcceptTimeoutMS 2016
- 61.175 CURL.SetOptionAddressScope 2017
- 61.176 CURL.SetOptionAppend 2018
- 61.177 CURL.SetOptionAutoReferer 2019
- 61.178 CURL.SetOptionBufferSize 2020
- 61.179 CURL.SetOptionCAINFO 2022
- 61.180 CURL.SetOptionCAPATH 2025
- 61.181 CURL.SetOptionCRLF 2027
- 61.182 CURL.SetOptionCRLFFile 2028
- 61.183 CURL.SetOptionCertInfo 2030
- 61.184 CURL.SetOptionConnectOnly 2032
- 61.185 CURL.SetOptionConnectTimeoutMS 2035
- 61.186 CURL.SetOptionConnectTo 2036
- 61.187 CURL.SetOptionConnectionTimeout 2037
- 61.188 CURL.SetOptionCookie 2039
- 61.189 CURL.SetOptionCookieFile 2041

• 61.190 CURL.SetOptionCookieJar	2044
• 61.191 CURL.SetOptionCookieList	2046
• 61.192 CURL.SetOptionCookieSession	2047
• 61.193 CURL.SetOptionCustomRequest	2048
• 61.194 CURL.SetOptionDNSCacheTimeout	2053
• 61.195 CURL.SetOptionDNSInterface	2054
• 61.196 CURL.SetOptionDNSLocalIPv4	2055
• 61.197 CURL.SetOptionDNSLocalIPv6	2056
• 61.198 CURL.SetOptionDNSServers	2057
• 61.199 CURL.SetOptionDNSShuffleAddresses	2058
• 61.200 CURL.SetOptionDOHURL	2059
• 61.201 CURL.SetOptionDefaultProtocol	2061
• 61.202 CURL.SetOptionDirListOnly	2062
• 61.203 CURL.SetOptionDisallowUserNameInURL	2064
• 61.204 CURL.SetOptionEGDSocket	2065
• 61.205 CURL.SetOptionExpect100TimeoutMS	2066
• 61.206 CURL.SetOptionFTPAccount	2067
• 61.207 CURL.SetOptionFTPAlternativeToUser	2068
• 61.208 CURL.SetOptionFTPCreateMissingDirs	2069
• 61.209 CURL.SetOptionFTPFileMethod	2072
• 61.210 CURL.SetOptionFTPPort	2073
• 61.211 CURL.SetOptionFTPResponseTimeout	2075
• 61.212 CURL.SetOptionFTPSSLAUTH	2076
• 61.213 CURL.SetOptionFTPSSLCCC	2078
• 61.214 CURL.SetOptionFTPSkipPasvIP	2079
• 61.215 CURL.SetOptionFTPUseEPRT	2080
• 61.216 CURL.SetOptionFTPUseEPSV	2081
• 61.217 CURL.SetOptionFTPUsePret	2082
• 61.218 CURL.SetOptionFailOnError	2083

• 61.219	CURL.SetOptionFileOnlyMode	2084
• 61.220	CURL.SetOptionFileTime	2085
• 61.221	CURL.SetOptionFollowLocation	2086
• 61.222	CURL.SetOptionForbidReuse	2088
• 61.223	CURL.SetOptionFreshConnect	2089
• 61.224	CURL.SetOptionGSSAPIDelegation	2090
• 61.225	CURL.SetOptionGet	2091
• 61.226	CURL.SetOptionHAProxyProtocol	2093
• 61.227	CURL.SetOptionHTTP200Aliases	2094
• 61.228	CURL.SetOptionHTTPAuth	2095
• 61.229	CURL.SetOptionHTTPContentDecoding	2097
• 61.230	CURL.SetOptionHTTPHeader	2098
• 61.231	CURL.SetOptionHTTPProxyTunnel	2102
• 61.232	CURL.SetOptionHTTPTransferDecoding	2103
• 61.233	CURL.SetOptionHTTPVersion	2104
• 61.234	CURL.SetOptionHappyEyeballsTimeOutMS	2105
• 61.235	CURL.SetOptionHeader	2106
• 61.236	CURL.SetOptionHeaderOptions	2107
• 61.237	CURL.SetOptionIPResolve	2108
• 61.238	CURL.SetOptionIgnoreContentLength	2109
• 61.239	CURL.SetOptionInFileSize	2110
• 61.240	CURL.SetOptionInterface	2112
• 61.241	CURL.SetOptionIssuerCert	2113
• 61.242	CURL.SetOptionKRBLevel	2115
• 61.243	CURL.SetOptionKeepSendingOnError	2116
• 61.244	CURL.SetOptionKeyPassword	2117
• 61.245	CURL.SetOptionLocalPort	2119
• 61.246	CURL.SetOptionLocalPortRange	2120
• 61.247	CURL.SetOptionLoginOptions	2121

• 61.248	CURL.SetOptionLowSpeedLimit	2123
• 61.249	CURL.SetOptionLowSpeedTime	2124
• 61.250	CURL.SetOptionMailAuth	2125
• 61.251	CURL.SetOptionMailFrom	2127
• 61.252	CURL.SetOptionMailRecipients	2128
• 61.253	CURL.SetOptionMaxAgeConn	2129
• 61.254	CURL.SetOptionMaxConnects	2130
• 61.255	CURL.SetOptionMaxFileSize	2131
• 61.256	CURL.SetOptionMaxRecvSpeed	2132
• 61.257	CURL.SetOptionMaxRedirs	2133
• 61.258	CURL.SetOptionMaxSendSpeed	2135
• 61.259	CURL.SetOptionNETRCFile	2136
• 61.260	CURL.SetOptionNetRC	2137
• 61.261	CURL.SetOptionNewDirectoryPerms	2139
• 61.262	CURL.SetOptionNewFilePerms	2140
• 61.263	CURL.SetOptionNoBody	2141
• 61.264	CURL.SetOptionNoProxy	2143
• 61.265	CURL.SetOptionPassword	2145
• 61.266	CURL.SetOptionPathAsIs	2148
• 61.267	CURL.SetOptionPinnedPublicKey	2149
• 61.268	CURL.SetOptionPipeWait	2150
• 61.269	CURL.SetOptionPort	2151
• 61.270	CURL.SetOptionPost	2153
• 61.271	CURL.SetOptionPostFieldSize	2157
• 61.272	CURL.SetOptionPostFields	2158
• 61.273	CURL.SetOptionPostQuote	2162
• 61.274	CURL.SetOptionPostRedir	2164
• 61.275	CURL.SetOptionPreProxy	2166
• 61.276	CURL.SetOptionPreQuote	2167

• 61.277	CURL.SetOptionProtocols	2169
• 61.278	CURL.SetOptionProxy	2171
• 61.279	CURL.SetOptionProxyAuth	2173
• 61.280	CURL.SetOptionProxyCAInfo	2174
• 61.281	CURL.SetOptionProxyCAPath	2175
• 61.282	CURL.SetOptionProxyCRLFile	2176
• 61.283	CURL.SetOptionProxyHeader	2177
• 61.284	CURL.SetOptionProxyKeyPassword	2178
• 61.285	CURL.SetOptionProxyPassword	2179
• 61.286	CURL.SetOptionProxyPinnedPublicKey	2180
• 61.287	CURL.SetOptionProxyPort	2181
• 61.288	CURL.SetOptionProxySSLCert	2182
• 61.289	CURL.SetOptionProxySSLCertType	2183
• 61.290	CURL.SetOptionProxySSLCipherList	2184
• 61.291	CURL.SetOptionProxySSLKey	2185
• 61.292	CURL.SetOptionProxySSLKeyType	2186
• 61.293	CURL.SetOptionProxySSLOptions	2187
• 61.294	CURL.SetOptionProxySSLVerifyHost	2188
• 61.295	CURL.SetOptionProxySSLVerifyPeer	2189
• 61.296	CURL.SetOptionProxySSLVersion	2190
• 61.297	CURL.SetOptionProxyServiceName	2192
• 61.298	CURL.SetOptionProxyTLS13Ciphers	2193
• 61.299	CURL.SetOptionProxyTLSAuthPassword	2194
• 61.300	CURL.SetOptionProxyTLSAuthType	2195
• 61.301	CURL.SetOptionProxyTLSAuthUsername	2196
• 61.302	CURL.SetOptionProxyTransferMode	2197
• 61.303	CURL.SetOptionProxyType	2198
• 61.304	CURL.SetOptionProxyUsername	2200
• 61.305	CURL.SetOptionPut	2201

	39
• 61.306 CURL.SetOptionQuote	2203
• 61.307 CURL.SetOptionRTSPClientCSEQ	2206
• 61.308 CURL.SetOptionRTSPRequest	2207
• 61.309 CURL.SetOptionRTSPServerCSEQ	2208
• 61.310 CURL.SetOptionRTSPSessionID	2209
• 61.311 CURL.SetOptionRTSPStreamURI	2210
• 61.312 CURL.SetOptionRTSPTransport	2211
• 61.313 CURL.SetOptionRandomFile	2212
• 61.314 CURL.SetOptionRange	2213
• 61.315 CURL.SetOptionRedirProtocols	2215
• 61.316 CURL.SetOptionReferer	2217
• 61.317 CURL.SetOptionRequestTarget	2218
• 61.318 CURL.SetOptionResolve	2219
• 61.319 CURL.SetOptionResumeFrom	2220
• 61.320 CURL.SetOptionSASLAuthZID	2221
• 61.321 CURL.SetOptionSASLIR	2222
• 61.322 CURL.SetOptionSSHAuthTypes	2223
• 61.323 CURL.SetOptionSSHCompression	2225
• 61.324 CURL.SetOptionSSHHostPublicKeyMD5	2226
• 61.325 CURL.SetOptionSSHKnownHosts	2227
• 61.326 CURL.SetOptionSSHPrivateKeyfile	2228
• 61.327 CURL.SetOptionSSHPublicKeyfile	2230
• 61.328 CURL.SetOptionSSLCert	2232
• 61.329 CURL.SetOptionSSLCertType	2236
• 61.330 CURL.SetOptionSSLCipherList	2238
• 61.331 CURL.SetOptionSSEnableALPN	2240
• 61.332 CURL.SetOptionSSEnableNPN	2241
• 61.333 CURL.SetOptionSSEngine	2242
• 61.334 CURL.SetOptionSSEngineDefault	2243

- 61.335 CURL.SetOptionSSLFalseStart 2244
- 61.336 CURL.SetOptionSSLKey 2245
- 61.337 CURL.SetOptionSSLKeyType 2247
- 61.338 CURL.SetOptionSSLOptions 2249
- 61.339 CURL.SetOptionSSLSessionIDCache 2250
- 61.340 CURL.SetOptionSSLVerifyHost 2251
- 61.341 CURL.SetOptionSSLVerifyPeer 2254
- 61.342 CURL.SetOptionSSLVerifyStatus 2257
- 61.343 CURL.SetOptionSSLVersion 2258
- 61.344 CURL.SetOptionServiceName 2261
- 61.345 CURL.SetOptionSocks5Auth 2262
- 61.346 CURL.SetOptionSocks5GSSAPINec 2263
- 61.347 CURL.SetOptionSocks5GSSAPIService 2264
- 61.348 CURL.SetOptionStreamDepends 2265
- 61.349 CURL.SetOptionStreamDependsE 2266
- 61.350 CURL.SetOptionStreamWeight 2267
- 61.351 CURL.SetOptionSuppressConnectHeaders 2268
- 61.352 CURL.SetOptionTCPFastOpen 2269
- 61.353 CURL.SetOptionTCPKeepAlive 2270
- 61.354 CURL.SetOptionTCPKeepIdle 2271
- 61.355 CURL.SetOptionTCPKeepInterval 2272
- 61.356 CURL.SetOptionTCPNoDelay 2273
- 61.357 CURL.SetOptionTFTPBlockSize 2274
- 61.358 CURL.SetOptionTFTPNoOptions 2275
- 61.359 CURL.SetOptionTLS13Ciphers 2276
- 61.360 CURL.SetOptionTLSAuthPassword 2277
- 61.361 CURL.SetOptionTLSAuthType 2278
- 61.362 CURL.SetOptionTLSAuthUsername 2279
- 61.363 CURL.SetOptionTelnetOptions 2280

	41
• 61.364 CURL.SetOptionTimeCondition	2281
• 61.365 CURL.SetOptionTimeOut	2282
• 61.366 CURL.SetOptionTimeValue	2284
• 61.367 CURL.SetOptionTimeoutMS	2285
• 61.368 CURL.SetOptionTransferEncoding	2286
• 61.369 CURL.SetOptionTransferText	2287
• 61.370 CURL.SetOptionURL	2288
• 61.371 CURL.SetOptionUnixSocketPath	2296
• 61.372 CURL.SetOptionUnrestrictedAuth	2297
• 61.373 CURL.SetOptionUpkeepIntervalMS	2298
• 61.374 CURL.SetOptionUpload	2299
• 61.375 CURL.SetOptionUploadBufferSize	2301
• 61.376 CURL.SetOptionUseSSL	2302
• 61.377 CURL.SetOptionUserAgent	2304
• 61.378 CURL.SetOptionUsername	2305
• 61.379 CURL.SetOptionVerbose	2307
• 61.380 CURL.SetOptionWildCardMatch	2309
• 61.381 CURL.SetOptionXOAuth2Bearer	2312
• 61.382 CURL.SetProgressEvaluate	2313
• 61.383 CURL.SetProgressScript	2314
• 61.384 CURL.SetTag	2316
• 61.385 CURL.SetUpdateProgressDialog	2318
• 61.386 CURL.SetupAWS	2320
• 61.387 CURL.SetupOAuth	2324
• 61.388 CURL.Upkeep	2329
• 61.389 CURL.UseSystemCertificates	2330
• 61.390 CURL.Version	2332
• 47.1 Calendar.Alarm.Duplicate	1229
• 47.2 Calendar.Alarm.GetAbsoluteTrigger	1231

• 47.3 Calendar.Alarm.GetAcknowledged	1232
• 47.4 Calendar.Alarm.GetAction	1233
• 47.5 Calendar.Alarm.GetEmailAddress	1234
• 47.6 Calendar.Alarm.GetRelatedTo	1235
• 47.7 Calendar.Alarm.GetRelativeTrigger	1236
• 47.8 Calendar.Alarm.GetSound	1237
• 47.9 Calendar.Alarm.GetURL	1238
• 47.10 Calendar.Alarm.SetAbsoluteTrigger	1239
• 47.11 Calendar.Alarm.SetAcknowledged	1240
• 47.12 Calendar.Alarm.SetAction	1241
• 47.13 Calendar.Alarm.SetEmailAddress	1242
• 47.14 Calendar.Alarm.SetRelatedTo	1243
• 47.15 Calendar.Alarm.SetRelativeTrigger	1244
• 47.16 Calendar.Alarm.SetSound	1245
• 47.17 Calendar.Alarm.SetURL	1246
• 47.18 Calendar.Alarm.TriggerDateRelativeTo	1247
• 47.19 Calendar.Attendee.GetAddress	1248
• 47.20 Calendar.Attendee.GetCommonName	1249
• 47.21 Calendar.Attendee.GetStatus	1250
• 47.22 Calendar.Calendar.Duplicate	1251
• 47.23 Calendar.Calendar.GetColor	1252
• 47.24 Calendar.Calendar.GetNotes	1254
• 47.25 Calendar.Calendar.GetTitle	1255
• 47.26 Calendar.Calendar.GetType	1257
• 47.27 Calendar.Calendar.GetUID	1258
• 47.28 Calendar.Calendar.IsEditable	1259
• 47.29 Calendar.Calendar.SetColor	1260
• 47.30 Calendar.Calendar.SetNotes	1261
• 47.31 Calendar.Calendar.SetTitle	1262

	43
• 47.32 Calendar.Calendars	1263
• 47.33 Calendar.Events	1264
• 47.34 Calendar.Initialize	1266
• 47.35 Calendar.Item.AddAlarm	1267
• 47.36 Calendar.Item.Duplicate	1268
• 47.37 Calendar.Item.GetAlarms	1269
• 47.38 Calendar.Item.GetAllDay	1270
• 47.39 Calendar.Item.GetAttendeeCommonName	1271
• 47.40 Calendar.Item.GetAttendeeCount	1272
• 47.41 Calendar.Item.GetAttendeeStatus	1273
• 47.42 Calendar.Item.GetAttendeeURL	1274
• 47.43 Calendar.Item.GetAttendees	1275
• 47.44 Calendar.Item.GetCalendar	1276
• 47.45 Calendar.Item.GetCompleted	1277
• 47.46 Calendar.Item.GetCompletionDate	1278
• 47.47 Calendar.Item.GetDateStamp	1279
• 47.48 Calendar.Item.GetDueDate	1280
• 47.49 Calendar.Item.GetEndDate	1281
• 47.50 Calendar.Item.GetLocation	1282
• 47.51 Calendar.Item.GetNotes	1283
• 47.52 Calendar.Item.GetPriority	1284
• 47.53 Calendar.Item.GetStartDate	1285
• 47.54 Calendar.Item.GetTitle	1286
• 47.55 Calendar.Item.GetUID	1287
• 47.56 Calendar.Item.GetURL	1289
• 47.57 Calendar.Item.HasAlarm	1290
• 47.58 Calendar.Item.IsDetached	1291
• 47.59 Calendar.Item.NextAlarmDate	1292
• 47.60 Calendar.Item.Occurrence	1293

• 47.61	Calendar.Item.RemoveAlarm	1294
• 47.62	Calendar.Item.SetAllDay	1295
• 47.63	Calendar.Item.SetCalendar	1297
• 47.64	Calendar.Item.SetCompleted	1299
• 47.65	Calendar.Item.SetCompletionDate	1300
• 47.66	Calendar.Item.SetDueDate	1301
• 47.67	Calendar.Item.SetEndDate	1302
• 47.68	Calendar.Item.SetLocation	1303
• 47.69	Calendar.Item.SetNotes	1304
• 47.70	Calendar.Item.SetPriority	1306
• 47.71	Calendar.Item.SetStartDate	1307
• 47.72	Calendar.Item.SetTitle	1308
• 47.73	Calendar.Item.SetURL	1310
• 47.74	Calendar.NewAlarm	1311
• 47.75	Calendar.NewCalendar	1312
• 47.76	Calendar.NewEvent	1313
• 47.77	Calendar.NewReminder	1315
• 47.78	Calendar.Notification.Clear	1319
• 47.79	Calendar.Notification.Evaluate	1320
• 47.80	Calendar.Notification.GetChangedExternally	1321
• 47.81	Calendar.Notification.GetDeletedRecords	1322
• 47.82	Calendar.Notification.GetInsertedRecords	1323
• 47.83	Calendar.Notification.GetProcessID	1324
• 47.84	Calendar.Notification.GetProcessName	1325
• 47.85	Calendar.Notification.GetUpdatedRecords	1326
• 47.86	Calendar.Notification.GetUserUID	1327
• 47.87	Calendar.Notification.GetWhat	1328
• 47.88	Calendar.Notification.Set	1329
• 47.89	Calendar.RemoveCalendar	1330

	45
• 47.90 Calendar.RemoveEvent	1331
• 47.91 Calendar.RemoveReminder	1332
• 47.92 Calendar.SaveCalendar	1333
• 47.93 Calendar.SaveEvent	1334
• 47.94 Calendar.SaveReminder	1336
• 47.95 Calendar.SelectEvent	1340
• 47.96 Calendar.Tasks	1341
• 47.97 Calendar.TasksCompletedSince	1342
• 47.98 Calendar.UncompletedTasks	1343
• 47.99 Calendar.UncompletedTasksDueBefore	1344
• 124.1 ClearRegistration	6261
• 51.1 Clipboard.DetectFileMakerDataType	1435
• 51.2 Clipboard.GetData	1436
• 51.3 Clipboard.GetFileMakerData	1438
• 51.4 Clipboard.GetFiles	1440
• 51.5 Clipboard.GetHTMLText	1441
• 51.6 Clipboard.GetPicture	1442
• 51.7 Clipboard.GetRTFText	1443
• 51.8 Clipboard.GetStyledText	1444
• 51.9 Clipboard.GetText	1445
• 51.10 Clipboard.GetTypes	1447
• 51.11 Clipboard.SetFileMakerData	1448
• 51.12 Clipboard.SetFiles	1450
• 51.13 Clipboard.SetHTMLText	1452
• 51.14 Clipboard.SetPicture	1454
• 51.15 Clipboard.SetRTFText	1455
• 51.16 Clipboard.SetStyledText	1457
• 51.17 Clipboard.SetText	1458
• 52.1 ColorPanel.Choose	1461

• 52.2 ColorPanel.GetColor	1463
• 52.3 ColorPanel.GetColorChangedEvaluate	1464
• 52.4 ColorPanel.GetColorChangedScript	1465
• 52.5 ColorPanel.Hide	1466
• 52.6 ColorPanel.SetColor	1467
• 52.7 ColorPanel.SetColorChangedEvaluate	1468
• 52.8 ColorPanel.SetColorChangedScript	1469
• 52.9 ColorPanel.Show	1471
• 124.2 CompileDate	6262
• 124.3 CompileTime	6263
• 55.1 Container.Compress	1605
• 55.2 Container.DecodeFromBase64	1607
• 55.3 Container.DecodeFromHex	1609
• 55.4 Container.Decompress	1610
• 55.5 Container.Deserialize	1612
• 55.6 Container.Export	1613
• 55.7 Container.ExtractStream	1616
• 55.8 Container.GetBase64	1617
• 55.9 Container.GetCount	1619
• 55.10 Container.GetDataURL	1621
• 55.11 Container.GetHeight	1622
• 55.12 Container.GetHex	1623
• 55.17 Container.GetName	1628
• 55.18 Container.GetResolution	1629
• 55.19 Container.GetSize	1631
• 55.20 Container.GetText	1633
• 55.21 Container.GetTotalSize	1635
• 55.22 Container.GetType	1636
• 55.23 Container.GetTypeSize	1638

	47
• 55.24 Container.GetTypes	1640
• 55.25 Container.GetWidth	1642
• 55.26 Container.IsCompressed	1643
• 55.27 Container.ReadArchive	1644
• 55.28 Container.ReadFile	1645
• 55.29 Container.ReadImage	1648
• 55.30 Container.Remove	1650
• 55.31 Container.Rename	1652
• 55.32 Container.RenameStream	1654
• 55.33 Container.Serialize	1655
• 55.34 Container.WriteArchive	1656
• 55.35 Container.WriteFile	1658
• 92.1 ContinuityCamera.Clear	5033
• 92.2 ContinuityCamera.Import	5034
• 92.3 ContinuityCamera.PopupMenu	5035
• 92.4 ContinuityCamera.Result	5037
• 92.5 ContinuityCamera.SetScriptTrigger	5038
• 57.1 CoreImage.Detect	1667
• 58.1 CoreLocation.ClearFailHandler	1669
• 58.2 CoreLocation.ClearUpdateLocationHandler	1670
• 58.3 CoreLocation.RegionMonitoringAvailable	1671
• 58.4 CoreLocation.RegionMonitoringEnabled	1672
• 58.5 CoreLocation.SetFailEvaluate	1673
• 58.6 CoreLocation.SetFailHandler	1674
• 58.7 CoreLocation.SetUpdateLocationEvaluate	1675
• 58.8 CoreLocation.SetUpdateLocationHandler	1676
• 58.9 CoreLocation.altitude	1678
• 58.10 CoreLocation.authorizationStatus	1679
• 58.11 CoreLocation.course	1680

- 58.12 CoreLocation.description 1681
- 58.13 CoreLocation.desiredAccuracy 1682
- 58.14 CoreLocation.dismissHeadingCalibrationDisplay 1683
- 58.15 CoreLocation.distanceFilter 1684
- 58.16 CoreLocation.distanceFromLocation 1685
- 58.17 CoreLocation.hasLocation 1686
- 58.18 CoreLocation.headingAvailable 1687
- 58.19 CoreLocation.horizontalAccuracy 1688
- 58.20 CoreLocation.latitude 1689
- 58.21 CoreLocation.locationServicesEnabled 1690
- 58.22 CoreLocation.longitude 1691
- 58.23 CoreLocation.purpose 1692
- 58.24 CoreLocation.requestAlwaysAuthorization 1693
- 58.25 CoreLocation.requestLocation 1694
- 58.26 CoreLocation.requestWhenInUseAuthorization 1695
- 58.27 CoreLocation.setDesiredAccuracy 1696
- 58.28 CoreLocation.setDistanceFilter 1697
- 58.29 CoreLocation.setPurpose 1698
- 58.30 CoreLocation.significantLocationChangeMonitoringAvailable 1699
- 58.31 CoreLocation.speed 1700
- 58.32 CoreLocation.startMonitoringSignificantLocationChanges 1701
- 58.33 CoreLocation.startUpdatingHeading 1702
- 58.34 CoreLocation.startUpdatingLocation 1703
- 58.35 CoreLocation.stopMonitoringSignificantLocationChanges 1704
- 58.36 CoreLocation.stopUpdatingHeading 1705
- 58.37 CoreLocation.stopUpdatingLocation 1706
- 58.38 CoreLocation.timestamp 1707
- 58.39 CoreLocation.verticalAccuracy 1708
- 59.1 CoreML.AddArrayParameter 1709

	49
• 59.2 CoreML.AddDoubleParameter	1711
• 59.3 CoreML.AddImageParameter	1712
• 59.4 CoreML.AddIntegerParameter	1714
• 59.5 CoreML.AddTextParameter	1715
• 59.6 CoreML.AddUndefinedParameter	1716
• 59.7 CoreML.Available	1717
• 59.8 CoreML.Clear	1718
• 59.9 CoreML.CompileModel	1719
• 59.10 CoreML.Description	1721
• 59.11 CoreML.GetUsesCPUOnly	1724
• 59.12 CoreML.OpenModel	1725
• 59.13 CoreML.PredictionFromFeatures	1727
• 59.14 CoreML.Release	1729
• 59.15 CoreML.ResultImage	1730
• 59.16 CoreML.SetUsesCPUOnly	1731
• 59.17 CoreML.Update	1732
• 67.1 DNSLookup.Address	2451
• 67.2 DNSLookup.AddressCount	2453
• 67.3 DNSLookup.Alias	2454
• 67.4 DNSLookup.AliasCount	2455
• 67.5 DNSLookup.LookupHostByAddress	2456
• 67.6 DNSLookup.LookupHostByName	2458
• 67.7 DNSLookup.Name	2460
• 67.8 DNSLookup.Release	2461
• 62.1 Debugger.BringToFront	2333
• 62.2 Debugger.CurrentLineNumber	2334
• 62.3 Debugger.GetCallStack	2335
• 62.4 Debugger.IsVisible	2336
• 62.5 Debugger.Title	2337

• 62.6 Debugger.Window	2338
• 63.1 Dialog.AddField	2339
• 63.2 Dialog.ClearFields	2341
• 63.3 Dialog.CloseSheet	2342
• 63.4 Dialog.GetAlternateButton	2343
• 63.5 Dialog.GetButton	2344
• 63.6 Dialog.GetButtonPressed	2345
• 63.7 Dialog.GetButtons	2346
• 63.8 Dialog.GetDefaultButton	2347
• 63.9 Dialog.GetFieldText	2348
• 63.10 Dialog.GetIcon	2349
• 63.11 Dialog.GetInformativeText	2350
• 63.12 Dialog.GetLastResult	2351
• 63.13 Dialog.GetLeft	2352
• 63.14 Dialog.GetMessage	2353
• 63.15 Dialog.GetMode	2354
• 63.16 Dialog.GetOtherButton	2355
• 63.17 Dialog.GetSheetEvaluate	2356
• 63.18 Dialog.GetSheetFileName	2357
• 63.19 Dialog.GetSheetRunning	2358
• 63.20 Dialog.GetSheetScriptName	2359
• 63.21 Dialog.GetShowsSuppressionButton	2360
• 63.22 Dialog.GetSuppressionButtonTitle	2361
• 63.23 Dialog.GetSuppressionState	2362
• 63.24 Dialog.GetTimeout	2363
• 63.25 Dialog.GetTop	2364
• 63.26 Dialog.GetWindowTitle	2365
• 63.27 Dialog.Reset	2366
• 63.28 Dialog.Run	2367

• 63.29 Dialog.RunSheet	2369
• 63.30 Dialog.SetAlternateButton	2370
• 63.31 Dialog.SetButton	2371
• 63.32 Dialog.SetButtons	2373
• 63.33 Dialog.SetDefaultButton	2374
• 63.34 Dialog.SetFieldText	2375
• 63.35 Dialog.SetIcon	2376
• 63.36 Dialog.SetInformativeText	2377
• 63.37 Dialog.SetLeft	2378
• 63.38 Dialog.SetMessage	2379
• 63.39 Dialog.SetMode	2380
• 63.40 Dialog.SetOtherButton	2381
• 63.41 Dialog.SetSheetEvaluate	2382
• 63.42 Dialog.SetSheetFileName	2383
• 63.43 Dialog.SetSheetScriptName	2384
• 63.44 Dialog.SetShowsSuppressionButton	2385
• 63.45 Dialog.SetSuppressionButtonTitle	2386
• 63.46 Dialog.SetTimeout	2387
• 63.47 Dialog.SetTop	2389
• 63.48 Dialog.SetWindowTitle	2391
• 64.1 DialogModifications.Clear	2393
• 64.2 DialogModifications.Install	2394
• 64.3 DialogModifications.Set	2395
• 64.4 DialogModifications.Uninstall	2396
• 65.1 Dictionary.AddSQL	2397
• 80.1 Dictionary.AddSQLRecord	4065
• 80.2 Dictionary.AddSQLRecords	4067
• 65.4 Dictionary.Clear	2404
• 65.5 Dictionary.Clone	2405

• 65.6 Dictionary.Count	2406
• 65.7 Dictionary.Create	2407
• 65.8 Dictionary.CreateNamed	2410
• 65.9 Dictionary.Deserialize	2411
• 65.10 Dictionary.HasKey	2413
• 65.11 Dictionary.KeyAtIndex	2414
• 65.12 Dictionary.Keys	2415
• 65.13 Dictionary.List	2416
• 65.14 Dictionary.Release	2417
• 65.15 Dictionary.RemoveKey	2418
• 65.16 Dictionary.Serialize	2419
• 65.17 Dictionary.SetList	2421
• 65.18 Dictionary.SetQuickList	2422
• 65.19 Dictionary.SetValueForKey	2423
• 65.20 Dictionary.SetVariables	2426
• 100.1 Dictionary.ToJSON	5231
• 65.22 Dictionary.ToText	2429
• 191.1 Dictionary.ToXML	9253
• 65.24 Dictionary.ValueForKey	2433
• 65.25 Dictionary.ValueTypeForKey	2435
• 65.26 Dictionary.Values	2436
• 66.1 DirectoryWatcher.AddDirectory	2437
• 66.2 DirectoryWatcher.ChangeCount	2439
• 66.3 DirectoryWatcher.Create	2440
• 66.4 DirectoryWatcher.GetEvaluate	2441
• 66.5 DirectoryWatcher.GetFileName	2442
• 66.6 DirectoryWatcher.GetScriptName	2443
• 66.7 DirectoryWatcher.NextChange	2444
• 66.8 DirectoryWatcher.Release	2445

• 66.9 DirectoryWatcher.ReleaseAll	2446
• 66.10 DirectoryWatcher.SetEvaluate	2447
• 66.11 DirectoryWatcher.SetFileName	2448
• 66.12 DirectoryWatcher.SetScriptName	2449
• 68.1 DocumentCameraScan.Clear	2463
• 68.2 DocumentCameraScan.Close	2465
• 68.3 DocumentCameraScan.ErrorMessage	2466
• 68.4 DocumentCameraScan.Initialize	2467
• 68.5 DocumentCameraScan.IsInitialized	2469
• 68.6 DocumentCameraScan.PageCount	2470
• 68.7 DocumentCameraScan.PageImage	2471
• 68.8 DocumentCameraScan.Scan	2473
• 68.9 DocumentCameraScan.SetScript	2474
• 68.10 DocumentCameraScan.Supported	2476
• 68.11 DocumentCameraScan.Title	2477
• 68.12 DocumentCameraScan.Visible	2478
• 77.1 DocumentPicker.Dismiss	3709
• 77.2 DocumentPicker.Export	3710
• 77.3 DocumentPicker.File	3711
• 77.4 DocumentPicker.FileCount	3712
• 77.5 DocumentPicker.Files	3713
• 77.6 DocumentPicker.Import	3714
• 77.7 DocumentPicker.IsVisible	3715
• 77.8 DocumentPicker.Move	3716
• 77.9 DocumentPicker.Open	3717
• 77.10 DocumentPicker.SetTrigger	3718
• 69.1 DragDrop.ClearDragActionHandler	2479
• 69.2 DragDrop.ClearDragEnterHandler	2481
• 69.3 DragDrop.ClearDragExitHandler	2482

- 69.4 DragDrop.CreateOnPopoverWithControl 2483
- 69.5 DragDrop.CreateOnPopoverWithSize 2485
- 69.6 DragDrop.CreateWithControl 2487
- 69.7 DragDrop.CreateWithSize 2490
- 69.8 DragDrop.CreateWithWindow 2492
- 69.9 DragDrop.GetAutoResizingMask 2493
- 69.10 DragDrop.GetEmailAccount 2494
- 69.11 DragDrop.GetEmailCount 2495
- 69.12 DragDrop.GetEmailID 2496
- 69.13 DragDrop.GetEmailMailbox 2497
- 69.14 DragDrop.GetEmailSubject 2498
- 69.15 DragDrop.GetFileDescriptor 2499
- 69.16 DragDrop.GetFileDescriptorCount 2501
- 69.17 DragDrop.GetHTML 2502
- 69.18 DragDrop.GetHeight 2503
- 69.19 DragDrop.GetLeft 2504
- 69.20 DragDrop.GetMouseX 2505
- 69.21 DragDrop.GetMouseY 2506
- 69.22 DragDrop.GetPath 2507
- 69.23 DragDrop.GetPathCount 2510
- 69.24 DragDrop.GetPicture 2512
- 69.25 DragDrop.GetRTF 2514
- 69.26 DragDrop.GetTag 2515
- 69.27 DragDrop.GetText 2516
- 69.28 DragDrop.GetTop 2518
- 69.29 DragDrop.GetTypes 2519
- 69.30 DragDrop.GetURL 2520
- 69.31 DragDrop.GetVisible 2521
- 69.32 DragDrop.GetWidth 2522

	55
• 69.33 DragDrop.GetWindowRef	2523
• 69.34 DragDrop.List	2524
• 69.35 DragDrop.RegisterDropTypes	2525
• 69.36 DragDrop.Release	2527
• 69.37 DragDrop.ReleaseAll	2529
• 69.38 DragDrop.SetAutoResizingMask	2530
• 69.39 DragDrop.SetCursor	2532
• 69.40 DragDrop.SetDragActionHandler	2534
• 69.41 DragDrop.SetDragEnterHandler	2536
• 69.42 DragDrop.SetDragExitHandler	2538
• 69.43 DragDrop.SetFrame	2540
• 69.44 DragDrop.SetFrameWithControl	2541
• 69.45 DragDrop.SetImage	2543
• 69.46 DragDrop.SetTag	2545
• 69.47 DragDrop.SetVisible	2546
• 69.48 DragDrop.UnregisterDropTypes	2547
• 70.1 DynaPDF.AddActionToObj	2549
• 70.2 DynaPDF.AddAnnotToPage	2552
• 70.3 DynaPDF.AddBookmark	2553
• 70.4 DynaPDF.AddBookmarkEx	2555
• 70.5 DynaPDF.AddContinueText	2557
• 70.6 DynaPDF.AddDeviceNProcessColorants	2558
• 70.7 DynaPDF.AddDeviceNSeparations	2560
• 70.8 DynaPDF.AddFontSearchPath	2563
• 70.9 DynaPDF.AddOutputIntent	2564
• 70.10 DynaPDF.AddOutputIntentEx	2565
• 70.11 DynaPDF.AddValToChoiceField	2567
• 70.12 DynaPDF.AllowPageBreak	2569
• 70.13 DynaPDF.AppendImagePage	2571

• 70.14 DynaPDF.AppendImagePages	2573
• 70.15 DynaPDF.AppendPage	2575
• 70.16 DynaPDF.AssociateEmbFile	2577
• 70.17 DynaPDF.AttachFile	2579
• 70.18 DynaPDF.AttachFileContainer	2581
• 70.19 DynaPDF.AttachFileText	2582
• 70.20 DynaPDF.BeginContinueText	2584
• 70.21 DynaPDF.BeginLayer	2586
• 70.22 DynaPDF.BeginPattern	2587
• 70.23 DynaPDF.BeginTemplate	2588
• 70.24 DynaPDF.Bezier123	2589
• 70.25 DynaPDF.Bezier13	2591
• 70.26 DynaPDF.Bezier23	2592
• 70.27 DynaPDF.CMYK	2593
• 70.28 DynaPDF.ChangeAnnotName	2595
• 70.29 DynaPDF.ChangeAnnotPos	2596
• 70.30 DynaPDF.ChangeBookmark	2597
• 70.31 DynaPDF.ChangeFont	2599
• 70.32 DynaPDF.ChangeFontSize	2600
• 70.33 DynaPDF.ChangeFontStyle	2601
• 70.34 DynaPDF.ChangeFontStyleEx	2602
• 70.35 DynaPDF.ChangeLinkAnnot	2603
• 70.36 DynaPDF.ChangeSeparationColor	2604
• 70.37 DynaPDF.CheckConformance	2605
• 70.38 DynaPDF.CheckFieldNames	2608
• 70.39 DynaPDF.CircleAnnot	2609
• 70.40 DynaPDF.Clear	2611
• 70.41 DynaPDF.ClipPath	2612
• 70.42 DynaPDF.CloseImportFile	2614

• 70.43 DynaPDF.ClosePath	2615
• 70.44 DynaPDF.ConvertColors	2617
• 70.45 DynaPDF.ConvertStyledText	2619
• 70.46 DynaPDF.CreateButton	2620
• 70.47 DynaPDF.CreateCheckBox	2623
• 70.48 DynaPDF.CreateComboBox	2625
• 70.49 DynaPDF.CreateDeviceNColorSpace	2628
• 70.50 DynaPDF.CreateGoToAction	2630
• 70.51 DynaPDF.CreateGoToActionEx	2632
• 70.52 DynaPDF.CreateGoToRAction	2634
• 70.53 DynaPDF.CreateGoToRActionEx	2636
• 70.54 DynaPDF.CreateGroupField	2638
• 70.55 DynaPDF.CreateJSAction	2640
• 70.56 DynaPDF.CreateListBox	2643
• 70.57 DynaPDF.CreateNamedDest	2646
• 70.58 DynaPDF.CreateRadioButton	2648
• 70.59 DynaPDF.CreateSeparationCS	2650
• 70.60 DynaPDF.CreateSigField	2653
• 70.61 DynaPDF.CreateSigFieldAP	2656
• 70.62 DynaPDF.CreateStructureTree	2657
• 70.63 DynaPDF.CreateTextField	2659
• 70.64 DynaPDF.CreateXFASStream	2661
• 70.65 DynaPDF.DeleteAcroForm	2662
• 70.66 DynaPDF.DeleteActionFromObjEx	2663
• 70.67 DynaPDF.DeleteAnnotation	2664
• 70.68 DynaPDF.DeleteBookmark	2665
• 70.69 DynaPDF.DeleteEmbeddedFile	2666
• 70.70 DynaPDF.DeleteField	2667
• 70.71 DynaPDF.DeleteFieldEx	2668

• 70.72 DynaPDF.DeleteJavaScripts	2669
• 70.73 DynaPDF.DeletePage	2670
• 70.74 DynaPDF.DeletePageLabels	2671
• 70.75 DynaPDF.DeleteSeparationInfo	2672
• 70.76 DynaPDF.DeleteTemplate	2673
• 70.77 DynaPDF.DeleteTemplateEx	2674
• 70.78 DynaPDF.DeleteXFAForm	2675
• 70.79 DynaPDF.DrawArc	2676
• 70.80 DynaPDF.DrawArcEx	2678
• 70.81 DynaPDF.DrawChord	2680
• 70.82 DynaPDF.DrawCircle	2682
• 70.83 DynaPDF.DrawPie	2684
• 70.84 DynaPDF.EditPage	2686
• 70.85 DynaPDF.EditTemplate	2688
• 70.86 DynaPDF.EditTemplate2	2690
• 70.87 DynaPDF.Ellipse	2691
• 70.88 DynaPDF.EnableEncryption	2693
• 70.89 DynaPDF.EndLayer	2696
• 70.90 DynaPDF.EndPage	2697
• 70.91 DynaPDF.EndPattern	2699
• 70.92 DynaPDF.EndTemplate	2700
• 70.93 DynaPDF.ExchangeBookmarks	2701
• 70.94 DynaPDF.ExchangePages	2702
• 70.95 DynaPDF.ExtractDocumentText	2703
• 70.96 DynaPDF.ExtractImages	2705
• 70.97 DynaPDF.ExtractPageRectText	2707
• 70.98 DynaPDF.ExtractPageText	2709
• 70.99 DynaPDF.ExtractText	2711
• 70.100 DynaPDF.FileAttachAnnot	2714

• 70.101 DynaPDF.FileAttachAnnotEx	2716
• 70.102 DynaPDF.FileLink	2718
• 70.103 DynaPDF.FindBookmark	2720
• 70.104 DynaPDF.FindEmbeddedFile	2722
• 70.105 DynaPDF.FindField	2723
• 70.106 DynaPDF.FindLinkAnnot	2724
• 70.107 DynaPDF.FindNextBookmark	2725
• 70.108 DynaPDF.FindPattern	2726
• 70.109 DynaPDF.FindText	2727
• 70.110 DynaPDF.FlattenAnnotOrField	2729
• 70.111 DynaPDF.FlattenAnnots	2730
• 70.112 DynaPDF.FlattenForm	2732
• 70.113 DynaPDF.FlushPages	2734
• 70.114 DynaPDF.FontInfo	2736
• 70.115 DynaPDF.FreeTextAnnot	2738
• 70.116 DynaPDF.GeneratePreview	2740
• 70.117 DynaPDF.GetAnnotCount	2743
• 70.118 DynaPDF.GetAnnotFlags	2744
• 70.119 DynaPDF.GetAnnotLink	2745
• 70.120 DynaPDF.GetAnnotType	2746
• 70.121 DynaPDF.GetAnnotation	2748
• 70.122 DynaPDF.GetAscent	2750
• 70.123 DynaPDF.GetBBox	2751
• 70.124 DynaPDF.GetBookmark	2753
• 70.125 DynaPDF.GetBookmarkCount	2755
• 70.126 DynaPDF.GetBorderStyle	2756
• 70.127 DynaPDF.GetCMapCount	2757
• 70.128 DynaPDF.GetCharacterSpacing	2758
• 70.129 DynaPDF.GetCheckBoxChar	2759

• 70.130 DynaPDF.GetCheckBoxCharEx	2760
• 70.131 DynaPDF.GetCheckBoxDefState	2761
• 70.132 DynaPDF.GetColorSpace	2762
• 70.133 DynaPDF.GetColorSpaceCount	2763
• 70.134 DynaPDF.GetColorSpaceInfo	2764
• 70.135 DynaPDF.GetCompressionFilter	2765
• 70.136 DynaPDF.GetCompressionLevel	2766
• 70.137 DynaPDF.GetContent	2767
• 70.138 DynaPDF.GetDocInfo	2768
• 70.139 DynaPDF.GetDocInfoCount	2770
• 70.140 DynaPDF.GetDocUsesTransparency	2771
• 70.141 DynaPDF.GetDrawDirection	2772
• 70.142 DynaPDF.GetDynaPDFVersion	2773
• 70.143 DynaPDF.GetEmbeddedFile	2774
• 70.144 DynaPDF.GetEmbeddedFileAsContainer	2776
• 70.145 DynaPDF.GetEmbeddedFileCount	2777
• 70.146 DynaPDF.GetFTextHeight	2779
• 70.147 DynaPDF.GetFTextHeightEx	2781
• 70.148 DynaPDF.GetField	2783
• 70.149 DynaPDF.GetFieldBackColor	2785
• 70.150 DynaPDF.GetFieldBorderColor	2786
• 70.151 DynaPDF.GetFieldBorderStyle	2787
• 70.152 DynaPDF.GetFieldBorderWidth	2788
• 70.153 DynaPDF.GetFieldChoiceValue	2789
• 70.154 DynaPDF.GetFieldColor	2790
• 70.155 DynaPDF.GetFieldCount	2791
• 70.156 DynaPDF.GetFieldExpValCount	2792
• 70.157 DynaPDF.GetFieldExpValue	2793
• 70.158 DynaPDF.GetFieldExpValueEx	2794

• 70.159 DynaPDF.GetFieldFlags	2796
• 70.160 DynaPDF.GetFieldGroupType	2797
• 70.161 DynaPDF.GetFieldHighlightMode	2798
• 70.162 DynaPDF.GetFieldIndex	2799
• 70.163 DynaPDF.GetFieldMapName	2800
• 70.164 DynaPDF.GetFieldName	2801
• 70.165 DynaPDF.GetFieldOrientation	2802
• 70.166 DynaPDF.GetFieldTextAlign	2803
• 70.167 DynaPDF.GetFieldTextColor	2804
• 70.168 DynaPDF.GetFieldToolTip	2805
• 70.169 DynaPDF.GetFieldType	2806
• 70.170 DynaPDF.GetFontCount	2807
• 70.171 DynaPDF.GetFontOrigin	2808
• 70.172 DynaPDF.GetFontSelMode	2809
• 70.173 DynaPDF.GetFontWeight	2810
• 70.174 DynaPDF.GetGStateFlags	2811
• 70.175 DynaPDF.GetImage	2812
• 70.176 DynaPDF.GetImageCount	2815
• 70.177 DynaPDF.GetImportDocInfo	2817
• 70.178 DynaPDF.GetImportFlags	2819
• 70.179 DynaPDF.GetImportFlags2	2820
• 70.180 DynaPDF.GetImportOrientation	2821
• 70.181 DynaPDF.GetImportPDFVersion	2822
• 70.182 DynaPDF.GetImportPageBounds	2823
• 70.183 DynaPDF.GetImportPageCount	2825
• 70.184 DynaPDF.GetInDocInfoCount	2828
• 70.185 DynaPDF.GetInFieldCount	2829
• 70.186 DynaPDF.GetInIsCollection	2830
• 70.187 DynaPDF.GetInIsEncrypted	2831

• 70.188 DynaPDF.GetInIsSigned	2832
• 70.189 DynaPDF.GetInIsTrapped	2833
• 70.190 DynaPDF.GetInIsXFAForm	2834
• 70.191 DynaPDF.GetInMetadata	2835
• 70.192 DynaPDF.GetInPrintSettings	2837
• 70.193 DynaPDF.GetInRepairMode	2838
• 70.194 DynaPDF.GetIsFixedPitch	2839
• 70.195 DynaPDF.GetIsTaggingEnabled	2840
• 70.196 DynaPDF.GetJPEGQuality	2841
• 70.197 DynaPDF.GetJavaScriptCount	2842
• 70.198 DynaPDF.GetLanguage	2843
• 70.199 DynaPDF.GetLastErrorMessage	2844
• 70.200 DynaPDF.GetLastTextPosX	2845
• 70.201 DynaPDF.GetLastTextPosY	2846
• 70.202 DynaPDF.GetLeading	2847
• 70.203 DynaPDF.GetLineWidth	2848
• 70.204 DynaPDF.GetLinkHighlightMode	2849
• 70.205 DynaPDF.GetLogMetafileSize	2850
• 70.206 DynaPDF.GetLogMetafileSizeEx	2851
• 70.207 DynaPDF.GetMetaConvFlags	2852
• 70.208 DynaPDF.GetMetadata	2853
• 70.209 DynaPDF.GetOCG	2855
• 70.210 DynaPDF.GetOCGContUsage	2858
• 70.211 DynaPDF.GetOCGCount	2860
• 70.212 DynaPDF.GetOCGUsageUserName	2861
• 70.213 DynaPDF.GetOpacity	2862
• 70.214 DynaPDF.GetOrientation	2863
• 70.215 DynaPDF.GetOutputIntent	2864
• 70.216 DynaPDF.GetOutputIntentCount	2866

• 70.217 DynaPDF.GetPDFVersion	2867
• 70.218 DynaPDF.GetPageAnnotCount	2868
• 70.219 DynaPDF.GetPageAnnotation	2869
• 70.220 DynaPDF.GetPageBBox	2870
• 70.221 DynaPDF.GetPageCoords	2872
• 70.222 DynaPDF.GetPageCount	2873
• 70.223 DynaPDF.GetPageFieldCount	2875
• 70.224 DynaPDF.GetPageHeight	2876
• 70.225 DynaPDF.GetPageLabel	2878
• 70.226 DynaPDF.GetPageLabelCount	2880
• 70.227 DynaPDF.GetPageLayout	2881
• 70.228 DynaPDF.GetPageMode	2882
• 70.229 DynaPDF.GetPageNum	2883
• 70.230 DynaPDF.GetPageWidth	2884
• 70.231 DynaPDF.GetPrintSettings	2886
• 70.232 DynaPDF.GetReplaceICCProfile	2887
• 70.233 DynaPDF.GetReplaceICCProfileData	2888
• 70.234 DynaPDF.GetReplaceICCProfilesCounter	2889
• 70.235 DynaPDF.GetResolution	2890
• 70.236 DynaPDF.GetSaveNewImageFormat	2891
• 70.237 DynaPDF.GetTemplCount	2892
• 70.238 DynaPDF.GetTemplHeight	2893
• 70.239 DynaPDF.GetTemplWidth	2894
• 70.240 DynaPDF.GetTextDrawMode	2895
• 70.241 DynaPDF.GetTextFieldDefaultValue	2896
• 70.242 DynaPDF.GetTextFieldValue	2897
• 70.243 DynaPDF.GetTextRise	2898
• 70.244 DynaPDF.GetTextScaling	2899
• 70.245 DynaPDF.GetTextWidth	2900

• 70.246 DynaPDF.GetTransparentColor	2902
• 70.247 DynaPDF.GetTrapped	2903
• 70.248 DynaPDF.GetUseExactPwd	2904
• 70.249 DynaPDF.GetUseGlobalImpFiles	2905
• 70.250 DynaPDF.GetUseStdFonts	2906
• 70.251 DynaPDF.GetUseSystemFonts	2907
• 70.252 DynaPDF.GetUseTransparency	2908
• 70.253 DynaPDF.GetUseVisibleCoords	2909
• 70.254 DynaPDF.GetUserRights	2910
• 70.255 DynaPDF.GetUserUnit	2911
• 70.256 DynaPDF.GetUsesTransparency	2912
• 70.257 DynaPDF.GetViewerPreferences	2914
• 70.258 DynaPDF.GetWMFDefExtent	2915
• 70.259 DynaPDF.GetWMFPixelPerInch	2916
• 70.260 DynaPDF.GetWordSpacing	2917
• 70.261 DynaPDF.GetXFASStream	2918
• 70.262 DynaPDF.GetXFASStreamCount	2920
• 70.263 DynaPDF.HaveOpenDocument	2921
• 70.264 DynaPDF.HaveOpenPage	2922
• 70.265 DynaPDF.HighlightAnnot	2923
• 70.266 DynaPDF.HighlightPattern	2925
• 70.267 DynaPDF.ImportEncryptionSettings	2927
• 70.268 DynaPDF.ImportPDFFile	2928
• 70.269 DynaPDF.ImportPDFPage	2931
• 70.270 DynaPDF.ImportPageAsTemplate	2934
• 70.271 DynaPDF.InitColorManagement	2936
• 70.272 DynaPDF.InitColorManagementEx	2939
• 70.273 DynaPDF.Initialize	2941
• 70.274 DynaPDF.InsertBookmark	2948

	65
• 70.275 DynaPDF.InsertBookmarkEx	2950
• 70.276 DynaPDF.InsertImage	2952
• 70.277 DynaPDF.InsertImageFile	2956
• 70.278 DynaPDF.InsertMetafile	2959
• 70.279 DynaPDF.InsertMetafileEx	2961
• 70.280 DynaPDF.IsColorPage	2963
• 70.281 DynaPDF.IsEmptyPage	2965
• 70.282 DynaPDF.IsInitialized	2966
• 70.283 DynaPDF.LineAnnot	2969
• 70.284 DynaPDF.LineTo	2971
• 70.285 DynaPDF.List	2973
• 70.286 DynaPDF.ListImages	2974
• 70.287 DynaPDF.LockLayer	2977
• 70.288 DynaPDF.MovePage	2978
• 70.289 DynaPDF.MoveTo	2979
• 70.290 DynaPDF.New	2981
• 70.291 DynaPDF.OpenOutputFile	2984
• 70.292 DynaPDF.OpenOutputFileEncrypted	2986
• 70.293 DynaPDF.OpenPDFFromContainer	2988
• 70.294 DynaPDF.OpenPDFFromFile	2992
• 70.295 DynaPDF.Optimize	2995
• 70.296 DynaPDF.PageLink	3001
• 70.297 DynaPDF.PageLinkEx	3004
• 70.298 DynaPDF.PageStatistics	3008
• 70.299 DynaPDF.ParseContent	3011
• 70.300 DynaPDF.PlaceTemplate	3013
• 70.301 DynaPDF.PlaceTemplateEx	3015
• 70.302 DynaPDF.Print	3017
• 70.303 DynaPDF.Print.GetDevMode	3021

• 70.304 DynaPDF.Print.GetDevNames	3022
• 70.305 DynaPDF.Print.SetDevMode	3023
• 70.306 DynaPDF.Print.SetDevNames	3025
• 70.307 DynaPDF.RGB	3026
• 70.308 DynaPDF.ReadImageFormat	3028
• 70.309 DynaPDF.ReadImageResolution	3030
• 70.310 DynaPDF.Rectangle	3031
• 70.311 DynaPDF.Release	3033
• 70.312 DynaPDF.RenameSpotColor	3035
• 70.313 DynaPDF.RenderPDFFile	3036
• 70.314 DynaPDF.RenderPDFFileEx	3038
• 70.315 DynaPDF.RenderPage	3040
• 70.316 DynaPDF.ReplaceImage	3043
• 70.317 DynaPDF.ReplacePattern	3046
• 70.318 DynaPDF.ResetEncryptionSettings	3049
• 70.319 DynaPDF.RestoreGraphicState	3050
• 70.320 DynaPDF.RotateCoords	3052
• 70.321 DynaPDF.RotateTemplate	3055
• 70.322 DynaPDF.RoundRect	3058
• 70.323 DynaPDF.RoundRectEx	3060
• 70.324 DynaPDF.Save	3062
• 70.325 DynaPDF.SaveAndSignFile	3065
• 70.326 DynaPDF.SaveAndSignFileWinCrypt	3067
• 70.327 DynaPDF.SaveAndSignFileWinCryptDialog	3069
• 70.328 DynaPDF.SaveGraphicState	3071
• 70.329 DynaPDF.ScaleCoords	3072
• 70.330 DynaPDF.SetAlpha	3074
• 70.331 DynaPDF.SetAnnotBorderStyle	3076
• 70.332 DynaPDF.SetAnnotBorderWidth	3078

• 70.333 DynaPDF.SetAnnotColor	3079
• 70.334 DynaPDF.SetAnnotDate	3081
• 70.335 DynaPDF.SetAnnotFlags	3083
• 70.336 DynaPDF.SetAnnotFlagsEx	3085
• 70.337 DynaPDF.SetAnnotHighlightMode	3086
• 70.338 DynaPDF.SetAnnotIcon	3087
• 70.339 DynaPDF.SetAnnotLineEndStyle	3088
• 70.340 DynaPDF.SetAnnotOpacity	3089
• 70.341 DynaPDF.SetAnnotOpenState	3090
• 70.342 DynaPDF.SetAnnotString	3091
• 70.343 DynaPDF.SetAnnotSubject	3092
• 70.344 DynaPDF.SetBBox	3093
• 70.345 DynaPDF.SetBookmarkDest	3095
• 70.346 DynaPDF.SetBookmarkStyle	3097
• 70.347 DynaPDF.SetBorderStyle	3099
• 70.348 DynaPDF.SetCMapDir	3100
• 70.349 DynaPDF.SetCharacterSpacing	3101
• 70.350 DynaPDF.SetCheckBoxChar	3102
• 70.351 DynaPDF.SetCheckBoxDefState	3103
• 70.352 DynaPDF.SetCheckBoxState	3104
• 70.353 DynaPDF.SetColorSpace	3105
• 70.354 DynaPDF.SetCompressionFilter	3107
• 70.355 DynaPDF.SetCompressionLevel	3109
• 70.356 DynaPDF.SetContent	3110
• 70.357 DynaPDF.SetDocInfo	3111
• 70.358 DynaPDF.SetDocInfoEx	3113
• 70.359 DynaPDF.SetDrawDirection	3115
• 70.360 DynaPDF.SetExtColorSpace	3116
• 70.361 DynaPDF.SetExtFillColorSpace	3118

• 70.362 DynaPDF.SetExtStrokeColorSpace	3119
• 70.363 DynaPDF.SetFieldBBox	3120
• 70.364 DynaPDF.SetFieldBackColor	3122
• 70.365 DynaPDF.SetFieldBorderColor	3123
• 70.366 DynaPDF.SetFieldBorderStyle	3124
• 70.367 DynaPDF.SetFieldBorderWidth	3125
• 70.368 DynaPDF.SetFieldColor	3127
• 70.369 DynaPDF.SetFieldDate	3129
• 70.370 DynaPDF.SetFieldExpValue	3130
• 70.371 DynaPDF.SetFieldExpValueEx	3132
• 70.372 DynaPDF.SetFieldFlags	3134
• 70.373 DynaPDF.SetFieldFont	3136
• 70.374 DynaPDF.SetFieldFontEx	3138
• 70.375 DynaPDF.SetFieldFontSize	3140
• 70.376 DynaPDF.SetFieldHighlightMode	3141
• 70.377 DynaPDF.SetFieldIndex	3142
• 70.378 DynaPDF.SetFieldMapName	3143
• 70.379 DynaPDF.SetFieldName	3144
• 70.380 DynaPDF.SetFieldOrientation	3146
• 70.381 DynaPDF.SetFieldTextAlign	3147
• 70.382 DynaPDF.SetFieldTextColor	3148
• 70.383 DynaPDF.SetFieldToolTip	3149
• 70.384 DynaPDF.SetFillColor	3150
• 70.385 DynaPDF.SetFloatPrecision	3153
• 70.386 DynaPDF.SetFont	3154
• 70.387 DynaPDF.SetFontEx	3156
• 70.388 DynaPDF.SetFontOrigin	3158
• 70.389 DynaPDF.SetFontSearchOrder	3159
• 70.390 DynaPDF.SetFontSelMode	3161

• 70.391 DynaPDF.SetFontWeight	3162
• 70.392 DynaPDF.SetGStateFlags	3164
• 70.393 DynaPDF.SetImportFlags	3166
• 70.394 DynaPDF.SetImportFlags2	3170
• 70.395 DynaPDF.SetJPEGQuality	3172
• 70.396 DynaPDF.SetLanguage	3174
• 70.397 DynaPDF.SetLeading	3176
• 70.398 DynaPDF.SetLineJoinStyle	3177
• 70.399 DynaPDF.SetLineWidth	3178
• 70.400 DynaPDF.SetLinkHighlightMode	3180
• 70.401 DynaPDF.SetMetaConvFlags	3181
• 70.402 DynaPDF.SetMetadata	3183
• 70.403 DynaPDF.SetMiterLimit	3185
• 70.404 DynaPDF.SetNumberFormat	3186
• 70.405 DynaPDF.SetOCGState	3188
• 70.406 DynaPDF.SetOpacity	3190
• 70.407 DynaPDF.SetOrientation	3191
• 70.408 DynaPDF.SetOrientationEx	3192
• 70.409 DynaPDF.SetPDFVersion	3195
• 70.410 DynaPDF.SetPageBBox	3197
• 70.411 DynaPDF.SetPageCoords	3199
• 70.412 DynaPDF.SetPageFormat	3201
• 70.413 DynaPDF.SetPageHeight	3203
• 70.414 DynaPDF.SetPageLayout	3206
• 70.415 DynaPDF.SetPageMode	3207
• 70.416 DynaPDF.SetPageWidth	3208
• 70.417 DynaPDF.SetPrintSettings	3211
• 70.418 DynaPDF.SetReplaceICCProfile	3213
• 70.419 DynaPDF.SetReplaceICCProfileData	3215

• 70.420 DynaPDF.SetResolution	3217
• 70.421 DynaPDF.SetSaveNewImageFormat	3219
• 70.422 DynaPDF.SetSeparationInfo	3221
• 70.423 DynaPDF.SetStrokeColor	3222
• 70.424 DynaPDF.SetTextDrawMode	3224
• 70.425 DynaPDF.SetTextFieldValue	3226
• 70.426 DynaPDF.SetTextFieldValueEx	3228
• 70.427 DynaPDF.SetTextRect	3229
• 70.428 DynaPDF.SetTextRise	3231
• 70.429 DynaPDF.SetTextScaling	3232
• 70.430 DynaPDF.SetTransparentColor	3233
• 70.431 DynaPDF.SetTrapped	3234
• 70.432 DynaPDF.SetUseExactPwd	3235
• 70.433 DynaPDF.SetUseGlobalImpFiles	3236
• 70.434 DynaPDF.SetUseStdFonts	3237
• 70.435 DynaPDF.SetUseSystemFonts	3239
• 70.436 DynaPDF.SetUseTransparency	3241
• 70.437 DynaPDF.SetUseVisibleCoords	3242
• 70.438 DynaPDF.SetUserUnit	3243
• 70.439 DynaPDF.SetViewerPreferences	3244
• 70.440 DynaPDF.SetWMFDefExtent	3245
• 70.441 DynaPDF.SetWMFPixelPerInch	3246
• 70.442 DynaPDF.SetWordSpacing	3247
• 70.443 DynaPDF.SetXFASStream	3248
• 70.444 DynaPDF.ShowDifferences	3249
• 70.445 DynaPDF.SkewCoords	3251
• 70.446 DynaPDF.SquareAnnot	3253
• 70.447 DynaPDF.StampAnnot	3255
• 70.448 DynaPDF.StrokePath	3257

• 70.449 DynaPDF.SysFontInfo	3259
• 70.450 DynaPDF.Table.AddColumn	3261
• 70.451 DynaPDF.Table.AddRow	3262
• 70.452 DynaPDF.Table.AddRows	3264
• 70.453 DynaPDF.Table.ClearColumn	3265
• 70.454 DynaPDF.Table.ClearContent	3266
• 70.455 DynaPDF.Table.ClearRow	3268
• 70.456 DynaPDF.Table.Create	3270
• 70.457 DynaPDF.Table.DeleteCol	3273
• 70.458 DynaPDF.Table.DeleteRow	3274
• 70.459 DynaPDF.Table.DeleteRows	3275
• 70.460 DynaPDF.Table.Draw	3276
• 70.461 DynaPDF.Table.GetFirstRow	3279
• 70.462 DynaPDF.Table.GetNextHeight	3280
• 70.463 DynaPDF.Table.GetNextHeightRow	3281
• 70.464 DynaPDF.Table.GetNextRow	3282
• 70.465 DynaPDF.Table.GetNumCols	3283
• 70.466 DynaPDF.Table.GetNumRows	3284
• 70.467 DynaPDF.Table.GetPDF	3285
• 70.468 DynaPDF.Table.GetTableHeight	3286
• 70.469 DynaPDF.Table.GetTableWidth	3287
• 70.470 DynaPDF.Table.HaveMore	3288
• 70.471 DynaPDF.Table.Release	3289
• 70.472 DynaPDF.Table.SetBorderWidth	3290
• 70.473 DynaPDF.Table.SetBoxProperty	3292
• 70.474 DynaPDF.Table.SetCellAction	3294
• 70.475 DynaPDF.Table.SetCellImage	3296
• 70.476 DynaPDF.Table.SetCellImageEx	3299
• 70.477 DynaPDF.Table.SetCellOrientation	3301

• 70.478 DynaPDF.Table.SetCellPadding	3303
• 70.479 DynaPDF.Table.SetCellSpacing	3305
• 70.480 DynaPDF.Table.SetCellTable	3307
• 70.481 DynaPDF.Table.SetCellTemplate	3309
• 70.482 DynaPDF.Table.SetCellText	3312
• 70.483 DynaPDF.Table.SetColWidth	3314
• 70.484 DynaPDF.Table.SetColor	3316
• 70.485 DynaPDF.Table.SetColorFloat	3318
• 70.486 DynaPDF.Table.SetFlags	3320
• 70.487 DynaPDF.Table.SetFont	3322
• 70.488 DynaPDF.Table.SetFontSelMode	3324
• 70.489 DynaPDF.Table.SetFontSize	3325
• 70.490 DynaPDF.Table.SetGridWidth	3327
• 70.491 DynaPDF.Table.SetPDF	3329
• 70.492 DynaPDF.Table.SetRGBColor	3330
• 70.493 DynaPDF.Table.SetRowHeight	3332
• 70.494 DynaPDF.Table.SetTableWidth	3333
• 70.495 DynaPDF.TextAnnot	3335
• 70.496 DynaPDF.TranslateCoords	3337
• 70.497 DynaPDF.Triangle	3339
• 70.498 DynaPDF.UnlockLayer	3341
• 70.499 DynaPDF.Uninitialize	3342
• 70.500 DynaPDF.WatermarkAnnot	3343
• 70.501 DynaPDF.WebLink	3345
• 70.502 DynaPDF.WriteDemoText	3348
• 70.503 DynaPDF.WriteFText	3350
• 70.504 DynaPDF.WriteFTextEx	3352
• 70.505 DynaPDF.WriteFTextExRotated	3356
• 70.506 DynaPDF.WriteStyledText	3358

- 70.507 DynaPDF.WriteStyledTextEx 3360
- 70.508 DynaPDF.WriteStyledTextExRotated 3362
- 70.509 DynaPDF.WriteText 3364
- 149.1 ECKey.BuiltInCurves 7061
- 149.2 ECKey.Description 7063
- 149.3 ECKey.Duplicate 7064
- 149.4 ECKey.Generate 7065
- 149.5 ECKey.PrivateKey 7067
- 149.6 ECKey.PublicKey 7068
- 149.7 ECKey.ReadPrivateKey 7069
- 149.8 ECKey.ReadPublicKey 7070
- 149.9 ECKey.Release 7071
- 149.10 ECKey.Sign 7072
- 149.11 ECKey.Size 7073
- 149.12 ECKey.Verify 7074
- 71.1 EIDSDK.Address 3367
- 71.2 EIDSDK.BeginTransaction 3368
- 71.3 EIDSDK.CardDeliveryMunicipality 3369
- 71.4 EIDSDK.CardNumber 3370
- 71.5 EIDSDK.CardValidFrom 3371
- 71.6 EIDSDK.CardValidTo 3372
- 71.7 EIDSDK.ChipNumber 3373
- 71.8 EIDSDK.Close 3374
- 71.9 EIDSDK.DateOfBirth 3375
- 71.10 EIDSDK.DocTypeInt 3376
- 71.11 EIDSDK.Duplicate 3377
- 71.12 EIDSDK.EndTransaction 3378
- 71.13 EIDSDK.FirstName 3379
- 71.14 EIDSDK.Initialize 3380

• 71.15 EIDSDK.LastName	3381
• 71.16 EIDSDK.MemberOfFamily	3382
• 71.17 EIDSDK.Municipality	3383
• 71.18 EIDSDK.NatNumber	3384
• 71.19 EIDSDK.Nationality	3385
• 71.20 EIDSDK.NobleCondition	3386
• 71.21 EIDSDK.Open	3387
• 71.22 EIDSDK.PhotoDigest	3388
• 71.23 EIDSDK.Picture	3389
• 71.24 EIDSDK.PlaceOfBirth	3390
• 71.25 EIDSDK.PostalCode	3391
• 71.26 EIDSDK.SDKReleaseDate	3392
• 71.27 EIDSDK.SDKVersion	3393
• 71.28 EIDSDK.SetTrigger	3394
• 71.29 EIDSDK.Sex	3395
• 71.30 EIDSDK.SpecialOrganisation	3396
• 71.31 EIDSDK.SpecialStatus	3397
• 71.32 EIDSDK.StartScan	3398
• 71.33 EIDSDK.StopScan	3399
• 71.34 EIDSDK.SupportsPinPad	3400
• 71.35 EIDSDK.ThirdName	3401
• 71.36 EIDSDK.Version	3402
• 175.2 Email.Verify	8231
• 72.1 EmailParser.Address	3403
• 72.2 EmailParser.AddressCount	3406
• 72.3 EmailParser.AttachedEmails	3407
• 72.4 EmailParser.Attachment	3408
• 72.5 EmailParser.AttachmentCount	3410
• 72.6 EmailParser.Free	3411

- 72.7 EmailParser.HTMLText 3413
- 72.8 EmailParser.HTMLToPlainText 3415
- 72.9 EmailParser.HasHeader 3416
- 72.10 EmailParser.Hash 3417
- 72.11 EmailParser.Header 3418
- 72.12 EmailParser.HeaderCount 3420
- 72.13 EmailParser.HeaderValue 3421
- 72.14 EmailParser.Inline 3422
- 72.15 EmailParser.InlineCount 3424
- 72.16 EmailParser.List 3425
- 72.17 EmailParser.MessageID 3426
- 72.18 EmailParser.Parse 3427
- 72.19 EmailParser.ParseContainer 3431
- 72.20 EmailParser.ParseFile 3432
- 72.21 EmailParser.PlainText 3433
- 72.22 EmailParser.ProcessImageReferences 3435
- 72.23 EmailParser.ReceiveDate 3436
- 72.24 EmailParser.SentDate 3437
- 72.25 EmailParser.Source 3438
- 72.26 EmailParser.SourceWithoutAttachments 3439
- 72.27 EmailParser.Subject 3440
- 72.28 EmailParser.WriteAttachment 3442
- 72.29 EmailParser.WriteInline 3443
- 73.1 Encryption.Cipher 3445
- 73.2 Encryption.CipherNames 3451
- 73.3 Encryption.DecryptAES 3452
- 73.4 Encryption.DecryptBlowfish 3454
- 73.5 Encryption.DecryptContainerAES 3456
- 73.6 Encryption.DecryptContainerBlowfish 3458

- 73.7 Encryption.DigestNames 3460
- 73.8 Encryption.EncryptAES 3461
- 73.9 Encryption.EncryptBlowfish 3463
- 73.10 Encryption.EncryptContainerAES 3465
- 73.11 Encryption.EncryptContainerBlowfish 3467
- 74.1 EnvironmentVariables.ClearValue 3485
- 74.2 EnvironmentVariables.Count 3487
- 74.3 EnvironmentVariables.Name 3488
- 74.4 EnvironmentVariables.Names 3489
- 74.5 EnvironmentVariables.SetValue 3490
- 74.6 EnvironmentVariables.Value 3491
- 75.1 EventMonitor.Clear 3493
- 75.2 EventMonitor.ClearCardWindow 3494
- 75.3 EventMonitor.GetEnabled 3495
- 75.4 EventMonitor.Install 3496
- 75.5 EventMonitor.LastMouseClickedButton 3497
- 75.6 EventMonitor.LastMouseClickedIsDoubleClick 3498
- 75.7 EventMonitor.LastMousePositionX 3499
- 75.8 EventMonitor.LastMousePositionY 3500
- 75.9 EventMonitor.SetCardWindow 3501
- 75.10 EventMonitor.SetEnabled 3504
- 76.1 Events.Alarm.Copy 3505
- 76.2 Events.Alarm.GetAbsoluteDate 3507
- 76.3 Events.Alarm.GetEmailAddress 3508
- 76.4 Events.Alarm.GetProximity 3509
- 76.5 Events.Alarm.GetRelativeOffset 3510
- 76.6 Events.Alarm.GetSound 3511
- 76.7 Events.Alarm.GetStructuredLocation 3512
- 76.8 Events.Alarm.GetURL 3513

• 76.9 Events.Alarm.SetAbsoluteDate	3514
• 76.10 Events.Alarm.SetEmailAddress	3515
• 76.11 Events.Alarm.SetProximity	3516
• 76.12 Events.Alarm.SetRelativeOffset	3517
• 76.13 Events.Alarm.SetSound	3518
• 76.14 Events.Alarm.SetStructuredLocation	3520
• 76.15 Events.Alarm.SetURL	3522
• 76.16 Events.Alarm.TriggerDateRelativeTo	3523
• 76.17 Events.Alarm.Type	3524
• 76.18 Events.AuthorizationStatusForEntityType	3525
• 76.19 Events.Calendar.AllowsContentModifications	3527
• 76.20 Events.Calendar.CalendarIdentifier	3528
• 76.21 Events.Calendar.Duplicate	3529
• 76.22 Events.Calendar.GetColor	3530
• 76.23 Events.Calendar.GetSource	3532
• 76.24 Events.Calendar.GetTitle	3533
• 76.25 Events.Calendar.GetType	3534
• 76.26 Events.Calendar.Immutable	3535
• 76.27 Events.Calendar.SetColor	3536
• 76.28 Events.Calendar.SetSource	3537
• 76.29 Events.Calendar.SetTitle	3538
• 76.30 Events.Calendar.Subscribed	3539
• 76.31 Events.Calendar.allowedEntityTypes	3540
• 76.32 Events.Calendar.supportedEventAvailabilities	3541
• 76.33 Events.CalendarCount	3542
• 76.34 Events.CalendarItemsWithExternalIdentifier	3543
• 76.35 Events.Calendars	3544
• 76.36 Events.ClearNotification	3545
• 76.37 Events.Commit	3546

• 76.38 Events.CompletedReminders	3547
• 76.39 Events.DelegateSources	3548
• 76.40 Events.Event.BirthdayPersonUniqueID	3549
• 76.41 Events.Event.GetAllDay	3550
• 76.42 Events.Event.GetAvailability	3551
• 76.43 Events.Event.GetEndDate	3552
• 76.44 Events.Event.GetStartDate	3553
• 76.45 Events.Event.GetStructuredLocation	3554
• 76.46 Events.Event.IsDetached	3555
• 76.47 Events.Event.OccurrenceDate	3556
• 76.48 Events.Event.Refresh	3557
• 76.49 Events.Event.SetAllDay	3558
• 76.50 Events.Event.SetAvailability	3559
• 76.51 Events.Event.SetEndDate	3560
• 76.52 Events.Event.SetStartDate	3562
• 76.53 Events.Event.SetStructuredLocation	3564
• 76.54 Events.Event.Status	3565
• 76.55 Events.Event.compareStartDateWithEvent	3566
• 76.56 Events.Event.organizer	3567
• 76.57 Events.EventStoreIdentifier	3568
• 76.58 Events.Events	3569
• 76.59 Events.IncompleteReminders	3570
• 76.60 Events.Initialize	3571
• 76.61 Events.Item.AddAlarm	3572
• 76.62 Events.Item.AddRecurrenceRule	3574
• 76.63 Events.Item.Alarms	3575
• 76.64 Events.Item.Attendees	3576
• 76.65 Events.Item.CalendarItemExternalIdentifier	3577
• 76.66 Events.Item.CalendarItemIdentifier	3579

• 76.67 Events.Item.Duplicate	3580
• 76.68 Events.Item.GetCalendar	3581
• 76.69 Events.Item.GetLocation	3582
• 76.70 Events.Item.GetNotes	3583
• 76.71 Events.Item.GetTimeZone	3584
• 76.72 Events.Item.GetTitle	3585
• 76.73 Events.Item.GetURL	3586
• 76.74 Events.Item.HasAlarms	3587
• 76.75 Events.Item.HasAttendees	3588
• 76.76 Events.Item.HasNotes	3589
• 76.77 Events.Item.HasRecurrenceRules	3590
• 76.78 Events.Item.RecurrenceRules	3591
• 76.79 Events.Item.RemoveAlarm	3592
• 76.80 Events.Item.RemoveRecurrenceRule	3593
• 76.81 Events.Item.SetCalendar	3594
• 76.82 Events.Item.SetLocation	3596
• 76.83 Events.Item.SetNotes	3598
• 76.84 Events.Item.SetTimeZone	3600
• 76.85 Events.Item.SetTitle	3601
• 76.86 Events.Item.SetURL	3603
• 76.87 Events.Item.creationDate	3605
• 76.88 Events.Item.lastModifiedDate	3606
• 76.89 Events.NewAlarm	3607
• 76.90 Events.NewAlarmWithAbsoluteDate	3609
• 76.91 Events.NewAlarmWithRelativeOffset	3610
• 76.92 Events.NewCalendar	3611
• 76.93 Events.NewEvent	3612
• 76.94 Events.NewReminder	3614
• 76.95 Events.Object.HasChanges	3616

- 76.96 Events.Object.IsNew 3617
- 76.97 Events.Object.Refresh 3618
- 76.98 Events.Object.Reset 3619
- 76.99 Events.Object.Rollback 3620
- 76.100 Events.Participant.GetName 3621
- 76.101 Events.Participant.GetStatus 3622
- 76.102 Events.Participant.IsCurrentUser 3623
- 76.103 Events.Participant.Name 3624
- 76.104 Events.Participant.Person 3625
- 76.105 Events.Participant.Role 3626
- 76.106 Events.Participant.Status 3627
- 76.107 Events.Participant.Type 3628
- 76.108 Events.Participant.URL 3629
- 76.109 Events.RecurrenceDayOfWeek.Copy 3630
- 76.110 Events.RecurrenceDayOfWeek.DayOfTheWeek 3631
- 76.111 Events.RecurrenceDayOfWeek.NewWithDayOfWeek 3632
- 76.112 Events.RecurrenceDayOfWeek.WeekNumber 3633
- 76.113 Events.RecurrenceEnd.Copy 3634
- 76.114 Events.RecurrenceEnd.EndDate 3635
- 76.115 Events.RecurrenceEnd.NewWithEndDate 3636
- 76.116 Events.RecurrenceEnd.NewWithOccurrenceCount 3637
- 76.117 Events.RecurrenceEnd.OccurrenceCount 3638
- 76.118 Events.RecurrenceRule.CalendarIdentifier 3639
- 76.119 Events.RecurrenceRule.Copy 3640
- 76.120 Events.RecurrenceRule.DaysOfTheMonth 3641
- 76.121 Events.RecurrenceRule.DaysOfTheWeek 3642
- 76.122 Events.RecurrenceRule.DaysOfTheYear 3643
- 76.123 Events.RecurrenceRule.Description 3644
- 76.124 Events.RecurrenceRule.FirstDayOfTheWeek 3645

• 76.125 Events.RecurrenceRule.Frequency	3646
• 76.126 Events.RecurrenceRule.GetRecurrenceEnd	3647
• 76.127 Events.RecurrenceRule.Interval	3648
• 76.128 Events.RecurrenceRule.MonthsOfTheYear	3649
• 76.129 Events.RecurrenceRule.NewWithFrequency	3650
• 76.130 Events.RecurrenceRule.SetPositions	3653
• 76.131 Events.RecurrenceRule.SetRecurrenceEnd	3654
• 76.132 Events.RecurrenceRule.WeeksOfTheYear	3655
• 76.133 Events.RefreshSourcesIfNecessary	3656
• 76.134 Events.Reminder.GetCompleted	3657
• 76.135 Events.Reminder.GetCompletionDate	3658
• 76.136 Events.Reminder.GetDueDate	3659
• 76.137 Events.Reminder.GetDueTimestamp	3660
• 76.138 Events.Reminder.GetPriority	3661
• 76.139 Events.Reminder.GetStartDate	3662
• 76.140 Events.Reminder.GetStartTimestamp	3663
• 76.141 Events.Reminder.SetCompleted	3664
• 76.142 Events.Reminder.SetCompletionDate	3665
• 76.143 Events.Reminder.SetDueDate	3666
• 76.144 Events.Reminder.SetDueDateComponents	3668
• 76.145 Events.Reminder.SetPriority	3670
• 76.146 Events.Reminder.SetStartDate	3672
• 76.147 Events.Reminder.SetStartDateComponents	3674
• 76.148 Events.Reminders	3676
• 76.149 Events.RemoveCalendar	3677
• 76.150 Events.RemoveEvent	3678
• 76.151 Events.RemoveReminder	3679
• 76.152 Events.Reset	3680
• 76.153 Events.SaveCalendar	3681

• 76.154 Events.SaveEvent	3682
• 76.155 Events.SaveReminder	3684
• 76.156 Events.SelectEvent	3687
• 76.157 Events.SetNotification	3688
• 76.158 Events.SetNotificationEvaluate	3690
• 76.159 Events.Source.Calendars	3691
• 76.160 Events.Source.Title	3692
• 76.161 Events.Source.Type	3693
• 76.162 Events.SourceWithType	3694
• 76.163 Events.Sources	3695
• 76.164 Events.StructuredLocation.Copy	3696
• 76.165 Events.StructuredLocation.GetGeoLocation	3697
• 76.166 Events.StructuredLocation.GetRadius	3698
• 76.167 Events.StructuredLocation.NewLocationWithTitle	3699
• 76.168 Events.StructuredLocation.SetGeoLocation	3701
• 76.169 Events.StructuredLocation.SetRadius	3702
• 76.170 Events.StructuredLocation.Title	3703
• 76.171 Events.defaultCalendarForNewEvents	3704
• 76.172 Events.defaultCalendarForNewReminders	3705
• 76.173 Events.requestAccessToEntityType	3706
• 79.1 FM.AllowFileDragDrop	3883
• 79.2 FM.Argument	3885
• 79.3 FM.ArgumentCount	3886
• 79.4 FM.Beep	3887
• 79.5 FM.ChooseDictionary	3888
• 80.3 FM.CompareTables	4069
• 79.7 FM.CurrentScriptID	3893
• 79.8 FM.CurrentScriptName	3894
• 79.9 FM.CurrentThreadID	3895

	83
• 79.10 FM.DataType	3896
• 79.11 FM.DataViewerContent	3897
• 80.4 FM.DeleteRecord	4073
• 80.5 FM.DeleteRecords	4076
• 79.14 FM.DisableMouseWheel	3904
• 79.15 FM.DisableRuntimeEndWindow	3905
• 79.16 FM.EnableMouseWheel	3906
• 79.17 FM.Evaluate	3907
• 80.6 FM.ExecuteFileSQL	4079
• 80.7 FM.ExecuteFileSQLOnIdle	4086
• 80.8 FM.ExecuteSQL	4088
• 80.9 FM.ExecuteSQL.LastError	4094
• 80.10 FM.ExecuteSQL.LastErrorMessage	4096
• 80.11 FM.ExecuteSQL.LastSQL	4099
• 80.12 FM.ExecuteSQLOnIdle	4100
• 79.25 FM.GetDictionary	3932
• 79.26 FM.GetDictionaryList	3933
• 79.27 FM.GetDisableContextualMenus	3934
• 80.13 FM.GetSQLBatchMode	4103
• 79.29 FM.InitMessageFilter	3936
• 80.14 FM.InsertOrUpdateRecord	4104
• 80.15 FM.InsertOrUpdateRecord2	4107
• 80.16 FM.InsertOrUpdateRecord3	4110
• 80.17 FM.InsertOrUpdateRecordQuery	4113
• 80.18 FM.InsertRecord	4115
• 80.19 FM.InsertRecordCSV	4119
• 80.20 FM.InsertRecordQuery	4122
• 80.21 FM.InsertRecordQueryIgnoreDuplicates	4126
• 80.22 FM.InsertRecordTSV	4129

• 80.23 FM.InsertSetUpdateProgressDialog	4132
• 79.40 FM.IsMainThread	3967
• 79.41 FM.Loop	3968
• 79.42 FM.MainThreadID	3972
• 79.43 FM.MouseWheelScriptTrigger	3973
• 80.24 FM.NULL	4134
• 79.45 FM.PatchNotificationProblem	3977
• 79.46 FM.QueryBaseTableNames	3978
• 79.47 FM.QueryFieldsForBaseTableName	3979
• 79.48 FM.QueryFieldsForTableName	3980
• 79.49 FM.QueryTableNames	3982
• 79.50 FM.RunDatabaseDesignReport	3983
• 79.51 FM.RunSaveAsXML	3985
• 79.52 FM.RunScript	3986
• 79.53 FM.RunScriptIdle	3988
• 79.54 FM.RunScriptLater	3990
• 79.55 FM.SQL.Avg	3992
• 80.25 FM.SQL.CSV	4135
• 80.26 FM.SQL.Execute	4138
• 80.27 FM.SQL.Field	4141
• 80.28 FM.SQL.FieldCount	4143
• 80.29 FM.SQL.FieldType	4145
• 80.30 FM.SQL.InsertRecords	4146
• 156.1 FM.SQL.InsertRecordsToSQL	7291
• 100.2 FM.SQL.JSONRecord	5234
• 100.3 FM.SQL.JSONRecords	5236
• 79.65 FM.SQL.Max	4014
• 79.66 FM.SQL.Min	4016
• 80.34 FM.SQL.Release	4155

	85
• 80.35 FM.SQL.RowCount	4157
• 79.69 FM.SQL.Sum	4022
• 80.36 FM.SQL.Text	4159
• 79.71 FM.ScriptIDForScriptName	4027
• 79.72 FM.ScriptNameForScriptID	4028
• 79.73 FM.ScriptNames	4029
• 79.74 FM.SetDisableContextualMenus	4030
• 80.37 FM.SetSQLBatchMode	4162
• 79.76 FM.SetThreadName	4033
• 79.77 FM.StopScriptIdle	4034
• 79.78 FM.TableStatistics	4035
• 80.38 FM.UpdateRecord	4164
• 79.80 FM.UpdateRecord2	4041
• 79.81 FM.UpdateRecord3	4043
• 80.39 FM.UpdateRecords	4167
• 79.83 FM.UpdateRecords2	4048
• 79.84 FM.UpdateRecords3	4050
• 178.1 FM.VariableAdd	8259
• 178.2 FM.VariableAppend	8261
• 178.3 FM.VariableClear	8262
• 178.4 FM.VariableClearAll	8263
• 178.5 FM.VariableExists	8264
• 178.6 FM.VariableGet	8265
• 178.7 FM.VariableList	8267
• 178.8 FM.VariableNames	8268
• 178.9 FM.VariableReset	8269
• 178.10 FM.VariableSet	8270
• 83.1 FSEvents.Create	4205
• 83.2 FSEvents.CreateRelativeToDevice	4209

- 83.3 FSEvents.CurrentEventId 4210
- 83.4 FSEvents.Description 4211
- 83.5 FSEvents.DeviceBeingWatched 4212
- 83.6 FSEvents.DeviceID 4213
- 83.7 FSEvents.EventCount 4214
- 83.8 FSEvents.FlushASync 4215
- 83.9 FSEvents.FlushSync 4216
- 83.10 FSEvents.GetEvaluate 4217
- 83.11 FSEvents.GetExclusionPaths 4218
- 83.12 FSEvents.GetFileName 4219
- 83.13 FSEvents.GetScriptName 4220
- 83.14 FSEvents.HasNextEvent 4221
- 83.15 FSEvents.LastEventIdForDeviceBeforeTime 4222
- 83.16 FSEvents.LatestEventId 4223
- 83.17 FSEvents.NextEvent 4224
- 83.18 FSEvents.PathsBeingWatched 4228
- 83.19 FSEvents.Release 4229
- 83.20 FSEvents.SetEvaluate 4230
- 83.21 FSEvents.SetExclusionPaths 4231
- 83.22 FSEvents.SetFileName 4232
- 83.23 FSEvents.SetScriptName 4233
- 83.24 FSEvents.Show 4234
- 83.25 FSEvents.Start 4235
- 83.26 FSEvents.Started 4236
- 83.27 FSEvents.Stop 4237
- 83.28 FSEvents.UUIDForDevice 4238
- 77.11 FileDialog.GetAllowMulti 3719
- 77.12 FileDialog.GetAllowsOtherFileTypes 3720
- 77.13 FileDialog.GetCanSelectHiddenExtension 3721

- 77.14 FileDialog.GetFilter 3722
- 77.15 FileDialog.GetInitialDirectory 3723
- 77.16 FileDialog.GetMessage 3724
- 77.17 FileDialog.GetNameFieldLabel 3725
- 77.18 FileDialog.GetNameFieldStringValue 3726
- 77.19 FileDialog.GetPath 3727
- 77.20 FileDialog.GetPathCount 3730
- 77.21 FileDialog.GetPrompt 3731
- 77.22 FileDialog.GetResolvesAliases 3732
- 77.23 FileDialog.GetShowHidden 3733
- 77.24 FileDialog.GetTreatsFilePackagesAsDirectories 3734
- 77.25 FileDialog.GetUseSheet 3735
- 77.26 FileDialog.GetWindowTitle 3736
- 77.27 FileDialog.OpenFileDialog 3737
- 77.28 FileDialog.Reset 3740
- 77.29 FileDialog.SaveFileDialog 3742
- 77.30 FileDialog.SelectFolderDialog 3744
- 77.31 FileDialog.SelectItemDialog 3747
- 77.32 FileDialog.SetAllowMulti 3749
- 77.33 FileDialog.SetAllowsOtherFileTypes 3751
- 77.34 FileDialog.SetCanSelectHiddenExtension 3752
- 77.35 FileDialog.SetFilter 3753
- 77.36 FileDialog.SetInitialDirectory 3755
- 77.37 FileDialog.SetMessage 3757
- 77.38 FileDialog.SetNameFieldLabel 3759
- 77.39 FileDialog.SetNameFieldStringValue 3760
- 77.40 FileDialog.SetPrompt 3761
- 77.41 FileDialog.SetResolvesAliases 3763
- 77.42 FileDialog.SetSheetScriptTrigger 3764

- 77.43 FileDialog.SetShowHidden 3765
- 77.44 FileDialog.SetTreatsFilePackagesAsDirectories 3766
- 77.45 FileDialog.SetUseSheet 3767
- 77.46 FileDialog.SetWindowTitle 3768
- 77.47 FileDialogWatcher.GetLastPath 3769
- 77.48 FileDialogWatcher.Install 3770
- 78.1 Files.AccessDate 3771
- 78.2 Files.AddedToDirectoryDate 3773
- 78.3 Files.AppPath 3774
- 78.4 Files.AudioTags 3775
- 78.5 Files.CanOpenFile 3777
- 78.6 Files.CopyFile 3778
- 78.7 Files.CopyFiles 3780
- 78.8 Files.CreateAlias 3782
- 78.9 Files.CreateBookmark 3784
- 78.10 Files.CreateDirectory 3785
- 78.11 Files.CreateHardLink 3787
- 78.12 Files.CreateSymbolicLink 3789
- 78.13 Files.CreationDate 3790
- 78.14 Files.Delete 3792
- 78.15 Files.DeleteFolder 3794
- 78.16 Files.DirectoryExists 3796
- 78.17 Files.DiskInfo 3798
- 78.18 Files.FileDisplayName 3800
- 78.19 Files.FileExists 3801
- 78.20 Files.FileExtension 3803
- 78.21 Files.FileInfo 3804
- 78.22 Files.FileKind 3806
- 78.23 Files.FileName 3807

	89
• 78.24 Files.FileSize	3808
• 78.25 Files.FileUTITypes	3810
• 78.26 Files.FolderSize	3811
• 78.27 Files.GetComment	3813
• 78.28 Files.GetFinderLabel	3814
• 78.29 Files.GetNodeID	3815
• 78.30 Files.GetPathFromNodeID	3817
• 78.31 Files.GetPosixPermissions	3819
• 78.32 Files.GetTagNames	3820
• 78.33 Files.IsHidden	3821
• 78.34 Files.ItemExists	3822
• 78.35 Files.Launch	3823
• 78.36 Files.LaunchFile	3826
• 78.37 Files.List	3828
• 78.38 Files.ListRecursive	3831
• 78.39 Files.ListVolumes	3833
• 78.40 Files.ModificationDate	3834
• 78.41 Files.Mount	3836
• 78.42 Files.MountPath	3839
• 78.43 Files.MoveFile	3840
• 78.44 Files.MoveToTrash	3842
• 78.45 Files.ReadFile	3844
• 78.46 Files.ReadJPEG	3847
• 78.47 Files.ReadPDF	3849
• 78.48 Files.ReadPNG	3851
• 78.49 Files.RenameFile	3853
• 78.50 Files.ResolveAlias	3855
• 78.51 Files.ResolveBookmark	3857
• 78.52 Files.RevealFile	3858

- 78.53 Files.SetAudioTags 3860
- 78.54 Files.SetComment 3862
- 78.55 Files.SetCreationDate 3863
- 78.56 Files.SetFinderLabel 3864
- 78.57 Files.SetHidden 3865
- 78.58 Files.SetModificationDate 3866
- 78.59 Files.SetPosixPermissions 3867
- 78.60 Files.SetTagNames 3869
- 78.61 Files.Unmount 3870
- 78.62 Files.WriteFile 3871
- 81.1 Folders.Applications 4169
- 81.2 Folders.LocalFonts 4170
- 81.3 Folders.LocalPreferences 4171
- 81.4 Folders.SharedDocuments 4172
- 81.5 Folders.System 4173
- 81.6 Folders.SystemFonts 4174
- 81.7 Folders.SystemTemporary 4175
- 81.8 Folders.UserDesktop 4177
- 81.9 Folders.UserDocuments 4179
- 81.10 Folders.UserDownloads 4181
- 81.11 Folders.UserFonts 4182
- 81.12 Folders.UserHome 4183
- 81.13 Folders.UserMusic 4184
- 81.14 Folders.UserPictures 4185
- 81.15 Folders.UserPreferences 4186
- 81.16 Folders.UserTemporary 4187
- 81.17 Folders.UserTrash 4189
- 81.18 Folders.UserVideo 4190
- 81.19 Folders.Windows 4191

	91
• 82.1 Font.Activate	4193
• 82.2 Font.CalculateTextFits	4195
• 82.3 Font.CalculateTextHeight	4197
• 82.4 Font.CalculateTextWidth	4199
• 82.5 Font.Deactivate	4201
• 82.6 FontManager.FontFile	4202
• 82.7 FontManager.ListFontFamilies	4203
• 82.8 FontManager.ListFonts	4204
• 85.1 GMImage.AdaptiveThreshold	4337
• 85.2 GMImage.AddNoise	4339
• 85.3 GMImage.AddNoiseChannel	4340
• 85.4 GMImage.AddPathArcAbs	4341
• 85.5 GMImage.AddPathArcRel	4343
• 85.6 GMImage.AddPathClosePath	4345
• 85.7 GMImage.AddPathCurvetoAbs	4346
• 85.8 GMImage.AddPathCurvetoRel	4348
• 85.9 GMImage.AddPathLinetoAbs	4350
• 85.10 GMImage.AddPathLinetoHorizontalAbs	4351
• 85.11 GMImage.AddPathLinetoHorizontalRel	4352
• 85.12 GMImage.AddPathLinetoRel	4353
• 85.13 GMImage.AddPathLinetoVerticalAbs	4354
• 85.14 GMImage.AddPathLinetoVerticalRel	4355
• 85.15 GMImage.AddPathMovetoAbs	4356
• 85.16 GMImage.AddPathMovetoRel	4357
• 85.17 GMImage.AddPathQuadraticCurvetoAbs	4358
• 85.18 GMImage.AddPathQuadraticCurvetoRel	4359
• 85.19 GMImage.AddPathSmoothCurvetoAbs	4360
• 85.20 GMImage.AddPathSmoothCurvetoRel	4361
• 85.21 GMImage.AddPathSmoothQuadraticCurvetoAbs	4362

- 85.22 GImage.AddPathSmoothQuadraticCurveToRel 4363
- 85.23 GImage.Affine 4364
- 85.24 GImage.Annotate 4365
- 85.25 GImage.AutoOrient 4369
- 85.26 GImage.AveragePixelValue 4370
- 85.27 GImage.BaseColumns 4372
- 85.28 GImage.BaseFilename 4373
- 85.29 GImage.BaseRows 4374
- 85.30 GImage.Blur 4375
- 85.31 GImage.BlurChannel 4377
- 85.32 GImage.Border 4378
- 85.33 GImage.BoundingBox 4380
- 85.34 GImage.Channel 4381
- 85.35 GImage.Charcoal 4383
- 85.36 GImage.Chop 4385
- 85.37 GImage.ClipMask 4386
- 85.38 GImage.ClipPath 4387
- 85.39 GImage.Coders 4388
- 85.40 GImage.Colorize 4389
- 85.41 GImage.ColorizeRGB 4391
- 85.42 GImage.Columns 4393
- 85.43 GImage.Compare 4394
- 85.44 GImage.Composite 4396
- 85.45 GImage.CompositeXY 4398
- 85.46 GImage.Contrast 4400
- 85.47 GImage.Copy 4401
- 85.48 GImage.CopyChannel 4402
- 85.49 GImage.Crop 4405
- 85.50 GImage.CycleColormap 4407

• 85.51 GMImage.Despeckle	4408
• 85.52 GMImage.Directory	4409
• 85.53 GMImage.DrawArc	4410
• 85.54 GMImage.DrawCircle	4412
• 85.55 GMImage.DrawEllipse	4414
• 85.56 GMImage.DrawLine	4416
• 85.57 GMImage.DrawPath	4418
• 85.58 GMImage.DrawRectangle	4419
• 85.59 GMImage.DrawRoundRectangle	4422
• 85.60 GMImage.Edge	4424
• 85.61 GMImage.Emboss	4425
• 85.62 GMImage.Enhance	4427
• 85.63 GMImage.Equalize	4428
• 85.64 GMImage.Erase	4429
• 85.65 GMImage.ExifThumbnail	4430
• 85.66 GMImage.Extent	4431
• 85.67 GMImage.FillPattern	4433
• 85.68 GMImage.FindColorInColumn	4434
• 85.69 GMImage.FindColorInRow	4436
• 85.70 GMImage.Flip	4438
• 85.71 GMImage.FloodFillColor	4440
• 85.72 GMImage.FloodFillColorXY	4442
• 85.73 GMImage.FloodFillOpacity	4444
• 85.74 GMImage.FloodFillTexture	4445
• 85.75 GMImage.FloodFillTextureXY	4446
• 85.76 GMImage.Flop	4447
• 85.77 GMImage.FontMap	4449
• 85.78 GMImage.FontTypeMetrics	4450
• 85.79 GMImage.Format	4452

- 85.80 GMImage.Frame 4453
- 85.81 GMImage.Free 4455
- 85.82 GMImage.FreeAll 4457
- 85.83 GMImage.Gamma 4458
- 85.84 GMImage.GaussianBlur 4459
- 85.85 GMImage.GaussianBlurChannel 4460
- 85.86 GMImage.Geometry 4461
- 85.87 GMImage.GetAdjoin 4462
- 85.88 GMImage.GetAnimationDelay 4463
- 85.89 GMImage.GetAnimationIterations 4464
- 85.90 GMImage.GetAntiAlias 4465
- 85.91 GMImage.GetAttribute 4466
- 85.92 GMImage.GetAttributeNames 4468
- 85.93 GMImage.GetAttributesJSON 4469
- 85.94 GMImage.GetBackgroundColor 4471
- 85.95 GMImage.GetBackgroundTexture 4472
- 85.96 GMImage.GetBorderColor 4473
- 85.97 GMImage.GetBoxColor 4474
- 85.98 GMImage.GetChannelDepth 4475
- 85.99 GMImage.GetClassType 4476
- 85.100 GMImage.GetClipMask 4477
- 85.101 GMImage.GetColorFuzz 4478
- 85.102 GMImage.GetColorMapSize 4479
- 85.103 GMImage.GetColorSpace 4480
- 85.104 GMImage.GetComment 4482
- 85.105 GMImage.GetCompose 4483
- 85.106 GMImage.GetCompressType 4484
- 85.107 GMImage.GetDebug 4485
- 85.108 GMImage.GetDefineSet 4486

• 85.109 GImage.GetDefineValue	4487
• 85.110 GImage.GetDensity	4488
• 85.111 GImage.GetDepth	4489
• 85.112 GImage.GetEXIFOrientation	4490
• 85.113 GImage.GetEndian	4491
• 85.114 GImage.GetFileName	4492
• 85.115 GImage.GetFileSize	4493
• 85.116 GImage.GetFillColor	4494
• 85.117 GImage.GetFillRule	4495
• 85.118 GImage.GetFilterType	4496
• 85.119 GImage.GetFont	4497
• 85.120 GImage.GetFontPointsize	4498
• 85.121 GImage.GetGamma	4499
• 85.122 GImage.GetGifDisposeMethod	4500
• 85.123 GImage.GetHeight	4501
• 85.124 GImage.GetICCColorProfile	4503
• 85.125 GImage.GetIPTCProfile	4504
• 85.126 GImage.GetIPTCProfileValues	4505
• 85.127 GImage.GetInterlaceType	4506
• 85.128 GImage.GetIsValid	4507
• 85.129 GImage.GetJPEGAsBase64	4508
• 85.130 GImage.GetJPEGAsHex	4509
• 85.131 GImage.GetLabel	4510
• 85.132 GImage.GetLineWidth	4511
• 85.133 GImage.GetMagick	4512
• 85.134 GImage.GetMatte	4513
• 85.135 GImage.GetMatteColor	4514
• 85.136 GImage.GetModulusDepth	4515
• 85.137 GImage.GetMonochrome	4516

- 85.138 GImage.GetOrientation 4517
- 85.139 GImage.GetPNGAsBase64 4519
- 85.140 GImage.GetPNGAsHex 4520
- 85.141 GImage.GetPage 4521
- 85.142 GImage.GetPixelColor 4522
- 85.143 GImage.GetProfile 4524
- 85.144 GImage.GetQuality 4525
- 85.145 GImage.GetQuantizeColorSpace 4526
- 85.146 GImage.GetQuantizeColors 4527
- 85.147 GImage.GetQuantizeDither 4528
- 85.148 GImage.GetQuantizeTreeDepth 4529
- 85.149 GImage.GetQuiet 4530
- 85.150 GImage.GetRenderingIntent 4531
- 85.151 GImage.GetResolutionUnits 4532
- 85.152 GImage.GetScene 4533
- 85.153 GImage.GetSize 4534
- 85.154 GImage.GetStrokeAntiAlias 4535
- 85.155 GImage.GetStrokeColor 4536
- 85.156 GImage.GetStrokeDashArray 4537
- 85.157 GImage.GetStrokeDashOffset 4538
- 85.158 GImage.GetStrokeLineCap 4539
- 85.159 GImage.GetStrokeLineJoin 4540
- 85.160 GImage.GetStrokeMiterLimit 4541
- 85.161 GImage.GetStrokeWidth 4542
- 85.162 GImage.GetSubImage 4543
- 85.163 GImage.GetSubRange 4544
- 85.164 GImage.GetTextEncoding 4545
- 85.165 GImage.GetTileName 4546
- 85.166 GImage.GetType 4547

• 85.167 GImage.GetVerbose	4548
• 85.168 GImage.GetView	4549
• 85.169 GImage.GetWidth	4550
• 85.170 GImage.GetXMP	4552
• 85.171 GImage.GetcolorMap	4554
• 85.172 GImage.Hash	4555
• 85.173 GImage.ImageCount	4557
• 85.174 GImage.Implode	4558
• 85.175 GImage.InvertChannel	4559
• 85.176 GImage.IsGray	4561
• 85.177 GImage.Level	4562
• 85.178 GImage.LevelChannel	4563
• 85.179 GImage.List	4565
• 85.180 GImage.Magnify	4566
• 85.181 GImage.Map	4567
• 85.182 GImage.MatteFloodfill	4568
• 85.183 GImage.MeanErrorPerPixel	4569
• 85.184 GImage.MedianFilter	4570
• 85.185 GImage.Minify	4571
• 85.186 GImage.Modulate	4572
• 85.187 GImage.MontageGeometry	4574
• 85.188 GImage.MotionBlur	4575
• 85.189 GImage.MultiplyChannel	4576
• 85.190 GImage.Negate	4578
• 85.191 GImage.New	4580
• 85.192 GImage.NewFromBase64	4583
• 85.193 GImage.NewFromContainer	4584
• 85.194 GImage.NewFromFile	4586
• 85.195 GImage.NewFromHex	4588

• 85.196 GImage.NewImagesFromContainer	4589
• 85.197 GImage.NewImagesFromFile	4590
• 85.198 GImage.Normalize	4592
• 85.199 GImage.NormalizedMaxError	4593
• 85.200 GImage.NormalizedMeanError	4595
• 85.201 GImage.OilPaint	4596
• 85.202 GImage.Opacity	4597
• 85.203 GImage.Opaque	4598
• 85.204 GImage.PopClipPath	4599
• 85.205 GImage.PurgeTemporaryFiles	4600
• 85.206 GImage.PushClipPath	4601
• 85.207 GImage.Quantize	4602
• 85.208 GImage.QuantumDepth	4604
• 85.209 GImage.Raise	4605
• 85.210 GImage.RandomThreshold	4607
• 85.211 GImage.RandomThresholdChannel	4608
• 85.212 GImage.Read	4609
• 85.213 GImage.ReduceNoise	4611
• 85.214 GImage.Release	4612
• 85.215 GImage.ReleaseAll	4614
• 85.216 GImage.Repage	4615
• 85.217 GImage.ReplaceColor	4616
• 85.218 GImage.Resize	4619
• 85.219 GImage.Roll	4621
• 85.220 GImage.Rollxy	4622
• 85.221 GImage.Rotate	4623
• 85.222 GImage.Rotating	4625
• 85.223 GImage.Rows	4626
• 85.224 GImage.Sample	4627

- 85.225 GImage.Scale 4628
- 85.226 GImage.Scaling 4632
- 85.227 GImage.Segment 4633
- 85.228 GImage.SetAdjoin 4634
- 85.229 GImage.SetAnimationDelay 4635
- 85.230 GImage.SetAnimationIterations 4636
- 85.231 GImage.SetAntiAlias 4637
- 85.232 GImage.SetAttribute 4638
- 85.233 GImage.SetBackgroundColor 4639
- 85.234 GImage.SetBackgroundTexture 4641
- 85.235 GImage.SetBorderColor 4642
- 85.236 GImage.SetBoxColor 4644
- 85.237 GImage.SetCacheThreshold 4645
- 85.238 GImage.SetClassType 4646
- 85.239 GImage.SetColorFuzz 4647
- 85.240 GImage.SetColorMapSize 4649
- 85.241 GImage.SetColorSpace 4650
- 85.242 GImage.SetComment 4651
- 85.243 GImage.SetCompose 4652
- 85.244 GImage.SetCompressType 4653
- 85.245 GImage.SetDebug 4655
- 85.246 GImage.SetDefineSet 4656
- 85.247 GImage.SetDefineValue 4657
- 85.248 GImage.SetDensity 4658
- 85.249 GImage.SetDepth 4660
- 85.250 GImage.SetEXIFOrientation 4661
- 85.251 GImage.SetEndian 4662
- 85.252 GImage.SetFileName 4663
- 85.253 GImage.SetFillColor 4664

- 85.254 GImage.SetFillRule 4666
- 85.255 GImage.SetFilterType 4667
- 85.256 GImage.SetFont 4668
- 85.257 GImage.SetFontPointsize 4669
- 85.258 GImage.SetGifDisposeMethod 4670
- 85.259 GImage.SetICCColorProfile 4671
- 85.260 GImage.SetIPTCProfile 4673
- 85.261 GImage.SetInterlaceType 4674
- 85.262 GImage.SetIsValid 4675
- 85.263 GImage.SetLabel 4676
- 85.264 GImage.SetLineWidth 4677
- 85.265 GImage.SetMagick 4678
- 85.266 GImage.SetMatte 4680
- 85.267 GImage.SetMatteColor 4682
- 85.268 GImage.SetModulusDepth 4683
- 85.269 GImage.SetMonochrome 4684
- 85.270 GImage.SetOrientation 4685
- 85.271 GImage.SetPage 4687
- 85.272 GImage.SetPixelColor 4688
- 85.273 GImage.SetProfile 4690
- 85.274 GImage.SetQuality 4692
- 85.275 GImage.SetQuantizeColorSpace 4694
- 85.276 GImage.SetQuantizeColors 4695
- 85.277 GImage.SetQuantizeDither 4696
- 85.278 GImage.SetQuantizeTreeDepth 4697
- 85.279 GImage.SetQuiet 4698
- 85.280 GImage.SetRenderingIntent 4699
- 85.281 GImage.SetResolutionUnits 4700
- 85.282 GImage.SetScene 4702

	101
• 85.283 GImage.SetSize	4703
• 85.284 GImage.SetStrokeAntiAlias	4704
• 85.285 GImage.SetStrokeColor	4706
• 85.286 GImage.SetStrokeDashArray	4708
• 85.287 GImage.SetStrokeDashOffset	4709
• 85.288 GImage.SetStrokeLineCap	4710
• 85.289 GImage.SetStrokeLineJoin	4711
• 85.290 GImage.SetStrokeMiterLimit	4712
• 85.291 GImage.SetStrokeWidth	4713
• 85.292 GImage.SetSubImage	4714
• 85.293 GImage.SetSubRange	4715
• 85.294 GImage.SetTextEncoding	4716
• 85.295 GImage.SetTileName	4717
• 85.296 GImage.SetType	4718
• 85.297 GImage.SetVerbose	4721
• 85.298 GImage.SetView	4722
• 85.299 GImage.SetXMP	4723
• 85.300 GImage.SetchannelDepth	4724
• 85.301 GImage.SetcolorMap	4725
• 85.302 GImage.Shade	4726
• 85.303 GImage.Sharpen	4727
• 85.304 GImage.SharpenChannel	4729
• 85.305 GImage.Shave	4730
• 85.306 GImage.Shear	4732
• 85.307 GImage.Signature	4733
• 85.308 GImage.SkewX	4734
• 85.309 GImage.SkewY	4735
• 85.310 GImage.Solarize	4736
• 85.311 GImage.Spread	4738

- 85.312 GImage.Stegano 4739
- 85.313 GImage.Stereo 4740
- 85.314 GImage.Strip 4741
- 85.315 GImage.StrokePattern 4742
- 85.316 GImage.Swirl 4743
- 85.317 GImage.Texture 4744
- 85.318 GImage.Threshold 4745
- 85.319 GImage.TotalColors 4747
- 85.320 GImage.Transform 4748
- 85.321 GImage.TransformOrigin 4749
- 85.322 GImage.TransformReset 4750
- 85.323 GImage.TransformRotation 4751
- 85.324 GImage.TransformScale 4752
- 85.325 GImage.TransformSkewX 4753
- 85.326 GImage.TransformSkewY 4754
- 85.327 GImage.Translation 4755
- 85.328 GImage.Transparent 4756
- 85.329 GImage.Trim 4758
- 85.330 GImage.Unsharpmask 4760
- 85.331 GImage.UnsharpmaskChannel 4761
- 85.332 GImage.Wave 4762
- 85.333 GImage.WriteImages 4763
- 85.334 GImage.WriteToBMPContainer 4765
- 85.335 GImage.WriteToContainer 4766
- 85.336 GImage.WriteToFile 4768
- 85.337 GImage.WriteToGIFContainer 4771
- 85.338 GImage.WriteToJPEGContainer 4773
- 85.339 GImage.WriteToPDFContainer 4775
- 85.340 GImage.WriteToPNGContainer 4777

	103
• 85.341 GImage.WriteToTiffContainer	4780
• 85.342 GImage.XResolution	4782
• 85.343 GImage.YResolution	4783
• 85.344 GImage.Zoom	4784
• 53.1 GZipFile.Compress	1473
• 53.2 GZipFile.Decompress	1475
• 84.1 GameKit.Achievement.Completed	4239
• 84.2 GameKit.Achievement.GetPercentComplete	4240
• 84.3 GameKit.Achievement.GetShowsCompletionBanner	4241
• 84.4 GameKit.Achievement.LastReportedDate	4242
• 84.5 GameKit.Achievement.New	4243
• 84.6 GameKit.Achievement.Player	4244
• 84.7 GameKit.Achievement.SetPercentComplete	4245
• 84.8 GameKit.Achievement.SetShowsCompletionBanner	4246
• 84.9 GameKit.AchievementDescription.AchievedDescription	4247
• 84.10 GameKit.AchievementDescription.GroupIdentifier	4248
• 84.11 GameKit.AchievementDescription.Hidden	4249
• 84.12 GameKit.AchievementDescription.Image	4250
• 84.13 GameKit.AchievementDescription.IncompleteAchievementImage	4251
• 84.14 GameKit.AchievementDescription.MaximumPoints	4252
• 84.15 GameKit.AchievementDescription.PlaceholderCompletedAchievementImage	4253
• 84.16 GameKit.AchievementDescription.Replayable	4254
• 84.17 GameKit.AchievementDescription.Title	4255
• 84.18 GameKit.AchievementDescription.UnachievedDescription	4256
• 84.19 GameKit.AnonymousGuestPlayer	4257
• 84.20 GameKit.Challenge.Achievement	4258
• 84.21 GameKit.Challenge.CompletionDate	4259
• 84.22 GameKit.Challenge.Decline	4260
• 84.23 GameKit.Challenge.IssueDate	4261

- 84.24 GameKit.Challenge.IssuingPlayer 4262
- 84.25 GameKit.Challenge.Message 4263
- 84.26 GameKit.Challenge.ReceivingPlayer 4264
- 84.27 GameKit.Challenge.Score 4265
- 84.28 GameKit.Challenge.State 4266
- 84.29 GameKit.DefaultLeaderboardIdentifier 4267
- 84.30 GameKit.GameCenterView.Dismiss 4268
- 84.31 GameKit.GameCenterView.GetLeaderboardIdentifier 4269
- 84.32 GameKit.GameCenterView.GetLeaderboardTimeScope 4270
- 84.33 GameKit.GameCenterView.GetViewState 4271
- 84.34 GameKit.GameCenterView.Initialize 4272
- 84.35 GameKit.GameCenterView.Present 4273
- 84.36 GameKit.GameCenterView.SetLeaderboardIdentifier 4274
- 84.37 GameKit.GameCenterView.SetLeaderboardTimeScope 4275
- 84.38 GameKit.GameCenterView.SetScriptTrigger 4276
- 84.39 GameKit.GameCenterView.SetViewState 4277
- 84.40 GameKit.GameCenterView.ShowBannerWithTitle 4278
- 84.41 GameKit.Initialize 4279
- 84.42 GameKit.Leaderboard.GetPlayerScope 4280
- 84.43 GameKit.Leaderboard.GetRange 4281
- 84.44 GameKit.Leaderboard.GetTimeScope 4282
- 84.45 GameKit.Leaderboard.GroupIdentifier 4283
- 84.46 GameKit.Leaderboard.Image 4284
- 84.47 GameKit.Leaderboard.LoadScores 4285
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.49 GameKit.Leaderboard.LocalPlayerScore 4287
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.51 GameKit.Leaderboard.New 4289
- 84.52 GameKit.Leaderboard.Scores 4290

	105
• 84.53 GameKit.Leaderboard.SetPlayerScope	4291
• 84.54 GameKit.Leaderboard.SetRange	4292
• 84.55 GameKit.Leaderboard.SetTimeScope	4293
• 84.56 GameKit.Leaderboard.Title	4294
• 84.57 GameKit.LeaderboardSet.GroupIdentifier	4295
• 84.58 GameKit.LeaderboardSet.Image	4296
• 84.59 GameKit.LeaderboardSet.Title	4297
• 84.60 GameKit.LoadAchievementDescriptions	4298
• 84.61 GameKit.LoadAchievements	4299
• 84.62 GameKit.LoadLeaderboardSets	4300
• 84.63 GameKit.LoadLeaderboards	4301
• 84.64 GameKit.LoadPlayers	4302
• 84.65 GameKit.LoadReceivedChallenges	4303
• 84.66 GameKit.LocalPlayer	4304
• 84.67 GameKit.LocalPlayer.Authenticate	4305
• 84.68 GameKit.LocalPlayer.AuthenticateError	4306
• 84.69 GameKit.LocalPlayer.ClearAuthenticateHandler	4307
• 84.70 GameKit.LocalPlayer.isAuthenticated	4308
• 84.71 GameKit.LocalPlayer.isUnderage	4309
• 84.72 GameKit.Player.Alias	4310
• 84.73 GameKit.Player.DisplayName	4311
• 84.74 GameKit.Player.GuestIdentifier	4312
• 84.75 GameKit.Player.Photo	4313
• 84.76 GameKit.RecentPlayers	4314
• 84.77 GameKit.ReportAchievements	4315
• 84.78 GameKit.ReportAchievementsWithEligibleChallenges	4316
• 84.79 GameKit.ReportScores	4317
• 84.80 GameKit.ReportScoresWithEligibleChallenges	4318
• 84.81 GameKit.ResetAchievements	4319

- 84.82 GameKit.Score.Date 4320
- 84.83 GameKit.Score.FormattedValue 4321
- 84.84 GameKit.Score.GetContext 4322
- 84.85 GameKit.Score.GetShouldSetDefaultLeaderboard 4323
- 84.86 GameKit.Score.GetValue 4324
- 84.87 GameKit.Score.LeaderboardIdentifier 4325
- 84.88 GameKit.Score.New 4326
- 84.89 GameKit.Score.Player 4327
- 84.90 GameKit.Score.Rank 4328
- 84.91 GameKit.Score.SetContext 4329
- 84.92 GameKit.Score.SetShouldSetDefaultLeaderboard 4330
- 84.93 GameKit.Score.SetValue 4331
- 84.94 GameKit.SelectChallengeablePlayers 4332
- 84.95 GameKit.SetDefaultLeaderboardIdentifier 4333
- 84.96 GameKit.SetPlayerDidChangeScriptTrigger 4334
- 84.97 GameKit.ShowChallengeComposeDialog 4335
- 162.1 GetSystemUIMode 7719
- 162.2 GetSystemUIModeOptions 7720
- 86.1 Hash.CRC32 4785
- 86.2 Hash.Digest 4787
- 86.3 Hash.DigestFile 4791
- 86.4 Hash.MD5 4793
- 86.5 Hash.MD5.HMAC 4795
- 86.6 Hash.PBKDF2.HMAC 4797
- 86.7 Hash.RandomHexString 4799
- 86.8 Hash.RandomString 4800
- 86.9 Hash.SHA1 4802
- 86.10 Hash.SHA1.HMAC 4805
- 86.11 Hash.SHA256 4807

	107
• 86.12 Hash.SHA256.HMAC	4809
• 86.13 Hash.SHA512	4812
• 86.14 Hash.SHA512.HMAC	4814
• 87.1 HealthKit.AuthorizationStatusForType	4817
• 87.2 HealthKit.BiologicalSex	4819
• 87.3 HealthKit.BloodType	4820
• 87.4 HealthKit.DateOfBirth	4821
• 87.5 HealthKit.DateOfBirthComponents	4822
• 87.6 HealthKit.FitzpatrickSkinType	4823
• 87.7 HealthKit.RequestAuthorizationToShareTypes	4824
• 87.8 HealthKit.SampleQuery	4827
• 87.9 HealthKit.WheelchairUse	4829
• 87.10 HealthKit.isHealthDataAvailable	4830
• 88.1 HotKey.GetEnabled	4831
• 88.2 HotKey.GetEvaluate	4832
• 88.3 HotKey.GetIgnoreOnModal	4833
• 88.4 HotKey.GetKeyCode	4834
• 88.5 HotKey.GetKeyUp	4835
• 88.6 HotKey.GetLocal	4836
• 88.7 HotKey.GetModifiers	4837
• 88.8 HotKey.GetName	4838
• 88.9 HotKey.GetScriptFileName	4839
• 88.10 HotKey.GetScriptName	4840
• 88.11 HotKey.GetTag	4841
• 88.12 HotKey.List	4842
• 88.13 HotKey.Register	4843
• 88.14 HotKey.SetEnabled	4847
• 88.15 HotKey.SetEvaluate	4848
• 88.16 HotKey.SetIgnoreOnModal	4851

- 88.17 HotKey.SetKeyUp 4852
- 88.18 HotKey.SetLocal 4853
- 88.19 HotKey.SetName 4854
- 88.20 HotKey.SetScript 4855
- 88.21 HotKey.SetTag 4856
- 88.22 HotKey.Unregister 4857
- 91.1 IKDeviceBrowserPanel.Close 4921
- 91.2 IKDeviceBrowserPanel.GetCancelButtonLabel 4923
- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924
- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.7 IKDeviceBrowserPanel.GetHeight 4928
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.9 IKDeviceBrowserPanel.GetPrompt 4930
- 91.10 IKDeviceBrowserPanel.GetSelectButtonLabel 4931
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.12 IKDeviceBrowserPanel.GetWindowTitle 4933
- 91.13 IKDeviceBrowserPanel.Hide 4934
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.15 IKDeviceBrowserPanel.SelectedDeviceID 4936
- 91.16 IKDeviceBrowserPanel.SelectedDeviceName 4937
- 91.17 IKDeviceBrowserPanel.SetCancelButtonLabel 4938
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944

	109
• 91.24 IKDeviceBrowserPanel.SetPrompt	4945
• 91.25 IKDeviceBrowserPanel.SetSelectButtonLabel	4946
• 91.26 IKDeviceBrowserPanel.SetTrigger	4947
• 91.27 IKDeviceBrowserPanel.SetWidth	4949
• 91.28 IKDeviceBrowserPanel.SetWindowTitle	4950
• 91.29 IKDeviceBrowserPanel.Show	4951
• 91.30 IKDeviceBrowserPanel.Visible	4953
• 89.1 IKPictureTaker.ClearNotification	4859
• 89.2 IKPictureTaker.GetAllowsEditing	4860
• 89.3 IKPictureTaker.GetAllowsFileChoosing	4861
• 89.4 IKPictureTaker.GetAllowsVideoCapture	4862
• 89.5 IKPictureTaker.GetInformationalText	4863
• 89.6 IKPictureTaker.GetInputImage	4864
• 89.7 IKPictureTaker.GetMirroring	4865
• 89.8 IKPictureTaker.GetOutputImage	4866
• 89.9 IKPictureTaker.GetOutputImageMaxHeight	4867
• 89.10 IKPictureTaker.GetOutputImageMaxWidth	4868
• 89.11 IKPictureTaker.GetRemainOpenAfterValidate	4869
• 89.12 IKPictureTaker.GetShowAddressBookPicture	4870
• 89.13 IKPictureTaker.GetShowEffects	4871
• 89.14 IKPictureTaker.GetShowEmptyPicture	4872
• 89.15 IKPictureTaker.GetShowRecentPicture	4873
• 89.16 IKPictureTaker.GetUpdateRecentPicture	4874
• 89.17 IKPictureTaker.Run	4875
• 89.18 IKPictureTaker.SetAllowsEditing	4876
• 89.19 IKPictureTaker.SetAllowsFileChoosing	4877
• 89.20 IKPictureTaker.SetAllowsVideoCapture	4878
• 89.21 IKPictureTaker.SetInformationalText	4879
• 89.22 IKPictureTaker.SetInputImage	4880

- 89.23 IKPictureTaker.SetMirroring 4881
- 89.24 IKPictureTaker.SetNotification 4882
- 89.25 IKPictureTaker.SetOutputImageMaxSize 4883
- 89.26 IKPictureTaker.SetRemainOpenAfterValidate 4884
- 89.27 IKPictureTaker.SetShowAddressBookPicture 4885
- 89.28 IKPictureTaker.SetShowEffects 4886
- 89.29 IKPictureTaker.SetShowEmptyPicture 4887
- 89.30 IKPictureTaker.SetShowRecentPicture 4888
- 89.31 IKPictureTaker.SetUpdateRecentPicture 4889
- 91.31 IKScannerDevicePanel.ClearImage 4954
- 91.32 IKScannerDevicePanel.Close 4955
- 91.33 IKScannerDevicePanel.GetCombine 4956
- 91.34 IKScannerDevicePanel.GetDocumentName 4957
- 91.35 IKScannerDevicePanel.GetDownloadsDirectory 4958
- 91.36 IKScannerDevicePanel.GetHeight 4959
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.38 IKScannerDevicePanel.GetOverviewControlLabel 4961
- 91.39 IKScannerDevicePanel.GetScanControlLabel 4962
- 91.40 IKScannerDevicePanel.GetScannerDeviceID 4963
- 91.41 IKScannerDevicePanel.GetScannerDeviceName 4964
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.43 IKScannerDevicePanel.GetWindowTitle 4966
- 91.44 IKScannerDevicePanel.Hide 4967
- 91.45 IKScannerDevicePanel.ImageCount 4968
- 91.46 IKScannerDevicePanel.NextImage 4969
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.48 IKScannerDevicePanel.SetCloseTrigger 4971
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.50 IKScannerDevicePanel.SetDocumentName 4974

	111
• 91.51 IKScannerDevicePanel.SetDownloadsDirectory	4975
• 91.52 IKScannerDevicePanel.SetHeight	4976
• 91.53 IKScannerDevicePanel.SetMode	4977
• 91.54 IKScannerDevicePanel.SetOverviewControlLabel	4978
• 91.55 IKScannerDevicePanel.SetScanControlLabel	4979
• 91.56 IKScannerDevicePanel.SetScannerDeviceID	4980
• 91.57 IKScannerDevicePanel.SetScannerDeviceName	4981
• 91.58 IKScannerDevicePanel.SetTrigger	4982
• 91.59 IKScannerDevicePanel.SetWidth	4984
• 91.60 IKScannerDevicePanel.SetWindowTitle	4985
• 91.61 IKScannerDevicePanel.Show	4986
• 91.62 IKScannerDevicePanel.Visible	4988
• 90.1 IKSlideShow.Add	4891
• 90.2 IKSlideShow.AddImage	4893
• 90.3 IKSlideShow.AddPDF	4894
• 90.4 IKSlideShow.AddPath	4895
• 90.5 IKSlideShow.AddURL	4896
• 90.6 IKSlideShow.Clear	4897
• 90.7 IKSlideShow.Count	4898
• 90.8 IKSlideShow.GetAudioFile	4899
• 90.9 IKSlideShow.GetMode	4900
• 90.10 IKSlideShow.GetPDFDisplayBox	4901
• 90.11 IKSlideShow.GetPDFDisplayMode	4902
• 90.12 IKSlideShow.GetPDFDisplaysAsBook	4903
• 90.13 IKSlideShow.GetScreen	4904
• 90.14 IKSlideShow.GetStartIndex	4905
• 90.15 IKSlideShow.GetStartPaused	4906
• 90.16 IKSlideShow.GetWrapAround	4907
• 90.17 IKSlideShow.ItemAtIndex	4908

- 90.18 IKSlideShow.Run 4910
- 90.19 IKSlideShow.SetAudioFile 4911
- 90.20 IKSlideShow.SetMode 4912
- 90.21 IKSlideShow.SetPDFDisplayBox 4913
- 90.22 IKSlideShow.SetPDFDisplayMode 4914
- 90.23 IKSlideShow.SetPDFDisplaysAsBook 4915
- 90.24 IKSlideShow.SetScreen 4916
- 90.25 IKSlideShow.SetStartIndex 4917
- 90.26 IKSlideShow.SetStartPaused 4918
- 90.27 IKSlideShow.SetWrapAround 4919
- 134.1 Icon.ClearIcon 6615
- 134.2 Icon.GetIcon 6617
- 134.3 Icon.GetIconWithQuickLook 6619
- 134.4 Icon.SetIcon 6621
- 91.63 ImageCapture.CameraInfo 4989
- 91.64 ImageCapture.CloseDevice 4991
- 91.65 ImageCapture.Contents 4992
- 91.66 ImageCapture.DeviceInfo 4993
- 91.67 ImageCapture.Devices 4995
- 91.68 ImageCapture.DevicesJSON 4997
- 91.69 ImageCapture.Download 4998
- 91.70 ImageCapture.Features 4999
- 91.71 ImageCapture.GetFeatureValue 5000
- 91.72 ImageCapture.GetFeatures 5001
- 91.73 ImageCapture.GetParameter 5002
- 91.74 ImageCapture.GetParameters 5005
- 91.75 ImageCapture.ImagePaths 5006
- 91.76 ImageCapture.Initialize 5007
- 91.77 ImageCapture.MediaFilenames 5008

	113
• 91.78 ImageCapture.MediaFiles	5009
• 91.79 ImageCapture.OpenDevice	5010
• 91.80 ImageCapture.PDF	5012
• 91.81 ImageCapture.PreferredDevice	5013
• 91.82 ImageCapture.RequestDeleteFiles	5014
• 91.83 ImageCapture.RequestDisableTethering	5015
• 91.84 ImageCapture.RequestEnableTethering	5016
• 91.85 ImageCapture.RequestOverviewScan	5017
• 91.86 ImageCapture.RequestScan	5018
• 91.87 ImageCapture.RequestSelectFunctionalUnit	5021
• 91.88 ImageCapture.RequestSyncClock	5023
• 91.89 ImageCapture.RequestTakePicture	5024
• 91.90 ImageCapture.SetFeatureValue	5025
• 91.91 ImageCapture.SetParameter	5026
• 91.92 ImageCapture.Thumbnail	5030
• 91.93 ImageCapture.cancelScan	5031
• 92.6 ImagePicker.AvailableCaptureModesForCameraDevice	5039
• 92.7 ImagePicker.AvailableMediaTypesForSourceType	5040
• 92.8 ImagePicker.ClearMedia	5041
• 92.9 ImagePicker.ClearOverlay	5042
• 92.10 ImagePicker.Dismiss	5043
• 92.11 ImagePicker.GetAllowsEditing	5044
• 92.12 ImagePicker.GetCameraCaptureMode	5045
• 92.13 ImagePicker.GetCameraDevice	5046
• 92.14 ImagePicker.GetCameraFlashMode	5047
• 92.15 ImagePicker.GetEvaluate	5048
• 92.16 ImagePicker.GetFileName	5049
• 92.17 ImagePicker.GetScriptName	5050
• 92.18 ImagePicker.GetShowsCameraControls	5051

- 92.19 ImagePicker.GetSourceType 5052
- 92.20 ImagePicker.GetVideoMaximumDuration 5053
- 92.21 ImagePicker.HasMedia 5054
- 92.22 ImagePicker.IsCameraDeviceAvailable 5055
- 92.23 ImagePicker.IsFlashAvailableForCameraDevice 5056
- 92.24 ImagePicker.IsPresented 5057
- 92.25 ImagePicker.IsSourceTypeAvailable 5058
- 92.26 ImagePicker.MediaCropRect 5060
- 92.27 ImagePicker.MediaEditedImage 5061
- 92.28 ImagePicker.MediaIsImage 5062
- 92.29 ImagePicker.MediaIsVideo 5063
- 92.30 ImagePicker.MediaOriginalImage 5064
- 92.31 ImagePicker.MediaPath 5066
- 92.32 ImagePicker.MediaReferenceURL 5067
- 92.33 ImagePicker.MediaType 5068
- 92.34 ImagePicker.MediaTypes 5069
- 92.35 ImagePicker.MediaURL 5070
- 92.36 ImagePicker.New 5071
- 92.37 ImagePicker.Present 5073
- 92.38 ImagePicker.SetAllowsEditing 5074
- 92.39 ImagePicker.SetCameraCaptureMode 5075
- 92.40 ImagePicker.SetCameraDevice 5076
- 92.41 ImagePicker.SetCameraFlashMode 5077
- 92.42 ImagePicker.SetEvaluate 5078
- 92.43 ImagePicker.SetOverlayImage 5079
- 92.44 ImagePicker.SetScript 5080
- 92.45 ImagePicker.SetShowsCameraControls 5081
- 92.46 ImagePicker.SetSourceType 5082
- 92.47 ImagePicker.SetVideoMaximumDuration 5083

	115
• 92.48 UIImagePickerController.StartVideoCapture	5084
• 92.49 UIImagePickerController.StopVideoCapture	5085
• 92.50 UIImagePickerController.TakePicture	5086
• 92.51 UIImagePickerController.VideoIsCompatibleWithSavedPhotosAlbum	5087
• 92.52 UIImagePickerController.WriteImageToSavedPhotosAlbum	5088
• 92.53 UIImagePickerController.WriteVideoToSavedPhotosAlbum	5090
• 93.1 UIImageView.Clear	5091
• 93.2 UIImageView.CreateWithControl	5092
• 93.3 UIImageView.CreateWithSize	5094
• 93.4 UIImageView.CreateWithWindow	5096
• 93.5 UIImageView.GetHeight	5097
• 93.6 UIImageView.GetLeft	5098
• 93.7 UIImageView.GetTag	5099
• 93.8 UIImageView.GetToolTip	5100
• 93.9 UIImageView.GetTop	5101
• 93.10 UIImageView.GetVisible	5102
• 93.11 UIImageView.GetWidth	5103
• 93.12 UIImageView.Release	5104
• 93.13 UIImageView.ReleaseAll	5105
• 93.14 UIImageView.SetFrame	5106
• 93.15 UIImageView.SetFrameWithControl	5107
• 93.16 UIImageView.SetImage	5108
• 93.17 UIImageView.SetTag	5109
• 93.18 UIImageView.SetToolTip	5110
• 93.19 UIImageView.SetVisible	5111
• 124.4 Is64bit	6264
• 124.5 IsClient	6265
• 124.6 IsError	6266
• 124.7 IsIOS	6268

- 124.8 IsIOSDevice 6269
- 124.9 IsIOSSimulator 6270
- 124.10 IsLinux 6271
- 124.11 IsMacOS 6272
- 124.12 IsMobile 6273
- 124.13 IsRegistered 6274
- 124.14 IsRuntime 6277
- 124.15 IsServer 6278
- 124.16 IsWindows 6280
- 98.1 JS.AddFileMakerEvaluateFunction 5181
- 98.2 JS.AddFileMakerRunScriptFunction 5183
- 98.3 JS.AddFileMakerSQLFunction 5185
- 98.4 JS.AddFunction 5186
- 98.5 JS.CallFunction 5188
- 98.6 JS.Evaluate 5190
- 98.7 JS.EvaluateToString 5194
- 98.8 JS.Free 5196
- 98.9 JS.GetGlobalProperty 5198
- 98.10 JS.GetGlobalPropertyValue 5200
- 98.11 JS.New 5201
- 98.12 JS.Now 5203
- 98.13 JS.ObjectCount 5204
- 98.14 JS.SetGlobalProperty 5205
- 98.15 JS.SetGlobalPropertyValue 5207
- 98.16 JS.StringCount 5209
- 98.17 JS.TimeToDateComponents 5210
- 98.18 JS.TimeToUTCDate 5212
- 98.19 JS.UTCDateToTime 5213
- 100.4 JSON.AddBooleanToObject 5238

	117
• 100.5 JSON.AddFalseToObject	5240
• 100.6 JSON.AddItemToArray	5242
• 100.7 JSON.AddItemToObject	5244
• 100.8 JSON.AddNullToObject	5247
• 100.9 JSON.AddNumberToArray	5249
• 100.10 JSON.AddNumberToObject	5251
• 100.11 JSON.AddStringToArray	5253
• 100.12 JSON.AddStringToObject	5255
• 100.13 JSON.AddTrueToObject	5258
• 100.14 JSON.Clone	5260
• 100.15 JSON.Colorize	5261
• 100.16 JSON.Compact	5263
• 100.17 JSON.CreateArray	5264
• 100.18 JSON.CreateArrayRef	5265
• 100.19 JSON.CreateBool	5268
• 100.20 JSON.CreateBoolean	5269
• 100.21 JSON.CreateDoubleArray	5270
• 100.22 JSON.CreateFalse	5271
• 100.23 JSON.CreateIntegerArray	5272
• 100.24 JSON.CreateNull	5273
• 100.25 JSON.CreateNumber	5274
• 100.26 JSON.CreateObject	5276
• 100.27 JSON.CreateObjectRef	5278
• 100.28 JSON.CreateString	5281
• 100.29 JSON.CreateStringArray	5282
• 100.30 JSON.CreateStringArrayWithList	5283
• 100.31 JSON.CreateTrue	5284
• 100.32 JSON.CreateValue	5285
• 100.33 JSON.DeleteItemFromArray	5286

• 100.34 JSON.DeleteItemFromObject	5287
• 100.35 JSON.EqualContent	5288
• 100.36 JSON.Equals	5289
• 100.37 JSON.FindValueInArray	5291
• 100.38 JSON.FindValueInObjectArray	5293
• 100.39 JSON.Format	5295
• 100.40 JSON.GetArrayItem	5297
• 100.41 JSON.GetArrayItemsAsList	5299
• 100.42 JSON.GetArrayPathItems	5301
• 100.43 JSON.GetArraySize	5303
• 100.44 JSON.GetDoubleValue	5304
• 100.45 JSON.GetIntegerValue	5305
• 100.46 JSON.GetObjectItem	5306
• 100.47 JSON.GetObjectItemTree	5309
• 100.48 JSON.GetObjectItemTreeRef	5310
• 100.49 JSON.GetObjectName	5311
• 100.50 JSON.GetObjectNameList	5312
• 100.51 JSON.GetObjectSize	5313
• 100.52 JSON.GetPathItem	5314
• 100.53 JSON.GetStringValue	5317
• 100.54 JSON.GetType	5319
• 100.55 JSON.GetValue	5320
• 100.56 JSON.Import	5322
• 100.57 JSON.Import.Cancel	5325
• 100.58 JSON.Import.ErrorCount	5326
• 100.59 JSON.Import.Errors	5327
• 100.60 JSON.Import.Status	5328
• 100.61 JSON.Import.TODO	5329
• 100.62 JSON.Import.Total	5330

	119
• 100.63 JSON.Import.Work	5331
• 100.64 JSON.IsValid	5332
• 100.65 JSON.Parse	5333
• 100.66 JSON.Release	5336
• 100.67 JSON.ReleaseAll	5338
• 100.68 JSON.ReplaceItemInArray	5339
• 100.69 JSON.ReplaceItemInObject	5340
• 100.70 JSON.SetPathItem	5341
• 100.71 JSON.Sort	5343
• 100.72 JSON.ToHTML	5344
• 97.1 Java.CallObjectMethod	5157
• 97.2 Java.CallStaticMethod	5159
• 97.3 Java.GetContainerFileName	5161
• 97.4 Java.GetObjectField	5162
• 97.5 Java.GetStaticField	5164
• 97.6 Java.Initialize	5166
• 97.7 Java.Initialized	5169
• 97.8 Java.NewClassObject	5170
• 97.9 Java.ObjectClassName	5172
• 97.10 Java.Release	5173
• 97.11 Java.ReleaseAll	5174
• 97.12 Java.SetContainerFileName	5175
• 97.13 Java.SetObjectField	5176
• 97.14 Java.SetStaticField	5178
• 99.1 JavaScript.CheckScriptSyntax	5215
• 99.2 JavaScript.EvaluateScript	5217
• 99.3 JavaScript.GetProperty	5220
• 99.4 JavaScript.HasProperty	5221
• 99.5 JavaScript.New	5222

- 99.6 JavaScript.RegisterEvaluateFunction 5223
- 99.7 JavaScript.RegisterFunction 5225
- 99.8 JavaScript.RegisterRunScriptFunction 5227
- 99.9 JavaScript.RegisterSQLQueryFunction 5228
- 99.10 JavaScript.Release 5229
- 99.11 JavaScript.SetProperty 5230
- 101.1 Keychain.AddPassword 5357
- 101.2 Keychain.DeletePassword 5359
- 101.3 Keychain.ListAccounts 5360
- 101.4 Keychain.ListDatabases 5361
- 101.5 Keychain.UpdatePassword 5362
- 175.3 LCMS.ProfileInfo 8232
- 102.1 LDAP.Add 5363
- 102.2 LDAP.AddJSON 5365
- 102.3 LDAP.AddList 5369
- 102.4 LDAP.AddRecord 5371
- 102.5 LDAP.Bind 5373
- 102.6 LDAP.Connect 5375
- 102.7 LDAP.Delete 5378
- 102.8 LDAP.GetNetworkTimeOut 5379
- 102.9 LDAP.GetProtocolVersion 5380
- 102.10 LDAP.GetReferrals 5381
- 102.11 LDAP.GetTimeOut 5382
- 102.12 LDAP.JSON 5383
- 102.13 LDAP.Modify 5388
- 102.14 LDAP.ModifyJSON 5389
- 102.15 LDAP.ModifyRecord 5391
- 102.16 LDAP.Release 5393
- 102.17 LDAP.Rename 5394

	121
• 102.18 LDAP.Search	5395
• 102.19 LDAP.SearchResult.AttributeCount	5397
• 102.20 LDAP.SearchResult.AttributeName	5399
• 102.21 LDAP.SearchResult.AttributeNames	5400
• 102.22 LDAP.SearchResult.AttributeValue	5401
• 102.23 LDAP.SearchResult.AttributeValueCount	5402
• 102.24 LDAP.SearchResult.AttributeValues	5403
• 102.25 LDAP.SearchResult.AttributeValuesByName	5405
• 102.26 LDAP.SearchResult.Count	5407
• 102.27 LDAP.SearchResult.DistinguishedName	5409
• 102.28 LDAP.SetNetworkTimeOut	5410
• 102.29 LDAP.SetProtocolVersion	5411
• 102.30 LDAP.SetReferrals	5412
• 102.31 LDAP.SetTimeOut	5413
• 102.32 LDAP.SimpleBind	5414
• 102.33 LDAP.StartTLS	5415
• 103.1 List.AddPostfix	5417
• 103.2 List.AddPrefix	5419
• 103.3 List.AddValue	5420
• 103.4 List.And	5421
• 103.5 List.AndColumn	5422
• 103.6 List.BestMatch	5424
• 103.7 List.CSVSplit	5425
• 103.8 List.CountValues	5427
• 103.9 List.CrossProduct	5428
• 103.10 List.DeCombine	5430
• 103.11 List.Deserialize	5432
• 103.12 List.FindEquals	5433
• 103.13 List.FindUnequals	5434

- 103.14 List.GetValue 5436
- 103.15 List.HasDuplicateItems 5437
- 103.16 List.HasValue 5438
- 103.17 List.InsertValue 5440
- 103.18 List.MatchesPostfix 5441
- 103.19 List.MatchesPrefix 5442
- 103.20 List.Not 5443
- 103.21 List.NotColumn 5444
- 103.22 List.Or 5446
- 103.23 List.OrColumn 5447
- 103.24 List.RegExMatch 5449
- 103.25 List.Remove 5451
- 103.26 List.RemoveDuplicateItems 5452
- 103.27 List.RemoveEmptyItems 5454
- 103.28 List.RemovePostfix 5455
- 103.29 List.RemovePrefix 5457
- 103.30 List.RemoveValue 5459
- 103.31 List.Reverse 5461
- 103.32 List.Serialize 5462
- 103.33 List.SetValue 5463
- 103.34 List.Sort 5464
- 103.35 List.SubList 5467
- 103.36 List.Trim 5469
- 103.37 List.ValueIndex 5470
- 103.38 List.XOr 5471
- 103.39 List.XOrColumn 5472
- 104.1 ListDialog.AddItemToList 5563
- 104.2 ListDialog.AddItemsToList 5565
- 104.3 ListDialog.AddSQL 5566

	123
• 104.4 ListDialog.ClearColumnHeaders	5567
• 104.5 ListDialog.ClearList	5568
• 104.6 ListDialog.ColumnCount	5569
• 104.7 ListDialog.GetAllowEmptySelection	5570
• 104.8 ListDialog.GetAllowMultipleSelection	5571
• 104.9 ListDialog.GetCancelButtonLabel	5572
• 104.10 ListDialog.GetColumnHeader	5573
• 104.11 ListDialog.GetHeight	5574
• 104.12 ListDialog.GetOtherButtonEvaluate	5575
• 104.13 ListDialog.GetOtherButtonLabel	5576
• 104.14 ListDialog.GetPositionX	5577
• 104.15 ListDialog.GetPositionY	5578
• 104.16 ListDialog.GetPrompt	5579
• 104.17 ListDialog.GetSelectButtonLabel	5580
• 104.18 ListDialog.GetSelectedTag	5581
• 104.19 ListDialog.GetSelectedTitle	5582
• 104.20 ListDialog.GetWidth	5583
• 104.21 ListDialog.GetWindowTitle	5584
• 104.22 ListDialog.ListCount	5585
• 104.23 ListDialog.ListItem	5586
• 104.24 ListDialog.ListTag	5587
• 104.25 ListDialog.Reset	5588
• 104.26 ListDialog.SetAllowEmptySelection	5589
• 104.27 ListDialog.SetAllowMultipleSelection	5590
• 104.28 ListDialog.SetCancelButtonLabel	5591
• 104.29 ListDialog.SetColumnCount	5592
• 104.30 ListDialog.SetColumnHeader	5593
• 104.31 ListDialog.SetHeight	5594
• 104.32 ListDialog.SetOtherButtonEvaluate	5595

- 104.33 ListDialog.SetOtherButtonLabel 5596
- 104.34 ListDialog.SetPosition 5597
- 104.35 ListDialog.SetPositionX 5598
- 104.36 ListDialog.SetPositionY 5599
- 104.37 ListDialog.SetPrompt 5600
- 104.38 ListDialog.SetSelectButtonLabel 5601
- 104.39 ListDialog.SetSelectedTag 5602
- 104.40 ListDialog.SetSelectedTitle 5603
- 104.41 ListDialog.SetWidth 5604
- 104.42 ListDialog.SetWindowTitle 5605
- 104.43 ListDialog.ShowDialog 5606
- 104.44 ListDialog.Sort 5608
- 175.4 Log 8233
- 105.1 MailComposer.AddAttachmentContainer 5609
- 105.2 MailComposer.AddAttachmentFile 5611
- 105.3 MailComposer.AddAttachmentText 5612
- 105.4 MailComposer.CanSendMail 5613
- 105.5 MailComposer.Dismiss 5614
- 105.6 MailComposer.Error 5615
- 105.7 MailComposer.GetBCCRecipients 5616
- 105.8 MailComposer.GetCCRecipients 5617
- 105.9 MailComposer.GetEvaluate 5618
- 105.10 MailComposer.GetFileName 5619
- 105.11 MailComposer.GetMessageBody 5620
- 105.12 MailComposer.GetScriptName 5621
- 105.13 MailComposer.GetSubject 5622
- 105.14 MailComposer.GetTORecipients 5623
- 105.15 MailComposer.IsPresented 5624
- 105.16 MailComposer.New 5625

	125
• 105.17 MailComposer.Present	5626
• 105.18 MailComposer.Result	5628
• 105.19 MailComposer.SetBCCRecipients	5629
• 105.20 MailComposer.SetCCRecipients	5630
• 105.21 MailComposer.SetEvaluate	5631
• 105.22 MailComposer.SetMessageBody	5632
• 105.23 MailComposer.SetScript	5633
• 105.24 MailComposer.SetSubject	5635
• 105.25 MailComposer.SetTORecipients	5636
• 106.1 MapView.AddCircle	5637
• 106.2 MapView.AddPin	5639
• 106.3 MapView.AddPinWithAddress	5641
• 106.4 MapView.AddPoint	5643
• 106.5 MapView.AddPolygon	5645
• 106.6 MapView.AddPolyline	5647
• 106.7 MapView.Annotations	5649
• 106.8 MapView.CreateWithControl	5650
• 106.9 MapView.CreateWithSize	5652
• 106.10 MapView.FormatDistance	5654
• 106.11 MapView.GetAnnotationCoordinate	5655
• 106.12 MapView.GetAnnotationDragImage	5656
• 106.13 MapView.GetAnnotationImage	5657
• 106.14 MapView.GetAnnotationSelectedImage	5658
• 106.15 MapView.GetAutoResizingMask	5659
• 106.16 MapView.GetCenterCoordinateLatitude	5660
• 106.17 MapView.GetCenterCoordinateLongitude	5661
• 106.18 MapView.GetHeight	5662
• 106.19 MapView.GetLeft	5663
• 106.20 MapView.GetMapType	5664

- 106.21 MapView.GetOverlayFillColor 5665
- 106.22 MapView.GetOverlayLineWidth 5666
- 106.23 MapView.GetOverlayPoints 5667
- 106.24 MapView.GetOverlayStrokeColor 5669
- 106.25 MapView.GetPitchEnabled 5670
- 106.26 MapView.GetRegion 5671
- 106.27 MapView.GetRegionLatitude 5672
- 106.28 MapView.GetRegionLatitudeSpan 5673
- 106.29 MapView.GetRegionLongitude 5674
- 106.30 MapView.GetRegionLongitudeSpan 5675
- 106.31 MapView.GetRotateEnabled 5676
- 106.32 MapView.GetScrollEnabled 5677
- 106.33 MapView.GetShowsBuildings 5678
- 106.34 MapView.GetShowsCompass 5679
- 106.35 MapView.GetShowsPointsOfInterest 5680
- 106.36 MapView.GetShowsScale 5681
- 106.37 MapView.GetShowsTraffic 5682
- 106.38 MapView.GetShowsUserLocation 5683
- 106.39 MapView.GetShowsZoomControls 5684
- 106.40 MapView.GetTag 5685
- 106.41 MapView.GetToolTip 5686
- 106.42 MapView.GetTop 5687
- 106.43 MapView.GetVisible 5688
- 106.44 MapView.GetVisibleMapRect 5689
- 106.45 MapView.GetWidth 5690
- 106.46 MapView.GetZoomEnabled 5691
- 106.47 MapView.GetZoomLevel 5692
- 106.48 MapView.IsUserLocationVisible 5693
- 106.49 MapView.MouseCoordinate 5694

	127
• 106.50 MapView.Overlays	5695
• 106.51 MapView.ParseDistance	5696
• 106.52 MapView.PlanRoute	5697
• 106.53 MapView.Release	5699
• 106.54 MapView.ReleaseAll	5700
• 106.55 MapView.RemoveAnnotation	5701
• 106.56 MapView.RemoveAnnotations	5702
• 106.57 MapView.RemoveOverlay	5703
• 106.58 MapView.RemoveOverlays	5704
• 106.59 MapView.Screenshot	5705
• 106.60 MapView.SelectedAnnotations	5707
• 106.61 MapView.SetAnnotationCoordinate	5708
• 106.62 MapView.SetAnnotationDragImage	5709
• 106.63 MapView.SetAnnotationImage	5710
• 106.64 MapView.SetAnnotationSelectedImage	5711
• 106.65 MapView.SetAutoResizingMask	5712
• 106.66 MapView.SetColor	5714
• 106.67 MapView.SetCoordinate	5715
• 106.68 MapView.SetFrame	5716
• 106.69 MapView.SetFrameWithControl	5717
• 106.70 MapView.SetMapType	5718
• 106.71 MapView.SetOverlayFillColor	5719
• 106.72 MapView.SetOverlayLineWidth	5720
• 106.73 MapView.SetOverlayPoints	5721
• 106.74 MapView.SetOverlayStrokeColor	5722
• 106.75 MapView.SetPitchEnabled	5723
• 106.76 MapView.SetRegion	5724
• 106.77 MapView.SetRotateEnabled	5725
• 106.78 MapView.SetScript	5726

- 106.79 `MapView.SetScrollEnabled` 5728
- 106.80 `MapView.SetShowsBuildings` 5729
- 106.81 `MapView.SetShowsCompass` 5730
- 106.82 `MapView.SetShowsPointsOfInterest` 5731
- 106.83 `MapView.SetShowsScale` 5732
- 106.84 `MapView.SetShowsTraffic` 5733
- 106.85 `MapView.SetShowsUserLocation` 5734
- 106.86 `MapView.SetShowsZoomControls` 5736
- 106.87 `MapView.SetTag` 5737
- 106.88 `MapView.SetToolTip` 5738
- 106.89 `MapView.SetVisible` 5739
- 106.90 `MapView.SetVisibleMapRect` 5740
- 106.91 `MapView.SetZoomEnabled` 5741
- 106.92 `MapView.SetZoomLevel` 5742
- 106.93 `MapView.ShowAddress` 5743
- 106.94 `MapView.ShowAllAnnotations` 5745
- 106.95 `MapView.Snapshot` 5746
- 107.1 `Markdown.CSS` 5749
- 107.2 `Markdown.Create` 5750
- 107.3 `Markdown.HTML` 5751
- 107.4 `Markdown.Release` 5752
- 108.1 `Math.BitwiseAND` 5753
- 108.2 `Math.BitwiseNOT` 5755
- 108.3 `Math.BitwiseOR` 5756
- 108.4 `Math.BitwiseShiftLeft` 5757
- 108.5 `Math.BitwiseShiftRight` 5758
- 108.6 `Math.BitwiseXOR` 5759
- 108.7 `Math.DecToHex` 5760
- 108.8 `Math.DecodeNumber` 5761

	129
• 108.9 Math.EncodeNumber	5763
• 108.10 Math.HexToDec	5765
• 108.11 Math.InchToPixel	5766
• 108.12 Math.InsidePolygon	5767
• 108.13 Math.IsValidCC	5768
• 108.14 Math.MillimeterToPixel	5769
• 108.15 Math.NumberToText	5770
• 108.16 Math.PixelToInch	5771
• 108.17 Math.PixelToMillimeter	5772
• 108.18 Math.PolylineDecode	5773
• 108.19 Math.PolylineEncode	5774
• 108.20 Math.TextToNumber	5776
• 109.1 Matrix.AddColumn	5779
• 109.2 Matrix.AddColumns	5781
• 109.3 Matrix.AddRow	5782
• 109.4 Matrix.AddRows	5783
• 109.5 Matrix.Avg	5784
• 109.6 Matrix.CSV	5785
• 109.7 Matrix.Clear	5787
• 109.8 Matrix.ClearValues	5788
• 109.9 Matrix.Clone	5789
• 109.10 Matrix.DataType	5790
• 109.11 Matrix.Free	5791
• 109.12 Matrix.GetColumn	5792
• 109.13 Matrix.GetRow	5793
• 109.14 Matrix.GetText	5794
• 109.15 Matrix.GetValue	5795
• 109.16 Matrix.Height	5797
• 109.17 Matrix.InsertRecords	5798

- 109.18 Matrix.InsertRecordsToSQL 5800
- 109.19 Matrix.JSONRecord 5802
- 109.20 Matrix.JSONRecords 5803
- 109.21 Matrix.Max 5804
- 109.22 Matrix.Min 5805
- 109.23 Matrix.New 5806
- 109.24 Matrix.NewWithSQL 5808
- 109.25 Matrix.RemoveColumn 5809
- 109.26 Matrix.RemoveRow 5810
- 109.27 Matrix.Resize 5811
- 109.28 Matrix.SetColumn 5812
- 109.29 Matrix.SetRow 5814
- 109.30 Matrix.SetValue 5816
- 109.31 Matrix.Sum 5818
- 109.32 Matrix.Text 5820
- 109.33 Matrix.Width 5822
- 110.1 MatrixDongle.Count 5823
- 110.2 MatrixDongle.Find 5825
- 110.3 MatrixDongle.GetDriverFlag 5826
- 110.4 MatrixDongle.GetVersionAPI 5827
- 110.5 MatrixDongle.GetVersionDRV 5828
- 110.6 MatrixDongle.GetVersionDRV.USB 5829
- 110.7 MatrixDongle.Initialize 5830
- 110.8 MatrixDongle.Initialized 5832
- 110.9 MatrixDongle.MemorySize 5833
- 110.10 MatrixDongle.Model 5834
- 110.11 MatrixDongle.ReadHex 5835
- 110.12 MatrixDongle.ReadSerialNumber 5837
- 110.13 MatrixDongle.ReadText 5838

	131
• 110.14 MatrixDongle.Release	5840
• 110.15 MatrixDongle.SetDriverFlag	5841
• 110.16 MatrixDongle.Version	5843
• 110.17 MatrixDongle.WriteHex	5844
• 110.18 MatrixDongle.WriteText	5845
• 111.1 MediaLibraryBrowser.getMediaLibraries	5847
• 111.2 MediaLibraryBrowser.getVisible	5848
• 111.3 MediaLibraryBrowser.setFrame	5849
• 111.4 MediaLibraryBrowser.setMediaLibraries	5850
• 111.5 MediaLibraryBrowser.setVisible	5851
• 111.6 MediaLibraryBrowser.togglePanel	5852
• 112.1 Menu.AddItem	5853
• 112.2 Menu.AddItems	5856
• 112.3 Menu.CreateMenu	5859
• 112.4 Menu.DefineQuickMenu	5861
• 112.5 Menu.DefineQuickMenuXML	5864
• 112.6 Menu.FindItemWithTag	5866
• 112.7 Menu.FindItemWithTitle	5867
• 112.8 Menu.GetAllowsContextMenuPlugIns	5868
• 112.9 Menu.GetEvaluate	5869
• 112.10 Menu.GetMinimumWidth	5870
• 112.11 Menu.GetScriptFileName	5871
• 112.12 Menu.GetScriptName	5872
• 112.13 Menu.GetShowsStateColumn	5873
• 112.14 Menu.GetTag	5874
• 112.15 Menu.GetTitle	5875
• 112.16 Menu.GetURL	5876
• 112.17 Menu.InsertItem	5877
• 112.18 Menu.ItemAtIndex	5878

- 112.19 Menu.Items 5879
- 112.20 Menu.List 5880
- 112.21 Menu.NumberOfItems 5881
- 112.22 Menu.PopUp 5882
- 112.23 Menu.Release 5886
- 112.24 Menu.ReleaseAll 5888
- 112.25 Menu.RemoveAllItems 5889
- 112.26 Menu.RemoveItem 5890
- 112.27 Menu.RemoveItemAtIndex 5891
- 112.28 Menu.SelectedItem 5892
- 112.29 Menu.SetAllowsContextMenuPlugIns 5894
- 112.30 Menu.SetEvaluate 5895
- 112.31 Menu.SetMinimumWidth 5896
- 112.32 Menu.SetScriptAction 5897
- 112.33 Menu.SetShowsStateColumn 5899
- 112.34 Menu.SetTag 5900
- 112.35 Menu.SetTitle 5901
- 112.36 Menu.SetURL 5902
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.39 MenuItem.GetAlternate 5906
- 112.40 MenuItem.GetAttributedTitle 5907
- 112.41 MenuItem.GetBackColor 5908
- 112.42 MenuItem.GetBold 5909
- 112.43 MenuItem.GetEnabled 5910
- 112.44 MenuItem.GetEvaluate 5911
- 112.45 MenuItem.GetFontColor 5912
- 112.46 MenuItem.GetFontName 5913
- 112.47 MenuItem.GetFontSize 5914

	133
• 112.48 MenuItem.GetGroupID	5915
• 112.49 MenuItem.GetHidden	5916
• 112.50 MenuItem.GetImage	5917
• 112.51 MenuItem.GetItalic	5918
• 112.52 MenuItem.GetKeyEquivalent	5919
• 112.53 MenuItem.GetKeyEquivalentModifierMask	5920
• 112.54 MenuItem.GetMixedStateImage	5921
• 112.55 MenuItem.GetOffStateImage	5922
• 112.56 MenuItem.GetOnStateImage	5923
• 112.57 MenuItem.GetParentItem	5924
• 112.58 MenuItem.GetParentMenu	5925
• 112.59 MenuItem.GetPath	5926
• 112.60 MenuItem.GetRequireCommand	5927
• 112.61 MenuItem.GetRequireControl	5928
• 112.62 MenuItem.GetRequireOption	5929
• 112.63 MenuItem.GetRequireShift	5930
• 112.64 MenuItem.GetScriptFileName	5931
• 112.65 MenuItem.GetScriptName	5932
• 112.66 MenuItem.GetSelectable	5933
• 112.67 MenuItem.GetState	5934
• 112.68 MenuItem.GetStrikeOut	5935
• 112.69 MenuItem.GetSubMenu	5936
• 112.70 MenuItem.GetTag	5937
• 112.71 MenuItem.GetTitle	5939
• 112.72 MenuItem.GetToolTip	5940
• 112.73 MenuItem.GetURL	5941
• 112.74 MenuItem.GetUnderline	5942
• 112.75 MenuItem.GetUserKeyEquivalent	5943
• 112.76 MenuItem.HasSubmenu	5944

- 112.77 MenuItem.IsSeparatorItem 5945
- 112.78 MenuItem.List 5946
- 112.79 MenuItem.Release 5947
- 112.80 MenuItem.SetAlternate 5948
- 112.81 MenuItem.SetAttributedTitle 5949
- 112.82 MenuItem.SetBackColor 5950
- 112.83 MenuItem.SetBold 5952
- 112.84 MenuItem.SetEnabled 5954
- 112.85 MenuItem.SetEvaluate 5955
- 112.86 MenuItem.SetFontColor 5956
- 112.87 MenuItem.SetFontName 5958
- 112.88 MenuItem.SetFontSize 5960
- 112.89 MenuItem.SetGroupID 5962
- 112.90 MenuItem.SetHidden 5963
- 112.91 MenuItem.SetImage 5964
- 112.92 MenuItem.SetItalic 5966
- 112.93 MenuItem.SetKeyEquivalent 5968
- 112.94 MenuItem.SetKeyEquivalentModifierMask 5970
- 112.95 MenuItem.SetMixedStateImage 5972
- 112.96 MenuItem.SetOffStateImage 5973
- 112.97 MenuItem.SetOnStateImage 5974
- 112.98 MenuItem.SetRequireCommand 5975
- 112.99 MenuItem.SetRequireControl 5976
- 112.100 MenuItem.SetRequireOption 5977
- 112.101 MenuItem.SetRequireShift 5978
- 112.102 MenuItem.SetScriptAction 5979
- 112.103 MenuItem.SetSelectable 5981
- 112.104 MenuItem.SetState 5982
- 112.105 MenuItem.SetStrikeOut 5984

	135
• 112.106 MenuItem.SetSubMenu	5985
• 112.107 MenuItem.SetTag	5986
• 112.108 MenuItem.SetTitle	5987
• 112.109 MenuItem.SetToolTip	5988
• 112.110 MenuItem.SetURL	5989
• 112.111 MenuItem.SetUnderline	5990
• 113.1 Menubar.HasMenuCommand	5993
• 113.2 Menubar.IsMenuCommandChecked	5995
• 113.3 Menubar.ListMenuCommands	5997
• 113.4 Menubar.RemoveMenuCommand	5998
• 113.5 Menubar.RunMenuCommand	5999
• 113.6 Menubar.SetMenuCommandShortcut	6001
• 113.7 Menubar.SetMenuCommandTitle	6002
• 113.8 Menubar.SetMenuCommandVisible	6003
• 114.1 MessageComposer.AddAttachmentContainer	6005
• 114.2 MessageComposer.AddAttachmentFile	6007
• 114.3 MessageComposer.AttachmentCount	6008
• 114.4 MessageComposer.CanSendAttachments	6009
• 114.5 MessageComposer.CanSendSubject	6010
• 114.6 MessageComposer.CanSendText	6011
• 114.7 MessageComposer.Dismiss	6012
• 114.8 MessageComposer.Evaluate	6013
• 114.9 MessageComposer.GetFileName	6014
• 114.10 MessageComposer.GetMessageBody	6015
• 114.11 MessageComposer.GetRecipients	6016
• 114.12 MessageComposer.GetScriptName	6017
• 114.13 MessageComposer.GetSubject	6018
• 114.14 MessageComposer.IsPresented	6019
• 114.15 MessageComposer.New	6020

• 114.16 MessageComposer.Present	6021
• 114.17 MessageComposer.Result	6023
• 114.18 MessageComposer.SetEvaluate	6024
• 114.19 MessageComposer.SetMessageBody	6025
• 114.20 MessageComposer.SetRecipients	6026
• 114.21 MessageComposer.SetScript	6027
• 114.22 MessageComposer.SetSubject	6029
• 114.23 MessageComposer.disableUserAttachments	6030
• 115.1 MetaDataQuery.AttributesForFile	6031
• 115.2 MetaDataQuery.Close	6033
• 115.3 MetaDataQuery.Create	6034
• 115.4 MetaDataQuery.GetEvaluate	6035
• 115.5 MetaDataQuery.GetScriptFileName	6036
• 115.6 MetaDataQuery.GetScriptName	6037
• 115.7 MetaDataQuery.IsGathering	6038
• 115.8 MetaDataQuery.IsStarted	6039
• 115.9 MetaDataQuery.IsStopped	6040
• 115.10 MetaDataQuery.PathAtIndex	6041
• 115.11 MetaDataQuery.Paths	6043
• 115.12 MetaDataQuery.QueryString	6044
• 115.13 MetaDataQuery.ResultAtIndex	6045
• 115.14 MetaDataQuery.ResultCount	6046
• 115.15 MetaDataQuery.Results	6047
• 115.16 MetaDataQuery.SearchScopes	6048
• 115.17 MetaDataQuery.SetEvaluate	6049
• 115.18 MetaDataQuery.SetQueryString	6050
• 115.19 MetaDataQuery.SetScript	6052
• 115.20 MetaDataQuery.SetSearchScopes	6053
• 115.21 MetaDataQuery.StartQuery	6055

	137
• 115.22 MetaDataQuery.StopQuery	6056
• 175.5 Modbus.CalculateRTUMessageCRC	8234
• 78.67 MountNotification.Install	3880
• 78.68 MountNotification.Uninstall	3882
• 175.6 MouseCursor.Hide	8235
• 175.7 MouseCursor.HideUntilMouseMoves	8236
• 175.8 MouseCursor.Set	8237
• 175.9 MouseCursor.Show	8240
• 175.10 MsgBox	8241
• 119.1 NSEventFilter.DisableEvents	6103
• 119.2 NSEventFilter.EnableAllEvents	6105
• 119.3 NSEventFilter.EnableEvents	6106
• 117.1 NetworkInterfaces.Count	6089
• 117.2 NetworkInterfaces.Default	6090
• 117.3 NetworkInterfaces.JSON	6091
• 117.4 NetworkInterfaces.Update	6092
• 117.5 NetworkInterfaces.Value	6093
• 118.1 Notification.List	6095
• 118.2 Notification.Listen	6096
• 118.3 Notification.Send	6098
• 118.4 Notification.SendDirect	6099
• 118.5 Notification.Unlisten	6100
• 118.6 Notification.UnlistenAll	6101
• 120.1 OCR.Cleanup	6109
• 120.2 OCR.Clear	6110
• 120.3 OCR.GetBoxText	6111
• 120.4 OCR.GetHOCText	6112
• 120.5 OCR.GetPageSegMode	6113
• 120.6 OCR.GetText	6114

- 120.7 OCR.GetTextWithCoordinates 6116
- 120.8 OCR.GetVariable 6118
- 120.9 OCR.Initialize 6119
- 120.10 OCR.IsInitialized 6121
- 120.11 OCR.Language 6122
- 120.12 OCR.MeanTextConf 6123
- 120.13 OCR.Recognize 6124
- 120.14 OCR.SetImage 6125
- 120.15 OCR.SetPageSegMode 6127
- 120.16 OCR.SetRectangle 6129
- 120.17 OCR.SetResolution 6130
- 120.18 OCR.SetVariable 6131
- 120.19 OCR.WriteToPDF 6132
- 122.1 PDFKit.AddEmptyPage 6153
- 122.2 PDFKit.AddImageFilePage 6155
- 122.3 PDFKit.AddImagePage 6157
- 122.4 PDFKit.AppendPages 6159
- 122.5 PDFKit.Combine 6160
- 122.6 PDFKit.CombineRef 6162
- 122.7 PDFKit.GeneratePreview 6164
- 122.8 PDFKit.GetCurrentFilter 6166
- 122.9 PDFKit.GetIgnoreCombineErrors 6167
- 122.10 PDFKit.GetPDFAttribute 6168
- 122.11 PDFKit.GetPDFDocument 6171
- 122.12 PDFKit.GetPDFPageCount 6173
- 122.13 PDFKit.GetPDFPageDisplayAnnotation 6175
- 122.14 PDFKit.GetPDFPageFormattedText 6176
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180

	139
• 122.17 PDFKit.GetPDFPagePDFRef	6182
• 122.18 PDFKit.GetPDFPageRotation	6183
• 122.19 PDFKit.GetPDFPageText	6184
• 122.20 PDFKit.GetPDFPageValue	6186
• 122.21 PDFKit.GetPDFPagesPDF	6188
• 122.22 PDFKit.GetPDFPagesPDFRef	6190
• 122.23 PDFKit.GetPDFText	6191
• 122.24 PDFKit.GetPrintLastSettings	6192
• 122.25 PDFKit.GetPrintOption	6193
• 122.26 PDFKit.GetPrintSetting	6194
• 122.27 PDFKit.NewPDFDocument	6196
• 122.28 PDFKit.Open	6198
• 122.29 PDFKit.OpenContainer	6200
• 122.30 PDFKit.OpenPath	6202
• 122.31 PDFKit.OpenURL	6204
• 122.32 PDFKit.PageBounds	6205
• 122.33 PDFKit.Print	6207
• 122.34 PDFKit.Release	6209
• 122.35 PDFKit.ResetPrintSettings	6211
• 122.36 PDFKit.RestorePrintSettings	6212
• 122.37 PDFKit.SavePrintSettings	6213
• 122.38 PDFKit.SetCurrentFilter	6214
• 122.39 PDFKit.SetIgnoreCombineErrors	6216
• 122.40 PDFKit.SetPDFAttribute	6217
• 122.41 PDFKit.SetPDFPageDisplayAnnotation	6220
• 122.42 PDFKit.SetPDFPageRotation	6222
• 122.43 PDFKit.SetPrintOption	6224
• 122.44 PDFKit.SetPrintSetting	6226
• 122.45 PDFKit.Watermark	6230

- 122.46 PDFKit.WriteToPath 6233
- 122.47 PDFKit.allowsCopying 6235
- 122.48 PDFKit.allowsPrinting 6237
- 122.49 PDFKit.isEncrypted 6239
- 122.50 PDFKit.isLocked 6241
- 123.1 PHP.Execute 6247
- 123.2 PHP.ExistsVariable 6249
- 123.3 PHP.GetResultContainer 6250
- 123.4 PHP.GetResultString 6251
- 123.5 PHP.GetVariable 6252
- 123.6 PHP.Init 6253
- 123.7 PHP.IsInitialized 6255
- 123.8 PHP.Load 6256
- 123.9 PHP.Run 6257
- 123.10 PHP.SetVariable 6258
- 123.11 PHP.ShutDown 6259
- 48.1 PKCS12.CA 1345
- 48.2 PKCS12.CACount 1347
- 48.3 PKCS12.Cert 1348
- 48.4 PKCS12.PKey 1349
- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352
- 48.7 PKCS12.Release 1354
- 48.8 PKCS12.ShowDialog 1355
- 48.9 PKCS7.ReadFromContainer 1356
- 48.10 PKCS7.ReadFromFile 1357
- 48.11 PKCS7.Release 1358
- 48.12 PKCS7.SignedDataCert 1359
- 48.13 PKCS7.SignedDataCertCount 1360

	141
• 48.14 PKCS7.SignedDataContent	1361
• 48.15 PKey.Bits	1362
• 48.16 PKey.DescriptionPrivateKey	1363
• 48.17 PKey.DescriptionPublicKey	1364
• 48.18 PKey.GetPrivateKey	1365
• 48.19 PKey.GetPublicKey	1366
• 48.20 PKey.Release	1367
• 48.21 PKey.Type	1368
• 127.1 PageSetupDialog.ClearOption	6383
• 127.2 PageSetupDialog.ClearOptions	6384
• 127.3 PageSetupDialog.Disable	6385
• 127.4 PageSetupDialog.Enable	6386
• 127.5 PageSetupDialog.GetLastSettings	6388
• 127.6 PageSetupDialog.GetNoDialog	6389
• 127.7 PageSetupDialog.GetOption	6390
• 127.8 PageSetupDialog.GetPaperName	6391
• 127.9 PageSetupDialog.GetPaperOrientation	6392
• 127.10 PageSetupDialog.GetPrinterName	6393
• 127.11 PageSetupDialog.GetScalingFactor	6394
• 127.12 PageSetupDialog.Install	6395
• 127.13 PageSetupDialog.SetNoDialog	6397
• 127.14 PageSetupDialog.SetOption	6398
• 127.15 PageSetupDialog.SetPaperName	6399
• 127.16 PageSetupDialog.SetPaperOrientation	6400
• 127.17 PageSetupDialog.SetPrinterName	6401
• 127.18 PageSetupDialog.SetScalingFactor	6402
• 121.1 Path.AddPathComponent	6135
• 121.2 Path.FileMakerPathToNativePath	6139
• 121.3 Path.FilePathToFileURL	6141

- 121.4 Path.FileURLToFilePath 6143
- 121.5 Path.LastPathComponent 6144
- 121.6 Path.LongPath 6146
- 121.7 Path.NativePathToFileMakerPath 6147
- 121.8 Path.RemoveLastPathComponent 6149
- 121.9 Path.ShortPath 6151
- 124.17 Platform 6281
- 124.18 Plugin.BuildNumber 6283
- 124.19 Plugin.CallCounter 6284
- 124.20 Plugin.CallErrorScriptTrigger 6285
- 124.21 Plugin.CompileDate 6286
- 124.22 Plugin.DisableFunction 6287
- 124.23 Plugin.FunctionCount 6288
- 124.24 Plugin.Functions 6289
- 124.25 Plugin.GetSuccessReturn 6290
- 124.26 Plugin.InstallSignalHandlers 6291
- 124.27 Plugin.IsPrerelease 6292
- 124.28 Plugin.JasperVersion 6293
- 124.29 Plugin.LibSSHVersion 6294
- 124.30 Plugin.LicenseeName 6295
- 124.31 Plugin.LimitFunction 6297
- 124.32 Plugin.LockFunction 6299
- 124.33 Plugin.OpenSSLVersion 6300
- 124.34 Plugin.PNGVersion 6301
- 124.35 Plugin.Path 6302
- 124.36 Plugin.ScriptStepParameter 6304
- 124.37 Plugin.ScriptStepParameterCount 6305
- 124.38 Plugin.Seats 6306
- 124.39 Plugin.SetErrorScriptTrigger 6307

	143
• 124.40 Plugin.SetFunctions	6309
• 124.41 Plugin.SetPreviewSize	6311
• 124.42 Plugin.SetSuccessReturn	6312
• 124.43 Plugin.StartTimeStamp	6313
• 124.44 Plugin.TiffVersion	6314
• 124.45 Plugin.UnlockFunction	6315
• 124.46 Plugin.UsedFunctions	6316
• 124.47 Plugin.ZLibVersion	6317
• 124.48 Plugin.isDebug	6318
• 125.1 PortMidi.Abort	6341
• 125.2 PortMidi.CheckHostError	6342
• 125.3 PortMidi.ClearDataAvailableHandler	6343
• 125.4 PortMidi.Close	6344
• 125.5 PortMidi.CurrentEvent	6345
• 125.6 PortMidi.DeviceCount	6346
• 125.7 PortMidi.GetChannelMask	6347
• 125.8 PortMidi.GetDefaultInputDeviceID	6348
• 125.9 PortMidi.GetDefaultOutputDeviceID	6349
• 125.10 PortMidi.GetDeviceID	6350
• 125.11 PortMidi.GetDeviceInfo	6351
• 125.12 PortMidi.GetDeviceName	6353
• 125.13 PortMidi.GetFilter	6354
• 125.14 PortMidi.OpenInput	6355
• 125.15 PortMidi.OpenOutput	6356
• 125.16 PortMidi.Poll	6358
• 125.17 PortMidi.ReadMessage	6359
• 125.18 PortMidi.Rescan	6360
• 125.19 PortMidi.SendMessage	6361
• 125.20 PortMidi.SendMessageRaw	6363

- 125.21 PortMidi.SendSysExHex 6364
- 125.22 PortMidi.SetChannelMask 6365
- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 125.24 PortMidi.SetDataAvailableHandler 6368
- 125.25 PortMidi.SetFilter 6370
- 125.26 PortMidi.TimeStamp 6372
- 126.1 Preferences.ClearRecentFiles 6373
- 126.2 Preferences.DeleteValue 6374
- 126.3 Preferences.GetTextSelectionWithDragAndDrop 6375
- 126.4 Preferences.GetValue 6376
- 126.5 Preferences.GetValueType 6378
- 126.6 Preferences.HasValue 6379
- 126.7 Preferences.SetTextSelectionWithDragAndDrop 6380
- 126.8 Preferences.SetValue 6381
- 127.19 PrintDialog.ClearOption 6403
- 127.20 PrintDialog.ClearOptions 6404
- 127.21 PrintDialog.Disable 6405
- 127.22 PrintDialog.Enable 6406
- 127.23 PrintDialog.GetAllPages 6408
- 127.24 PrintDialog.GetConfiguration 6409
- 127.25 PrintDialog.GetCopies 6410
- 127.26 PrintDialog.GetDestinationPath 6411
- 127.27 PrintDialog.GetDuplex 6412
- 127.28 PrintDialog.GetFirstPage 6413
- 127.29 PrintDialog.GetLastPage 6414
- 127.30 PrintDialog.GetLastSettings 6415
- 127.31 PrintDialog.GetNoDialog 6417
- 127.32 PrintDialog.GetOption 6418
- 127.33 PrintDialog.GetPageNumberingOffset 6419

	145
• 127.34 PrintDialog.GetPaperName	6420
• 127.35 PrintDialog.GetPrintToPDF	6421
• 127.36 PrintDialog.GetPrinterName	6422
• 127.37 PrintDialog.GetReset	6423
• 127.38 PrintDialog.GetResetDestination	6424
• 127.39 PrintDialog.GetTray	6425
• 127.40 PrintDialog.Install	6426
• 127.41 PrintDialog.SetAllPages	6428
• 127.42 PrintDialog.SetConfiguration	6429
• 127.43 PrintDialog.SetCopies	6430
• 127.44 PrintDialog.SetDestinationPath	6432
• 127.45 PrintDialog.SetDuplex	6433
• 127.46 PrintDialog.SetFirstPage	6434
• 127.47 PrintDialog.SetLastPage	6435
• 127.48 PrintDialog.SetNoDialog	6436
• 127.49 PrintDialog.SetOption	6438
• 127.50 PrintDialog.SetPageNumberingOffset	6440
• 127.51 PrintDialog.SetPaperName	6441
• 127.52 PrintDialog.SetPrintToPDF	6442
• 127.53 PrintDialog.SetPrintType	6443
• 127.54 PrintDialog.SetPrinterName	6445
• 127.55 PrintDialog.SetReset	6446
• 127.56 PrintDialog.SetResetDestination	6447
• 127.57 PrintDialog.SetTray	6448
• 128.1 Printer.CurrentNumberOfCopies	6449
• 128.2 Printer.CurrentPaperFormat	6450
• 128.3 Printer.CurrentPaperSource	6452
• 128.4 Printer.CurrentPrintWhat	6454
• 128.5 Printer.CurrentPrinterName	6456

- 128.6 Printer.ErrorLog 6458
- 128.7 Printer.GetDefaultPrinter 6459
- 128.8 Printer.PaperFormats 6460
- 128.9 Printer.PaperSources 6462
- 128.10 Printer.Print 6464
- 128.11 Printer.PrinterCount 6467
- 128.12 Printer.PrinterInfo 6468
- 128.13 Printer.PrinterName 6470
- 128.14 Printer.PrinterNames 6472
- 128.15 Printer.SetPrinter 6474
- 129.1 Process.FrontProcessBundleID 6477
- 129.2 Process.FrontProcessName 6478
- 129.3 Process.FrontWindowTitle 6479
- 129.4 Process.GetCurrentDirectory 6480
- 129.5 Process.IsFrontMost 6481
- 129.6 Process.IsRunning 6482
- 129.7 Process.KeepFrontMost 6483
- 129.8 Process.LoadLibrary 6484
- 129.9 Process.SetCurrentDirectory 6485
- 129.10 Process.SetFrontMost 6486
- 129.11 ProcessActivity.List 6487
- 129.12 ProcessActivity.Options 6488
- 129.13 ProcessActivity.Reason 6489
- 129.14 ProcessActivity.beginActivity 6490
- 129.15 ProcessActivity.endActivity 6492
- 130.1 ProgressDialog.ClearImage 6493
- 130.2 ProgressDialog.GetBottomText 6495
- 130.3 ProgressDialog.GetButtonCaption 6496
- 130.4 ProgressDialog.GetCancel 6497

	147
• 130.5 ProgressDialog.GetImageHeight	6499
• 130.6 ProgressDialog.GetImageWidth	6500
• 130.7 ProgressDialog.GetPositionX	6501
• 130.8 ProgressDialog.GetPositionY	6502
• 130.9 ProgressDialog.GetProgress	6503
• 130.10 ProgressDialog.GetShowButton	6504
• 130.11 ProgressDialog.GetTitle	6505
• 130.12 ProgressDialog.GetTopMost	6506
• 130.13 ProgressDialog.GetTopText	6507
• 130.14 ProgressDialog.Hide	6508
• 130.15 ProgressDialog.Reset	6510
• 130.16 ProgressDialog.SetBottomText	6511
• 130.17 ProgressDialog.SetButtonCaption	6513
• 130.18 ProgressDialog.SetCancel	6515
• 130.19 ProgressDialog.SetFont	6517
• 130.20 ProgressDialog.SetImage	6519
• 130.21 ProgressDialog.SetImageHeight	6521
• 130.22 ProgressDialog.SetImageWidth	6522
• 130.23 ProgressDialog.SetPosition	6523
• 130.24 ProgressDialog.SetPositionCentered	6524
• 130.25 ProgressDialog.SetProgress	6525
• 130.26 ProgressDialog.SetShowButton	6527
• 130.27 ProgressDialog.SetTitle	6529
• 130.28 ProgressDialog.SetTopMost	6531
• 130.29 ProgressDialog.SetTopText	6533
• 130.30 ProgressDialog.Show	6535
• 130.31 ProgressDialog.Update	6537
• 130.32 Progressdialog.GetEvaluate	6539
• 130.33 Progressdialog.GetFileName	6540

- 130.34 Progressdialog.GetScriptName 6541
- 130.35 Progressdialog.SetEvaluate 6542
- 130.36 Progressdialog.SetScript 6543
- 131.1 Proj.BatchTransform 6545
- 131.2 Proj.Initialize 6546
- 131.3 Proj.IsInitialized 6547
- 131.4 Proj.Transform 6548
- 134.5 QLPreviewPanel.AddContainer 6622
- 134.6 QLPreviewPanel.AddFile 6624
- 134.7 QLPreviewPanel.AddImage 6625
- 134.8 QLPreviewPanel.AddPDF 6626
- 134.9 QLPreviewPanel.Clear 6627
- 134.10 QLPreviewPanel.CurrentPreviewItemIndex 6628
- 134.11 QLPreviewPanel.CurrentPreviewItemPath 6629
- 134.12 QLPreviewPanel.CurrentPreviewItemTitle 6630
- 134.13 QLPreviewPanel.GetHeight 6631
- 134.14 QLPreviewPanel.GetLeft 6632
- 134.15 QLPreviewPanel.GetTop 6633
- 134.16 QLPreviewPanel.GetWidth 6634
- 134.17 QLPreviewPanel.Hide 6635
- 134.18 QLPreviewPanel.IsVisible 6636
- 134.19 QLPreviewPanel.Move 6637
- 134.20 QLPreviewPanel.Resize 6638
- 134.21 QLPreviewPanel.SetCurrentPreviewItemIndex 6640
- 134.22 QLPreviewPanel.Show 6641
- 122.51 QuartzFilterManager.Filters 6243
- 122.52 QuartzFilterManager.HidePanel 6244
- 122.53 QuartzFilterManager.ShowPanel 6245
- 103.40 QuickList.AddList 5474

	149
• 103.41 QuickList.AddMultiValue	5476
• 103.42 QuickList.AddPostfix	5478
• 103.43 QuickList.AddPrefix	5480
• 103.44 QuickList.AddQuickList	5482
• 103.45 QuickList.AddSQL	5483
• 103.46 QuickList.AddValue	5485
• 103.47 QuickList.And	5487
• 103.48 QuickList.AndColumn	5489
• 103.49 QuickList.BestMatch	5491
• 103.50 QuickList.CSVSplit	5492
• 103.51 QuickList.Clear	5493
• 103.52 QuickList.Clone	5494
• 103.53 QuickList.Count	5495
• 103.54 QuickList.CrossProduct	5497
• 103.55 QuickList.DeCombine	5499
• 103.56 QuickList.Deserialize	5501
• 103.57 QuickList.FindEquals	5502
• 103.58 QuickList.FindUnequals	5503
• 103.59 QuickList.Free	5504
• 103.60 QuickList.GetList	5506
• 103.61 QuickList.GetValue	5508
• 103.62 QuickList.HasDuplicateItems	5510
• 103.63 QuickList.HasValue	5511
• 103.64 QuickList.InsertValue	5513
• 103.65 QuickList.List	5514
• 103.66 QuickList.MatchesPostfix	5515
• 103.67 QuickList.MatchesPrefix	5517
• 103.68 QuickList.MatchesSubString	5519
• 103.69 QuickList.New	5521

- 103.70 QuickList.Not 5523
- 103.71 QuickList.NotColumn 5525
- 103.72 QuickList.Or 5527
- 103.73 QuickList.OrColumn 5529
- 103.74 QuickList.Pop 5531
- 103.75 QuickList.PopFirst 5532
- 103.76 QuickList.Push 5533
- 103.77 QuickList.RegExMatch 5534
- 103.78 QuickList.Remove 5535
- 103.79 QuickList.RemoveDuplicateItems 5536
- 103.80 QuickList.RemoveEmptyItems 5537
- 103.81 QuickList.RemovePostfix 5538
- 103.82 QuickList.RemovePrefix 5540
- 103.83 QuickList.RemoveValue 5542
- 103.84 QuickList.Reserve 5543
- 103.85 QuickList.Reverse 5544
- 103.86 QuickList.Serialize 5545
- 103.87 QuickList.SetList 5547
- 103.88 QuickList.SetValue 5548
- 103.89 QuickList.Sort 5550
- 103.90 QuickList.SortWith 5552
- 103.91 QuickList.SubList 5555
- 103.92 QuickList.Trim 5557
- 103.93 QuickList.ValueIndex 5558
- 103.94 QuickList.XOr 5559
- 103.95 QuickList.XOrColumn 5560
- 73.12 RSA.DecryptPrivateKey 3469
- 73.13 RSA.EncryptPrivateKey 3471
- 149.13 RSA.GeneratePrivateKey 7075

	151
• 149.14 RSA.GetPublicKey	7077
• 73.14 RSA.PrivateDecrypt	3473
• 73.15 RSA.PrivateEncrypt	3476
• 73.16 RSA.PublicDecrypt	3479
• 73.17 RSA.PublicEncrypt	3482
• 149.15 RSA.Sign	7079
• 149.16 RSA.Verify	7084
• 135.1 RegEx.CaptureCount	6643
• 135.2 RegEx.Compile	6645
• 135.3 RegEx.Execute	6648
• 135.4 RegEx.FindMatches	6651
• 135.5 RegEx.Free	6654
• 135.6 RegEx.List	6655
• 135.7 RegEx.Match	6656
• 135.8 RegEx.MatchList	6658
• 135.9 RegEx.MinimumLength	6660
• 135.10 RegEx.NameCount	6661
• 135.11 RegEx.NamedSubstring	6662
• 135.12 RegEx.Options	6663
• 135.13 RegEx.Pattern	6664
• 135.14 RegEx.Quote	6665
• 135.15 RegEx.Replace	6666
• 135.16 RegEx.ReplaceAll	6668
• 135.17 RegEx.Results	6670
• 135.18 RegEx.Size	6672
• 135.19 RegEx.StringNumber	6673
• 135.20 RegEx.Study	6674
• 135.21 RegEx.Substring	6675
• 135.22 RegEx.SubstringList	6677

- 135.23 RegEx.Version 6678
- 124.49 Register 6320
- 124.50 Registration 6323
- 136.1 Registry.CreateKey 6679
- 136.2 Registry.DeleteKey 6681
- 136.3 Registry.DeleteTree 6682
- 136.4 Registry.DeleteValue 6683
- 136.5 Registry.FlushKey 6684
- 136.6 Registry.GetValue 6685
- 136.7 Registry.GetValueType 6687
- 136.8 Registry.ListKeys 6688
- 136.9 Registry.ListValues 6689
- 136.10 Registry.SetValue 6690
- 137.1 RemoteControl.ClickMouse 6693
- 137.2 RemoteControl.FindWindow 6695
- 137.3 RemoteControl.GetWindowsList 6696
- 137.4 RemoteControl.HideCursor 6697
- 137.5 RemoteControl.MouseX 6698
- 137.6 RemoteControl.MouseY 6699
- 137.7 RemoteControl.MoveMouse 6700
- 137.8 RemoteControl.PressCommandKey 6701
- 137.9 RemoteControl.PressControlKey 6702
- 137.10 RemoteControl.PressDialogButton 6703
- 137.11 RemoteControl.PressDialogButton.Clear 6704
- 137.12 RemoteControl.PressKey 6705
- 137.13 RemoteControl.PressKeyLater 6708
- 137.14 RemoteControl.PressOptionKey 6709
- 137.15 RemoteControl.PressShiftKey 6710
- 137.16 RemoteControl.ShowCursor 6711

	153
• 138.1 RichText.AppendFormattedText	6713
• 138.2 RichText.AppendText	6714
• 138.3 RichText.Attribute	6715
• 138.4 RichText.Clear	6716
• 138.5 RichText.FormattedText	6717
• 138.6 RichText.GeneratePDF	6719
• 138.7 RichText.HTMLText	6720
• 138.8 RichText.RTF	6721
• 138.9 RichText.ReadContainer	6722
• 138.10 RichText.ReadFile	6724
• 138.11 RichText.ReadHTML	6726
• 138.12 RichText.ReadRTF	6728
• 138.13 RichText.ReadText	6729
• 138.14 RichText.ReadURL	6731
• 138.15 RichText.ReadWebviewer	6732
• 138.16 RichText.Release	6733
• 138.17 RichText.ReplaceText	6734
• 138.18 RichText.ReplaceTexts	6736
• 138.19 RichText.SetAttribute	6737
• 138.20 RichText.SetFormattedText	6738
• 138.21 RichText.SetText	6740
• 138.22 RichText.Text	6741
• 138.23 RichText.TextLength	6742
• 138.24 RichText.WriteContainer	6743
• 138.25 RichText.WriteDOC	6745
• 138.26 RichText.WriteFile	6747
• 138.27 RichText.WritePDF	6750
• 138.28 RichText.WriteRTF	6752
• 139.1 RunTask.AddArgument	6755

- 139.2 RunTask.GetArgument 6757
- 139.3 RunTask.GetArgumentCount 6758
- 139.4 RunTask.GetCurrentDirectoryPath 6759
- 139.5 RunTask.GetLaunchPath 6760
- 139.6 RunTask.GetVerb 6761
- 139.7 RunTask.IsRunning 6762
- 139.8 RunTask.Launch 6763
- 139.9 RunTask.NewTask 6766
- 139.10 RunTask.ProcessIdentifier 6768
- 139.11 RunTask.ReadErrorText 6769
- 139.12 RunTask.ReadOutputText 6770
- 139.13 RunTask.SetArguments 6771
- 139.14 RunTask.SetCurrentDirectoryPath 6774
- 139.15 RunTask.SetLaunchPath 6775
- 139.16 RunTask.SetVerb 6777
- 139.17 RunTask.Terminate 6778
- 139.18 RunTask.TerminationReason 6779
- 139.19 RunTask.TerminationStatus 6780
- 139.20 RunTask.Wait 6781
- 139.21 RunTask.WriteInputText 6783
- 151.1 SNMP.Get 7123
- 151.2 SNMP.SetRetries 7125
- 151.3 SNMP.SetTimeout 7126
- 156.2 SQL.Cancel 7295
- 156.3 SQL.ClientVersion 7296
- 156.4 SQL.Close 7297
- 156.5 SQL.CommandText 7298
- 156.6 SQL.CommandType 7299
- 156.7 SQL.Commit 7300

	155
• 156.8 SQL.Connect	7302
• 156.9 SQL.Disconnect	7308
• 156.10 SQL.Execute	7309
• 156.11 SQL.FetchFirst	7313
• 156.12 SQL.FetchLast	7314
• 156.13 SQL.FetchNext	7316
• 156.14 SQL.FetchPos	7319
• 156.15 SQL.FetchPrior	7320
• 156.16 SQL.FieldCount	7321
• 156.17 SQL.FreeAllConnections	7323
• 156.18 SQL.FreeCommand	7324
• 156.19 SQL.FreeConnection	7326
• 156.20 SQL.GetAutoCommit	7328
• 156.21 SQL.GetCommandOption	7329
• 156.22 SQL.GetCommandOptions	7330
• 156.23 SQL.GetCommandTag	7331
• 156.24 SQL.GetConnectionOption	7332
• 156.25 SQL.GetConnectionOptions	7333
• 156.26 SQL.GetConnectionTag	7334
• 156.27 SQL.GetFieldAsBoolean	7335
• 156.28 SQL.GetFieldAsContainer	7336
• 156.29 SQL.GetFieldAsDate	7337
• 156.30 SQL.GetFieldAsDateTime	7339
• 156.31 SQL.GetFieldAsFloat	7340
• 156.32 SQL.GetFieldAsJPEG	7342
• 156.33 SQL.GetFieldAsNumber	7344
• 156.34 SQL.GetFieldAsPDF	7346
• 156.35 SQL.GetFieldAsPNG	7348
• 156.36 SQL.GetFieldAsText	7350

- 156.37 SQL.GetFieldAsTime 7352
- 156.38 SQL.GetFieldDataType 7353
- 156.39 SQL.GetFieldIsNull 7354
- 156.40 SQL.GetFieldName 7355
- 156.41 SQL.GetFieldNameList 7357
- 156.42 SQL.GetFieldOption 7359
- 156.43 SQL.GetFieldOptions 7360
- 156.44 SQL.GetFieldValue 7361
- 156.45 SQL.GetFieldValueList 7362
- 156.46 SQL.GetIsolationLevel 7364
- 156.47 SQL.GetParamAsBoolean 7365
- 156.48 SQL.GetParamAsContainer 7366
- 156.49 SQL.GetParamAsDate 7367
- 156.50 SQL.GetParamAsDateTime 7368
- 156.51 SQL.GetParamAsFloat 7369
- 156.52 SQL.GetParamAsJPEG 7371
- 156.53 SQL.GetParamAsNumber 7373
- 156.54 SQL.GetParamAsPDF 7375
- 156.55 SQL.GetParamAsPNG 7377
- 156.56 SQL.GetParamAsText 7379
- 156.57 SQL.GetParamAsTime 7380
- 156.58 SQL.GetParamDataType 7381
- 156.59 SQL.GetParamIsDefault 7382
- 156.60 SQL.GetParamIsNull 7383
- 156.61 SQL.GetParamName 7384
- 156.62 SQL.GetParamNameList 7385
- 156.63 SQL.GetParamOption 7387
- 156.64 SQL.GetParamOptions 7388
- 156.65 SQL.GetParamValue 7389

	157
• 156.66 SQL.GetParamValueList	7390
• 156.67 SQL.GetRecordsAsText	7392
• 156.68 SQL.InsertOrUpdateRecords	7394
• 156.69 SQL.InsertRecords	7397
• 156.70 SQL.InternalSQLiteLibrary.Activate	7399
• 156.71 SQL.InternalSQLiteLibrary.Activated	7400
• 156.72 SQL.InternalSQLiteLibrary.Deactivate	7401
• 156.73 SQL.InternalSQLiteLibrary.SourceID	7402
• 156.74 SQL.InternalSQLiteLibrary.Version	7403
• 156.75 SQL.InternalSQLiteLibrary.VersionNumber	7404
• 156.76 SQL.ListCommands	7405
• 156.77 SQL.ListConnections	7406
• 156.78 SQL.MySQL.InsertID	7407
• 156.79 SQL.NewCommand	7408
• 156.80 SQL.NewConnection	7412
• 156.81 SQL.Open	7415
• 156.82 SQL.ParamCount	7416
• 156.83 SQL.Prepare	7417
• 156.84 SQL.ResetCommand	7418
• 156.85 SQL.ResetConnection	7419
• 156.86 SQL.Rollback	7420
• 156.87 SQL.RowsAffected	7421
• 156.88 SQL.SQLite3.EnableLoadExtension	7423
• 156.89 SQL.SQLite3.LastInsertRowID	7424
• 156.90 SQL.SQLite3.MemoryHighwater	7425
• 156.91 SQL.SQLite3.MemoryUsed	7426
• 156.92 SQL.SQLite3.ReKey	7427
• 156.93 SQL.SQLite3.SetKey	7429
• 156.94 SQL.ServerVersion	7431

- 156.95 SQL.ServerVersionString 7432
- 156.96 SQL.SetAutoCommit 7433
- 156.97 SQL.SetClient 7434
- 156.98 SQL.SetCommandOption 7436
- 156.99 SQL.SetCommandTag 7438
- 156.100 SQL.SetCommandText 7439
- 156.101 SQL.SetConnectionOption 7441
- 156.102 SQL.SetConnectionTag 7446
- 156.103 SQL.SetFieldOption 7447
- 156.104 SQL.SetIsolationLevel 7448
- 156.105 SQL.SetParamAsBoolean 7449
- 156.106 SQL.SetParamAsContainer 7450
- 156.107 SQL.SetParamAsDate 7452
- 156.108 SQL.SetParamAsDateTime 7454
- 156.109 SQL.SetParamAsFloat 7456
- 156.110 SQL.SetParamAsNumber 7458
- 156.111 SQL.SetParamAsText 7460
- 156.112 SQL.SetParamAsTime 7462
- 156.113 SQL.SetParamDataType 7463
- 156.114 SQL.SetParamDefault 7464
- 156.115 SQL.SetParamNull 7465
- 156.116 SQL.SetParamOption 7466
- 156.117 SQL.SetParamTypesValues 7467
- 156.118 SQL.SetParamUnknown 7469
- 156.119 SQL.SetParamValue 7470
- 156.120 SQL.SetParamValues 7472
- 156.121 SQL.isAlive 7474
- 156.122 SQL.isConnected 7475
- 156.123 SQL.isExecuted 7476

	159
• 156.124 SQL.isOpened	7477
• 156.125 SQL.isResultSet	7478
• 157.1 SSH.CloseChannel	7479
• 157.2 SSH.Connect	7481
• 157.3 SSH.Disconnect	7485
• 157.4 SSH.EOF	7486
• 157.5 SSH.Execute	7487
• 157.6 SSH.Flush	7490
• 157.7 SSH.FreeChannel	7491
• 157.8 SSH.GetExitState	7492
• 157.9 SSH.GetIP	7493
• 157.10 SSH.GetPort	7494
• 157.11 SSH.GetTag	7495
• 157.12 SSH.GetTimeout	7496
• 157.13 SSH.GetUserName	7497
• 157.14 SSH.HostKey	7498
• 157.15 SSH.HostKeyHash	7499
• 157.16 SSH.IsAuthenticated	7500
• 157.17 SSH.New	7501
• 157.18 SSH.OpenSession	7504
• 157.19 SSH.ReadHex	7505
• 157.20 SSH.ReadText	7506
• 157.21 SSH.Release	7508
• 157.22 SSH.RequestPTY	7509
• 157.23 SSH.SendEOF	7510
• 157.24 SSH.SessionHandshake	7511
• 157.25 SSH.SetEnv	7512
• 157.26 SSH.SetTag	7513
• 157.27 SSH.SetTimeout	7514

- 157.28 SSH.Shell 7515
- 157.29 SSH.Tunnel.BytesReceived 7516
- 157.30 SSH.Tunnel.BytesSent 7517
- 157.31 SSH.Tunnel.Cancel 7518
- 157.32 SSH.Tunnel.Cancelled 7519
- 157.33 SSH.Tunnel.Messages 7520
- 157.34 SSH.Tunnel.Run 7521
- 157.35 SSH.Tunnel.Running 7523
- 157.36 SSH.UserAuthKeyboardInteractive 7524
- 157.37 SSH.UserAuthList 7525
- 157.38 SSH.UserAuthPassword 7526
- 157.39 SSH.UserAuthPublicKey 7527
- 157.40 SSH.UserAuthPublicKeyFile 7529
- 157.41 SSH.WaitClosed 7531
- 157.42 SSH.WaitEOF 7532
- 157.43 SSH.WaitSocket 7533
- 157.44 SSH.WriteHex 7534
- 157.45 SSH.WriteText 7535
- 140.1 Schedule.Check 6785
- 140.2 Schedule.ClearEvaluateResult 6786
- 140.3 Schedule.ClearSQLResult 6787
- 140.4 Schedule.EvaluateAfterDelay 6788
- 140.5 Schedule.EvaluateAtTime 6790
- 140.6 Schedule.EvaluateAtTimeStamp 6792
- 140.7 Schedule.EvaluateOnIdle 6794
- 140.8 Schedule.ExecuteSQLAfterDelay 6795
- 140.9 Schedule.ExecuteSQLAtTime 6797
- 140.10 Schedule.ExecuteSQLAtTimeStamp 6799
- 140.11 Schedule.ExecuteSQLOnIdle 6801

	161
• 140.12 Schedule.GetAutoRelease	6803
• 140.13 Schedule.GetEvaluate	6804
• 140.14 Schedule.GetEvaluateResult	6805
• 140.15 Schedule.GetFileName	6806
• 140.16 Schedule.GetLastTimeStamp	6807
• 140.17 Schedule.GetRepeatDelay	6808
• 140.18 Schedule.GetRunCount	6809
• 140.19 Schedule.GetSQL	6810
• 140.20 Schedule.GetSQLResult	6811
• 140.21 Schedule.GetScriptName	6812
• 140.22 Schedule.GetScriptParameter	6813
• 140.23 Schedule.GetTimeStamp	6814
• 140.24 Schedule.GetURL	6815
• 140.25 Schedule.List	6816
• 140.26 Schedule.Release	6817
• 140.27 Schedule.ReleaseAll	6819
• 140.28 Schedule.SetAutoRelease	6820
• 140.29 Schedule.SetEvaluate	6821
• 140.30 Schedule.SetFileName	6822
• 140.31 Schedule.SetRepeatDelay	6823
• 140.32 Schedule.SetSQL	6824
• 140.33 Schedule.SetScriptName	6825
• 140.34 Schedule.SetScriptParameter	6826
• 140.35 Schedule.SetTimeStamp	6827
• 140.36 Schedule.SetURL	6828
• 140.37 Schedule.StartScriptAfterDelay	6829
• 140.38 Schedule.StartScriptAtTime	6831
• 140.39 Schedule.StartScriptAtTimeStamp	6833
• 140.40 Schedule.StartScriptOnIdle	6835

- 141.1 Screen.Count 6837
- 141.2 Screen.DockHeight 6838
- 141.3 Screen.DockWidth 6839
- 141.4 Screen.Height 6840
- 141.5 Screen.Left 6841
- 141.6 Screen.Scale 6842
- 141.7 Screen.Top 6843
- 141.8 Screen.Width 6844
- 141.9 Screenshot 6845
- 141.10 ScreenshotRect 6847
- 142.1 ScriptWorkspace.BringToFront 6849
- 142.2 ScriptWorkspace.CopyScriptText 6850
- 142.3 ScriptWorkspace.CurrentTab 6851
- 142.4 ScriptWorkspace.ExpandScriptFolders 6852
- 142.5 ScriptWorkspace.GetScriptListSearch 6853
- 142.6 ScriptWorkspace.IsActive 6854
- 142.7 ScriptWorkspace.IsVisible 6855
- 142.8 ScriptWorkspace.LineCount 6856
- 142.9 ScriptWorkspace.OpenScript 6857
- 142.10 ScriptWorkspace.ScriptNames 6858
- 142.11 ScriptWorkspace.ScriptText 6859
- 142.12 ScriptWorkspace.ScriptsVisible 6860
- 142.13 ScriptWorkspace.ScrollToLine 6861
- 142.14 ScriptWorkspace.ScrollToSelection 6862
- 142.15 ScriptWorkspace.SelectLine 6863
- 142.16 ScriptWorkspace.SelectLines 6864
- 142.17 ScriptWorkspace.SelectedLine 6865
- 142.18 ScriptWorkspace.SelectedLines 6866
- 142.19 ScriptWorkspace.SetScriptListSearch 6867

	163
• 142.20 ScriptWorkspace.StepsVisible	6868
• 142.21 ScriptWorkspace.StyledScriptText	6869
• 142.22 ScriptWorkspace.Tabs	6870
• 142.23 ScriptWorkspace.Title	6871
• 142.24 ScriptWorkspace.TriggerScripts	6872
• 142.25 ScriptWorkspace.TriggerSteps	6873
• 142.26 ScriptWorkspace.Window	6874
• 175.11 SendCommand	8242
• 143.1 SendMail.AddAttachmentContainer	6875
• 143.2 SendMail.AddAttachmentFile	6878
• 143.3 SendMail.AddAttachmentText	6881
• 143.4 SendMail.AddBCC	6883
• 143.5 SendMail.AddCC	6885
• 143.6 SendMail.AddHeader	6887
• 143.7 SendMail.AddRecipient	6889
• 143.8 SendMail.AddReplyTo	6891
• 143.9 SendMail.AddTo	6892
• 143.10 SendMail.AttachmentCount	6894
• 143.11 SendMail.ClearAttachments	6895
• 143.12 SendMail.ClearHeaders	6896
• 143.13 SendMail.ClearRecipients	6897
• 143.14 SendMail.CreateEmail	6898
• 143.15 SendMail.GetHTMLText	6900
• 143.16 SendMail.GetInReplyTo	6901
• 143.17 SendMail.GetMessageID	6902
• 143.18 SendMail.GetPlainText	6903
• 143.19 SendMail.GetRichText	6904
• 143.20 SendMail.GetSMTPPassword	6905
• 143.21 SendMail.GetSMTPServer	6906

- 143.22 SendMail.GetSMTPUserName 6907
- 143.23 SendMail.GetSource 6908
- 143.24 SendMail.GetSubject 6909
- 143.25 SendMail.PrepareCURL 6910
- 143.26 SendMail.Release 6912
- 143.27 SendMail.SetFrom 6913
- 143.28 SendMail.SetHTMLText 6915
- 143.29 SendMail.SetInReplyTo 6917
- 143.30 SendMail.SetMessageID 6918
- 143.31 SendMail.SetPlainText 6919
- 143.32 SendMail.SetRichText 6921
- 143.33 SendMail.SetSMTPPassword 6923
- 143.34 SendMail.SetSMTPServer 6925
- 143.35 SendMail.SetSMTPUserName 6927
- 143.36 SendMail.SetSubject 6929
- 144.1 SerialPort.AvailableBytes 6931
- 144.2 SerialPort.Clear 6933
- 144.3 SerialPort.ClearDataAvailableHandler 6934
- 144.4 SerialPort.Close 6935
- 144.5 SerialPort.CloseAll 6936
- 144.6 SerialPort.GetBaudRate 6937
- 144.7 SerialPort.GetCTS 6938
- 144.8 SerialPort.GetDSR 6939
- 144.9 SerialPort.GetDTR 6940
- 144.10 SerialPort.GetDataBits 6941
- 144.11 SerialPort.GetParity 6942
- 144.12 SerialPort.GetRTS 6943
- 144.13 SerialPort.GetStopBits 6944
- 144.14 SerialPort.GetXON 6945

	165
• 144.15 SerialPort.HasLine	6946
• 144.16 SerialPort.IsSuspended	6947
• 144.17 SerialPort.LastError	6948
• 144.18 SerialPort.List	6949
• 144.19 SerialPort.Open	6950
• 144.20 SerialPort.Read	6956
• 144.21 SerialPort.ReadByte	6959
• 144.22 SerialPort.ReadHex	6960
• 144.23 SerialPort.ReadLine	6961
• 144.24 SerialPort.Resume	6962
• 144.25 SerialPort.SetBaudRate	6963
• 144.26 SerialPort.SetCTS	6964
• 144.27 SerialPort.SetDSR	6965
• 144.28 SerialPort.SetDTR	6966
• 144.29 SerialPort.SetDataAvailableEvaluate	6967
• 144.30 SerialPort.SetDataAvailableHandler	6968
• 144.31 SerialPort.SetDataBits	6970
• 144.32 SerialPort.SetParity	6971
• 144.33 SerialPort.SetRTS	6972
• 144.34 SerialPort.SetStopBits	6973
• 144.35 SerialPort.SetXON	6974
• 144.36 SerialPort.Suspend	6976
• 144.37 SerialPort.Write	6977
• 144.38 SerialPort.WriteByte	6979
• 144.39 SerialPort.WriteHex	6980
• 145.1 ServerSocket.Check	6983
• 145.2 ServerSocket.GetAllowedScripts	6984
• 145.3 ServerSocket.GetAllowedTypes	6985
• 145.4 ServerSocket.SendQuery	6986

- 145.5 ServerSocket.SetAllowedScripts 6988
- 145.6 ServerSocket.SetAllowedTypes 6989
- 145.7 ServerSocket.Start 6990
- 145.8 ServerSocket.Stop 6992
- 146.1 ServiceProvider.Install 6993
- 146.2 ServiceProvider.Uninstall 6995
- 146.3 ServiceProvider.Value 6996
- 162.3 SetSystemUIMode 7721
- 147.1 SharedMemory.Exists 6997
- 147.2 SharedMemory.GetValue 6998
- 147.3 SharedMemory.SetValue 6999
- 148.1 Shell.AddArgument 7001
- 148.2 Shell.AddEnvironment 7004
- 148.3 Shell.AvailableBytesError 7005
- 148.4 Shell.AvailableBytesOutput 7006
- 148.5 Shell.ClearArguments 7007
- 148.6 Shell.ClearEnvironment 7008
- 148.7 Shell.CloseInput 7009
- 148.8 Shell.CloseStreams 7010
- 148.9 Shell.Execute 7011
- 148.10 Shell.ExitCode 7019
- 148.11 Shell.GetApplicationName 7020
- 148.12 Shell.GetArgument 7021
- 148.13 Shell.GetArgumentCount 7022
- 148.14 Shell.GetArguments 7023
- 148.15 Shell.GetCompletedEvaluate 7024
- 148.16 Shell.GetCompletedScriptFileName 7025
- 148.17 Shell.GetCompletedScriptName 7026
- 148.18 Shell.GetCurrentDirectory 7027

	167
• 148.19 Shell.GetDataAvailableEvaluate	7028
• 148.20 Shell.GetDataAvailableScriptFileName	7029
• 148.21 Shell.GetDataAvailableScriptName	7030
• 148.22 Shell.GetDomain	7031
• 148.23 Shell.GetEnvironment	7032
• 148.24 Shell.GetPassword	7033
• 148.25 Shell.GetUsername	7034
• 148.26 Shell.IsRunning	7035
• 148.27 Shell.New	7036
• 148.28 Shell.PeekErrorText	7037
• 148.29 Shell.PeekOutputText	7038
• 148.30 Shell.ProcessIdentifier	7039
• 148.31 Shell.ReadErrorText	7040
• 148.32 Shell.ReadOutputText	7041
• 148.33 Shell.Release	7043
• 148.34 Shell.SetApplicationName	7044
• 148.35 Shell.SetArguments	7045
• 148.36 Shell.SetArgumentsList	7046
• 148.37 Shell.SetCompletedEvaluate	7047
• 148.38 Shell.SetCompletedScript	7048
• 148.39 Shell.SetCurrentDirectory	7049
• 148.40 Shell.SetDataAvailableEvaluate	7050
• 148.41 Shell.SetDataAvailableScript	7051
• 148.42 Shell.SetDomain	7052
• 148.43 Shell.SetPassword	7053
• 148.44 Shell.SetUsername	7054
• 148.45 Shell.Terminate	7055
• 148.46 Shell.TerminationReason	7056
• 148.47 Shell.Wait	7057

- 148.48 Shell.WriteInputText 7059
- 175.12 ShowURL 8243
- 150.1 SmartCard.Available 7087
- 150.2 SmartCard.BeginTransaction 7088
- 150.3 SmartCard.Cancel 7089
- 150.4 SmartCard.CancelTransaction 7090
- 150.5 SmartCard.Connect 7091
- 150.6 SmartCard.Control 7093
- 150.7 SmartCard.Disconnect 7094
- 150.8 SmartCard.EndTransaction 7095
- 150.9 SmartCard.GetActiveProtocol 7096
- 150.10 SmartCard.GetAttribute 7097
- 150.11 SmartCard.HeaderTemplate 7099
- 150.12 SmartCard.Init 7100
- 150.13 SmartCard.ListReaderGroups 7103
- 150.14 SmartCard.ListReaders 7104
- 150.15 SmartCard.PerformSignature 7106
- 150.16 SmartCard.ReadCertificate 7107
- 150.17 SmartCard.ReadFile 7108
- 150.18 SmartCard.Reconnect 7111
- 150.19 SmartCard.Release 7112
- 150.20 SmartCard.SetAttribute 7113
- 150.21 SmartCard.SplitValues 7114
- 150.22 SmartCard.Status 7116
- 150.23 SmartCard.Transmit 7117
- 150.24 SmartCard.TransmitReceiveHeader 7120
- 150.25 SmartCard.Valid 7121
- 152.1 Social.AccountProperty 7127
- 152.2 Social.Accounts 7129

	169
• 152.3 Social.HasAccessForAccountType	7131
• 152.4 Social.RequestAccessForAccountType	7132
• 153.1 SocialComposer.AddImageContainer	7159
• 153.2 SocialComposer.AddImageFile	7161
• 153.3 SocialComposer.AddURL	7162
• 153.4 SocialComposer.Dismiss	7163
• 153.5 SocialComposer.GetEvaluate	7164
• 153.6 SocialComposer.GetFileName	7165
• 153.7 SocialComposer.GetInitialText	7166
• 153.8 SocialComposer.GetScriptName	7167
• 153.9 SocialComposer.ImageCount	7168
• 153.10 SocialComposer.IsAvailableForServiceType	7169
• 153.11 SocialComposer.IsPresented	7170
• 153.12 SocialComposer.New	7171
• 153.13 SocialComposer.Present	7173
• 153.14 SocialComposer.RemoveAllImages	7175
• 153.15 SocialComposer.RemoveAllURLs	7176
• 153.16 SocialComposer.Result	7177
• 153.17 SocialComposer.ServiceType	7178
• 153.18 SocialComposer.SetEvaluate	7179
• 153.19 SocialComposer.SetInitialText	7180
• 153.20 SocialComposer.SetScript	7181
• 153.21 SocialComposer.URLCount	7183
• 152.5 SocialRequest.AddParameter	7134
• 152.6 SocialRequest.ClearMultipartData	7136
• 152.7 SocialRequest.ClearParameter	7137
• 152.8 SocialRequest.GetAccount	7138
• 152.9 SocialRequest.GetMultiPartDataCount	7139
• 152.10 SocialRequest.GetParameterCount	7140

- 152.11 SocialRequest.GetRequestMethod 7141
- 152.12 SocialRequest.GetResponse 7142
- 152.13 SocialRequest.GetServiceType 7144
- 152.14 SocialRequest.GetURL 7145
- 152.15 SocialRequest.New 7146
- 152.16 SocialRequest.Perform 7148
- 152.17 SocialRequest.Release 7150
- 152.18 SocialRequest.SetAccount 7151
- 152.19 SocialRequest.SetRequestMethod 7153
- 152.20 SocialRequest.SetServiceType 7154
- 152.21 SocialRequest.SetURL 7155
- 152.22 SocialRequest.addMultipartContainer 7156
- 152.23 SocialRequest.addMultipartText 7157
- 154.1 Socket.AcceptNewConnection 7185
- 154.2 Socket.AddMembership 7187
- 154.3 Socket.AvailableBytes 7188
- 154.4 Socket.Check 7189
- 154.5 Socket.CheckAll 7190
- 154.6 Socket.ClearDataAvailableHandler 7191
- 154.7 Socket.ClearErrorHandler 7192
- 154.8 Socket.ClearNewConnectionHandler 7193
- 154.9 Socket.Close 7194
- 154.10 Socket.CloseAll 7196
- 154.11 Socket.Connect 7197
- 154.12 Socket.DropMembership 7202
- 154.13 Socket.GetBroadcast 7203
- 154.14 Socket.GetMulticastInterface 7204
- 154.15 Socket.GetMulticastLoop 7205
- 154.16 Socket.GetMulticastTimeToLive 7206

	171
• 154.17 Socket.GetTag	7207
• 154.18 Socket.GetTimeToLive	7208
• 154.19 Socket.IsClosed	7209
• 154.20 Socket.IsListening	7210
• 154.21 Socket.LastError	7211
• 154.22 Socket.LastMessageIP	7212
• 154.23 Socket.LastMessagePort	7213
• 154.24 Socket.List	7214
• 154.25 Socket.Listen	7215
• 154.26 Socket.LocalIP	7217
• 154.27 Socket.LocalPort	7218
• 154.28 Socket.NewTCPSocket	7219
• 154.29 Socket.NewUDPSocket	7221
• 154.30 Socket.Peek	7223
• 154.31 Socket.PeekAll	7224
• 154.32 Socket.PeekAllHex	7225
• 154.33 Socket.PeekHex	7226
• 154.34 Socket.Read	7227
• 154.35 Socket.ReadAll	7230
• 154.36 Socket.ReadAllHex	7232
• 154.37 Socket.ReadHex	7233
• 154.38 Socket.ReadLine	7234
• 154.39 Socket.ReadLineHex	7236
• 154.40 Socket.ReadMLLP	7237
• 154.41 Socket.RemoteIP	7238
• 154.42 Socket.RemotePort	7239
• 154.43 Socket.SSL.Accept	7240
• 154.44 Socket.SSL.Connect	7241
• 154.45 Socket.SSL.GetMethod	7242

- 154.46 Socket.SSL.Initialize 7243
- 154.47 Socket.SSL.Prepare 7244
- 154.48 Socket.SSL.SetMethod 7245
- 154.49 Socket.SSL.UseCertificateFile 7246
- 154.50 Socket.SSL.UsePrivateKeyFile 7247
- 154.51 Socket.SendMessage 7248
- 154.52 Socket.SendMessageHex 7250
- 154.53 Socket.SetBroadcast 7251
- 154.54 Socket.SetDataAvailableEvaluate 7252
- 154.55 Socket.SetDataAvailableHandler 7253
- 154.56 Socket.SetDataAvailableURL 7255
- 154.57 Socket.SetErrorEvaluate 7256
- 154.58 Socket.SetErrorHandler 7257
- 154.59 Socket.SetErrorURL 7259
- 154.60 Socket.SetMulticastInterface 7260
- 154.61 Socket.SetMulticastLoop 7261
- 154.62 Socket.SetMulticastTimeToLive 7262
- 154.63 Socket.SetNewConnectionEvaluate 7263
- 154.64 Socket.SetNewConnectionHandler 7264
- 154.65 Socket.SetNewConnectionURL 7266
- 154.66 Socket.SetTag 7267
- 154.67 Socket.SetTimeToLive 7268
- 154.68 Socket.Write 7269
- 154.69 Socket.WriteByte 7271
- 154.70 Socket.WriteHex 7272
- 154.71 Socket.WriteMLLP 7274
- 155.1 Speech.AvailableVoices 7275
- 155.2 Speech.IsPaused 7276
- 155.3 Speech.IsSpeaking 7277

	173
• 155.4 Speech.Pause	7278
• 155.5 Speech.Resume	7279
• 155.6 Speech.Speak	7280
• 155.7 SpeechRecognition.AuthorizationStatus	7282
• 155.8 SpeechRecognition.Initialize	7283
• 155.9 SpeechRecognition.IsInitialized	7284
• 155.10 SpeechRecognition.Recognize	7285
• 155.11 SpeechRecognition.RequestAuthorization	7287
• 155.12 SpeechRecognition.SupportedLocales	7288
• 155.13 SpeechRecognition.SupportsOnDeviceRecognition	7290
• 158.1 StoreKit.AddPayment	7537
• 158.2 StoreKit.CanMakePayments	7539
• 158.3 StoreKit.FinishTransaction	7540
• 158.4 StoreKit.InvalidProductIdentifiers	7541
• 158.5 StoreKit.IsProductViewVisible	7542
• 158.6 StoreKit.ProductQueryRunning	7543
• 158.7 StoreKit.Products	7544
• 158.8 StoreKit.QueryProducts	7545
• 158.9 StoreKit.RequestReview	7546
• 158.10 StoreKit.RestoreCompletedTransactions	7547
• 158.11 StoreKit.SetProductViewFinishedTrigger	7548
• 158.12 StoreKit.SetRestoreCompletedTransactionsTrigger	7549
• 158.13 StoreKit.SetUpdatedTransactionsTrigger	7550
• 158.14 StoreKit.ShowProductView	7551
• 158.15 StoreKit.Transactions	7552
• 124.51 StoreRegistration	6324
• 159.1 SyntaxColoring.AddContextMenuCommand	7553
• 159.2 SyntaxColoring.AddTag	7559
• 159.3 SyntaxColoring.CheckVariableDeclaration.Disable	7564

- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.6 SyntaxColoring.CheckVariableDeclaration.Notification.Disable 7569
- 159.7 SyntaxColoring.CheckVariableDeclaration.Notification.Enable 7570
- 159.8 SyntaxColoring.CheckVariableDeclaration.Notification.Enabled 7571
- 159.9 SyntaxColoring.Clear 7572
- 159.10 SyntaxColoring.ClearContextMenuCommands 7573
- 159.11 SyntaxColoring.ContextualMenuEnabled.GetEnabled 7574
- 159.12 SyntaxColoring.ContextualMenuEnabled.SetEnabled 7575
- 159.13 SyntaxColoring.CopyButton.GetEnabled 7576
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.15 SyntaxColoring.Disable 7579
- 159.16 SyntaxColoring.Enable 7580
- 159.17 SyntaxColoring.Enabled 7581
- 159.18 SyntaxColoring.FactoryDefaults 7582
- 159.19 SyntaxColoring.Format 7583
- 159.20 SyntaxColoring.GetAddFindbars 7584
- 159.21 SyntaxColoring.GetBlackFieldPicker 7585
- 159.22 SyntaxColoring.GetFontName 7586
- 159.23 SyntaxColoring.GetFontSize 7587
- 159.24 SyntaxColoring.GetFormulasWithLinks 7588
- 159.25 SyntaxColoring.GetMinCalcFontSize 7589
- 159.26 SyntaxColoring.GetRelationGraphSearchBoxPreferredSize 7590
- 159.27 SyntaxColoring.GetRememberColumnWidths 7591
- 159.28 SyntaxColoring.GetResizeFieldPicker 7592
- 159.29 SyntaxColoring.GetScriptHighlightColor 7593
- 159.30 SyntaxColoring.GetScriptIfColor 7594
- 159.31 SyntaxColoring.GetScriptLoopColor 7595
- 159.32 SyntaxColoring.GetScriptSearchColor 7596

	175
• 159.33 SyntaxColoring.GetShowFieldAndTableIDs	7597
• 159.34 SyntaxColoring.GetShowLayoutIDs	7598
• 159.35 SyntaxColoring.GetShowScriptIDs	7599
• 159.36 SyntaxColoring.GetTag	7600
• 159.37 SyntaxColoring.GetTags	7601
• 159.38 SyntaxColoring.GetUseBoldFont	7602
• 159.39 SyntaxColoring.LineNumbers.Disable	7603
• 159.40 SyntaxColoring.LineNumbers.Enable	7604
• 159.41 SyntaxColoring.LineNumbers.Enabled	7606
• 159.42 SyntaxColoring.LineNumbers.GetColor	7607
• 159.43 SyntaxColoring.LineNumbers.SetColor	7608
• 159.44 SyntaxColoring.ListContextMenuCommand	7609
• 159.45 SyntaxColoring.RelationshipGraphSearchBox.GetEnabled	7610
• 159.46 SyntaxColoring.RelationshipGraphSearchBox.SetEnabled	7611
• 159.47 SyntaxColoring.RemoveContextMenuCommand	7612
• 159.48 SyntaxColoring.RemoveTag	7613
• 159.49 SyntaxColoring.ScriptGoToBox.GetEnabled	7614
• 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled	7615
• 159.51 SyntaxColoring.ScriptIfLoopHighlight.GetEnabled	7617
• 159.52 SyntaxColoring.ScriptIfLoopHighlight.SetEnabled	7618
• 159.53 SyntaxColoring.ScriptSearchBox.GetEnabled	7619
• 159.54 SyntaxColoring.ScriptSearchBox.GetText	7620
• 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled	7621
• 159.56 SyntaxColoring.ScriptSearchBox.SetText	7623
• 159.57 SyntaxColoring.SetAddFindbars	7624
• 159.58 SyntaxColoring.SetBlackFieldPicker	7625
• 159.59 SyntaxColoring.SetFontName	7626
• 159.60 SyntaxColoring.SetFontSize	7627
• 159.61 SyntaxColoring.SetFormulasWithLinks	7628

- 159.62 SyntaxColoring.SetMinCalcFontSize 7629
- 159.63 SyntaxColoring.SetRelationGraphSearchBoxPreferredSize 7630
- 159.64 SyntaxColoring.SetRememberColumnWidths 7631
- 159.65 SyntaxColoring.SetResizeFieldPicker 7632
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633
- 159.67 SyntaxColoring.SetScriptIfColor 7635
- 159.68 SyntaxColoring.SetScriptLoopColor 7636
- 159.69 SyntaxColoring.SetScriptSearchColor 7637
- 159.70 SyntaxColoring.SetShowFieldAndTableIDs 7638
- 159.71 SyntaxColoring.SetShowLayoutIDs 7639
- 159.72 SyntaxColoring.SetShowScriptIDs 7640
- 159.73 SyntaxColoring.SetUseBoldFont 7641
- 159.74 SyntaxColoring.ShowTextPositions.GetEnabled 7642
- 159.75 SyntaxColoring.ShowTextPositions.SetEnabled 7643
- 159.76 SyntaxColoring.ZoomButton.GetEnabled 7644
- 159.77 SyntaxColoring.ZoomButton.SetEnabled 7645
- 160.1 System.Logout 7647
- 160.2 System.Restart 7648
- 160.3 System.Shutdown 7649
- 160.4 System.Sleep 7650
- 161.1 SystemInfo.ADSystemInfo 7651
- 161.2 SystemInfo.AvailableRAM 7653
- 161.3 SystemInfo.CPUBrandString 7654
- 161.4 SystemInfo.ComputerName 7655
- 161.5 SystemInfo.DomainName 7656
- 161.6 SystemInfo.DoubleClickTime 7657
- 161.7 SystemInfo.HardDiscSerial 7658
- 161.8 SystemInfo.HostDNSName 7659
- 161.9 SystemInfo.HostName 7660

	177
• 161.10 SystemInfo.IdleTime	7661
• 161.11 SystemInfo.Is64bitWindows	7662
• 161.12 SystemInfo.IsAdminUser	7663
• 161.13 SystemInfo.MACAddress	7664
• 161.14 SystemInfo.MacAppDarkMode	7665
• 161.15 SystemInfo.MacBoardID	7666
• 161.16 SystemInfo.MacBugFixVersion	7667
• 161.17 SystemInfo.MacHasHardwareAcceleratedCoreImage	7668
• 161.18 SystemInfo.MacMajorVersion	7669
• 161.19 SystemInfo.MacMinorVersion	7670
• 161.20 SystemInfo.MacModel	7671
• 161.21 SystemInfo.MacROMBootVersion	7672
• 161.22 SystemInfo.MacSerialNumber	7673
• 161.23 SystemInfo.MacSystemDarkMode	7674
• 161.24 SystemInfo.MacUUID	7675
• 161.25 SystemInfo.MacVRAMSize	7676
• 161.26 SystemInfo.NetworkStats	7677
• 161.27 SystemInfo.OSName	7680
• 161.28 SystemInfo.OSVersionString	7681
• 161.29 SystemInfo.PhysicalRAM	7682
• 161.30 SystemInfo.ProcessorCount	7683
• 161.31 SystemInfo.SystemFont	7684
• 161.32 SystemInfo.Time	7685
• 161.33 SystemInfo.UserName	7686
• 161.34 SystemInfo.UserShortName	7687
• 161.35 SystemInfo.WinBuildNumber	7688
• 161.36 SystemInfo.WinCSDVersion	7689
• 161.37 SystemInfo.WinMajorVersion	7690
• 161.38 SystemInfo.WinMinorVersion	7691

- 161.39 SystemInfo.WinPlatformId 7692
- 161.40 SystemInfo.WinProductKey 7693
- 161.41 SystemInfo.WinProductType 7694
- 161.42 SystemInfo.WinServicePackMajor 7695
- 161.43 SystemInfo.WinServicePackMinor 7696
- 161.44 SystemInfo.WinSuiteMask 7697
- 161.45 SystemInfo.WinSystemMetrics 7698
- 161.46 SystemInfo.WindowsAero 7700
- 161.47 SystemInfo.isCatalina 7701
- 161.48 SystemInfo.isElCapitan 7702
- 161.49 SystemInfo.isHighSierra 7703
- 161.50 SystemInfo.isLeopard 7704
- 161.51 SystemInfo.isLion 7705
- 161.52 SystemInfo.isMacOSX 7706
- 161.53 SystemInfo.isMavericks 7707
- 161.54 SystemInfo.isMojave 7708
- 161.55 SystemInfo.isMountainLion 7709
- 161.56 SystemInfo.isSierra 7710
- 161.57 SystemInfo.isSnowLeopard 7711
- 161.58 SystemInfo.isWindows10 7712
- 161.59 SystemInfo.isWindows2000 7713
- 161.60 SystemInfo.isWindows7 7714
- 161.61 SystemInfo.isWindows8 7715
- 161.62 SystemInfo.isWindowsVista 7716
- 161.63 SystemInfo.isWindowsXP 7717
- 161.64 SystemInfo.isYosemite 7718
- 163.1 TAPI.AddressCount 7725
- 163.2 TAPI.AddressValue 7727
- 163.3 TAPI.Answer 7728

	179
• 163.4 TAPI.BlindTransfer	7729
• 163.5 TAPI.CallInfo	7730
• 163.6 TAPI.Connect	7732
• 163.7 TAPI.CreateCall	7733
• 163.8 TAPI.Dial	7735
• 163.9 TAPI.Disconnect	7736
• 163.10 TAPI.Finish	7737
• 163.11 TAPI.GetCallStateEvaluate	7738
• 163.12 TAPI.GetCallStateScriptFileName	7739
• 163.13 TAPI.GetCallStateScriptName	7740
• 163.14 TAPI.GetCallStateURL	7741
• 163.15 TAPI.GetNewCallEvaluate	7742
• 163.16 TAPI.GetNewCallScriptFileName	7743
• 163.17 TAPI.GetNewCallScriptName	7744
• 163.18 TAPI.GetNewCallURL	7745
• 163.19 TAPI.HandoffDirect	7746
• 163.20 TAPI.Hold	7747
• 163.21 TAPI.Initialize	7748
• 163.22 TAPI.IsInitialized	7749
• 163.23 TAPI.ListenOnAddress	7750
• 163.24 TAPI.ListenOnAllAddresses	7751
• 163.25 TAPI.ParkDirect	7752
• 163.26 TAPI.ParkIndirect	7753
• 163.27 TAPI.Pickup	7754
• 163.28 TAPI.Release	7755
• 163.29 TAPI.ReleaseAll	7756
• 163.30 TAPI.RemoveFromConference	7757
• 163.31 TAPI.SetCallStateEvaluate	7758
• 163.32 TAPI.SetCallStateScript	7759

- 163.33 TAPI.SetCallStateURL 7760
- 163.34 TAPI.SetNewCallEvaluate 7761
- 163.35 TAPI.SetNewCallScript 7762
- 163.36 TAPI.SetNewCallURL 7763
- 163.37 TAPI.Shutdown 7764
- 163.38 TAPI.Transfer 7765
- 163.39 TAPI.Unpark 7766
- 164.1 Text.AddLineNumbers 7767
- 164.2 Text.AppendTextFile 7769
- 164.3 Text.CapitalCase 7771
- 164.4 Text.Character 7773
- 164.5 Text.Characters 7775
- 164.6 Text.Code 7776
- 164.7 Text.ConvertFromTextEncoding 7777
- 164.8 Text.ConvertToTextEncoding 7783
- 164.9 Text.ConvertUnicodeToCharacterComposition 7790
- 164.10 Text.ConvertUnicodeToCharacterDecomposition 7792
- 164.11 Text.CountWords 7793
- 164.12 Text.DecodeBytesFromBase64 7794
- 164.13 Text.DecodeFromBase64 7795
- 164.14 Text.DecodeFromBase64URL 7796
- 164.15 Text.DecodeFromBytes 7797
- 164.16 Text.DecodeFromHTML 7798
- 164.17 Text.DecodeFromHex 7800
- 164.18 Text.DecodeFromQuotedPrintable 7802
- 164.19 Text.DecodeFromURL 7803
- 164.20 Text.DecodeFromXML 7805
- 164.21 Text.DecodeHexFromBase64 7806
- 164.22 Text.DecodeIMAPFolderName 7807

	181
• 164.23 Text.DecodeURLComponent	7808
• 164.24 Text.Deserialize	7809
• 164.25 Text.EncodeBytesToBase64	7810
• 164.26 Text.EncodeEmailSubject	7811
• 164.27 Text.EncodeHexToBase64	7812
• 164.28 Text.EncodeToBase64	7813
• 164.29 Text.EncodeToBase64URL	7814
• 164.30 Text.EncodeToBytes	7816
• 164.31 Text.EncodeToHTML	7817
• 164.32 Text.EncodeToHex	7819
• 164.33 Text.EncodeToQuotedPrintable	7821
• 164.34 Text.EncodeToURL	7822
• 164.35 Text.EncodeToXML	7824
• 164.36 Text.EncodeURLComponent	7826
• 164.37 Text.FileExtensionToMimeType	7828
• 164.38 Text.FilterUTF16	7830
• 164.39 Text.FindBetween	7831
• 164.40 Text.InvalidCharactersForEncoding	7833
• 164.41 Text.JaroWinklerDistance	7834
• 164.42 Text.Length	7835
• 164.43 Text.LevenshteinDistance	7836
• 164.44 Text.ListWords	7837
• 164.45 Text.LowerCase	7838
• 164.46 Text.MergeFields	7839
• 164.47 Text.MimeTypeToFileExtension	7841
• 164.48 Text.ReadEMLXFile	7842
• 164.49 Text.ReadTextFile	7843
• 164.50 Text.ReadTextFromContainer	7847
• 164.51 Text.RedefineEncoding	7848

- 164.52 Text.RemoveAccents 7849
- 164.53 Text.RemoveAccentsCaseInsensitive 7850
- 164.54 Text.RemoveControlCharacters 7851
- 164.55 Text.RemoveNewLine 7852
- 164.56 Text.RemovePostfix 7853
- 164.57 Text.RemovePrefix 7854
- 164.58 Text.ReplaceAll 7856
- 164.59 Text.ReplaceNewline 7857
- 164.60 Text.Serialize 7860
- 164.61 Text.SoundEx 7861
- 164.62 Text.SoundExGerman 7862
- 164.63 Text.Styles 7863
- 164.64 Text.TextToHTML 7865
- 164.65 Text.TextToRTF 7867
- 164.66 Text.Trim 7869
- 164.67 Text.UpperCase 7870
- 164.68 Text.WriteTextFile 7871
- 164.69 Text.WriteToContainer 7875
- 165.1 TextView.CanUndo 7877
- 165.2 TextView.Copy 7878
- 165.3 TextView.CreateOnPopoverWithControl 7879
- 165.4 TextView.CreateOnPopoverWithSize 7881
- 165.5 TextView.CreateWithControl 7882
- 165.6 TextView.CreateWithSize 7884
- 165.7 TextView.CreateWithWindow 7885
- 165.8 TextView.Cut 7886
- 165.9 TextView.GetAutoCorrectionEnabled 7887
- 165.10 TextView.GetAutoResizingMask 7888
- 165.11 TextView.GetHTMLText 7889

	183
• 165.12 TextView.GetHeight	7890
• 165.13 TextView.GetLeft	7891
• 165.14 TextView.GetPlainText	7892
• 165.15 TextView.GetRTF	7893
• 165.16 TextView.GetReadOnly	7894
• 165.17 TextView.GetRulerVisible	7895
• 165.18 TextView.GetSpellCheckingEnabled	7896
• 165.19 TextView.GetStyled	7897
• 165.20 TextView.GetTag	7898
• 165.21 TextView.GetTop	7899
• 165.22 TextView.GetVisible	7900
• 165.23 TextView.GetWidth	7901
• 165.24 TextView.GetWindowRef	7902
• 165.25 TextView.List	7903
• 165.26 TextView.Paste	7904
• 165.27 TextView.Release	7905
• 165.28 TextView.ReleaseAll	7906
• 165.29 TextView.SetAutoCorrectionEnabled	7907
• 165.30 TextView.SetAutoResizingMask	7908
• 165.31 TextView.SetFocus	7910
• 165.32 TextView.SetFrame	7911
• 165.33 TextView.SetFrameWithControl	7912
• 165.34 TextView.SetHTMLText	7913
• 165.35 TextView.SetPlainText	7914
• 165.36 TextView.SetRTF	7915
• 165.37 TextView.SetReadOnly	7916
• 165.38 TextView.SetRulerVisible	7917
• 165.39 TextView.SetSpellCheckingEnabled	7918
• 165.40 TextView.SetStyled	7919

- 165.41 `TextView.SetTag` 7920
- 165.42 `TextView.SetVisible` 7921
- 165.43 `TextView.ShowFontPanel` 7922
- 165.44 `TextView.Undo` 7923
- 166.1 `Time.Format` 7925
- 166.2 `Time.Parse` 7929
- 175.13 `Time.Sleep` 8244
- 166.3 `Time.TimeStampToUTC` 7933
- 166.4 `Time.TimeZoneOffset` 7934
- 175.14 `Time.UnixTimeStamp` 8245
- 166.5 `Time.UnixTimeStampToFileMaker` 7935
- 182.1 `Toolbar.Install` 8531
- 182.2 `Toolbar.InstallBackground` 8533
- 182.3 `Toolbar.Register` 8534
- 167.4 `Toolbar.SetImage` 7942
- 167.5 `Toolbar.SetLabel` 7944
- 167.6 `Toolbar.SetPaletteLabel` 7946
- 167.7 `Toolbar.SetTooltip` 7947
- 182.4 `Toolbar.Unregister` 8536
- 168.2 `TouchBar.AddButton` 7960
- 168.3 `TouchBar.AssignToApp` 7963
- 168.4 `TouchBar.AssignToWindow` 7965
- 168.5 `TouchBar.Available` 7967
- 168.6 `TouchBar.Clear` 7968
- 168.7 `TouchBar.Create` 7969
- 168.8 `TouchBar.GetAutomaticCustomizeTouchBarItemEnabled` 7970
- 168.9 `TouchBar.GetCustomizationAllowedItemIdentifiers` 7971
- 168.10 `TouchBar.GetCustomizationIdentifier` 7972
- 168.11 `TouchBar.GetCustomizationRequiredItemIdentifiers` 7973

	185
• 168.12 TouchBar.GetDefaultItemIdentifiers	7974
• 168.13 TouchBar.GetItemIdentifiers	7975
• 168.14 TouchBar.GetPrincipalItemIdentifier	7976
• 168.15 TouchBar.Release	7977
• 168.16 TouchBar.SetAutomaticCustomizeTouchBarItemEnabled	7978
• 168.17 TouchBar.SetCustomizationAllowedItemIdentifiers	7979
• 168.18 TouchBar.SetCustomizationIdentifier	7980
• 168.19 TouchBar.SetCustomizationRequiredItemIdentifiers	7981
• 168.20 TouchBar.SetDefaultItemIdentifiers	7982
• 168.21 TouchBar.SetPrincipalItemIdentifier	7983
• 168.22 TouchBar.ToggleCustomizationPalette	7984
• 168.23 TouchBar.Visible	7985
• 124.52 Trace	6326
• 124.53 Trace.AreErrorNotificationsEnabled	6329
• 124.54 Trace.DisableErrorNotifications	6330
• 124.55 Trace.EnableErrorNotifications	6331
• 124.56 Trace.GetErrorsOnly	6332
• 124.57 Trace.GetWithTimes	6333
• 124.58 Trace.Off	6334
• 124.59 Trace.SetErrorsOnly	6335
• 124.60 Trace.SetWithTimes	6336
• 124.61 Trace.WriteLine	6337
• 169.1 Twain.Acquire	7987
• 169.2 Twain.ClearCancelScript	7989
• 169.3 Twain.ClearNotificationScript	7990
• 169.4 Twain.CloseDS	7991
• 169.5 Twain.CloseDSM	7992
• 169.6 Twain.CurrentDSIdentity	7993
• 169.7 Twain.CurrentImage	7994

- 169.8 Twain.DisableDS 7995
- 169.9 Twain.GetAutofeed 7996
- 169.10 Twain.GetAutomaticBorderDetection 7997
- 169.11 Twain.GetAutomaticBrightness 7998
- 169.12 Twain.GetAutomaticRotate 7999
- 169.13 Twain.GetBrightness 8000
- 169.14 Twain.GetCloseAfterTransfer 8001
- 169.15 Twain.GetCompressionQuality 8002
- 169.16 Twain.GetContrast 8003
- 169.17 Twain.GetDSIdentitiesCount 8004
- 169.18 Twain.GetDSIdentity 8005
- 169.19 Twain.GetDefaultIdentity 8006
- 169.20 Twain.GetDiscardBlankPages 8007
- 169.21 Twain.GetDuplexEnabled 8008
- 169.22 Twain.GetFeededEnabled 8009
- 169.23 Twain.GetFilePaths 8010
- 169.24 Twain.GetFileType 8011
- 169.25 Twain.GetFolderPath 8012
- 169.26 Twain.GetGamma 8013
- 169.27 Twain.GetHighlight 8014
- 169.28 Twain.GetImageCount 8015
- 169.29 Twain.GetOrientation 8016
- 169.30 Twain.GetPaper 8017
- 169.31 Twain.GetPixelType 8018
- 169.32 Twain.GetResolutionX 8019
- 169.33 Twain.GetResolutionY 8020
- 169.34 Twain.GetShadow 8021
- 169.35 Twain.GetUIVisible 8022
- 169.36 Twain.ImageInfo 8023

	187
• 169.37 Twain.Initialize	8025
• 169.38 Twain.IsDSEnabled	8027
• 169.39 Twain.IsInitialized	8028
• 169.40 Twain.OpenDS	8029
• 169.41 Twain.OpenDSM	8030
• 169.42 Twain.SelectDS	8031
• 169.43 Twain.SelectDSIdentity	8032
• 169.44 Twain.SetAutofeed	8033
• 169.45 Twain.SetAutomaticBorderDetection	8034
• 169.46 Twain.SetAutomaticBrightness	8035
• 169.47 Twain.SetAutomaticRotate	8036
• 169.48 Twain.SetBrightness	8037
• 169.49 Twain.SetCancelScript	8038
• 169.50 Twain.SetCloseAfterTransfer	8039
• 169.51 Twain.SetCompressionQuality	8040
• 169.52 Twain.SetContrast	8041
• 169.53 Twain.SetDefaultDSIdentity	8042
• 169.54 Twain.SetDiscardBlankPages	8043
• 169.55 Twain.SetDuplexEnabled	8044
• 169.56 Twain.SetFeededEnabled	8045
• 169.57 Twain.SetFileType	8047
• 169.58 Twain.SetFolderPath	8048
• 169.59 Twain.SetGamma	8049
• 169.60 Twain.SetHighlight	8050
• 169.61 Twain.SetNotificationScript	8051
• 169.62 Twain.SetOrientation	8052
• 169.63 Twain.SetPaper	8053
• 169.64 Twain.SetPaperSize	8055
• 169.65 Twain.SetPixelType	8056

- 169.66 Twain.SetResolutionX 8057
- 169.67 Twain.SetResolutionY 8058
- 169.68 Twain.SetShadow 8059
- 169.69 Twain.SupportsBW 8060
- 169.70 Twain.SupportsGray 8061
- 169.71 Twain.SupportsMemoryTransfer 8062
- 169.72 Twain.SupportsRGB 8063
- 169.73 Twain.TransferImage 8064
- 170.1 UNNotification.Action 8065
- 170.2 UNNotification.AddUserInfo 8067
- 170.3 UNNotification.AuthorizationError 8068
- 170.4 UNNotification.AuthorizationGranted 8069
- 170.5 UNNotification.Badge 8070
- 170.6 UNNotification.Body 8071
- 170.7 UNNotification.CategoryIdentifier 8072
- 170.8 UNNotification.Date 8073
- 170.9 UNNotification.Deliver 8074
- 170.10 UNNotification.DeliveredNotifications 8075
- 170.11 UNNotification.GetDescription 8076
- 170.12 UNNotification.Identifier 8077
- 170.13 UNNotification.IsRegisteredForRemoteNotifications 8078
- 170.14 UNNotification.LaunchImageName 8079
- 170.15 UNNotification.New 8080
- 170.16 UNNotification.NextTriggerDate 8082
- 170.17 UNNotification.NotificationSettings 8083
- 170.18 UNNotification.PendingNotificationRequests 8085
- 170.19 UNNotification.Region 8086
- 170.20 UNNotification.Release 8088
- 170.21 UNNotification.ReleaseAll 8089

	189
• 170.22 UNNotification.RemoteNotificationsDeviceToken	8090
• 170.23 UNNotification.RemoteNotificationsError	8091
• 170.24 UNNotification.RemoveAllDeliveredNotifications	8092
• 170.25 UNNotification.RemoveAllPendingNotificationRequests	8093
• 170.26 UNNotification.RemoveDeliveredNotificationsWithIdentifiers	8094
• 170.27 UNNotification.RemovePendingNotificationRequestsWithIdentifiers	8095
• 170.28 UNNotification.Repeats	8096
• 170.29 UNNotification.Schedule	8097
• 170.30 UNNotification.SetActionScript	8099
• 170.31 UNNotification.SetBadge	8100
• 170.32 UNNotification.SetBody	8102
• 170.33 UNNotification.SetCalendarDateTrigger	8104
• 170.34 UNNotification.SetCalendarTrigger	8105
• 170.35 UNNotification.SetCategoryIdentifier	8107
• 170.36 UNNotification.SetLaunchImageName	8108
• 170.37 UNNotification.SetLocationTrigger	8109
• 170.38 UNNotification.SetNFCScript	8111
• 170.39 UNNotification.SetScript	8112
• 170.40 UNNotification.SetSound	8114
• 170.41 UNNotification.SetSubTitle	8115
• 170.42 UNNotification.SetThreadIdentifier	8116
• 170.43 UNNotification.SetTimeIntervalTrigger	8117
• 170.44 UNNotification.SetTitle	8119
• 170.45 UNNotification.SubTitle	8121
• 170.46 UNNotification.ThreadIdentifier	8122
• 170.47 UNNotification.TimeInterval	8123
• 170.48 UNNotification.Title	8124
• 170.49 UNNotification.Type	8126
• 170.50 UNNotification.UserInfoKeys	8127

• 170.51 UNNotification.UserInfoValue	8128
• 172.1 URLScheme.GetDefaultHandler	8141
• 172.2 URLScheme.InstallURLEventHandler	8143
• 172.3 URLScheme.SetDefaultHandler	8144
• 173.1 USB.Count	8147
• 173.2 USB.FindDevice	8149
• 173.3 USB.FindSerialNumber	8150
• 173.4 USB.GetProductID	8151
• 173.5 USB.GetProductName	8152
• 173.6 USB.GetSerialNumber	8153
• 173.7 USB.GetVendorID	8154
• 173.8 USB.GetVendorName	8155
• 176.1 UUID.Formatted	8247
• 176.2 UUID.FromNumber	8249
• 176.3 UUID.Hex	8251
• 176.4 UUID.Number	8252
• 176.5 UUID.Raw	8253
• 176.6 UUID.ToNumber	8254
• 53.3 UnZipFile.Close	1476
• 53.4 UnZipFile.ExtractFiles	1477
• 53.5 UnZipFile.GlobalComment	1479
• 53.6 UnZipFile.ItemCRC	1480
• 53.7 UnZipFile.ItemComment	1481
• 53.8 UnZipFile.ItemCompressedSize	1482
• 53.9 UnZipFile.ItemCompressionMethod	1483
• 53.10 UnZipFile.ItemCount	1484
• 53.11 UnZipFile.ItemDate	1485
• 53.12 UnZipFile.ItemDiskNumberStart	1486
• 53.13 UnZipFile.ItemExternalFileAttributes	1487

	191
• 53.14 UnZipFile.ItemFlag	1488
• 53.15 UnZipFile.ItemInternalFileAttributes	1490
• 53.16 UnZipFile.ItemName	1491
• 53.17 UnZipFile.ItemSizeFileComment	1492
• 53.18 UnZipFile.ItemSizeFileExtra	1493
• 53.19 UnZipFile.ItemSizeFileName	1494
• 53.20 UnZipFile.ItemUncompressedSize	1495
• 53.21 UnZipFile.ItemVersion	1496
• 53.22 UnZipFile.ItemVersionNeeded	1497
• 53.23 UnZipFile.OpenContainer	1498
• 53.24 UnZipFile.OpenFile	1499
• 53.25 UnZipFile.ReadAsFileContainer	1501
• 53.26 UnZipFile.ReadAsGIFContainer	1502
• 53.27 UnZipFile.ReadAsHex	1503
• 53.28 UnZipFile.ReadAsJPEGContainer	1504
• 53.29 UnZipFile.ReadAsPNGContainer	1505
• 53.30 UnZipFile.ReadAsText	1506
• 53.31 UnZipFile.ReadToFile	1507
• 53.32 UnZipFile.UsePassword	1508
• 171.1 Updater.CheckForUpdates	8129
• 171.2 Updater.CheckForUpdatesInBackground	8130
• 171.3 Updater.GetAutomaticallyChecksForUpdates	8131
• 171.4 Updater.GetAutomaticallyDownloadsUpdates	8132
• 171.5 Updater.GetFeedURL	8133
• 171.6 Updater.GetSendsSystemProfile	8134
• 171.7 Updater.LastUpdateCheckDate	8135
• 171.8 Updater.SetAutomaticallyChecksForUpdates	8136
• 171.9 Updater.SetAutomaticallyDownloadsUpdates	8137
• 171.10 Updater.SetSendsSystemProfile	8138

- 171.11 Updater.UpdateInProgress 8139
- 174.1 UserNotification.ClearDidActivateNotificationScript 8157
- 174.2 UserNotification.ClearDidDeliverNotificationScript 8159
- 174.3 UserNotification.ContentImage 8160
- 174.4 UserNotification.Create 8161
- 174.5 UserNotification.GetActionButtonTitle 8162
- 174.6 UserNotification.GetActivationType 8163
- 174.7 UserNotification.GetActualDeliveryDate 8164
- 174.8 UserNotification.GetDeliveryDate 8165
- 174.9 UserNotification.GetDeliveryTimeZone 8166
- 174.10 UserNotification.GetDescription 8167
- 174.11 UserNotification.GetIdentifier 8168
- 174.12 UserNotification.GetInformativeText 8169
- 174.13 UserNotification.GetOtherButtonTitle 8170
- 174.14 UserNotification.GetResponse 8171
- 174.15 UserNotification.GetResponsePlaceholder 8172
- 174.16 UserNotification.GetSoundName 8173
- 174.17 UserNotification.GetSubTitle 8174
- 174.18 UserNotification.GetTitle 8175
- 174.19 UserNotification.GetUserInfo 8176
- 174.20 UserNotification.HasReplyButton 8177
- 174.21 UserNotification.Release 8178
- 174.22 UserNotification.SetActionButtonTitle 8179
- 174.23 UserNotification.SetContentImage 8180
- 174.24 UserNotification.SetDeliveryDate 8181
- 174.25 UserNotification.SetDeliveryTimeZone 8182
- 174.26 UserNotification.SetDidActivateNotificationScript 8183
- 174.27 UserNotification.SetDidDeliverNotificationScript 8185
- 174.28 UserNotification.SetHasActionButton 8187

	193
• 174.29 UserNotification.SetHasReplyButton	8188
• 174.30 UserNotification.SetIdentifier	8189
• 174.31 UserNotification.SetInformativeText	8190
• 174.32 UserNotification.SetOtherButtonTitle	8191
• 174.33 UserNotification.SetResponsePlaceholder	8192
• 174.34 UserNotification.SetSoundName	8193
• 174.35 UserNotification.SetSubTitle	8194
• 174.36 UserNotification.SetTitle	8195
• 174.37 UserNotification.SetUserInfo	8196
• 174.38 UserNotification.deliverNotification	8197
• 174.39 UserNotification.deliveredNotifications	8198
• 174.40 UserNotification.hasActionButton	8199
• 174.41 UserNotification.isPresented	8200
• 174.42 UserNotification.isRemote	8201
• 174.43 UserNotification.removeAllDeliveredNotifications	8202
• 174.44 UserNotification.removeAllScheduledNotifications	8203
• 174.45 UserNotification.removeDeliveredNotification	8204
• 174.46 UserNotification.removeScheduledNotification	8205
• 174.47 UserNotification.scheduleNotification	8206
• 174.48 UserNotification.scheduledNotifications	8207
• 177.1 Validate.CheckReceipt	8255
• 177.2 Validate.Exit	8257
• 177.3 Validate.FindReceipt	8258
• 124.62 Version	6338
• 124.63 VersionAutoUpdate	6340
• 179.1 Vision.ClassifyImage	8273
• 179.2 Vision.DetectBarcode	8275
• 179.3 Vision.KnownClassifications	8276
• 179.4 Vision.RecognizeText	8277

- 179.5 Vision.SupportedRecognitionLanguages 8279
- 179.6 Vision.SupportedSymbologies 8280
- 181.1 WIA.ClearCurrentDevice 8493
- 181.2 WIA.DeviceCount 8494
- 181.3 WIA.DeviceProperties 8495
- 181.4 WIA.DevicePropertyKeys 8497
- 181.5 WIA.DevicePropertyValue 8500
- 181.6 WIA.GetCurrentDevice 8503
- 181.7 WIA.GetCurrentItem 8504
- 181.8 WIA.Image 8505
- 181.9 WIA.ImageCount 8507
- 181.10 WIA.ImageDialog 8508
- 181.11 WIA.Images 8510
- 181.12 WIA.Initialize 8511
- 181.13 WIA.ItemProperties 8512
- 181.14 WIA.ItemPropertyKeys 8514
- 181.15 WIA.ItemPropertyValue 8517
- 181.16 WIA.ListItems 8520
- 181.17 WIA.Scan 8521
- 181.18 WIA.SelectDeviceDialog 8523
- 181.19 WIA.SetCurrentDevice 8524
- 181.20 WIA.SetDevicePropertyValue 8525
- 181.21 WIA.SetItemPropertyValue 8527
- 187.1 WMFP.Create 8767
- 187.2 WMFP.FrameStep 8770
- 187.3 WMFP.GetBalance 8771
- 187.4 WMFP.GetDuration 8772
- 187.5 WMFP.GetIdealVideoSize 8773
- 187.6 WMFP.GetLoop 8774

	195
• 187.7 WMFP.GetMute	8775
• 187.8 WMFP.GetNativeVideoSize	8776
• 187.9 WMFP.GetPosition	8777
• 187.10 WMFP.GetRate	8778
• 187.11 WMFP.GetState	8779
• 187.12 WMFP.GetTag	8780
• 187.13 WMFP.GetVisible	8781
• 187.14 WMFP.GetVolume	8782
• 187.15 WMFP.Pause	8783
• 187.16 WMFP.Play	8784
• 187.17 WMFP.Release	8785
• 187.18 WMFP.Screenshot	8786
• 187.19 WMFP.SetBalance	8787
• 187.20 WMFP.SetBorder	8788
• 187.21 WMFP.SetFrame	8789
• 187.22 WMFP.SetLoop	8790
• 187.23 WMFP.SetMute	8791
• 187.24 WMFP.SetPlaybackEndedScriptTrigger	8792
• 187.25 WMFP.SetPosition	8793
• 187.26 WMFP.SetRate	8794
• 187.27 WMFP.SetTag	8795
• 187.28 WMFP.SetVisible	8796
• 187.29 WMFP.SetVolume	8797
• 187.30 WMFP.Stop	8798
• 187.31 WMFP.UpdateVideo	8799
• 188.1 WMIQuery.Connect	8801
• 188.2 WMIQuery.New	8805
• 188.3 WMIQuery.Next	8806
• 188.4 WMIQuery.PropertyNames	8807

- 188.5 WMIQuery.PropertyType 8808
- 188.6 WMIQuery.PropertyValue 8809
- 188.7 WMIQuery.Query 8810
- 188.8 WMIQuery.Release 8812
- 180.1 WebDownloadDelegate.Cancel 8281
- 180.2 WebDownloadDelegate.ClearBeginDownloadHandler 8282
- 180.3 WebDownloadDelegate.ClearDidDownloadHandler 8283
- 180.4 WebDownloadDelegate.ClearFailHandler 8284
- 180.5 WebDownloadDelegate.ClearFolder 8285
- 180.6 WebDownloadDelegate.ClearProgressHandler 8286
- 180.7 WebDownloadDelegate.DownloadedLength 8287
- 180.8 WebDownloadDelegate.ErrorMessage 8288
- 180.9 WebDownloadDelegate.GetFolder 8289
- 180.10 WebDownloadDelegate.Install 8290
- 180.11 WebDownloadDelegate.MIMEType 8291
- 180.12 WebDownloadDelegate.Path 8292
- 180.13 WebDownloadDelegate.SetBeginDownloadHandler 8293
- 180.14 WebDownloadDelegate.SetDidDownloadHandler 8294
- 180.15 WebDownloadDelegate.SetFailHandler 8296
- 180.16 WebDownloadDelegate.SetFolder 8297
- 180.17 WebDownloadDelegate.SetProgressHandler 8299
- 180.18 WebDownloadDelegate.URL 8301
- 180.19 WebDownloadDelegate.expectedContentLength 8302
- 180.20 WebDownloadDelegate.suggestedFilename 8303
- 180.21 WebDownloadDelegate.textEncodingName 8304
- 180.22 WebPolicyDelegate.AddMimeType 8305
- 180.23 WebPolicyDelegate.Install 8306
- 180.24 WebPolicyDelegate.RemoveMimeType 8307
- 180.25 WebView.AddScriptMessageHandler 8308

	197
• 180.26 WebView.AddUserScript	8310
• 180.27 WebView.AllCookies	8312
• 180.28 WebView.AllowsAnyHTTPSCertificateForHost	8314
• 180.29 WebView.CallFunction	8315
• 180.30 WebView.ClearBrowserSession	8316
• 180.31 WebView.ClearSelection	8317
• 180.32 WebView.ClickInput	8318
• 180.33 WebView.Close	8320
• 180.34 WebView.Cookies.ClearForURL	8321
• 180.35 WebView.Cookies.Count	8322
• 180.36 WebView.Cookies.Query	8323
• 180.37 WebView.Copy	8324
• 180.38 WebView.CopyFormattedText	8325
• 180.39 WebView.Create	8326
• 180.40 WebView.CreateOnPopover	8328
• 180.41 WebView.Cut	8330
• 180.42 WebView.DisableJavascriptAlerts	8331
• 180.43 WebView.EstimatedProgress	8332
• 180.44 WebView.Evaluate	8333
• 180.45 WebView.ExecCommand	8337
• 180.46 WebView.FindByName	8339
• 180.47 WebView.FindWindowByIndex	8341
• 180.48 WebView.FindWindowByTitle	8342
• 180.49 WebView.FormReset	8344
• 180.50 WebView.FormSubmit	8345
• 180.51 WebView.GetAllowsLinkPreview	8346
• 180.52 WebView.GetAutoResizingMask	8347
• 180.53 WebView.GetCustomUserAgent	8348
• 180.54 WebView.GetEditable	8349

- 180.55 WebView.GetForm 8350
- 180.56 WebView.GetFormButtonValue 8351
- 180.57 WebView.GetFormCount 8352
- 180.58 WebView.GetFormInputChecked 8353
- 180.59 WebView.GetFormInputValue 8354
- 180.60 WebView.GetFormSelectOptions 8356
- 180.61 WebView.GetFormSelectValue 8357
- 180.62 WebView.GetFormTextAreaValue 8359
- 180.63 WebView.GetFormValue 8361
- 180.64 WebView.GetFormattedText 8363
- 180.65 WebView.GetHTMLText 8365
- 180.66 WebView.GetHidden 8367
- 180.67 WebView.GetIcon 8368
- 180.68 WebView.GetImage 8369
- 180.69 WebView.GetImageCount 8371
- 180.70 WebView.GetInternetExplorerVersion 8372
- 180.71 WebView.GetLink 8373
- 180.72 WebView.GetLinkCount 8374
- 180.73 WebView.GetPlainText 8375
- 180.74 WebView.GetPreferences 8377
- 180.75 WebView.GetPrintParameter 8379
- 180.76 WebView.GetPrivateBrowsing 8380
- 180.77 WebView.GetSilent 8381
- 180.78 WebView.GetSource 8382
- 180.79 WebView.GetSourceData 8383
- 180.80 WebView.GetTitle 8384
- 180.81 WebView.GetURL 8385
- 180.82 WebView.GoBack 8386
- 180.83 WebView.GoForward 8387

	199
• 180.84 WebView.HasOnlySecureContent	8388
• 180.85 WebView.InstallCallback	8389
• 180.86 WebView.InstallMultiFileOpenDialog	8391
• 180.87 WebView.IsLoading	8392
• 180.88 WebView.LoadHTML	8394
• 180.89 WebView.LoadJavascriptURL	8395
• 180.90 WebView.LoadURL	8396
• 180.91 WebView.MakeTextLarger	8398
• 180.92 WebView.MakeTextSmaller	8399
• 180.93 WebView.MakeTextStandardSize	8400
• 180.94 WebView.Passwords.Clear	8401
• 180.95 WebView.Passwords.Install	8402
• 180.96 WebView.Passwords.Set	8404
• 180.97 WebView.Paste	8406
• 180.98 WebView.PostURL	8407
• 180.99 WebView.PressKey	8409
• 180.100 WebView.Print	8410
• 180.101 WebView.PrintPreview	8412
• 180.102 WebView.PrintToFile	8413
• 180.103 WebView.Release	8415
• 180.104 WebView.Reload	8416
• 180.105 WebView.RemoveAllUserScripts	8417
• 180.106 WebView.RemoveScriptMessageHandler	8418
• 180.107 WebView.RenderImage	8419
• 180.108 WebView.RenderPDF	8421
• 180.109 WebView.RunJavaScript	8423
• 180.110 WebView.RunJavaScriptReturnTitle	8433
• 180.111 WebView.Screenshot	8435
• 180.112 WebView.Scrollbar.getHorizontalMaximum	8437

- 180.113 WebView.Scrollbar.getHorizontalPosition 8438
- 180.114 WebView.Scrollbar.getVerticalMaximum 8439
- 180.115 WebView.Scrollbar.getVerticalPosition 8440
- 180.116 WebView.Scrollbar.set 8441
- 180.117 WebView.SearchText 8442
- 180.118 WebView.SelectAll 8444
- 180.119 WebView.SelectedText 8445
- 180.120 WebView.SendCommand 8447
- 180.121 WebView.SetAllowsLinkPreview 8448
- 180.122 WebView.SetAutoResizingMask 8449
- 180.123 WebView.SetCustomUserAgent 8451
- 180.124 WebView.SetEditable 8453
- 180.125 WebView.SetFocus 8454
- 180.126 WebView.SetFormButtonValue 8455
- 180.127 WebView.SetFormInputChecked 8457
- 180.128 WebView.SetFormInputValue 8459
- 180.129 WebView.SetFormSelectValue 8462
- 180.130 WebView.SetFormTextAreaValue 8464
- 180.131 WebView.SetFormValue 8466
- 180.132 WebView.SetHidden 8468
- 180.133 WebView.SetInternetExplorerVersion 8469
- 180.134 WebView.SetPreferences 8472
- 180.135 WebView.SetPrintParameter 8474
- 180.136 WebView.SetPrivateBrowsing 8476
- 180.137 WebView.SetSilent 8477
- 180.138 WebView.SetTitle 8478
- 180.139 WebView.StopLoading 8479
- 180.140 WebView.UserScripts 8480
- 180.141 WebView.canResetPageZoom 8481

	201
• 180.142 WebView.canZoomPageIn	8482
• 180.143 WebView.canZoomPageOut	8483
• 180.144 WebView.getMediaVolume	8484
• 180.145 WebView.getPageSizeMultiplier	8485
• 180.146 WebView.resetPageZoom	8486
• 180.147 WebView.setMediaVolume	8487
• 180.148 WebView.setPageSizeMultiplier	8488
• 180.149 WebView.setZoom	8489
• 180.150 WebView.zoomPageIn	8490
• 180.151 WebView.zoomPageOut	8491
• 186.1 WinSendMail.AddAttachmentContainer	8739
• 186.2 WinSendMail.AddAttachmentFile	8741
• 186.3 WinSendMail.AddAttachmentText	8743
• 186.4 WinSendMail.AddBCC	8744
• 186.5 WinSendMail.AddCC	8746
• 186.6 WinSendMail.AddRecipient	8748
• 186.7 WinSendMail.AddTo	8750
• 186.8 WinSendMail.AttachmentCount	8752
• 186.9 WinSendMail.ClearAttachments	8753
• 186.10 WinSendMail.ClearRecipients	8754
• 186.11 WinSendMail.CreateEmail	8755
• 186.12 WinSendMail.GetSubject	8757
• 186.13 WinSendMail.GetText	8758
• 186.14 WinSendMail.Release	8759
• 186.15 WinSendMail.Send	8760
• 186.16 WinSendMail.SendAnsi	8761
• 186.17 WinSendMail.SendAsync	8762
• 186.18 WinSendMail.SetFrom	8763
• 186.19 WinSendMail.SetSubject	8764

- 186.20 WinSendMail.SetText 8765
- 182.5 Window.Activate 8537
- 182.6 Window.AddBottomOverlay 8538
- 182.7 Window.AsPDF 8540
- 182.8 Window.ClearFocus 8542
- 182.9 Window.ClearTouchBar 8543
- 182.10 Window.ConfigureToolBarMenu 8544
- 182.11 Window.Current 8545
- 182.12 Window.DisableScrollbars 8546
- 182.13 Window.EnableScrollbars 8547
- 182.14 Window.Fade 8548
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.17 Window.FlashWindow 8556
- 182.18 Window.GetAlpha 8558
- 182.19 Window.GetClassName 8559
- 182.20 Window.GetCurrentTag 8560
- 182.21 Window.GetHeight 8561
- 182.22 Window.GetLeft 8562
- 182.23 Window.GetMaxHeight 8563
- 182.24 Window.GetMaxWidth 8564
- 182.25 Window.GetMinHeight 8565
- 182.26 Window.GetMinWidth 8566
- 182.27 Window.GetTag 8567
- 182.28 Window.GetTitle 8568
- 182.29 Window.GetTitleVisible 8569
- 182.30 Window.GetTitlebarAppearsTransparent 8570
- 182.31 Window.GetToolBarConfiguration 8571
- 182.32 Window.GetToolBarCustomizationPaletteIsRunning 8572

	203
• 182.33 Window.GetToolBarVisible	8573
• 182.34 Window.GetTop	8574
• 182.35 Window.GetTopMost	8575
• 182.36 Window.GetWidth	8576
• 182.37 Window.HasCloseButton	8577
• 182.38 Window.HasMiniaturizeButton	8578
• 182.39 Window.HasShadow	8579
• 182.40 Window.HasZoomButton	8580
• 182.41 Window.Hide	8581
• 182.42 Window.HideContent	8583
• 182.43 Window.HideOverlay	8584
• 182.44 Window.HideScrollbars	8585
• 182.45 Window.IgnoresMouseEvents	8587
• 182.46 Window.IsFullScreen	8588
• 182.47 Window.IsFullScreenAuxiliary	8589
• 182.48 Window.IsFullScreenPrimary	8590
• 182.49 Window.IsMaximized	8591
• 182.50 Window.IsMinimized	8592
• 182.51 Window.IsModified	8593
• 182.52 Window.IsVisible	8594
• 182.53 Window.List	8595
• 182.54 Window.ListCommands	8596
• 182.55 Window.Maximize	8597
• 182.56 Window.Minimize	8598
• 182.57 Window.ModalDialogFront	8599
• 182.58 Window.Move	8600
• 182.59 Window.PositionNextDialog	8602
• 182.60 Window.RemoveMenu	8604
• 182.61 Window.Resizable	8605

- 182.62 Window.Resize 8606
- 182.63 Window.ResizeContentView 8608
- 182.64 Window.RunCommand 8610
- 182.65 Window.RunToolBarCustomizationPalette 8612
- 182.66 Window.Screenshot 8613
- 182.67 Window.Scrollbar.GetScrollElasticity 8615
- 182.68 Window.Scrollbar.SetScrollElasticity 8616
- 182.69 Window.Scrollbar.getHorizontalMaximum 8618
- 182.70 Window.Scrollbar.getHorizontalPosition 8619
- 182.71 Window.Scrollbar.getVerticalMaximum 8620
- 182.72 Window.Scrollbar.getVerticalPosition 8621
- 182.73 Window.Scrollbar.set 8622
- 182.74 Window.ScrollbarsVisible 8623
- 182.75 Window.SetAlpha 8624
- 182.76 Window.SetBounds 8626
- 182.77 Window.SetCloseButton 8628
- 182.78 Window.SetCurrentTag 8630
- 182.79 Window.SetDockImage 8631
- 182.80 Window.SetFocus 8633
- 182.81 Window.SetFullScreenAuxiliary 8634
- 182.82 Window.SetFullScreenPrimary 8635
- 182.83 Window.SetIgnoresMouseEvents 8636
- 182.84 Window.SetMaxHeight 8637
- 182.85 Window.SetMaxWidth 8638
- 182.86 Window.SetMinHeight 8639
- 182.87 Window.SetMinWidth 8640
- 182.88 Window.SetMiniaturizeButton 8641
- 182.89 Window.SetModified 8643
- 182.90 Window.SetProgress 8644

	205
• 182.91 Window.SetResizable	8646
• 182.92 Window.SetShadow	8648
• 182.93 Window.SetShowsToolBarButton	8649
• 182.94 Window.SetTag	8651
• 182.95 Window.SetTitle	8652
• 182.96 Window.SetTitleIcon	8653
• 182.97 Window.SetTitleVisible	8654
• 182.98 Window.SetTitlebarAppearsTransparent	8655
• 182.99 Window.SetToolBarConfiguration	8656
• 182.100 Window.SetToolBarVisible	8657
• 182.101 Window.SetTopMost	8658
• 182.102 Window.SetZoomButton	8659
• 182.103 Window.Show	8661
• 182.104 Window.ShowCharacterPalette	8663
• 182.105 Window.ShowContent	8664
• 182.106 Window.ShowKeyboard	8665
• 182.107 Window.ShowOverlay	8666
• 182.108 Window.ShowScrollbars	8668
• 182.109 Window.ShowTableViewDialog	8670
• 182.110 Window.ShowsToolBarButton	8671
• 182.111 Window.ToggleFullScreen	8672
• 182.112 Window.TopHeight	8673
• 182.113 Window.Update	8674
• 185.1 WindowTransition.Perform	8733
• 185.2 WindowTransition.Prepare	8734
• 185.3 WindowTransition.PrepareWindow	8736
• 183.1 WindowsScript.AddCode	8675
• 183.2 WindowsScript.Close	8680
• 183.3 WindowsScript.Create	8684

- 183.4 WindowsScript.ErrorClear 8688
- 183.5 WindowsScript.ErrorColumn 8689
- 183.6 WindowsScript.ErrorDescription 8690
- 183.7 WindowsScript.ErrorLine 8691
- 183.8 WindowsScript.ErrorNumber 8692
- 183.9 WindowsScript.ErrorSource 8693
- 183.10 WindowsScript.ErrorText 8694
- 183.11 WindowsScript.Eval 8695
- 183.12 WindowsScript.ExecuteFunction 8696
- 183.13 WindowsScript.ExecuteStatement 8700
- 183.14 WindowsScript.GetAllowUI 8701
- 183.15 WindowsScript.GetLanguage 8702
- 183.16 WindowsScript.GetTimeout 8703
- 183.17 WindowsScript.GetUseSafeSubset 8704
- 183.18 WindowsScript.SetAllowUI 8705
- 183.19 WindowsScript.SetLanguage 8706
- 183.20 WindowsScript.SetTimeout 8709
- 183.21 WindowsScript.SetUseSafeSubset 8710
- 184.1 WindowsUserNotification.Available 8711
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.6 WindowsUserNotification.HideNotification 8716
- 184.7 WindowsUserNotification.Initialize 8717
- 184.8 WindowsUserNotification.Isinitialized 8719
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724

	207
• 184.12 WindowsUserNotification.SetImagePath	8725
• 184.13 WindowsUserNotification.SetScriptName	8726
• 184.14 WindowsUserNotification.SetText	8727
• 184.15 WindowsUserNotification.Setting	8728
• 184.16 WindowsUserNotification.ShowNotification	8730
• 184.17 WindowsUserNotification.XMLUsed	8731
• 189.1 WordFile.AddMediaFile	8813
• 189.2 WordFile.Append	8815
• 189.3 WordFile.AppendTableRow	8816
• 189.4 WordFile.DuplicateTableRow	8818
• 189.5 WordFile.FieldNames	8819
• 189.6 WordFile.GetCaseless	8820
• 189.7 WordFile.GetFieldText	8821
• 189.8 WordFile.GetMediaFile	8822
• 189.9 WordFile.GetXML	8823
• 189.10 WordFile.HasTag	8824
• 189.11 WordFile.MediaFiles	8825
• 189.12 WordFile.OpenContainer	8826
• 189.13 WordFile.OpenFile	8828
• 189.14 WordFile.OpenText	8830
• 189.15 WordFile.Parts	8831
• 189.16 WordFile.Release	8832
• 189.17 WordFile.RemoveTableRow	8833
• 189.18 WordFile.ReplaceTag	8835
• 189.19 WordFile.SetCaseless	8838
• 189.20 WordFile.SetFieldText	8839
• 189.21 WordFile.SetMarkers	8840
• 189.22 WordFile.SetMediaFile	8841
• 189.23 WordFile.SetXML	8843

- 189.24 WordFile.Texts 8844
- 189.25 WordFile.WriteFile 8846
- 48.22 X509.Description 1369
- 48.23 X509.Duplicate 1370
- 48.24 X509.IssuerName 1371
- 48.25 X509.Name 1372
- 48.26 X509.Read 1373
- 48.27 X509.ReadFromContainer 1374
- 48.28 X509.ReadFromFile 1375
- 48.29 X509.Release 1376
- 48.30 X509.SerialNumber 1377
- 48.31 X509.ShowDialog 1378
- 48.32 X509.SubjectName 1379
- 48.33 X509.Version 1380
- 48.34 X509.Write 1381
- 190.1 XL.Book.AddCustomNumFormat 8849
- 190.2 XL.Book.AddFont 8852
- 190.3 XL.Book.AddFormat 8854
- 190.4 XL.Book.AddPictureContainer 8857
- 190.5 XL.Book.AddPictureFile 8859
- 190.6 XL.Book.AddSheet 8860
- 190.7 XL.Book.BiffVersion 8862
- 190.8 XL.Book.CustomNumFormat 8863
- 190.9 XL.Book.DeleteSheet 8864
- 190.10 XL.Book.DeleteSheetsExcept 8867
- 190.11 XL.Book.FontCount 8868
- 190.12 XL.Book.FormatCount 8869
- 190.13 XL.Book.GetActiveSheet 8870
- 190.14 XL.Book.GetDefaultFontName 8871

	209
• 190.15 XL.Book.GetDefaultFontSize	8872
• 190.16 XL.Book.GetPicture	8873
• 190.17 XL.Book.GetPictureType	8874
• 190.18 XL.Book.GetRGBMode	8875
• 190.19 XL.Book.GetRefR1C1	8876
• 190.20 XL.Book.GetText	8877
• 190.21 XL.Book.InsertSheet	8878
• 190.22 XL.Book.IsDate1904	8879
• 190.23 XL.Book.IsTemplate	8880
• 190.24 XL.Book.MoveSheet	8881
• 190.25 XL.Book.PictureCount	8882
• 190.26 XL.Book.Release	8883
• 190.27 XL.Book.ReleaseAll	8885
• 190.28 XL.Book.Save	8886
• 190.29 XL.Book.SaveToFile	8888
• 190.30 XL.Book.SetActiveSheet	8890
• 190.31 XL.Book.SetDate1904	8891
• 190.32 XL.Book.SetDefaultFont	8892
• 190.33 XL.Book.SetRGBMode	8893
• 190.34 XL.Book.SetRefR1C1	8894
• 190.35 XL.Book.SetTemplate	8895
• 190.36 XL.Book.SheetCount	8896
• 190.37 XL.Book.SheetIndexForName	8897
• 190.38 XL.Book.Sheets	8898
• 190.39 XL.Book.Version	8899
• 190.40 XL.Color.Pack	8900
• 190.41 XL.Color.UnPack	8902
• 190.42 XL.CopyContent	8904
• 190.43 XL.CopyRow	8906

- 190.44 XL.CopySheet 8908
- 190.45 XL.Date.DoubleToTimeStamp 8910
- 190.46 XL.Date.Pack 8911
- 190.47 XL.Date.TimeStampToDouble 8913
- 190.48 XL.Date.UnPack 8914
- 190.49 XL.Font.GetBold 8915
- 190.50 XL.Font.GetColor 8916
- 190.51 XL.Font.GetItalic 8917
- 190.52 XL.Font.GetName 8918
- 190.53 XL.Font.GetScript 8919
- 190.54 XL.Font.GetSize 8920
- 190.55 XL.Font.GetStrikeOut 8921
- 190.56 XL.Font.GetUnderline 8922
- 190.57 XL.Font.SetBold 8923
- 190.58 XL.Font.SetColor 8925
- 190.59 XL.Font.SetItalic 8928
- 190.60 XL.Font.SetName 8929
- 190.61 XL.Font.SetScript 8931
- 190.62 XL.Font.SetSize 8932
- 190.63 XL.Font.SetStrikeOut 8934
- 190.64 XL.Font.SetUnderline 8935
- 190.65 XL.Format.GetAlignH 8936
- 190.66 XL.Format.GetAlignV 8937
- 190.67 XL.Format.GetBorderBottom 8938
- 190.68 XL.Format.GetBorderBottomColor 8939
- 190.69 XL.Format.GetBorderDiagonal 8940
- 190.70 XL.Format.GetBorderDiagonalColor 8941
- 190.71 XL.Format.GetBorderDiagonalStyle 8942
- 190.72 XL.Format.GetBorderLeft 8943

	211
• 190.73 XL.Format.GetBorderLeftColor	8944
• 190.74 XL.Format.GetBorderRight	8945
• 190.75 XL.Format.GetBorderRightColor	8946
• 190.76 XL.Format.GetBorderTop	8947
• 190.77 XL.Format.GetBorderTopColor	8948
• 190.78 XL.Format.GetFillPattern	8949
• 190.79 XL.Format.GetFont	8950
• 190.80 XL.Format.GetHidden	8951
• 190.81 XL.Format.GetIndent	8952
• 190.82 XL.Format.GetLocked	8953
• 190.83 XL.Format.GetNumFormat	8954
• 190.84 XL.Format.GetPatternBackgroundColor	8955
• 190.85 XL.Format.GetPatternForegroundColor	8956
• 190.86 XL.Format.GetRotation	8957
• 190.87 XL.Format.GetShrinkToFit	8958
• 190.88 XL.Format.GetWrap	8959
• 190.89 XL.Format.SetAlignH	8960
• 190.90 XL.Format.SetAlignV	8963
• 190.91 XL.Format.SetBorder	8965
• 190.92 XL.Format.SetBorderBottom	8967
• 190.93 XL.Format.SetBorderBottomColor	8969
• 190.94 XL.Format.SetBorderColor	8970
• 190.95 XL.Format.SetBorderDiagonal	8972
• 190.96 XL.Format.SetBorderDiagonalColor	8974
• 190.97 XL.Format.SetBorderDiagonalStyle	8975
• 190.98 XL.Format.SetBorderLeft	8976
• 190.99 XL.Format.SetBorderLeftColor	8978
• 190.100 XL.Format.SetBorderRight	8979
• 190.101 XL.Format.SetBorderRightColor	8981

- 190.102 XL.Format.SetBorderTop 8982
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.104 XL.Format.SetFillPattern 8985
- 190.105 XL.Format.SetFont 8987
- 190.106 XL.Format.SetHidden 8989
- 190.107 XL.Format.SetIndent 8990
- 190.108 XL.Format.SetLocked 8991
- 190.109 XL.Format.SetNumFormat 8993
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.112 XL.Format.SetRotation 9000
- 190.113 XL.Format.SetShrinkToFit 9001
- 190.114 XL.Format.SetWrap 9002
- 190.115 XL.Initialize 9005
- 190.116 XL.IsInitialized 9008
- 190.117 XL.LoadBook 9010
- 190.118 XL.LoadBookPartially 9013
- 190.119 XL.NewBook 9015
- 190.120 XL.Sheet.AddHyperlink 9017
- 190.121 XL.Sheet.AddIgnoredError 9019
- 190.122 XL.Sheet.AddrToRowCol 9021
- 190.123 XL.Sheet.ApplyFilter 9022
- 190.124 XL.Sheet.AutoFilter 9023
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.126 XL.Sheet.AutoFilter.Clear 9026
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.130 XL.Sheet.AutoFilter.FilterType 9030

	213
• 190.131 XL.Sheet.AutoFilter.GetCustomFilter	9032
• 190.132 XL.Sheet.AutoFilter.GetRef	9033
• 190.133 XL.Sheet.AutoFilter.GetSort	9034
• 190.134 XL.Sheet.AutoFilter.GetSortRange	9035
• 190.135 XL.Sheet.AutoFilter.GetTop10	9036
• 190.136 XL.Sheet.AutoFilter.SetCustomFilter	9037
• 190.137 XL.Sheet.AutoFilter.SetRef	9039
• 190.138 XL.Sheet.AutoFilter.SetSort	9041
• 190.139 XL.Sheet.AutoFilter.SetTop10	9042
• 190.140 XL.Sheet.CellIsDate	9044
• 190.141 XL.Sheet.CellIsFormula	9045
• 190.142 XL.Sheet.CellReadBlank	9046
• 190.143 XL.Sheet.CellReadBoolean	9047
• 190.144 XL.Sheet.CellReadBooleans	9048
• 190.145 XL.Sheet.CellReadComment	9050
• 190.146 XL.Sheet.CellReadComments	9051
• 190.147 XL.Sheet.CellReadDate	9053
• 190.148 XL.Sheet.CellReadDates	9055
• 190.149 XL.Sheet.CellReadFormula	9057
• 190.150 XL.Sheet.CellReadFormulas	9058
• 190.151 XL.Sheet.CellReadNumber	9060
• 190.152 XL.Sheet.CellReadNumbers	9061
• 190.153 XL.Sheet.CellReadText	9063
• 190.154 XL.Sheet.CellReadTexts	9065
• 190.155 XL.Sheet.CellType	9067
• 190.156 XL.Sheet.CellWriteBlank	9068
• 190.157 XL.Sheet.CellWriteBlanks	9070
• 190.158 XL.Sheet.CellWriteBoolean	9072
• 190.159 XL.Sheet.CellWriteBooleans	9074

- 190.160 XL.Sheet.CellWriteComment 9076
- 190.161 XL.Sheet.CellWriteComments 9078
- 190.162 XL.Sheet.CellWriteDate 9080
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.164 XL.Sheet.CellWriteError 9084
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.166 XL.Sheet.CellWriteFormulaBoolean 9089
- 190.167 XL.Sheet.CellWriteFormulaNumber 9091
- 190.168 XL.Sheet.CellWriteFormulaText 9093
- 190.169 XL.Sheet.CellWriteFormulas 9095
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.174 XL.Sheet.Clear 9108
- 190.175 XL.Sheet.ClearPrintArea 9109
- 190.176 XL.Sheet.ClearPrintRepeats 9110
- 190.177 XL.Sheet.CopyCell 9111
- 190.178 XL.Sheet.DelHyperlink 9112
- 190.179 XL.Sheet.DelMergeByIndex 9113
- 190.180 XL.Sheet.DeleteMerge 9114
- 190.181 XL.Sheet.DeleteNamedRange 9115
- 190.182 XL.Sheet.GetCellError 9116
- 190.183 XL.Sheet.GetCellErrors 9117
- 190.184 XL.Sheet.GetCellFormat 9119
- 190.185 XL.Sheet.GetCellFormats 9120
- 190.186 XL.Sheet.GetColHidden 9122
- 190.187 XL.Sheet.GetColWidth 9123
- 190.188 XL.Sheet.GetDisplayGridlines 9124

	215
• 190.189 XL.Sheet.GetFirstCol	9125
• 190.190 XL.Sheet.GetFirstRow	9126
• 190.191 XL.Sheet.GetFooter	9127
• 190.192 XL.Sheet.GetFooterMargin	9128
• 190.193 XL.Sheet.GetGroupSummaryBelow	9129
• 190.194 XL.Sheet.GetGroupSummaryRight	9130
• 190.195 XL.Sheet.GetHCenter	9131
• 190.196 XL.Sheet.GetHeader	9132
• 190.197 XL.Sheet.GetHeaderMargin	9133
• 190.198 XL.Sheet.GetHidden	9134
• 190.199 XL.Sheet.GetHorPageBreak	9135
• 190.200 XL.Sheet.GetHorPageBreakCount	9136
• 190.201 XL.Sheet.GetLandscape	9137
• 190.202 XL.Sheet.GetLastCol	9138
• 190.203 XL.Sheet.GetLastRow	9139
• 190.204 XL.Sheet.GetMarginBottom	9140
• 190.205 XL.Sheet.GetMarginLeft	9141
• 190.206 XL.Sheet.GetMarginRight	9142
• 190.207 XL.Sheet.GetMarginTop	9143
• 190.208 XL.Sheet.GetMerge	9144
• 190.209 XL.Sheet.GetName	9146
• 190.210 XL.Sheet.GetNamedRange	9147
• 190.211 XL.Sheet.GetPaper	9148
• 190.212 XL.Sheet.GetPicture	9150
• 190.213 XL.Sheet.GetPrintArea	9152
• 190.214 XL.Sheet.GetPrintFit	9153
• 190.215 XL.Sheet.GetPrintGridlines	9154
• 190.216 XL.Sheet.GetPrintRepeatCols	9155
• 190.217 XL.Sheet.GetPrintRepeatRows	9156

- 190.218 XL.Sheet.GetPrintRow 9157
- 190.219 XL.Sheet.GetPrintZoom 9158
- 190.220 XL.Sheet.GetProtect 9159
- 190.221 XL.Sheet.GetRowHeight 9160
- 190.222 XL.Sheet.GetRowHidden 9161
- 190.223 XL.Sheet.GetText 9162
- 190.224 XL.Sheet.GetTopLeftView 9163
- 190.225 XL.Sheet.GetVCenter 9164
- 190.226 XL.Sheet.GetVerPageBreak 9165
- 190.227 XL.Sheet.GetVerPageBreakCount 9166
- 190.228 XL.Sheet.GetZoom 9167
- 190.229 XL.Sheet.GroupCols 9168
- 190.230 XL.Sheet.GroupRows 9169
- 190.231 XL.Sheet.Hyperlink 9170
- 190.232 XL.Sheet.HyperlinkSize 9171
- 190.233 XL.Sheet.InsertCol 9172
- 190.234 XL.Sheet.InsertRow 9173
- 190.235 XL.Sheet.Merge 9174
- 190.236 XL.Sheet.MergeSize 9175
- 190.237 XL.Sheet.NamedRange 9176
- 190.238 XL.Sheet.NamedRangeCount 9177
- 190.239 XL.Sheet.PictureCount 9178
- 190.240 XL.Sheet.RemoveCol 9179
- 190.241 XL.Sheet.RemoveComment 9180
- 190.242 XL.Sheet.RemoveComments 9181
- 190.243 XL.Sheet.RemoveFilter 9183
- 190.244 XL.Sheet.RemoveRow 9184
- 190.245 XL.Sheet.RightToLeft 9186
- 190.246 XL.Sheet.RowColToAddr 9187

	217
• 190.247 XL.Sheet.SetAutoFitArea	9189
• 190.248 XL.Sheet.SetCellFormat	9190
• 190.249 XL.Sheet.SetCellFormats	9192
• 190.250 XL.Sheet.SetCol	9194
• 190.251 XL.Sheet.SetColHidden	9197
• 190.252 XL.Sheet.SetColumn	9198
• 190.253 XL.Sheet.SetDisplayGridlines	9200
• 190.254 XL.Sheet.SetFooter	9201
• 190.255 XL.Sheet.SetGroupSummaryBelow	9203
• 190.256 XL.Sheet.SetGroupSummaryRight	9204
• 190.257 XL.Sheet.SetHCenter	9205
• 190.258 XL.Sheet.SetHeader	9206
• 190.259 XL.Sheet.SetHorPageBreak	9208
• 190.260 XL.Sheet.SetLandscape	9209
• 190.261 XL.Sheet.SetMarginBottom	9210
• 190.262 XL.Sheet.SetMarginLeft	9211
• 190.263 XL.Sheet.SetMarginRight	9212
• 190.264 XL.Sheet.SetMarginTop	9213
• 190.265 XL.Sheet.SetMerge	9214
• 190.266 XL.Sheet.SetName	9216
• 190.267 XL.Sheet.SetNamedRange	9217
• 190.268 XL.Sheet.SetPaper	9219
• 190.269 XL.Sheet.SetPictureWithScale	9220
• 190.270 XL.Sheet.SetPictureWithSize	9222
• 190.271 XL.Sheet.SetPrintArea	9225
• 190.272 XL.Sheet.SetPrintFit	9227
• 190.273 XL.Sheet.SetPrintGridlines	9228
• 190.274 XL.Sheet.SetPrintRepeatCols	9229
• 190.275 XL.Sheet.SetPrintRepeatRows	9230

- 190.276 XL.Sheet.SetPrintRow 9231
- 190.277 XL.Sheet.SetPrintZoom 9232
- 190.278 XL.Sheet.SetProtect 9233
- 190.279 XL.Sheet.SetProtectEx 9234
- 190.280 XL.Sheet.SetRightToLeft 9236
- 190.281 XL.Sheet.SetRow 9237
- 190.282 XL.Sheet.SetRowHidden 9239
- 190.283 XL.Sheet.SetTabColor 9240
- 190.284 XL.Sheet.SetTabColorRGB 9241
- 190.285 XL.Sheet.SetTopLeftView 9242
- 190.286 XL.Sheet.SetVCenter 9243
- 190.287 XL.Sheet.SetVerPageBreak 9244
- 190.288 XL.Sheet.SetZoom 9245
- 190.289 XL.Sheet.Split 9246
- 190.290 XL.Sheet.SplitInfo 9247
- 190.291 XL.Sheet.Table 9248
- 190.292 XL.Sheet.TableSize 9249
- 190.293 XL.Sheet.Type 9250
- 190.294 XL.Uninitialize 9251
- 191.2 XML.ApplyStylesheet 9256
- 191.3 XML.Canonical 9258
- 191.4 XML.ClearVariables 9260
- 191.5 XML.Colorize 9261
- 191.6 XML.DeletePath 9263
- 191.7 XML.ExtractText 9265
- 191.8 XML.Format 9267
- 191.9 XML.GetAttribute 9269
- 191.10 XML.GetPathValue 9270
- 191.11 XML.HasAttribute 9272

	219
• 191.12 XML.Import	9273
• 191.13 XML.Import.Cancel	9277
• 191.14 XML.Import.ErrorCount	9278
• 191.15 XML.Import.Errors	9279
• 191.16 XML.Import.SetBaseFields	9280
• 191.17 XML.Import.SetExtraField	9281
• 191.18 XML.Import.Status	9282
• 191.19 XML.Import.TODO	9283
• 191.20 XML.Import.Total	9284
• 191.21 XML.Import.Work	9285
• 191.22 XML.ListAttributes	9287
• 191.23 XML.NodeCount	9288
• 191.24 XML.NodeNames	9289
• 191.25 XML.Parse	9291
• 191.26 XML.Query	9293
• 191.27 XML.ReadContainer	9296
• 191.28 XML.ReadFile	9297
• 191.29 XML.Release	9299
• 191.30 XML.ReleaseAll	9300
• 191.31 XML.SetPathValue	9301
• 191.32 XML.SetPathXML	9303
• 191.33 XML.SetVariables	9305
• 191.34 XML.SubTree	9307
• 191.35 XML.ToJSON	9310
• 191.36 XML.Validate	9311
• 191.37 XML.ValidateFile	9313
• 53.33 ZipFile.CRCFile	1509
• 53.34 ZipFile.Close	1510
• 53.35 ZipFile.CompressFiles	1511

- 53.36 ZipFile.CreateFile 1513
- 53.37 ZipFile.Open 1515
- 53.38 ZipFile.SetCompressionLevel 1517
- 53.39 ZipFile.UsePassword 1518
- 53.40 ZipFile.WriteContainer 1520
- 53.41 ZipFile.WriteFile 1521
- 53.42 ZipFile.WriteHex 1523
- 53.43 ZipFile.WriteText 1524
- 94.1 iOSApp.GetDidBecomeActiveEvaluate 5113
- 94.2 iOSApp.GetDidEnterBackgroundEvaluate 5114
- 94.3 iOSApp.GetDidReceiveMemoryWarningEvaluate 5115
- 94.4 iOSApp.GetIdleTimerDisabled 5116
- 94.5 iOSApp.GetSignificantTimeChangeEvaluate 5117
- 94.6 iOSApp.GetWillEnterForegroundEvaluate 5118
- 94.7 iOSApp.GetWillResignActiveEvaluate 5119
- 94.8 iOSApp.SetDidBecomeActiveEvaluate 5120
- 94.9 iOSApp.SetDidBecomeActiveScript 5121
- 94.10 iOSApp.SetDidEnterBackgroundEvaluate 5122
- 94.11 iOSApp.SetDidEnterBackgroundScript 5123
- 94.12 iOSApp.SetDidReceiveMemoryWarningEvaluate 5124
- 94.13 iOSApp.SetDidReceiveMemoryWarningScript 5125
- 94.14 iOSApp.SetIdleTimerDisabled 5126
- 94.15 iOSApp.SetSignificantTimeChangeEvaluate 5127
- 94.16 iOSApp.SetSignificantTimeChangeScript 5128
- 94.17 iOSApp.SetWillEnterForegroundEvaluate 5129
- 94.18 iOSApp.SetWillEnterForegroundScript 5130
- 94.19 iOSApp.SetWillResignActiveEvaluate 5131
- 94.20 iOSApp.SetWillResignActiveScript 5132
- 95.1 iOSDevice.BatteryLevel 5133

	221
• 95.2 <code>iOSDevice.BatteryState</code>	5134
• 95.3 <code>iOSDevice.IdentifierForVendor</code>	5135
• 95.4 <code>iOSDevice.IsBatteryMonitoringEnabled</code>	5136
• 95.5 <code>iOSDevice.LocalizedModel</code>	5137
• 95.6 <code>iOSDevice.Model</code>	5138
• 95.7 <code>iOSDevice.Name</code>	5139
• 95.8 <code>iOSDevice.Orientation</code>	5140
• 95.9 <code>iOSDevice.OrientationIsLandscape</code>	5141
• 95.10 <code>iOSDevice.OrientationIsPortrait</code>	5142
• 95.11 <code>iOSDevice.SetBatteryMonitoringEnabled</code>	5143
• 95.12 <code>iOSDevice.SystemName</code>	5144
• 95.13 <code>iOSDevice.SystemVersion</code>	5145
• 95.14 <code>iOSDevice.UserInterfaceIdiom</code>	5146
• 96.1 <code>iOSKeyboard.GetDidHideEvaluate</code>	5147
• 96.2 <code>iOSKeyboard.GetDidShowEvaluate</code>	5148
• 96.3 <code>iOSKeyboard.GetWillHideEvaluate</code>	5149
• 96.4 <code>iOSKeyboard.GetWillShowEvaluate</code>	5150
• 96.5 <code>iOSKeyboard.SetDidHideEvaluate</code>	5151
• 96.6 <code>iOSKeyboard.SetDidShowEvaluate</code>	5152
• 96.7 <code>iOSKeyboard.SetWillHideEvaluate</code>	5153
• 96.8 <code>iOSKeyboard.SetWillShowEvaluate</code>	5154
• 96.9 <code>iOSKeyboard.State</code>	5155

6044 functions.

Chapter 4

Functions compatible with Mac OS X

• 38.1 AVAsset.AvailableMetadataFormats	987
• 38.2 AVAsset.Duration	989
• 38.3 AVAsset.Framerate	990
• 38.4 AVAsset.HasProtectedContent	991
• 38.5 AVAsset.Image	992
• 38.6 AVAsset.ImageActualTime	994
• 38.7 AVAsset.IsComposable	995
• 38.8 AVAsset.IsExportable	996
• 38.9 AVAsset.IsPlayable	997
• 38.10 AVAsset.IsReadable	998
• 38.11 AVAsset.Loaded	999
• 38.12 AVAsset.Lyrics	1000
• 38.13 AVAsset.Metadata	1001
• 38.14 AVAsset.MetadataKeys	1002
• 38.15 AVAsset.NaturalHeight	1004
• 38.16 AVAsset.NaturalWidth	1005
• 38.17 AVAsset.OpenContainer	1006
• 38.18 AVAsset.OpenFile	1008
• 38.19 AVAsset.OpenURL	1010

- 38.20 AVAsset.PreferredRate 1012
- 38.21 AVAsset.PreferredVolume 1013
- 38.22 AVAsset.Release 1014
- 38.23 AVAsset.RequestImageTimePrecision 1016
- 38.24 AVAsset.TimeCodes 1018
- 38.25 AVAsset.TrackCount 1019
- 38.26 AVAsset.TrackInfo 1020
- 38.27 AVAsset.URL 1024
- 38.28 AVAsset.WaitForLoaded 1025
- 39.1 AVExport.AllExportPresets 1027
- 39.2 AVExport.CancelExport 1029
- 39.3 AVExport.Duration 1030
- 39.4 AVExport.Error 1031
- 39.5 AVExport.EstimatedOutputFileLength 1032
- 39.6 AVExport.ExportAsynchronously 1033
- 39.7 AVExport.ExportSession 1035
- 39.8 AVExport.ExportSessionMerge 1038
- 39.9 AVExport.GetOutputFileType 1040
- 39.10 AVExport.GetOutputPath 1041
- 39.11 AVExport.GetOutputURL 1042
- 39.12 AVExport.GetShouldOptimizeForNetworkUse 1043
- 39.13 AVExport.GetTimeRange 1044
- 39.14 AVExport.OutputFileExtension 1045
- 39.15 AVExport.PresetName 1046
- 39.16 AVExport.Progress 1047
- 39.17 AVExport.Release 1048
- 39.18 AVExport.SetOutputFileType 1049
- 39.19 AVExport.SetOutputPath 1050
- 39.20 AVExport.SetOutputURL 1052

	225
• 39.21 AVExport.SetShouldOptimizeForNetworkUse	1053
• 39.22 AVExport.SetTimeRange	1054
• 39.23 AVExport.Status	1055
• 39.24 AVExport.SupportedFileTypes	1056
• 40.1 AVPlayer.FindPlayers	1057
• 40.2 AVPlayer.GetAsset	1059
• 40.3 AVPlayer.GetDuration	1060
• 40.4 AVPlayer.GetFinishedEvaluate	1061
• 40.5 AVPlayer.GetFinishedFileName	1062
• 40.6 AVPlayer.GetFinishedScriptName	1063
• 40.7 AVPlayer.GetMuted	1064
• 40.8 AVPlayer.GetProgressEvaluate	1065
• 40.9 AVPlayer.GetProgressInterval	1066
• 40.10 AVPlayer.GetRate	1067
• 40.11 AVPlayer.GetTime	1068
• 40.12 AVPlayer.GetVolume	1069
• 40.13 AVPlayer.OpenContainer	1070
• 40.14 AVPlayer.OpenFile	1072
• 40.15 AVPlayer.OpenURL	1074
• 40.16 AVPlayer.Pause	1075
• 40.17 AVPlayer.Play	1076
• 40.18 AVPlayer.Release	1078
• 40.19 AVPlayer.ReleaseAll	1079
• 40.20 AVPlayer.SetFinishedEvaluate	1080
• 40.21 AVPlayer.SetFinishedScript	1081
• 40.22 AVPlayer.SetMuted	1082
• 40.23 AVPlayer.SetProgressEvaluate	1083
• 40.24 AVPlayer.SetProgressInterval	1085
• 40.25 AVPlayer.SetRate	1086

- 40.26 AVPlayer.SetTime 1087
- 40.27 AVPlayer.SetVolume 1088
- 41.1 AVRecorder.AddPreviewToWindow 1089
- 41.2 AVRecorder.AudioDeviceCount 1091
- 41.3 AVRecorder.AudioDeviceInfo 1092
- 41.4 AVRecorder.AuthorizationStatusForMediaType 1094
- 41.5 AVRecorder.CaptureStillPhoto 1095
- 41.6 AVRecorder.ClosePreview 1097
- 41.7 AVRecorder.CurrentQRCode 1098
- 41.10 AVRecorder.GetAudioDevice 1101
- 41.11 AVRecorder.GetAutomaticallyAdjustsVideoMirroring 1102
- 41.13 AVRecorder.GetFilePath 1104
- 41.14 AVRecorder.GetVideoDevice 1105
- 41.15 AVRecorder.GetVideoMirrored 1106
- 41.16 AVRecorder.HasQRCode 1107
- 41.17 AVRecorder.Init 1108
- 41.18 AVRecorder.IsRecording 1111
- 41.19 AVRecorder.IsVideoMirroringSupported 1112
- 41.20 AVRecorder.Release 1113
- 41.21 AVRecorder.RequestAccessForMediaType 1114
- 41.22 AVRecorder.SetAudioDevice 1115
- 41.23 AVRecorder.SetAutomaticallyAdjustsVideoMirroring 1116
- 41.25 AVRecorder.SetFilePath 1118
- 41.26 AVRecorder.SetScreenInput 1119
- 41.27 AVRecorder.SetVideoDevice 1121
- 41.28 AVRecorder.SetVideoMirrored 1122
- 41.30 AVRecorder.StartPreview 1125
- 41.31 AVRecorder.StartQRCodeDetection 1126
- 41.32 AVRecorder.StartRecording 1128

	227
• 41.33 AVRecorder.StopQRCodeDetection	1129
• 41.34 AVRecorder.StopRecording	1130
• 41.35 AVRecorder.VideoDeviceCount	1131
• 41.36 AVRecorder.VideoDeviceInfo	1132
• 33.1 Addressbook.Account.Name	799
• 33.2 Addressbook.Account.Type	801
• 33.3 Addressbook.Account.URL	802
• 33.4 Addressbook.Account.isMainAccount	803
• 33.5 Addressbook.LocalizedPropertyOrLabel	804
• 33.6 Addressbook.NewGroup	805
• 33.7 Addressbook.NewPerson	806
• 33.8 Addressbook.Notification.Clear	808
• 33.9 Addressbook.Notification.Evaluate	809
• 33.10 Addressbook.Notification.GetChangedExternally	810
• 33.11 Addressbook.Notification.GetDeletedRecords	811
• 33.12 Addressbook.Notification.GetInsertedRecords	812
• 33.13 Addressbook.Notification.GetProcessID	813
• 33.14 Addressbook.Notification.GetProcessName	814
• 33.15 Addressbook.Notification.GetUpdatedRecords	815
• 33.16 Addressbook.Notification.GetUserUID	816
• 33.17 Addressbook.Notification.Set	817
• 33.18 Addressbook.Record.Account	818
• 33.19 Addressbook.addRecord	819
• 33.20 Addressbook.allAccounts	822
• 33.21 Addressbook.defaultAccount	823
• 33.22 Addressbook.enabledAccounts	824
• 33.23 Addressbook.formattedAddress	825
• 33.24 Addressbook.group.addMember	826
• 33.25 Addressbook.group.addSubgroup	827

- 33.26 Addressbook.group.members 828
- 33.27 Addressbook.group.parentGroups 829
- 33.28 Addressbook.group.removeMember 830
- 33.29 Addressbook.group.removeSubgroup 831
- 33.30 Addressbook.group.subgroups 832
- 33.31 Addressbook.groups 833
- 33.32 Addressbook.hasUnsavedChanges 834
- 33.33 Addressbook.me 835
- 33.34 Addressbook.multivalued.New 837
- 33.35 Addressbook.multivalued.addAddress 839
- 33.36 Addressbook.multivalued.addValue 841
- 33.37 Addressbook.multivalued.count 844
- 33.38 Addressbook.multivalued.identifierAtIndex 846
- 33.39 Addressbook.multivalued.identifiers 847
- 33.40 Addressbook.multivalued.indexForIdentifier 848
- 33.41 Addressbook.multivalued.indexForLabel 849
- 33.42 Addressbook.multivalued.insertValue 850
- 33.43 Addressbook.multivalued.labelAtIndex 851
- 33.44 Addressbook.multivalued.labelForIdentifier 853
- 33.45 Addressbook.multivalued.labels 854
- 33.46 Addressbook.multivalued.primaryIdentifier 855
- 33.47 Addressbook.multivalued.removeValueAndLabelAtIndex 856
- 33.48 Addressbook.multivalued.replaceLabelAtIndex 857
- 33.49 Addressbook.multivalued.replaceValueAtIndex 858
- 33.50 Addressbook.multivalued.setPrimaryIdentifier 860
- 33.51 Addressbook.multivalued.valueAtIndex 862
- 33.52 Addressbook.multivalued.valueForIdentifier 864
- 33.53 Addressbook.multivalued.valueForLabel 865
- 33.54 Addressbook.multivalued.values 866

	229
• 33.55 Addressbook.people	867
• 33.56 Addressbook.persistentAccounts	868
• 33.57 Addressbook.person.EditInAddressbook	869
• 33.58 Addressbook.person.ExternalUID	870
• 33.59 Addressbook.person.GetImage	871
• 33.60 Addressbook.person.SetBirthdayComponents	872
• 33.61 Addressbook.person.SetImage	873
• 33.62 Addressbook.person.ShowInAddressbook	874
• 33.63 Addressbook.person.linkedPeople	875
• 33.64 Addressbook.person.parentGroups	876
• 33.65 Addressbook.person.vCardRepresentation	877
• 33.66 Addressbook.personFromVCardRepresentation	878
• 33.67 Addressbook.personFromVCardTextRepresentation	879
• 33.68 Addressbook.record.SetValueForProperty	880
• 33.69 Addressbook.record.UniqueID	884
• 33.70 Addressbook.record.displayName	885
• 33.71 Addressbook.record.isReadOnly	887
• 33.72 Addressbook.record.removeValueForProperty	888
• 33.73 Addressbook.record.valueForProperty	889
• 33.74 Addressbook.recordsMatchingSearchElement	893
• 33.75 Addressbook.removeRecord	895
• 33.76 Addressbook.save	896
• 33.77 Addressbook.searchElementForConjunction	899
• 33.78 Addressbook.searchElementForProperty	900
• 33.79 Addressbook.searchGroupsWithName	902
• 33.80 Addressbook.searchPeopleWithCreationDate	903
• 33.81 Addressbook.searchPeopleWithEmail	904
• 33.82 Addressbook.searchPeopleWithModificationDate	905
• 33.83 Addressbook.searchPeopleWithName	906

- 33.84 Addressbook.searchPersonWithExternalUID 907
- 33.85 Addressbook.setMe 908
- 34.1 App.CancelUserAttentionRequest 909
- 168.1 App.ClearTouchBar 7959
- 34.4 App.EffectiveUserID 912
- 34.5 App.GetDockBadgeLabel 913
- 34.6 App.GetDockIcon 914
- 34.7 App.GetProcessName 915
- 34.8 App.GetProcessPath 916
- 34.9 App.MemoryUsed 917
- 34.10 App.OpenFile 918
- 34.11 App.ProcessID 919
- 34.12 App.RequestUserAttention 920
- 34.13 App.SetDockBadgeLabel 921
- 34.14 App.SetDockIcon 922
- 34.15 App.SetProcessName 923
- 34.16 App.UserID 924
- 35.1 AppleScript.Close 925
- 35.2 AppleScript.Compile 927
- 35.3 AppleScript.Execute 928
- 35.4 AppleScript.GetPropertyName 929
- 35.5 AppleScript.GetPropertyValue 931
- 35.6 AppleScript.LastError 932
- 35.7 AppleScript.LastErrorMessage 933
- 35.8 AppleScript.PropertyCount 934
- 35.9 AppleScript.Run 935
- 35.10 AppleScript.SetPropertyValue 940
- 35.11 Applescript.DeterminePermissionToAutomateTarget 941
- 36.1 Archive.Compress 943

	231
• 36.2 Archive.Content	946
• 36.3 Archive.Extract	948
• 36.4 Archive.FileList	949
• 36.5 Archive.LibVersion	950
• 36.6 Archive.LibVersionDetails	951
• 36.7 Archive.SupportedFormats	952
• 36.8 Archive.Verify	953
• 37.1 Audit.Backup	955
• 37.2 Audit.Backup2	957
• 37.3 Audit.Changed	958
• 37.4 Audit.Changed2	962
• 37.5 Audit.ClearCaches	964
• 37.6 Audit.Delete	965
• 37.7 Audit.Delete2	967
• 37.8 Audit.FieldIDForName	968
• 37.9 Audit.FieldNameForID	969
• 37.10 Audit.GetEnabled	970
• 37.11 Audit.GetIgnoreCalculations	971
• 37.12 Audit.GetIgnoreSummaryFields	972
• 37.13 Audit.GetIgnoreUnderscoreFieldNames	973
• 37.14 Audit.GetIgnoredFieldNames	974
• 37.15 Audit.GetLogAccess	975
• 37.16 Audit.GetUUIDField	976
• 37.17 Audit.SetEnabled	977
• 37.18 Audit.SetIgnoreCalculations	978
• 37.19 Audit.SetIgnoreSummaryFields	979
• 37.20 Audit.SetIgnoreUnderscoreFieldNames	980
• 37.21 Audit.SetIgnoredFieldNames	981
• 37.22 Audit.SetLogAccess	983

- 37.23 Audit.SetUUIDField 984
- 37.24 Audit.TableIDForName 985
- 37.25 Audit.TableNameForID 986
- 42.1 Backdrop.Close 1135
- 42.2 Backdrop.Install 1136
- 43.1 Barcode.Detect 1137
- 43.2 Barcode.DrawBarcode 1140
- 43.3 Barcode.EANChecksum 1142
- 43.4 Barcode.Generate 1143
- 43.5 Barcode.GenerateJSON 1149
- 43.6 Barcode.GetInputMode 1151
- 43.7 Barcode.GetOption 1152
- 43.8 Barcode.GetPrimary 1153
- 43.9 Barcode.ISBNChecksum 1154
- 43.10 Barcode.LibVersion 1156
- 43.11 Barcode.SetInputMode 1157
- 43.12 Barcode.SetOption 1159
- 43.13 Barcode.SetOptions 1161
- 43.14 Barcode.SetPrimary 1164
- 43.15 Barcode.UPCChecksum 1166
- 43.16 Barcode.WriteFile 1167
- 44.1 BinaryFile.Append 1171
- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.4 BinaryFile.EOF 1176
- 44.5 BinaryFile.Length 1177
- 44.6 BinaryFile.Open 1178
- 44.7 BinaryFile.Position 1180
- 44.8 BinaryFile.ReadByte 1181

	233
• 44.9 BinaryFile.ReadContainer	1182
• 44.10 BinaryFile.ReadFloat	1183
• 44.11 BinaryFile.ReadHex	1184
• 44.12 BinaryFile.ReadInt	1186
• 44.13 BinaryFile.ReadPDF	1187
• 44.14 BinaryFile.ReadText	1189
• 44.15 BinaryFile.Seek	1191
• 44.16 BinaryFile.WriteByte	1192
• 44.17 BinaryFile.WriteContainer	1193
• 44.18 BinaryFile.WriteFloat	1194
• 44.19 BinaryFile.WriteHex	1195
• 44.20 BinaryFile.WriteInt	1197
• 44.21 BinaryFile.WriteText	1199
• 46.1 Bonjour.Browse	1223
• 46.2 Bonjour.JSON	1225
• 46.3 Bonjour.Register	1227
• 46.4 Bonjour.RegisteredName	1228
• 49.1 CGImageSource.ClearProperties	1383
• 49.2 CGImageSource.Count	1385
• 49.3 CGImageSource.CreateWithData	1386
• 49.4 CGImageSource.CreateWithPath	1387
• 49.5 CGImageSource.CreateWithURL	1389
• 49.6 CGImageSource.Export	1390
• 49.7 CGImageSource.FileName	1392
• 49.8 CGImageSource.HasProperty	1393
• 49.9 CGImageSource.ImageAtIndex	1394
• 49.10 CGImageSource.Keys	1396
• 49.11 CGImageSource.Properties	1398
• 49.12 CGImageSource.Property	1401

- 49.13 `CGImageSource.Release` 1403
- 49.14 `CGImageSource.SetProperty` 1405
- 49.15 `CGImageSource.Status` 1407
- 49.16 `CGImageSource.SupportedExportTypes` 1409
- 49.17 `CGImageSource.SupportedTypes` 1410
- 49.18 `CGImageSource.ThumbnailAtIndex` 1411
- 49.19 `CGImageSource.Type` 1413
- 175.1 `CGPSConverter.Convert` 8229
- 50.1 `CLGeocoder.Cancel` 1415
- 50.2 `CLGeocoder.Cancelled` 1417
- 50.3 `CLGeocoder.Close` 1418
- 50.4 `CLGeocoder.Distance` 1419
- 50.5 `CLGeocoder.Done` 1421
- 50.6 `CLGeocoder.Error` 1422
- 50.7 `CLGeocoder.ErrorMessage` 1423
- 50.8 `CLGeocoder.GeocodeAddressString` 1424
- 50.9 `CLGeocoder.JSON` 1426
- 50.10 `CLGeocoder.PlacemarkCount` 1428
- 50.11 `CLGeocoder.PlacemarkValue` 1429
- 50.12 `CLGeocoder.ReverseGeocodeLocation` 1432
- 54.1 `CNContact.AddEmailAddress` 1527
- 54.2 `CNContact.AddInstantMessage` 1529
- 54.3 `CNContact.AddInstantMessageJSON` 1530
- 54.4 `CNContact.AddPhoneNumber` 1531
- 54.5 `CNContact.AddPostalAddress` 1532
- 54.6 `CNContact.AddPostalAddressJSON` 1534
- 54.7 `CNContact.AddRelation` 1535
- 54.8 `CNContact.AddSocialProfile` 1536
- 54.9 `CNContact.AddSocialProfileJSON` 1538

	235
• 54.10 CNContact.AddURLAddress	1539
• 54.11 CNContact.DeleteValue	1540
• 54.12 CNContact.EditInAddressbook	1542
• 54.13 CNContact.IsUnifiedWithContact	1543
• 54.14 CNContact.JSON	1544
• 54.15 CNContact.MailingAddress	1546
• 54.16 CNContact.Name	1547
• 54.17 CNContact.SetValue	1548
• 54.19 CNContact.ShowInAddressbook	1552
• 54.20 CNContact.UnifiedContacts	1553
• 54.21 CNContact.Value	1554
• 54.22 CNContactPicker.Close	1557
• 54.23 CNContactPicker.Current	1558
• 54.24 CNContactPicker.SetTrigger	1559
• 54.25 CNContactPicker.Show	1560
• 54.26 CNContactStore.AddContact	1562
• 54.27 CNContactStore.AddGroup	1564
• 54.28 CNContactStore.AddMember	1566
• 54.29 CNContactStore.AddSubgroup	1567
• 54.30 CNContactStore.AuthorizationError	1568
• 54.31 CNContactStore.AuthorizationStatus	1569
• 54.32 CNContactStore.Contacts	1570
• 54.33 CNContactStore.ContactsInContainer	1571
• 54.34 CNContactStore.ContactsInGroup	1572
• 54.35 CNContactStore.ContactsMatchingName	1573
• 54.36 CNContactStore.ContactsWithData	1574
• 54.37 CNContactStore.ContainerForContact	1575
• 54.38 CNContactStore.ContainerForGroup	1576
• 54.39 CNContactStore.Containers	1577

- 54.40 CNContactStore.Country 1578
- 54.41 CNContactStore.DataWithContacts 1579
- 54.42 CNContactStore.DefaultContainerIdentifier 1580
- 54.43 CNContactStore.DeleteContact 1581
- 54.44 CNContactStore.DeleteGroup 1582
- 54.45 CNContactStore.GroupHierarchy 1583
- 54.46 CNContactStore.Groups 1585
- 54.47 CNContactStore.GroupsByName 1587
- 54.48 CNContactStore.GroupsForContact 1588
- 54.49 CNContactStore.GroupsInContainer 1589
- 54.50 CNContactStore.NewContact 1590
- 54.51 CNContactStore.RemoveMember 1592
- 54.52 CNContactStore.RemoveSubgroup 1593
- 54.53 CNContactStore.RenameGroup 1594
- 54.54 CNContactStore.RequestAccess 1595
- 54.55 CNContactStore.SetChangeScript 1597
- 54.56 CNContactStore.Subgroups 1598
- 54.57 CNContactStore.UnifiedMeContact 1599
- 54.58 CNContactStore.UpdateContact 1601
- 54.59 CNContainer.Name 1602
- 54.60 CNContainer.Type 1603
- 54.61 CNGroup.Name 1604
- 60.1 CUPS.CancelJob 1733
- 60.2 CUPS.GetDefaultPrinterName 1735
- 60.3 CUPS.GetJobCompletionTime 1736
- 60.4 CUPS.GetJobCreationTime 1737
- 60.5 CUPS.GetJobFormat 1738
- 60.6 CUPS.GetJobID 1739
- 60.7 CUPS.GetJobIndex 1740

	237
• 60.8 CUPS.GetJobPrinter	1741
• 60.9 CUPS.GetJobPriority	1742
• 60.10 CUPS.GetJobProcessingTime	1743
• 60.11 CUPS.GetJobSize	1744
• 60.12 CUPS.GetJobState	1745
• 60.13 CUPS.GetJobTitle	1746
• 60.14 CUPS.GetJobUser	1747
• 60.15 CUPS.GetJobsCount	1748
• 60.16 CUPS.GetPrinterCount	1750
• 60.17 CUPS.GetPrinterDefault	1751
• 60.18 CUPS.GetPrinterName	1752
• 60.19 CUPS.LastErrorCode	1753
• 60.20 CUPS.LastErrorMessage	1754
• 60.21 CUPS.PrintData	1755
• 60.22 CUPS.PrintDataEncoding	1757
• 60.23 CUPS.PrintFile	1759
• 61.1 CURL.AddInputFile	1761
• 61.2 CURL.AddInputGIF	1763
• 61.3 CURL.AddInputJPEG	1764
• 61.4 CURL.AddInputPDF	1765
• 61.5 CURL.AddInputPNG	1766
• 61.6 CURL.AddInputText	1768
• 61.7 CURL.Cancel	1770
• 61.8 CURL.Check	1771
• 61.9 CURL.Cleanup	1772
• 61.10 CURL.CloseDebugFile	1775
• 61.11 CURL.CloseHeaderFile	1776
• 61.12 CURL.CloseInputFile	1777
• 61.13 CURL.CloseOutputFile	1778

- 61.14 `CURL.CreateDebugOutputFile` 1780
- 61.15 `CURL.CreateHeaderOutputFile` 1782
- 61.16 `CURL.CreateOutputFile` 1784
- 61.17 `CURL.ErrorCode` 1788
- 61.18 `CURL.ErrorMessage` 1791
- 61.19 `CURL.Features` 1792
- 61.20 `CURL.FileInfos` 1793
- 61.21 `CURL.FormAddKeyContainer` 1796
- 61.22 `CURL.FormAddKeyContainerContentType` 1798
- 61.23 `CURL.FormAddKeyFile` 1800
- 61.24 `CURL.FormAddKeyFileContentType` 1802
- 61.25 `CURL.FormAddKeyText` 1804
- 61.26 `CURL.FormAddKeyTextContentType` 1806
- 61.27 `CURL.FormAddKeyValue` 1808
- 61.28 `CURL.FormAddKeyValueContentType` 1810
- 61.29 `CURL.FormClear` 1812
- 61.30 `CURL.FormFinish` 1813
- 61.31 `CURL.GetActiveSocket` 1815
- 61.32 `CURL.GetAppConnectTime` 1816
- 61.33 `CURL.GetBatchCurrentFileName` 1817
- 61.34 `CURL.GetBatchCurrentFilePath` 1818
- 61.35 `CURL.GetBatchDestinationPath` 1819
- 61.36 `CURL.GetBatchFileNames` 1820
- 61.37 `CURL.GetCertInfo` 1821
- 61.38 `CURL.GetConditionUnmet` 1823
- 61.39 `CURL.GetConnectTime` 1824
- 61.40 `CURL.GetContentLengthDownload` 1825
- 61.41 `CURL.GetContentLengthUpload` 1826
- 61.42 `CURL.GetContentType` 1827

	239
• 61.43 CURL.GetCookieList	1828
• 61.44 CURL.GetDebugAsText	1831
• 61.45 CURL.GetDebugLength	1834
• 61.46 CURL.GetDebugWithData	1835
• 61.47 CURL.GetDebugWithProgress	1836
• 61.48 CURL.GetDebugWithTime	1837
• 61.49 CURL.GetEffectiveURL	1838
• 61.50 CURL.GetFTPEntryPath	1840
• 61.51 CURL.GetFileTime	1841
• 61.52 CURL.GetFinishedEvaluate	1842
• 61.53 CURL.GetFinishedFileName	1843
• 61.54 CURL.GetFinishedScriptName	1844
• 61.55 CURL.GetFormData	1845
• 61.56 CURL.GetHTTPAuthAvail	1847
• 61.57 CURL.GetHTTPConnectCode	1848
• 61.58 CURL.GetHTTPVersion	1849
• 61.59 CURL.GetHeaderAsText	1850
• 61.60 CURL.GetHeaderLength	1852
• 61.61 CURL.GetHeaderSize	1853
• 61.62 CURL.GetInputAsText	1854
• 61.63 CURL.GetInputLength	1856
• 61.64 CURL.GetLastSocket	1857
• 61.65 CURL.GetLocalIP	1858
• 61.66 CURL.GetLocalPort	1859
• 61.67 CURL.GetMultiOptionChunkLengthPenaltySize	1860
• 61.68 CURL.GetMultiOptionContentLengthPenaltySize	1861
• 61.69 CURL.GetMultiOptionMaxConcurrentStreams	1862
• 61.70 CURL.GetMultiOptionMaxConnects	1863
• 61.71 CURL.GetMultiOptionMaxHostConnections	1864

- 61.72 `CURL.GetMultiOptionMaxPipelineLength` 1865
- 61.73 `CURL.GetMultiOptionMaxTotalConnections` 1866
- 61.74 `CURL.GetMultiOptionPipelining` 1867
- 61.75 `CURL.GetMultiRunningTransfers` 1868
- 61.76 `CURL.GetNameLookupTime` 1869
- 61.77 `CURL.GetNumConnects` 1870
- 61.78 `CURL.GetOSErrNo` 1871
- 61.79 `CURL.GetOptionConnectTo` 1872
- 61.80 `CURL.GetOptionHTTP200Aliases` 1873
- 61.81 `CURL.GetOptionHTTPHeader` 1874
- 61.82 `CURL.GetOptionMailRecipients` 1875
- 61.83 `CURL.GetOptionPostQuote` 1876
- 61.84 `CURL.GetOptionPreQuote` 1877
- 61.85 `CURL.GetOptionProxyHeader` 1878
- 61.86 `CURL.GetOptionQuote` 1879
- 61.87 `CURL.GetOptionResolve` 1880
- 61.88 `CURL.GetOptionTelnetOptions` 1881
- 61.89 `CURL.GetPreTransferTime` 1882
- 61.90 `CURL.GetPrimaryIP` 1883
- 61.91 `CURL.GetPrimaryPort` 1884
- 61.92 `CURL.GetProgressCurrentDownload` 1885
- 61.93 `CURL.GetProgressCurrentUpload` 1886
- 61.94 `CURL.GetProgressEvaluate` 1887
- 61.95 `CURL.GetProgressFileName` 1888
- 61.96 `CURL.GetProgressPercent` 1889
- 61.97 `CURL.GetProgressScriptName` 1890
- 61.98 `CURL.GetProgressTotalDownload` 1891
- 61.99 `CURL.GetProgressTotalUpload` 1892
- 61.100 `CURL.GetProtocol` 1893

	241
• 61.101 CURL.GetProxyAuthAvail	1894
• 61.102 CURL.GetProxySSLVerifyResult	1895
• 61.103 CURL.GetRTSPCSEQRecv	1896
• 61.104 CURL.GetRTSPClientCSEQ	1897
• 61.105 CURL.GetRTSPServerCSEQ	1898
• 61.106 CURL.GetRTSPSessionID	1899
• 61.107 CURL.GetRedirectCount	1900
• 61.108 CURL.GetRedirectTime	1901
• 61.109 CURL.GetRedirectURL	1902
• 61.110 CURL.GetRequestSize	1904
• 61.111 CURL.GetResponseCode	1905
• 61.112 CURL.GetResultAsContainer	1907
• 61.113 CURL.GetResultAsData	1910
• 61.114 CURL.GetResultAsEMailList	1912
• 61.115 CURL.GetResultAsEmail	1914
• 61.116 CURL.GetResultAsGIF	1916
• 61.117 CURL.GetResultAsJPEG	1918
• 61.118 CURL.GetResultAsMime	1920
• 61.119 CURL.GetResultAsPDF	1922
• 61.120 CURL.GetResultAsPNG	1924
• 61.121 CURL.GetResultAsText	1926
• 61.122 CURL.GetResultLength	1930
• 61.123 CURL.GetSSLEngines	1931
• 61.124 CURL.GetSSLVerifyResult	1932
• 61.125 CURL.GetScheme	1933
• 61.126 CURL.GetSizeDownload	1934
• 61.127 CURL.GetSizeUpload	1935
• 61.128 CURL.GetSpeedDownload	1936
• 61.129 CURL.GetSpeedUpload	1937

- 61.130 CURL.GetStartTransferTime 1938
- 61.131 CURL.GetTag 1939
- 61.132 CURL.GetTotalTime 1940
- 61.133 CURL.Host 1941
- 61.134 CURL.IsRunning 1942
- 61.135 CURL.LibIDNVersion 1943
- 61.136 CURL.LibSSHVersion 1944
- 61.137 CURL.LibSSLVersion 1945
- 61.138 CURL.List 1946
- 61.139 CURL.New 1947
- 61.140 CURL.NumberOfRunningTransfers 1950
- 61.141 CURL.OpenInputFile 1951
- 61.142 CURL.Perform 1954
- 61.143 CURL.PerformAsync 1963
- 61.144 CURL.PerformInBackground 1965
- 61.145 CURL.Protocols 1967
- 61.146 CURL.ReceiveData 1968
- 61.147 CURL.ReceiveText 1970
- 61.148 CURL.Reset 1973
- 61.149 CURL.RunningTransfers 1974
- 61.150 CURL.SendData 1975
- 61.151 CURL.SendText 1977
- 61.152 CURL.SetBatchDestinationPath 1979
- 61.153 CURL.SetDebugWithData 1981
- 61.154 CURL.SetDebugWithProgress 1983
- 61.155 CURL.SetDebugWithTime 1985
- 61.156 CURL.SetFinishedEvaluate 1987
- 61.157 CURL.SetFinishedScript 1989
- 61.158 CURL.SetInputFile 1991

	243
• 61.159 CURL.SetInputGIF	1994
• 61.160 CURL.SetInputJPEG	1996
• 61.161 CURL.SetInputPDF	1998
• 61.162 CURL.SetInputPNG	2000
• 61.163 CURL.SetInputText	2002
• 61.164 CURL.SetMultiOptionChunkLengthPenaltySize	2005
• 61.165 CURL.SetMultiOptionContentLengthPenaltySize	2006
• 61.166 CURL.SetMultiOptionMaxConcurrentStreams	2007
• 61.167 CURL.SetMultiOptionMaxConnects	2008
• 61.168 CURL.SetMultiOptionMaxHostConnections	2009
• 61.169 CURL.SetMultiOptionMaxPipelineLength	2010
• 61.170 CURL.SetMultiOptionMaxTotalConnections	2011
• 61.171 CURL.SetMultiOptionPipelining	2012
• 61.172 CURL.SetOptionAbstractUnixSocket	2013
• 61.173 CURL.SetOptionAcceptEncoding	2014
• 61.174 CURL.SetOptionAcceptTimeoutMS	2016
• 61.175 CURL.SetOptionAddressScope	2017
• 61.176 CURL.SetOptionAppend	2018
• 61.177 CURL.SetOptionAutoReferer	2019
• 61.178 CURL.SetOptionBufferSize	2020
• 61.179 CURL.SetOptionCAINFO	2022
• 61.180 CURL.SetOptionCAPATH	2025
• 61.181 CURL.SetOptionCRLF	2027
• 61.182 CURL.SetOptionCRLFfile	2028
• 61.183 CURL.SetOptionCertInfo	2030
• 61.184 CURL.SetOptionConnectOnly	2032
• 61.185 CURL.SetOptionConnectTimeoutMS	2035
• 61.186 CURL.SetOptionConnectTo	2036
• 61.187 CURL.SetOptionConnectionTimeout	2037

- 61.188 `CURL.SetOptionCookie` 2039
- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.190 `CURL.SetOptionCookieJar` 2044
- 61.191 `CURL.SetOptionCookieList` 2046
- 61.192 `CURL.SetOptionCookieSession` 2047
- 61.193 `CURL.SetOptionCustomRequest` 2048
- 61.194 `CURL.SetOptionDNSSCacheTimeout` 2053
- 61.195 `CURL.SetOptionDNSInterface` 2054
- 61.196 `CURL.SetOptionDNSLocalIPv4` 2055
- 61.197 `CURL.SetOptionDNSLocalIPv6` 2056
- 61.198 `CURL.SetOptionDNSServers` 2057
- 61.199 `CURL.SetOptionDNSShuffleAddresses` 2058
- 61.200 `CURL.SetOptionDOHURL` 2059
- 61.201 `CURL.SetOptionDefaultProtocol` 2061
- 61.202 `CURL.SetOptionDirListOnly` 2062
- 61.203 `CURL.SetOptionDisallowUserNameInURL` 2064
- 61.204 `CURL.SetOptionEGDSocket` 2065
- 61.205 `CURL.SetOptionExpect100TimeoutMS` 2066
- 61.206 `CURL.SetOptionFTPAccount` 2067
- 61.207 `CURL.SetOptionFTPAlternativeToUser` 2068
- 61.208 `CURL.SetOptionFTPCreateMissingDirs` 2069
- 61.209 `CURL.SetOptionFTPFileMethod` 2072
- 61.210 `CURL.SetOptionFTPPort` 2073
- 61.211 `CURL.SetOptionFTPResponseTimeout` 2075
- 61.212 `CURL.SetOptionFTPSSLAuth` 2076
- 61.213 `CURL.SetOptionFTPSSLCCC` 2078
- 61.214 `CURL.SetOptionFTPSkipPasvIP` 2079
- 61.215 `CURL.SetOptionFTPUseEPRT` 2080
- 61.216 `CURL.SetOptionFTPUseEPSV` 2081

	245
• 61.217 CURL.SetOptionFTPUsePret	2082
• 61.218 CURL.SetOptionFailOnError	2083
• 61.219 CURL.SetOptionFileOnlyMode	2084
• 61.220 CURL.SetOptionFileTime	2085
• 61.221 CURL.SetOptionFollowLocation	2086
• 61.222 CURL.SetOptionForbidReuse	2088
• 61.223 CURL.SetOptionFreshConnect	2089
• 61.224 CURL.SetOptionGSSAPIDelegation	2090
• 61.225 CURL.SetOptionGet	2091
• 61.226 CURL.SetOptionHAProxyProtocol	2093
• 61.227 CURL.SetOptionHTTP200Aliases	2094
• 61.228 CURL.SetOptionHTTPAuth	2095
• 61.229 CURL.SetOptionHTTPContentDecoding	2097
• 61.230 CURL.SetOptionHTTPHeader	2098
• 61.231 CURL.SetOptionHTTPProxyTunnel	2102
• 61.232 CURL.SetOptionHTTPTransferDecoding	2103
• 61.233 CURL.SetOptionHTTPVersion	2104
• 61.234 CURL.SetOptionHappyEyeballsTimeOutMS	2105
• 61.235 CURL.SetOptionHeader	2106
• 61.236 CURL.SetOptionHeaderOptions	2107
• 61.237 CURL.SetOptionIPResolve	2108
• 61.238 CURL.SetOptionIgnoreContentLength	2109
• 61.239 CURL.SetOptionInFileSize	2110
• 61.240 CURL.SetOptionInterface	2112
• 61.241 CURL.SetOptionIssuerCert	2113
• 61.242 CURL.SetOptionKRBLevel	2115
• 61.243 CURL.SetOptionKeepSendingOnError	2116
• 61.244 CURL.SetOptionKeyPassword	2117
• 61.245 CURL.SetOptionLocalPort	2119

- 61.246 CURL.SetOptionLocalPortRange 2120
- 61.247 CURL.SetOptionLoginOptions 2121
- 61.248 CURL.SetOptionLowSpeedLimit 2123
- 61.249 CURL.SetOptionLowSpeedTime 2124
- 61.250 CURL.SetOptionMailAuth 2125
- 61.251 CURL.SetOptionMailFrom 2127
- 61.252 CURL.SetOptionMailRecipients 2128
- 61.253 CURL.SetOptionMaxAgeConn 2129
- 61.254 CURL.SetOptionMaxConnects 2130
- 61.255 CURL.SetOptionMaxFileSize 2131
- 61.256 CURL.SetOptionMaxRecvSpeed 2132
- 61.257 CURL.SetOptionMaxRedirs 2133
- 61.258 CURL.SetOptionMaxSendSpeed 2135
- 61.259 CURL.SetOptionNETRCFile 2136
- 61.260 CURL.SetOptionNetRC 2137
- 61.261 CURL.SetOptionNewDirectoryPerms 2139
- 61.262 CURL.SetOptionNewFilePerms 2140
- 61.263 CURL.SetOptionNoBody 2141
- 61.264 CURL.SetOptionNoProxy 2143
- 61.265 CURL.SetOptionPassword 2145
- 61.266 CURL.SetOptionPathAsIs 2148
- 61.267 CURL.SetOptionPinnedPublicKey 2149
- 61.268 CURL.SetOptionPipeWait 2150
- 61.269 CURL.SetOptionPort 2151
- 61.270 CURL.SetOptionPost 2153
- 61.271 CURL.SetOptionPostFieldSize 2157
- 61.272 CURL.SetOptionPostFields 2158
- 61.273 CURL.SetOptionPostQuote 2162
- 61.274 CURL.SetOptionPostRedir 2164

	247
• 61.275 CURL.SetOptionPreProxy	2166
• 61.276 CURL.SetOptionPreQuote	2167
• 61.277 CURL.SetOptionProtocols	2169
• 61.278 CURL.SetOptionProxy	2171
• 61.279 CURL.SetOptionProxyAuth	2173
• 61.280 CURL.SetOptionProxyCAInfo	2174
• 61.281 CURL.SetOptionProxyCAPath	2175
• 61.282 CURL.SetOptionProxyCRLFile	2176
• 61.283 CURL.SetOptionProxyHeader	2177
• 61.284 CURL.SetOptionProxyKeyPassword	2178
• 61.285 CURL.SetOptionProxyPassword	2179
• 61.286 CURL.SetOptionProxyPinnedPublicKey	2180
• 61.287 CURL.SetOptionProxyPort	2181
• 61.288 CURL.SetOptionProxySSLCert	2182
• 61.289 CURL.SetOptionProxySSLCertType	2183
• 61.290 CURL.SetOptionProxySSLCipherList	2184
• 61.291 CURL.SetOptionProxySSLKey	2185
• 61.292 CURL.SetOptionProxySSLKeyType	2186
• 61.293 CURL.SetOptionProxySSLOptions	2187
• 61.294 CURL.SetOptionProxySSLVerifyHost	2188
• 61.295 CURL.SetOptionProxySSLVerifyPeer	2189
• 61.296 CURL.SetOptionProxySSLVersion	2190
• 61.297 CURL.SetOptionProxyServiceName	2192
• 61.298 CURL.SetOptionProxyTLS13Ciphers	2193
• 61.299 CURL.SetOptionProxyTLSAuthPassword	2194
• 61.300 CURL.SetOptionProxyTLSAuthType	2195
• 61.301 CURL.SetOptionProxyTLSAuthUsername	2196
• 61.302 CURL.SetOptionProxyTransferMode	2197
• 61.303 CURL.SetOptionProxyType	2198

- 61.304 CURL.SetOptionProxyUsername 2200
- 61.305 CURL.SetOptionPut 2201
- 61.306 CURL.SetOptionQuote 2203
- 61.307 CURL.SetOptionRTSPClientCSEQ 2206
- 61.308 CURL.SetOptionRTSPRequest 2207
- 61.309 CURL.SetOptionRTSPServerCSEQ 2208
- 61.310 CURL.SetOptionRTSPSessionID 2209
- 61.311 CURL.SetOptionRTSPStreamURI 2210
- 61.312 CURL.SetOptionRTSPTransport 2211
- 61.313 CURL.SetOptionRandomFile 2212
- 61.314 CURL.SetOptionRange 2213
- 61.315 CURL.SetOptionRedirProtocols 2215
- 61.316 CURL.SetOptionReferer 2217
- 61.317 CURL.SetOptionRequestTarget 2218
- 61.318 CURL.SetOptionResolve 2219
- 61.319 CURL.SetOptionResumeFrom 2220
- 61.320 CURL.SetOptionSASLAuthZID 2221
- 61.321 CURL.SetOptionSASLIR 2222
- 61.322 CURL.SetOptionSSHAAuthTypes 2223
- 61.323 CURL.SetOptionSSHCompression 2225
- 61.324 CURL.SetOptionSSHHostPublicKeyMD5 2226
- 61.325 CURL.SetOptionSSHKnownHosts 2227
- 61.326 CURL.SetOptionSSHPrivateKeyfile 2228
- 61.327 CURL.SetOptionSSHPublicKeyfile 2230
- 61.328 CURL.SetOptionSSLCert 2232
- 61.329 CURL.SetOptionSSLCertType 2236
- 61.330 CURL.SetOptionSSLCipherList 2238
- 61.331 CURL.SetOptionSSEnableALPN 2240
- 61.332 CURL.SetOptionSSEnableNPN 2241

	249
• 61.333 CURL.SetOptionSSLEngine	2242
• 61.334 CURL.SetOptionSSLEngineDefault	2243
• 61.335 CURL.SetOptionSSLFalseStart	2244
• 61.336 CURL.SetOptionSSLKey	2245
• 61.337 CURL.SetOptionSSLKeyType	2247
• 61.338 CURL.SetOptionSSLOptions	2249
• 61.339 CURL.SetOptionSSLSessionIDCache	2250
• 61.340 CURL.SetOptionSSLVerifyHost	2251
• 61.341 CURL.SetOptionSSLVerifyPeer	2254
• 61.342 CURL.SetOptionSSLVerifyStatus	2257
• 61.343 CURL.SetOptionSSLVersion	2258
• 61.344 CURL.SetOptionServiceName	2261
• 61.345 CURL.SetOptionSocks5Auth	2262
• 61.346 CURL.SetOptionSocks5GSSAPINec	2263
• 61.347 CURL.SetOptionSocks5GSSAPIService	2264
• 61.348 CURL.SetOptionStreamDepends	2265
• 61.349 CURL.SetOptionStreamDependsE	2266
• 61.350 CURL.SetOptionStreamWeight	2267
• 61.351 CURL.SetOptionSuppressConnectHeaders	2268
• 61.352 CURL.SetOptionTCPFastOpen	2269
• 61.353 CURL.SetOptionTCPKeepAlive	2270
• 61.354 CURL.SetOptionTCPKeepIdle	2271
• 61.355 CURL.SetOptionTCPKeepInterval	2272
• 61.356 CURL.SetOptionTCPNoDelay	2273
• 61.357 CURL.SetOptionTFTPBlockSize	2274
• 61.358 CURL.SetOptionTFTPNoOptions	2275
• 61.359 CURL.SetOptionTLS13Ciphers	2276
• 61.360 CURL.SetOptionTLSAuthPassword	2277
• 61.361 CURL.SetOptionTLSAuthType	2278

- 61.362 `CURL.SetOptionTLSAuthUsername` 2279
- 61.363 `CURL.SetOptionTelnetOptions` 2280
- 61.364 `CURL.SetOptionTimeCondition` 2281
- 61.365 `CURL.SetOptionTimeOut` 2282
- 61.366 `CURL.SetOptionTimeValue` 2284
- 61.367 `CURL.SetOptionTimeoutMS` 2285
- 61.368 `CURL.SetOptionTransferEncoding` 2286
- 61.369 `CURL.SetOptionTransferText` 2287
- 61.370 `CURL.SetOptionURL` 2288
- 61.371 `CURL.SetOptionUnixSocketPath` 2296
- 61.372 `CURL.SetOptionUnrestrictedAuth` 2297
- 61.373 `CURL.SetOptionUpkeepIntervalMS` 2298
- 61.374 `CURL.SetOptionUpload` 2299
- 61.375 `CURL.SetOptionUploadBufferSize` 2301
- 61.376 `CURL.SetOptionUseSSL` 2302
- 61.377 `CURL.SetOptionUserAgent` 2304
- 61.378 `CURL.SetOptionUsername` 2305
- 61.379 `CURL.SetOptionVerbose` 2307
- 61.380 `CURL.SetOptionWildCardMatch` 2309
- 61.381 `CURL.SetOptionXOAuth2Bearer` 2312
- 61.382 `CURL.SetProgressEvaluate` 2313
- 61.383 `CURL.SetProgressScript` 2314
- 61.384 `CURL.SetTag` 2316
- 61.385 `CURL.SetUpdateProgressDialog` 2318
- 61.386 `CURL.SetupAWS` 2320
- 61.387 `CURL.SetupOAuth` 2324
- 61.388 `CURL.Upkeep` 2329
- 61.389 `CURL.UseSystemCertificates` 2330
- 61.390 `CURL.Version` 2332

	251
• 47.1 Calendar.Alarm.Duplicate	1229
• 47.2 Calendar.Alarm.GetAbsoluteTrigger	1231
• 47.3 Calendar.Alarm.GetAcknowledged	1232
• 47.4 Calendar.Alarm.GetAction	1233
• 47.5 Calendar.Alarm.GetEmailAddress	1234
• 47.6 Calendar.Alarm.GetRelatedTo	1235
• 47.7 Calendar.Alarm.GetRelativeTrigger	1236
• 47.8 Calendar.Alarm.GetSound	1237
• 47.9 Calendar.Alarm.GetURL	1238
• 47.10 Calendar.Alarm.SetAbsoluteTrigger	1239
• 47.11 Calendar.Alarm.SetAcknowledged	1240
• 47.12 Calendar.Alarm.SetAction	1241
• 47.13 Calendar.Alarm.SetEmailAddress	1242
• 47.14 Calendar.Alarm.SetRelatedTo	1243
• 47.15 Calendar.Alarm.SetRelativeTrigger	1244
• 47.16 Calendar.Alarm.SetSound	1245
• 47.17 Calendar.Alarm.SetURL	1246
• 47.18 Calendar.Alarm.TriggerDateRelativeTo	1247
• 47.19 Calendar.Attendee.GetAddress	1248
• 47.20 Calendar.Attendee.GetCommonName	1249
• 47.21 Calendar.Attendee.GetStatus	1250
• 47.22 Calendar.Calendar.Duplicate	1251
• 47.23 Calendar.Calendar.GetColor	1252
• 47.24 Calendar.Calendar.GetNotes	1254
• 47.25 Calendar.Calendar.GetTitle	1255
• 47.26 Calendar.Calendar.GetType	1257
• 47.27 Calendar.Calendar.GetUID	1258
• 47.28 Calendar.Calendar.IsEditable	1259
• 47.29 Calendar.Calendar.SetColor	1260

- 47.30 Calendar.Calendar.SetNotes 1261
- 47.31 Calendar.Calendar.SetTitle 1262
- 47.32 Calendar.Calendars 1263
- 47.33 Calendar.Events 1264
- 47.34 Calendar.Initialize 1266
- 47.35 Calendar.Item.AddAlarm 1267
- 47.36 Calendar.Item.Duplicate 1268
- 47.37 Calendar.Item.GetAlarms 1269
- 47.38 Calendar.Item.GetAllDay 1270
- 47.39 Calendar.Item.GetAttendeeCommonName 1271
- 47.40 Calendar.Item.GetAttendeeCount 1272
- 47.41 Calendar.Item.GetAttendeeStatus 1273
- 47.42 Calendar.Item.GetAttendeeURL 1274
- 47.43 Calendar.Item.GetAttendees 1275
- 47.44 Calendar.Item.GetCalendar 1276
- 47.45 Calendar.Item.GetCompleted 1277
- 47.46 Calendar.Item.GetCompletionDate 1278
- 47.47 Calendar.Item.GetDateStamp 1279
- 47.48 Calendar.Item.GetDueDate 1280
- 47.49 Calendar.Item.GetEndDate 1281
- 47.50 Calendar.Item.GetLocation 1282
- 47.51 Calendar.Item.GetNotes 1283
- 47.52 Calendar.Item.GetPriority 1284
- 47.53 Calendar.Item.GetStartDate 1285
- 47.54 Calendar.Item.GetTitle 1286
- 47.55 Calendar.Item.GetUID 1287
- 47.56 Calendar.Item.GetURL 1289
- 47.57 Calendar.Item.HasAlarm 1290
- 47.58 Calendar.Item.IsDetached 1291

	253
• 47.59 Calendar.Item.NextAlarmDate	1292
• 47.60 Calendar.Item.Occurrence	1293
• 47.61 Calendar.Item.RemoveAlarm	1294
• 47.62 Calendar.Item.SetAllDay	1295
• 47.63 Calendar.Item.SetCalendar	1297
• 47.64 Calendar.Item.SetCompleted	1299
• 47.65 Calendar.Item.SetCompletionDate	1300
• 47.66 Calendar.Item.SetDueDate	1301
• 47.67 Calendar.Item.SetEndDate	1302
• 47.68 Calendar.Item.SetLocation	1303
• 47.69 Calendar.Item.SetNotes	1304
• 47.70 Calendar.Item.SetPriority	1306
• 47.71 Calendar.Item.SetStartDate	1307
• 47.72 Calendar.Item.SetTitle	1308
• 47.73 Calendar.Item.SetURL	1310
• 47.74 Calendar.NewAlarm	1311
• 47.75 Calendar.NewCalendar	1312
• 47.76 Calendar.NewEvent	1313
• 47.77 Calendar.NewReminder	1315
• 47.78 Calendar.Notification.Clear	1319
• 47.79 Calendar.Notification.Evaluate	1320
• 47.80 Calendar.Notification.GetChangedExternally	1321
• 47.81 Calendar.Notification.GetDeletedRecords	1322
• 47.82 Calendar.Notification.GetInsertedRecords	1323
• 47.83 Calendar.Notification.GetProcessID	1324
• 47.84 Calendar.Notification.GetProcessName	1325
• 47.85 Calendar.Notification.GetUpdatedRecords	1326
• 47.86 Calendar.Notification.GetUserUID	1327
• 47.87 Calendar.Notification.GetWhat	1328

- 47.88 Calendar.Notification.Set 1329
- 47.89 Calendar.RemoveCalendar 1330
- 47.90 Calendar.RemoveEvent 1331
- 47.91 Calendar.RemoveReminder 1332
- 47.92 Calendar.SaveCalendar 1333
- 47.93 Calendar.SaveEvent 1334
- 47.94 Calendar.SaveReminder 1336
- 47.95 Calendar.SelectEvent 1340
- 47.96 Calendar.Tasks 1341
- 47.97 Calendar.TasksCompletedSince 1342
- 47.98 Calendar.UncompletedTasks 1343
- 47.99 Calendar.UncompletedTasksDueBefore 1344
- 124.1 ClearRegistration 6261
- 51.1 Clipboard.DetectFileMakerDataType 1435
- 51.2 Clipboard.GetData 1436
- 51.3 Clipboard.GetFileMakerData 1438
- 51.4 Clipboard.GetFiles 1440
- 51.5 Clipboard.GetHTMLText 1441
- 51.6 Clipboard.GetPicture 1442
- 51.7 Clipboard.GetRTFText 1443
- 51.8 Clipboard.GetStyledText 1444
- 51.9 Clipboard.GetText 1445
- 51.10 Clipboard.GetTypes 1447
- 51.11 Clipboard.SetFileMakerData 1448
- 51.12 Clipboard.SetFiles 1450
- 51.13 Clipboard.SetHTMLText 1452
- 51.14 Clipboard.SetPicture 1454
- 51.15 Clipboard.SetRTFText 1455
- 51.16 Clipboard.SetStyledText 1457

	255
• 51.17 Clipboard.SetText	1458
• 52.2 ColorPanel.GetColor	1463
• 52.3 ColorPanel.GetColorChangedEvaluate	1464
• 52.4 ColorPanel.GetColorChangedScript	1465
• 52.5 ColorPanel.Hide	1466
• 52.6 ColorPanel.SetColor	1467
• 52.7 ColorPanel.SetColorChangedEvaluate	1468
• 52.8 ColorPanel.SetColorChangedScript	1469
• 52.9 ColorPanel.Show	1471
• 124.2 CompileDate	6262
• 124.3 CompileTime	6263
• 55.1 Container.Compress	1605
• 55.2 Container.DecodeFromBase64	1607
• 55.3 Container.DecodeFromHex	1609
• 55.4 Container.Decompress	1610
• 55.5 Container.Deserialize	1612
• 55.6 Container.Export	1613
• 55.7 Container.ExtractStream	1616
• 55.8 Container.GetBase64	1617
• 55.9 Container.GetCount	1619
• 55.10 Container.GetDataURL	1621
• 55.11 Container.GetHeight	1622
• 55.12 Container.GetHex	1623
• 55.17 Container.GetName	1628
• 55.18 Container.GetResolution	1629
• 55.19 Container.GetSize	1631
• 55.20 Container.GetText	1633
• 55.21 Container.GetTotalSize	1635
• 55.22 Container.GetType	1636

- 55.23 Container.GetTypeSize 1638
- 55.24 Container.GetTypes 1640
- 55.25 Container.GetWidth 1642
- 55.26 Container.IsCompressed 1643
- 55.27 Container.ReadArchive 1644
- 55.28 Container.ReadFile 1645
- 55.29 Container.ReadImage 1648
- 55.30 Container.Remove 1650
- 55.31 Container.Rename 1652
- 55.32 Container.RenameStream 1654
- 55.33 Container.Serialize 1655
- 55.34 Container.WriteArchive 1656
- 55.35 Container.WriteFile 1658
- 92.1 ContinuityCamera.Clear 5033
- 92.2 ContinuityCamera.Import 5034
- 92.3 ContinuityCamera.PopupMenu 5035
- 92.4 ContinuityCamera.Result 5037
- 92.5 ContinuityCamera.SetScriptTrigger 5038
- 57.1 CoreImage.Detect 1667
- 58.1 CoreLocation.ClearFailHandler 1669
- 58.2 CoreLocation.ClearUpdateLocationHandler 1670
- 58.3 CoreLocation.RegionMonitoringAvailable 1671
- 58.4 CoreLocation.RegionMonitoringEnabled 1672
- 58.5 CoreLocation.SetFailEvaluate 1673
- 58.6 CoreLocation.SetFailHandler 1674
- 58.7 CoreLocation.SetUpdateLocationEvaluate 1675
- 58.8 CoreLocation.SetUpdateLocationHandler 1676
- 58.9 CoreLocation.altitude 1678
- 58.10 CoreLocation.authorizationStatus 1679

	257
• 58.11 CoreLocation.course	1680
• 58.12 CoreLocation.description	1681
• 58.13 CoreLocation.desiredAccuracy	1682
• 58.15 CoreLocation.distanceFilter	1684
• 58.16 CoreLocation.distanceFromLocation	1685
• 58.17 CoreLocation.hasLocation	1686
• 58.18 CoreLocation.headingAvailable	1687
• 58.19 CoreLocation.horizontalAccuracy	1688
• 58.20 CoreLocation.latitude	1689
• 58.21 CoreLocation.locationServicesEnabled	1690
• 58.22 CoreLocation.longitude	1691
• 58.23 CoreLocation.purpose	1692
• 58.27 CoreLocation.setDesiredAccuracy	1696
• 58.28 CoreLocation.setDistanceFilter	1697
• 58.29 CoreLocation.setPurpose	1698
• 58.30 CoreLocation.significantLocationChangeMonitoringAvailable	1699
• 58.31 CoreLocation.speed	1700
• 58.32 CoreLocation.startMonitoringSignificantLocationChanges	1701
• 58.34 CoreLocation.startUpdatingLocation	1703
• 58.35 CoreLocation.stopMonitoringSignificantLocationChanges	1704
• 58.37 CoreLocation.stopUpdatingLocation	1706
• 58.38 CoreLocation.timestamp	1707
• 58.39 CoreLocation.verticalAccuracy	1708
• 59.1 CoreML.AddArrayParameter	1709
• 59.2 CoreML.AddDoubleParameter	1711
• 59.3 CoreML.AddImageParameter	1712
• 59.4 CoreML.AddIntegerParameter	1714
• 59.5 CoreML.AddTextParameter	1715
• 59.6 CoreML.AddUndefinedParameter	1716

- 59.7 CoreML.Available 1717
- 59.8 CoreML.Clear 1718
- 59.9 CoreML.CompileModel 1719
- 59.10 CoreML.Description 1721
- 59.11 CoreML.GetUsesCPUOnly 1724
- 59.12 CoreML.OpenModel 1725
- 59.13 CoreML.PredictionFromFeatures 1727
- 59.14 CoreML.Release 1729
- 59.15 CoreML.ResultImage 1730
- 59.16 CoreML.SetUsesCPUOnly 1731
- 59.17 CoreML.Update 1732
- 67.1 DNSLookup.Address 2451
- 67.2 DNSLookup.AddressCount 2453
- 67.3 DNSLookup.Alias 2454
- 67.4 DNSLookup.AliasCount 2455
- 67.5 DNSLookup.LookupHostByAddress 2456
- 67.6 DNSLookup.LookupHostByName 2458
- 67.7 DNSLookup.Name 2460
- 67.8 DNSLookup.Release 2461
- 62.1 Debugger.BringToFront 2333
- 62.2 Debugger.CurrentLineNumber 2334
- 62.3 Debugger.GetCallStack 2335
- 62.4 Debugger.IsVisible 2336
- 62.5 Debugger.Title 2337
- 62.6 Debugger.Window 2338
- 63.1 Dialog.AddField 2339
- 63.2 Dialog.ClearFields 2341
- 63.3 Dialog.CloseSheet 2342
- 63.4 Dialog.GetAlternateButton 2343

	259
• 63.5 Dialog.GetButton	2344
• 63.6 Dialog.GetButtonPressed	2345
• 63.7 Dialog.GetButtons	2346
• 63.8 Dialog.GetDefaultButton	2347
• 63.9 Dialog.GetFieldText	2348
• 63.10 Dialog.GetIcon	2349
• 63.11 Dialog.GetInformativeText	2350
• 63.12 Dialog.GetLastResult	2351
• 63.13 Dialog.GetLeft	2352
• 63.14 Dialog.GetMessage	2353
• 63.15 Dialog.GetMode	2354
• 63.16 Dialog.GetOtherButton	2355
• 63.17 Dialog.GetSheetEvaluate	2356
• 63.18 Dialog.GetSheetFileName	2357
• 63.19 Dialog.GetSheetRunning	2358
• 63.20 Dialog.GetSheetScriptName	2359
• 63.21 Dialog.GetShowsSuppressionButton	2360
• 63.22 Dialog.GetSuppressionButtonTitle	2361
• 63.23 Dialog.GetSuppressionState	2362
• 63.24 Dialog.GetTimeout	2363
• 63.25 Dialog.GetTop	2364
• 63.26 Dialog.GetWindowTitle	2365
• 63.27 Dialog.Reset	2366
• 63.28 Dialog.Run	2367
• 63.29 Dialog.RunSheet	2369
• 63.30 Dialog.SetAlternateButton	2370
• 63.31 Dialog.SetButton	2371
• 63.32 Dialog.SetButtons	2373
• 63.33 Dialog.SetDefaultButton	2374

- 63.34 Dialog.SetFieldText 2375
- 63.35 Dialog.SetIcon 2376
- 63.36 Dialog.SetInformativeText 2377
- 63.37 Dialog.SetLeft 2378
- 63.38 Dialog.SetMessage 2379
- 63.39 Dialog.SetMode 2380
- 63.40 Dialog.SetOtherButton 2381
- 63.41 Dialog.SetSheetEvaluate 2382
- 63.42 Dialog.SetSheetFileName 2383
- 63.43 Dialog.SetSheetScriptName 2384
- 63.44 Dialog.SetShowsSuppressionButton 2385
- 63.45 Dialog.SetSuppressionButtonTitle 2386
- 63.46 Dialog.SetTimeout 2387
- 63.47 Dialog.SetTop 2389
- 63.48 Dialog.SetWindowTitle 2391
- 64.1 DialogModifications.Clear 2393
- 64.2 DialogModifications.Install 2394
- 64.3 DialogModifications.Set 2395
- 64.4 DialogModifications.Uninstall 2396
- 65.1 Dictionary.AddSQL 2397
- 80.1 Dictionary.AddSQLRecord 4065
- 80.2 Dictionary.AddSQLRecords 4067
- 65.4 Dictionary.Clear 2404
- 65.5 Dictionary.Clone 2405
- 65.6 Dictionary.Count 2406
- 65.7 Dictionary.Create 2407
- 65.8 Dictionary.CreateNamed 2410
- 65.9 Dictionary.Deserialize 2411
- 65.10 Dictionary.HasKey 2413

	261
• 65.11 Dictionary.KeyAtIndex	2414
• 65.12 Dictionary.Keys	2415
• 65.13 Dictionary.List	2416
• 65.14 Dictionary.Release	2417
• 65.15 Dictionary.RemoveKey	2418
• 65.16 Dictionary.Serialize	2419
• 65.17 Dictionary.SetList	2421
• 65.18 Dictionary.SetQuickList	2422
• 65.19 Dictionary.SetValueForKey	2423
• 65.20 Dictionary.SetVariables	2426
• 100.1 Dictionary.ToJSON	5231
• 65.22 Dictionary.ToText	2429
• 191.1 Dictionary.ToXML	9253
• 65.24 Dictionary.ValueForKey	2433
• 65.25 Dictionary.ValueTypeForKey	2435
• 65.26 Dictionary.Values	2436
• 69.1 DragDrop.ClearDragActionHandler	2479
• 69.2 DragDrop.ClearDragEnterHandler	2481
• 69.3 DragDrop.ClearDragExitHandler	2482
• 69.4 DragDrop.CreateOnPopoverWithControl	2483
• 69.5 DragDrop.CreateOnPopoverWithSize	2485
• 69.6 DragDrop.CreateWithControl	2487
• 69.7 DragDrop.CreateWithSize	2490
• 69.8 DragDrop.CreateWithWindow	2492
• 69.9 DragDrop.GetAutoResizingMask	2493
• 69.10 DragDrop.GetEmailAccount	2494
• 69.11 DragDrop.GetEmailCount	2495
• 69.12 DragDrop.GetEmailID	2496
• 69.13 DragDrop.GetEmailMailbox	2497

- 69.14 DragDrop.GetEmailSubject 2498
- 69.17 DragDrop.GetHTML 2502
- 69.18 DragDrop.GetHeight 2503
- 69.19 DragDrop.GetLeft 2504
- 69.20 DragDrop.GetMouseX 2505
- 69.21 DragDrop.GetMouseY 2506
- 69.22 DragDrop.GetPath 2507
- 69.23 DragDrop.GetPathCount 2510
- 69.24 DragDrop.GetPicture 2512
- 69.25 DragDrop.GetRTF 2514
- 69.26 DragDrop.GetTag 2515
- 69.27 DragDrop.GetText 2516
- 69.28 DragDrop.GetTop 2518
- 69.29 DragDrop.GetTypes 2519
- 69.30 DragDrop.GetURL 2520
- 69.31 DragDrop.GetVisible 2521
- 69.32 DragDrop.GetWidth 2522
- 69.33 DragDrop.GetWindowRef 2523
- 69.34 DragDrop.List 2524
- 69.35 DragDrop.RegisterDropTypes 2525
- 69.36 DragDrop.Release 2527
- 69.37 DragDrop.ReleaseAll 2529
- 69.38 DragDrop.SetAutoResizingMask 2530
- 69.39 DragDrop.SetCursor 2532
- 69.40 DragDrop.SetDragActionHandler 2534
- 69.41 DragDrop.SetDragEnterHandler 2536
- 69.42 DragDrop.SetDragExitHandler 2538
- 69.43 DragDrop.SetFrame 2540
- 69.44 DragDrop.SetFrameWithControl 2541

	263
• 69.45 DragDrop.SetImage	2543
• 69.46 DragDrop.SetTag	2545
• 69.47 DragDrop.SetVisible	2546
• 69.48 DragDrop.UnregisterDropTypes	2547
• 70.1 DynaPDF.AddActionToObj	2549
• 70.2 DynaPDF.AddAnnotToPage	2552
• 70.3 DynaPDF.AddBookmark	2553
• 70.4 DynaPDF.AddBookmarkEx	2555
• 70.5 DynaPDF.AddContinueText	2557
• 70.6 DynaPDF.AddDeviceNProcessColorants	2558
• 70.7 DynaPDF.AddDeviceNSeparations	2560
• 70.8 DynaPDF.AddFontSearchPath	2563
• 70.9 DynaPDF.AddOutputIntent	2564
• 70.10 DynaPDF.AddOutputIntentEx	2565
• 70.11 DynaPDF.AddValToChoiceField	2567
• 70.12 DynaPDF.AllowPageBreak	2569
• 70.13 DynaPDF.AppendImagePage	2571
• 70.14 DynaPDF.AppendImagePages	2573
• 70.15 DynaPDF.AppendPage	2575
• 70.16 DynaPDF.AssociateEmbFile	2577
• 70.17 DynaPDF.AttachFile	2579
• 70.18 DynaPDF.AttachFileContainer	2581
• 70.19 DynaPDF.AttachFileText	2582
• 70.20 DynaPDF.BeginContinueText	2584
• 70.21 DynaPDF.BeginLayer	2586
• 70.22 DynaPDF.BeginPattern	2587
• 70.23 DynaPDF.BeginTemplate	2588
• 70.24 DynaPDF.Bezier123	2589
• 70.25 DynaPDF.Bezier13	2591

- 70.26 DynaPDF.Bezier23 2592
- 70.27 DynaPDF.CMYK 2593
- 70.28 DynaPDF.ChangeAnnotName 2595
- 70.29 DynaPDF.ChangeAnnotPos 2596
- 70.30 DynaPDF.ChangeBookmark 2597
- 70.31 DynaPDF.ChangeFont 2599
- 70.32 DynaPDF.ChangeFontSize 2600
- 70.33 DynaPDF.ChangeFontStyle 2601
- 70.34 DynaPDF.ChangeFontStyleEx 2602
- 70.35 DynaPDF.ChangeLinkAnnot 2603
- 70.36 DynaPDF.ChangeSeparationColor 2604
- 70.37 DynaPDF.CheckConformance 2605
- 70.38 DynaPDF.CheckFieldNames 2608
- 70.39 DynaPDF.CircleAnnot 2609
- 70.40 DynaPDF.Clear 2611
- 70.41 DynaPDF.ClipPath 2612
- 70.42 DynaPDF.CloseImportFile 2614
- 70.43 DynaPDF.ClosePath 2615
- 70.44 DynaPDF.ConvertColors 2617
- 70.45 DynaPDF.ConvertStyledText 2619
- 70.46 DynaPDF.CreateButton 2620
- 70.47 DynaPDF.CreateCheckBox 2623
- 70.48 DynaPDF.CreateComboBox 2625
- 70.49 DynaPDF.CreateDeviceNColorSpace 2628
- 70.50 DynaPDF.CreateGoToAction 2630
- 70.51 DynaPDF.CreateGoToActionEx 2632
- 70.52 DynaPDF.CreateGoToRAction 2634
- 70.53 DynaPDF.CreateGoToRActionEx 2636
- 70.54 DynaPDF.CreateGroupField 2638

	265
• 70.55 DynaPDF.CreateJSAction	2640
• 70.56 DynaPDF.CreateListBox	2643
• 70.57 DynaPDF.CreateNamedDest	2646
• 70.58 DynaPDF.CreateRadioButton	2648
• 70.59 DynaPDF.CreateSeparationCS	2650
• 70.60 DynaPDF.CreateSigField	2653
• 70.61 DynaPDF.CreateSigFieldAP	2656
• 70.62 DynaPDF.CreateStructureTree	2657
• 70.63 DynaPDF.CreateTextField	2659
• 70.64 DynaPDF.CreateXFASStream	2661
• 70.65 DynaPDF.DeleteAcroForm	2662
• 70.66 DynaPDF.DeleteActionFromObjEx	2663
• 70.67 DynaPDF.DeleteAnnotation	2664
• 70.68 DynaPDF.DeleteBookmark	2665
• 70.69 DynaPDF.DeleteEmbeddedFile	2666
• 70.70 DynaPDF.DeleteField	2667
• 70.71 DynaPDF.DeleteFieldEx	2668
• 70.72 DynaPDF.DeleteJavaScripts	2669
• 70.73 DynaPDF.DeletePage	2670
• 70.74 DynaPDF.DeletePageLabels	2671
• 70.75 DynaPDF.DeleteSeparationInfo	2672
• 70.76 DynaPDF.DeleteTemplate	2673
• 70.77 DynaPDF.DeleteTemplateEx	2674
• 70.78 DynaPDF.DeleteXFAForm	2675
• 70.79 DynaPDF.DrawArc	2676
• 70.80 DynaPDF.DrawArcEx	2678
• 70.81 DynaPDF.DrawChord	2680
• 70.82 DynaPDF.DrawCircle	2682
• 70.83 DynaPDF.DrawPie	2684

- 70.84 DynaPDF.EditPage 2686
- 70.85 DynaPDF.EditTemplate 2688
- 70.86 DynaPDF.EditTemplate2 2690
- 70.87 DynaPDF.Ellipse 2691
- 70.88 DynaPDF.EnableEncryption 2693
- 70.89 DynaPDF.EndLayer 2696
- 70.90 DynaPDF.EndPage 2697
- 70.91 DynaPDF.EndPattern 2699
- 70.92 DynaPDF.EndTemplate 2700
- 70.93 DynaPDF.ExchangeBookmarks 2701
- 70.94 DynaPDF.ExchangePages 2702
- 70.95 DynaPDF.ExtractDocumentText 2703
- 70.96 DynaPDF.ExtractImages 2705
- 70.97 DynaPDF.ExtractPageRectText 2707
- 70.98 DynaPDF.ExtractPageText 2709
- 70.99 DynaPDF.ExtractText 2711
- 70.100 DynaPDF.FileAttachAnnot 2714
- 70.101 DynaPDF.FileAttachAnnotEx 2716
- 70.102 DynaPDF.FileLink 2718
- 70.103 DynaPDF.FindBookmark 2720
- 70.104 DynaPDF.FindEmbeddedFile 2722
- 70.105 DynaPDF.FindField 2723
- 70.106 DynaPDF.FindLinkAnnot 2724
- 70.107 DynaPDF.FindNextBookmark 2725
- 70.108 DynaPDF.FindPattern 2726
- 70.109 DynaPDF.FindText 2727
- 70.110 DynaPDF.FlattenAnnotOrField 2729
- 70.111 DynaPDF.FlattenAnnots 2730
- 70.112 DynaPDF.FlattenForm 2732

	267
• 70.113 DynaPDF.FlushPages	2734
• 70.114 DynaPDF.FontInfo	2736
• 70.115 DynaPDF.FreeTextAnnot	2738
• 70.116 DynaPDF.GeneratePreview	2740
• 70.117 DynaPDF.GetAnnotCount	2743
• 70.118 DynaPDF.GetAnnotFlags	2744
• 70.119 DynaPDF.GetAnnotLink	2745
• 70.120 DynaPDF.GetAnnotType	2746
• 70.121 DynaPDF.GetAnnotation	2748
• 70.122 DynaPDF.GetAscent	2750
• 70.123 DynaPDF.GetBBox	2751
• 70.124 DynaPDF.GetBookmark	2753
• 70.125 DynaPDF.GetBookmarkCount	2755
• 70.126 DynaPDF.GetBorderStyle	2756
• 70.127 DynaPDF.GetCMapCount	2757
• 70.128 DynaPDF.GetCharacterSpacing	2758
• 70.129 DynaPDF.GetCheckBoxChar	2759
• 70.130 DynaPDF.GetCheckBoxCharEx	2760
• 70.131 DynaPDF.GetCheckBoxDefState	2761
• 70.132 DynaPDF.GetColorSpace	2762
• 70.133 DynaPDF.GetColorSpaceCount	2763
• 70.134 DynaPDF.GetColorSpaceInfo	2764
• 70.135 DynaPDF.GetCompressionFilter	2765
• 70.136 DynaPDF.GetCompressionLevel	2766
• 70.137 DynaPDF.GetContent	2767
• 70.138 DynaPDF.GetDocInfo	2768
• 70.139 DynaPDF.GetDocInfoCount	2770
• 70.140 DynaPDF.GetDocUsesTransparency	2771
• 70.141 DynaPDF.GetDrawDirection	2772

- 70.142 DynaPDF.GetDynaPDFVersion 2773
- 70.143 DynaPDF.GetEmbeddedFile 2774
- 70.144 DynaPDF.GetEmbeddedFileAsContainer 2776
- 70.145 DynaPDF.GetEmbeddedFileCount 2777
- 70.146 DynaPDF.GetFTextHeight 2779
- 70.147 DynaPDF.GetFTextHeightEx 2781
- 70.148 DynaPDF.GetField 2783
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.151 DynaPDF.GetFieldBorderStyle 2787
- 70.152 DynaPDF.GetFieldBorderWidth 2788
- 70.153 DynaPDF.GetFieldChoiceValue 2789
- 70.154 DynaPDF.GetFieldColor 2790
- 70.155 DynaPDF.GetFieldCount 2791
- 70.156 DynaPDF.GetFieldExpValCount 2792
- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.158 DynaPDF.GetFieldExpValueEx 2794
- 70.159 DynaPDF.GetFieldFlags 2796
- 70.160 DynaPDF.GetFieldGroupType 2797
- 70.161 DynaPDF.GetFieldHighlightMode 2798
- 70.162 DynaPDF.GetFieldIndex 2799
- 70.163 DynaPDF.GetFieldMapName 2800
- 70.164 DynaPDF.GetFieldName 2801
- 70.165 DynaPDF.GetFieldOrientation 2802
- 70.166 DynaPDF.GetFieldTextAlign 2803
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.168 DynaPDF.GetFieldToolTip 2805
- 70.169 DynaPDF.GetFieldType 2806
- 70.170 DynaPDF.GetFontCount 2807

	269
• 70.171 DynaPDF.GetFontOrigin	2808
• 70.172 DynaPDF.GetFontSelMode	2809
• 70.173 DynaPDF.GetFontWeight	2810
• 70.174 DynaPDF.GetGStateFlags	2811
• 70.175 DynaPDF.GetImage	2812
• 70.176 DynaPDF.GetImageCount	2815
• 70.177 DynaPDF.GetImportDocInfo	2817
• 70.178 DynaPDF.GetImportFlags	2819
• 70.179 DynaPDF.GetImportFlags2	2820
• 70.180 DynaPDF.GetImportOrientation	2821
• 70.181 DynaPDF.GetImportPDFVersion	2822
• 70.182 DynaPDF.GetImportPageBounds	2823
• 70.183 DynaPDF.GetImportPageCount	2825
• 70.184 DynaPDF.GetInDocInfoCount	2828
• 70.185 DynaPDF.GetInFieldCount	2829
• 70.186 DynaPDF.GetInIsCollection	2830
• 70.187 DynaPDF.GetInIsEncrypted	2831
• 70.188 DynaPDF.GetInIsSigned	2832
• 70.189 DynaPDF.GetInIsTrapped	2833
• 70.190 DynaPDF.GetInIsXFAForm	2834
• 70.191 DynaPDF.GetInMetadata	2835
• 70.192 DynaPDF.GetInPrintSettings	2837
• 70.193 DynaPDF.GetInRepairMode	2838
• 70.194 DynaPDF.GetIsFixedPitch	2839
• 70.195 DynaPDF.GetIsTaggingEnabled	2840
• 70.196 DynaPDF.GetJPEGQuality	2841
• 70.197 DynaPDF.GetJavaScriptCount	2842
• 70.198 DynaPDF.GetLanguage	2843
• 70.199 DynaPDF.GetLastErrorMessage	2844

- 70.200 DynaPDF.GetLastTextPosX 2845
- 70.201 DynaPDF.GetLastTextPosY 2846
- 70.202 DynaPDF.GetLeading 2847
- 70.203 DynaPDF.GetLineWidth 2848
- 70.204 DynaPDF.GetLinkHighlightMode 2849
- 70.208 DynaPDF.GetMetadata 2853
- 70.209 DynaPDF.GetOCG 2855
- 70.210 DynaPDF.GetOCGContUsage 2858
- 70.211 DynaPDF.GetOCGCount 2860
- 70.212 DynaPDF.GetOCGUsageUserName 2861
- 70.213 DynaPDF.GetOpacity 2862
- 70.214 DynaPDF.GetOrientation 2863
- 70.215 DynaPDF.GetOutputIntent 2864
- 70.216 DynaPDF.GetOutputIntentCount 2866
- 70.217 DynaPDF.GetPDFVersion 2867
- 70.218 DynaPDF.GetPageAnnotCount 2868
- 70.219 DynaPDF.GetPageAnnotation 2869
- 70.220 DynaPDF.GetPageBBox 2870
- 70.221 DynaPDF.GetPageCoords 2872
- 70.222 DynaPDF.GetPageCount 2873
- 70.223 DynaPDF.GetPageFieldCount 2875
- 70.224 DynaPDF.GetPageHeight 2876
- 70.225 DynaPDF.GetPageLabel 2878
- 70.226 DynaPDF.GetPageLabelCount 2880
- 70.227 DynaPDF.GetPageLayout 2881
- 70.228 DynaPDF.GetPageMode 2882
- 70.229 DynaPDF.GetPageNum 2883
- 70.230 DynaPDF.GetPageWidth 2884
- 70.231 DynaPDF.GetPrintSettings 2886

	271
• 70.232 DynaPDF.GetReplaceICCProfile	2887
• 70.233 DynaPDF.GetReplaceICCProfileData	2888
• 70.234 DynaPDF.GetReplaceICCProfilesCounter	2889
• 70.235 DynaPDF.GetResolution	2890
• 70.236 DynaPDF.GetSaveNewImageFormat	2891
• 70.237 DynaPDF.GetTemplCount	2892
• 70.238 DynaPDF.GetTemplHeight	2893
• 70.239 DynaPDF.GetTemplWidth	2894
• 70.240 DynaPDF.GetTextDrawMode	2895
• 70.241 DynaPDF.GetTextFieldDefaultValue	2896
• 70.242 DynaPDF.GetTextFieldValue	2897
• 70.243 DynaPDF.GetTextRise	2898
• 70.244 DynaPDF.GetTextScaling	2899
• 70.245 DynaPDF.GetTextWidth	2900
• 70.246 DynaPDF.GetTransparentColor	2902
• 70.247 DynaPDF.GetTrapped	2903
• 70.248 DynaPDF.GetUseExactPwd	2904
• 70.249 DynaPDF.GetUseGlobalImpFiles	2905
• 70.250 DynaPDF.GetUseStdFonts	2906
• 70.251 DynaPDF.GetUseSystemFonts	2907
• 70.252 DynaPDF.GetUseTransparency	2908
• 70.253 DynaPDF.GetUseVisibleCoords	2909
• 70.254 DynaPDF.GetUserRights	2910
• 70.255 DynaPDF.GetUserUnit	2911
• 70.256 DynaPDF.GetUsesTransparency	2912
• 70.257 DynaPDF.GetViewerPreferences	2914
• 70.260 DynaPDF.GetWordSpacing	2917
• 70.261 DynaPDF.GetXFASStream	2918
• 70.262 DynaPDF.GetXFASStreamCount	2920

- 70.263 DynaPDF.HaveOpenDocument 2921
- 70.264 DynaPDF.HaveOpenPage 2922
- 70.265 DynaPDF.HighlightAnnot 2923
- 70.266 DynaPDF.HighlightPattern 2925
- 70.267 DynaPDF.ImportEncryptionSettings 2927
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.269 DynaPDF.ImportPDFPage 2931
- 70.270 DynaPDF.ImportPageAsTemplate 2934
- 70.271 DynaPDF.InitColorManagement 2936
- 70.272 DynaPDF.InitColorManagementEx 2939
- 70.273 DynaPDF.Initialize 2941
- 70.274 DynaPDF.InsertBookmark 2948
- 70.275 DynaPDF.InsertBookmarkEx 2950
- 70.276 DynaPDF.InsertImage 2952
- 70.277 DynaPDF.InsertImageFile 2956
- 70.280 DynaPDF.IsColorPage 2963
- 70.281 DynaPDF.IsEmptyPage 2965
- 70.282 DynaPDF.IsInitialized 2966
- 70.283 DynaPDF.LineAnnot 2969
- 70.284 DynaPDF.LineTo 2971
- 70.285 DynaPDF.List 2973
- 70.286 DynaPDF.ListImages 2974
- 70.287 DynaPDF.LockLayer 2977
- 70.288 DynaPDF.MovePage 2978
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981
- 70.291 DynaPDF.OpenOutputFile 2984
- 70.292 DynaPDF.OpenOutputFileEncrypted 2986
- 70.293 DynaPDF.OpenPDFFromContainer 2988

	273
• 70.294 DynaPDF.OpenPDFFromFile	2992
• 70.295 DynaPDF.Optimize	2995
• 70.296 DynaPDF.PageLink	3001
• 70.297 DynaPDF.PageLinkEx	3004
• 70.298 DynaPDF.PageStatistics	3008
• 70.299 DynaPDF.ParseContent	3011
• 70.300 DynaPDF.PlaceTemplate	3013
• 70.301 DynaPDF.PlaceTemplateEx	3015
• 70.307 DynaPDF.RGB	3026
• 70.308 DynaPDF.ReadImageFormat	3028
• 70.309 DynaPDF.ReadImageResolution	3030
• 70.310 DynaPDF.Rectangle	3031
• 70.311 DynaPDF.Release	3033
• 70.312 DynaPDF.RenameSpotColor	3035
• 70.313 DynaPDF.RenderPDFFile	3036
• 70.314 DynaPDF.RenderPDFFileEx	3038
• 70.315 DynaPDF.RenderPage	3040
• 70.316 DynaPDF.ReplaceImage	3043
• 70.317 DynaPDF.ReplacePattern	3046
• 70.318 DynaPDF.ResetEncryptionSettings	3049
• 70.319 DynaPDF.RestoreGraphicState	3050
• 70.320 DynaPDF.RotateCoords	3052
• 70.321 DynaPDF.RotateTemplate	3055
• 70.322 DynaPDF.RoundRect	3058
• 70.323 DynaPDF.RoundRectEx	3060
• 70.324 DynaPDF.Save	3062
• 70.325 DynaPDF.SaveAndSignFile	3065
• 70.328 DynaPDF.SaveGraphicState	3071
• 70.329 DynaPDF.ScaleCoords	3072

- 70.330 DynaPDF.SetAlpha 3074
- 70.331 DynaPDF.SetAnnotBorderStyle 3076
- 70.332 DynaPDF.SetAnnotBorderWidth 3078
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.336 DynaPDF.SetAnnotFlagsEx 3085
- 70.337 DynaPDF.SetAnnotHighlightMode 3086
- 70.338 DynaPDF.SetAnnotIcon 3087
- 70.339 DynaPDF.SetAnnotLineEndStyle 3088
- 70.340 DynaPDF.SetAnnotOpacity 3089
- 70.341 DynaPDF.SetAnnotOpenState 3090
- 70.342 DynaPDF.SetAnnotString 3091
- 70.343 DynaPDF.SetAnnotSubject 3092
- 70.344 DynaPDF.SetBBox 3093
- 70.345 DynaPDF.SetBookmarkDest 3095
- 70.346 DynaPDF.SetBookmarkStyle 3097
- 70.347 DynaPDF.SetBorderStyle 3099
- 70.348 DynaPDF.SetCMapDir 3100
- 70.349 DynaPDF.SetCharacterSpacing 3101
- 70.350 DynaPDF.SetCheckBoxChar 3102
- 70.351 DynaPDF.SetCheckBoxDefState 3103
- 70.352 DynaPDF.SetCheckBoxState 3104
- 70.353 DynaPDF.SetColorSpace 3105
- 70.354 DynaPDF.SetCompressionFilter 3107
- 70.355 DynaPDF.SetCompressionLevel 3109
- 70.356 DynaPDF.SetContent 3110
- 70.357 DynaPDF.SetDocInfo 3111
- 70.358 DynaPDF.SetDocInfoEx 3113

	275
• 70.359 DynaPDF.SetDrawDirection	3115
• 70.360 DynaPDF.SetExtColorSpace	3116
• 70.361 DynaPDF.SetExtFillColorSpace	3118
• 70.362 DynaPDF.SetExtStrokeColorSpace	3119
• 70.363 DynaPDF.SetFieldBBox	3120
• 70.364 DynaPDF.SetFieldBackColor	3122
• 70.365 DynaPDF.SetFieldBorderColor	3123
• 70.366 DynaPDF.SetFieldBorderStyle	3124
• 70.367 DynaPDF.SetFieldBorderWidth	3125
• 70.368 DynaPDF.SetFieldColor	3127
• 70.369 DynaPDF.SetFieldDate	3129
• 70.370 DynaPDF.SetFieldExpValue	3130
• 70.371 DynaPDF.SetFieldExpValueEx	3132
• 70.372 DynaPDF.SetFieldFlags	3134
• 70.373 DynaPDF.SetFieldFont	3136
• 70.374 DynaPDF.SetFieldFontEx	3138
• 70.375 DynaPDF.SetFieldFontSize	3140
• 70.376 DynaPDF.SetFieldHighlightMode	3141
• 70.377 DynaPDF.SetFieldIndex	3142
• 70.378 DynaPDF.SetFieldMapName	3143
• 70.379 DynaPDF.SetFieldName	3144
• 70.380 DynaPDF.SetFieldOrientation	3146
• 70.381 DynaPDF.SetFieldTextAlign	3147
• 70.382 DynaPDF.SetFieldTextColor	3148
• 70.383 DynaPDF.SetFieldToolTip	3149
• 70.384 DynaPDF.SetFillColor	3150
• 70.385 DynaPDF.SetFloatPrecision	3153
• 70.386 DynaPDF.SetFont	3154
• 70.387 DynaPDF.SetFontEx	3156

- 70.388 DynaPDF.SetFontOrigin 3158
- 70.389 DynaPDF.SetFontSearchOrder 3159
- 70.390 DynaPDF.SetFontSelMode 3161
- 70.391 DynaPDF.SetFontWeight 3162
- 70.392 DynaPDF.SetGStateFlags 3164
- 70.393 DynaPDF.SetImportFlags 3166
- 70.394 DynaPDF.SetImportFlags2 3170
- 70.395 DynaPDF.SetJPEGQuality 3172
- 70.396 DynaPDF.SetLanguage 3174
- 70.397 DynaPDF.SetLeading 3176
- 70.398 DynaPDF.SetLineJoinStyle 3177
- 70.399 DynaPDF.SetLineWidth 3178
- 70.400 DynaPDF.SetLinkHighlightMode 3180
- 70.402 DynaPDF.SetMetadata 3183
- 70.403 DynaPDF.SetMiterLimit 3185
- 70.404 DynaPDF.SetNumberFormat 3186
- 70.405 DynaPDF.SetOCGState 3188
- 70.406 DynaPDF.SetOpacity 3190
- 70.407 DynaPDF.SetOrientation 3191
- 70.408 DynaPDF.SetOrientationEx 3192
- 70.409 DynaPDF.SetPDFVersion 3195
- 70.410 DynaPDF.SetPageBBox 3197
- 70.411 DynaPDF.SetPageCoords 3199
- 70.412 DynaPDF.SetPageFormat 3201
- 70.413 DynaPDF.SetPageHeight 3203
- 70.414 DynaPDF.SetPageLayout 3206
- 70.415 DynaPDF.SetPageMode 3207
- 70.416 DynaPDF.SetPageWidth 3208
- 70.417 DynaPDF.SetPrintSettings 3211

	277
• 70.418 DynaPDF.SetReplaceICCProfile	3213
• 70.419 DynaPDF.SetReplaceICCProfileData	3215
• 70.420 DynaPDF.SetResolution	3217
• 70.421 DynaPDF.SetSaveNewImageFormat	3219
• 70.422 DynaPDF.SetSeparationInfo	3221
• 70.423 DynaPDF.SetStrokeColor	3222
• 70.424 DynaPDF.SetTextDrawMode	3224
• 70.425 DynaPDF.SetTextFieldValue	3226
• 70.426 DynaPDF.SetTextFieldValueEx	3228
• 70.427 DynaPDF.SetTextRect	3229
• 70.428 DynaPDF.SetTextRise	3231
• 70.429 DynaPDF.SetTextScaling	3232
• 70.430 DynaPDF.SetTransparentColor	3233
• 70.431 DynaPDF.SetTrapped	3234
• 70.432 DynaPDF.SetUseExactPwd	3235
• 70.433 DynaPDF.SetUseGlobalImpFiles	3236
• 70.434 DynaPDF.SetUseStdFonts	3237
• 70.435 DynaPDF.SetUseSystemFonts	3239
• 70.436 DynaPDF.SetUseTransparency	3241
• 70.437 DynaPDF.SetUseVisibleCoords	3242
• 70.438 DynaPDF.SetUserUnit	3243
• 70.439 DynaPDF.SetViewerPreferences	3244
• 70.442 DynaPDF.SetWordSpacing	3247
• 70.443 DynaPDF.SetXFASStream	3248
• 70.444 DynaPDF.ShowDifferences	3249
• 70.445 DynaPDF.SkewCoords	3251
• 70.446 DynaPDF.SquareAnnot	3253
• 70.447 DynaPDF.StampAnnot	3255
• 70.448 DynaPDF.StrokePath	3257

- 70.449 DynaPDF.SysFontInfo 3259
- 70.450 DynaPDF.Table.AddColumn 3261
- 70.451 DynaPDF.Table.AddRow 3262
- 70.452 DynaPDF.Table.AddRows 3264
- 70.453 DynaPDF.Table.ClearColumn 3265
- 70.454 DynaPDF.Table.ClearContent 3266
- 70.455 DynaPDF.Table.ClearRow 3268
- 70.456 DynaPDF.Table.Create 3270
- 70.457 DynaPDF.Table.DeleteCol 3273
- 70.458 DynaPDF.Table.DeleteRow 3274
- 70.459 DynaPDF.Table.DeleteRows 3275
- 70.460 DynaPDF.Table.Draw 3276
- 70.461 DynaPDF.Table.GetFirstRow 3279
- 70.462 DynaPDF.Table.GetNextHeight 3280
- 70.463 DynaPDF.Table.GetNextHeightRow 3281
- 70.464 DynaPDF.Table.GetNextRow 3282
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.467 DynaPDF.Table.GetPDF 3285
- 70.468 DynaPDF.Table.GetTableHeight 3286
- 70.469 DynaPDF.Table.GetTableWidth 3287
- 70.470 DynaPDF.Table.HaveMore 3288
- 70.471 DynaPDF.Table.Release 3289
- 70.472 DynaPDF.Table.SetBorderWidth 3290
- 70.473 DynaPDF.Table.SetBoxProperty 3292
- 70.474 DynaPDF.Table.SetCellAction 3294
- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.476 DynaPDF.Table.SetCellImageEx 3299
- 70.477 DynaPDF.Table.SetCellOrientation 3301

	279
• 70.478 DynaPDF.Table.SetCellPadding	3303
• 70.479 DynaPDF.Table.SetCellSpacing	3305
• 70.480 DynaPDF.Table.SetCellTable	3307
• 70.481 DynaPDF.Table.SetCellTemplate	3309
• 70.482 DynaPDF.Table.SetCellText	3312
• 70.483 DynaPDF.Table.SetColWidth	3314
• 70.484 DynaPDF.Table.SetColor	3316
• 70.485 DynaPDF.Table.SetColorFloat	3318
• 70.486 DynaPDF.Table.SetFlags	3320
• 70.487 DynaPDF.Table.SetFont	3322
• 70.488 DynaPDF.Table.SetFontSelMode	3324
• 70.489 DynaPDF.Table.SetFontSize	3325
• 70.490 DynaPDF.Table.SetGridWidth	3327
• 70.491 DynaPDF.Table.SetPDF	3329
• 70.492 DynaPDF.Table.SetRGBColor	3330
• 70.493 DynaPDF.Table.SetRowHeight	3332
• 70.494 DynaPDF.Table.SetTableWidth	3333
• 70.495 DynaPDF.TextAnnot	3335
• 70.496 DynaPDF.TranslateCoords	3337
• 70.497 DynaPDF.Triangle	3339
• 70.498 DynaPDF.UnlockLayer	3341
• 70.499 DynaPDF.Uninitialize	3342
• 70.500 DynaPDF.WatermarkAnnot	3343
• 70.501 DynaPDF.WebLink	3345
• 70.502 DynaPDF.WriteDemoText	3348
• 70.503 DynaPDF.WriteFText	3350
• 70.504 DynaPDF.WriteFTextEx	3352
• 70.505 DynaPDF.WriteFTextExRotated	3356
• 70.506 DynaPDF.WriteStyledText	3358

- 70.507 DynaPDF.WriteStyledTextEx 3360
- 70.508 DynaPDF.WriteStyledTextExRotated 3362
- 70.509 DynaPDF.WriteText 3364
- 149.1 ECKey.BuiltInCurves 7061
- 149.2 ECKey.Description 7063
- 149.3 ECKey.Duplicate 7064
- 149.4 ECKey.Generate 7065
- 149.5 ECKey.PrivateKey 7067
- 149.6 ECKey.PublicKey 7068
- 149.7 ECKey.ReadPrivateKey 7069
- 149.8 ECKey.ReadPublicKey 7070
- 149.9 ECKey.Release 7071
- 149.10 ECKey.Sign 7072
- 149.11 ECKey.Size 7073
- 149.12 ECKey.Verify 7074
- 175.2 Email.Verify 8231
- 72.1 EmailParser.Address 3403
- 72.2 EmailParser.AddressCount 3406
- 72.3 EmailParser.AttachedEmails 3407
- 72.4 EmailParser.Attachment 3408
- 72.5 EmailParser.AttachmentCount 3410
- 72.6 EmailParser.Free 3411
- 72.7 EmailParser.HTMLText 3413
- 72.8 EmailParser.HTMLToPlainText 3415
- 72.9 EmailParser.HasHeader 3416
- 72.10 EmailParser.Hash 3417
- 72.11 EmailParser.Header 3418
- 72.12 EmailParser.HeaderCount 3420
- 72.13 EmailParser.HeaderValue 3421

	281
• 72.14 EmailParser.Inline	3422
• 72.15 EmailParser.InlineCount	3424
• 72.16 EmailParser.List	3425
• 72.17 EmailParser.MessageID	3426
• 72.18 EmailParser.Parse	3427
• 72.19 EmailParser.ParseContainer	3431
• 72.20 EmailParser.ParseFile	3432
• 72.21 EmailParser.PlainText	3433
• 72.22 EmailParser.ProcessImageReferences	3435
• 72.23 EmailParser.ReceiveDate	3436
• 72.24 EmailParser.SentDate	3437
• 72.25 EmailParser.Source	3438
• 72.26 EmailParser.SourceWithoutAttachments	3439
• 72.27 EmailParser.Subject	3440
• 72.28 EmailParser.WriteAttachment	3442
• 72.29 EmailParser.WriteInline	3443
• 73.1 Encryption.Cipher	3445
• 73.2 Encryption.CipherNames	3451
• 73.3 Encryption.DecryptAES	3452
• 73.4 Encryption.DecryptBlowfish	3454
• 73.5 Encryption.DecryptContainerAES	3456
• 73.6 Encryption.DecryptContainerBlowfish	3458
• 73.7 Encryption.DigestNames	3460
• 73.8 Encryption.EncryptAES	3461
• 73.9 Encryption.EncryptBlowfish	3463
• 73.10 Encryption.EncryptContainerAES	3465
• 73.11 Encryption.EncryptContainerBlowfish	3467
• 74.1 EnvironmentVariables.Clear Value	3485
• 74.2 EnvironmentVariables.Count	3487

- 74.3 EnvironmentVariables.Name 3488
- 74.4 EnvironmentVariables.Names 3489
- 74.5 EnvironmentVariables.Set Value 3490
- 74.6 EnvironmentVariables.Value 3491
- 75.1 EventMonitor.Clear 3493
- 75.2 EventMonitor.ClearCardWindow 3494
- 75.3 EventMonitor.GetEnabled 3495
- 75.4 EventMonitor.Install 3496
- 75.5 EventMonitor.LastMouseClickedButton 3497
- 75.6 EventMonitor.LastMouseClickedIsDoubleClick 3498
- 75.7 EventMonitor.LastMousePositionX 3499
- 75.8 EventMonitor.LastMousePositionY 3500
- 75.9 EventMonitor.SetCardWindow 3501
- 75.10 EventMonitor.SetEnabled 3504
- 76.1 Events.Alarm.Copy 3505
- 76.2 Events.Alarm.GetAbsoluteDate 3507
- 76.3 Events.Alarm.GetEmailAddress 3508
- 76.4 Events.Alarm.GetProximity 3509
- 76.5 Events.Alarm.GetRelativeOffset 3510
- 76.6 Events.Alarm.GetSound 3511
- 76.7 Events.Alarm.GetStructuredLocation 3512
- 76.8 Events.Alarm.GetURL 3513
- 76.9 Events.Alarm.SetAbsoluteDate 3514
- 76.10 Events.Alarm.SetEmailAddress 3515
- 76.11 Events.Alarm.SetProximity 3516
- 76.12 Events.Alarm.SetRelativeOffset 3517
- 76.13 Events.Alarm.SetSound 3518
- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.15 Events.Alarm.SetURL 3522

	283
• 76.16 Events.Alarm.TriggerDateRelativeTo	3523
• 76.17 Events.Alarm.Type	3524
• 76.18 Events.AuthorizationStatusForEntityType	3525
• 76.19 Events.Calendar.AllowsContentModifications	3527
• 76.20 Events.Calendar.CalendarIdentifier	3528
• 76.21 Events.Calendar.Duplicate	3529
• 76.22 Events.Calendar.GetColor	3530
• 76.23 Events.Calendar.GetSource	3532
• 76.24 Events.Calendar.GetTitle	3533
• 76.25 Events.Calendar.GetType	3534
• 76.26 Events.Calendar.Immutable	3535
• 76.27 Events.Calendar.SetColor	3536
• 76.28 Events.Calendar.SetSource	3537
• 76.29 Events.Calendar.SetTitle	3538
• 76.30 Events.Calendar.Subscribed	3539
• 76.31 Events.Calendar.allowedEntityTypes	3540
• 76.32 Events.Calendar.supportedEventAvailabilities	3541
• 76.33 Events.Calendar.Count	3542
• 76.34 Events.Calendar.ItemsWithExternalIdentifier	3543
• 76.35 Events.Calendars	3544
• 76.36 Events.ClearNotification	3545
• 76.37 Events.Commit	3546
• 76.38 Events.CompletedReminders	3547
• 76.39 Events.DelegateSources	3548
• 76.40 Events.Event.BirthdayPersonUniqueID	3549
• 76.41 Events.Event.GetAllDay	3550
• 76.42 Events.Event.GetAvailability	3551
• 76.43 Events.Event.GetEndDate	3552
• 76.44 Events.Event.GetStartDate	3553

- 76.45 Events.Event.GetStructuredLocation 3554
- 76.46 Events.Event.IsDetached 3555
- 76.47 Events.Event.OccurrenceDate 3556
- 76.48 Events.Event.Refresh 3557
- 76.49 Events.Event.SetAllDay 3558
- 76.50 Events.Event.SetAvailability 3559
- 76.51 Events.Event.SetEndDate 3560
- 76.52 Events.Event.SetStartDate 3562
- 76.53 Events.Event.SetStructuredLocation 3564
- 76.54 Events.Event.Status 3565
- 76.55 Events.Event.compareStartDateWithEvent 3566
- 76.56 Events.Event.organizer 3567
- 76.57 Events.EventStoreIdentifier 3568
- 76.58 Events.Events 3569
- 76.59 Events.IncompleteReminders 3570
- 76.60 Events.Initialize 3571
- 76.61 Events.Item.AddAlarm 3572
- 76.62 Events.Item.AddRecurrenceRule 3574
- 76.63 Events.Item.Alarms 3575
- 76.64 Events.Item.Attendees 3576
- 76.65 Events.Item.CalendarItemExternalIdentifier 3577
- 76.66 Events.Item.CalendarItemIdentifier 3579
- 76.67 Events.Item.Duplicate 3580
- 76.68 Events.Item.GetCalendar 3581
- 76.69 Events.Item.GetLocation 3582
- 76.70 Events.Item.GetNotes 3583
- 76.71 Events.Item.GetTimeZone 3584
- 76.72 Events.Item.GetTitle 3585
- 76.73 Events.Item.GetURL 3586

	285
• 76.74 Events.Item.HasAlarms	3587
• 76.75 Events.Item.HasAttendees	3588
• 76.76 Events.Item.HasNotes	3589
• 76.77 Events.Item.HasRecurrenceRules	3590
• 76.78 Events.Item.RecurrenceRules	3591
• 76.79 Events.Item.RemoveAlarm	3592
• 76.80 Events.Item.RemoveRecurrenceRule	3593
• 76.81 Events.Item.SetCalendar	3594
• 76.82 Events.Item.SetLocation	3596
• 76.83 Events.Item.SetNotes	3598
• 76.84 Events.Item.SetTimeZone	3600
• 76.85 Events.Item.SetTitle	3601
• 76.86 Events.Item.SetURL	3603
• 76.87 Events.Item.creationDate	3605
• 76.88 Events.Item.lastModifiedDate	3606
• 76.89 Events.NewAlarm	3607
• 76.90 Events.NewAlarmWithAbsoluteDate	3609
• 76.91 Events.NewAlarmWithRelativeOffset	3610
• 76.92 Events.NewCalendar	3611
• 76.93 Events.NewEvent	3612
• 76.94 Events.NewReminder	3614
• 76.95 Events.Object.HasChanges	3616
• 76.96 Events.Object.IsNew	3617
• 76.97 Events.Object.Refresh	3618
• 76.98 Events.Object.Reset	3619
• 76.99 Events.Object.Rollback	3620
• 76.100 Events.Participant.GetName	3621
• 76.101 Events.Participant.GetStatus	3622
• 76.102 Events.Participant.IsCurrentUser	3623

• 76.103 Events.Participant.Name	3624
• 76.104 Events.Participant.Person	3625
• 76.105 Events.Participant.Role	3626
• 76.106 Events.Participant.Status	3627
• 76.107 Events.Participant.Type	3628
• 76.108 Events.Participant.URL	3629
• 76.109 Events.RecurrenceDayOfWeek.Copy	3630
• 76.110 Events.RecurrenceDayOfWeek.DayOfTheWeek	3631
• 76.111 Events.RecurrenceDayOfWeek.NewWithDayOfWeek	3632
• 76.112 Events.RecurrenceDayOfWeek.WeekNumber	3633
• 76.113 Events.RecurrenceEnd.Copy	3634
• 76.114 Events.RecurrenceEnd.EndDate	3635
• 76.115 Events.RecurrenceEnd.NewWithEndDate	3636
• 76.116 Events.RecurrenceEnd.NewWithOccurrenceCount	3637
• 76.117 Events.RecurrenceEnd.OccurrenceCount	3638
• 76.118 Events.RecurrenceRule.CalendarIdentifier	3639
• 76.119 Events.RecurrenceRule.Copy	3640
• 76.120 Events.RecurrenceRule.DaysOfTheMonth	3641
• 76.121 Events.RecurrenceRule.DaysOfTheWeek	3642
• 76.122 Events.RecurrenceRule.DaysOfTheYear	3643
• 76.123 Events.RecurrenceRule.Description	3644
• 76.124 Events.RecurrenceRule.FirstDayOfTheWeek	3645
• 76.125 Events.RecurrenceRule.Frequency	3646
• 76.126 Events.RecurrenceRule.GetRecurrenceEnd	3647
• 76.127 Events.RecurrenceRule.Interval	3648
• 76.128 Events.RecurrenceRule.MonthsOfTheYear	3649
• 76.129 Events.RecurrenceRule.NewWithFrequency	3650
• 76.130 Events.RecurrenceRule.SetPositions	3653
• 76.131 Events.RecurrenceRule.SetRecurrenceEnd	3654

	287
• 76.132 Events.RecurrenceRule.WeeksOfTheYear	3655
• 76.133 Events.RefreshSourcesIfNecessary	3656
• 76.134 Events.Reminder.GetCompleted	3657
• 76.135 Events.Reminder.GetCompletionDate	3658
• 76.136 Events.Reminder.GetDueDate	3659
• 76.137 Events.Reminder.GetDueTimestamp	3660
• 76.138 Events.Reminder.GetPriority	3661
• 76.139 Events.Reminder.GetStartDate	3662
• 76.140 Events.Reminder.GetStartTimestamp	3663
• 76.141 Events.Reminder.SetCompleted	3664
• 76.142 Events.Reminder.SetCompletionDate	3665
• 76.143 Events.Reminder.SetDueDate	3666
• 76.144 Events.Reminder.SetDueDateComponents	3668
• 76.145 Events.Reminder.SetPriority	3670
• 76.146 Events.Reminder.SetStartDate	3672
• 76.147 Events.Reminder.SetStartDateComponents	3674
• 76.148 Events.Reminders	3676
• 76.149 Events.RemoveCalendar	3677
• 76.150 Events.RemoveEvent	3678
• 76.151 Events.RemoveReminder	3679
• 76.152 Events.Reset	3680
• 76.153 Events.SaveCalendar	3681
• 76.154 Events.SaveEvent	3682
• 76.155 Events.SaveReminder	3684
• 76.156 Events.SelectEvent	3687
• 76.157 Events.SetNotification	3688
• 76.158 Events.SetNotificationEvaluate	3690
• 76.159 Events.Source.Calendars	3691
• 76.160 Events.Source.Title	3692

- 76.161 Events.Source.Type 3693
- 76.162 Events.SourceWithType 3694
- 76.163 Events.Sources 3695
- 76.164 Events.StructuredLocation.Copy 3696
- 76.165 Events.StructuredLocation.GetGeoLocation 3697
- 76.166 Events.StructuredLocation.GetRadius 3698
- 76.167 Events.StructuredLocation.NewLocationWithTitle 3699
- 76.168 Events.StructuredLocation.SetGeoLocation 3701
- 76.169 Events.StructuredLocation.SetRadius 3702
- 76.170 Events.StructuredLocation.Title 3703
- 76.171 Events.defaultCalendarForNewEvents 3704
- 76.172 Events.defaultCalendarForNewReminders 3705
- 76.173 Events.requestAccessToEntityType 3706
- 79.1 FM.AllowFileDragDrop 3883
- 79.2 FM.Argument 3885
- 79.3 FM.ArgumentCount 3886
- 79.4 FM.Beep 3887
- 79.5 FM.ChooseDictionary 3888
- 80.3 FM.CompareTables 4069
- 79.7 FM.CurrentScriptID 3893
- 79.8 FM.CurrentScriptName 3894
- 79.9 FM.CurrentThreadID 3895
- 79.10 FM.DataType 3896
- 79.11 FM.DataViewerContent 3897
- 80.4 FM.DeleteRecord 4073
- 80.5 FM.DeleteRecords 4076
- 79.15 FM.DisableRuntimeEndWindow 3905
- 79.17 FM.Evaluate 3907
- 80.6 FM.ExecuteFileSQL 4079

	289
• 80.7 FM.ExecuteFileSQLOnIdle	4086
• 80.8 FM.ExecuteSQL	4088
• 80.9 FM.ExecuteSQL.LastError	4094
• 80.10 FM.ExecuteSQL.LastErrorMessage	4096
• 80.11 FM.ExecuteSQL.LastSQL	4099
• 80.12 FM.ExecuteSQLOnIdle	4100
• 79.25 FM.GetDictionary	3932
• 79.26 FM.GetDictionaryList	3933
• 79.27 FM.GetDisableContextualMenus	3934
• 80.13 FM.GetSQLBatchMode	4103
• 80.14 FM.InsertOrUpdateRecord	4104
• 80.15 FM.InsertOrUpdateRecord2	4107
• 80.16 FM.InsertOrUpdateRecord3	4110
• 80.17 FM.InsertOrUpdateRecordQuery	4113
• 80.18 FM.InsertRecord	4115
• 80.19 FM.InsertRecordCSV	4119
• 80.20 FM.InsertRecordQuery	4122
• 80.21 FM.InsertRecordQueryIgnoreDuplicates	4126
• 80.22 FM.InsertRecordTSV	4129
• 80.23 FM.InsertSetUpdateProgressDialog	4132
• 79.40 FM.IsMainThread	3967
• 79.41 FM.Loop	3968
• 79.42 FM.MainThreadID	3972
• 79.43 FM.MouseWheelScriptTrigger	3973
• 80.24 FM.NULL	4134
• 79.45 FM.PatchNotificationProblem	3977
• 79.46 FM.QueryBaseTableNames	3978
• 79.47 FM.QueryFieldsForBaseTableName	3979
• 79.48 FM.QueryFieldsForTableName	3980

- 79.49 FM.QueryTableNames 3982
- 79.50 FM.RunDatabaseDesignReport 3983
- 79.51 FM.RunSaveAsXML 3985
- 79.52 FM.RunScript 3986
- 79.53 FM.RunScriptIdle 3988
- 79.54 FM.RunScriptLater 3990
- 79.55 FM.SQL.Avg 3992
- 80.25 FM.SQL.CSV 4135
- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.29 FM.SQL.FieldType 4145
- 80.30 FM.SQL.InsertRecords 4146
- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 100.2 FM.SQL.JSONRecord 5234
- 100.3 FM.SQL.JSONRecords 5236
- 79.65 FM.SQL.Max 4014
- 79.66 FM.SQL.Min 4016
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 79.69 FM.SQL.Sum 4022
- 80.36 FM.SQL.Text 4159
- 79.71 FM.ScriptIDForScriptName 4027
- 79.72 FM.ScriptNameForScriptID 4028
- 79.73 FM.ScriptNames 4029
- 79.74 FM.SetDisableContextualMenus 4030
- 80.37 FM.SetSQLBatchMode 4162
- 79.76 FM.SetThreadName 4033
- 79.77 FM.StopScriptIdle 4034

	291
• 79.78 FM.TableStatistics	4035
• 80.38 FM.UpdateRecord	4164
• 79.80 FM.UpdateRecord2	4041
• 79.81 FM.UpdateRecord3	4043
• 80.39 FM.UpdateRecords	4167
• 79.83 FM.UpdateRecords2	4048
• 79.84 FM.UpdateRecords3	4050
• 178.1 FM.VariableAdd	8259
• 178.2 FM.VariableAppend	8261
• 178.3 FM.VariableClear	8262
• 178.4 FM.VariableClearAll	8263
• 178.5 FM.VariableExists	8264
• 178.6 FM.VariableGet	8265
• 178.7 FM.VariableList	8267
• 178.8 FM.VariableNames	8268
• 178.9 FM.VariableReset	8269
• 178.10 FM.VariableSet	8270
• 83.1 FSEvents.Create	4205
• 83.2 FSEvents.CreateRelativeToDevice	4209
• 83.3 FSEvents.CurrentEventId	4210
• 83.4 FSEvents.Description	4211
• 83.5 FSEvents.DeviceBeingWatched	4212
• 83.6 FSEvents.DeviceID	4213
• 83.7 FSEvents.EventCount	4214
• 83.8 FSEvents.FlushASync	4215
• 83.9 FSEvents.FlushSync	4216
• 83.10 FSEvents.GetEvaluate	4217
• 83.11 FSEvents.GetExclusionPaths	4218
• 83.12 FSEvents.GetFileName	4219

- 83.13 FSEvents.GetScriptName 4220
- 83.14 FSEvents.HasNextEvent 4221
- 83.15 FSEvents.LastEventIdForDeviceBeforeTime 4222
- 83.16 FSEvents.LatestEventId 4223
- 83.17 FSEvents.NextEvent 4224
- 83.18 FSEvents.PathsBeingWatched 4228
- 83.19 FSEvents.Release 4229
- 83.20 FSEvents.SetEvaluate 4230
- 83.21 FSEvents.SetExclusionPaths 4231
- 83.22 FSEvents.SetFileName 4232
- 83.23 FSEvents.SetScriptName 4233
- 83.24 FSEvents.Show 4234
- 83.25 FSEvents.Start 4235
- 83.26 FSEvents.Started 4236
- 83.27 FSEvents.Stop 4237
- 83.28 FSEvents.UUIDForDevice 4238
- 77.11 FileDialog.GetAllowMulti 3719
- 77.12 FileDialog.GetAllowsOtherFileTypes 3720
- 77.13 FileDialog.GetCanSelectHiddenExtension 3721
- 77.14 FileDialog.GetFilter 3722
- 77.15 FileDialog.GetInitialDirectory 3723
- 77.16 FileDialog.GetMessage 3724
- 77.17 FileDialog.GetNameFieldLabel 3725
- 77.18 FileDialog.GetNameFieldStringValue 3726
- 77.19 FileDialog.GetPath 3727
- 77.20 FileDialog.GetPathCount 3730
- 77.21 FileDialog.GetPrompt 3731
- 77.22 FileDialog.GetResolvesAliases 3732
- 77.23 FileDialog.GetShowHidden 3733

	293
• 77.24 FileDialog.GetTreatsFilePackagesAsDirectories	3734
• 77.25 FileDialog.GetUseSheet	3735
• 77.26 FileDialog.GetWindowTitle	3736
• 77.27 FileDialog.OpenFileDialog	3737
• 77.28 FileDialog.Reset	3740
• 77.29 FileDialog.SaveFileDialog	3742
• 77.30 FileDialog.SelectFolderDialog	3744
• 77.31 FileDialog.SelectItemDialog	3747
• 77.32 FileDialog.SetAllowMulti	3749
• 77.33 FileDialog.SetAllowsOtherFileTypes	3751
• 77.34 FileDialog.SetCanSelectHiddenExtension	3752
• 77.35 FileDialog.SetFilter	3753
• 77.36 FileDialog.SetInitialDirectory	3755
• 77.37 FileDialog.SetMessage	3757
• 77.38 FileDialog.SetNameFieldLabel	3759
• 77.39 FileDialog.SetNameFieldStringValue	3760
• 77.40 FileDialog.SetPrompt	3761
• 77.41 FileDialog.SetResolvesAliases	3763
• 77.42 FileDialog.SetSheetScriptTrigger	3764
• 77.43 FileDialog.SetShowHidden	3765
• 77.44 FileDialog.SetTreatsFilePackagesAsDirectories	3766
• 77.45 FileDialog.SetUseSheet	3767
• 77.46 FileDialog.SetWindowTitle	3768
• 77.47 FileDialogWatcher.GetLastPath	3769
• 77.48 FileDialogWatcher.Install	3770
• 78.1 Files.AccessDate	3771
• 78.2 Files.AddedToDirectoryDate	3773
• 78.3 Files.AppPath	3774
• 78.4 Files.AudioTags	3775

- 78.5 Files.CanOpenFile 3777
- 78.6 Files.CopyFile 3778
- 78.7 Files.CopyFiles 3780
- 78.8 Files.CreateAlias 3782
- 78.9 Files.CreateBookmark 3784
- 78.10 Files.CreateDirectory 3785
- 78.11 Files.CreateHardLink 3787
- 78.12 Files.CreateSymbolicLink 3789
- 78.13 Files.CreationDate 3790
- 78.14 Files.Delete 3792
- 78.15 Files.DeleteFolder 3794
- 78.16 Files.DirectoryExists 3796
- 78.17 Files.DiskInfo 3798
- 78.18 Files.FileDisplayName 3800
- 78.19 Files.FileExists 3801
- 78.20 Files.FileExtension 3803
- 78.21 Files.FileInfo 3804
- 78.22 Files.FileKind 3806
- 78.23 Files.FileName 3807
- 78.24 Files.FileSize 3808
- 78.25 Files.FileUTITypes 3810
- 78.26 Files.FolderSize 3811
- 78.27 Files.GetComment 3813
- 78.28 Files.GetFinderLabel 3814
- 78.29 Files.GetNodeID 3815
- 78.30 Files.GetPathFromNodeID 3817
- 78.31 Files.GetPosixPermissions 3819
- 78.32 Files.GetTagNames 3820
- 78.33 Files.IsHidden 3821

	295
• 78.34 Files.ItemExists	3822
• 78.35 Files.Launch	3823
• 78.36 Files.LaunchFile	3826
• 78.37 Files.List	3828
• 78.38 Files.ListRecursive	3831
• 78.39 Files.ListVolumes	3833
• 78.40 Files.ModificationDate	3834
• 78.41 Files.Mount	3836
• 78.42 Files.MountPath	3839
• 78.43 Files.MoveFile	3840
• 78.44 Files.MoveToTrash	3842
• 78.45 Files.ReadFile	3844
• 78.46 Files.ReadJPEG	3847
• 78.47 Files.ReadPDF	3849
• 78.48 Files.ReadPNG	3851
• 78.49 Files.RenameFile	3853
• 78.50 Files.ResolveAlias	3855
• 78.51 Files.ResolveBookmark	3857
• 78.52 Files.RevealFile	3858
• 78.53 Files.SetAudioTags	3860
• 78.54 Files.SetComment	3862
• 78.55 Files.SetCreationDate	3863
• 78.56 Files.SetFinderLabel	3864
• 78.57 Files.SetHidden	3865
• 78.58 Files.SetModificationDate	3866
• 78.59 Files.SetPosixPermissions	3867
• 78.60 Files.SetTagNames	3869
• 78.61 Files.Unmount	3870
• 78.62 Files.WriteFile	3871

- 81.1 Folders.Applications 4169
- 81.2 Folders.LocalFonts 4170
- 81.3 Folders.LocalPreferences 4171
- 81.4 Folders.SharedDocuments 4172
- 81.5 Folders.System 4173
- 81.6 Folders.SystemFonts 4174
- 81.7 Folders.SystemTemporary 4175
- 81.8 Folders.UserDesktop 4177
- 81.9 Folders.UserDocuments 4179
- 81.10 Folders.UserDownloads 4181
- 81.11 Folders.UserFonts 4182
- 81.12 Folders.UserHome 4183
- 81.13 Folders.UserMusic 4184
- 81.14 Folders.UserPictures 4185
- 81.15 Folders.UserPreferences 4186
- 81.16 Folders.UserTemporary 4187
- 81.17 Folders.UserTrash 4189
- 81.18 Folders.UserVideo 4190
- 82.1 Font.Activate 4193
- 82.2 Font.CalculateTextFits 4195
- 82.3 Font.CalculateTextHeight 4197
- 82.4 Font.CalculateTextWidth 4199
- 82.5 Font.Deactivate 4201
- 82.6 FontManager.FontFile 4202
- 82.7 FontManager.ListFontFamilies 4203
- 82.8 FontManager.ListFonts 4204
- 85.1 GImage.AdaptiveThreshold 4337
- 85.2 GImage.AddNoise 4339
- 85.3 GImage.AddNoiseChannel 4340

	297
• 85.4 GMImage.AddPathArcAbs	4341
• 85.5 GMImage.AddPathArcRel	4343
• 85.6 GMImage.AddPathClosePath	4345
• 85.7 GMImage.AddPathCurvetoAbs	4346
• 85.8 GMImage.AddPathCurvetoRel	4348
• 85.9 GMImage.AddPathLinetoAbs	4350
• 85.10 GMImage.AddPathLinetoHorizontalAbs	4351
• 85.11 GMImage.AddPathLinetoHorizontalRel	4352
• 85.12 GMImage.AddPathLinetoRel	4353
• 85.13 GMImage.AddPathLinetoVerticalAbs	4354
• 85.14 GMImage.AddPathLinetoVerticalRel	4355
• 85.15 GMImage.AddPathMovetoAbs	4356
• 85.16 GMImage.AddPathMovetoRel	4357
• 85.17 GMImage.AddPathQuadraticCurvetoAbs	4358
• 85.18 GMImage.AddPathQuadraticCurvetoRel	4359
• 85.19 GMImage.AddPathSmoothCurvetoAbs	4360
• 85.20 GMImage.AddPathSmoothCurvetoRel	4361
• 85.21 GMImage.AddPathSmoothQuadraticCurvetoAbs	4362
• 85.22 GMImage.AddPathSmoothQuadraticCurvetoRel	4363
• 85.23 GMImage.Affine	4364
• 85.24 GMImage.Annotate	4365
• 85.25 GMImage.AutoOrient	4369
• 85.26 GMImage.AveragePixelValue	4370
• 85.27 GMImage.BaseColumns	4372
• 85.28 GMImage.BaseFilename	4373
• 85.29 GMImage.BaseRows	4374
• 85.30 GMImage.Blur	4375
• 85.31 GMImage.BlurChannel	4377
• 85.32 GMImage.Border	4378

- 85.33 `GMImage.BoundingBox` 4380
- 85.34 `GMImage.Channel` 4381
- 85.35 `GMImage.Charcoal` 4383
- 85.36 `GMImage.Chop` 4385
- 85.37 `GMImage.ClipMask` 4386
- 85.38 `GMImage.ClipPath` 4387
- 85.39 `GMImage.Coders` 4388
- 85.40 `GMImage.Colorize` 4389
- 85.41 `GMImage.ColorizeRGB` 4391
- 85.42 `GMImage.Columns` 4393
- 85.43 `GMImage.Compare` 4394
- 85.44 `GMImage.Composite` 4396
- 85.45 `GMImage.CompositeXY` 4398
- 85.46 `GMImage.Contrast` 4400
- 85.47 `GMImage.Copy` 4401
- 85.48 `GMImage.CopyChannel` 4402
- 85.49 `GMImage.Crop` 4405
- 85.50 `GMImage.CycleColormap` 4407
- 85.51 `GMImage.Despeckle` 4408
- 85.52 `GMImage.Directory` 4409
- 85.53 `GMImage.DrawArc` 4410
- 85.54 `GMImage.DrawCircle` 4412
- 85.55 `GMImage.DrawEllipse` 4414
- 85.56 `GMImage.DrawLine` 4416
- 85.57 `GMImage.DrawPath` 4418
- 85.58 `GMImage.DrawRectangle` 4419
- 85.59 `GMImage.DrawRoundRectangle` 4422
- 85.60 `GMImage.Edge` 4424
- 85.61 `GMImage.Emboss` 4425

	299
• 85.62 GMImage.Enhance	4427
• 85.63 GMImage.Equalize	4428
• 85.64 GMImage.Erase	4429
• 85.65 GMImage.ExifThumbnail	4430
• 85.66 GMImage.Extent	4431
• 85.67 GMImage.FillPattern	4433
• 85.68 GMImage.FindColorInColumn	4434
• 85.69 GMImage.FindColorInRow	4436
• 85.70 GMImage.Flip	4438
• 85.71 GMImage.FloodFillColor	4440
• 85.72 GMImage.FloodFillColorXY	4442
• 85.73 GMImage.FloodFillOpacity	4444
• 85.74 GMImage.FloodFillTexture	4445
• 85.75 GMImage.FloodFillTextureXY	4446
• 85.76 GMImage.Flop	4447
• 85.77 GMImage.FontMap	4449
• 85.78 GMImage.FontTypeMetrics	4450
• 85.79 GMImage.Format	4452
• 85.80 GMImage.Frame	4453
• 85.81 GMImage.Free	4455
• 85.82 GMImage.FreeAll	4457
• 85.83 GMImage.Gamma	4458
• 85.84 GMImage.GaussianBlur	4459
• 85.85 GMImage.GaussianBlurChannel	4460
• 85.86 GMImage.Geometry	4461
• 85.87 GMImage.GetAdjoin	4462
• 85.88 GMImage.GetAnimationDelay	4463
• 85.89 GMImage.GetAnimationIterations	4464
• 85.90 GMImage.GetAntiAlias	4465

- 85.91 `GImage.GetAttribute` 4466
- 85.92 `GImage.GetAttributeNames` 4468
- 85.93 `GImage.GetAttributesJSON` 4469
- 85.94 `GImage.GetBackgroundColor` 4471
- 85.95 `GImage.GetBackgroundTexture` 4472
- 85.96 `GImage.GetBorderColor` 4473
- 85.97 `GImage.GetBoxColor` 4474
- 85.98 `GImage.GetChannelDepth` 4475
- 85.99 `GImage.GetClassType` 4476
- 85.100 `GImage.GetClipMask` 4477
- 85.101 `GImage.GetColorFuzz` 4478
- 85.102 `GImage.GetColorMapSize` 4479
- 85.103 `GImage.GetColorSpace` 4480
- 85.104 `GImage.GetComment` 4482
- 85.105 `GImage.GetCompose` 4483
- 85.106 `GImage.GetCompressType` 4484
- 85.107 `GImage.GetDebug` 4485
- 85.108 `GImage.GetDefineSet` 4486
- 85.109 `GImage.GetDefineValue` 4487
- 85.110 `GImage.GetDensity` 4488
- 85.111 `GImage.GetDepth` 4489
- 85.112 `GImage.GetEXIFOrientation` 4490
- 85.113 `GImage.GetEndian` 4491
- 85.114 `GImage.GetFileName` 4492
- 85.115 `GImage.GetFileSize` 4493
- 85.116 `GImage.GetFillColor` 4494
- 85.117 `GImage.GetFillRule` 4495
- 85.118 `GImage.GetFilterType` 4496
- 85.119 `GImage.GetFont` 4497

	301
• 85.120 GImage.GetFontPointsize	4498
• 85.121 GImage.GetGamma	4499
• 85.122 GImage.GetGifDisposeMethod	4500
• 85.123 GImage.GetHeight	4501
• 85.124 GImage.GetICCColorProfile	4503
• 85.125 GImage.GetIPTCProfile	4504
• 85.126 GImage.GetIPTCProfileValues	4505
• 85.127 GImage.GetInterlaceType	4506
• 85.128 GImage.GetIsValid	4507
• 85.129 GImage.GetJPEGAsBase64	4508
• 85.130 GImage.GetJPEGAsHex	4509
• 85.131 GImage.GetLabel	4510
• 85.132 GImage.GetLineWidth	4511
• 85.133 GImage.GetMagick	4512
• 85.134 GImage.GetMatte	4513
• 85.135 GImage.GetMatteColor	4514
• 85.136 GImage.GetModulusDepth	4515
• 85.137 GImage.GetMonochrome	4516
• 85.138 GImage.GetOrientation	4517
• 85.139 GImage.GetPNGAsBase64	4519
• 85.140 GImage.GetPNGAsHex	4520
• 85.141 GImage.GetPage	4521
• 85.142 GImage.GetPixelColor	4522
• 85.143 GImage.GetProfile	4524
• 85.144 GImage.GetQuality	4525
• 85.145 GImage.GetQuantizeColorSpace	4526
• 85.146 GImage.GetQuantizeColors	4527
• 85.147 GImage.GetQuantizeDither	4528
• 85.148 GImage.GetQuantizeTreeDepth	4529

- 85.149 GImage.GetQuiet 4530
- 85.150 GImage.GetRenderingIntent 4531
- 85.151 GImage.GetResolutionUnits 4532
- 85.152 GImage.GetScene 4533
- 85.153 GImage.GetSize 4534
- 85.154 GImage.GetStrokeAntiAlias 4535
- 85.155 GImage.GetStrokeColor 4536
- 85.156 GImage.GetStrokeDashArray 4537
- 85.157 GImage.GetStrokeDashOffset 4538
- 85.158 GImage.GetStrokeLineCap 4539
- 85.159 GImage.GetStrokeLineJoin 4540
- 85.160 GImage.GetStrokeMiterLimit 4541
- 85.161 GImage.GetStrokeWidth 4542
- 85.162 GImage.GetSubImage 4543
- 85.163 GImage.GetSubRange 4544
- 85.164 GImage.GetTextEncoding 4545
- 85.165 GImage.GetTileName 4546
- 85.166 GImage.GetType 4547
- 85.167 GImage.GetVerbose 4548
- 85.168 GImage.GetView 4549
- 85.169 GImage.GetWidth 4550
- 85.170 GImage.GetXMP 4552
- 85.171 GImage.GetcolorMap 4554
- 85.172 GImage.Hash 4555
- 85.173 GImage.ImageCount 4557
- 85.174 GImage.Implode 4558
- 85.175 GImage.InvertChannel 4559
- 85.176 GImage.IsGray 4561
- 85.177 GImage.Level 4562

	303
• 85.178 GImage.LevelChannel	4563
• 85.179 GImage.List	4565
• 85.180 GImage.Magnify	4566
• 85.181 GImage.Map	4567
• 85.182 GImage.MatteFloodfill	4568
• 85.183 GImage.MeanErrorPerPixel	4569
• 85.184 GImage.MedianFilter	4570
• 85.185 GImage.Minify	4571
• 85.186 GImage.Modulate	4572
• 85.187 GImage.MontageGeometry	4574
• 85.188 GImage.MotionBlur	4575
• 85.189 GImage.MultiplyChannel	4576
• 85.190 GImage.Negate	4578
• 85.191 GImage.New	4580
• 85.192 GImage.NewFromBase64	4583
• 85.193 GImage.NewFromContainer	4584
• 85.194 GImage.NewFromFile	4586
• 85.195 GImage.NewFromHex	4588
• 85.196 GImage.NewImagesFromContainer	4589
• 85.197 GImage.NewImagesFromFile	4590
• 85.198 GImage.Normalize	4592
• 85.199 GImage.NormalizedMaxError	4593
• 85.200 GImage.NormalizedMeanError	4595
• 85.201 GImage.OilPaint	4596
• 85.202 GImage.Opacity	4597
• 85.203 GImage.Opaque	4598
• 85.204 GImage.PopClipPath	4599
• 85.205 GImage.PurgeTemporaryFiles	4600
• 85.206 GImage.PushClipPath	4601

- 85.207 GImage.Quantize 4602
- 85.208 GImage.QuantumDepth 4604
- 85.209 GImage.Raise 4605
- 85.210 GImage.RandomThreshold 4607
- 85.211 GImage.RandomThresholdChannel 4608
- 85.212 GImage.Read 4609
- 85.213 GImage.ReduceNoise 4611
- 85.214 GImage.Release 4612
- 85.215 GImage.ReleaseAll 4614
- 85.216 GImage.Repage 4615
- 85.217 GImage.ReplaceColor 4616
- 85.218 GImage.Resize 4619
- 85.219 GImage.Roll 4621
- 85.220 GImage.Rollxy 4622
- 85.221 GImage.Rotate 4623
- 85.222 GImage.Rotating 4625
- 85.223 GImage.Rows 4626
- 85.224 GImage.Sample 4627
- 85.225 GImage.Scale 4628
- 85.226 GImage.Scaling 4632
- 85.227 GImage.Segment 4633
- 85.228 GImage.SetAdjoin 4634
- 85.229 GImage.SetAnimationDelay 4635
- 85.230 GImage.SetAnimationIterations 4636
- 85.231 GImage.SetAntiAlias 4637
- 85.232 GImage.SetAttribute 4638
- 85.233 GImage.SetBackgroundColor 4639
- 85.234 GImage.SetBackgroundTexture 4641
- 85.235 GImage.SetBorderColor 4642

	305
• 85.236 GImage.SetBoxColor	4644
• 85.237 GImage.SetCacheThreshold	4645
• 85.238 GImage.SetClassType	4646
• 85.239 GImage.SetColorFuzz	4647
• 85.240 GImage.SetColorMapSize	4649
• 85.241 GImage.SetColorSpace	4650
• 85.242 GImage.SetComment	4651
• 85.243 GImage.SetCompose	4652
• 85.244 GImage.SetCompressType	4653
• 85.245 GImage.SetDebug	4655
• 85.246 GImage.SetDefineSet	4656
• 85.247 GImage.SetDefineValue	4657
• 85.248 GImage.SetDensity	4658
• 85.249 GImage.SetDepth	4660
• 85.250 GImage.SetEXIFOrientation	4661
• 85.251 GImage.SetEndian	4662
• 85.252 GImage.SetFileName	4663
• 85.253 GImage.SetFillColor	4664
• 85.254 GImage.SetFillRule	4666
• 85.255 GImage.SetFilterType	4667
• 85.256 GImage.SetFont	4668
• 85.257 GImage.SetFontPointsize	4669
• 85.258 GImage.SetGifDisposeMethod	4670
• 85.259 GImage.SetICCColorProfile	4671
• 85.260 GImage.SetIPTCProfile	4673
• 85.261 GImage.SetInterlaceType	4674
• 85.262 GImage.SetIsValid	4675
• 85.263 GImage.SetLabel	4676
• 85.264 GImage.SetLineWidth	4677

- 85.265 GImage.SetMagick 4678
- 85.266 GImage.SetMatte 4680
- 85.267 GImage.SetMatteColor 4682
- 85.268 GImage.SetModulusDepth 4683
- 85.269 GImage.SetMonochrome 4684
- 85.270 GImage.SetOrientation 4685
- 85.271 GImage.SetPage 4687
- 85.272 GImage.SetPixelColor 4688
- 85.273 GImage.SetProfile 4690
- 85.274 GImage.SetQuality 4692
- 85.275 GImage.SetQuantizeColorSpace 4694
- 85.276 GImage.SetQuantizeColors 4695
- 85.277 GImage.SetQuantizeDither 4696
- 85.278 GImage.SetQuantizeTreeDepth 4697
- 85.279 GImage.SetQuiet 4698
- 85.280 GImage.SetRenderingIntent 4699
- 85.281 GImage.SetResolutionUnits 4700
- 85.282 GImage.SetScene 4702
- 85.283 GImage.SetSize 4703
- 85.284 GImage.SetStrokeAntiAlias 4704
- 85.285 GImage.SetStrokeColor 4706
- 85.286 GImage.SetStrokeDashArray 4708
- 85.287 GImage.SetStrokeDashOffset 4709
- 85.288 GImage.SetStrokeLineCap 4710
- 85.289 GImage.SetStrokeLineJoin 4711
- 85.290 GImage.SetStrokeMiterLimit 4712
- 85.291 GImage.SetStrokeWidth 4713
- 85.292 GImage.SetSubImage 4714
- 85.293 GImage.SetSubRange 4715

	307
• 85.294 GImage.SetTextEncoding	4716
• 85.295 GImage.SetTileName	4717
• 85.296 GImage.SetType	4718
• 85.297 GImage.SetVerbose	4721
• 85.298 GImage.SetView	4722
• 85.299 GImage.SetXMP	4723
• 85.300 GImage.SetchannelDepth	4724
• 85.301 GImage.SetcolorMap	4725
• 85.302 GImage.Shade	4726
• 85.303 GImage.Sharpen	4727
• 85.304 GImage.SharpenChannel	4729
• 85.305 GImage.Shave	4730
• 85.306 GImage.Shear	4732
• 85.307 GImage.Signature	4733
• 85.308 GImage.SkewX	4734
• 85.309 GImage.SkewY	4735
• 85.310 GImage.Solarize	4736
• 85.311 GImage.Spread	4738
• 85.312 GImage.Stegano	4739
• 85.313 GImage.Stereo	4740
• 85.314 GImage.Strip	4741
• 85.315 GImage.StrokePattern	4742
• 85.316 GImage.Swirl	4743
• 85.317 GImage.Texture	4744
• 85.318 GImage.Threshold	4745
• 85.319 GImage.TotalColors	4747
• 85.320 GImage.Transform	4748
• 85.321 GImage.TransformOrigin	4749
• 85.322 GImage.TransformReset	4750

- 85.323 `GUIImage.TransformRotation` 4751
- 85.324 `GUIImage.TransformScale` 4752
- 85.325 `GUIImage.TransformSkewX` 4753
- 85.326 `GUIImage.TransformSkewY` 4754
- 85.327 `GUIImage.Translation` 4755
- 85.328 `GUIImage.Transparent` 4756
- 85.329 `GUIImage.Trim` 4758
- 85.330 `GUIImage.Unsharpmask` 4760
- 85.331 `GUIImage.UnsharpmaskChannel` 4761
- 85.332 `GUIImage.Wave` 4762
- 85.333 `GUIImage.WriteImages` 4763
- 85.334 `GUIImage.WriteToBMPContainer` 4765
- 85.335 `GUIImage.WriteToContainer` 4766
- 85.336 `GUIImage.WriteToFile` 4768
- 85.337 `GUIImage.WriteToGIFContainer` 4771
- 85.338 `GUIImage.WriteToJPEGContainer` 4773
- 85.339 `GUIImage.WriteToPDFContainer` 4775
- 85.340 `GUIImage.WriteToPNGContainer` 4777
- 85.341 `GUIImage.WriteToTiffContainer` 4780
- 85.342 `GUIImage.XResolution` 4782
- 85.343 `GUIImage.YResolution` 4783
- 85.344 `GUIImage.Zoom` 4784
- 53.1 `GZipFile.Compress` 1473
- 53.2 `GZipFile.Decompress` 1475
- 84.1 `GameKit.Achievement.Completed` 4239
- 84.2 `GameKit.Achievement.GetPercentComplete` 4240
- 84.3 `GameKit.Achievement.GetShowsCompletionBanner` 4241
- 84.4 `GameKit.Achievement.LastReportedDate` 4242
- 84.5 `GameKit.Achievement.New` 4243

	309
• 84.6 GameKit.Achievement.Player	4244
• 84.7 GameKit.Achievement.SetPercentComplete	4245
• 84.8 GameKit.Achievement.SetShowsCompletionBanner	4246
• 84.9 GameKit.AchievementDescription.AchievedDescription	4247
• 84.10 GameKit.AchievementDescription.GroupIdentifier	4248
• 84.11 GameKit.AchievementDescription.Hidden	4249
• 84.12 GameKit.AchievementDescription.Image	4250
• 84.13 GameKit.AchievementDescription.IncompleteAchievementImage	4251
• 84.14 GameKit.AchievementDescription.MaximumPoints	4252
• 84.15 GameKit.AchievementDescription.PlaceholderCompletedAchievementImage	4253
• 84.16 GameKit.AchievementDescription.Replayable	4254
• 84.17 GameKit.AchievementDescription.Title	4255
• 84.18 GameKit.AchievementDescription.UnachievedDescription	4256
• 84.19 GameKit.AnonymousGuestPlayer	4257
• 84.20 GameKit.Challenge.Achievement	4258
• 84.21 GameKit.Challenge.CompletionDate	4259
• 84.22 GameKit.Challenge.Decline	4260
• 84.23 GameKit.Challenge.IssueDate	4261
• 84.24 GameKit.Challenge.IssuingPlayer	4262
• 84.25 GameKit.Challenge.Message	4263
• 84.26 GameKit.Challenge.ReceivingPlayer	4264
• 84.27 GameKit.Challenge.Score	4265
• 84.28 GameKit.Challenge.State	4266
• 84.29 GameKit.DefaultLeaderboardIdentifier	4267
• 84.30 GameKit.GameCenterView.Dismiss	4268
• 84.31 GameKit.GameCenterView.GetLeaderboardIdentifier	4269
• 84.32 GameKit.GameCenterView.GetLeaderboardTimeScope	4270
• 84.33 GameKit.GameCenterView.GetViewState	4271
• 84.34 GameKit.GameCenterView.Initialize	4272

- 84.35 GameKit.GameCenterView.Present 4273
- 84.36 GameKit.GameCenterView.SetLeaderboardIdentifier 4274
- 84.37 GameKit.GameCenterView.SetLeaderboardTimeScope 4275
- 84.38 GameKit.GameCenterView.SetScriptTrigger 4276
- 84.39 GameKit.GameCenterView.SetViewState 4277
- 84.40 GameKit.GameCenterView.ShowBannerWithTitle 4278
- 84.41 GameKit.Initialize 4279
- 84.42 GameKit.Leaderboard.GetPlayerScope 4280
- 84.43 GameKit.Leaderboard.GetRange 4281
- 84.44 GameKit.Leaderboard.GetTimeScope 4282
- 84.45 GameKit.Leaderboard.GroupIdentifier 4283
- 84.46 GameKit.Leaderboard.Image 4284
- 84.47 GameKit.Leaderboard.LoadScores 4285
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.49 GameKit.Leaderboard.LocalPlayerScore 4287
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.51 GameKit.Leaderboard.New 4289
- 84.52 GameKit.Leaderboard.Scores 4290
- 84.53 GameKit.Leaderboard.SetPlayerScope 4291
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.55 GameKit.Leaderboard.SetTimeScope 4293
- 84.56 GameKit.Leaderboard.Title 4294
- 84.57 GameKit.LeaderboardSet.GroupIdentifier 4295
- 84.58 GameKit.LeaderboardSet.Image 4296
- 84.59 GameKit.LeaderboardSet.Title 4297
- 84.60 GameKit.LoadAchievementDescriptions 4298
- 84.61 GameKit.LoadAchievements 4299
- 84.62 GameKit.LoadLeaderboardSets 4300
- 84.63 GameKit.LoadLeaderboards 4301

	311
• 84.64 GameKit.LoadPlayers	4302
• 84.65 GameKit.LoadReceivedChallenges	4303
• 84.66 GameKit.LocalPlayer	4304
• 84.67 GameKit.LocalPlayer.Authenticate	4305
• 84.68 GameKit.LocalPlayer.AuthenticateError	4306
• 84.69 GameKit.LocalPlayer.ClearAuthenticateHandler	4307
• 84.70 GameKit.LocalPlayer.isAuthenticated	4308
• 84.71 GameKit.LocalPlayer.isUnderage	4309
• 84.72 GameKit.Player.Alias	4310
• 84.73 GameKit.Player.DisplayName	4311
• 84.74 GameKit.Player.GuestIdentifier	4312
• 84.75 GameKit.Player.Photo	4313
• 84.76 GameKit.RecentPlayers	4314
• 84.77 GameKit.ReportAchievements	4315
• 84.78 GameKit.ReportAchievementsWithEligibleChallenges	4316
• 84.79 GameKit.ReportScores	4317
• 84.80 GameKit.ReportScoresWithEligibleChallenges	4318
• 84.81 GameKit.ResetAchievements	4319
• 84.82 GameKit.Score.Date	4320
• 84.83 GameKit.Score.FormattedValue	4321
• 84.84 GameKit.Score.GetContext	4322
• 84.85 GameKit.Score.GetShouldSetDefaultLeaderboard	4323
• 84.86 GameKit.Score.GetValue	4324
• 84.87 GameKit.Score.LeaderboardIdentifier	4325
• 84.88 GameKit.Score.New	4326
• 84.89 GameKit.Score.Player	4327
• 84.90 GameKit.Score.Rank	4328
• 84.91 GameKit.Score.SetContext	4329
• 84.92 GameKit.Score.SetShouldSetDefaultLeaderboard	4330

- 84.93 GameKit.Score.SetValue 4331
- 84.94 GameKit.SelectChallengeablePlayers 4332
- 84.95 GameKit.SetDefaultLeaderboardIdentifier 4333
- 84.96 GameKit.SetPlayerDidChangeScriptTrigger 4334
- 84.97 GameKit.ShowChallengeComposeDialog 4335
- 162.1 GetSystemUIMode 7719
- 162.2 GetSystemUIModeOptions 7720
- 86.1 Hash.CRC32 4785
- 86.2 Hash.Digest 4787
- 86.3 Hash.DigestFile 4791
- 86.4 Hash.MD5 4793
- 86.5 Hash.MD5.HMAC 4795
- 86.6 Hash.PBKDF2.HMAC 4797
- 86.7 Hash.RandomHexString 4799
- 86.8 Hash.RandomString 4800
- 86.9 Hash.SHA1 4802
- 86.10 Hash.SHA1.HMAC 4805
- 86.11 Hash.SHA256 4807
- 86.12 Hash.SHA256.HMAC 4809
- 86.13 Hash.SHA512 4812
- 86.14 Hash.SHA512.HMAC 4814
- 88.1 HotKey.GetEnabled 4831
- 88.2 HotKey.GetEvaluate 4832
- 88.3 HotKey.GetIgnoreOnModal 4833
- 88.4 HotKey.GetKeyCode 4834
- 88.5 HotKey.GetKeyUp 4835
- 88.6 HotKey.GetLocal 4836
- 88.7 HotKey.GetModifiers 4837
- 88.8 HotKey.GetName 4838

	313
• 88.9 HotKey.GetScriptFileName	4839
• 88.10 HotKey.GetScriptName	4840
• 88.11 HotKey.GetTag	4841
• 88.12 HotKey.List	4842
• 88.13 HotKey.Register	4843
• 88.14 HotKey.SetEnabled	4847
• 88.15 HotKey.SetEvaluate	4848
• 88.16 HotKey.SetIgnoreOnModal	4851
• 88.17 HotKey.SetKeyUp	4852
• 88.18 HotKey.SetLocal	4853
• 88.19 HotKey.SetName	4854
• 88.20 HotKey.SetScript	4855
• 88.21 HotKey.SetTag	4856
• 88.22 HotKey.Unregister	4857
• 91.1 IKDeviceBrowserPanel.Close	4921
• 91.2 IKDeviceBrowserPanel.GetCancelButtonLabel	4923
• 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras	4924
• 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners	4925
• 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras	4926
• 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners	4927
• 91.7 IKDeviceBrowserPanel.GetHeight	4928
• 91.8 IKDeviceBrowserPanel.GetMode	4929
• 91.9 IKDeviceBrowserPanel.GetPrompt	4930
• 91.10 IKDeviceBrowserPanel.GetSelectButtonLabel	4931
• 91.11 IKDeviceBrowserPanel.GetWidth	4932
• 91.12 IKDeviceBrowserPanel.GetWindowTitle	4933
• 91.13 IKDeviceBrowserPanel.Hide	4934
• 91.14 IKDeviceBrowserPanel.Reset	4935
• 91.15 IKDeviceBrowserPanel.SelectedDeviceID	4936

- 91.16 IKDeviceBrowserPanel.SelectedDeviceName 4937
- 91.17 IKDeviceBrowserPanel.SetCancelButtonLabel 4938
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.25 IKDeviceBrowserPanel.SetSelectButtonLabel 4946
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.28 IKDeviceBrowserPanel.SetWindowTitle 4950
- 91.29 IKDeviceBrowserPanel.Show 4951
- 91.30 IKDeviceBrowserPanel.Visible 4953
- 89.1 IKPictureTaker.ClearNotification 4859
- 89.2 IKPictureTaker.GetAllowsEditing 4860
- 89.3 IKPictureTaker.GetAllowsFileChoosing 4861
- 89.4 IKPictureTaker.GetAllowsVideoCapture 4862
- 89.5 IKPictureTaker.GetInformationalText 4863
- 89.6 IKPictureTaker.GetInputImage 4864
- 89.7 IKPictureTaker.GetMirroring 4865
- 89.8 IKPictureTaker.GetOutputImage 4866
- 89.9 IKPictureTaker.GetOutputImageMaxHeight 4867
- 89.10 IKPictureTaker.GetOutputImageMaxWidth 4868
- 89.11 IKPictureTaker.GetRemainOpenAfterValidate 4869
- 89.12 IKPictureTaker.GetShowAddressBookPicture 4870
- 89.13 IKPictureTaker.GetShowEffects 4871
- 89.14 IKPictureTaker.GetShowEmptyPicture 4872

	315
• 89.15 IKPictureTaker.GetShowRecentPicture	4873
• 89.16 IKPictureTaker.GetUpdateRecentPicture	4874
• 89.17 IKPictureTaker.Run	4875
• 89.18 IKPictureTaker.SetAllowsEditing	4876
• 89.19 IKPictureTaker.SetAllowsFileChoosing	4877
• 89.20 IKPictureTaker.SetAllowsVideoCapture	4878
• 89.21 IKPictureTaker.SetInformationalText	4879
• 89.22 IKPictureTaker.SetInputImage	4880
• 89.23 IKPictureTaker.SetMirroring	4881
• 89.24 IKPictureTaker.SetNotification	4882
• 89.25 IKPictureTaker.SetOutputImageMaxSize	4883
• 89.26 IKPictureTaker.SetRemainOpenAfterValidate	4884
• 89.27 IKPictureTaker.SetShowAddressBookPicture	4885
• 89.28 IKPictureTaker.SetShowEffects	4886
• 89.29 IKPictureTaker.SetShowEmptyPicture	4887
• 89.30 IKPictureTaker.SetShowRecentPicture	4888
• 89.31 IKPictureTaker.SetUpdateRecentPicture	4889
• 91.31 IKScannerDevicePanel.ClearImage	4954
• 91.32 IKScannerDevicePanel.Close	4955
• 91.33 IKScannerDevicePanel.GetCombine	4956
• 91.34 IKScannerDevicePanel.GetDocumentName	4957
• 91.35 IKScannerDevicePanel.GetDownloadsDirectory	4958
• 91.36 IKScannerDevicePanel.GetHeight	4959
• 91.37 IKScannerDevicePanel.GetMode	4960
• 91.38 IKScannerDevicePanel.GetOverviewControlLabel	4961
• 91.39 IKScannerDevicePanel.GetScanControlLabel	4962
• 91.40 IKScannerDevicePanel.GetScannerDeviceID	4963
• 91.41 IKScannerDevicePanel.GetScannerDeviceName	4964
• 91.42 IKScannerDevicePanel.GetWidth	4965

- 91.43 IKScannerDevicePanel.GetWindowTitle 4966
- 91.44 IKScannerDevicePanel.Hide 4967
- 91.45 IKScannerDevicePanel.ImageCount 4968
- 91.46 IKScannerDevicePanel.NextImage 4969
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.48 IKScannerDevicePanel.SetCloseTrigger 4971
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.50 IKScannerDevicePanel.SetDocumentName 4974
- 91.51 IKScannerDevicePanel.SetDownloadsDirectory 4975
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.54 IKScannerDevicePanel.SetOverviewControlLabel 4978
- 91.55 IKScannerDevicePanel.SetScanControlLabel 4979
- 91.56 IKScannerDevicePanel.SetScannerDeviceID 4980
- 91.57 IKScannerDevicePanel.SetScannerDeviceName 4981
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.60 IKScannerDevicePanel.SetWindowTitle 4985
- 91.61 IKScannerDevicePanel.Show 4986
- 91.62 IKScannerDevicePanel.Visible 4988
- 90.1 IKSlideShow.Add 4891
- 90.2 IKSlideShow.AddImage 4893
- 90.3 IKSlideShow.AddPDF 4894
- 90.4 IKSlideShow.AddPath 4895
- 90.5 IKSlideShow.AddURL 4896
- 90.6 IKSlideShow.Clear 4897
- 90.7 IKSlideShow.Count 4898
- 90.8 IKSlideShow.GetAudioFile 4899
- 90.9 IKSlideShow.GetMode 4900

	317
• 90.10 IKSideshow.GetPDFDisplayBox	4901
• 90.11 IKSideshow.GetPDFDisplayMode	4902
• 90.12 IKSideshow.GetPDFDisplaysAsBook	4903
• 90.13 IKSideshow.GetScreen	4904
• 90.14 IKSideshow.GetStartIndex	4905
• 90.15 IKSideshow.GetStartPaused	4906
• 90.16 IKSideshow.GetWrapAround	4907
• 90.17 IKSideshow.ItemAtIndex	4908
• 90.18 IKSideshow.Run	4910
• 90.19 IKSideshow.SetAudioFile	4911
• 90.20 IKSideshow.SetMode	4912
• 90.21 IKSideshow.SetPDFDisplayBox	4913
• 90.22 IKSideshow.SetPDFDisplayMode	4914
• 90.23 IKSideshow.SetPDFDisplaysAsBook	4915
• 90.24 IKSideshow.SetScreen	4916
• 90.25 IKSideshow.SetStartIndex	4917
• 90.26 IKSideshow.SetStartPaused	4918
• 90.27 IKSideshow.SetWrapAround	4919
• 134.1 Icon.ClearIcon	6615
• 134.2 Icon.GetIcon	6617
• 134.3 Icon.GetIconWithQuickLook	6619
• 134.4 Icon.SetIcon	6621
• 91.63 ImageCapture.CameraInfo	4989
• 91.64 ImageCapture.CloseDevice	4991
• 91.65 ImageCapture.Contents	4992
• 91.66 ImageCapture.DeviceInfo	4993
• 91.67 ImageCapture.Devices	4995
• 91.68 ImageCapture.DevicesJSON	4997
• 91.69 ImageCapture.Download	4998

- 91.70 ImageCapture.Features 4999
- 91.71 ImageCapture.GetFeatureValue 5000
- 91.72 ImageCapture.GetFeatures 5001
- 91.73 ImageCapture.GetParameter 5002
- 91.74 ImageCapture.GetParameters 5005
- 91.75 ImageCapture.ImagePaths 5006
- 91.76 ImageCapture.Initialize 5007
- 91.77 ImageCapture.MediaFileNames 5008
- 91.78 ImageCapture.MediaFiles 5009
- 91.79 ImageCapture.OpenDevice 5010
- 91.80 ImageCapture.PDF 5012
- 91.81 ImageCapture.PreferredDevice 5013
- 91.82 ImageCapture.RequestDeleteFiles 5014
- 91.83 ImageCapture.RequestDisableTethering 5015
- 91.84 ImageCapture.RequestEnableTethering 5016
- 91.85 ImageCapture.RequestOverviewScan 5017
- 91.86 ImageCapture.RequestScan 5018
- 91.87 ImageCapture.RequestSelectFunctionalUnit 5021
- 91.88 ImageCapture.RequestSyncClock 5023
- 91.89 ImageCapture.RequestTakePicture 5024
- 91.90 ImageCapture.SetFeatureValue 5025
- 91.91 ImageCapture.SetParameter 5026
- 91.92 ImageCapture.Thumbnail 5030
- 91.93 ImageCapture.cancelScan 5031
- 93.1 ImageView.Clear 5091
- 93.2 ImageView.CreateWithControl 5092
- 93.3 ImageView.CreateWithSize 5094
- 93.4 ImageView.CreateWithWindow 5096
- 93.5 ImageView.GetHeight 5097

	319
• 93.6 ImageView.GetLeft	5098
• 93.7 ImageView.GetTag	5099
• 93.8 ImageView.GetToolTip	5100
• 93.9 ImageView.GetTop	5101
• 93.10 ImageView.GetVisible	5102
• 93.11 ImageView.GetWidth	5103
• 93.12 ImageView.Release	5104
• 93.13 ImageView.ReleaseAll	5105
• 93.14 ImageView.SetFrame	5106
• 93.15 ImageView.SetFrameWithControl	5107
• 93.16 ImageView.SetImage	5108
• 93.17 ImageView.SetTag	5109
• 93.18 ImageView.SetToolTip	5110
• 93.19 ImageView.SetVisible	5111
• 124.4 Is64bit	6264
• 124.5 IsClient	6265
• 124.6 IsError	6266
• 124.7 IsIOS	6268
• 124.8 IsIOSDevice	6269
• 124.9 IsIOSSimulator	6270
• 124.10 IsLinux	6271
• 124.11 IsMacOS	6272
• 124.12 IsMobile	6273
• 124.13 IsRegistered	6274
• 124.14 IsRuntime	6277
• 124.15 IsServer	6278
• 124.16 IsWindows	6280
• 98.1 JS.AddFileMakerEvaluateFunction	5181
• 98.2 JS.AddFileMakerRunScriptFunction	5183

- 98.3 JS.AddFileMakerSQLFunction 5185
- 98.4 JS.AddFunction 5186
- 98.5 JS.CallFunction 5188
- 98.6 JS.Evaluate 5190
- 98.7 JS.EvaluateToString 5194
- 98.8 JS.Free 5196
- 98.9 JS.GetGlobalProperty 5198
- 98.10 JS.GetGlobalPropertyValue 5200
- 98.11 JS.New 5201
- 98.12 JS.Now 5203
- 98.13 JS.ObjectCount 5204
- 98.14 JS.SetGlobalProperty 5205
- 98.15 JS.SetGlobalPropertyValue 5207
- 98.16 JS.StringCount 5209
- 98.17 JS.TimeToDateComponents 5210
- 98.18 JS.TimeToUTCDate 5212
- 98.19 JS.UTCDateToTime 5213
- 100.4 JSON.AddBooleanToObject 5238
- 100.5 JSON.AddFalseToObject 5240
- 100.6 JSON.AddItemToArray 5242
- 100.7 JSON.AddItemToObject 5244
- 100.8 JSON.AddNullToObject 5247
- 100.9 JSON.AddNumberToArray 5249
- 100.10 JSON.AddNumberToObject 5251
- 100.11 JSON.AddStringToArray 5253
- 100.12 JSON.AddStringToObject 5255
- 100.13 JSON.AddTrueToObject 5258
- 100.14 JSON.Clone 5260
- 100.15 JSON.Colorize 5261

	321
• 100.16 JSON.Compact	5263
• 100.17 JSON.CreateArray	5264
• 100.18 JSON.CreateArrayRef	5265
• 100.19 JSON.CreateBool	5268
• 100.20 JSON.CreateBoolean	5269
• 100.21 JSON.CreateDoubleArray	5270
• 100.22 JSON.CreateFalse	5271
• 100.23 JSON.CreateIntegerArray	5272
• 100.24 JSON.CreateNull	5273
• 100.25 JSON.CreateNumber	5274
• 100.26 JSON.CreateObject	5276
• 100.27 JSON.CreateObjectRef	5278
• 100.28 JSON.CreateString	5281
• 100.29 JSON.CreateStringArray	5282
• 100.30 JSON.CreateStringArrayWithList	5283
• 100.31 JSON.CreateTrue	5284
• 100.32 JSON.CreateValue	5285
• 100.33 JSON.DeleteItemFromArray	5286
• 100.34 JSON.DeleteItemFromObject	5287
• 100.35 JSON.EqualContent	5288
• 100.36 JSON.Equals	5289
• 100.37 JSON.FindValueInArray	5291
• 100.38 JSON.FindValueInObjectArray	5293
• 100.39 JSON.Format	5295
• 100.40 JSON.GetArrayItem	5297
• 100.41 JSON.GetArrayItemsAsList	5299
• 100.42 JSON.GetArrayPathItems	5301
• 100.43 JSON.GetArraySize	5303
• 100.44 JSON.GetDoubleValue	5304

- 100.45 JSON.GetIntegerValue 5305
- 100.46 JSON.GetObjectItem 5306
- 100.47 JSON.GetObjectItemTree 5309
- 100.48 JSON.GetObjectItemTreeRef 5310
- 100.49 JSON.GetObjectName 5311
- 100.50 JSON.GetObjectNameList 5312
- 100.51 JSON.GetObjectSize 5313
- 100.52 JSON.GetPathItem 5314
- 100.53 JSON.GetStringValue 5317
- 100.54 JSON.GetType 5319
- 100.55 JSON.GetValue 5320
- 100.56 JSON.Import 5322
- 100.57 JSON.Import.Cancel 5325
- 100.58 JSON.Import.ErrorCount 5326
- 100.59 JSON.Import.Errors 5327
- 100.60 JSON.Import.Status 5328
- 100.61 JSON.Import.Todo 5329
- 100.62 JSON.Import.Total 5330
- 100.63 JSON.Import.Work 5331
- 100.64 JSON.IsValid 5332
- 100.65 JSON.Parse 5333
- 100.66 JSON.Release 5336
- 100.67 JSON.ReleaseAll 5338
- 100.68 JSON.ReplaceItemInArray 5339
- 100.69 JSON.ReplaceItemInObject 5340
- 100.70 JSON.SetPathItem 5341
- 100.71 JSON.Sort 5343
- 100.72 JSON.ToHTML 5344
- 97.1 Java.CallObjectMethod 5157

	323
• 97.2 Java.CallStaticMethod	5159
• 97.3 Java.GetContainerFileName	5161
• 97.4 Java.GetObjectField	5162
• 97.5 Java.GetStaticField	5164
• 97.6 Java.Initialize	5166
• 97.7 Java.Initialized	5169
• 97.8 Java.NewClassObject	5170
• 97.9 Java.ObjectClassName	5172
• 97.10 Java.Release	5173
• 97.11 Java.ReleaseAll	5174
• 97.12 Java.SetContainerFileName	5175
• 97.13 Java.SetObjectField	5176
• 97.14 Java.SetStaticField	5178
• 99.1 JavaScript.CheckScriptSyntax	5215
• 99.2 JavaScript.EvaluateScript	5217
• 99.3 JavaScript.GetProperty	5220
• 99.4 JavaScript.HasProperty	5221
• 99.5 JavaScript.New	5222
• 99.6 JavaScript.RegisterEvaluateFunction	5223
• 99.7 JavaScript.RegisterFunction	5225
• 99.8 JavaScript.RegisterRunScriptFunction	5227
• 99.9 JavaScript.RegisterSQLQueryFunction	5228
• 99.10 JavaScript.Release	5229
• 99.11 JavaScript.SetProperty	5230
• 101.1 Keychain.AddPassword	5357
• 101.2 Keychain.DeletePassword	5359
• 101.3 Keychain.ListAccounts	5360
• 101.4 Keychain.ListDatabases	5361
• 101.5 Keychain.UpdatePassword	5362

• 175.3 LCMS.ProfileInfo	8232
• 102.1 LDAP.Add	5363
• 102.2 LDAP.AddJSON	5365
• 102.3 LDAP.AddList	5369
• 102.4 LDAP.AddRecord	5371
• 102.5 LDAP.Bind	5373
• 102.6 LDAP.Connect	5375
• 102.7 LDAP.Delete	5378
• 102.8 LDAP.GetNetworkTimeOut	5379
• 102.9 LDAP.GetProtocolVersion	5380
• 102.10 LDAP.GetReferrals	5381
• 102.11 LDAP.GetTimeOut	5382
• 102.12 LDAP.JSON	5383
• 102.13 LDAP.Modify	5388
• 102.14 LDAP.ModifyJSON	5389
• 102.15 LDAP.ModifyRecord	5391
• 102.16 LDAP.Release	5393
• 102.17 LDAP.Rename	5394
• 102.18 LDAP.Search	5395
• 102.19 LDAP.SearchResult.AttributeCount	5397
• 102.20 LDAP.SearchResult.AttributeName	5399
• 102.21 LDAP.SearchResult.AttributeNames	5400
• 102.22 LDAP.SearchResult.AttributeValue	5401
• 102.23 LDAP.SearchResult.AttributeValueCount	5402
• 102.24 LDAP.SearchResult.AttributeValues	5403
• 102.25 LDAP.SearchResult.AttributeValuesByName	5405
• 102.26 LDAP.SearchResult.Count	5407
• 102.27 LDAP.SearchResult.DistinguishedName	5409
• 102.28 LDAP.SetNetworkTimeOut	5410

	325
• 102.29 LDAP.SetProtocolVersion	5411
• 102.30 LDAP.SetReferrals	5412
• 102.31 LDAP.SetTimeOut	5413
• 102.32 LDAP.SimpleBind	5414
• 102.33 LDAP.StartTLS	5415
• 103.1 List.AddPostfix	5417
• 103.2 List.AddPrefix	5419
• 103.3 List.AddValue	5420
• 103.4 List.And	5421
• 103.5 List.AndColumn	5422
• 103.6 List.BestMatch	5424
• 103.7 List.CSVSplit	5425
• 103.8 List.CountValues	5427
• 103.9 List.CrossProduct	5428
• 103.10 List.DeCombine	5430
• 103.11 List.Deserialize	5432
• 103.12 List.FindEquals	5433
• 103.13 List.FindUnequals	5434
• 103.14 List.GetValue	5436
• 103.15 List.HasDuplicateItems	5437
• 103.16 List.HasValue	5438
• 103.17 List.InsertValue	5440
• 103.18 List.MatchesPostfix	5441
• 103.19 List.MatchesPrefix	5442
• 103.20 List.Not	5443
• 103.21 List.NotColumn	5444
• 103.22 List.Or	5446
• 103.23 List.OrColumn	5447
• 103.24 List.RegExMatch	5449

- 103.25 List.Remove 5451
- 103.26 List.RemoveDuplicateItems 5452
- 103.27 List.RemoveEmptyItems 5454
- 103.28 List.RemovePostfix 5455
- 103.29 List.RemovePrefix 5457
- 103.30 List.RemoveValue 5459
- 103.31 List.Reverse 5461
- 103.32 List.Serialize 5462
- 103.33 List.SetValue 5463
- 103.34 List.Sort 5464
- 103.35 List.SubList 5467
- 103.36 List.Trim 5469
- 103.37 List.ValueIndex 5470
- 103.38 List.XOr 5471
- 103.39 List.XOrColumn 5472
- 104.1 ListDialog.AddItemToList 5563
- 104.2 ListDialog.AddItemsToList 5565
- 104.3 ListDialog.AddSQL 5566
- 104.4 ListDialog.ClearColumnHeaders 5567
- 104.5 ListDialog.ClearList 5568
- 104.6 ListDialog.ColumnCount 5569
- 104.7 ListDialog.GetAllowEmptySelection 5570
- 104.8 ListDialog.GetAllowMultipleSelection 5571
- 104.9 ListDialog.GetCancelButtonLabel 5572
- 104.10 ListDialog.GetColumnHeader 5573
- 104.11 ListDialog.GetHeight 5574
- 104.12 ListDialog.GetOtherButtonEvaluate 5575
- 104.13 ListDialog.GetOtherButtonLabel 5576
- 104.14 ListDialog.GetPositionX 5577

	327
• 104.15 ListDialog.GetPositionY	5578
• 104.16 ListDialog.GetPrompt	5579
• 104.17 ListDialog.GetSelectButtonLabel	5580
• 104.18 ListDialog.GetSelectedTag	5581
• 104.19 ListDialog.GetSelectedTitle	5582
• 104.20 ListDialog.GetWidth	5583
• 104.21 ListDialog.GetWindowTitle	5584
• 104.22 ListDialog.ListCount	5585
• 104.23 ListDialog.ListItem	5586
• 104.24 ListDialog.ListTag	5587
• 104.25 ListDialog.Reset	5588
• 104.26 ListDialog.SetAllowEmptySelection	5589
• 104.27 ListDialog.SetAllowMultipleSelection	5590
• 104.28 ListDialog.SetCancelButtonLabel	5591
• 104.29 ListDialog.SetColumnCount	5592
• 104.30 ListDialog.SetColumnHeader	5593
• 104.31 ListDialog.SetHeight	5594
• 104.32 ListDialog.SetOtherButtonEvaluate	5595
• 104.33 ListDialog.SetOtherButtonLabel	5596
• 104.34 ListDialog.SetPosition	5597
• 104.35 ListDialog.SetPositionX	5598
• 104.36 ListDialog.SetPositionY	5599
• 104.37 ListDialog.SetPrompt	5600
• 104.38 ListDialog.SetSelectButtonLabel	5601
• 104.39 ListDialog.SetSelectedTag	5602
• 104.40 ListDialog.SetSelectedTitle	5603
• 104.41 ListDialog.SetWidth	5604
• 104.42 ListDialog.SetWindowTitle	5605
• 104.43 ListDialog.ShowDialog	5606

- 104.44 ListDialog.Sort 5608
- 175.4 Log 8233
- 106.1 MapView.AddCircle 5637
- 106.2 MapView.AddPin 5639
- 106.3 MapView.AddPinWithAddress 5641
- 106.4 MapView.AddPoint 5643
- 106.5 MapView.AddPolygon 5645
- 106.6 MapView.AddPolyline 5647
- 106.7 MapView.Annotations 5649
- 106.8 MapView.CreateWithControl 5650
- 106.9 MapView.CreateWithSize 5652
- 106.10 MapView.FormatDistance 5654
- 106.11 MapView.GetAnnotationCoordinate 5655
- 106.12 MapView.GetAnnotationDragImage 5656
- 106.13 MapView.GetAnnotationImage 5657
- 106.14 MapView.GetAnnotationSelectedImage 5658
- 106.15 MapView.GetAutoResizingMask 5659
- 106.16 MapView.GetCenterCoordinateLatitude 5660
- 106.17 MapView.GetCenterCoordinateLongitude 5661
- 106.18 MapView.GetHeight 5662
- 106.19 MapView.GetLeft 5663
- 106.20 MapView.GetMapType 5664
- 106.21 MapView.GetOverlayFillColor 5665
- 106.22 MapView.GetOverlayLineWidth 5666
- 106.23 MapView.GetOverlayPoints 5667
- 106.24 MapView.GetOverlayStrokeColor 5669
- 106.25 MapView.GetPitchEnabled 5670
- 106.26 MapView.GetRegion 5671
- 106.27 MapView.GetRegionLatitude 5672

	329
• 106.28 MapView.GetRegionLatitudeSpan	5673
• 106.29 MapView.GetRegionLongitude	5674
• 106.30 MapView.GetRegionLongitudeSpan	5675
• 106.31 MapView.GetRotateEnabled	5676
• 106.32 MapView.GetScrollEnabled	5677
• 106.33 MapView.GetShowsBuildings	5678
• 106.34 MapView.GetShowsCompass	5679
• 106.35 MapView.GetShowsPointsOfInterest	5680
• 106.36 MapView.GetShowsScale	5681
• 106.37 MapView.GetShowsTraffic	5682
• 106.38 MapView.GetShowsUserLocation	5683
• 106.39 MapView.GetShowsZoomControls	5684
• 106.40 MapView.GetTag	5685
• 106.41 MapView.GetToolTip	5686
• 106.42 MapView.GetTop	5687
• 106.43 MapView.GetVisible	5688
• 106.44 MapView.GetVisibleMapRect	5689
• 106.45 MapView.GetWidth	5690
• 106.46 MapView.GetZoomEnabled	5691
• 106.47 MapView.GetZoomLevel	5692
• 106.48 MapView.IsUserLocationVisible	5693
• 106.49 MapView.MouseCoordinate	5694
• 106.50 MapView.Overlays	5695
• 106.51 MapView.ParseDistance	5696
• 106.52 MapView.PlanRoute	5697
• 106.53 MapView.Release	5699
• 106.54 MapView.ReleaseAll	5700
• 106.55 MapView.RemoveAnnotation	5701
• 106.56 MapView.RemoveAnnotations	5702

- 106.57 `MapView.RemoveOverlay` 5703
- 106.58 `MapView.RemoveOverlays` 5704
- 106.59 `MapView.Screenshot` 5705
- 106.60 `MapView.SelectedAnnotations` 5707
- 106.61 `MapView.SetAnnotationCoordinate` 5708
- 106.62 `MapView.SetAnnotationDragImage` 5709
- 106.63 `MapView.SetAnnotationImage` 5710
- 106.64 `MapView.SetAnnotationSelectedImage` 5711
- 106.65 `MapView.SetAutoResizingMask` 5712
- 106.66 `MapView.SetColor` 5714
- 106.67 `MapView.SetCoordinate` 5715
- 106.68 `MapView.SetFrame` 5716
- 106.69 `MapView.SetFrameWithControl` 5717
- 106.70 `MapView.SetMapType` 5718
- 106.71 `MapView.SetOverlayFillColor` 5719
- 106.72 `MapView.SetOverlayLineWidth` 5720
- 106.73 `MapView.SetOverlayPoints` 5721
- 106.74 `MapView.SetOverlayStrokeColor` 5722
- 106.75 `MapView.SetPitchEnabled` 5723
- 106.76 `MapView.SetRegion` 5724
- 106.77 `MapView.SetRotateEnabled` 5725
- 106.78 `MapView.SetScript` 5726
- 106.79 `MapView.SetScrollEnabled` 5728
- 106.80 `MapView.SetShowsBuildings` 5729
- 106.81 `MapView.SetShowsCompass` 5730
- 106.82 `MapView.SetShowsPointsOfInterest` 5731
- 106.83 `MapView.SetShowsScale` 5732
- 106.84 `MapView.SetShowsTraffic` 5733
- 106.85 `MapView.SetShowsUserLocation` 5734

	331
• 106.86 MapView.SetShowsZoomControls	5736
• 106.87 MapView.SetTag	5737
• 106.88 MapView.SetToolTip	5738
• 106.89 MapView.SetVisible	5739
• 106.90 MapView.SetVisibleMapRect	5740
• 106.91 MapView.SetZoomEnabled	5741
• 106.92 MapView.SetZoomLevel	5742
• 106.93 MapView.ShowAddress	5743
• 106.94 MapView.ShowAllAnnotations	5745
• 106.95 MapView.Snapshot	5746
• 107.1 Markdown.CSS	5749
• 107.2 Markdown.Create	5750
• 107.3 Markdown.HTML	5751
• 107.4 Markdown.Release	5752
• 108.1 Math.BitwiseAND	5753
• 108.2 Math.BitwiseNOT	5755
• 108.3 Math.BitwiseOR	5756
• 108.4 Math.BitwiseShiftLeft	5757
• 108.5 Math.BitwiseShiftRight	5758
• 108.6 Math.BitwiseXOR	5759
• 108.7 Math.DecToHex	5760
• 108.8 Math.DecodeNumber	5761
• 108.9 Math.EncodeNumber	5763
• 108.10 Math.HexToDec	5765
• 108.11 Math.InchToPixel	5766
• 108.12 Math.InsidePolygon	5767
• 108.13 Math.IsValidCC	5768
• 108.14 Math.MillimeterToPixel	5769
• 108.15 Math.NumberToText	5770

- 108.16 Math.PixelToInch 5771
- 108.17 Math.PixelToMillimeter 5772
- 108.18 Math.PolylineDecode 5773
- 108.19 Math.PolylineEncode 5774
- 108.20 Math.TextToNumber 5776
- 109.1 Matrix.AddColumn 5779
- 109.2 Matrix.AddColumnns 5781
- 109.3 Matrix.AddRow 5782
- 109.4 Matrix.AddRows 5783
- 109.5 Matrix.Avg 5784
- 109.6 Matrix.CSV 5785
- 109.7 Matrix.Clear 5787
- 109.8 Matrix.ClearValues 5788
- 109.9 Matrix.Clone 5789
- 109.10 Matrix.DataType 5790
- 109.11 Matrix.Free 5791
- 109.12 Matrix.GetColumn 5792
- 109.13 Matrix.GetRow 5793
- 109.14 Matrix.GetText 5794
- 109.15 Matrix.GetValue 5795
- 109.16 Matrix.Height 5797
- 109.17 Matrix.InsertRecords 5798
- 109.18 Matrix.InsertRecordsToSQL 5800
- 109.19 Matrix.JSONRecord 5802
- 109.20 Matrix.JSONRecords 5803
- 109.21 Matrix.Max 5804
- 109.22 Matrix.Min 5805
- 109.23 Matrix.New 5806
- 109.24 Matrix.NewWithSQL 5808

	333
• 109.25 Matrix.RemoveColumn	5809
• 109.26 Matrix.RemoveRow	5810
• 109.27 Matrix.Resize	5811
• 109.28 Matrix.SetColumn	5812
• 109.29 Matrix.SetRow	5814
• 109.30 Matrix.SetValue	5816
• 109.31 Matrix.Sum	5818
• 109.32 Matrix.Text	5820
• 109.33 Matrix.Width	5822
• 110.1 MatrixDongle.Count	5823
• 110.2 MatrixDongle.Find	5825
• 110.3 MatrixDongle.GetDriverFlag	5826
• 110.4 MatrixDongle.GetVersionAPI	5827
• 110.5 MatrixDongle.GetVersionDRV	5828
• 110.6 MatrixDongle.GetVersionDRV.USB	5829
• 110.7 MatrixDongle.Initialize	5830
• 110.8 MatrixDongle.Initialized	5832
• 110.9 MatrixDongle.MemorySize	5833
• 110.10 MatrixDongle.Model	5834
• 110.11 MatrixDongle.ReadHex	5835
• 110.12 MatrixDongle.ReadSerialNumber	5837
• 110.13 MatrixDongle.ReadText	5838
• 110.14 MatrixDongle.Release	5840
• 110.15 MatrixDongle.SetDriverFlag	5841
• 110.16 MatrixDongle.Version	5843
• 110.17 MatrixDongle.WriteHex	5844
• 110.18 MatrixDongle.WriteText	5845
• 111.1 MediaLibraryBrowser.getMediaLibraries	5847
• 111.2 MediaLibraryBrowser.getVisible	5848

- 111.3 MediaLibraryBrowser.setFrame 5849
- 111.4 MediaLibraryBrowser.setMediaLibraries 5850
- 111.5 MediaLibraryBrowser.setVisible 5851
- 111.6 MediaLibraryBrowser.togglePanel 5852
- 112.1 Menu.AddItem 5853
- 112.2 Menu.AddItems 5856
- 112.3 Menu.CreateMenu 5859
- 112.4 Menu.DefineQuickMenu 5861
- 112.5 Menu.DefineQuickMenuXML 5864
- 112.6 Menu.FindItemWithTag 5866
- 112.7 Menu.FindItemWithTitle 5867
- 112.8 Menu.GetAllowsContextMenuPlugIns 5868
- 112.9 Menu.GetEvaluate 5869
- 112.10 Menu.GetMinimumWidth 5870
- 112.11 Menu.GetScriptFileName 5871
- 112.12 Menu.GetScriptName 5872
- 112.13 Menu.GetShowsStateColumn 5873
- 112.14 Menu.GetTag 5874
- 112.15 Menu.GetTitle 5875
- 112.16 Menu.GetURL 5876
- 112.17 Menu.InsertItem 5877
- 112.18 Menu.ItemAtIndex 5878
- 112.19 Menu.Items 5879
- 112.20 Menu.List 5880
- 112.21 Menu.NumberOfItems 5881
- 112.22 Menu.PopUp 5882
- 112.23 Menu.Release 5886
- 112.24 Menu.ReleaseAll 5888
- 112.25 Menu.RemoveAllItems 5889

	335
• 112.26 Menu.RemoveItem	5890
• 112.27 Menu.RemoveItemAtIndex	5891
• 112.28 Menu.SelectedItem	5892
• 112.29 Menu.SetAllowsContextMenuPlugIns	5894
• 112.30 Menu.SetEvaluate	5895
• 112.31 Menu.SetMinimumWidth	5896
• 112.32 Menu.SetScriptAction	5897
• 112.33 Menu.SetShowsStateColumn	5899
• 112.34 Menu.SetTag	5900
• 112.35 Menu.SetTitle	5901
• 112.36 Menu.SetURL	5902
• 112.37 MenuItem.CreateMenuItem	5903
• 112.38 MenuItem.CreateSeparator	5905
• 112.39 MenuItem.GetAlternate	5906
• 112.40 MenuItem.GetAttributedTitle	5907
• 112.42 MenuItem.GetBold	5909
• 112.43 MenuItem.GetEnabled	5910
• 112.44 MenuItem.GetEvaluate	5911
• 112.45 MenuItem.GetFontColor	5912
• 112.46 MenuItem.GetFontName	5913
• 112.47 MenuItem.GetFontSize	5914
• 112.48 MenuItem.GetGroupID	5915
• 112.49 MenuItem.GetHidden	5916
• 112.50 MenuItem.GetImage	5917
• 112.51 MenuItem.GetItalic	5918
• 112.52 MenuItem.GetKeyEquivalent	5919
• 112.53 MenuItem.GetKeyEquivalentModifierMask	5920
• 112.54 MenuItem.GetMixedStateImage	5921
• 112.55 MenuItem.GetOffStateImage	5922

- 112.56 MenuItem.GetOnStateImage 5923
- 112.57 MenuItem.GetParentItem 5924
- 112.58 MenuItem.GetParentMenu 5925
- 112.59 MenuItem.GetPath 5926
- 112.60 MenuItem.GetRequireCommand 5927
- 112.61 MenuItem.GetRequireControl 5928
- 112.62 MenuItem.GetRequireOption 5929
- 112.63 MenuItem.GetRequireShift 5930
- 112.64 MenuItem.GetScriptFileName 5931
- 112.65 MenuItem.GetScriptName 5932
- 112.66 MenuItem.GetSelectable 5933
- 112.67 MenuItem.GetState 5934
- 112.68 MenuItem.GetStrikeOut 5935
- 112.69 MenuItem.GetSubMenu 5936
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939
- 112.72 MenuItem.GetToolTip 5940
- 112.73 MenuItem.GetURL 5941
- 112.74 MenuItem.GetUnderline 5942
- 112.75 MenuItem.GetUserKeyEquivalent 5943
- 112.76 MenuItem.HasSubmenu 5944
- 112.77 MenuItem.IsSeparatorItem 5945
- 112.78 MenuItem.List 5946
- 112.79 MenuItem.Release 5947
- 112.80 MenuItem.SetAlternate 5948
- 112.81 MenuItem.SetAttributedTitle 5949
- 112.83 MenuItem.SetBold 5952
- 112.84 MenuItem.SetEnabled 5954
- 112.85 MenuItem.SetEvaluate 5955

	337
• 112.86 MenuItem.SetFontColor	5956
• 112.87 MenuItem.SetFontName	5958
• 112.88 MenuItem.SetFontSize	5960
• 112.89 MenuItem.SetGroupID	5962
• 112.90 MenuItem.SetHidden	5963
• 112.91 MenuItem.SetImage	5964
• 112.92 MenuItem.SetItalic	5966
• 112.93 MenuItem.SetKeyEquivalent	5968
• 112.94 MenuItem.SetKeyEquivalentModifierMask	5970
• 112.95 MenuItem.SetMixedStateImage	5972
• 112.96 MenuItem.SetOffStateImage	5973
• 112.97 MenuItem.SetOnStateImage	5974
• 112.98 MenuItem.SetRequireCommand	5975
• 112.99 MenuItem.SetRequireControl	5976
• 112.100 MenuItem.SetRequireOption	5977
• 112.101 MenuItem.SetRequireShift	5978
• 112.102 MenuItem.SetScriptAction	5979
• 112.103 MenuItem.SetSelectable	5981
• 112.104 MenuItem.SetState	5982
• 112.105 MenuItem.SetStrikeOut	5984
• 112.106 MenuItem.SetSubMenu	5985
• 112.107 MenuItem.SetTag	5986
• 112.108 MenuItem.SetTitle	5987
• 112.109 MenuItem.SetToolTip	5988
• 112.110 MenuItem.SetURL	5989
• 112.111 MenuItem.SetUnderline	5990
• 113.1 Menubar.HasMenuCommand	5993
• 113.2 Menubar.IsMenuCommandChecked	5995
• 113.3 Menubar.ListMenuCommands	5997

- 113.4 Menubar.RemoveMenuCommand 5998
- 113.5 Menubar.RunMenuCommand 5999
- 113.6 Menubar.SetMenuCommandShortcut 6001
- 113.7 Menubar.SetMenuCommandTitle 6002
- 113.8 Menubar.SetMenuCommandVisible 6003
- 115.1 MetaDataQuery.AttributesForFile 6031
- 115.2 MetaDataQuery.Close 6033
- 115.3 MetaDataQuery.Create 6034
- 115.4 MetaDataQuery.GetEvaluate 6035
- 115.5 MetaDataQuery.GetScriptFileName 6036
- 115.6 MetaDataQuery.GetScriptName 6037
- 115.7 MetaDataQuery.IsGathering 6038
- 115.8 MetaDataQuery.IsStarted 6039
- 115.9 MetaDataQuery.IsStopped 6040
- 115.10 MetaDataQuery.PathAtIndex 6041
- 115.11 MetaDataQuery.Paths 6043
- 115.12 MetaDataQuery.QueryString 6044
- 115.13 MetaDataQuery.ResultAtIndex 6045
- 115.14 MetaDataQuery.ResultCount 6046
- 115.15 MetaDataQuery.Results 6047
- 115.16 MetaDataQuery.SearchScopes 6048
- 115.17 MetaDataQuery.SetEvaluate 6049
- 115.18 MetaDataQuery.SetQueryString 6050
- 115.19 MetaDataQuery.SetScript 6052
- 115.20 MetaDataQuery.SetSearchScopes 6053
- 115.21 MetaDataQuery.StartQuery 6055
- 115.22 MetaDataQuery.StopQuery 6056
- 175.5 Modbus.CalculateRTUMessageCRC 8234
- 78.67 MountNotification.Install 3880

	339
• 78.68 MountNotification.Uninstall	3882
• 175.6 MouseCursor.Hide	8235
• 175.7 MouseCursor.HideUntilMouseMoves	8236
• 175.8 MouseCursor.Set	8237
• 175.9 MouseCursor.Show	8240
• 175.10 MsgBox	8241
• 119.1 NSEventFilter.DisableEvents	6103
• 119.2 NSEventFilter.EnableAllEvents	6105
• 119.3 NSEventFilter.EnableEvents	6106
• 117.1 NetworkInterfaces.Count	6089
• 117.2 NetworkInterfaces.Default	6090
• 117.3 NetworkInterfaces.JSON	6091
• 117.4 NetworkInterfaces.Update	6092
• 117.5 NetworkInterfaces.Value	6093
• 118.1 Notification.List	6095
• 118.2 Notification.Listen	6096
• 118.3 Notification.Send	6098
• 118.4 Notification.SendDirect	6099
• 118.5 Notification.Unlisten	6100
• 118.6 Notification.UnlistenAll	6101
• 120.1 OCR.Cleanup	6109
• 120.2 OCR.Clear	6110
• 120.3 OCR.GetBoxText	6111
• 120.4 OCR.GetHOCText	6112
• 120.5 OCR.GetPageSegMode	6113
• 120.6 OCR.GetText	6114
• 120.7 OCR.GetTextWithCoordinates	6116
• 120.8 OCR.GetVariable	6118
• 120.9 OCR.Initialize	6119

- 120.10 OCR.IsInitialized 6121
- 120.11 OCR.Language 6122
- 120.12 OCR.MeanTextConf 6123
- 120.13 OCR.Recognize 6124
- 120.14 OCR.SetImage 6125
- 120.15 OCR.SetPageSegMode 6127
- 120.16 OCR.SetRectangle 6129
- 120.17 OCR.SetResolution 6130
- 120.18 OCR.SetVariable 6131
- 120.19 OCR.WriteToPDF 6132
- 122.1 PDFKit.AddEmptyPage 6153
- 122.2 PDFKit.AddImageFilePage 6155
- 122.3 PDFKit.AddImagePage 6157
- 122.4 PDFKit.AppendPages 6159
- 122.5 PDFKit.Combine 6160
- 122.6 PDFKit.CombineRef 6162
- 122.7 PDFKit.GeneratePreview 6164
- 122.8 PDFKit.GetCurrentFilter 6166
- 122.9 PDFKit.GetIgnoreCombineErrors 6167
- 122.10 PDFKit.GetPDFAttribute 6168
- 122.11 PDFKit.GetPDFDocument 6171
- 122.12 PDFKit.GetPDFPageCount 6173
- 122.13 PDFKit.GetPDFPageDisplayAnnotation 6175
- 122.14 PDFKit.GetPDFPageFormattedText 6176
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180
- 122.17 PDFKit.GetPDFPagePDFRef 6182
- 122.18 PDFKit.GetPDFPageRotation 6183
- 122.19 PDFKit.GetPDFPageText 6184

	341
• 122.20 PDFKit.GetPDFPageValue	6186
• 122.21 PDFKit.GetPDFPagesPDF	6188
• 122.22 PDFKit.GetPDFPagesPDFRef	6190
• 122.23 PDFKit.GetPDFText	6191
• 122.24 PDFKit.GetPrintLastSettings	6192
• 122.25 PDFKit.GetPrintOption	6193
• 122.26 PDFKit.GetPrintSetting	6194
• 122.27 PDFKit.NewPDFDocument	6196
• 122.28 PDFKit.Open	6198
• 122.29 PDFKit.OpenContainer	6200
• 122.30 PDFKit.OpenPath	6202
• 122.31 PDFKit.OpenURL	6204
• 122.32 PDFKit.PageBounds	6205
• 122.33 PDFKit.Print	6207
• 122.34 PDFKit.Release	6209
• 122.35 PDFKit.ResetPrintSettings	6211
• 122.36 PDFKit.RestorePrintSettings	6212
• 122.37 PDFKit.SavePrintSettings	6213
• 122.38 PDFKit.SetCurrentFilter	6214
• 122.39 PDFKit.SetIgnoreCombineErrors	6216
• 122.40 PDFKit.SetPDFAttribute	6217
• 122.41 PDFKit.SetPDFPageDisplayAnnotation	6220
• 122.42 PDFKit.SetPDFPageRotation	6222
• 122.43 PDFKit.SetPrintOption	6224
• 122.44 PDFKit.SetPrintSetting	6226
• 122.45 PDFKit.Watermark	6230
• 122.46 PDFKit.WriteToPath	6233
• 122.47 PDFKit.allowsCopying	6235
• 122.48 PDFKit.allowsPrinting	6237

- 122.49 PDFKit.isEncrypted 6239
- 122.50 PDFKit.isLocked 6241
- 123.1 PHP.Execute 6247
- 123.2 PHP.ExistsVariable 6249
- 123.3 PHP.GetResultContainer 6250
- 123.4 PHP.GetResultString 6251
- 123.5 PHP.GetVariable 6252
- 123.6 PHP.Init 6253
- 123.7 PHP.IsInitialized 6255
- 123.8 PHP.Load 6256
- 123.9 PHP.Run 6257
- 123.10 PHP.SetVariable 6258
- 123.11 PHP.ShutDown 6259
- 48.1 PKCS12.CA 1345
- 48.2 PKCS12.CACount 1347
- 48.3 PKCS12.Cert 1348
- 48.4 PKCS12.PKey 1349
- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352
- 48.7 PKCS12.Release 1354
- 48.8 PKCS12.ShowDialog 1355
- 48.9 PKCS7.ReadFromContainer 1356
- 48.10 PKCS7.ReadFromFile 1357
- 48.11 PKCS7.Release 1358
- 48.12 PKCS7.SignedDataCert 1359
- 48.13 PKCS7.SignedDataCertCount 1360
- 48.14 PKCS7.SignedDataContent 1361
- 48.15 PKey.Bits 1362
- 48.16 PKey.DescriptionPrivateKey 1363

	343
• 48.17 PKey.DescriptionPublicKey	1364
• 48.18 PKey.GetPrivateKey	1365
• 48.19 PKey.GetPublicKey	1366
• 48.20 PKey.Release	1367
• 48.21 PKey.Type	1368
• 127.1 PageSetupDialog.ClearOption	6383
• 127.2 PageSetupDialog.ClearOptions	6384
• 127.3 PageSetupDialog.Disable	6385
• 127.4 PageSetupDialog.Enable	6386
• 127.5 PageSetupDialog.GetLastSettings	6388
• 127.6 PageSetupDialog.GetNoDialog	6389
• 127.7 PageSetupDialog.GetOption	6390
• 127.8 PageSetupDialog.GetPaperName	6391
• 127.9 PageSetupDialog.GetPaperOrientation	6392
• 127.10 PageSetupDialog.GetPrinterName	6393
• 127.11 PageSetupDialog.GetScalingFactor	6394
• 127.12 PageSetupDialog.Install	6395
• 127.13 PageSetupDialog.SetNoDialog	6397
• 127.14 PageSetupDialog.SetOption	6398
• 127.15 PageSetupDialog.SetPaperName	6399
• 127.16 PageSetupDialog.SetPaperOrientation	6400
• 127.17 PageSetupDialog.SetPrinterName	6401
• 127.18 PageSetupDialog.SetScalingFactor	6402
• 121.1 Path.AddPathComponent	6135
• 121.2 Path.FileMakerPathToNativePath	6139
• 121.3 Path.FilePathToFileURL	6141
• 121.4 Path.FileURLToFilePath	6143
• 121.5 Path.LastPathComponent	6144
• 121.6 Path.LongPath	6146

- 121.7 Path.NativePathToFileMakerPath 6147
- 121.8 Path.RemoveLastPathComponent 6149
- 121.9 Path.ShortPath 6151
- 124.17 Platform 6281
- 124.18 Plugin.BuildNumber 6283
- 124.19 Plugin.CallCounter 6284
- 124.20 Plugin.CallErrorScriptTrigger 6285
- 124.21 Plugin.CompileDate 6286
- 124.22 Plugin.DisableFunction 6287
- 124.23 Plugin.FunctionCount 6288
- 124.24 Plugin.Functions 6289
- 124.25 Plugin.GetSuccessReturn 6290
- 124.26 Plugin.InstallSignalHandlers 6291
- 124.27 Plugin.IsPrerelease 6292
- 124.28 Plugin.JasperVersion 6293
- 124.29 Plugin.LibSSHVersion 6294
- 124.30 Plugin.LicenseeName 6295
- 124.31 Plugin.LimitFunction 6297
- 124.32 Plugin.LockFunction 6299
- 124.33 Plugin.OpenSSLVersion 6300
- 124.34 Plugin.PNGVersion 6301
- 124.35 Plugin.Path 6302
- 124.36 Plugin.ScriptStepParameter 6304
- 124.37 Plugin.ScriptStepParameterCount 6305
- 124.38 Plugin.Seats 6306
- 124.39 Plugin.SetErrorScriptTrigger 6307
- 124.40 Plugin.SetFunctions 6309
- 124.41 Plugin.SetPreviewSize 6311
- 124.42 Plugin.SetSuccessReturn 6312

	345
• 124.43 Plugin.StartTimeStamp	6313
• 124.44 Plugin.TiffVersion	6314
• 124.45 Plugin.UnlockFunction	6315
• 124.46 Plugin.UsedFunctions	6316
• 124.47 Plugin.ZLibVersion	6317
• 124.48 Plugin.isDebug	6318
• 125.1 PortMidi.Abort	6341
• 125.2 PortMidi.CheckHostError	6342
• 125.3 PortMidi.ClearDataAvailableHandler	6343
• 125.4 PortMidi.Close	6344
• 125.5 PortMidi.CurrentEvent	6345
• 125.6 PortMidi.DeviceCount	6346
• 125.7 PortMidi.GetChannelMask	6347
• 125.8 PortMidi.GetDefaultInputDeviceID	6348
• 125.9 PortMidi.GetDefaultOutputDeviceID	6349
• 125.10 PortMidi.GetDeviceID	6350
• 125.11 PortMidi.GetDeviceInfo	6351
• 125.12 PortMidi.GetDeviceName	6353
• 125.13 PortMidi.GetFilter	6354
• 125.14 PortMidi.OpenInput	6355
• 125.15 PortMidi.OpenOutput	6356
• 125.16 PortMidi.Poll	6358
• 125.17 PortMidi.ReadMessage	6359
• 125.18 PortMidi.Rescan	6360
• 125.19 PortMidi.SendMessage	6361
• 125.20 PortMidi.SendMessageRaw	6363
• 125.21 PortMidi.SendSysExHex	6364
• 125.22 PortMidi.SetChannelMask	6365
• 125.23 PortMidi.SetDataAvailableEvaluate	6367

- 125.24 PortMidi.SetDataAvailableHandler 6368
- 125.25 PortMidi.SetFilter 6370
- 125.26 PortMidi.TimeStamp 6372
- 126.1 Preferences.ClearRecentFiles 6373
- 126.2 Preferences.DeleteValue 6374
- 126.3 Preferences.GetTextSelectionWithDragAndDrop 6375
- 126.4 Preferences.GetValue 6376
- 126.5 Preferences.GetValueType 6378
- 126.6 Preferences.HasValue 6379
- 126.7 Preferences.SetTextSelectionWithDragAndDrop 6380
- 126.8 Preferences.SetValue 6381
- 127.19 PrintDialog.ClearOption 6403
- 127.20 PrintDialog.ClearOptions 6404
- 127.21 PrintDialog.Disable 6405
- 127.22 PrintDialog.Enable 6406
- 127.23 PrintDialog.GetAllPages 6408
- 127.24 PrintDialog.GetConfiguration 6409
- 127.25 PrintDialog.GetCopies 6410
- 127.26 PrintDialog.GetDestinationPath 6411
- 127.27 PrintDialog.GetDuplex 6412
- 127.28 PrintDialog.GetFirstPage 6413
- 127.29 PrintDialog.GetLastPage 6414
- 127.30 PrintDialog.GetLastSettings 6415
- 127.31 PrintDialog.GetNoDialog 6417
- 127.32 PrintDialog.GetOption 6418
- 127.33 PrintDialog.GetPageNumberingOffset 6419
- 127.34 PrintDialog.GetPaperName 6420
- 127.35 PrintDialog.GetPrintToPDF 6421
- 127.36 PrintDialog.GetPrinterName 6422

	347
• 127.37 PrintDialog.GetReset	6423
• 127.38 PrintDialog.GetResetDestination	6424
• 127.39 PrintDialog.GetTray	6425
• 127.40 PrintDialog.Install	6426
• 127.41 PrintDialog.SetAllPages	6428
• 127.42 PrintDialog.SetConfiguration	6429
• 127.43 PrintDialog.SetCopies	6430
• 127.44 PrintDialog.SetDestinationPath	6432
• 127.45 PrintDialog.SetDuplex	6433
• 127.46 PrintDialog.SetFirstPage	6434
• 127.47 PrintDialog.SetLastPage	6435
• 127.48 PrintDialog.SetNoDialog	6436
• 127.49 PrintDialog.SetOption	6438
• 127.50 PrintDialog.SetPageNumberingOffset	6440
• 127.51 PrintDialog.SetPaperName	6441
• 127.52 PrintDialog.SetPrintToPDF	6442
• 127.53 PrintDialog.SetPrintType	6443
• 127.54 PrintDialog.SetPrinterName	6445
• 127.55 PrintDialog.SetReset	6446
• 127.56 PrintDialog.SetResetDestination	6447
• 127.57 PrintDialog.SetTray	6448
• 128.7 Printer.GetDefaultPrinter	6459
• 128.11 Printer.PrinterCount	6467
• 128.12 Printer.PrinterInfo	6468
• 128.13 Printer.PrinterName	6470
• 129.1 Process.FrontProcessBundleID	6477
• 129.2 Process.FrontProcessName	6478
• 129.3 Process.FrontWindowTitle	6479
• 129.4 Process.GetCurrentDirectory	6480

- 129.5 Process.IsFrontMost 6481
- 129.6 Process.IsRunning 6482
- 129.7 Process.KeepFrontMost 6483
- 129.8 Process.LoadLibrary 6484
- 129.9 Process.SetCurrentDirectory 6485
- 129.10 Process.SetFrontMost 6486
- 129.11 ProcessActivity.List 6487
- 129.12 ProcessActivity.Options 6488
- 129.13 ProcessActivity.Reason 6489
- 129.14 ProcessActivity.beginActivity 6490
- 129.15 ProcessActivity.endActivity 6492
- 130.1 ProgressDialog.ClearImage 6493
- 130.2 ProgressDialog.GetBottomText 6495
- 130.3 ProgressDialog.GetButtonCaption 6496
- 130.4 ProgressDialog.GetCancel 6497
- 130.5 ProgressDialog.GetImageHeight 6499
- 130.6 ProgressDialog.GetImageWidth 6500
- 130.7 ProgressDialog.GetPositionX 6501
- 130.8 ProgressDialog.GetPositionY 6502
- 130.9 ProgressDialog.GetProgress 6503
- 130.10 ProgressDialog.GetShowButton 6504
- 130.11 ProgressDialog.GetTitle 6505
- 130.12 ProgressDialog.GetTopMost 6506
- 130.13 ProgressDialog.GetTopText 6507
- 130.14 ProgressDialog.Hide 6508
- 130.15 ProgressDialog.Reset 6510
- 130.16 ProgressDialog.SetBottomText 6511
- 130.17 ProgressDialog.SetButtonCaption 6513
- 130.18 ProgressDialog.SetCancel 6515

	349
• 130.19 ProgressDialog.SetFont	6517
• 130.20 ProgressDialog.SetImage	6519
• 130.21 ProgressDialog.SetImageHeight	6521
• 130.22 ProgressDialog.SetImageWidth	6522
• 130.23 ProgressDialog.SetPosition	6523
• 130.24 ProgressDialog.SetPositionCentered	6524
• 130.25 ProgressDialog.SetProgress	6525
• 130.26 ProgressDialog.SetShowButton	6527
• 130.27 ProgressDialog.SetTitle	6529
• 130.28 ProgressDialog.SetTopMost	6531
• 130.29 ProgressDialog.SetTopText	6533
• 130.30 ProgressDialog.Show	6535
• 130.31 ProgressDialog.Update	6537
• 130.32 Progressdialog.GetEvaluate	6539
• 130.33 Progressdialog.GetFileName	6540
• 130.34 Progressdialog.GetScriptName	6541
• 130.35 Progressdialog.SetEvaluate	6542
• 130.36 Progressdialog.SetScript	6543
• 131.1 Proj.BatchTransform	6545
• 131.2 Proj.Initialize	6546
• 131.3 Proj.IsInitialized	6547
• 131.4 Proj.Transform	6548
• 134.5 QLPreviewPanel.AddContainer	6622
• 134.6 QLPreviewPanel.AddFile	6624
• 134.7 QLPreviewPanel.AddImage	6625
• 134.8 QLPreviewPanel.AddPDF	6626
• 134.9 QLPreviewPanel.Clear	6627
• 134.10 QLPreviewPanel.CurrentPreviewItemIndex	6628
• 134.11 QLPreviewPanel.CurrentPreviewItemPath	6629

- 134.12 QLPreviewPanel.CurrentPreviewItemTitle 6630
- 134.13 QLPreviewPanel.GetHeight 6631
- 134.14 QLPreviewPanel.GetLeft 6632
- 134.15 QLPreviewPanel.GetTop 6633
- 134.16 QLPreviewPanel.GetWidth 6634
- 134.17 QLPreviewPanel.Hide 6635
- 134.18 QLPreviewPanel.IsVisible 6636
- 134.19 QLPreviewPanel.Move 6637
- 134.20 QLPreviewPanel.Resize 6638
- 134.21 QLPreviewPanel.SetCurrentPreviewItemIndex 6640
- 134.22 QLPreviewPanel.Show 6641
- 122.51 QuartzFilterManager.Filters 6243
- 122.52 QuartzFilterManager.HidePanel 6244
- 122.53 QuartzFilterManager.ShowPanel 6245
- 103.40 QuickList.AddList 5474
- 103.41 QuickList.AddMultiValue 5476
- 103.42 QuickList.AddPostfix 5478
- 103.43 QuickList.AddPrefix 5480
- 103.44 QuickList.AddQuickList 5482
- 103.45 QuickList.AddSQL 5483
- 103.46 QuickList.AddValue 5485
- 103.47 QuickList.And 5487
- 103.48 QuickList.AndColumn 5489
- 103.49 QuickList.BestMatch 5491
- 103.50 QuickList.CSVSplit 5492
- 103.51 QuickList.Clear 5493
- 103.52 QuickList.Clone 5494
- 103.53 QuickList.Count 5495
- 103.54 QuickList.CrossProduct 5497

	351
• 103.55 QuickList.DeCombine	5499
• 103.56 QuickList.Deserialize	5501
• 103.57 QuickList.FindEquals	5502
• 103.58 QuickList.FindUnequals	5503
• 103.59 QuickList.Free	5504
• 103.60 QuickList.GetList	5506
• 103.61 QuickList.GetValue	5508
• 103.62 QuickList.HasDuplicateItems	5510
• 103.63 QuickList.HasValue	5511
• 103.64 QuickList.InsertValue	5513
• 103.65 QuickList.List	5514
• 103.66 QuickList.MatchesPostfix	5515
• 103.67 QuickList.MatchesPrefix	5517
• 103.68 QuickList.MatchesSubString	5519
• 103.69 QuickList.New	5521
• 103.70 QuickList.Not	5523
• 103.71 QuickList.NotColumn	5525
• 103.72 QuickList.Or	5527
• 103.73 QuickList.OrColumn	5529
• 103.74 QuickList.Pop	5531
• 103.75 QuickList.PopFirst	5532
• 103.76 QuickList.Push	5533
• 103.77 QuickList.RegExMatch	5534
• 103.78 QuickList.Remove	5535
• 103.79 QuickList.RemoveDuplicateItems	5536
• 103.80 QuickList.RemoveEmptyItems	5537
• 103.81 QuickList.RemovePostfix	5538
• 103.82 QuickList.RemovePrefix	5540
• 103.83 QuickList.RemoveValue	5542

- 103.84 QuickList.Reserve 5543
- 103.85 QuickList.Reverse 5544
- 103.86 QuickList.Serialize 5545
- 103.87 QuickList.SetList 5547
- 103.88 QuickList.SetValue 5548
- 103.89 QuickList.Sort 5550
- 103.90 QuickList.SortWith 5552
- 103.91 QuickList.SubList 5555
- 103.92 QuickList.Trim 5557
- 103.93 QuickList.ValueIndex 5558
- 103.94 QuickList.XOr 5559
- 103.95 QuickList.XOrColumn 5560
- 73.12 RSA.DecryptPrivateKey 3469
- 73.13 RSA.EncryptPrivateKey 3471
- 149.13 RSA.GeneratePrivateKey 7075
- 149.14 RSA.GetPublicKey 7077
- 73.14 RSA.PrivateDecrypt 3473
- 73.15 RSA.PrivateEncrypt 3476
- 73.16 RSA.PublicDecrypt 3479
- 73.17 RSA.PublicEncrypt 3482
- 149.15 RSA.Sign 7079
- 149.16 RSA.Verify 7084
- 135.1 RegEx.CaptureCount 6643
- 135.2 RegEx.Compile 6645
- 135.3 RegEx.Execute 6648
- 135.4 RegEx.FindMatches 6651
- 135.5 RegEx.Free 6654
- 135.6 RegEx.List 6655
- 135.7 RegEx.Match 6656

	353
• 135.8 RegEx.MatchList	6658
• 135.9 RegEx.MinimumLength	6660
• 135.10 RegEx.NameCount	6661
• 135.11 RegEx.NamedSubstring	6662
• 135.12 RegEx.Options	6663
• 135.13 RegEx.Pattern	6664
• 135.14 RegEx.Quote	6665
• 135.15 RegEx.Replace	6666
• 135.16 RegEx.ReplaceAll	6668
• 135.17 RegEx.Results	6670
• 135.18 RegEx.Size	6672
• 135.19 RegEx.StringNumber	6673
• 135.20 RegEx.Study	6674
• 135.21 RegEx.Substring	6675
• 135.22 RegEx.SubstringList	6677
• 135.23 RegEx.Version	6678
• 124.49 Register	6320
• 124.50 Registration	6323
• 137.1 RemoteControl.ClickMouse	6693
• 137.4 RemoteControl.HideCursor	6697
• 137.5 RemoteControl.MouseX	6698
• 137.6 RemoteControl.MouseY	6699
• 137.7 RemoteControl.MoveMouse	6700
• 137.8 RemoteControl.PressCommandKey	6701
• 137.9 RemoteControl.PressControlKey	6702
• 137.10 RemoteControl.PressDialogButton	6703
• 137.11 RemoteControl.PressDialogButton.Clear	6704
• 137.12 RemoteControl.PressKey	6705
• 137.13 RemoteControl.PressKeyLater	6708

- 137.14 RemoteControl.PressOptionKey 6709
- 137.15 RemoteControl.PressShiftKey 6710
- 137.16 RemoteControl.ShowCursor 6711
- 138.1 RichText.AppendFormattedText 6713
- 138.2 RichText.AppendText 6714
- 138.3 RichText.Attribute 6715
- 138.4 RichText.Clear 6716
- 138.5 RichText.FormattedText 6717
- 138.6 RichText.GeneratePDF 6719
- 138.7 RichText.HTMLText 6720
- 138.8 RichText.RTF 6721
- 138.9 RichText.ReadContainer 6722
- 138.10 RichText.ReadFile 6724
- 138.11 RichText.ReadHTML 6726
- 138.12 RichText.ReadRTF 6728
- 138.13 RichText.ReadText 6729
- 138.14 RichText.ReadURL 6731
- 138.15 RichText.ReadWebviewer 6732
- 138.16 RichText.Release 6733
- 138.17 RichText.ReplaceText 6734
- 138.18 RichText.ReplaceTexts 6736
- 138.19 RichText.SetAttribute 6737
- 138.20 RichText.SetFormattedText 6738
- 138.21 RichText.SetText 6740
- 138.22 RichText.Text 6741
- 138.23 RichText.TextLength 6742
- 138.24 RichText.WriteContainer 6743
- 138.25 RichText.WriteDOC 6745
- 138.26 RichText.WriteFile 6747

	355
• 138.27 RichText.WritePDF	6750
• 138.28 RichText.WriteRTF	6752
• 139.1 RunTask.AddArgument	6755
• 139.2 RunTask.GetArgument	6757
• 139.3 RunTask.GetArgumentCount	6758
• 139.4 RunTask.GetCurrentDirectoryPath	6759
• 139.5 RunTask.GetLaunchPath	6760
• 139.7 RunTask.IsRunning	6762
• 139.8 RunTask.Launch	6763
• 139.9 RunTask.NewTask	6766
• 139.10 RunTask.ProcessIdentifier	6768
• 139.11 RunTask.ReadErrorText	6769
• 139.12 RunTask.ReadOutputText	6770
• 139.13 RunTask.SetArguments	6771
• 139.14 RunTask.SetCurrentDirectoryPath	6774
• 139.15 RunTask.SetLaunchPath	6775
• 139.17 RunTask.Terminate	6778
• 139.18 RunTask.TerminationReason	6779
• 139.19 RunTask.TerminationStatus	6780
• 139.20 RunTask.Wait	6781
• 139.21 RunTask.WriteInputText	6783
• 151.1 SNMP.Get	7123
• 151.2 SNMP.SetRetries	7125
• 151.3 SNMP.SetTimeout	7126
• 156.2 SQL.Cancel	7295
• 156.3 SQL.ClientVersion	7296
• 156.4 SQL.Close	7297
• 156.5 SQL.CommandText	7298
• 156.6 SQL.CommandType	7299

- 156.7 SQL.Commit 7300
- 156.8 SQL.Connect 7302
- 156.9 SQL.Disconnect 7308
- 156.10 SQL.Execute 7309
- 156.11 SQL.FetchFirst 7313
- 156.12 SQL.FetchLast 7314
- 156.13 SQL.FetchNext 7316
- 156.14 SQL.FetchPos 7319
- 156.15 SQL.FetchPrior 7320
- 156.16 SQL.FieldCount 7321
- 156.17 SQL.FreeAllConnections 7323
- 156.18 SQL.FreeCommand 7324
- 156.19 SQL.FreeConnection 7326
- 156.20 SQL.GetAutoCommit 7328
- 156.21 SQL.GetCommandOption 7329
- 156.22 SQL.GetCommandOptions 7330
- 156.23 SQL.GetCommandTag 7331
- 156.24 SQL.GetConnectionOption 7332
- 156.25 SQL.GetConnectionOptions 7333
- 156.26 SQL.GetConnectionTag 7334
- 156.27 SQL.GetFieldAsBoolean 7335
- 156.28 SQL.GetFieldAsContainer 7336
- 156.29 SQL.GetFieldAsDate 7337
- 156.30 SQL.GetFieldAsDateTime 7339
- 156.31 SQL.GetFieldAsFloat 7340
- 156.32 SQL.GetFieldAsJPEG 7342
- 156.33 SQL.GetFieldAsNumber 7344
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348

	357
• 156.36 SQL.GetFieldAsText	7350
• 156.37 SQL.GetFieldAsTime	7352
• 156.38 SQL.GetFieldDataType	7353
• 156.39 SQL.GetFieldIsNull	7354
• 156.40 SQL.GetFieldName	7355
• 156.41 SQL.GetFieldNameList	7357
• 156.42 SQL.GetFieldOption	7359
• 156.43 SQL.GetFieldOptions	7360
• 156.44 SQL.GetFieldValue	7361
• 156.45 SQL.GetFieldValueList	7362
• 156.46 SQL.GetIsolationLevel	7364
• 156.47 SQL.GetParamAsBoolean	7365
• 156.48 SQL.GetParamAsContainer	7366
• 156.49 SQL.GetParamAsDate	7367
• 156.50 SQL.GetParamAsDateTime	7368
• 156.51 SQL.GetParamAsFloat	7369
• 156.52 SQL.GetParamAsJPEG	7371
• 156.53 SQL.GetParamAsNumber	7373
• 156.54 SQL.GetParamAsPDF	7375
• 156.55 SQL.GetParamAsPNG	7377
• 156.56 SQL.GetParamAsText	7379
• 156.57 SQL.GetParamAsTime	7380
• 156.58 SQL.GetParamDataType	7381
• 156.59 SQL.GetParamIsDefault	7382
• 156.60 SQL.GetParamIsNull	7383
• 156.61 SQL.GetParamName	7384
• 156.62 SQL.GetParamNameList	7385
• 156.63 SQL.GetParamOption	7387
• 156.64 SQL.GetParamOptions	7388

- 156.65 SQL.GetParamValue 7389
- 156.66 SQL.GetParamValueList 7390
- 156.67 SQL.GetRecordsAsText 7392
- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397
- 156.70 SQL.InternalSQLiteLibrary.Activate 7399
- 156.71 SQL.InternalSQLiteLibrary.Activated 7400
- 156.72 SQL.InternalSQLiteLibrary.Deactivate 7401
- 156.73 SQL.InternalSQLiteLibrary.SourceID 7402
- 156.74 SQL.InternalSQLiteLibrary.Version 7403
- 156.75 SQL.InternalSQLiteLibrary.VersionNumber 7404
- 156.76 SQL.ListCommands 7405
- 156.77 SQL.ListConnections 7406
- 156.78 SQL.MySQL.InsertID 7407
- 156.79 SQL.NewCommand 7408
- 156.80 SQL.NewConnection 7412
- 156.81 SQL.Open 7415
- 156.82 SQL.ParamCount 7416
- 156.83 SQL.Prepare 7417
- 156.84 SQL.ResetCommand 7418
- 156.85 SQL.ResetConnection 7419
- 156.86 SQL.Rollback 7420
- 156.87 SQL.RowsAffected 7421
- 156.88 SQL.SQLite3.EnableLoadExtension 7423
- 156.89 SQL.SQLite3.LastInsertRowID 7424
- 156.90 SQL.SQLite3.MemoryHighwater 7425
- 156.91 SQL.SQLite3.MemoryUsed 7426
- 156.92 SQL.SQLite3.ReKey 7427
- 156.93 SQL.SQLite3.SetKey 7429

	359
• 156.94 SQL.ServerVersion	7431
• 156.95 SQL.ServerVersionString	7432
• 156.96 SQL.SetAutoCommit	7433
• 156.97 SQL.SetClient	7434
• 156.98 SQL.SetCommandOption	7436
• 156.99 SQL.SetCommandTag	7438
• 156.100 SQL.SetCommandText	7439
• 156.101 SQL.SetConnectionOption	7441
• 156.102 SQL.SetConnectionTag	7446
• 156.103 SQL.SetFieldOption	7447
• 156.104 SQL.SetIsolationLevel	7448
• 156.105 SQL.SetParamAsBoolean	7449
• 156.106 SQL.SetParamAsContainer	7450
• 156.107 SQL.SetParamAsDate	7452
• 156.108 SQL.SetParamAsDateTime	7454
• 156.109 SQL.SetParamAsFloat	7456
• 156.110 SQL.SetParamAsNumber	7458
• 156.111 SQL.SetParamAsText	7460
• 156.112 SQL.SetParamAsTime	7462
• 156.113 SQL.SetParamDataType	7463
• 156.114 SQL.SetParamDefault	7464
• 156.115 SQL.SetParamNull	7465
• 156.116 SQL.SetParamOption	7466
• 156.117 SQL.SetParamTypesValues	7467
• 156.118 SQL.SetParamUnknown	7469
• 156.119 SQL.SetParamValue	7470
• 156.120 SQL.SetParamValues	7472
• 156.121 SQL.isAlive	7474
• 156.122 SQL.isConnected	7475

- 156.123 SQL.isExecuted 7476
- 156.124 SQL.isOpened 7477
- 156.125 SQL.isResultSet 7478
- 157.1 SSH.CloseChannel 7479
- 157.2 SSH.Connect 7481
- 157.3 SSH.Disconnect 7485
- 157.4 SSH.EOF 7486
- 157.5 SSH.Execute 7487
- 157.6 SSH.Flush 7490
- 157.7 SSH.FreeChannel 7491
- 157.8 SSH.GetExitState 7492
- 157.9 SSH.GetIP 7493
- 157.10 SSH.GetPort 7494
- 157.11 SSH.GetTag 7495
- 157.12 SSH.GetTimeout 7496
- 157.13 SSH.GetUserName 7497
- 157.14 SSH.HostKey 7498
- 157.15 SSH.HostKeyHash 7499
- 157.16 SSH.IsAuthenticated 7500
- 157.17 SSH.New 7501
- 157.18 SSH.OpenSession 7504
- 157.19 SSH.ReadHex 7505
- 157.20 SSH.ReadText 7506
- 157.21 SSH.Release 7508
- 157.22 SSH.RequestPTY 7509
- 157.23 SSH.SendEOF 7510
- 157.24 SSH.SessionHandshake 7511
- 157.25 SSH.SetEnv 7512
- 157.26 SSH.SetTag 7513

	361
• 157.27 SSH.SetTimeout	7514
• 157.28 SSH.Shell	7515
• 157.29 SSH.Tunnel.BytesReceived	7516
• 157.30 SSH.Tunnel.BytesSent	7517
• 157.31 SSH.Tunnel.Cancel	7518
• 157.32 SSH.Tunnel.Cancelled	7519
• 157.33 SSH.Tunnel.Messages	7520
• 157.34 SSH.Tunnel.Run	7521
• 157.35 SSH.Tunnel.Running	7523
• 157.36 SSH.UserAuthKeyboardInteractive	7524
• 157.37 SSH.UserAuthList	7525
• 157.38 SSH.UserAuthPassword	7526
• 157.39 SSH.UserAuthPublicKey	7527
• 157.40 SSH.UserAuthPublicKeyFile	7529
• 157.41 SSH.WaitClosed	7531
• 157.42 SSH.WaitEOF	7532
• 157.43 SSH.WaitSocket	7533
• 157.44 SSH.WriteHex	7534
• 157.45 SSH.WriteText	7535
• 140.1 Schedule.Check	6785
• 140.2 Schedule.ClearEvaluateResult	6786
• 140.3 Schedule.ClearSQLResult	6787
• 140.4 Schedule.EvaluateAfterDelay	6788
• 140.5 Schedule.EvaluateAtTime	6790
• 140.6 Schedule.EvaluateAtTimeStamp	6792
• 140.7 Schedule.EvaluateOnIdle	6794
• 140.8 Schedule.ExecuteSQLAfterDelay	6795
• 140.9 Schedule.ExecuteSQLAtTime	6797
• 140.10 Schedule.ExecuteSQLAtTimeStamp	6799

- 140.11 Schedule.ExecuteSQLOnIdle 6801
- 140.12 Schedule.GetAutoRelease 6803
- 140.13 Schedule.GetEvaluate 6804
- 140.14 Schedule.GetEvaluateResult 6805
- 140.15 Schedule.GetFileName 6806
- 140.16 Schedule.GetLastTimeStamp 6807
- 140.17 Schedule.GetRepeatDelay 6808
- 140.18 Schedule.GetRunCount 6809
- 140.19 Schedule.GetSQL 6810
- 140.20 Schedule.GetSQLResult 6811
- 140.21 Schedule.GetScriptName 6812
- 140.22 Schedule.GetScriptParameter 6813
- 140.23 Schedule.GetTimeStamp 6814
- 140.24 Schedule.GetURL 6815
- 140.25 Schedule.List 6816
- 140.26 Schedule.Release 6817
- 140.27 Schedule.ReleaseAll 6819
- 140.28 Schedule.SetAutoRelease 6820
- 140.29 Schedule.SetEvaluate 6821
- 140.30 Schedule.SetFileName 6822
- 140.31 Schedule.SetRepeatDelay 6823
- 140.32 Schedule.SetSQL 6824
- 140.33 Schedule.SetScriptName 6825
- 140.34 Schedule.SetScriptParameter 6826
- 140.35 Schedule.SetTimeStamp 6827
- 140.36 Schedule.SetURL 6828
- 140.37 Schedule.StartScriptAfterDelay 6829
- 140.38 Schedule.StartScriptAtTime 6831
- 140.39 Schedule.StartScriptAtTimeStamp 6833

	363
• 140.40 Schedule.StartScriptOnIdle	6835
• 141.1 Screen.Count	6837
• 141.2 Screen.DockHeight	6838
• 141.3 Screen.DockWidth	6839
• 141.4 Screen.Height	6840
• 141.5 Screen.Left	6841
• 141.6 Screen.Scale	6842
• 141.7 Screen.Top	6843
• 141.8 Screen.Width	6844
• 141.9 Screenshot	6845
• 141.10 ScreenshotRect	6847
• 142.1 ScriptWorkspace.BringToFront	6849
• 142.2 ScriptWorkspace.CopyScriptText	6850
• 142.3 ScriptWorkspace.CurrentTab	6851
• 142.4 ScriptWorkspace.ExpandScriptFolders	6852
• 142.5 ScriptWorkspace.GetScriptListSearch	6853
• 142.6 ScriptWorkspace.IsActive	6854
• 142.7 ScriptWorkspace.IsVisible	6855
• 142.8 ScriptWorkspace.LineCount	6856
• 142.9 ScriptWorkspace.OpenScript	6857
• 142.10 ScriptWorkspace.ScriptNames	6858
• 142.11 ScriptWorkspace.ScriptText	6859
• 142.12 ScriptWorkspace.ScriptsVisible	6860
• 142.13 ScriptWorkspace.ScrollToLine	6861
• 142.14 ScriptWorkspace.ScrollToSelection	6862
• 142.15 ScriptWorkspace.SelectLine	6863
• 142.16 ScriptWorkspace.SelectLines	6864
• 142.17 ScriptWorkspace.SelectedLine	6865
• 142.18 ScriptWorkspace.SelectedLines	6866

- 142.19 ScriptWorkspace.SetScriptListSearch 6867
- 142.20 ScriptWorkspace.StepsVisible 6868
- 142.21 ScriptWorkspace.StyledScriptText 6869
- 142.22 ScriptWorkspace.Tabs 6870
- 142.23 ScriptWorkspace.Title 6871
- 142.24 ScriptWorkspace.TriggerScripts 6872
- 142.25 ScriptWorkspace.TriggerSteps 6873
- 142.26 ScriptWorkspace.Window 6874
- 175.11 SendCommand 8242
- 143.1 SendMail.AddAttachmentContainer 6875
- 143.2 SendMail.AddAttachmentFile 6878
- 143.3 SendMail.AddAttachmentText 6881
- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.6 SendMail.AddHeader 6887
- 143.7 SendMail.AddRecipient 6889
- 143.8 SendMail.AddReplyTo 6891
- 143.9 SendMail.AddTo 6892
- 143.10 SendMail.AttachmentCount 6894
- 143.11 SendMail.ClearAttachments 6895
- 143.12 SendMail.ClearHeaders 6896
- 143.13 SendMail.ClearRecipients 6897
- 143.14 SendMail.CreateEmail 6898
- 143.15 SendMail.GetHTMLText 6900
- 143.16 SendMail.GetInReplyTo 6901
- 143.17 SendMail.GetMessageID 6902
- 143.18 SendMail.GetPlainText 6903
- 143.19 SendMail.GetRichText 6904
- 143.20 SendMail.GetSMTPPassword 6905

	365
• 143.21 SendMail.GetSMTPServer	6906
• 143.22 SendMail.GetSMTPUserName	6907
• 143.23 SendMail.GetSource	6908
• 143.24 SendMail.GetSubject	6909
• 143.25 SendMail.PrepareCURL	6910
• 143.26 SendMail.Release	6912
• 143.27 SendMail.SetFrom	6913
• 143.28 SendMail.SetHTMLText	6915
• 143.29 SendMail.SetInReplyTo	6917
• 143.30 SendMail.SetMessageID	6918
• 143.31 SendMail.SetPlainText	6919
• 143.32 SendMail.SetRichText	6921
• 143.33 SendMail.SetSMTPPassword	6923
• 143.34 SendMail.SetSMTPServer	6925
• 143.35 SendMail.SetSMTPUserName	6927
• 143.36 SendMail.SetSubject	6929
• 144.1 SerialPort.AvailableBytes	6931
• 144.2 SerialPort.Clear	6933
• 144.3 SerialPort.ClearDataAvailableHandler	6934
• 144.4 SerialPort.Close	6935
• 144.5 SerialPort.CloseAll	6936
• 144.6 SerialPort.GetBaudRate	6937
• 144.7 SerialPort.GetCTS	6938
• 144.8 SerialPort.GetDSR	6939
• 144.9 SerialPort.GetDTR	6940
• 144.10 SerialPort.GetDataBits	6941
• 144.11 SerialPort.GetParity	6942
• 144.12 SerialPort.GetRTS	6943
• 144.13 SerialPort.GetStopBits	6944

- 144.14 SerialPort.GetXON 6945
- 144.15 SerialPort.HasLine 6946
- 144.16 SerialPort.IsSuspended 6947
- 144.17 SerialPort.LastError 6948
- 144.18 SerialPort.List 6949
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.21 SerialPort.ReadByte 6959
- 144.22 SerialPort.ReadHex 6960
- 144.23 SerialPort.ReadLine 6961
- 144.24 SerialPort.Resume 6962
- 144.25 SerialPort.SetBaudRate 6963
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.29 SerialPort.SetDataAvailableEvaluate 6967
- 144.30 SerialPort.SetDataAvailableHandler 6968
- 144.31 SerialPort.SetDataBits 6970
- 144.32 SerialPort.SetParity 6971
- 144.33 SerialPort.SetRTS 6972
- 144.34 SerialPort.SetStopBits 6973
- 144.35 SerialPort.SetXON 6974
- 144.36 SerialPort.Suspend 6976
- 144.37 SerialPort.Write 6977
- 144.38 SerialPort.WriteByte 6979
- 144.39 SerialPort.WriteHex 6980
- 145.1 ServerSocket.Check 6983
- 145.2 ServerSocket.GetAllowedScripts 6984
- 145.3 ServerSocket.GetAllowedTypes 6985

	367
• 145.4 ServerSocket.SendQuery	6986
• 145.5 ServerSocket.SetAllowedScripts	6988
• 145.6 ServerSocket.SetAllowedTypes	6989
• 145.7 ServerSocket.Start	6990
• 145.8 ServerSocket.Stop	6992
• 146.1 ServiceProvider.Install	6993
• 146.2 ServiceProvider.Uninstall	6995
• 146.3 ServiceProvider.Value	6996
• 162.3 SetSystemUIMode	7721
• 147.1 SharedMemory.Exists	6997
• 147.2 SharedMemory.GetValue	6998
• 147.3 SharedMemory.SetValue	6999
• 148.1 Shell.AddArgument	7001
• 148.2 Shell.AddEnvironment	7004
• 148.3 Shell.AvailableBytesError	7005
• 148.4 Shell.AvailableBytesOutput	7006
• 148.5 Shell.ClearArguments	7007
• 148.6 Shell.ClearEnvironment	7008
• 148.7 Shell.CloseInput	7009
• 148.8 Shell.CloseStreams	7010
• 148.9 Shell.Execute	7011
• 148.10 Shell.ExitCode	7019
• 148.11 Shell.GetApplicationName	7020
• 148.12 Shell.GetArgument	7021
• 148.13 Shell.GetArgumentCount	7022
• 148.14 Shell.GetArguments	7023
• 148.15 Shell.GetCompletedEvaluate	7024
• 148.16 Shell.GetCompletedScriptFileName	7025
• 148.17 Shell.GetCompletedScriptName	7026

- 148.18 Shell.GetCurrentDirectory 7027
- 148.19 Shell.GetDataAvailableEvaluate 7028
- 148.20 Shell.GetDataAvailableScriptFileName 7029
- 148.21 Shell.GetDataAvailableScriptName 7030
- 148.22 Shell.GetDomain 7031
- 148.23 Shell.GetEnvironment 7032
- 148.24 Shell.GetPassword 7033
- 148.25 Shell.GetUsername 7034
- 148.26 Shell.IsRunning 7035
- 148.27 Shell.New 7036
- 148.28 Shell.PeekErrorText 7037
- 148.29 Shell.PeekOutputText 7038
- 148.30 Shell.ProcessIdentifier 7039
- 148.31 Shell.ReadErrorText 7040
- 148.32 Shell.ReadOutputText 7041
- 148.33 Shell.Release 7043
- 148.34 Shell.SetApplicationName 7044
- 148.35 Shell.SetArguments 7045
- 148.36 Shell.SetArgumentsList 7046
- 148.37 Shell.SetCompletedEvaluate 7047
- 148.38 Shell.SetCompletedScript 7048
- 148.39 Shell.SetCurrentDirectory 7049
- 148.40 Shell.SetDataAvailableEvaluate 7050
- 148.41 Shell.SetDataAvailableScript 7051
- 148.42 Shell.SetDomain 7052
- 148.43 Shell.SetPassword 7053
- 148.44 Shell.SetUsername 7054
- 148.45 Shell.Terminate 7055
- 148.46 Shell.TerminationReason 7056

	369
• 148.47 Shell.Wait	7057
• 148.48 Shell.WriteInputText	7059
• 175.12 ShowURL	8243
• 150.1 SmartCard.Available	7087
• 150.2 SmartCard.BeginTransaction	7088
• 150.3 SmartCard.Cancel	7089
• 150.4 SmartCard.CancelTransaction	7090
• 150.5 SmartCard.Connect	7091
• 150.6 SmartCard.Control	7093
• 150.7 SmartCard.Disconnect	7094
• 150.8 SmartCard.EndTransaction	7095
• 150.9 SmartCard.GetActiveProtocol	7096
• 150.10 SmartCard.GetAttribute	7097
• 150.11 SmartCard.HeaderTemplate	7099
• 150.12 SmartCard.Init	7100
• 150.13 SmartCard.ListReaderGroups	7103
• 150.14 SmartCard.ListReaders	7104
• 150.15 SmartCard.PerformSignature	7106
• 150.16 SmartCard.ReadCertificate	7107
• 150.17 SmartCard.ReadFile	7108
• 150.18 SmartCard.Reconnect	7111
• 150.19 SmartCard.Release	7112
• 150.20 SmartCard.SetAttribute	7113
• 150.21 SmartCard.SplitValues	7114
• 150.22 SmartCard.Status	7116
• 150.23 SmartCard.Transmit	7117
• 150.24 SmartCard.TransmitReceiveHeader	7120
• 150.25 SmartCard.Valid	7121
• 152.1 Social.AccountProperty	7127

- 152.2 Social.Accounts 7129
- 152.3 Social.HasAccessForAccountType 7131
- 152.4 Social.RequestAccessForAccountType 7132
- 152.5 SocialRequest.AddParameter 7134
- 152.6 SocialRequest.ClearMultipartData 7136
- 152.7 SocialRequest.ClearParameter 7137
- 152.8 SocialRequest.GetAccount 7138
- 152.9 SocialRequest.GetMultiPartDataCount 7139
- 152.10 SocialRequest.GetParameterCount 7140
- 152.11 SocialRequest.GetRequestMethod 7141
- 152.12 SocialRequest.GetResponse 7142
- 152.13 SocialRequest.GetServiceType 7144
- 152.14 SocialRequest.GetURL 7145
- 152.15 SocialRequest.New 7146
- 152.16 SocialRequest.Perform 7148
- 152.17 SocialRequest.Release 7150
- 152.18 SocialRequest.SetAccount 7151
- 152.19 SocialRequest.SetRequestMethod 7153
- 152.20 SocialRequest.SetServiceType 7154
- 152.21 SocialRequest.SetURL 7155
- 152.22 SocialRequest.addMultipartContainer 7156
- 152.23 SocialRequest.addMultipartText 7157
- 154.1 Socket.AcceptNewConnection 7185
- 154.2 Socket.AddMembership 7187
- 154.3 Socket.AvailableBytes 7188
- 154.4 Socket.Check 7189
- 154.5 Socket.CheckAll 7190
- 154.6 Socket.ClearDataAvailableHandler 7191
- 154.7 Socket.ClearErrorHandler 7192

	371
• 154.8 Socket.ClearNewConnectionHandler	7193
• 154.9 Socket.Close	7194
• 154.10 Socket.CloseAll	7196
• 154.11 Socket.Connect	7197
• 154.12 Socket.DropMembership	7202
• 154.13 Socket.GetBroadcast	7203
• 154.14 Socket.GetMulticastInterface	7204
• 154.15 Socket.GetMulticastLoop	7205
• 154.16 Socket.GetMulticastTimeToLive	7206
• 154.17 Socket.GetTag	7207
• 154.18 Socket.GetTimeToLive	7208
• 154.19 Socket.IsClosed	7209
• 154.20 Socket.IsListening	7210
• 154.21 Socket.LastError	7211
• 154.22 Socket.LastMessageIP	7212
• 154.23 Socket.LastMessagePort	7213
• 154.24 Socket.List	7214
• 154.25 Socket.Listen	7215
• 154.26 Socket.LocalIP	7217
• 154.27 Socket.LocalPort	7218
• 154.28 Socket.NewTCPSocket	7219
• 154.29 Socket.NewUDPSocket	7221
• 154.30 Socket.Peek	7223
• 154.31 Socket.PeekAll	7224
• 154.32 Socket.PeekAllHex	7225
• 154.33 Socket.PeekHex	7226
• 154.34 Socket.Read	7227
• 154.35 Socket.ReadAll	7230
• 154.36 Socket.ReadAllHex	7232

- 154.37 Socket.ReadHex 7233
- 154.38 Socket.ReadLine 7234
- 154.39 Socket.ReadLineHex 7236
- 154.40 Socket.ReadMLLP 7237
- 154.41 Socket.RemoteIP 7238
- 154.42 Socket.RemotePort 7239
- 154.43 Socket.SSL.Accept 7240
- 154.44 Socket.SSL.Connect 7241
- 154.45 Socket.SSL.GetMethod 7242
- 154.46 Socket.SSL.Initialize 7243
- 154.47 Socket.SSL.Prepare 7244
- 154.48 Socket.SSL.SetMethod 7245
- 154.49 Socket.SSL.UseCertificateFile 7246
- 154.50 Socket.SSL.UsePrivateKeyFile 7247
- 154.51 Socket.SendMessage 7248
- 154.52 Socket.SendMessageHex 7250
- 154.53 Socket.SetBroadcast 7251
- 154.54 Socket.SetDataAvailableEvaluate 7252
- 154.55 Socket.SetDataAvailableHandler 7253
- 154.56 Socket.SetDataAvailableURL 7255
- 154.57 Socket.SetErrorEvaluate 7256
- 154.58 Socket.SetErrorHandler 7257
- 154.59 Socket.SetErrorURL 7259
- 154.60 Socket.SetMulticastInterface 7260
- 154.61 Socket.SetMulticastLoop 7261
- 154.62 Socket.SetMulticastTimeToLive 7262
- 154.63 Socket.SetNewConnectionEvaluate 7263
- 154.64 Socket.SetNewConnectionHandler 7264
- 154.65 Socket.SetNewConnectionURL 7266

	373
• 154.66 Socket.SetTag	7267
• 154.67 Socket.SetTimeToLive	7268
• 154.68 Socket.Write	7269
• 154.69 Socket.WriteByte	7271
• 154.70 Socket.WriteHex	7272
• 154.71 Socket.WriteMLLP	7274
• 155.1 Speech.AvailableVoices	7275
• 155.2 Speech.IsPaused	7276
• 155.3 Speech.IsSpeaking	7277
• 155.4 Speech.Pause	7278
• 155.5 Speech.Resume	7279
• 155.6 Speech.Speak	7280
• 155.7 SpeechRecognition.AuthorizationStatus	7282
• 155.8 SpeechRecognition.Initialize	7283
• 155.9 SpeechRecognition.IsInitialized	7284
• 155.10 SpeechRecognition.Recognize	7285
• 155.11 SpeechRecognition.RequestAuthorization	7287
• 155.12 SpeechRecognition.SupportedLocales	7288
• 155.13 SpeechRecognition.SupportsOnDeviceRecognition	7290
• 158.1 StoreKit.AddPayment	7537
• 158.2 StoreKit.CanMakePayments	7539
• 158.3 StoreKit.FinishTransaction	7540
• 158.4 StoreKit.InvalidProductIdentifiers	7541
• 158.5 StoreKit.IsProductViewVisible	7542
• 158.6 StoreKit.ProductQueryRunning	7543
• 158.7 StoreKit.Products	7544
• 158.8 StoreKit.QueryProducts	7545
• 158.10 StoreKit.RestoreCompletedTransactions	7547
• 158.12 StoreKit.SetRestoreCompletedTransactionsTrigger	7549

- 158.13 `StoreKit.SetUpdatedTransactionsTrigger` 7550
- 158.15 `StoreKit.Transactions` 7552
- 124.51 `StoreRegistration` 6324
- 159.1 `SyntaxColoring.AddContextMenuCommand` 7553
- 159.2 `SyntaxColoring.AddTag` 7559
- 159.3 `SyntaxColoring.CheckVariableDeclaration.Disable` 7564
- 159.4 `SyntaxColoring.CheckVariableDeclaration.Enable` 7565
- 159.5 `SyntaxColoring.CheckVariableDeclaration.Enabled` 7567
- 159.6 `SyntaxColoring.CheckVariableDeclaration.Notification.Disable` 7569
- 159.7 `SyntaxColoring.CheckVariableDeclaration.Notification.Enable` 7570
- 159.8 `SyntaxColoring.CheckVariableDeclaration.Notification.Enabled` 7571
- 159.9 `SyntaxColoring.Clear` 7572
- 159.10 `SyntaxColoring.ClearContextMenuCommands` 7573
- 159.11 `SyntaxColoring.ContextualMenuEnabled.GetEnabled` 7574
- 159.12 `SyntaxColoring.ContextualMenuEnabled.SetEnabled` 7575
- 159.13 `SyntaxColoring.CopyButton.GetEnabled` 7576
- 159.14 `SyntaxColoring.CopyButton.SetEnabled` 7577
- 159.15 `SyntaxColoring.Disable` 7579
- 159.16 `SyntaxColoring.Enable` 7580
- 159.17 `SyntaxColoring.Enabled` 7581
- 159.18 `SyntaxColoring.FactoryDefaults` 7582
- 159.19 `SyntaxColoring.Format` 7583
- 159.20 `SyntaxColoring.GetAddFindbars` 7584
- 159.21 `SyntaxColoring.GetBlackFieldPicker` 7585
- 159.22 `SyntaxColoring.GetFontName` 7586
- 159.23 `SyntaxColoring.GetFontSize` 7587
- 159.24 `SyntaxColoring.GetFormulasWithLinks` 7588
- 159.25 `SyntaxColoring.GetMinCalcFontSize` 7589
- 159.26 `SyntaxColoring.GetRelationGraphSearchBoxPreferredSize` 7590

	375
• 159.27 SyntaxColoring.GetRememberColumnWidths	7591
• 159.28 SyntaxColoring.GetResizeFieldPicker	7592
• 159.29 SyntaxColoring.GetScriptHighlightColor	7593
• 159.30 SyntaxColoring.GetScriptIfColor	7594
• 159.31 SyntaxColoring.GetScriptLoopColor	7595
• 159.32 SyntaxColoring.GetScriptSearchColor	7596
• 159.33 SyntaxColoring.GetShowFieldAndTableIDs	7597
• 159.34 SyntaxColoring.GetShowLayoutIDs	7598
• 159.35 SyntaxColoring.GetShowScriptIDs	7599
• 159.36 SyntaxColoring.GetTag	7600
• 159.37 SyntaxColoring.GetTags	7601
• 159.38 SyntaxColoring.GetUseBoldFont	7602
• 159.39 SyntaxColoring.LineNumbers.Disable	7603
• 159.40 SyntaxColoring.LineNumbers.Enable	7604
• 159.41 SyntaxColoring.LineNumbers.Enabled	7606
• 159.42 SyntaxColoring.LineNumbers.GetColor	7607
• 159.43 SyntaxColoring.LineNumbers.SetColor	7608
• 159.44 SyntaxColoring.ListContextMenuCommand	7609
• 159.45 SyntaxColoring.RelationshipGraphSearchBox.GetEnabled	7610
• 159.46 SyntaxColoring.RelationshipGraphSearchBox.SetEnabled	7611
• 159.47 SyntaxColoring.RemoveContextMenuCommand	7612
• 159.48 SyntaxColoring.RemoveTag	7613
• 159.49 SyntaxColoring.ScriptGoToBox.GetEnabled	7614
• 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled	7615
• 159.51 SyntaxColoring.ScriptIfLoopHighlight.GetEnabled	7617
• 159.52 SyntaxColoring.ScriptIfLoopHighlight.SetEnabled	7618
• 159.53 SyntaxColoring.ScriptSearchBox.GetEnabled	7619
• 159.54 SyntaxColoring.ScriptSearchBox.GetText	7620
• 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled	7621

- 159.56 SyntaxColoring.ScriptSearchBox.SetText 7623
- 159.57 SyntaxColoring.SetAddFindbars 7624
- 159.58 SyntaxColoring.SetBlackFieldPicker 7625
- 159.59 SyntaxColoring.SetFontName 7626
- 159.60 SyntaxColoring.SetFontSize 7627
- 159.61 SyntaxColoring.SetFormulasWithLinks 7628
- 159.62 SyntaxColoring.SetMinCalcFontSize 7629
- 159.63 SyntaxColoring.SetRelationGraphSearchBoxPreferredSize 7630
- 159.64 SyntaxColoring.SetRememberColumnWidths 7631
- 159.65 SyntaxColoring.SetResizeFieldPicker 7632
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633
- 159.67 SyntaxColoring.SetScriptIfColor 7635
- 159.68 SyntaxColoring.SetScriptLoopColor 7636
- 159.69 SyntaxColoring.SetScriptSearchColor 7637
- 159.70 SyntaxColoring.SetShowFieldAndTableIDs 7638
- 159.71 SyntaxColoring.SetShowLayoutIDs 7639
- 159.72 SyntaxColoring.SetShowScriptIDs 7640
- 159.73 SyntaxColoring.SetUseBoldFont 7641
- 159.74 SyntaxColoring.ShowTextPositions.GetEnabled 7642
- 159.75 SyntaxColoring.ShowTextPositions.SetEnabled 7643
- 159.76 SyntaxColoring.ZoomButton.GetEnabled 7644
- 159.77 SyntaxColoring.ZoomButton.SetEnabled 7645
- 160.1 System.Logout 7647
- 160.2 System.Restart 7648
- 160.3 System.Shutdown 7649
- 160.4 System.Sleep 7650
- 161.2 SystemInfo.AvailableRAM 7653
- 161.3 SystemInfo.CPUBrandString 7654
- 161.4 SystemInfo.ComputerName 7655

	377
• 161.5 SystemInfo.DomainName	7656
• 161.6 SystemInfo.DoubleClickTime	7657
• 161.7 SystemInfo.HardDiscSerial	7658
• 161.8 SystemInfo.HostDNSName	7659
• 161.9 SystemInfo.HostName	7660
• 161.10 SystemInfo.IdleTime	7661
• 161.11 SystemInfo.Is64bitWindows	7662
• 161.12 SystemInfo.IsAdminUser	7663
• 161.13 SystemInfo.MACAddress	7664
• 161.14 SystemInfo.MacAppDarkMode	7665
• 161.15 SystemInfo.MacBoardID	7666
• 161.16 SystemInfo.MacBugFixVersion	7667
• 161.17 SystemInfo.MacHasHardwareAcceleratedCoreImage	7668
• 161.18 SystemInfo.MacMajorVersion	7669
• 161.19 SystemInfo.MacMinorVersion	7670
• 161.20 SystemInfo.MacModel	7671
• 161.21 SystemInfo.MacROMBootVersion	7672
• 161.22 SystemInfo.MacSerialNumber	7673
• 161.23 SystemInfo.MacSystemDarkMode	7674
• 161.24 SystemInfo.MacUUID	7675
• 161.25 SystemInfo.MacVRAMSize	7676
• 161.26 SystemInfo.NetworkStats	7677
• 161.27 SystemInfo.OSName	7680
• 161.28 SystemInfo.OSVersionString	7681
• 161.29 SystemInfo.PhysicalRAM	7682
• 161.30 SystemInfo.ProcessorCount	7683
• 161.31 SystemInfo.SystemFont	7684
• 161.32 SystemInfo.Time	7685
• 161.33 SystemInfo.UserName	7686

- 161.34 SystemInfo.UserName 7687
- 161.46 SystemInfo.WindowsAero 7700
- 161.47 SystemInfo.isCatalina 7701
- 161.48 SystemInfo.isElCapitan 7702
- 161.49 SystemInfo.isHighSierra 7703
- 161.50 SystemInfo.isLeopard 7704
- 161.51 SystemInfo.isLion 7705
- 161.52 SystemInfo.isMacOSX 7706
- 161.53 SystemInfo.isMavericks 7707
- 161.54 SystemInfo.isMojave 7708
- 161.55 SystemInfo.isMountainLion 7709
- 161.56 SystemInfo.isSierra 7710
- 161.57 SystemInfo.isSnowLeopard 7711
- 161.58 SystemInfo.isWindows10 7712
- 161.59 SystemInfo.isWindows2000 7713
- 161.60 SystemInfo.isWindows7 7714
- 161.61 SystemInfo.isWindows8 7715
- 161.62 SystemInfo.isWindowsVista 7716
- 161.63 SystemInfo.isWindowsXP 7717
- 161.64 SystemInfo.isYosemite 7718
- 164.1 Text.AddLineNumbers 7767
- 164.2 Text.AppendTextFile 7769
- 164.3 Text.CapitalCase 7771
- 164.4 Text.Character 7773
- 164.5 Text.Characters 7775
- 164.6 Text.Code 7776
- 164.7 Text.ConvertFromTextEncoding 7777
- 164.8 Text.ConvertToTextEncoding 7783
- 164.9 Text.ConvertUnicodeToCharacterComposition 7790

	379
• 164.10 Text.ConvertUnicodeToCharacterDecomposition	7792
• 164.11 Text.CountWords	7793
• 164.12 Text.DecodeBytesFromBase64	7794
• 164.13 Text.DecodeFromBase64	7795
• 164.14 Text.DecodeFromBase64URL	7796
• 164.15 Text.DecodeFromBytes	7797
• 164.16 Text.DecodeFromHTML	7798
• 164.17 Text.DecodeFromHex	7800
• 164.18 Text.DecodeFromQuotedPrintable	7802
• 164.19 Text.DecodeFromURL	7803
• 164.20 Text.DecodeFromXML	7805
• 164.21 Text.DecodeHexFromBase64	7806
• 164.22 Text.DecodeIMAPFolderName	7807
• 164.23 Text.DecodeURLComponent	7808
• 164.24 Text.Deserialize	7809
• 164.25 Text.EncodeBytesToBase64	7810
• 164.26 Text.EncodeEmailSubject	7811
• 164.27 Text.EncodeHexToBase64	7812
• 164.28 Text.EncodeToBase64	7813
• 164.29 Text.EncodeToBase64URL	7814
• 164.30 Text.EncodeToBytes	7816
• 164.31 Text.EncodeToHTML	7817
• 164.32 Text.EncodeToHex	7819
• 164.33 Text.EncodeToQuotedPrintable	7821
• 164.34 Text.EncodeToURL	7822
• 164.35 Text.EncodeToXML	7824
• 164.36 Text.EncodeURLComponent	7826
• 164.37 Text.FileExtensionToMimeType	7828
• 164.38 Text.FilterUTF16	7830

- 164.39 Text.FindBetween 7831
- 164.40 Text.InvalidCharactersForEncoding 7833
- 164.41 Text.JaroWinklerDistance 7834
- 164.42 Text.Length 7835
- 164.43 Text.LevenshteinDistance 7836
- 164.44 Text.ListWords 7837
- 164.45 Text.LowerCase 7838
- 164.46 Text.MergeFields 7839
- 164.47 Text.MimeTypeToFileExtension 7841
- 164.48 Text.ReadEMLXFile 7842
- 164.49 Text.ReadTextFile 7843
- 164.50 Text.ReadTextFromContainer 7847
- 164.51 Text.RedefineEncoding 7848
- 164.52 Text.RemoveAccents 7849
- 164.53 Text.RemoveAccentsCaseInsensitive 7850
- 164.54 Text.RemoveControlCharacters 7851
- 164.55 Text.RemoveNewLine 7852
- 164.56 Text.RemovePostfix 7853
- 164.57 Text.RemovePrefix 7854
- 164.58 Text.ReplaceAll 7856
- 164.59 Text.ReplaceNewline 7857
- 164.60 Text.Serialize 7860
- 164.61 Text.SoundEx 7861
- 164.62 Text.SoundExGerman 7862
- 164.63 Text.Styles 7863
- 164.64 Text.TextToHTML 7865
- 164.65 Text.TextToRTF 7867
- 164.66 Text.Trim 7869
- 164.67 Text.UpperCase 7870

	381
• 164.68 Text.WriteTextFile	7871
• 164.69 Text.WriteToContainer	7875
• 165.1 TextView.CanUndo	7877
• 165.2 TextView.Copy	7878
• 165.3 TextView.CreateOnPopoverWithControl	7879
• 165.4 TextView.CreateOnPopoverWithSize	7881
• 165.5 TextView.CreateWithControl	7882
• 165.6 TextView.CreateWithSize	7884
• 165.7 TextView.CreateWithWindow	7885
• 165.8 TextView.Cut	7886
• 165.9 TextView.GetAutoCorrectionEnabled	7887
• 165.10 TextView.GetAutoResizingMask	7888
• 165.11 TextView.GetHTMLText	7889
• 165.12 TextView.GetHeight	7890
• 165.13 TextView.GetLeft	7891
• 165.14 TextView.GetPlainText	7892
• 165.15 TextView.GetRTF	7893
• 165.16 TextView.GetReadOnly	7894
• 165.17 TextView.GetRulerVisible	7895
• 165.18 TextView.GetSpellCheckingEnabled	7896
• 165.19 TextView.GetStyled	7897
• 165.20 TextView.GetTag	7898
• 165.21 TextView.GetTop	7899
• 165.22 TextView.GetVisible	7900
• 165.23 TextView.GetWidth	7901
• 165.24 TextView.GetWindowRef	7902
• 165.25 TextView.List	7903
• 165.26 TextView.Paste	7904
• 165.27 TextView.Release	7905

- 165.28 `TextView.ReleaseAll` 7906
- 165.29 `TextView.SetAutoCorrectionEnabled` 7907
- 165.30 `TextView.SetAutoResizingMask` 7908
- 165.31 `TextView.SetFocus` 7910
- 165.32 `TextView.SetFrame` 7911
- 165.33 `TextView.SetFrameWithControl` 7912
- 165.34 `TextView.SetHTMLText` 7913
- 165.35 `TextView.SetPlainText` 7914
- 165.36 `TextView.SetRTF` 7915
- 165.37 `TextView.SetReadOnly` 7916
- 165.38 `TextView.SetRulerVisible` 7917
- 165.39 `TextView.SetSpellCheckingEnabled` 7918
- 165.40 `TextView.SetStyled` 7919
- 165.41 `TextView.SetTag` 7920
- 165.42 `TextView.SetVisible` 7921
- 165.43 `TextView.ShowFontPanel` 7922
- 165.44 `TextView.Undo` 7923
- 166.1 `Time.Format` 7925
- 166.2 `Time.Parse` 7929
- 175.13 `Time.Sleep` 8244
- 166.3 `Time.TimeStampToUTC` 7933
- 166.4 `Time.TimeZoneOffset` 7934
- 175.14 `Time.UnixTimeStamp` 8245
- 166.5 `Time.UnixTimeStampToFileMaker` 7935
- 182.1 `Toolbar.Install` 8531
- 182.2 `Toolbar.InstallBackground` 8533
- 182.3 `Toolbar.Register` 8534
- 167.4 `Toolbar.SetImage` 7942
- 167.5 `Toolbar.SetLabel` 7944

	383
• 167.6 Toolbar.SetPaletteLabel	7946
• 167.7 Toolbar.SetTooltip	7947
• 182.4 Toolbar.Unregister	8536
• 168.2 TouchBar.AddButton	7960
• 168.3 TouchBar.AssignToApp	7963
• 168.4 TouchBar.AssignToWindow	7965
• 168.5 TouchBar.Available	7967
• 168.6 TouchBar.Clear	7968
• 168.7 TouchBar.Create	7969
• 168.8 TouchBar.GetAutomaticCustomizeTouchBarItemEnabled	7970
• 168.9 TouchBar.GetCustomizationAllowedItemIdentifiers	7971
• 168.10 TouchBar.GetCustomizationIdentifier	7972
• 168.11 TouchBar.GetCustomizationRequiredItemIdentifiers	7973
• 168.12 TouchBar.GetDefaultItemIdentifiers	7974
• 168.13 TouchBar.GetItemIdentifiers	7975
• 168.14 TouchBar.GetPrincipalItemIdentifier	7976
• 168.15 TouchBar.Release	7977
• 168.16 TouchBar.SetAutomaticCustomizeTouchBarItemEnabled	7978
• 168.17 TouchBar.SetCustomizationAllowedItemIdentifiers	7979
• 168.18 TouchBar.SetCustomizationIdentifier	7980
• 168.19 TouchBar.SetCustomizationRequiredItemIdentifiers	7981
• 168.20 TouchBar.SetDefaultItemIdentifiers	7982
• 168.21 TouchBar.SetPrincipalItemIdentifier	7983
• 168.22 TouchBar.ToggleCustomizationPalette	7984
• 168.23 TouchBar.Visible	7985
• 124.52 Trace	6326
• 124.53 Trace.AreErrorNotificationsEnabled	6329
• 124.54 Trace.DisableErrorNotifications	6330
• 124.55 Trace.EnableErrorNotifications	6331

- 124.56 Trace.GetErrorsOnly 6332
- 124.57 Trace.GetWithTimes 6333
- 124.58 Trace.Off 6334
- 124.59 Trace.SetErrorsOnly 6335
- 124.60 Trace.SetWithTimes 6336
- 124.61 Trace.WriteLine 6337
- 169.1 Twain.Acquire 7987
- 169.2 Twain.ClearCancelScript 7989
- 169.3 Twain.ClearNotificationScript 7990
- 169.4 Twain.CloseDS 7991
- 169.5 Twain.CloseDSM 7992
- 169.6 Twain.CurrentDSIdentity 7993
- 169.7 Twain.CurrentImage 7994
- 169.8 Twain.DisableDS 7995
- 169.9 Twain.GetAutofeed 7996
- 169.10 Twain.GetAutomaticBorderDetection 7997
- 169.11 Twain.GetAutomaticBrightness 7998
- 169.12 Twain.GetAutomaticRotate 7999
- 169.13 Twain.GetBrightness 8000
- 169.14 Twain.GetCloseAfterTransfer 8001
- 169.15 Twain.GetCompressionQuality 8002
- 169.16 Twain.GetContrast 8003
- 169.17 Twain.GetDSIdentitiesCount 8004
- 169.18 Twain.GetDSIdentity 8005
- 169.19 Twain.GetDefaultIdentity 8006
- 169.20 Twain.GetDiscardBlankPages 8007
- 169.21 Twain.GetDuplexEnabled 8008
- 169.22 Twain.GetFeddedEnabled 8009
- 169.23 Twain.GetFilePaths 8010

	385
• 169.24 Twain.GetFileType	8011
• 169.25 Twain.GetFolderPath	8012
• 169.26 Twain.GetGamma	8013
• 169.27 Twain.GetHighlight	8014
• 169.28 Twain.GetImageCount	8015
• 169.29 Twain.GetOrientation	8016
• 169.30 Twain.GetPaper	8017
• 169.31 Twain.GetPixelType	8018
• 169.32 Twain.GetResolutionX	8019
• 169.33 Twain.GetResolutionY	8020
• 169.34 Twain.GetShadow	8021
• 169.35 Twain.GetUIVisible	8022
• 169.36 Twain.ImageInfo	8023
• 169.37 Twain.Initialize	8025
• 169.38 Twain.IsDSEnabled	8027
• 169.39 Twain.IsInitialized	8028
• 169.40 Twain.OpenDS	8029
• 169.41 Twain.OpenDSM	8030
• 169.42 Twain.SelectDS	8031
• 169.43 Twain.SelectDSIdentity	8032
• 169.44 Twain.SetAutofeed	8033
• 169.45 Twain.SetAutomaticBorderDetection	8034
• 169.46 Twain.SetAutomaticBrightness	8035
• 169.47 Twain.SetAutomaticRotate	8036
• 169.48 Twain.SetBrightness	8037
• 169.49 Twain.SetCancelScript	8038
• 169.50 Twain.SetCloseAfterTransfer	8039
• 169.51 Twain.SetCompressionQuality	8040
• 169.52 Twain.SetContrast	8041

- 169.53 Twain.SetDefaultDSIdentity 8042
- 169.54 Twain.SetDiscardBlankPages 8043
- 169.55 Twain.SetDuplexEnabled 8044
- 169.56 Twain.SetFeededEnabled 8045
- 169.57 Twain.SetFileType 8047
- 169.58 Twain.SetFolderPath 8048
- 169.59 Twain.SetGamma 8049
- 169.60 Twain.SetHighlight 8050
- 169.61 Twain.SetNotificationScript 8051
- 169.62 Twain.SetOrientation 8052
- 169.63 Twain.SetPaper 8053
- 169.64 Twain.SetPaperSize 8055
- 169.65 Twain.SetPixelType 8056
- 169.66 Twain.SetResolutionX 8057
- 169.67 Twain.SetResolutionY 8058
- 169.68 Twain.SetShadow 8059
- 169.69 Twain.SupportsBW 8060
- 169.70 Twain.SupportsGray 8061
- 169.71 Twain.SupportsMemoryTransfer 8062
- 169.72 Twain.SupportsRGB 8063
- 169.73 Twain.TransferImage 8064
- 170.1 UNNotification.Action 8065
- 170.2 UNNotification.AddUserInfo 8067
- 170.3 UNNotification.AuthorizationError 8068
- 170.4 UNNotification.AuthorizationGranted 8069
- 170.5 UNNotification.Badge 8070
- 170.6 UNNotification.Body 8071
- 170.7 UNNotification.CategoryIdentifier 8072
- 170.8 UNNotification.Date 8073

	387
• 170.9 UNNotification.Deliver	8074
• 170.10 UNNotification.DeliveredNotifications	8075
• 170.11 UNNotification.GetDescription	8076
• 170.12 UNNotification.Identifier	8077
• 170.13 UNNotification.IsRegisteredForRemoteNotifications	8078
• 170.15 UNNotification.New	8080
• 170.16 UNNotification.NextTriggerDate	8082
• 170.17 UNNotification.NotificationSettings	8083
• 170.18 UNNotification.PendingNotificationRequests	8085
• 170.20 UNNotification.Release	8088
• 170.21 UNNotification.ReleaseAll	8089
• 170.22 UNNotification.RemoteNotificationsDeviceToken	8090
• 170.23 UNNotification.RemoteNotificationsError	8091
• 170.24 UNNotification.RemoveAllDeliveredNotifications	8092
• 170.25 UNNotification.RemoveAllPendingNotificationRequests	8093
• 170.26 UNNotification.RemoveDeliveredNotificationsWithIdentifiers	8094
• 170.27 UNNotification.RemovePendingNotificationRequestsWithIdentifiers	8095
• 170.28 UNNotification.Repeats	8096
• 170.29 UNNotification.Schedule	8097
• 170.30 UNNotification.SetActionScript	8099
• 170.31 UNNotification.SetBadge	8100
• 170.32 UNNotification.SetBody	8102
• 170.33 UNNotification.SetCalendarDateTrigger	8104
• 170.34 UNNotification.SetCalendarTrigger	8105
• 170.35 UNNotification.SetCategoryIdentifier	8107
• 170.39 UNNotification.SetScript	8112
• 170.40 UNNotification.SetSound	8114
• 170.41 UNNotification.SetSubTitle	8115
• 170.42 UNNotification.SetThreadIdentifier	8116

- 170.43 UNNotification.SetTimeIntervalTrigger 8117
- 170.44 UNNotification.SetTitle 8119
- 170.45 UNNotification.SubTitle 8121
- 170.46 UNNotification.ThreadIdentifier 8122
- 170.47 UNNotification.TimeInterval 8123
- 170.48 UNNotification.Title 8124
- 170.49 UNNotification.Type 8126
- 170.50 UNNotification.UserInfoKeys 8127
- 170.51 UNNotification.UserInfoValue 8128
- 172.1 URLScheme.GetDefaultHandler 8141
- 172.2 URLScheme.InstallURLEventHandler 8143
- 172.3 URLScheme.SetDefaultHandler 8144
- 173.1 USB.Count 8147
- 173.2 USB.FindDevice 8149
- 173.3 USB.FindSerialNumber 8150
- 173.4 USB.GetProductID 8151
- 173.5 USB.GetProductName 8152
- 173.6 USB.GetSerialNumber 8153
- 173.7 USB.GetVendorID 8154
- 173.8 USB.GetVendorName 8155
- 176.1 UUID.Formatted 8247
- 176.2 UUID.FromNumber 8249
- 176.3 UUID.Hex 8251
- 176.4 UUID.Number 8252
- 176.5 UUID.Raw 8253
- 176.6 UUID.ToNumber 8254
- 53.3 UnZipFile.Close 1476
- 53.4 UnZipFile.ExtractFiles 1477
- 53.5 UnZipFile.GlobalComment 1479

	389
• 53.6 UnZipFile.ItemCRC	1480
• 53.7 UnZipFile.ItemComment	1481
• 53.8 UnZipFile.ItemCompressedSize	1482
• 53.9 UnZipFile.ItemCompressionMethod	1483
• 53.10 UnZipFile.ItemCount	1484
• 53.11 UnZipFile.ItemDate	1485
• 53.12 UnZipFile.ItemDiskNumberStart	1486
• 53.13 UnZipFile.ItemExternalFileAttributes	1487
• 53.14 UnZipFile.ItemFlag	1488
• 53.15 UnZipFile.ItemInternalFileAttributes	1490
• 53.16 UnZipFile.ItemName	1491
• 53.17 UnZipFile.ItemSizeFileComment	1492
• 53.18 UnZipFile.ItemSizeFileExtra	1493
• 53.19 UnZipFile.ItemSizeFileName	1494
• 53.20 UnZipFile.ItemUncompressedSize	1495
• 53.21 UnZipFile.ItemVersion	1496
• 53.22 UnZipFile.ItemVersionNeeded	1497
• 53.23 UnZipFile.OpenContainer	1498
• 53.24 UnZipFile.OpenFile	1499
• 53.25 UnZipFile.ReadAsFileContainer	1501
• 53.26 UnZipFile.ReadAsGIFContainer	1502
• 53.27 UnZipFile.ReadAsHex	1503
• 53.28 UnZipFile.ReadAsJPEGContainer	1504
• 53.29 UnZipFile.ReadAsPNGContainer	1505
• 53.30 UnZipFile.ReadAsText	1506
• 53.31 UnZipFile.ReadToFile	1507
• 53.32 UnZipFile.UsePassword	1508
• 171.1 Updater.CheckForUpdates	8129
• 171.2 Updater.CheckForUpdatesInBackground	8130

- 171.3 Updater.GetAutomaticallyChecksForUpdates 8131
- 171.4 Updater.GetAutomaticallyDownloadsUpdates 8132
- 171.5 Updater.GetFeedURL 8133
- 171.6 Updater.GetSendsSystemProfile 8134
- 171.7 Updater.LastUpdateCheckDate 8135
- 171.8 Updater.SetAutomaticallyChecksForUpdates 8136
- 171.9 Updater.SetAutomaticallyDownloadsUpdates 8137
- 171.10 Updater.SetSendsSystemProfile 8138
- 171.11 Updater.UpdateInProgress 8139
- 174.1 UserNotification.ClearDidActivateNotificationScript 8157
- 174.2 UserNotification.ClearDidDeliverNotificationScript 8159
- 174.3 UserNotification.ContentImage 8160
- 174.4 UserNotification.Create 8161
- 174.5 UserNotification.GetActionButtonTitle 8162
- 174.6 UserNotification.GetActivationType 8163
- 174.7 UserNotification.GetActualDeliveryDate 8164
- 174.8 UserNotification.GetDeliveryDate 8165
- 174.9 UserNotification.GetDeliveryTimeZone 8166
- 174.10 UserNotification.GetDescription 8167
- 174.11 UserNotification.GetIdentifier 8168
- 174.12 UserNotification.GetInformativeText 8169
- 174.13 UserNotification.GetOtherButtonTitle 8170
- 174.14 UserNotification.GetResponse 8171
- 174.15 UserNotification.GetResponsePlaceholder 8172
- 174.16 UserNotification.GetSoundName 8173
- 174.17 UserNotification.GetSubTitle 8174
- 174.18 UserNotification.GetTitle 8175
- 174.19 UserNotification.GetUserInfo 8176
- 174.20 UserNotification.HasReplyButton 8177

	391
• 174.21 UserNotification.Release	8178
• 174.22 UserNotification.SetActionButtonTitle	8179
• 174.23 UserNotification.SetContentImage	8180
• 174.24 UserNotification.SetDeliveryDate	8181
• 174.25 UserNotification.SetDeliveryTimeZone	8182
• 174.26 UserNotification.SetDidActivateNotificationScript	8183
• 174.27 UserNotification.SetDidDeliverNotificationScript	8185
• 174.28 UserNotification.SetHasActionButton	8187
• 174.29 UserNotification.SetHasReplyButton	8188
• 174.30 UserNotification.SetIdentifier	8189
• 174.31 UserNotification.SetInformativeText	8190
• 174.32 UserNotification.SetOtherButtonTitle	8191
• 174.33 UserNotification.SetResponsePlaceholder	8192
• 174.34 UserNotification.SetSoundName	8193
• 174.35 UserNotification.SetSubTitle	8194
• 174.36 UserNotification.SetTitle	8195
• 174.37 UserNotification.SetUserInfo	8196
• 174.38 UserNotification.deliverNotification	8197
• 174.39 UserNotification.deliveredNotifications	8198
• 174.40 UserNotification.hasActionButton	8199
• 174.41 UserNotification.isPresented	8200
• 174.42 UserNotification.isRemote	8201
• 174.43 UserNotification.removeAllDeliveredNotifications	8202
• 174.44 UserNotification.removeAllScheduledNotifications	8203
• 174.45 UserNotification.removeDeliveredNotification	8204
• 174.46 UserNotification.removeScheduledNotification	8205
• 174.47 UserNotification.scheduleNotification	8206
• 174.48 UserNotification.scheduledNotifications	8207
• 177.1 Validate.CheckReceipt	8255

- 177.2 Validate.Exit 8257
- 177.3 Validate.FindReceipt 8258
- 124.62 Version 6338
- 124.63 VersionAutoUpdate 6340
- 179.1 Vision.ClassifyImage 8273
- 179.2 Vision.DetectBarcode 8275
- 179.3 Vision.KnownClassifications 8276
- 179.4 Vision.RecognizeText 8277
- 179.5 Vision.SupportedRecognitionLanguages 8279
- 179.6 Vision.SupportedSymbologies 8280
- 180.1 WebDownloadDelegate.Cancel 8281
- 180.2 WebDownloadDelegate.ClearBeginDownloadHandler 8282
- 180.3 WebDownloadDelegate.ClearDidDownloadHandler 8283
- 180.4 WebDownloadDelegate.ClearFailHandler 8284
- 180.5 WebDownloadDelegate.ClearFolder 8285
- 180.6 WebDownloadDelegate.ClearProgressHandler 8286
- 180.7 WebDownloadDelegate.DownloadedLength 8287
- 180.8 WebDownloadDelegate.ErrorMessage 8288
- 180.9 WebDownloadDelegate.GetFolder 8289
- 180.10 WebDownloadDelegate.Install 8290
- 180.11 WebDownloadDelegate.MIMEType 8291
- 180.12 WebDownloadDelegate.Path 8292
- 180.13 WebDownloadDelegate.SetBeginDownloadHandler 8293
- 180.14 WebDownloadDelegate.SetDidDownloadHandler 8294
- 180.15 WebDownloadDelegate.SetFailHandler 8296
- 180.16 WebDownloadDelegate.SetFolder 8297
- 180.17 WebDownloadDelegate.SetProgressHandler 8299
- 180.18 WebDownloadDelegate.URL 8301
- 180.19 WebDownloadDelegate.expectedContentLength 8302

	393
• 180.20 WebDownloadDelegate.suggestedFilename	8303
• 180.21 WebDownloadDelegate.textEncodingName	8304
• 180.22 WebPolicyDelegate.AddMimeType	8305
• 180.23 WebPolicyDelegate.Install	8306
• 180.24 WebPolicyDelegate.RemoveMimeType	8307
• 180.25 WebView.AddScriptMessageHandler	8308
• 180.26 WebView.AddUserScript	8310
• 180.27 WebView.AllCookies	8312
• 180.28 WebView.AllowsAnyHTTPSCertificateForHost	8314
• 180.31 WebView.ClearSelection	8317
• 180.32 WebView.ClickInput	8318
• 180.33 WebView.Close	8320
• 180.34 WebView.Cookies.ClearForURL	8321
• 180.35 WebView.Cookies.Count	8322
• 180.36 WebView.Cookies.Query	8323
• 180.37 WebView.Copy	8324
• 180.38 WebView.CopyFormattedText	8325
• 180.39 WebView.Create	8326
• 180.40 WebView.CreateOnPopover	8328
• 180.41 WebView.Cut	8330
• 180.42 WebView.DisableJavascriptAlerts	8331
• 180.43 WebView.EstimatedProgress	8332
• 180.44 WebView.Evaluate	8333
• 180.46 WebView.FindByName	8339
• 180.47 WebView.FindWindowByIndex	8341
• 180.48 WebView.FindWindowByTitle	8342
• 180.49 WebView.FormReset	8344
• 180.50 WebView.FormSubmit	8345
• 180.51 WebView.GetAllowsLinkPreview	8346

- 180.52 `WebView.GetAutoResizingMask` 8347
- 180.53 `WebView.GetCustomUserAgent` 8348
- 180.54 `WebView.GetEditable` 8349
- 180.55 `WebView.GetForm` 8350
- 180.56 `WebView.GetFormButtonValue` 8351
- 180.57 `WebView.GetFormCount` 8352
- 180.58 `WebView.GetFormInputChecked` 8353
- 180.59 `WebView.GetFormInputValue` 8354
- 180.60 `WebView.GetFormSelectOptions` 8356
- 180.61 `WebView.GetFormSelectValue` 8357
- 180.62 `WebView.GetFormTextAreaValue` 8359
- 180.63 `WebView.GetFormValue` 8361
- 180.64 `WebView.GetFormattedText` 8363
- 180.65 `WebView.GetHTMLText` 8365
- 180.66 `WebView.GetHidden` 8367
- 180.67 `WebView.GetIcon` 8368
- 180.68 `WebView.GetImage` 8369
- 180.69 `WebView.GetImageCount` 8371
- 180.71 `WebView.GetLink` 8373
- 180.72 `WebView.GetLinkCount` 8374
- 180.73 `WebView.GetPlainText` 8375
- 180.74 `WebView.GetPreferences` 8377
- 180.75 `WebView.GetPrintParameter` 8379
- 180.76 `WebView.GetPrivateBrowsing` 8380
- 180.78 `WebView.GetSource` 8382
- 180.79 `WebView.GetSourceData` 8383
- 180.80 `WebView.GetTitle` 8384
- 180.81 `WebView.GetURL` 8385
- 180.82 `WebView.GoBack` 8386

	395
• 180.83 WebView.GoForward	8387
• 180.84 WebView.HasOnlySecureContent	8388
• 180.85 WebView.InstallCallback	8389
• 180.86 WebView.InstallMultiFileOpenDialog	8391
• 180.87 WebView.IsLoading	8392
• 180.88 WebView.LoadHTML	8394
• 180.89 WebView.LoadJavascriptURL	8395
• 180.90 WebView.LoadURL	8396
• 180.91 WebView.MakeTextLarger	8398
• 180.92 WebView.MakeTextSmaller	8399
• 180.93 WebView.MakeTextStandardSize	8400
• 180.94 WebView.Passwords.Clear	8401
• 180.95 WebView.Passwords.Install	8402
• 180.96 WebView.Passwords.Set	8404
• 180.97 WebView.Paste	8406
• 180.98 WebView.PostURL	8407
• 180.100 WebView.Print	8410
• 180.102 WebView.PrintToFile	8413
• 180.103 WebView.Release	8415
• 180.104 WebView.Reload	8416
• 180.105 WebView.RemoveAllUserScripts	8417
• 180.106 WebView.RemoveScriptMessageHandler	8418
• 180.107 WebView.RenderImage	8419
• 180.108 WebView.RenderPDF	8421
• 180.109 WebView.RunJavaScript	8423
• 180.110 WebView.RunJavaScriptReturnTitle	8433
• 180.111 WebView.Screenshot	8435
• 180.112 WebView.Scrollbar.getHorizontalMaximum	8437
• 180.113 WebView.Scrollbar.getHorizontalPosition	8438

- 180.114 `WebView.Scrollbar.getVerticalMaximum` 8439
- 180.115 `WebView.Scrollbar.getVerticalPosition` 8440
- 180.116 `WebView.Scrollbar.set` 8441
- 180.117 `WebView.SearchText` 8442
- 180.118 `WebView.SelectAll` 8444
- 180.119 `WebView.SelectedText` 8445
- 180.121 `WebView.SetAllowsLinkPreview` 8448
- 180.122 `WebView.SetAutoResizingMask` 8449
- 180.123 `WebView.SetCustomUserAgent` 8451
- 180.124 `WebView.SetEditable` 8453
- 180.125 `WebView.SetFocus` 8454
- 180.126 `WebView.SetFormButtonValue` 8455
- 180.127 `WebView.SetFormInputChecked` 8457
- 180.128 `WebView.SetFormInputValue` 8459
- 180.129 `WebView.SetFormSelectValue` 8462
- 180.130 `WebView.SetFormTextAreaValue` 8464
- 180.131 `WebView.SetFormValue` 8466
- 180.132 `WebView.SetHidden` 8468
- 180.134 `WebView.SetPreferences` 8472
- 180.135 `WebView.SetPrintParameter` 8474
- 180.136 `WebView.SetPrivateBrowsing` 8476
- 180.138 `WebView.SetTitle` 8478
- 180.139 `WebView.StopLoading` 8479
- 180.140 `WebView.UserScripts` 8480
- 180.141 `WebView.canResetPageZoom` 8481
- 180.142 `WebView.canZoomPageIn` 8482
- 180.143 `WebView.canZoomPageOut` 8483
- 180.144 `WebView.getMediaVolume` 8484
- 180.145 `WebView.getPageSizeMultiplier` 8485

	397
• 180.146 WebView.resetPageZoom	8486
• 180.147 WebView.setMediaVolume	8487
• 180.148 WebView.setPageSizeMultiplier	8488
• 180.150 WebView.zoomPageIn	8490
• 180.151 WebView.zoomPageOut	8491
• 182.5 Window.Activate	8537
• 182.6 Window.AddBottomOverlay	8538
• 182.7 Window.AsPDF	8540
• 182.8 Window.ClearFocus	8542
• 182.9 Window.ClearTouchBar	8543
• 182.10 Window.ConfigureToolBarMenu	8544
• 182.11 Window.Current	8545
• 182.12 Window.DisableScrollbars	8546
• 182.13 Window.EnableScrollbars	8547
• 182.14 Window.Fade	8548
• 182.15 Window.FindByIndex	8550
• 182.16 Window.FindByTitle	8552
• 182.18 Window.GetAlpha	8558
• 182.19 Window.GetClassName	8559
• 182.20 Window.GetCurrentTag	8560
• 182.21 Window.GetHeight	8561
• 182.22 Window.GetLeft	8562
• 182.23 Window.GetMaxHeight	8563
• 182.24 Window.GetMaxWidth	8564
• 182.25 Window.GetMinHeight	8565
• 182.26 Window.GetMinWidth	8566
• 182.27 Window.GetTag	8567
• 182.28 Window.GetTitle	8568
• 182.29 Window.GetTitleVisible	8569

- 182.30 Window.GetTitlebarAppearsTransparent 8570
- 182.31 Window.GetToolbarConfiguration 8571
- 182.32 Window.GetToolbarCustomizationPaletteIsRunning 8572
- 182.33 Window.GetToolbarVisible 8573
- 182.34 Window.GetTop 8574
- 182.35 Window.GetTopMost 8575
- 182.36 Window.GetWidth 8576
- 182.37 Window.HasCloseButton 8577
- 182.38 Window.HasMiniaturizeButton 8578
- 182.39 Window.HasShadow 8579
- 182.40 Window.HasZoomButton 8580
- 182.41 Window.Hide 8581
- 182.42 Window.HideContent 8583
- 182.43 Window.HideOverlay 8584
- 182.44 Window.HideScrollbars 8585
- 182.45 Window.IgnoresMouseEvent 8587
- 182.46 Window.IsFullScreen 8588
- 182.47 Window.IsFullScreenAuxiliary 8589
- 182.48 Window.IsFullScreenPrimary 8590
- 182.49 Window.IsMaximized 8591
- 182.50 Window.IsMinimized 8592
- 182.51 Window.IsModified 8593
- 182.52 Window.IsVisible 8594
- 182.53 Window.List 8595
- 182.54 Window.ListCommands 8596
- 182.55 Window.Maximize 8597
- 182.56 Window.Minimize 8598
- 182.57 Window.ModalDialogFront 8599
- 182.58 Window.Move 8600

	399
• 182.59 Window.PositionNextDialog	8602
• 182.61 Window.Resizable	8605
• 182.62 Window.Resize	8606
• 182.63 Window.ResizeContentView	8608
• 182.64 Window.RunCommand	8610
• 182.65 Window.RunToolbarCustomizationPalette	8612
• 182.66 Window.Screenshot	8613
• 182.67 Window.Scrollbar.GetScrollElasticity	8615
• 182.68 Window.Scrollbar.SetScrollElasticity	8616
• 182.69 Window.Scrollbar.getHorizontalMaximum	8618
• 182.70 Window.Scrollbar.getHorizontalPosition	8619
• 182.71 Window.Scrollbar.getVerticalMaximum	8620
• 182.72 Window.Scrollbar.getVerticalPosition	8621
• 182.73 Window.Scrollbar.set	8622
• 182.74 Window.ScrollbarsVisible	8623
• 182.75 Window.SetAlpha	8624
• 182.76 Window.SetBounds	8626
• 182.77 Window.SetCloseButton	8628
• 182.78 Window.SetCurrentTag	8630
• 182.79 Window.SetDockImage	8631
• 182.80 Window.SetFocus	8633
• 182.81 Window.SetFullScreenAuxiliary	8634
• 182.82 Window.SetFullScreenPrimary	8635
• 182.83 Window.SetIgnoresMouseEvents	8636
• 182.84 Window.SetMaxHeight	8637
• 182.85 Window.SetMaxWidth	8638
• 182.86 Window.SetMinHeight	8639
• 182.87 Window.SetMinWidth	8640
• 182.88 Window.SetMiniaturizeButton	8641

- 182.89 Window.SetModified 8643
- 182.91 Window.SetResizable 8646
- 182.92 Window.SetShadow 8648
- 182.93 Window.SetShowsToolBarButton 8649
- 182.94 Window.SetTag 8651
- 182.95 Window.SetTitle 8652
- 182.97 Window.SetTitleVisible 8654
- 182.98 Window.SetTitlebarAppearsTransparent 8655
- 182.99 Window.SetToolBarConfiguration 8656
- 182.100 Window.SetToolBarVisible 8657
- 182.101 Window.SetTopMost 8658
- 182.102 Window.SetZoomButton 8659
- 182.103 Window.Show 8661
- 182.104 Window.ShowCharacterPalette 8663
- 182.105 Window.ShowContent 8664
- 182.106 Window.ShowKeyboard 8665
- 182.107 Window.ShowOverlay 8666
- 182.108 Window.ShowScrollbars 8668
- 182.109 Window.ShowTableViewDialog 8670
- 182.110 Window.ShowsToolBarButton 8671
- 182.111 Window.ToggleFullScreen 8672
- 182.112 Window.TopHeight 8673
- 182.113 Window.Update 8674
- 185.1 WindowTransition.Perform 8733
- 185.2 WindowTransition.Prepare 8734
- 185.3 WindowTransition.PrepareWindow 8736
- 189.1 WordFile.AddMediaFile 8813
- 189.2 WordFile.Append 8815
- 189.3 WordFile.AppendTableRow 8816

	401
• 189.4 WordFile.DuplicateTableRow	8818
• 189.5 WordFile.FieldNames	8819
• 189.6 WordFile.GetCaseless	8820
• 189.7 WordFile.GetFieldText	8821
• 189.8 WordFile.GetMediaFile	8822
• 189.9 WordFile.GetXML	8823
• 189.10 WordFile.HasTag	8824
• 189.11 WordFile.MediaFiles	8825
• 189.12 WordFile.OpenContainer	8826
• 189.13 WordFile.OpenFile	8828
• 189.14 WordFile.OpenText	8830
• 189.15 WordFile.Parts	8831
• 189.16 WordFile.Release	8832
• 189.17 WordFile.RemoveTableRow	8833
• 189.18 WordFile.ReplaceTag	8835
• 189.19 WordFile.SetCaseless	8838
• 189.20 WordFile.SetFieldText	8839
• 189.21 WordFile.SetMarkers	8840
• 189.22 WordFile.SetMediaFile	8841
• 189.23 WordFile.SetXML	8843
• 189.24 WordFile.Texts	8844
• 189.25 WordFile.WriteFile	8846
• 48.22 X509.Description	1369
• 48.23 X509.Duplicate	1370
• 48.24 X509.IssuerName	1371
• 48.25 X509.Name	1372
• 48.26 X509.Read	1373
• 48.27 X509.ReadFromContainer	1374
• 48.28 X509.ReadFromFile	1375

- 48.29 X509.Release 1376
- 48.30 X509.SerialNumber 1377
- 48.31 X509.ShowDialog 1378
- 48.32 X509.SubjectName 1379
- 48.33 X509.Version 1380
- 48.34 X509.Write 1381
- 190.1 XL.Book.AddCustomNumFormat 8849
- 190.2 XL.Book.AddFont 8852
- 190.3 XL.Book.AddFormat 8854
- 190.4 XL.Book.AddPictureContainer 8857
- 190.5 XL.Book.AddPictureFile 8859
- 190.6 XL.Book.AddSheet 8860
- 190.7 XL.Book.BiffVersion 8862
- 190.8 XL.Book.CustomNumFormat 8863
- 190.9 XL.Book.DeleteSheet 8864
- 190.10 XL.Book.DeleteSheetsExcept 8867
- 190.11 XL.Book.FontCount 8868
- 190.12 XL.Book.FormatCount 8869
- 190.13 XL.Book.GetActiveSheet 8870
- 190.14 XL.Book.GetDefaultFontName 8871
- 190.15 XL.Book.GetDefaultFontSize 8872
- 190.16 XL.Book.GetPicture 8873
- 190.17 XL.Book.GetPictureType 8874
- 190.18 XL.Book.GetRGBMode 8875
- 190.19 XL.Book.GetRefR1C1 8876
- 190.20 XL.Book.GetText 8877
- 190.21 XL.Book.InsertSheet 8878
- 190.22 XL.Book.IsDate1904 8879
- 190.23 XL.Book.IsTemplate 8880

	403
• 190.24 XL.Book.MoveSheet	8881
• 190.25 XL.Book.PictureCount	8882
• 190.26 XL.Book.Release	8883
• 190.27 XL.Book.ReleaseAll	8885
• 190.28 XL.Book.Save	8886
• 190.29 XL.Book.SaveToFile	8888
• 190.30 XL.Book.SetActiveSheet	8890
• 190.31 XL.Book.SetDate1904	8891
• 190.32 XL.Book.SetDefaultFont	8892
• 190.33 XL.Book.SetRGBMode	8893
• 190.34 XL.Book.SetRefR1C1	8894
• 190.35 XL.Book.SetTemplate	8895
• 190.36 XL.Book.SheetCount	8896
• 190.37 XL.Book.SheetIndexForName	8897
• 190.38 XL.Book.Sheets	8898
• 190.39 XL.Book.Version	8899
• 190.40 XL.Color.Pack	8900
• 190.41 XL.Color.UnPack	8902
• 190.42 XL.CopyContent	8904
• 190.43 XL.CopyRow	8906
• 190.44 XL.CopySheet	8908
• 190.45 XL.Date.DoubleToTimeStamp	8910
• 190.46 XL.Date.Pack	8911
• 190.47 XL.Date.TimeStampToDouble	8913
• 190.48 XL.Date.UnPack	8914
• 190.49 XL.Font.GetBold	8915
• 190.50 XL.Font.GetColor	8916
• 190.51 XL.Font.GetItalic	8917
• 190.52 XL.Font.GetName	8918

- 190.53 XL.Font.GetScript 8919
- 190.54 XL.Font.GetSize 8920
- 190.55 XL.Font.GetStrikeOut 8921
- 190.56 XL.Font.GetUnderline 8922
- 190.57 XL.Font.SetBold 8923
- 190.58 XL.Font.SetColor 8925
- 190.59 XL.Font.SetItalic 8928
- 190.60 XL.Font.SetName 8929
- 190.61 XL.Font.SetScript 8931
- 190.62 XL.Font.SetSize 8932
- 190.63 XL.Font.SetStrikeOut 8934
- 190.64 XL.Font.SetUnderline 8935
- 190.65 XL.Format.GetAlignH 8936
- 190.66 XL.Format.GetAlignV 8937
- 190.67 XL.Format.GetBorderBottom 8938
- 190.68 XL.Format.GetBorderBottomColor 8939
- 190.69 XL.Format.GetBorderDiagonal 8940
- 190.70 XL.Format.GetBorderDiagonalColor 8941
- 190.71 XL.Format.GetBorderDiagonalStyle 8942
- 190.72 XL.Format.GetBorderLeft 8943
- 190.73 XL.Format.GetBorderLeftColor 8944
- 190.74 XL.Format.GetBorderRight 8945
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.76 XL.Format.GetBorderTop 8947
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.78 XL.Format.GetFillPattern 8949
- 190.79 XL.Format.GetFont 8950
- 190.80 XL.Format.GetHidden 8951
- 190.81 XL.Format.GetIndent 8952

	405
• 190.82 XL.Format.GetLocked	8953
• 190.83 XL.Format.GetNumFormat	8954
• 190.84 XL.Format.GetPatternBackgroundColor	8955
• 190.85 XL.Format.GetPatternForegroundColor	8956
• 190.86 XL.Format.GetRotation	8957
• 190.87 XL.Format.GetShrinkToFit	8958
• 190.88 XL.Format.GetWrap	8959
• 190.89 XL.Format.SetAlignH	8960
• 190.90 XL.Format.SetAlignV	8963
• 190.91 XL.Format.SetBorder	8965
• 190.92 XL.Format.SetBorderBottom	8967
• 190.93 XL.Format.SetBorderBottomColor	8969
• 190.94 XL.Format.SetBorderColor	8970
• 190.95 XL.Format.SetBorderDiagonal	8972
• 190.96 XL.Format.SetBorderDiagonalColor	8974
• 190.97 XL.Format.SetBorderDiagonalStyle	8975
• 190.98 XL.Format.SetBorderLeft	8976
• 190.99 XL.Format.SetBorderLeftColor	8978
• 190.100 XL.Format.SetBorderRight	8979
• 190.101 XL.Format.SetBorderRightColor	8981
• 190.102 XL.Format.SetBorderTop	8982
• 190.103 XL.Format.SetBorderTopColor	8984
• 190.104 XL.Format.SetFillPattern	8985
• 190.105 XL.Format.SetFont	8987
• 190.106 XL.Format.SetHidden	8989
• 190.107 XL.Format.SetIndent	8990
• 190.108 XL.Format.SetLocked	8991
• 190.109 XL.Format.SetNumFormat	8993
• 190.110 XL.Format.SetPatternBackgroundColor	8996

- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.112 XL.Format.SetRotation 9000
- 190.113 XL.Format.SetShrinkToFit 9001
- 190.114 XL.Format.SetWrap 9002
- 190.115 XL.Initialize 9005
- 190.116 XL.IsInitialized 9008
- 190.117 XL.LoadBook 9010
- 190.118 XL.LoadBookPartially 9013
- 190.119 XL.NewBook 9015
- 190.120 XL.Sheet.AddHyperlink 9017
- 190.121 XL.Sheet.AddIgnoredError 9019
- 190.122 XL.Sheet.AddrToRowCol 9021
- 190.123 XL.Sheet.ApplyFilter 9022
- 190.124 XL.Sheet.AutoFilter 9023
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.126 XL.Sheet.AutoFilter.Clear 9026
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.130 XL.Sheet.AutoFilter.FilterType 9030
- 190.131 XL.Sheet.AutoFilter.GetCustomFilter 9032
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.134 XL.Sheet.AutoFilter.GetSortRange 9035
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.136 XL.Sheet.AutoFilter.SetCustomFilter 9037
- 190.137 XL.Sheet.AutoFilter.SetRef 9039
- 190.138 XL.Sheet.AutoFilter.SetSort 9041
- 190.139 XL.Sheet.AutoFilter.SetTop10 9042

	407
• 190.140 XL.Sheet.CellsDate	9044
• 190.141 XL.Sheet.CellsFormula	9045
• 190.142 XL.Sheet.CellReadBlank	9046
• 190.143 XL.Sheet.CellReadBoolean	9047
• 190.144 XL.Sheet.CellReadBooleans	9048
• 190.145 XL.Sheet.CellReadComment	9050
• 190.146 XL.Sheet.CellReadComments	9051
• 190.147 XL.Sheet.CellReadDate	9053
• 190.148 XL.Sheet.CellReadDates	9055
• 190.149 XL.Sheet.CellReadFormula	9057
• 190.150 XL.Sheet.CellReadFormulas	9058
• 190.151 XL.Sheet.CellReadNumber	9060
• 190.152 XL.Sheet.CellReadNumbers	9061
• 190.153 XL.Sheet.CellReadText	9063
• 190.154 XL.Sheet.CellReadTexts	9065
• 190.155 XL.Sheet.CellType	9067
• 190.156 XL.Sheet.CellWriteBlank	9068
• 190.157 XL.Sheet.CellWriteBlanks	9070
• 190.158 XL.Sheet.CellWriteBoolean	9072
• 190.159 XL.Sheet.CellWriteBooleans	9074
• 190.160 XL.Sheet.CellWriteComment	9076
• 190.161 XL.Sheet.CellWriteComments	9078
• 190.162 XL.Sheet.CellWriteDate	9080
• 190.163 XL.Sheet.CellWriteDates	9082
• 190.164 XL.Sheet.CellWriteError	9084
• 190.165 XL.Sheet.CellWriteFormula	9086
• 190.166 XL.Sheet.CellWriteFormulaBoolean	9089
• 190.167 XL.Sheet.CellWriteFormulaNumber	9091
• 190.168 XL.Sheet.CellWriteFormulaText	9093

- 190.169 XL.Sheet.CellWriteFormulas 9095
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.174 XL.Sheet.Clear 9108
- 190.175 XL.Sheet.ClearPrintArea 9109
- 190.176 XL.Sheet.ClearPrintRepeats 9110
- 190.177 XL.Sheet.CopyCell 9111
- 190.178 XL.Sheet.DelHyperlink 9112
- 190.179 XL.Sheet.DelMergeByIndex 9113
- 190.180 XL.Sheet.DeleteMerge 9114
- 190.181 XL.Sheet.DeleteNamedRange 9115
- 190.182 XL.Sheet.GetCellError 9116
- 190.183 XL.Sheet.GetCellErrors 9117
- 190.184 XL.Sheet.GetCellFormat 9119
- 190.185 XL.Sheet.GetCellFormats 9120
- 190.186 XL.Sheet.GetColHidden 9122
- 190.187 XL.Sheet.GetColWidth 9123
- 190.188 XL.Sheet.GetDisplayGridlines 9124
- 190.189 XL.Sheet.GetFirstCol 9125
- 190.190 XL.Sheet.GetFirstRow 9126
- 190.191 XL.Sheet.GetFooter 9127
- 190.192 XL.Sheet.GetFooterMargin 9128
- 190.193 XL.Sheet.GetGroupSummaryBelow 9129
- 190.194 XL.Sheet.GetGroupSummaryRight 9130
- 190.195 XL.Sheet.GetHCenter 9131
- 190.196 XL.Sheet.GetHeader 9132
- 190.197 XL.Sheet.GetHeaderMargin 9133

	409
• 190.198 XL.Sheet.GetHidden	9134
• 190.199 XL.Sheet.GetHorPageBreak	9135
• 190.200 XL.Sheet.GetHorPageBreakCount	9136
• 190.201 XL.Sheet.GetLandscape	9137
• 190.202 XL.Sheet.GetLastCol	9138
• 190.203 XL.Sheet.GetLastRow	9139
• 190.204 XL.Sheet.GetMarginBottom	9140
• 190.205 XL.Sheet.GetMarginLeft	9141
• 190.206 XL.Sheet.GetMarginRight	9142
• 190.207 XL.Sheet.GetMarginTop	9143
• 190.208 XL.Sheet.GetMerge	9144
• 190.209 XL.Sheet.GetName	9146
• 190.210 XL.Sheet.GetNamedRange	9147
• 190.211 XL.Sheet.GetPaper	9148
• 190.212 XL.Sheet.GetPicture	9150
• 190.213 XL.Sheet.GetPrintArea	9152
• 190.214 XL.Sheet.GetPrintFit	9153
• 190.215 XL.Sheet.GetPrintGridlines	9154
• 190.216 XL.Sheet.GetPrintRepeatCols	9155
• 190.217 XL.Sheet.GetPrintRepeatRows	9156
• 190.218 XL.Sheet.GetPrintRow	9157
• 190.219 XL.Sheet.GetPrintZoom	9158
• 190.220 XL.Sheet.GetProtect	9159
• 190.221 XL.Sheet.GetRowHeight	9160
• 190.222 XL.Sheet.GetRowHidden	9161
• 190.223 XL.Sheet.GetText	9162
• 190.224 XL.Sheet.GetTopLeftView	9163
• 190.225 XL.Sheet.GetVCenter	9164
• 190.226 XL.Sheet.GetVerPageBreak	9165

- 190.227 XL.Sheet.GetVerPageBreakCount 9166
- 190.228 XL.Sheet.GetZoom 9167
- 190.229 XL.Sheet.GroupCols 9168
- 190.230 XL.Sheet.GroupRows 9169
- 190.231 XL.Sheet.Hyperlink 9170
- 190.232 XL.Sheet.HyperlinkSize 9171
- 190.233 XL.Sheet.InsertCol 9172
- 190.234 XL.Sheet.InsertRow 9173
- 190.235 XL.Sheet.Merge 9174
- 190.236 XL.Sheet.MergeSize 9175
- 190.237 XL.Sheet.NamedRange 9176
- 190.238 XL.Sheet.NamedRangeCount 9177
- 190.239 XL.Sheet.PictureCount 9178
- 190.240 XL.Sheet.RemoveCol 9179
- 190.241 XL.Sheet.RemoveComment 9180
- 190.242 XL.Sheet.RemoveComments 9181
- 190.243 XL.Sheet.RemoveFilter 9183
- 190.244 XL.Sheet.RemoveRow 9184
- 190.245 XL.Sheet.RightToLeft 9186
- 190.246 XL.Sheet.RowColToAddr 9187
- 190.247 XL.Sheet.SetAutoFitArea 9189
- 190.248 XL.Sheet.SetCellFormat 9190
- 190.249 XL.Sheet.SetCellFormats 9192
- 190.250 XL.Sheet.SetCol 9194
- 190.251 XL.Sheet.SetColHidden 9197
- 190.252 XL.Sheet.SetColumn 9198
- 190.253 XL.Sheet.SetDisplayGridlines 9200
- 190.254 XL.Sheet.SetFooter 9201
- 190.255 XL.Sheet.SetGroupSummaryBelow 9203

	411
• 190.256 XL.Sheet.SetGroupSummaryRight	9204
• 190.257 XL.Sheet.SetHCenter	9205
• 190.258 XL.Sheet.SetHeader	9206
• 190.259 XL.Sheet.SetHorPageBreak	9208
• 190.260 XL.Sheet.SetLandscape	9209
• 190.261 XL.Sheet.SetMarginBottom	9210
• 190.262 XL.Sheet.SetMarginLeft	9211
• 190.263 XL.Sheet.SetMarginRight	9212
• 190.264 XL.Sheet.SetMarginTop	9213
• 190.265 XL.Sheet.SetMerge	9214
• 190.266 XL.Sheet.SetName	9216
• 190.267 XL.Sheet.SetNamedRange	9217
• 190.268 XL.Sheet.SetPaper	9219
• 190.269 XL.Sheet.SetPictureWithScale	9220
• 190.270 XL.Sheet.SetPictureWithSize	9222
• 190.271 XL.Sheet.SetPrintArea	9225
• 190.272 XL.Sheet.SetPrintFit	9227
• 190.273 XL.Sheet.SetPrintGridliens	9228
• 190.274 XL.Sheet.SetPrintRepeatCols	9229
• 190.275 XL.Sheet.SetPrintRepeatRows	9230
• 190.276 XL.Sheet.SetPrintRow	9231
• 190.277 XL.Sheet.SetPrintZoom	9232
• 190.278 XL.Sheet.SetProtect	9233
• 190.279 XL.Sheet.SetProtectEx	9234
• 190.280 XL.Sheet.SetRightToLeft	9236
• 190.281 XL.Sheet.SetRow	9237
• 190.282 XL.Sheet.SetRowHidden	9239
• 190.283 XL.Sheet.SetTabColor	9240
• 190.284 XL.Sheet.SetTabColorRGB	9241

- 190.285 XL.Sheet.SetTopLeftView 9242
- 190.286 XL.Sheet.SetVCenter 9243
- 190.287 XL.Sheet.SetVerPageBreak 9244
- 190.288 XL.Sheet.SetZoom 9245
- 190.289 XL.Sheet.Split 9246
- 190.290 XL.Sheet.SplitInfo 9247
- 190.291 XL.Sheet.Table 9248
- 190.292 XL.Sheet.TableSize 9249
- 190.293 XL.Sheet.Type 9250
- 190.294 XL.Uninitialize 9251
- 191.2 XML.ApplyStylesheet 9256
- 191.3 XML.Canonical 9258
- 191.4 XML.ClearVariables 9260
- 191.5 XML.Colorize 9261
- 191.6 XML.DeletePath 9263
- 191.7 XML.ExtractText 9265
- 191.8 XML.Format 9267
- 191.9 XML.GetAttribute 9269
- 191.10 XML.GetPathValue 9270
- 191.11 XML.HasAttribute 9272
- 191.12 XML.Import 9273
- 191.13 XML.Import.Cancel 9277
- 191.14 XML.Import.ErrorCount 9278
- 191.15 XML.Import.Errors 9279
- 191.16 XML.Import.SetBaseFields 9280
- 191.17 XML.Import.SetExtraField 9281
- 191.18 XML.Import.Status 9282
- 191.19 XML.Import.TODO 9283
- 191.20 XML.Import.Total 9284

	413
• 191.21 XML.Import.Work	9285
• 191.22 XML.ListAttributes	9287
• 191.23 XML.NodeCount	9288
• 191.24 XML.NodeNames	9289
• 191.25 XML.Parse	9291
• 191.26 XML.Query	9293
• 191.27 XML.ReadContainer	9296
• 191.28 XML.ReadFile	9297
• 191.29 XML.Release	9299
• 191.30 XML.ReleaseAll	9300
• 191.31 XML.SetPathValue	9301
• 191.32 XML.SetPathXML	9303
• 191.33 XML.SetVariables	9305
• 191.34 XML.SubTree	9307
• 191.35 XML.ToJSON	9310
• 191.36 XML.Validate	9311
• 191.37 XML.ValidateFile	9313
• 53.33 ZipFile.CRCFile	1509
• 53.34 ZipFile.Close	1510
• 53.35 ZipFile.CompressFiles	1511
• 53.36 ZipFile.CreateFile	1513
• 53.37 ZipFile.Open	1515
• 53.38 ZipFile.SetCompressionLevel	1517
• 53.39 ZipFile.UsePassword	1518
• 53.40 ZipFile.WriteContainer	1520
• 53.41 ZipFile.WriteFile	1521
• 53.42 ZipFile.WriteHex	1523
• 53.43 ZipFile.WriteText	1524

5528 functions.

Chapter 5

Functions compatible with Windows

• 41.1 AVRecorder.AddPreviewToWindow	1089
• 41.2 AVRecorder.AudioDeviceCount	1091
• 41.3 AVRecorder.AudioDeviceInfo	1092
• 41.5 AVRecorder.CaptureStillPhoto	1095
• 41.6 AVRecorder.ClosePreview	1097
• 41.8 AVRecorder.EncoderCount	1099
• 41.9 AVRecorder.EncoderInfo	1100
• 41.10 AVRecorder.GetAudioDevice	1101
• 41.12 AVRecorder.GetEncoder	1103
• 41.13 AVRecorder.GetFilePath	1104
• 41.14 AVRecorder.GetVideoDevice	1105
• 41.17 AVRecorder.Init	1108
• 41.18 AVRecorder.IsRecording	1111
• 41.20 AVRecorder.Release	1113
• 41.22 AVRecorder.SetAudioDevice	1115
• 41.24 AVRecorder.SetEncoder	1117
• 41.25 AVRecorder.SetFilePath	1118
• 41.27 AVRecorder.SetVideoDevice	1121
• 41.29 AVRecorder.ShowPropertyDialog	1123

- 41.30 AVRecorder.StartPreview 1125
- 41.32 AVRecorder.StartRecording 1128
- 41.34 AVRecorder.StopRecording 1130
- 41.35 AVRecorder.VideoDeviceCount 1131
- 41.36 AVRecorder.VideoDeviceInfo 1132
- 34.3 App.CompactMemory 911
- 34.7 App.GetProcessName 915
- 34.8 App.GetProcessPath 916
- 34.9 App.MemoryUsed 917
- 34.11 App.ProcessID 919
- 36.1 Archive.Compress 943
- 36.2 Archive.Content 946
- 36.3 Archive.Extract 948
- 36.4 Archive.FileList 949
- 36.5 Archive.LibVersion 950
- 36.6 Archive.LibVersionDetails 951
- 36.7 Archive.SupportedFormats 952
- 36.8 Archive.Verify 953
- 37.1 Audit.Backup 955
- 37.2 Audit.Backup2 957
- 37.3 Audit.Changed 958
- 37.4 Audit.Changed2 962
- 37.5 Audit.ClearCaches 964
- 37.6 Audit.Delete 965
- 37.7 Audit.Delete2 967
- 37.8 Audit.FieldIDForName 968
- 37.9 Audit.FieldNameForID 969
- 37.10 Audit.GetEnabled 970
- 37.11 Audit.GetIgnoreCalculations 971

	417
• 37.12 Audit.GetIgnoreSummaryFields	972
• 37.13 Audit.GetIgnoreUnderscoreFieldNames	973
• 37.14 Audit.GetIgnoredFieldNames	974
• 37.15 Audit.GetLogAccess	975
• 37.16 Audit.GetUUIDField	976
• 37.17 Audit.SetEnabled	977
• 37.18 Audit.SetIgnoreCalculations	978
• 37.19 Audit.SetIgnoreSummaryFields	979
• 37.20 Audit.SetIgnoreUnderscoreFieldNames	980
• 37.21 Audit.SetIgnoredFieldNames	981
• 37.22 Audit.SetLogAccess	983
• 37.23 Audit.SetUUIDField	984
• 37.24 Audit.TableIDForName	985
• 37.25 Audit.TableNameForID	986
• 43.1 Barcode.Detect	1137
• 43.2 Barcode.DrawBarcode	1140
• 43.3 Barcode.EANChecksum	1142
• 43.4 Barcode.Generate	1143
• 43.5 Barcode.GenerateJSON	1149
• 43.6 Barcode.GetInputMode	1151
• 43.7 Barcode.GetOption	1152
• 43.8 Barcode.GetPrimary	1153
• 43.9 Barcode.ISBNChecksum	1154
• 43.10 Barcode.LibVersion	1156
• 43.11 Barcode.SetInputMode	1157
• 43.12 Barcode.SetOption	1159
• 43.13 Barcode.SetOptions	1161
• 43.14 Barcode.SetPrimary	1164
• 43.15 Barcode.UPCChecksum	1166

- 43.16 Barcode.WriteFile 1167
- 44.1 BinaryFile.Append 1171
- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.4 BinaryFile.EOF 1176
- 44.5 BinaryFile.Length 1177
- 44.6 BinaryFile.Open 1178
- 44.7 BinaryFile.Position 1180
- 44.8 BinaryFile.ReadByte 1181
- 44.9 BinaryFile.ReadContainer 1182
- 44.10 BinaryFile.ReadFloat 1183
- 44.11 BinaryFile.ReadHex 1184
- 44.12 BinaryFile.ReadInt 1186
- 44.13 BinaryFile.ReadPDF 1187
- 44.14 BinaryFile.ReadText 1189
- 44.15 BinaryFile.Seek 1191
- 44.16 BinaryFile.WriteByte 1192
- 44.17 BinaryFile.WriteContainer 1193
- 44.18 BinaryFile.WriteFloat 1194
- 44.19 BinaryFile.WriteHex 1195
- 44.20 BinaryFile.WriteInt 1197
- 44.21 BinaryFile.WriteText 1199
- 46.1 Bonjour.Browse 1223
- 46.2 Bonjour.JSON 1225
- 46.3 Bonjour.Register 1227
- 46.4 Bonjour.RegisteredName 1228
- 61.1 CURL.AddInputFile 1761
- 61.2 CURL.AddInputGIF 1763
- 61.3 CURL.AddInputJPEG 1764

	419
• 61.4 CURL.AddInputPDF	1765
• 61.5 CURL.AddInputPNG	1766
• 61.6 CURL.AddInputText	1768
• 61.7 CURL.Cancel	1770
• 61.8 CURL.Check	1771
• 61.9 CURL.Cleanup	1772
• 61.10 CURL.CloseDebugFile	1775
• 61.11 CURL.CloseHeaderFile	1776
• 61.12 CURL.CloseInputFile	1777
• 61.13 CURL.CloseOutputFile	1778
• 61.14 CURL.CreateDebugOutputFile	1780
• 61.15 CURL.CreateHeaderOutputFile	1782
• 61.16 CURL.CreateOutputFile	1784
• 61.17 CURL.ErrorCode	1788
• 61.18 CURL.ErrorMessage	1791
• 61.19 CURL.Features	1792
• 61.20 CURL.FileInfos	1793
• 61.21 CURL.FormAddKeyContainer	1796
• 61.22 CURL.FormAddKeyContainerContentType	1798
• 61.23 CURL.FormAddKeyFile	1800
• 61.24 CURL.FormAddKeyFileContentType	1802
• 61.25 CURL.FormAddKeyText	1804
• 61.26 CURL.FormAddKeyTextContentType	1806
• 61.27 CURL.FormAddKeyValue	1808
• 61.28 CURL.FormAddKeyValueContentType	1810
• 61.29 CURL.FormClear	1812
• 61.30 CURL.FormFinish	1813
• 61.31 CURL.GetActiveSocket	1815
• 61.32 CURL.GetAppConnectTime	1816

- 61.33 `CURL.GetBatchCurrentFileName` 1817
- 61.34 `CURL.GetBatchCurrentFilePath` 1818
- 61.35 `CURL.GetBatchDestinationPath` 1819
- 61.36 `CURL.GetBatchFileNames` 1820
- 61.37 `CURL.GetCertInfo` 1821
- 61.38 `CURL.GetConditionUnmet` 1823
- 61.39 `CURL.GetConnectTime` 1824
- 61.40 `CURL.GetContentLengthDownload` 1825
- 61.41 `CURL.GetContentLengthUpload` 1826
- 61.42 `CURL.GetContentType` 1827
- 61.43 `CURL.GetCookieList` 1828
- 61.44 `CURL.GetDebugAsText` 1831
- 61.45 `CURL.GetDebugLength` 1834
- 61.46 `CURL.GetDebugWithData` 1835
- 61.47 `CURL.GetDebugWithProgress` 1836
- 61.48 `CURL.GetDebugWithTime` 1837
- 61.49 `CURL.GetEffectiveURL` 1838
- 61.50 `CURL.GetFTPEntryPath` 1840
- 61.51 `CURL.GetFileTime` 1841
- 61.52 `CURL.GetFinishedEvaluate` 1842
- 61.53 `CURL.GetFinishedFileName` 1843
- 61.54 `CURL.GetFinishedScriptName` 1844
- 61.55 `CURL.GetFormData` 1845
- 61.56 `CURL.GetHTTPAuthAvail` 1847
- 61.57 `CURL.GetHTTPConnectCode` 1848
- 61.58 `CURL.GetHTTPVersion` 1849
- 61.59 `CURL.GetHeaderAsText` 1850
- 61.60 `CURL.GetHeaderLength` 1852
- 61.61 `CURL.GetHeaderSize` 1853

	421
• 61.62 CURL.GetInputAsText	1854
• 61.63 CURL.GetInputLength	1856
• 61.64 CURL.GetLastSocket	1857
• 61.65 CURL.GetLocalIP	1858
• 61.66 CURL.GetLocalPort	1859
• 61.67 CURL.GetMultiOptionChunkLengthPenaltySize	1860
• 61.68 CURL.GetMultiOptionContentLengthPenaltySize	1861
• 61.69 CURL.GetMultiOptionMaxConcurrentStreams	1862
• 61.70 CURL.GetMultiOptionMaxConnects	1863
• 61.71 CURL.GetMultiOptionMaxHostConnections	1864
• 61.72 CURL.GetMultiOptionMaxPipelineLength	1865
• 61.73 CURL.GetMultiOptionMaxTotalConnections	1866
• 61.74 CURL.GetMultiOptionPipelining	1867
• 61.75 CURL.GetMultiRunningTransfers	1868
• 61.76 CURL.GetNameLookupTime	1869
• 61.77 CURL.GetNumConnects	1870
• 61.78 CURL.GetOSErrNo	1871
• 61.79 CURL.GetOptionConnectTo	1872
• 61.80 CURL.GetOptionHTTP200Aliases	1873
• 61.81 CURL.GetOptionHTTPHeader	1874
• 61.82 CURL.GetOptionMailRecipients	1875
• 61.83 CURL.GetOptionPostQuote	1876
• 61.84 CURL.GetOptionPreQuote	1877
• 61.85 CURL.GetOptionProxyHeader	1878
• 61.86 CURL.GetOptionQuote	1879
• 61.87 CURL.GetOptionResolve	1880
• 61.88 CURL.GetOptionTelnetOptions	1881
• 61.89 CURL.GetPreTransferTime	1882
• 61.90 CURL.GetPrimaryIP	1883

- 61.91 `CURL.GetPrimaryPort` 1884
- 61.92 `CURL.GetProgressCurrentDownload` 1885
- 61.93 `CURL.GetProgressCurrentUpload` 1886
- 61.94 `CURL.GetProgressEvaluate` 1887
- 61.95 `CURL.GetProgressFileName` 1888
- 61.96 `CURL.GetProgressPercent` 1889
- 61.97 `CURL.GetProgressScriptName` 1890
- 61.98 `CURL.GetProgressTotalDownload` 1891
- 61.99 `CURL.GetProgressTotalUpload` 1892
- 61.100 `CURL.GetProtocol` 1893
- 61.101 `CURL.GetProxyAuthAvail` 1894
- 61.102 `CURL.GetProxySSLVerifyResult` 1895
- 61.103 `CURL.GetRTSPCSEQRecv` 1896
- 61.104 `CURL.GetRTSPClientCSEQ` 1897
- 61.105 `CURL.GetRTSPServerCSEQ` 1898
- 61.106 `CURL.GetRTSPSessionID` 1899
- 61.107 `CURL.GetRedirectCount` 1900
- 61.108 `CURL.GetRedirectTime` 1901
- 61.109 `CURL.GetRedirectURL` 1902
- 61.110 `CURL.GetRequestSize` 1904
- 61.111 `CURL.GetResponseCode` 1905
- 61.112 `CURL.GetResultAsContainer` 1907
- 61.113 `CURL.GetResultAsData` 1910
- 61.114 `CURL.GetResultAsEMailList` 1912
- 61.115 `CURL.GetResultAsEmail` 1914
- 61.116 `CURL.GetResultAsGIF` 1916
- 61.117 `CURL.GetResultAsJPEG` 1918
- 61.118 `CURL.GetResultAsMime` 1920
- 61.119 `CURL.GetResultAsPDF` 1922

	423
• 61.120 CURL.GetResultAsPNG	1924
• 61.121 CURL.GetResultAsText	1926
• 61.122 CURL.GetResultLength	1930
• 61.123 CURL.GetSSLEngines	1931
• 61.124 CURL.GetSSLVerifyResult	1932
• 61.125 CURL.GetScheme	1933
• 61.126 CURL.GetSizeDownload	1934
• 61.127 CURL.GetSizeUpload	1935
• 61.128 CURL.GetSpeedDownload	1936
• 61.129 CURL.GetSpeedUpload	1937
• 61.130 CURL.GetStartTransferTime	1938
• 61.131 CURL.GetTag	1939
• 61.132 CURL.GetTotalTime	1940
• 61.133 CURL.Host	1941
• 61.134 CURL.IsRunning	1942
• 61.135 CURL.LibIDNVersion	1943
• 61.136 CURL.LibSSHVersion	1944
• 61.137 CURL.LibSSLVersion	1945
• 61.138 CURL.List	1946
• 61.139 CURL.New	1947
• 61.140 CURL.NumberOfRunningTransfers	1950
• 61.141 CURL.OpenInputFile	1951
• 61.142 CURL.Perform	1954
• 61.143 CURL.PerformAsync	1963
• 61.144 CURL.PerformInBackground	1965
• 61.145 CURL.Protocols	1967
• 61.146 CURL.ReceiveData	1968
• 61.147 CURL.ReceiveText	1970
• 61.148 CURL.Reset	1973

- 61.149 CURL.RunningTransfers 1974
- 61.150 CURL.SendData 1975
- 61.151 CURL.SendText 1977
- 61.152 CURL.SetBatchDestinationPath 1979
- 61.153 CURL.SetDebugWithData 1981
- 61.154 CURL.SetDebugWithProgress 1983
- 61.155 CURL.SetDebugWithTime 1985
- 61.156 CURL.SetFinishedEvaluate 1987
- 61.157 CURL.SetFinishedScript 1989
- 61.158 CURL.SetInputFile 1991
- 61.159 CURL.SetInputGIF 1994
- 61.160 CURL.SetInputJPEG 1996
- 61.161 CURL.SetInputPDF 1998
- 61.162 CURL.SetInputPNG 2000
- 61.163 CURL.SetInputText 2002
- 61.164 CURL.SetMultiOptionChunkLengthPenaltySize 2005
- 61.165 CURL.SetMultiOptionContentLengthPenaltySize 2006
- 61.166 CURL.SetMultiOptionMaxConcurrentStreams 2007
- 61.167 CURL.SetMultiOptionMaxConnects 2008
- 61.168 CURL.SetMultiOptionMaxHostConnections 2009
- 61.169 CURL.SetMultiOptionMaxPipelineLength 2010
- 61.170 CURL.SetMultiOptionMaxTotalConnections 2011
- 61.171 CURL.SetMultiOptionPipelining 2012
- 61.172 CURL.SetOptionAbstractUnixSocket 2013
- 61.173 CURL.SetOptionAcceptEncoding 2014
- 61.174 CURL.SetOptionAcceptTimeoutMS 2016
- 61.175 CURL.SetOptionAddressScope 2017
- 61.176 CURL.SetOptionAppend 2018
- 61.177 CURL.SetOptionAutoReferer 2019

	425
• 61.178 CURL.SetOptionBufferSize	2020
• 61.179 CURL.SetOptionCAINFO	2022
• 61.180 CURL.SetOptionCAPATH	2025
• 61.181 CURL.SetOptionCRLF	2027
• 61.182 CURL.SetOptionCRLFile	2028
• 61.183 CURL.SetOptionCertInfo	2030
• 61.184 CURL.SetOptionConnectOnly	2032
• 61.185 CURL.SetOptionConnectTimeoutMS	2035
• 61.186 CURL.SetOptionConnectTo	2036
• 61.187 CURL.SetOptionConnectionTimeout	2037
• 61.188 CURL.SetOptionCookie	2039
• 61.189 CURL.SetOptionCookieFile	2041
• 61.190 CURL.SetOptionCookieJar	2044
• 61.191 CURL.SetOptionCookieList	2046
• 61.192 CURL.SetOptionCookieSession	2047
• 61.193 CURL.SetOptionCustomRequest	2048
• 61.194 CURL.SetOptionDNSCacheTimeout	2053
• 61.195 CURL.SetOptionDNSInterface	2054
• 61.196 CURL.SetOptionDNSLocalIPv4	2055
• 61.197 CURL.SetOptionDNSLocalIPv6	2056
• 61.198 CURL.SetOptionDNSServers	2057
• 61.199 CURL.SetOptionDNSShuffleAddresses	2058
• 61.200 CURL.SetOptionDOHURL	2059
• 61.201 CURL.SetOptionDefaultProtocol	2061
• 61.202 CURL.SetOptionDirListOnly	2062
• 61.203 CURL.SetOptionDisallowUserNameInURL	2064
• 61.204 CURL.SetOptionEGDSocket	2065
• 61.205 CURL.SetOptionExpect100TimeoutMS	2066
• 61.206 CURL.SetOptionFTPAccount	2067

- 61.207 CURL.SetOptionFTPAlternativeToUser 2068
- 61.208 CURL.SetOptionFTPCreateMissingDirs 2069
- 61.209 CURL.SetOptionFTPFileMethod 2072
- 61.210 CURL.SetOptionFTPPort 2073
- 61.211 CURL.SetOptionFTPResponseTimeout 2075
- 61.212 CURL.SetOptionFTPSSLAUTH 2076
- 61.213 CURL.SetOptionFTPSSLCCC 2078
- 61.214 CURL.SetOptionFTPSkipPasvIP 2079
- 61.215 CURL.SetOptionFTPUseEPRT 2080
- 61.216 CURL.SetOptionFTPUseEPSV 2081
- 61.217 CURL.SetOptionFTPUsePret 2082
- 61.218 CURL.SetOptionFailOnError 2083
- 61.219 CURL.SetOptionFileOnlyMode 2084
- 61.220 CURL.SetOptionFileTime 2085
- 61.221 CURL.SetOptionFollowLocation 2086
- 61.222 CURL.SetOptionForbidReuse 2088
- 61.223 CURL.SetOptionFreshConnect 2089
- 61.224 CURL.SetOptionGSSAPIDelegation 2090
- 61.225 CURL.SetOptionGet 2091
- 61.226 CURL.SetOptionHAProxyProtocol 2093
- 61.227 CURL.SetOptionHTTP200Aliases 2094
- 61.228 CURL.SetOptionHTTPAUTH 2095
- 61.229 CURL.SetOptionHTTPContentDecoding 2097
- 61.230 CURL.SetOptionHTTPHeader 2098
- 61.231 CURL.SetOptionHTTPProxyTunnel 2102
- 61.232 CURL.SetOptionHTTPTransferDecoding 2103
- 61.233 CURL.SetOptionHTTPVersion 2104
- 61.234 CURL.SetOptionHappyEyeballsTimeOutMS 2105
- 61.235 CURL.SetOptionHeader 2106

	427
• 61.236 CURL.SetOptionHeaderOptions	2107
• 61.237 CURL.SetOptionIPResolve	2108
• 61.238 CURL.SetOptionIgnoreContentLength	2109
• 61.239 CURL.SetOptionInFileSize	2110
• 61.240 CURL.SetOptionInterface	2112
• 61.241 CURL.SetOptionIssuerCert	2113
• 61.242 CURL.SetOptionKRBLevel	2115
• 61.243 CURL.SetOptionKeepSendingOnError	2116
• 61.244 CURL.SetOptionKeyPassword	2117
• 61.245 CURL.SetOptionLocalPort	2119
• 61.246 CURL.SetOptionLocalPortRange	2120
• 61.247 CURL.SetOptionLoginOptions	2121
• 61.248 CURL.SetOptionLowSpeedLimit	2123
• 61.249 CURL.SetOptionLowSpeedTime	2124
• 61.250 CURL.SetOptionMailAuth	2125
• 61.251 CURL.SetOptionMailFrom	2127
• 61.252 CURL.SetOptionMailRecipients	2128
• 61.253 CURL.SetOptionMaxAgeConn	2129
• 61.254 CURL.SetOptionMaxConnects	2130
• 61.255 CURL.SetOptionMaxFileSize	2131
• 61.256 CURL.SetOptionMaxRecvSpeed	2132
• 61.257 CURL.SetOptionMaxRedirs	2133
• 61.258 CURL.SetOptionMaxSendSpeed	2135
• 61.259 CURL.SetOptionNETRCFile	2136
• 61.260 CURL.SetOptionNetRC	2137
• 61.261 CURL.SetOptionNewDirectoryPerms	2139
• 61.262 CURL.SetOptionNewFilePerms	2140
• 61.263 CURL.SetOptionNoBody	2141
• 61.264 CURL.SetOptionNoProxy	2143

- 61.265 `CURL.SetOptionPassword` 2145
- 61.266 `CURL.SetOptionPathAsIs` 2148
- 61.267 `CURL.SetOptionPinnedPublicKey` 2149
- 61.268 `CURL.SetOptionPipeWait` 2150
- 61.269 `CURL.SetOptionPort` 2151
- 61.270 `CURL.SetOptionPost` 2153
- 61.271 `CURL.SetOptionPostFieldSize` 2157
- 61.272 `CURL.SetOptionPostFields` 2158
- 61.273 `CURL.SetOptionPostQuote` 2162
- 61.274 `CURL.SetOptionPostRedir` 2164
- 61.275 `CURL.SetOptionPreProxy` 2166
- 61.276 `CURL.SetOptionPreQuote` 2167
- 61.277 `CURL.SetOptionProtocols` 2169
- 61.278 `CURL.SetOptionProxy` 2171
- 61.279 `CURL.SetOptionProxyAuth` 2173
- 61.280 `CURL.SetOptionProxyCAInfo` 2174
- 61.281 `CURL.SetOptionProxyCAPath` 2175
- 61.282 `CURL.SetOptionProxyCRLFile` 2176
- 61.283 `CURL.SetOptionProxyHeader` 2177
- 61.284 `CURL.SetOptionProxyKeyPassword` 2178
- 61.285 `CURL.SetOptionProxyPassword` 2179
- 61.286 `CURL.SetOptionProxyPinnedPublicKey` 2180
- 61.287 `CURL.SetOptionProxyPort` 2181
- 61.288 `CURL.SetOptionProxySSLCert` 2182
- 61.289 `CURL.SetOptionProxySSLCertType` 2183
- 61.290 `CURL.SetOptionProxySSLCipherList` 2184
- 61.291 `CURL.SetOptionProxySSLKey` 2185
- 61.292 `CURL.SetOptionProxySSLKeyType` 2186
- 61.293 `CURL.SetOptionProxySSLOptions` 2187

	429
• 61.294 CURL.SetOptionProxySSLVerifyHost	2188
• 61.295 CURL.SetOptionProxySSLVerifyPeer	2189
• 61.296 CURL.SetOptionProxySSLVersion	2190
• 61.297 CURL.SetOptionProxyServiceName	2192
• 61.298 CURL.SetOptionProxyTLS13Ciphers	2193
• 61.299 CURL.SetOptionProxyTLSAuthPassword	2194
• 61.300 CURL.SetOptionProxyTLSAuthType	2195
• 61.301 CURL.SetOptionProxyTLSAuthUsername	2196
• 61.302 CURL.SetOptionProxyTransferMode	2197
• 61.303 CURL.SetOptionProxyType	2198
• 61.304 CURL.SetOptionProxyUsername	2200
• 61.305 CURL.SetOptionPut	2201
• 61.306 CURL.SetOptionQuote	2203
• 61.307 CURL.SetOptionRTSPClientCSEQ	2206
• 61.308 CURL.SetOptionRTSPRequest	2207
• 61.309 CURL.SetOptionRTSPServerCSEQ	2208
• 61.310 CURL.SetOptionRTSPSessionID	2209
• 61.311 CURL.SetOptionRTSPStreamURI	2210
• 61.312 CURL.SetOptionRTSPTransport	2211
• 61.313 CURL.SetOptionRandomFile	2212
• 61.314 CURL.SetOptionRange	2213
• 61.315 CURL.SetOptionRedirProtocols	2215
• 61.316 CURL.SetOptionReferer	2217
• 61.317 CURL.SetOptionRequestTarget	2218
• 61.318 CURL.SetOptionResolve	2219
• 61.319 CURL.SetOptionResumeFrom	2220
• 61.320 CURL.SetOptionSASLAuthZID	2221
• 61.321 CURL.SetOptionSASLIR	2222
• 61.322 CURL.SetOptionSSHAAuthTypes	2223

- 61.323 `CURL.SetOptionSSHCompression` 2225
- 61.324 `CURL.SetOptionSSHHostPublicKeyMD5` 2226
- 61.325 `CURL.SetOptionSSHKnownHosts` 2227
- 61.326 `CURL.SetOptionSSHPrivateKeyfile` 2228
- 61.327 `CURL.SetOptionSSHPublicKeyfile` 2230
- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.329 `CURL.SetOptionSSLCertType` 2236
- 61.330 `CURL.SetOptionSSLCipherList` 2238
- 61.331 `CURL.SetOptionSSEnableALPN` 2240
- 61.332 `CURL.SetOptionSSEnableNPN` 2241
- 61.333 `CURL.SetOptionSSEngine` 2242
- 61.334 `CURL.SetOptionSSEngineDefault` 2243
- 61.335 `CURL.SetOptionSSLFalseStart` 2244
- 61.336 `CURL.SetOptionSSLKey` 2245
- 61.337 `CURL.SetOptionSSLKeyType` 2247
- 61.338 `CURL.SetOptionSSLOptions` 2249
- 61.339 `CURL.SetOptionSSLSessionIDCache` 2250
- 61.340 `CURL.SetOptionSSLVerifyHost` 2251
- 61.341 `CURL.SetOptionSSLVerifyPeer` 2254
- 61.342 `CURL.SetOptionSSLVerifyStatus` 2257
- 61.343 `CURL.SetOptionSSLVersion` 2258
- 61.344 `CURL.SetOptionServiceName` 2261
- 61.345 `CURL.SetOptionSocks5Auth` 2262
- 61.346 `CURL.SetOptionSocks5GSSAPINec` 2263
- 61.347 `CURL.SetOptionSocks5GSSAPIService` 2264
- 61.348 `CURL.SetOptionStreamDepends` 2265
- 61.349 `CURL.SetOptionStreamDependsE` 2266
- 61.350 `CURL.SetOptionStreamWeight` 2267
- 61.351 `CURL.SetOptionSuppressConnectHeaders` 2268

	431
• 61.352 CURL.SetOptionTCPFastOpen	2269
• 61.353 CURL.SetOptionTCPKeepAlive	2270
• 61.354 CURL.SetOptionTCPKeepIdle	2271
• 61.355 CURL.SetOptionTCPKeepInterval	2272
• 61.356 CURL.SetOptionTCPNoDelay	2273
• 61.357 CURL.SetOptionTFTPBlockSize	2274
• 61.358 CURL.SetOptionTFTPNoOptions	2275
• 61.359 CURL.SetOptionTLS13Ciphers	2276
• 61.360 CURL.SetOptionTLSAuthPassword	2277
• 61.361 CURL.SetOptionTLSAuthType	2278
• 61.362 CURL.SetOptionTLSAuthUsername	2279
• 61.363 CURL.SetOptionTelnetOptions	2280
• 61.364 CURL.SetOptionTimeCondition	2281
• 61.365 CURL.SetOptionTimeOut	2282
• 61.366 CURL.SetOptionTimeValue	2284
• 61.367 CURL.SetOptionTimeoutMS	2285
• 61.368 CURL.SetOptionTransferEncoding	2286
• 61.369 CURL.SetOptionTransferText	2287
• 61.370 CURL.SetOptionURL	2288
• 61.371 CURL.SetOptionUnixSocketPath	2296
• 61.372 CURL.SetOptionUnrestrictedAuth	2297
• 61.373 CURL.SetOptionUpkeepIntervalMS	2298
• 61.374 CURL.SetOptionUpload	2299
• 61.375 CURL.SetOptionUploadBufferSize	2301
• 61.376 CURL.SetOptionUseSSL	2302
• 61.377 CURL.SetOptionUserAgent	2304
• 61.378 CURL.SetOptionUsername	2305
• 61.379 CURL.SetOptionVerbose	2307
• 61.380 CURL.SetOptionWildCardMatch	2309

- 61.381 CURL.SetOptionXOAuth2Bearer 2312
- 61.382 CURL.SetProgressEvaluate 2313
- 61.383 CURL.SetProgressScript 2314
- 61.384 CURL.SetTag 2316
- 61.385 CURL.SetUpdateProgressDialog 2318
- 61.386 CURL.SetupAWS 2320
- 61.387 CURL.SetupOAuth 2324
- 61.388 CURL.Upkeep 2329
- 61.389 CURL.UseSystemCertificates 2330
- 61.390 CURL.Version 2332
- 124.1 ClearRegistration 6261
- 51.1 Clipboard.DetectFileMakerDataType 1435
- 51.2 Clipboard.GetData 1436
- 51.3 Clipboard.GetFileMakerData 1438
- 51.4 Clipboard.GetFiles 1440
- 51.5 Clipboard.GetHTMLText 1441
- 51.6 Clipboard.GetPicture 1442
- 51.7 Clipboard.GetRTFText 1443
- 51.9 Clipboard.GetText 1445
- 51.10 Clipboard.GetTypes 1447
- 51.11 Clipboard.SetFileMakerData 1448
- 51.12 Clipboard.SetFiles 1450
- 51.13 Clipboard.SetHTMLText 1452
- 51.14 Clipboard.SetPicture 1454
- 51.15 Clipboard.SetRTFText 1455
- 51.17 Clipboard.SetText 1458
- 52.1 ColorPanel.Choose 1461
- 124.2 CompileDate 6262
- 124.3 CompileTime 6263

	433
• 55.1 Container.Compress	1605
• 55.2 Container.DecodeFromBase64	1607
• 55.3 Container.DecodeFromHex	1609
• 55.4 Container.Decompress	1610
• 55.5 Container.Deserialize	1612
• 55.6 Container.Export	1613
• 55.7 Container.ExtractStream	1616
• 55.8 Container.GetBase64	1617
• 55.9 Container.GetCount	1619
• 55.10 Container.GetDataURL	1621
• 55.11 Container.GetHeight	1622
• 55.12 Container.GetHex	1623
• 55.17 Container.GetName	1628
• 55.18 Container.GetResolution	1629
• 55.19 Container.GetSize	1631
• 55.20 Container.GetText	1633
• 55.21 Container.GetTotalSize	1635
• 55.22 Container.GetType	1636
• 55.23 Container.GetTypeSize	1638
• 55.24 Container.GetTypes	1640
• 55.25 Container.GetWidth	1642
• 55.26 Container.IsCompressed	1643
• 55.27 Container.ReadArchive	1644
• 55.28 Container.ReadFile	1645
• 55.30 Container.Remove	1650
• 55.31 Container.Rename	1652
• 55.32 Container.RenameStream	1654
• 55.33 Container.Serialize	1655
• 55.34 Container.WriteArchive	1656

- 55.35 Container.WriteFile 1658
- 67.1 DNSLookup.Address 2451
- 67.2 DNSLookup.AddressCount 2453
- 67.3 DNSLookup.Alias 2454
- 67.4 DNSLookup.AliasCount 2455
- 67.5 DNSLookup.LookupHostByAddress 2456
- 67.6 DNSLookup.LookupHostByName 2458
- 67.7 DNSLookup.Name 2460
- 67.8 DNSLookup.Release 2461
- 63.4 Dialog.GetAlternateButton 2343
- 63.5 Dialog.GetButton 2344
- 63.6 Dialog.GetButtonPressed 2345
- 63.7 Dialog.GetButtons 2346
- 63.8 Dialog.GetDefaultButton 2347
- 63.10 Dialog.GetIcon 2349
- 63.11 Dialog.GetInformativeText 2350
- 63.12 Dialog.GetLastResult 2351
- 63.13 Dialog.GetLeft 2352
- 63.14 Dialog.GetMessage 2353
- 63.15 Dialog.GetMode 2354
- 63.16 Dialog.GetOtherButton 2355
- 63.21 Dialog.GetShowsSuppressionButton 2360
- 63.22 Dialog.GetSuppressionButtonTitle 2361
- 63.23 Dialog.GetSuppressionState 2362
- 63.24 Dialog.GetTimeout 2363
- 63.25 Dialog.GetTop 2364
- 63.26 Dialog.GetWindowTitle 2365
- 63.27 Dialog.Reset 2366
- 63.28 Dialog.Run 2367

	435
• 63.30 Dialog.SetAlternateButton	2370
• 63.31 Dialog.SetButton	2371
• 63.32 Dialog.SetButtons	2373
• 63.33 Dialog.SetDefaultButton	2374
• 63.35 Dialog.SetIcon	2376
• 63.36 Dialog.SetInformativeText	2377
• 63.37 Dialog.SetLeft	2378
• 63.38 Dialog.SetMessage	2379
• 63.39 Dialog.SetMode	2380
• 63.40 Dialog.SetOtherButton	2381
• 63.44 Dialog.SetShowsSuppressionButton	2385
• 63.45 Dialog.SetSuppressionButtonTitle	2386
• 63.46 Dialog.SetTimeout	2387
• 63.47 Dialog.SetTop	2389
• 63.48 Dialog.SetWindowTitle	2391
• 65.1 Dictionary.AddSQL	2397
• 80.1 Dictionary.AddSQLRecord	4065
• 80.2 Dictionary.AddSQLRecords	4067
• 65.4 Dictionary.Clear	2404
• 65.5 Dictionary.Clone	2405
• 65.6 Dictionary.Count	2406
• 65.7 Dictionary.Create	2407
• 65.8 Dictionary.CreateNamed	2410
• 65.9 Dictionary.Deserialize	2411
• 65.10 Dictionary.HasKey	2413
• 65.11 Dictionary.KeyAtIndex	2414
• 65.12 Dictionary.Keys	2415
• 65.13 Dictionary.List	2416
• 65.14 Dictionary.Release	2417

- 65.15 Dictionary.RemoveKey 2418
- 65.16 Dictionary.Serialize 2419
- 65.17 Dictionary.SetList 2421
- 65.18 Dictionary.SetQuickList 2422
- 65.19 Dictionary.SetValueForKey 2423
- 65.20 Dictionary.SetVariables 2426
- 100.1 Dictionary.ToJSON 5231
- 65.22 Dictionary.ToText 2429
- 191.1 Dictionary.ToXML 9253
- 65.24 Dictionary.ValueForKey 2433
- 65.25 Dictionary.ValueTypeForKey 2435
- 65.26 Dictionary.Values 2436
- 66.1 DirectoryWatcher.AddDirectory 2437
- 66.2 DirectoryWatcher.ChangeCount 2439
- 66.3 DirectoryWatcher.Create 2440
- 66.4 DirectoryWatcher.Evaluate 2441
- 66.5 DirectoryWatcher.GetFileName 2442
- 66.6 DirectoryWatcher.GetScriptName 2443
- 66.7 DirectoryWatcher.NextChange 2444
- 66.8 DirectoryWatcher.Release 2445
- 66.9 DirectoryWatcher.ReleaseAll 2446
- 66.10 DirectoryWatcher.SetEvaluate 2447
- 66.11 DirectoryWatcher.SetFileName 2448
- 66.12 DirectoryWatcher.SetScriptName 2449
- 69.1 DragDrop.ClearDragActionHandler 2479
- 69.2 DragDrop.ClearDragEnterHandler 2481
- 69.3 DragDrop.ClearDragExitHandler 2482
- 69.4 DragDrop.CreateOnPopoverWithControl 2483
- 69.5 DragDrop.CreateOnPopoverWithSize 2485

	437
• 69.6 DragDrop.CreateWithControl	2487
• 69.7 DragDrop.CreateWithSize	2490
• 69.8 DragDrop.CreateWithWindow	2492
• 69.15 DragDrop.GetFileDescriptor	2499
• 69.16 DragDrop.GetFileDescriptorCount	2501
• 69.17 DragDrop.GetHTML	2502
• 69.18 DragDrop.GetHeight	2503
• 69.19 DragDrop.GetLeft	2504
• 69.20 DragDrop.GetMouseX	2505
• 69.21 DragDrop.GetMouseY	2506
• 69.22 DragDrop.GetPath	2507
• 69.23 DragDrop.GetPathCount	2510
• 69.25 DragDrop.GetRTF	2514
• 69.26 DragDrop.GetTag	2515
• 69.27 DragDrop.GetText	2516
• 69.28 DragDrop.GetTop	2518
• 69.31 DragDrop.GetVisible	2521
• 69.32 DragDrop.GetWidth	2522
• 69.33 DragDrop.GetWindowRef	2523
• 69.34 DragDrop.List	2524
• 69.36 DragDrop.Release	2527
• 69.37 DragDrop.ReleaseAll	2529
• 69.39 DragDrop.SetCursor	2532
• 69.40 DragDrop.SetDragActionHandler	2534
• 69.41 DragDrop.SetDragEnterHandler	2536
• 69.42 DragDrop.SetDragExitHandler	2538
• 69.43 DragDrop.SetFrame	2540
• 69.44 DragDrop.SetFrameWithControl	2541
• 69.45 DragDrop.SetImage	2543

- 69.46 DragDrop.SetTag 2545
- 69.47 DragDrop.SetVisible 2546
- 70.1 DynaPDF.AddActionToObj 2549
- 70.2 DynaPDF.AddAnnotToPage 2552
- 70.3 DynaPDF.AddBookmark 2553
- 70.4 DynaPDF.AddBookmarkEx 2555
- 70.5 DynaPDF.AddContinueText 2557
- 70.6 DynaPDF.AddDeviceNProcessColorants 2558
- 70.7 DynaPDF.AddDeviceNSeparations 2560
- 70.8 DynaPDF.AddFontSearchPath 2563
- 70.9 DynaPDF.AddOutputIntent 2564
- 70.10 DynaPDF.AddOutputIntentEx 2565
- 70.11 DynaPDF.AddValToChoiceField 2567
- 70.12 DynaPDF.AllowPageBreak 2569
- 70.13 DynaPDF.AppendImagePage 2571
- 70.14 DynaPDF.AppendImagePages 2573
- 70.15 DynaPDF.AppendPage 2575
- 70.16 DynaPDF.AssociateEmbFile 2577
- 70.17 DynaPDF.AttachFile 2579
- 70.18 DynaPDF.AttachFileContainer 2581
- 70.19 DynaPDF.AttachFileText 2582
- 70.20 DynaPDF.BeginContinueText 2584
- 70.21 DynaPDF.BeginLayer 2586
- 70.22 DynaPDF.BeginPattern 2587
- 70.23 DynaPDF.BeginTemplate 2588
- 70.24 DynaPDF.Bezier123 2589
- 70.25 DynaPDF.Bezier13 2591
- 70.26 DynaPDF.Bezier23 2592
- 70.27 DynaPDF.CMYK 2593

	439
• 70.28 DynaPDF.ChangeAnnotName	2595
• 70.29 DynaPDF.ChangeAnnotPos	2596
• 70.30 DynaPDF.ChangeBookmark	2597
• 70.31 DynaPDF.ChangeFont	2599
• 70.32 DynaPDF.ChangeFontSize	2600
• 70.33 DynaPDF.ChangeFontStyle	2601
• 70.34 DynaPDF.ChangeFontStyleEx	2602
• 70.35 DynaPDF.ChangeLinkAnnot	2603
• 70.36 DynaPDF.ChangeSeparationColor	2604
• 70.37 DynaPDF.CheckConformance	2605
• 70.38 DynaPDF.CheckFieldNames	2608
• 70.39 DynaPDF.CircleAnnot	2609
• 70.40 DynaPDF.Clear	2611
• 70.41 DynaPDF.ClipPath	2612
• 70.42 DynaPDF.CloseImportFile	2614
• 70.43 DynaPDF.ClosePath	2615
• 70.44 DynaPDF.ConvertColors	2617
• 70.45 DynaPDF.ConvertStyledText	2619
• 70.46 DynaPDF.CreateButton	2620
• 70.47 DynaPDF.CreateCheckBox	2623
• 70.48 DynaPDF.CreateComboBox	2625
• 70.49 DynaPDF.CreateDeviceNColorSpace	2628
• 70.50 DynaPDF.CreateGoToAction	2630
• 70.51 DynaPDF.CreateGoToActionEx	2632
• 70.52 DynaPDF.CreateGoToRAction	2634
• 70.53 DynaPDF.CreateGoToRActionEx	2636
• 70.54 DynaPDF.CreateGroupField	2638
• 70.55 DynaPDF.CreateJSAction	2640
• 70.56 DynaPDF.CreateListBox	2643

- 70.57 DynaPDF.CreateNamedDest 2646
- 70.58 DynaPDF.CreateRadioButton 2648
- 70.59 DynaPDF.CreateSeparationCS 2650
- 70.60 DynaPDF.CreateSigField 2653
- 70.61 DynaPDF.CreateSigFieldAP 2656
- 70.62 DynaPDF.CreateStructureTree 2657
- 70.63 DynaPDF.CreateTextField 2659
- 70.64 DynaPDF.CreateXFASStream 2661
- 70.65 DynaPDF.DeleteAcroForm 2662
- 70.66 DynaPDF.DeleteActionFromObjEx 2663
- 70.67 DynaPDF.DeleteAnnotation 2664
- 70.68 DynaPDF.DeleteBookmark 2665
- 70.69 DynaPDF.DeleteEmbeddedFile 2666
- 70.70 DynaPDF.DeleteField 2667
- 70.71 DynaPDF.DeleteFieldEx 2668
- 70.72 DynaPDF.DeleteJavaScripts 2669
- 70.73 DynaPDF.DeletePage 2670
- 70.74 DynaPDF.DeletePageLabels 2671
- 70.75 DynaPDF.DeleteSeparationInfo 2672
- 70.76 DynaPDF.DeleteTemplate 2673
- 70.77 DynaPDF.DeleteTemplateEx 2674
- 70.78 DynaPDF.DeleteXFAForm 2675
- 70.79 DynaPDF.DrawArc 2676
- 70.80 DynaPDF.DrawArcEx 2678
- 70.81 DynaPDF.DrawChord 2680
- 70.82 DynaPDF.DrawCircle 2682
- 70.83 DynaPDF.DrawPie 2684
- 70.84 DynaPDF.EditPage 2686
- 70.85 DynaPDF.EditTemplate 2688

	441
• 70.86 DynaPDF.EditTemplate2	2690
• 70.87 DynaPDF.Ellipse	2691
• 70.88 DynaPDF.EnableEncryption	2693
• 70.89 DynaPDF.EndLayer	2696
• 70.90 DynaPDF.EndPage	2697
• 70.91 DynaPDF.EndPattern	2699
• 70.92 DynaPDF.EndTemplate	2700
• 70.93 DynaPDF.ExchangeBookmarks	2701
• 70.94 DynaPDF.ExchangePages	2702
• 70.95 DynaPDF.ExtractDocumentText	2703
• 70.96 DynaPDF.ExtractImages	2705
• 70.97 DynaPDF.ExtractPageRectText	2707
• 70.98 DynaPDF.ExtractPageText	2709
• 70.99 DynaPDF.ExtractText	2711
• 70.100 DynaPDF.FileAttachAnnot	2714
• 70.101 DynaPDF.FileAttachAnnotEx	2716
• 70.102 DynaPDF.FileLink	2718
• 70.103 DynaPDF.FindBookmark	2720
• 70.104 DynaPDF.FindEmbeddedFile	2722
• 70.105 DynaPDF.FindField	2723
• 70.106 DynaPDF.FindLinkAnnot	2724
• 70.107 DynaPDF.FindNextBookmark	2725
• 70.108 DynaPDF.FindPattern	2726
• 70.109 DynaPDF.FindText	2727
• 70.110 DynaPDF.FlattenAnnotOrField	2729
• 70.111 DynaPDF.FlattenAnnots	2730
• 70.112 DynaPDF.FlattenForm	2732
• 70.113 DynaPDF.FlushPages	2734
• 70.114 DynaPDF.FontInfo	2736

- 70.115 DynaPDF.FreeTextAnnot 2738
- 70.116 DynaPDF.GeneratePreview 2740
- 70.117 DynaPDF.GetAnnotCount 2743
- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.119 DynaPDF.GetAnnotLink 2745
- 70.120 DynaPDF.GetAnnotType 2746
- 70.121 DynaPDF.GetAnnotation 2748
- 70.122 DynaPDF.GetAscent 2750
- 70.123 DynaPDF.GetBBox 2751
- 70.124 DynaPDF.GetBookmark 2753
- 70.125 DynaPDF.GetBookmarkCount 2755
- 70.126 DynaPDF.GetBorderStyle 2756
- 70.127 DynaPDF.GetCMapCount 2757
- 70.128 DynaPDF.GetCharacterSpacing 2758
- 70.129 DynaPDF.GetCheckBoxChar 2759
- 70.130 DynaPDF.GetCheckBoxCharEx 2760
- 70.131 DynaPDF.GetCheckBoxDefState 2761
- 70.132 DynaPDF.GetColorSpace 2762
- 70.133 DynaPDF.GetColorSpaceCount 2763
- 70.134 DynaPDF.GetColorSpaceInfo 2764
- 70.135 DynaPDF.GetCompressionFilter 2765
- 70.136 DynaPDF.GetCompressionLevel 2766
- 70.137 DynaPDF.GetContent 2767
- 70.138 DynaPDF.GetDocInfo 2768
- 70.139 DynaPDF.GetDocInfoCount 2770
- 70.140 DynaPDF.GetDocUsesTransparency 2771
- 70.141 DynaPDF.GetDrawDirection 2772
- 70.142 DynaPDF.GetDynaPDFVersion 2773
- 70.143 DynaPDF.GetEmbeddedFile 2774

	443
• 70.144 DynaPDF.GetEmbeddedFileAsContainer	2776
• 70.145 DynaPDF.GetEmbeddedFileCount	2777
• 70.146 DynaPDF.GetFTextHeight	2779
• 70.147 DynaPDF.GetFTextHeightEx	2781
• 70.148 DynaPDF.GetField	2783
• 70.149 DynaPDF.GetFieldBackColor	2785
• 70.150 DynaPDF.GetFieldBorderColor	2786
• 70.151 DynaPDF.GetFieldBorderStyle	2787
• 70.152 DynaPDF.GetFieldBorderWidth	2788
• 70.153 DynaPDF.GetFieldChoiceValue	2789
• 70.154 DynaPDF.GetFieldColor	2790
• 70.155 DynaPDF.GetFieldCount	2791
• 70.156 DynaPDF.GetFieldExpValCount	2792
• 70.157 DynaPDF.GetFieldExpValue	2793
• 70.158 DynaPDF.GetFieldExpValueEx	2794
• 70.159 DynaPDF.GetFieldFlags	2796
• 70.160 DynaPDF.GetFieldGroupType	2797
• 70.161 DynaPDF.GetFieldHighlightMode	2798
• 70.162 DynaPDF.GetFieldIndex	2799
• 70.163 DynaPDF.GetFieldMapName	2800
• 70.164 DynaPDF.GetFieldName	2801
• 70.165 DynaPDF.GetFieldOrientation	2802
• 70.166 DynaPDF.GetFieldTextAlign	2803
• 70.167 DynaPDF.GetFieldTextColor	2804
• 70.168 DynaPDF.GetFieldToolTip	2805
• 70.169 DynaPDF.GetFieldType	2806
• 70.170 DynaPDF.GetFontCount	2807
• 70.171 DynaPDF.GetFontOrigin	2808
• 70.172 DynaPDF.GetFontSelMode	2809

- 70.173 DynaPDF.GetFontWeight 2810
- 70.174 DynaPDF.GetGStateFlags 2811
- 70.175 DynaPDF.GetImage 2812
- 70.176 DynaPDF.GetImageCount 2815
- 70.177 DynaPDF.GetImportDocInfo 2817
- 70.178 DynaPDF.GetImportFlags 2819
- 70.179 DynaPDF.GetImportFlags2 2820
- 70.180 DynaPDF.GetImportOrientation 2821
- 70.181 DynaPDF.GetImportPDFVersion 2822
- 70.182 DynaPDF.GetImportPageBounds 2823
- 70.183 DynaPDF.GetImportPageCount 2825
- 70.184 DynaPDF.GetInDocInfoCount 2828
- 70.185 DynaPDF.GetInFieldCount 2829
- 70.186 DynaPDF.GetInIsCollection 2830
- 70.187 DynaPDF.GetInIsEncrypted 2831
- 70.188 DynaPDF.GetInIsSigned 2832
- 70.189 DynaPDF.GetInIsTrapped 2833
- 70.190 DynaPDF.GetInIsXFAForm 2834
- 70.191 DynaPDF.GetInMetadata 2835
- 70.192 DynaPDF.GetInPrintSettings 2837
- 70.193 DynaPDF.GetInRepairMode 2838
- 70.194 DynaPDF.GetIsFixedPitch 2839
- 70.195 DynaPDF.GetIsTaggingEnabled 2840
- 70.196 DynaPDF.GetJPEGQuality 2841
- 70.197 DynaPDF.GetJavaScriptCount 2842
- 70.198 DynaPDF.GetLanguage 2843
- 70.199 DynaPDF.GetLastErrorMessage 2844
- 70.200 DynaPDF.GetLastTextPosX 2845
- 70.201 DynaPDF.GetLastTextPosY 2846

	445
• 70.202 DynaPDF.GetLeading	2847
• 70.203 DynaPDF.GetLineWidth	2848
• 70.204 DynaPDF.GetLinkHighlightMode	2849
• 70.205 DynaPDF.GetLogMetafileSize	2850
• 70.206 DynaPDF.GetLogMetafileSizeEx	2851
• 70.207 DynaPDF.GetMetaConvFlags	2852
• 70.208 DynaPDF.GetMetadata	2853
• 70.209 DynaPDF.GetOCG	2855
• 70.210 DynaPDF.GetOCGContUsage	2858
• 70.211 DynaPDF.GetOCGCount	2860
• 70.212 DynaPDF.GetOCGUsageUserName	2861
• 70.213 DynaPDF.GetOpacity	2862
• 70.214 DynaPDF.GetOrientation	2863
• 70.215 DynaPDF.GetOutputIntent	2864
• 70.216 DynaPDF.GetOutputIntentCount	2866
• 70.217 DynaPDF.GetPDFVersion	2867
• 70.218 DynaPDF.GetPageAnnotCount	2868
• 70.219 DynaPDF.GetPageAnnotation	2869
• 70.220 DynaPDF.GetPageBBox	2870
• 70.221 DynaPDF.GetPageCoords	2872
• 70.222 DynaPDF.GetPageCount	2873
• 70.223 DynaPDF.GetPageFieldCount	2875
• 70.224 DynaPDF.GetPageHeight	2876
• 70.225 DynaPDF.GetPageLabel	2878
• 70.226 DynaPDF.GetPageLabelCount	2880
• 70.227 DynaPDF.GetPageLayout	2881
• 70.228 DynaPDF.GetPageMode	2882
• 70.229 DynaPDF.GetPageNum	2883
• 70.230 DynaPDF.GetPageWidth	2884

- 70.231 DynaPDF.GetPrintSettings 2886
- 70.232 DynaPDF.GetReplaceICCProfile 2887
- 70.233 DynaPDF.GetReplaceICCProfileData 2888
- 70.234 DynaPDF.GetReplaceICCProfilesCounter 2889
- 70.235 DynaPDF.GetResolution 2890
- 70.236 DynaPDF.GetSaveNewImageFormat 2891
- 70.237 DynaPDF.GetTemplCount 2892
- 70.238 DynaPDF.GetTemplHeight 2893
- 70.239 DynaPDF.GetTemplWidth 2894
- 70.240 DynaPDF.GetTextDrawMode 2895
- 70.241 DynaPDF.GetTextFieldDefaultValue 2896
- 70.242 DynaPDF.GetTextFieldValue 2897
- 70.243 DynaPDF.GetTextRise 2898
- 70.244 DynaPDF.GetTextScaling 2899
- 70.245 DynaPDF.GetTextWidth 2900
- 70.246 DynaPDF.GetTransparentColor 2902
- 70.247 DynaPDF.GetTrapped 2903
- 70.248 DynaPDF.GetUseExactPwd 2904
- 70.249 DynaPDF.GetUseGlobalImpFiles 2905
- 70.250 DynaPDF.GetUseStdFonts 2906
- 70.251 DynaPDF.GetUseSystemFonts 2907
- 70.252 DynaPDF.GetUseTransparency 2908
- 70.253 DynaPDF.GetUseVisibleCoords 2909
- 70.254 DynaPDF.GetUserRights 2910
- 70.255 DynaPDF.GetUserUnit 2911
- 70.256 DynaPDF.GetUsesTransparency 2912
- 70.257 DynaPDF.GetViewerPreferences 2914
- 70.258 DynaPDF.GetWMFDefExtent 2915
- 70.259 DynaPDF.GetWMFPixelPerInch 2916

	447
• 70.260 DynaPDF.GetWordSpacing	2917
• 70.261 DynaPDF.GetXFASStream	2918
• 70.262 DynaPDF.GetXFASStreamCount	2920
• 70.263 DynaPDF.HaveOpenDocument	2921
• 70.264 DynaPDF.HaveOpenPage	2922
• 70.265 DynaPDF.HighlightAnnot	2923
• 70.266 DynaPDF.HighlightPattern	2925
• 70.267 DynaPDF.ImportEncryptionSettings	2927
• 70.268 DynaPDF.ImportPDFFile	2928
• 70.269 DynaPDF.ImportPDFPage	2931
• 70.270 DynaPDF.ImportPageAsTemplate	2934
• 70.271 DynaPDF.InitColorManagement	2936
• 70.272 DynaPDF.InitColorManagementEx	2939
• 70.273 DynaPDF.Initialize	2941
• 70.274 DynaPDF.InsertBookmark	2948
• 70.275 DynaPDF.InsertBookmarkEx	2950
• 70.276 DynaPDF.InsertImage	2952
• 70.277 DynaPDF.InsertImageFile	2956
• 70.278 DynaPDF.InsertMetafile	2959
• 70.279 DynaPDF.InsertMetafileEx	2961
• 70.280 DynaPDF.IsColorPage	2963
• 70.281 DynaPDF.IsEmptyPage	2965
• 70.282 DynaPDF.IsInitialized	2966
• 70.283 DynaPDF.LineAnnot	2969
• 70.284 DynaPDF.LineTo	2971
• 70.285 DynaPDF.List	2973
• 70.286 DynaPDF.ListImages	2974
• 70.287 DynaPDF.LockLayer	2977
• 70.288 DynaPDF.MovePage	2978

- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981
- 70.291 DynaPDF.OpenOutputFile 2984
- 70.292 DynaPDF.OpenOutputFileEncrypted 2986
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992
- 70.295 DynaPDF.Optimize 2995
- 70.296 DynaPDF.PageLink 3001
- 70.297 DynaPDF.PageLinkEx 3004
- 70.298 DynaPDF.PageStatistics 3008
- 70.299 DynaPDF.ParseContent 3011
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.301 DynaPDF.PlaceTemplateEx 3015
- 70.302 DynaPDF.Print 3017
- 70.303 DynaPDF.Print.GetDevMode 3021
- 70.304 DynaPDF.Print.GetDevNames 3022
- 70.305 DynaPDF.Print.SetDevMode 3023
- 70.306 DynaPDF.Print.SetDevNames 3025
- 70.307 DynaPDF.RGB 3026
- 70.308 DynaPDF.ReadImageFormat 3028
- 70.309 DynaPDF.ReadImageResolution 3030
- 70.310 DynaPDF.Rectangle 3031
- 70.311 DynaPDF.Release 3033
- 70.312 DynaPDF.RenameSpotColor 3035
- 70.313 DynaPDF.RenderPDFFile 3036
- 70.314 DynaPDF.RenderPDFFileEx 3038
- 70.315 DynaPDF.RenderPage 3040
- 70.316 DynaPDF.ReplaceImage 3043
- 70.317 DynaPDF.ReplacePattern 3046

	449
• 70.318 DynaPDF.ResetEncryptionSettings	3049
• 70.319 DynaPDF.RestoreGraphicState	3050
• 70.320 DynaPDF.RotateCoords	3052
• 70.321 DynaPDF.RotateTemplate	3055
• 70.322 DynaPDF.RoundRect	3058
• 70.323 DynaPDF.RoundRectEx	3060
• 70.324 DynaPDF.Save	3062
• 70.325 DynaPDF.SaveAndSignFile	3065
• 70.326 DynaPDF.SaveAndSignFileWinCrypt	3067
• 70.327 DynaPDF.SaveAndSignFileWinCryptDialog	3069
• 70.328 DynaPDF.SaveGraphicState	3071
• 70.329 DynaPDF.ScaleCoords	3072
• 70.330 DynaPDF.SetAlpha	3074
• 70.331 DynaPDF.SetAnnotBorderStyle	3076
• 70.332 DynaPDF.SetAnnotBorderWidth	3078
• 70.333 DynaPDF.SetAnnotColor	3079
• 70.334 DynaPDF.SetAnnotDate	3081
• 70.335 DynaPDF.SetAnnotFlags	3083
• 70.336 DynaPDF.SetAnnotFlagsEx	3085
• 70.337 DynaPDF.SetAnnotHighlightMode	3086
• 70.338 DynaPDF.SetAnnotIcon	3087
• 70.339 DynaPDF.SetAnnotLineEndStyle	3088
• 70.340 DynaPDF.SetAnnotOpacity	3089
• 70.341 DynaPDF.SetAnnotOpenState	3090
• 70.342 DynaPDF.SetAnnotString	3091
• 70.343 DynaPDF.SetAnnotSubject	3092
• 70.344 DynaPDF.SetBBox	3093
• 70.345 DynaPDF.SetBookmarkDest	3095
• 70.346 DynaPDF.SetBookmarkStyle	3097

- 70.347 DynaPDF.SetBorderStyle 3099
- 70.348 DynaPDF.SetCMapDir 3100
- 70.349 DynaPDF.SetCharacterSpacing 3101
- 70.350 DynaPDF.SetCheckBoxChar 3102
- 70.351 DynaPDF.SetCheckBoxDefState 3103
- 70.352 DynaPDF.SetCheckBoxState 3104
- 70.353 DynaPDF.SetColorSpace 3105
- 70.354 DynaPDF.SetCompressionFilter 3107
- 70.355 DynaPDF.SetCompressionLevel 3109
- 70.356 DynaPDF.SetContent 3110
- 70.357 DynaPDF.SetDocInfo 3111
- 70.358 DynaPDF.SetDocInfoEx 3113
- 70.359 DynaPDF.SetDrawDirection 3115
- 70.360 DynaPDF.SetExtColorSpace 3116
- 70.361 DynaPDF.SetExtFillColorSpace 3118
- 70.362 DynaPDF.SetExtStrokeColorSpace 3119
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.364 DynaPDF.SetFieldBackColor 3122
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.366 DynaPDF.SetFieldBorderStyle 3124
- 70.367 DynaPDF.SetFieldBorderWidth 3125
- 70.368 DynaPDF.SetFieldColor 3127
- 70.369 DynaPDF.SetFieldDate 3129
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.371 DynaPDF.SetFieldExpValueEx 3132
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.373 DynaPDF.SetFieldFont 3136
- 70.374 DynaPDF.SetFieldFontEx 3138
- 70.375 DynaPDF.SetFieldFontSize 3140

	451
• 70.376 DynaPDF.SetFieldHighlightMode	3141
• 70.377 DynaPDF.SetFieldIndex	3142
• 70.378 DynaPDF.SetFieldMapName	3143
• 70.379 DynaPDF.SetFieldName	3144
• 70.380 DynaPDF.SetFieldOrientation	3146
• 70.381 DynaPDF.SetFieldTextAlign	3147
• 70.382 DynaPDF.SetFieldTextColor	3148
• 70.383 DynaPDF.SetFieldToolTip	3149
• 70.384 DynaPDF.SetFillColor	3150
• 70.385 DynaPDF.SetFloatPrecision	3153
• 70.386 DynaPDF.SetFont	3154
• 70.387 DynaPDF.SetFontEx	3156
• 70.388 DynaPDF.SetFontOrigin	3158
• 70.389 DynaPDF.SetFontSearchOrder	3159
• 70.390 DynaPDF.SetFontSelMode	3161
• 70.391 DynaPDF.SetFontWeight	3162
• 70.392 DynaPDF.SetGStateFlags	3164
• 70.393 DynaPDF.SetImportFlags	3166
• 70.394 DynaPDF.SetImportFlags2	3170
• 70.395 DynaPDF.SetJPEGQuality	3172
• 70.396 DynaPDF.SetLanguage	3174
• 70.397 DynaPDF.SetLeading	3176
• 70.398 DynaPDF.SetLineJoinStyle	3177
• 70.399 DynaPDF.SetLineWidth	3178
• 70.400 DynaPDF.SetLinkHighlightMode	3180
• 70.401 DynaPDF.SetMetaConvFlags	3181
• 70.402 DynaPDF.SetMetadata	3183
• 70.403 DynaPDF.SetMiterLimit	3185
• 70.404 DynaPDF.SetNumberFormat	3186

- 70.405 DynaPDF.SetOCGState 3188
- 70.406 DynaPDF.SetOpacity 3190
- 70.407 DynaPDF.SetOrientation 3191
- 70.408 DynaPDF.SetOrientationEx 3192
- 70.409 DynaPDF.SetPDFVersion 3195
- 70.410 DynaPDF.SetPageBBox 3197
- 70.411 DynaPDF.SetPageCoords 3199
- 70.412 DynaPDF.SetPageFormat 3201
- 70.413 DynaPDF.SetPageHeight 3203
- 70.414 DynaPDF.SetPageLayout 3206
- 70.415 DynaPDF.SetPageMode 3207
- 70.416 DynaPDF.SetPageWidth 3208
- 70.417 DynaPDF.SetPrintSettings 3211
- 70.418 DynaPDF.SetReplaceICCProfile 3213
- 70.419 DynaPDF.SetReplaceICCProfileData 3215
- 70.420 DynaPDF.SetResolution 3217
- 70.421 DynaPDF.SetSaveNewImageFormat 3219
- 70.422 DynaPDF.SetSeparationInfo 3221
- 70.423 DynaPDF.SetStrokeColor 3222
- 70.424 DynaPDF.SetTextDrawMode 3224
- 70.425 DynaPDF.SetTextFieldValue 3226
- 70.426 DynaPDF.SetTextFieldValueEx 3228
- 70.427 DynaPDF.SetTextRect 3229
- 70.428 DynaPDF.SetTextRise 3231
- 70.429 DynaPDF.SetTextScaling 3232
- 70.430 DynaPDF.SetTransparentColor 3233
- 70.431 DynaPDF.SetTrapped 3234
- 70.432 DynaPDF.SetUseExactPwd 3235
- 70.433 DynaPDF.SetUseGlobalImpFiles 3236

	453
• 70.434 DynaPDF.SetUseStdFonts	3237
• 70.435 DynaPDF.SetUseSystemFonts	3239
• 70.436 DynaPDF.SetUseTransparency	3241
• 70.437 DynaPDF.SetUseVisibleCoords	3242
• 70.438 DynaPDF.SetUserUnit	3243
• 70.439 DynaPDF.SetViewerPreferences	3244
• 70.440 DynaPDF.SetWMFDefExtent	3245
• 70.441 DynaPDF.SetWMFPixelPerInch	3246
• 70.442 DynaPDF.SetWordSpacing	3247
• 70.443 DynaPDF.SetXFASStream	3248
• 70.444 DynaPDF.ShowDifferences	3249
• 70.445 DynaPDF.SkewCoords	3251
• 70.446 DynaPDF.SquareAnnot	3253
• 70.447 DynaPDF.StampAnnot	3255
• 70.448 DynaPDF.StrokePath	3257
• 70.449 DynaPDF.SysFontInfo	3259
• 70.450 DynaPDF.Table.AddColumn	3261
• 70.451 DynaPDF.Table.AddRow	3262
• 70.452 DynaPDF.Table.AddRows	3264
• 70.453 DynaPDF.Table.ClearColumn	3265
• 70.454 DynaPDF.Table.ClearContent	3266
• 70.455 DynaPDF.Table.ClearRow	3268
• 70.456 DynaPDF.Table.Create	3270
• 70.457 DynaPDF.Table.DeleteCol	3273
• 70.458 DynaPDF.Table.DeleteRow	3274
• 70.459 DynaPDF.Table.DeleteRows	3275
• 70.460 DynaPDF.Table.Draw	3276
• 70.461 DynaPDF.Table.GetFirstRow	3279
• 70.462 DynaPDF.Table.GetNextHeight	3280

- 70.463 DynaPDF.Table.GetNextHeightRow 3281
- 70.464 DynaPDF.Table.GetNextRow 3282
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.467 DynaPDF.Table.GetPDF 3285
- 70.468 DynaPDF.Table.GetTableHeight 3286
- 70.469 DynaPDF.Table.GetTableWidth 3287
- 70.470 DynaPDF.Table.HaveMore 3288
- 70.471 DynaPDF.Table.Release 3289
- 70.472 DynaPDF.Table.SetBorderWidth 3290
- 70.473 DynaPDF.Table.SetBoxProperty 3292
- 70.474 DynaPDF.Table.SetCellAction 3294
- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.476 DynaPDF.Table.SetCellImageEx 3299
- 70.477 DynaPDF.Table.SetCellOrientation 3301
- 70.478 DynaPDF.Table.SetCellPadding 3303
- 70.479 DynaPDF.Table.SetCellSpacing 3305
- 70.480 DynaPDF.Table.SetCellTable 3307
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.484 DynaPDF.Table.SetColor 3316
- 70.485 DynaPDF.Table.SetColorFloat 3318
- 70.486 DynaPDF.Table.SetFlags 3320
- 70.487 DynaPDF.Table.SetFont 3322
- 70.488 DynaPDF.Table.SetFontSelMode 3324
- 70.489 DynaPDF.Table.SetFontSize 3325
- 70.490 DynaPDF.Table.SetGridWidth 3327
- 70.491 DynaPDF.Table.SetPDF 3329

	455
• 70.492 DynaPDF.Table.SetRGBColor	3330
• 70.493 DynaPDF.Table.SetRowHeight	3332
• 70.494 DynaPDF.Table.SetTableWidth	3333
• 70.495 DynaPDF.TextAnnot	3335
• 70.496 DynaPDF.TranslateCoords	3337
• 70.497 DynaPDF.Triangle	3339
• 70.498 DynaPDF.UnLockLayer	3341
• 70.499 DynaPDF.Uninitialize	3342
• 70.500 DynaPDF.WatermarkAnnot	3343
• 70.501 DynaPDF.WebLink	3345
• 70.502 DynaPDF.WriteDemoText	3348
• 70.503 DynaPDF.WriteFText	3350
• 70.504 DynaPDF.WriteFTextEx	3352
• 70.505 DynaPDF.WriteFTextExRotated	3356
• 70.506 DynaPDF.WriteStyledText	3358
• 70.507 DynaPDF.WriteStyledTextEx	3360
• 70.508 DynaPDF.WriteStyledTextExRotated	3362
• 70.509 DynaPDF.WriteText	3364
• 149.1 ECKey.BuiltInCurves	7061
• 149.2 ECKey.Description	7063
• 149.3 ECKey.Duplicate	7064
• 149.4 ECKey.Generate	7065
• 149.5 ECKey.PrivateKey	7067
• 149.6 ECKey.PublicKey	7068
• 149.7 ECKey.ReadPrivateKey	7069
• 149.8 ECKey.ReadPublicKey	7070
• 149.9 ECKey.Release	7071
• 149.10 ECKey.Sign	7072
• 149.11 ECKey.Size	7073

- 149.12 ECKey.Verify 7074
- 175.2 Email.Verify 8231
- 72.1 EmailParser.Address 3403
- 72.2 EmailParser.AddressCount 3406
- 72.3 EmailParser.AttachedEmails 3407
- 72.4 EmailParser.Attachment 3408
- 72.5 EmailParser.AttachmentCount 3410
- 72.6 EmailParser.Free 3411
- 72.7 EmailParser.HTMLText 3413
- 72.8 EmailParser.HTMLToPlainText 3415
- 72.9 EmailParser.HasHeader 3416
- 72.10 EmailParser.Hash 3417
- 72.11 EmailParser.Header 3418
- 72.12 EmailParser.HeaderCount 3420
- 72.13 EmailParser.HeaderValue 3421
- 72.14 EmailParser.Inline 3422
- 72.15 EmailParser.InlineCount 3424
- 72.16 EmailParser.List 3425
- 72.17 EmailParser.MessageID 3426
- 72.18 EmailParser.Parse 3427
- 72.19 EmailParser.ParseContainer 3431
- 72.20 EmailParser.ParseFile 3432
- 72.21 EmailParser.PlainText 3433
- 72.22 EmailParser.ProcessImageReferences 3435
- 72.23 EmailParser.ReceiveDate 3436
- 72.24 EmailParser.SentDate 3437
- 72.25 EmailParser.Source 3438
- 72.26 EmailParser.SourceWithoutAttachments 3439
- 72.27 EmailParser.Subject 3440

	457
• 72.28 EmailParser.WriteAttachment	3442
• 72.29 EmailParser.WriteInline	3443
• 73.1 Encryption.Cipher	3445
• 73.2 Encryption.CipherNames	3451
• 73.3 Encryption.DecryptAES	3452
• 73.4 Encryption.DecryptBlowfish	3454
• 73.5 Encryption.DecryptContainerAES	3456
• 73.6 Encryption.DecryptContainerBlowfish	3458
• 73.7 Encryption.DigestNames	3460
• 73.8 Encryption.EncryptAES	3461
• 73.9 Encryption.EncryptBlowfish	3463
• 73.10 Encryption.EncryptContainerAES	3465
• 73.11 Encryption.EncryptContainerBlowfish	3467
• 74.1 EnvironmentVariables.ClearValue	3485
• 74.2 EnvironmentVariables.Count	3487
• 74.3 EnvironmentVariables.Name	3488
• 74.4 EnvironmentVariables.Names	3489
• 74.5 EnvironmentVariables.SetValue	3490
• 74.6 EnvironmentVariables.Value	3491
• 75.1 EventMonitor.Clear	3493
• 75.2 EventMonitor.ClearCardWindow	3494
• 75.3 EventMonitor.GetEnabled	3495
• 75.4 EventMonitor.Install	3496
• 75.5 EventMonitor.LastMouseClickedButton	3497
• 75.6 EventMonitor.LastMouseClickedIsDoubleClick	3498
• 75.7 EventMonitor.LastMousePositionX	3499
• 75.8 EventMonitor.LastMousePositionY	3500
• 75.9 EventMonitor.SetCardWindow	3501
• 75.10 EventMonitor.SetEnabled	3504

- 79.2 FM.Argument 3885
- 79.3 FM.ArgumentCount 3886
- 79.4 FM.Beep 3887
- 80.3 FM.CompareTables 4069
- 79.7 FM.CurrentScriptID 3893
- 79.8 FM.CurrentScriptName 3894
- 79.9 FM.CurrentThreadID 3895
- 79.10 FM.DataType 3896
- 80.4 FM.DeleteRecord 4073
- 80.5 FM.DeleteRecords 4076
- 79.14 FM.DisableMouseWheel 3904
- 79.16 FM.EnableMouseWheel 3906
- 79.17 FM.Evaluate 3907
- 80.6 FM.ExecuteFileSQL 4079
- 80.7 FM.ExecuteFileSQLOnIdle 4086
- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.12 FM.ExecuteSQLOnIdle 4100
- 79.27 FM.GetDisableContextualMenus 3934
- 80.13 FM.GetSQLBatchMode 4103
- 79.29 FM.InitMessageFilter 3936
- 80.14 FM.InsertOrUpdateRecord 4104
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115
- 80.19 FM.InsertRecordCSV 4119

	459
• 80.20 FM.InsertRecordQuery	4122
• 80.21 FM.InsertRecordQueryIgnoreDuplicates	4126
• 80.22 FM.InsertRecordTSV	4129
• 80.23 FM.InsertSetUpdateProgressDialog	4132
• 79.40 FM.IsMainThread	3967
• 79.41 FM.Loop	3968
• 79.42 FM.MainThreadID	3972
• 79.43 FM.MouseWheelScriptTrigger	3973
• 80.24 FM.NULL	4134
• 79.46 FM.QueryBaseTableNames	3978
• 79.47 FM.QueryFieldsForBaseTableName	3979
• 79.48 FM.QueryFieldsForTableName	3980
• 79.49 FM.QueryTableNames	3982
• 79.50 FM.RunDatabaseDesignReport	3983
• 79.51 FM.RunSaveAsXML	3985
• 79.52 FM.RunScript	3986
• 79.53 FM.RunScriptIdle	3988
• 79.54 FM.RunScriptLater	3990
• 79.55 FM.SQL.Avg	3992
• 80.25 FM.SQL.CSV	4135
• 80.26 FM.SQL.Execute	4138
• 80.27 FM.SQL.Field	4141
• 80.28 FM.SQL.FieldCount	4143
• 80.29 FM.SQL.FieldType	4145
• 80.30 FM.SQL.InsertRecords	4146
• 156.1 FM.SQL.InsertRecordsToSQL	7291
• 100.2 FM.SQL.JSONRecord	5234
• 100.3 FM.SQL.JSONRecords	5236
• 79.65 FM.SQL.Max	4014

- 79.66 FM.SQL.Min 4016
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 79.69 FM.SQL.Sum 4022
- 80.36 FM.SQL.Text 4159
- 79.71 FM.ScriptIDForScriptName 4027
- 79.72 FM.ScriptNameForScriptID 4028
- 79.73 FM.ScriptNames 4029
- 79.74 FM.SetDisableContextualMenus 4030
- 80.37 FM.SetSQLBatchMode 4162
- 79.76 FM.SetThreadName 4033
- 79.77 FM.StopScriptIdle 4034
- 79.78 FM.TableStatistics 4035
- 80.38 FM.UpdateRecord 4164
- 79.80 FM.UpdateRecord2 4041
- 79.81 FM.UpdateRecord3 4043
- 80.39 FM.UpdateRecords 4167
- 79.83 FM.UpdateRecords2 4048
- 79.84 FM.UpdateRecords3 4050
- 178.1 FM.VariableAdd 8259
- 178.2 FM.VariableAppend 8261
- 178.3 FM.VariableClear 8262
- 178.4 FM.VariableClearAll 8263
- 178.5 FM.VariableExists 8264
- 178.6 FM.VariableGet 8265
- 178.7 FM.VariableList 8267
- 178.8 FM.VariableNames 8268
- 178.9 FM.VariableReset 8269
- 178.10 FM.VariableSet 8270

	461
• 77.11 FileDialog.GetAllowMulti	3719
• 77.14 FileDialog.GetFilter	3722
• 77.15 FileDialog.GetInitialDirectory	3723
• 77.16 FileDialog.GetMessage	3724
• 77.17 FileDialog.GetNameFieldLabel	3725
• 77.18 FileDialog.GetNameFieldStringValue	3726
• 77.19 FileDialog.GetPath	3727
• 77.20 FileDialog.GetPathCount	3730
• 77.21 FileDialog.GetPrompt	3731
• 77.22 FileDialog.GetResolvesAliases	3732
• 77.23 FileDialog.GetShowHidden	3733
• 77.26 FileDialog.GetWindowTitle	3736
• 77.27 FileDialog.OpenFileDialog	3737
• 77.28 FileDialog.Reset	3740
• 77.29 FileDialog.SaveFileDialog	3742
• 77.30 FileDialog.SelectFolderDialog	3744
• 77.31 FileDialog.SelectItemDialog	3747
• 77.32 FileDialog.SetAllowMulti	3749
• 77.33 FileDialog.SetAllowsOtherFileTypes	3751
• 77.35 FileDialog.SetFilter	3753
• 77.36 FileDialog.SetInitialDirectory	3755
• 77.37 FileDialog.SetMessage	3757
• 77.38 FileDialog.SetNameFieldLabel	3759
• 77.39 FileDialog.SetNameFieldStringValue	3760
• 77.40 FileDialog.SetPrompt	3761
• 77.41 FileDialog.SetResolvesAliases	3763
• 77.43 FileDialog.SetShowHidden	3765
• 77.46 FileDialog.SetWindowTitle	3768
• 78.1 Files.AccessDate	3771

- 78.3 Files.AppPath 3774
- 78.4 Files.AudioTags 3775
- 78.5 Files.CanOpenFile 3777
- 78.6 Files.CopyFile 3778
- 78.8 Files.CreateAlias 3782
- 78.10 Files.CreateDirectory 3785
- 78.11 Files.CreateHardLink 3787
- 78.12 Files.CreateSymbolicLink 3789
- 78.13 Files.CreationDate 3790
- 78.14 Files.Delete 3792
- 78.15 Files.DeleteFolder 3794
- 78.16 Files.DirectoryExists 3796
- 78.17 Files.DiskInfo 3798
- 78.18 Files.FileDisplayName 3800
- 78.19 Files.FileExists 3801
- 78.20 Files.FileExtension 3803
- 78.21 Files.FileInfo 3804
- 78.22 Files.FileKind 3806
- 78.23 Files.FileName 3807
- 78.24 Files.FileSize 3808
- 78.26 Files.FolderSize 3811
- 78.29 Files.GetNodeID 3815
- 78.30 Files.GetPathFromNodeID 3817
- 78.33 Files.IsHidden 3821
- 78.34 Files.ItemExists 3822
- 78.35 Files.Launch 3823
- 78.36 Files.LaunchFile 3826
- 78.37 Files.List 3828
- 78.38 Files.ListRecursive 3831

	463
• 78.39 Files.ListVolumes	3833
• 78.40 Files.ModificationDate	3834
• 78.41 Files.Mount	3836
• 78.42 Files.MountPath	3839
• 78.43 Files.MoveFile	3840
• 78.44 Files.MoveToTrash	3842
• 78.45 Files.ReadFile	3844
• 78.46 Files.ReadJPEG	3847
• 78.47 Files.ReadPDF	3849
• 78.48 Files.ReadPNG	3851
• 78.49 Files.RenameFile	3853
• 78.50 Files.ResolveAlias	3855
• 78.52 Files.RevealFile	3858
• 78.53 Files.SetAudioTags	3860
• 78.55 Files.SetCreationDate	3863
• 78.57 Files.SetHidden	3865
• 78.58 Files.SetModificationDate	3866
• 78.61 Files.Unmount	3870
• 78.62 Files.WriteFile	3871
• 81.1 Folders.Applications	4169
• 81.3 Folders.LocalPreferences	4171
• 81.4 Folders.SharedDocuments	4172
• 81.5 Folders.System	4173
• 81.6 Folders.SystemFonts	4174
• 81.7 Folders.SystemTemporary	4175
• 81.8 Folders.UserDesktop	4177
• 81.9 Folders.UserDocuments	4179
• 81.10 Folders.UserDownloads	4181
• 81.12 Folders.UserHome	4183

- 81.13 Folders.UserMusic 4184
- 81.15 Folders.UserPreferences 4186
- 81.16 Folders.UserTemporary 4187
- 81.17 Folders.UserTrash 4189
- 81.18 Folders.UserVideo 4190
- 81.19 Folders.Windows 4191
- 82.1 Font.Activate 4193
- 82.2 Font.CalculateTextFits 4195
- 82.3 Font.CalculateTextHeight 4197
- 82.4 Font.CalculateTextWidth 4199
- 82.5 Font.Deactivate 4201
- 82.7 FontManager.ListFontFamilies 4203
- 82.8 FontManager.ListFonts 4204
- 85.1 GMImage.AdaptiveThreshold 4337
- 85.2 GMImage.AddNoise 4339
- 85.3 GMImage.AddNoiseChannel 4340
- 85.4 GMImage.AddPathArcAbs 4341
- 85.5 GMImage.AddPathArcRel 4343
- 85.6 GMImage.AddPathClosePath 4345
- 85.7 GMImage.AddPathCurvetoAbs 4346
- 85.8 GMImage.AddPathCurvetoRel 4348
- 85.9 GMImage.AddPathLinetoAbs 4350
- 85.10 GMImage.AddPathLinetoHorizontalAbs 4351
- 85.11 GMImage.AddPathLinetoHorizontalRel 4352
- 85.12 GMImage.AddPathLinetoRel 4353
- 85.13 GMImage.AddPathLinetoVerticalAbs 4354
- 85.14 GMImage.AddPathLinetoVerticalRel 4355
- 85.15 GMImage.AddPathMovetoAbs 4356
- 85.16 GMImage.AddPathMovetoRel 4357

	465
• 85.17 GMImage.AddPathQuadraticCurvetoAbs	4358
• 85.18 GMImage.AddPathQuadraticCurvetoRel	4359
• 85.19 GMImage.AddPathSmoothCurvetoAbs	4360
• 85.20 GMImage.AddPathSmoothCurvetoRel	4361
• 85.21 GMImage.AddPathSmoothQuadraticCurvetoAbs	4362
• 85.22 GMImage.AddPathSmoothQuadraticCurvetoRel	4363
• 85.23 GMImage.Affine	4364
• 85.24 GMImage.Annotate	4365
• 85.25 GMImage.AutoOrient	4369
• 85.26 GMImage.AveragePixelValue	4370
• 85.27 GMImage.BaseColumns	4372
• 85.28 GMImage.BaseFilename	4373
• 85.29 GMImage.BaseRows	4374
• 85.30 GMImage.Blur	4375
• 85.31 GMImage.BlurChannel	4377
• 85.32 GMImage.Border	4378
• 85.33 GMImage.BoundingBox	4380
• 85.34 GMImage.Channel	4381
• 85.35 GMImage.Charcoal	4383
• 85.36 GMImage.Chop	4385
• 85.37 GMImage.ClipMask	4386
• 85.38 GMImage.ClipPath	4387
• 85.39 GMImage.Coders	4388
• 85.40 GMImage.Colorize	4389
• 85.41 GMImage.ColorizeRGB	4391
• 85.42 GMImage.Columns	4393
• 85.43 GMImage.Compare	4394
• 85.44 GMImage.Composite	4396
• 85.45 GMImage.CompositeXY	4398

- 85.46 GImage.Contrast 4400
- 85.47 GImage.Copy 4401
- 85.48 GImage.CopyChannel 4402
- 85.49 GImage.Crop 4405
- 85.50 GImage.CycleColormap 4407
- 85.51 GImage.Despeckle 4408
- 85.52 GImage.Directory 4409
- 85.53 GImage.DrawArc 4410
- 85.54 GImage.DrawCircle 4412
- 85.55 GImage.DrawEllipse 4414
- 85.56 GImage.DrawLine 4416
- 85.57 GImage.DrawPath 4418
- 85.58 GImage.DrawRectangle 4419
- 85.59 GImage.DrawRoundRectangle 4422
- 85.60 GImage.Edge 4424
- 85.61 GImage.Emboss 4425
- 85.62 GImage.Enhance 4427
- 85.63 GImage.Equalize 4428
- 85.64 GImage.Erase 4429
- 85.65 GImage.ExifThumbnail 4430
- 85.66 GImage.Extent 4431
- 85.67 GImage.FillPattern 4433
- 85.68 GImage.FindColorInColumn 4434
- 85.69 GImage.FindColorInRow 4436
- 85.70 GImage.Flip 4438
- 85.71 GImage.FloodFillColor 4440
- 85.72 GImage.FloodFillColorXY 4442
- 85.73 GImage.FloodFillOpacity 4444
- 85.74 GImage.FloodFillTexture 4445

	467
• 85.75 GMImage.FloodFillTextureXY	4446
• 85.76 GMImage.Flop	4447
• 85.77 GMImage.FontMap	4449
• 85.78 GMImage.FontTypeMetrics	4450
• 85.79 GMImage.Format	4452
• 85.80 GMImage.Frame	4453
• 85.81 GMImage.Free	4455
• 85.82 GMImage.FreeAll	4457
• 85.83 GMImage.Gamma	4458
• 85.84 GMImage.GaussianBlur	4459
• 85.85 GMImage.GaussianBlurChannel	4460
• 85.86 GMImage.Geometry	4461
• 85.87 GMImage.GetAdjoin	4462
• 85.88 GMImage.GetAnimationDelay	4463
• 85.89 GMImage.GetAnimationIterations	4464
• 85.90 GMImage.GetAntiAlias	4465
• 85.91 GMImage.GetAttribute	4466
• 85.92 GMImage.GetAttributeNames	4468
• 85.93 GMImage.GetAttributesJSON	4469
• 85.94 GMImage.GetBackgroundColor	4471
• 85.95 GMImage.GetBackgroundTexture	4472
• 85.96 GMImage.GetBorderColor	4473
• 85.97 GMImage.GetBoxColor	4474
• 85.98 GMImage.GetChannelDepth	4475
• 85.99 GMImage.GetClassType	4476
• 85.100 GMImage.GetClipMask	4477
• 85.101 GMImage.GetColorFuzz	4478
• 85.102 GMImage.GetColorMapSize	4479
• 85.103 GMImage.GetColorSpace	4480

- 85.104 GImage.GetComment 4482
- 85.105 GImage.GetCompose 4483
- 85.106 GImage.GetCompressType 4484
- 85.107 GImage.GetDebug 4485
- 85.108 GImage.GetDefineSet 4486
- 85.109 GImage.GetDefineValue 4487
- 85.110 GImage.GetDensity 4488
- 85.111 GImage.GetDepth 4489
- 85.112 GImage.GetEXIFOrientation 4490
- 85.113 GImage.GetEndian 4491
- 85.114 GImage.GetFileName 4492
- 85.115 GImage.GetFileSize 4493
- 85.116 GImage.GetFillColor 4494
- 85.117 GImage.GetFillRule 4495
- 85.118 GImage.GetFilterType 4496
- 85.119 GImage.GetFont 4497
- 85.120 GImage.GetFontPointsize 4498
- 85.121 GImage.GetGamma 4499
- 85.122 GImage.GetGifDisposeMethod 4500
- 85.123 GImage.GetHeight 4501
- 85.124 GImage.GetICCColorProfile 4503
- 85.125 GImage.GetIPTCProfile 4504
- 85.126 GImage.GetIPTCProfileValues 4505
- 85.127 GImage.GetInterlaceType 4506
- 85.128 GImage.GetIsValid 4507
- 85.129 GImage.GetJPEGAsBase64 4508
- 85.130 GImage.GetJPEGAsHex 4509
- 85.131 GImage.GetLabel 4510
- 85.132 GImage.GetLineWidth 4511

	469
• 85.133 GImage.GetMagick	4512
• 85.134 GImage.GetMatte	4513
• 85.135 GImage.GetMatteColor	4514
• 85.136 GImage.GetModulusDepth	4515
• 85.137 GImage.GetMonochrome	4516
• 85.138 GImage.GetOrientation	4517
• 85.139 GImage.GetPNGAsBase64	4519
• 85.140 GImage.GetPNGAsHex	4520
• 85.141 GImage.GetPage	4521
• 85.142 GImage.GetPixelColor	4522
• 85.143 GImage.GetProfile	4524
• 85.144 GImage.GetQuality	4525
• 85.145 GImage.GetQuantizeColorSpace	4526
• 85.146 GImage.GetQuantizeColors	4527
• 85.147 GImage.GetQuantizeDither	4528
• 85.148 GImage.GetQuantizeTreeDepth	4529
• 85.149 GImage.GetQuiet	4530
• 85.150 GImage.GetRenderingIntent	4531
• 85.151 GImage.GetResolutionUnits	4532
• 85.152 GImage.GetScene	4533
• 85.153 GImage.GetSize	4534
• 85.154 GImage.GetStrokeAntiAlias	4535
• 85.155 GImage.GetStrokeColor	4536
• 85.156 GImage.GetStrokeDashArray	4537
• 85.157 GImage.GetStrokeDashOffset	4538
• 85.158 GImage.GetStrokeLineCap	4539
• 85.159 GImage.GetStrokeLineJoin	4540
• 85.160 GImage.GetStrokeMiterLimit	4541
• 85.161 GImage.GetStrokeWidth	4542

- 85.162 GImage.GetSubImage 4543
- 85.163 GImage.GetSubRange 4544
- 85.164 GImage.GetTextEncoding 4545
- 85.165 GImage.GetTileName 4546
- 85.166 GImage.GetType 4547
- 85.167 GImage.GetVerbose 4548
- 85.168 GImage.GetView 4549
- 85.169 GImage.GetWidth 4550
- 85.170 GImage.GetXMP 4552
- 85.171 GImage.GetcolorMap 4554
- 85.172 GImage.Hash 4555
- 85.173 GImage.ImageCount 4557
- 85.174 GImage.Implode 4558
- 85.175 GImage.InvertChannel 4559
- 85.176 GImage.IsGray 4561
- 85.177 GImage.Level 4562
- 85.178 GImage.LevelChannel 4563
- 85.179 GImage.List 4565
- 85.180 GImage.Magnify 4566
- 85.181 GImage.Map 4567
- 85.182 GImage.MatteFloodfill 4568
- 85.183 GImage.MeanErrorPerPixel 4569
- 85.184 GImage.MedianFilter 4570
- 85.185 GImage.Minify 4571
- 85.186 GImage.Modulate 4572
- 85.187 GImage.MontageGeometry 4574
- 85.188 GImage.MotionBlur 4575
- 85.189 GImage.MultiplyChannel 4576
- 85.190 GImage.Negate 4578

	471
• 85.191 GImage.New	4580
• 85.192 GImage.NewFromBase64	4583
• 85.193 GImage.NewFromContainer	4584
• 85.194 GImage.NewFromFile	4586
• 85.195 GImage.NewFromHex	4588
• 85.196 GImage.NewImagesFromContainer	4589
• 85.197 GImage.NewImagesFromFile	4590
• 85.198 GImage.Normalize	4592
• 85.199 GImage.NormalizedMaxError	4593
• 85.200 GImage.NormalizedMeanError	4595
• 85.201 GImage.OilPaint	4596
• 85.202 GImage.Opacity	4597
• 85.203 GImage.Opaque	4598
• 85.204 GImage.PopClipPath	4599
• 85.205 GImage.PurgeTemporaryFiles	4600
• 85.206 GImage.PushClipPath	4601
• 85.207 GImage.Quantize	4602
• 85.208 GImage.QuantumDepth	4604
• 85.209 GImage.Raise	4605
• 85.210 GImage.RandomThreshold	4607
• 85.211 GImage.RandomThresholdChannel	4608
• 85.212 GImage.Read	4609
• 85.213 GImage.ReduceNoise	4611
• 85.214 GImage.Release	4612
• 85.215 GImage.ReleaseAll	4614
• 85.216 GImage.Repage	4615
• 85.217 GImage.ReplaceColor	4616
• 85.218 GImage.Resize	4619
• 85.219 GImage.Roll	4621

- 85.220 GImage.Rollxy 4622
- 85.221 GImage.Rotate 4623
- 85.222 GImage.Rotating 4625
- 85.223 GImage.Rows 4626
- 85.224 GImage.Sample 4627
- 85.225 GImage.Scale 4628
- 85.226 GImage.Scaling 4632
- 85.227 GImage.Segment 4633
- 85.228 GImage.SetAdjoin 4634
- 85.229 GImage.SetAnimationDelay 4635
- 85.230 GImage.SetAnimationIterations 4636
- 85.231 GImage.SetAntiAlias 4637
- 85.232 GImage.SetAttribute 4638
- 85.233 GImage.SetBackgroundColor 4639
- 85.234 GImage.SetBackgroundTexture 4641
- 85.235 GImage.SetBorderColor 4642
- 85.236 GImage.SetBoxColor 4644
- 85.237 GImage.SetCacheThreshold 4645
- 85.238 GImage.SetClassType 4646
- 85.239 GImage.SetColorFuzz 4647
- 85.240 GImage.SetColorMapSize 4649
- 85.241 GImage.SetColorSpace 4650
- 85.242 GImage.SetComment 4651
- 85.243 GImage.SetCompose 4652
- 85.244 GImage.SetCompressType 4653
- 85.245 GImage.SetDebug 4655
- 85.246 GImage.SetDefineSet 4656
- 85.247 GImage.SetDefineValue 4657
- 85.248 GImage.SetDensity 4658

	473
• 85.249 GImage.SetDepth	4660
• 85.250 GImage.SetEXIFOrientation	4661
• 85.251 GImage.SetEndian	4662
• 85.252 GImage.SetFileName	4663
• 85.253 GImage.SetFillColor	4664
• 85.254 GImage.SetFillRule	4666
• 85.255 GImage.SetFilterType	4667
• 85.256 GImage.SetFont	4668
• 85.257 GImage.SetFontPointsize	4669
• 85.258 GImage.SetGifDisposeMethod	4670
• 85.259 GImage.SetICCColorProfile	4671
• 85.260 GImage.SetIPTCProfile	4673
• 85.261 GImage.SetInterlaceType	4674
• 85.262 GImage.SetIsValid	4675
• 85.263 GImage.SetLabel	4676
• 85.264 GImage.SetLineWidth	4677
• 85.265 GImage.SetMagick	4678
• 85.266 GImage.SetMatte	4680
• 85.267 GImage.SetMatteColor	4682
• 85.268 GImage.SetModulusDepth	4683
• 85.269 GImage.SetMonochrome	4684
• 85.270 GImage.SetOrientation	4685
• 85.271 GImage.SetPage	4687
• 85.272 GImage.SetPixelColor	4688
• 85.273 GImage.SetProfile	4690
• 85.274 GImage.SetQuality	4692
• 85.275 GImage.SetQuantizeColorSpace	4694
• 85.276 GImage.SetQuantizeColors	4695
• 85.277 GImage.SetQuantizeDither	4696

- 85.278 GImage.SetQuantizeTreeDepth 4697
- 85.279 GImage.SetQuiet 4698
- 85.280 GImage.SetRenderingIntent 4699
- 85.281 GImage.SetResolutionUnits 4700
- 85.282 GImage.SetScene 4702
- 85.283 GImage.SetSize 4703
- 85.284 GImage.SetStrokeAntiAlias 4704
- 85.285 GImage.SetStrokeColor 4706
- 85.286 GImage.SetStrokeDashArray 4708
- 85.287 GImage.SetStrokeDashOffset 4709
- 85.288 GImage.SetStrokeLineCap 4710
- 85.289 GImage.SetStrokeLineJoin 4711
- 85.290 GImage.SetStrokeMiterLimit 4712
- 85.291 GImage.SetStrokeWidth 4713
- 85.292 GImage.SetSubImage 4714
- 85.293 GImage.SetSubRange 4715
- 85.294 GImage.SetTextEncoding 4716
- 85.295 GImage.SetTileName 4717
- 85.296 GImage.SetType 4718
- 85.297 GImage.SetVerbose 4721
- 85.298 GImage.SetView 4722
- 85.299 GImage.SetXMP 4723
- 85.300 GImage.SetchannelDepth 4724
- 85.301 GImage.SetcolorMap 4725
- 85.302 GImage.Shade 4726
- 85.303 GImage.Sharpen 4727
- 85.304 GImage.SharpenChannel 4729
- 85.305 GImage.Shave 4730
- 85.306 GImage.Shear 4732

	475
• 85.307 GImage.Signature	4733
• 85.308 GImage.SkewX	4734
• 85.309 GImage.SkewY	4735
• 85.310 GImage.Solarize	4736
• 85.311 GImage.Spread	4738
• 85.312 GImage.Stegano	4739
• 85.313 GImage.Stereo	4740
• 85.314 GImage.Strip	4741
• 85.315 GImage.StrokePattern	4742
• 85.316 GImage.Swirl	4743
• 85.317 GImage.Texture	4744
• 85.318 GImage.Threshold	4745
• 85.319 GImage.TotalColors	4747
• 85.320 GImage.Transform	4748
• 85.321 GImage.TransformOrigin	4749
• 85.322 GImage.TransformReset	4750
• 85.323 GImage.TransformRotation	4751
• 85.324 GImage.TransformScale	4752
• 85.325 GImage.TransformSkewX	4753
• 85.326 GImage.TransformSkewY	4754
• 85.327 GImage.Translation	4755
• 85.328 GImage.Transparent	4756
• 85.329 GImage.Trim	4758
• 85.330 GImage.Unsharpmask	4760
• 85.331 GImage.UnsharpmaskChannel	4761
• 85.332 GImage.Wave	4762
• 85.333 GImage.WriteImages	4763
• 85.334 GImage.WriteToBMPContainer	4765
• 85.335 GImage.WriteToContainer	4766

- 85.336 GImage.WriteToFile 4768
- 85.337 GImage.WriteToGIFContainer 4771
- 85.338 GImage.WriteToJPEGContainer 4773
- 85.339 GImage.WriteToPDFContainer 4775
- 85.340 GImage.WriteToPNGContainer 4777
- 85.341 GImage.WriteToTiffContainer 4780
- 85.342 GImage.XResolution 4782
- 85.343 GImage.YResolution 4783
- 85.344 GImage.Zoom 4784
- 53.1 GZipFile.Compress 1473
- 53.2 GZipFile.Decompress 1475
- 86.1 Hash.CRC32 4785
- 86.2 Hash.Digest 4787
- 86.3 Hash.DigestFile 4791
- 86.4 Hash.MD5 4793
- 86.5 Hash.MD5.HMAC 4795
- 86.6 Hash.PBKDF2.HMAC 4797
- 86.7 Hash.RandomHexString 4799
- 86.8 Hash.RandomString 4800
- 86.9 Hash.SHA1 4802
- 86.10 Hash.SHA1.HMAC 4805
- 86.11 Hash.SHA256 4807
- 86.12 Hash.SHA256.HMAC 4809
- 86.13 Hash.SHA512 4812
- 86.14 Hash.SHA512.HMAC 4814
- 88.1 HotKey.GetEnabled 4831
- 88.2 HotKey.GetEvaluate 4832
- 88.3 HotKey.GetIgnoreOnModal 4833
- 88.4 HotKey.GetKeyCode 4834

	477
• 88.5 HotKey.GetKeyUp	4835
• 88.6 HotKey.GetLocal	4836
• 88.7 HotKey.GetModifiers	4837
• 88.8 HotKey.GetName	4838
• 88.9 HotKey.GetScriptFileName	4839
• 88.10 HotKey.GetScriptName	4840
• 88.11 HotKey.GetTag	4841
• 88.12 HotKey.List	4842
• 88.13 HotKey.Register	4843
• 88.14 HotKey.SetEnabled	4847
• 88.15 HotKey.SetEvaluate	4848
• 88.16 HotKey.SetIgnoreOnModal	4851
• 88.17 HotKey.SetKeyUp	4852
• 88.18 HotKey.SetLocal	4853
• 88.19 HotKey.SetName	4854
• 88.20 HotKey.SetScript	4855
• 88.21 HotKey.SetTag	4856
• 88.22 HotKey.Unregister	4857
• 134.2 Icon.GetIcon	6617
• 134.3 Icon.GetIconWithQuickLook	6619
• 124.4 Is64bit	6264
• 124.5 IsClient	6265
• 124.6 IsError	6266
• 124.7 IsIOS	6268
• 124.8 IsIOSDevice	6269
• 124.9 IsIOSSimulator	6270
• 124.10 IsLinux	6271
• 124.11 IsMacOS	6272
• 124.12 IsMobile	6273

- 124.13 IsRegistered 6274
- 124.14 IsRuntime 6277
- 124.15 IsServer 6278
- 124.16 IsWindows 6280
- 98.1 JS.AddFileMakerEvaluateFunction 5181
- 98.2 JS.AddFileMakerRunScriptFunction 5183
- 98.3 JS.AddFileMakerSQLFunction 5185
- 98.4 JS.AddFunction 5186
- 98.5 JS.CallFunction 5188
- 98.6 JS.Evaluate 5190
- 98.7 JS.EvaluateToString 5194
- 98.8 JS.Free 5196
- 98.9 JS.GetGlobalProperty 5198
- 98.10 JS.GetGlobalPropertyValue 5200
- 98.11 JS.New 5201
- 98.12 JS.Now 5203
- 98.13 JS.ObjectCount 5204
- 98.14 JS.SetGlobalProperty 5205
- 98.15 JS.SetGlobalPropertyValue 5207
- 98.16 JS.StringCount 5209
- 98.17 JS.TimeToDateComponents 5210
- 98.18 JS.TimeToUTCDate 5212
- 98.19 JS.UTCDateToTime 5213
- 100.4 JSON.AddBooleanToObject 5238
- 100.5 JSON.AddFalseToObject 5240
- 100.6 JSON.AddItemToArray 5242
- 100.7 JSON.AddItemToObject 5244
- 100.8 JSON.AddNullToObject 5247
- 100.9 JSON.AddNumberToArray 5249

	479
• 100.10 JSON.AddNumberToObject	5251
• 100.11 JSON.AddStringToArray	5253
• 100.12 JSON.AddStringToObject	5255
• 100.13 JSON.AddTrueToObject	5258
• 100.14 JSON.Clone	5260
• 100.15 JSON.Colorize	5261
• 100.16 JSON.Compact	5263
• 100.17 JSON.CreateArray	5264
• 100.18 JSON.CreateArrayRef	5265
• 100.19 JSON.CreateBool	5268
• 100.20 JSON.CreateBoolean	5269
• 100.21 JSON.CreateDoubleArray	5270
• 100.22 JSON.CreateFalse	5271
• 100.23 JSON.CreateIntegerArray	5272
• 100.24 JSON.CreateNull	5273
• 100.25 JSON.CreateNumber	5274
• 100.26 JSON.CreateObject	5276
• 100.27 JSON.CreateObjectRef	5278
• 100.28 JSON.CreateString	5281
• 100.29 JSON.CreateStringArray	5282
• 100.30 JSON.CreateStringArrayWithList	5283
• 100.31 JSON.CreateTrue	5284
• 100.32 JSON.CreateValue	5285
• 100.33 JSON.DeleteItemFromArray	5286
• 100.34 JSON.DeleteItemFromObject	5287
• 100.35 JSON.EqualContent	5288
• 100.36 JSON.Equals	5289
• 100.37 JSON.FindValueInArray	5291
• 100.38 JSON.FindValueInObjectArray	5293

- 100.39 JSON.Format 5295
- 100.40 JSON.GetArrayItem 5297
- 100.41 JSON.GetArrayItemsAsList 5299
- 100.42 JSON.GetArrayPathItems 5301
- 100.43 JSON.GetArraySize 5303
- 100.44 JSON.GetDoubleValue 5304
- 100.45 JSON.GetIntegerValue 5305
- 100.46 JSON.GetObjectItem 5306
- 100.47 JSON.GetObjectItemTree 5309
- 100.48 JSON.GetObjectItemTreeRef 5310
- 100.49 JSON.GetObjectName 5311
- 100.50 JSON.GetObjectNameList 5312
- 100.51 JSON.GetObjectSize 5313
- 100.52 JSON.GetPathItem 5314
- 100.53 JSON.GetStringValue 5317
- 100.54 JSON.GetType 5319
- 100.55 JSON.GetValue 5320
- 100.56 JSON.Import 5322
- 100.57 JSON.Import.Cancel 5325
- 100.58 JSON.Import.ErrorCount 5326
- 100.59 JSON.Import.Errors 5327
- 100.60 JSON.Import.Status 5328
- 100.61 JSON.Import.TODO 5329
- 100.62 JSON.Import.Total 5330
- 100.63 JSON.Import.Work 5331
- 100.64 JSON.IsValid 5332
- 100.65 JSON.Parse 5333
- 100.66 JSON.Release 5336
- 100.67 JSON.ReleaseAll 5338

	481
• 100.68 JSON.ReplaceItemInArray	5339
• 100.69 JSON.ReplaceItemInObject	5340
• 100.70 JSON.SetPathItem	5341
• 100.71 JSON.Sort	5343
• 100.72 JSON.ToHTML	5344
• 97.1 Java.CallObjectMethod	5157
• 97.2 Java.CallStaticMethod	5159
• 97.3 Java.GetContainerFileName	5161
• 97.4 Java.GetObjectField	5162
• 97.5 Java.GetStaticField	5164
• 97.6 Java.Initialize	5166
• 97.7 Java.Initialized	5169
• 97.8 Java.NewClassObject	5170
• 97.9 Java.ObjectClassName	5172
• 97.10 Java.Release	5173
• 97.11 Java.ReleaseAll	5174
• 97.12 Java.SetContainerFileName	5175
• 97.13 Java.SetObjectField	5176
• 97.14 Java.SetStaticField	5178
• 175.3 LCMS.ProfileInfo	8232
• 102.1 LDAP.Add	5363
• 102.2 LDAP.AddJSON	5365
• 102.3 LDAP.AddList	5369
• 102.4 LDAP.AddRecord	5371
• 102.5 LDAP.Bind	5373
• 102.6 LDAP.Connect	5375
• 102.7 LDAP.Delete	5378
• 102.9 LDAP.GetProtocolVersion	5380
• 102.10 LDAP.GetReferrals	5381

- 102.12 LDAP.JSON 5383
- 102.13 LDAP.Modify 5388
- 102.14 LDAP.ModifyJSON 5389
- 102.15 LDAP.ModifyRecord 5391
- 102.16 LDAP.Release 5393
- 102.17 LDAP.Rename 5394
- 102.18 LDAP.Search 5395
- 102.19 LDAP.SearchResult.AttributeCount 5397
- 102.20 LDAP.SearchResult.AttributeName 5399
- 102.21 LDAP.SearchResult.AttributeNames 5400
- 102.22 LDAP.SearchResult.AttributeValue 5401
- 102.23 LDAP.SearchResult.AttributeValueCount 5402
- 102.24 LDAP.SearchResult.AttributeValues 5403
- 102.25 LDAP.SearchResult.AttributeValuesByName 5405
- 102.26 LDAP.SearchResult.Count 5407
- 102.27 LDAP.SearchResult.DistinguishedName 5409
- 102.29 LDAP.SetProtocolVersion 5411
- 102.30 LDAP.SetReferrals 5412
- 102.32 LDAP.SimpleBind 5414
- 102.33 LDAP.StartTLS 5415
- 103.1 List.AddPostfix 5417
- 103.2 List.AddPrefix 5419
- 103.3 List.AddValue 5420
- 103.4 List.And 5421
- 103.5 List.AndColumn 5422
- 103.6 List.BestMatch 5424
- 103.7 List.CSVSplit 5425
- 103.8 List.CountValues 5427
- 103.9 List.CrossProduct 5428

	483
• 103.10 List.DeCombine	5430
• 103.11 List.Deserialize	5432
• 103.12 List.FindEquals	5433
• 103.13 List.FindUnequals	5434
• 103.14 List.GetValue	5436
• 103.15 List.HasDuplicateItems	5437
• 103.16 List.HasValue	5438
• 103.17 List.InsertValue	5440
• 103.18 List.MatchesPostfix	5441
• 103.19 List.MatchesPrefix	5442
• 103.20 List.Not	5443
• 103.21 List.NotColumn	5444
• 103.22 List.Or	5446
• 103.23 List.OrColumn	5447
• 103.24 List.RegExMatch	5449
• 103.25 List.Remove	5451
• 103.26 List.RemoveDuplicateItems	5452
• 103.27 List.RemoveEmptyItems	5454
• 103.28 List.RemovePostfix	5455
• 103.29 List.RemovePrefix	5457
• 103.30 List.RemoveValue	5459
• 103.31 List.Reverse	5461
• 103.32 List.Serialize	5462
• 103.33 List.SetValue	5463
• 103.34 List.Sort	5464
• 103.35 List.SubList	5467
• 103.36 List.Trim	5469
• 103.37 List.ValueIndex	5470
• 103.38 List.XOr	5471

- 103.39 List.XOrColumn 5472
- 104.1 ListDialog.AddItemToList 5563
- 104.2 ListDialog.AddItemsToList 5565
- 104.3 ListDialog.AddSQL 5566
- 104.4 ListDialog.ClearColumnHeaders 5567
- 104.5 ListDialog.ClearList 5568
- 104.6 ListDialog.ColumnCount 5569
- 104.7 ListDialog.GetAllowEmptySelection 5570
- 104.8 ListDialog.GetAllowMultipleSelection 5571
- 104.9 ListDialog.GetCancelButtonLabel 5572
- 104.10 ListDialog.GetColumnHeader 5573
- 104.11 ListDialog.GetHeight 5574
- 104.12 ListDialog.GetOtherButtonEvaluate 5575
- 104.13 ListDialog.GetOtherButtonLabel 5576
- 104.14 ListDialog.GetPositionX 5577
- 104.15 ListDialog.GetPositionY 5578
- 104.16 ListDialog.GetPrompt 5579
- 104.17 ListDialog.GetSelectButtonLabel 5580
- 104.18 ListDialog.GetSelectedTag 5581
- 104.19 ListDialog.GetSelectedTitle 5582
- 104.20 ListDialog.GetWidth 5583
- 104.21 ListDialog.GetWindowTitle 5584
- 104.22 ListDialog.ListCount 5585
- 104.23 ListDialog.ListItem 5586
- 104.24 ListDialog.ListTag 5587
- 104.25 ListDialog.Reset 5588
- 104.26 ListDialog.SetAllowEmptySelection 5589
- 104.27 ListDialog.SetAllowMultipleSelection 5590
- 104.28 ListDialog.SetCancelButtonLabel 5591

	485
• 104.29 ListDialog.SetColumnCount	5592
• 104.30 ListDialog.SetColumnHeader	5593
• 104.31 ListDialog.SetHeight	5594
• 104.32 ListDialog.SetOtherButtonEvaluate	5595
• 104.33 ListDialog.SetOtherButtonLabel	5596
• 104.34 ListDialog.SetPosition	5597
• 104.35 ListDialog.SetPositionX	5598
• 104.36 ListDialog.SetPositionY	5599
• 104.37 ListDialog.SetPrompt	5600
• 104.38 ListDialog.SetSelectButtonLabel	5601
• 104.39 ListDialog.SetSelectedTag	5602
• 104.40 ListDialog.SetSelectedTitle	5603
• 104.41 ListDialog.SetWidth	5604
• 104.42 ListDialog.SetWindowTitle	5605
• 104.43 ListDialog.ShowDialog	5606
• 104.44 ListDialog.Sort	5608
• 175.4 Log	8233
• 107.1 Markdown.CSS	5749
• 107.2 Markdown.Create	5750
• 107.3 Markdown.HTML	5751
• 107.4 Markdown.Release	5752
• 108.1 Math.BitwiseAND	5753
• 108.2 Math.BitwiseNOT	5755
• 108.3 Math.BitwiseOR	5756
• 108.4 Math.BitwiseShiftLeft	5757
• 108.5 Math.BitwiseShiftRight	5758
• 108.6 Math.BitwiseXOR	5759
• 108.7 Math.DecToHex	5760
• 108.8 Math.DecodeNumber	5761

- 108.9 Math.EncodeNumber 5763
- 108.10 Math.HexToDec 5765
- 108.11 Math.InchToPixel 5766
- 108.12 Math.InsidePolygon 5767
- 108.13 Math.IsValidCC 5768
- 108.14 Math.MillimeterToPixel 5769
- 108.15 Math.NumberToText 5770
- 108.16 Math.PixelToInch 5771
- 108.17 Math.PixelToMillimeter 5772
- 108.18 Math.PolylineDecode 5773
- 108.19 Math.PolylineEncode 5774
- 108.20 Math.TextToNumber 5776
- 109.1 Matrix.AddColumn 5779
- 109.2 Matrix.AddColumns 5781
- 109.3 Matrix.AddRow 5782
- 109.4 Matrix.AddRows 5783
- 109.5 Matrix.Avg 5784
- 109.6 Matrix.CSV 5785
- 109.7 Matrix.Clear 5787
- 109.8 Matrix.ClearValues 5788
- 109.9 Matrix.Clone 5789
- 109.10 Matrix.DataType 5790
- 109.11 Matrix.Free 5791
- 109.12 Matrix.GetColumn 5792
- 109.13 Matrix.GetRow 5793
- 109.14 Matrix.GetText 5794
- 109.15 Matrix.GetValue 5795
- 109.16 Matrix.Height 5797
- 109.17 Matrix.InsertRecords 5798

	487
• 109.18 Matrix.InsertRecordsToSQL	5800
• 109.19 Matrix.JSONRecord	5802
• 109.20 Matrix.JSONRecords	5803
• 109.21 Matrix.Max	5804
• 109.22 Matrix.Min	5805
• 109.23 Matrix.New	5806
• 109.24 Matrix.NewWithSQL	5808
• 109.25 Matrix.RemoveColumn	5809
• 109.26 Matrix.RemoveRow	5810
• 109.27 Matrix.Resize	5811
• 109.28 Matrix.SetColumn	5812
• 109.29 Matrix.SetRow	5814
• 109.30 Matrix.SetValue	5816
• 109.31 Matrix.Sum	5818
• 109.32 Matrix.Text	5820
• 109.33 Matrix.Width	5822
• 110.1 MatrixDongle.Count	5823
• 110.2 MatrixDongle.Find	5825
• 110.3 MatrixDongle.GetDriverFlag	5826
• 110.4 MatrixDongle.GetVersionAPI	5827
• 110.5 MatrixDongle.GetVersionDRV	5828
• 110.6 MatrixDongle.GetVersionDRV.USB	5829
• 110.7 MatrixDongle.Initialize	5830
• 110.8 MatrixDongle.Initialized	5832
• 110.9 MatrixDongle.MemorySize	5833
• 110.10 MatrixDongle.Model	5834
• 110.11 MatrixDongle.ReadHex	5835
• 110.12 MatrixDongle.ReadSerialNumber	5837
• 110.13 MatrixDongle.ReadText	5838

- 110.14 MatrixDongle.Release 5840
- 110.15 MatrixDongle.SetDriverFlag 5841
- 110.16 MatrixDongle.Version 5843
- 110.17 MatrixDongle.WriteHex 5844
- 110.18 MatrixDongle.WriteText 5845
- 112.1 Menu.AddItem 5853
- 112.2 Menu.AddItems 5856
- 112.3 Menu.CreateMenu 5859
- 112.4 Menu.DefineQuickMenu 5861
- 112.5 Menu.DefineQuickMenuXML 5864
- 112.6 Menu.FindItemWithTag 5866
- 112.7 Menu.FindItemWithTitle 5867
- 112.9 Menu.GetEvaluate 5869
- 112.11 Menu.GetScriptFileName 5871
- 112.12 Menu.GetScriptName 5872
- 112.14 Menu.GetTag 5874
- 112.15 Menu.GetTitle 5875
- 112.16 Menu.GetURL 5876
- 112.17 Menu.InsertItem 5877
- 112.18 Menu.ItemAtIndex 5878
- 112.19 Menu.Items 5879
- 112.20 Menu.List 5880
- 112.21 Menu.NumberOfItems 5881
- 112.22 Menu.PopUp 5882
- 112.23 Menu.Release 5886
- 112.24 Menu.ReleaseAll 5888
- 112.25 Menu.RemoveAllItems 5889
- 112.26 Menu.RemoveItem 5890
- 112.27 Menu.RemoveItemAtIndex 5891

	489
• 112.28 Menu.SelectedItem	5892
• 112.30 Menu.SetEvaluate	5895
• 112.32 Menu.SetScriptAction	5897
• 112.34 Menu.SetTag	5900
• 112.35 Menu.SetTitle	5901
• 112.36 Menu.SetURL	5902
• 112.37 MenuItem.CreateMenuItem	5903
• 112.38 MenuItem.CreateSeparator	5905
• 112.41 MenuItem.GetBackColor	5908
• 112.42 MenuItem.GetBold	5909
• 112.43 MenuItem.GetEnabled	5910
• 112.44 MenuItem.GetEvaluate	5911
• 112.45 MenuItem.GetFontColor	5912
• 112.46 MenuItem.GetFontName	5913
• 112.47 MenuItem.GetFontSize	5914
• 112.48 MenuItem.GetGroupID	5915
• 112.49 MenuItem.GetHidden	5916
• 112.50 MenuItem.GetImage	5917
• 112.51 MenuItem.GetItalic	5918
• 112.54 MenuItem.GetMixedStateImage	5921
• 112.55 MenuItem.GetOffStateImage	5922
• 112.56 MenuItem.GetOnStateImage	5923
• 112.57 MenuItem.GetParentItem	5924
• 112.58 MenuItem.GetParentMenu	5925
• 112.59 MenuItem.GetPath	5926
• 112.60 MenuItem.GetRequireCommand	5927
• 112.61 MenuItem.GetRequireControl	5928
• 112.62 MenuItem.GetRequireOption	5929
• 112.63 MenuItem.GetRequireShift	5930

- 112.64 MenuItem.GetScriptFileName 5931
- 112.65 MenuItem.GetScriptName 5932
- 112.66 MenuItem.GetSelectable 5933
- 112.67 MenuItem.GetState 5934
- 112.68 MenuItem.GetStrikeOut 5935
- 112.69 MenuItem.GetSubMenu 5936
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939
- 112.73 MenuItem.GetURL 5941
- 112.74 MenuItem.GetUnderline 5942
- 112.76 MenuItem.HasSubMenu 5944
- 112.77 MenuItem.IsSeparatorItem 5945
- 112.78 MenuItem.List 5946
- 112.79 MenuItem.Release 5947
- 112.82 MenuItem.SetBackColor 5950
- 112.83 MenuItem.SetBold 5952
- 112.84 MenuItem.SetEnabled 5954
- 112.85 MenuItem.SetEvaluate 5955
- 112.86 MenuItem.SetFontColor 5956
- 112.87 MenuItem.SetFontName 5958
- 112.88 MenuItem.SetFontSize 5960
- 112.89 MenuItem.SetGroupID 5962
- 112.90 MenuItem.SetHidden 5963
- 112.91 MenuItem.SetImage 5964
- 112.92 MenuItem.SetItalic 5966
- 112.95 MenuItem.SetMixedStateImage 5972
- 112.96 MenuItem.SetOffStateImage 5973
- 112.97 MenuItem.SetOnStateImage 5974
- 112.98 MenuItem.SetRequireCommand 5975

	491
• 112.99 MenuItem.SetRequireControl	5976
• 112.100 MenuItem.SetRequireOption	5977
• 112.101 MenuItem.SetRequireShift	5978
• 112.102 MenuItem.SetScriptAction	5979
• 112.103 MenuItem.SetSelectable	5981
• 112.104 MenuItem.SetState	5982
• 112.105 MenuItem.SetStrikeOut	5984
• 112.106 MenuItem.SetSubMenu	5985
• 112.107 MenuItem.SetTag	5986
• 112.108 MenuItem.SetTitle	5987
• 112.110 MenuItem.SetURL	5989
• 112.111 MenuItem.SetUnderline	5990
• 113.1 Menubar.HasMenuCommand	5993
• 113.2 Menubar.IsMenuCommandChecked	5995
• 113.3 Menubar.ListMenuCommands	5997
• 113.4 Menubar.RemoveMenuCommand	5998
• 113.5 Menubar.RunMenuCommand	5999
• 113.7 Menubar.SetMenuCommandTitle	6002
• 113.8 Menubar.SetMenuCommandVisible	6003
• 175.5 Modbus.CalculateRTUMessageCRC	8234
• 78.67 MountNotification.Install	3880
• 78.68 MountNotification.Uninstall	3882
• 175.6 MouseCursor.Hide	8235
• 175.7 MouseCursor.HideUntilMouseMoves	8236
• 175.8 MouseCursor.Set	8237
• 175.9 MouseCursor.Show	8240
• 175.10 MsgBox	8241
• 118.1 Notification.List	6095
• 118.2 Notification.Listen	6096

- 118.3 Notification.Send 6098
- 118.4 Notification.SendDirect 6099
- 118.5 Notification.Unlisten 6100
- 118.6 Notification.UnlistenAll 6101
- 120.1 OCR.Cleanup 6109
- 120.2 OCR.Clear 6110
- 120.3 OCR.GetBoxText 6111
- 120.4 OCR.GetHOCText 6112
- 120.5 OCR.GetPageSegMode 6113
- 120.6 OCR.GetText 6114
- 120.7 OCR.GetTextWithCoordinates 6116
- 120.8 OCR.GetVariable 6118
- 120.9 OCR.Initialize 6119
- 120.10 OCR.IsInitialized 6121
- 120.11 OCR.Language 6122
- 120.12 OCR.MeanTextConf 6123
- 120.13 OCR.Recognize 6124
- 120.14 OCR.SetImage 6125
- 120.15 OCR.SetPageSegMode 6127
- 120.16 OCR.SetRectangle 6129
- 120.17 OCR.SetResolution 6130
- 120.18 OCR.SetVariable 6131
- 120.19 OCR.WriteToPDF 6132
- 123.1 PHP.Execute 6247
- 123.2 PHP.ExistsVariable 6249
- 123.3 PHP.GetResultContainer 6250
- 123.4 PHP.GetResultString 6251
- 123.5 PHP.GetVariable 6252
- 123.6 PHP.Init 6253

	493
• 123.7 PHP.IsInitialized	6255
• 123.8 PHP.Load	6256
• 123.9 PHP.Run	6257
• 123.10 PHP.SetVariable	6258
• 123.11 PHP.ShutDown	6259
• 48.1 PKCS12.CA	1345
• 48.2 PKCS12.CACount	1347
• 48.3 PKCS12.Cert	1348
• 48.4 PKCS12.PKey	1349
• 48.5 PKCS12.ReadFromContainer	1350
• 48.6 PKCS12.ReadFromFile	1352
• 48.7 PKCS12.Release	1354
• 48.9 PKCS7.ReadFromContainer	1356
• 48.10 PKCS7.ReadFromFile	1357
• 48.11 PKCS7.Release	1358
• 48.12 PKCS7.SignedDataCert	1359
• 48.13 PKCS7.SignedDataCertCount	1360
• 48.14 PKCS7.SignedDataContent	1361
• 48.15 PKey.Bits	1362
• 48.16 PKey.DescriptionPrivateKey	1363
• 48.17 PKey.DescriptionPublicKey	1364
• 48.18 PKey.GetPrivateKey	1365
• 48.19 PKey.GetPublicKey	1366
• 48.20 PKey.Release	1367
• 48.21 PKey.Type	1368
• 121.1 Path.AddPathComponent	6135
• 121.2 Path.FileMakerPathToNativePath	6139
• 121.3 Path.FilePathToFileURL	6141
• 121.4 Path.FileURLToFilePath	6143

- 121.5 Path.LastPathComponent 6144
- 121.6 Path.LongPath 6146
- 121.7 Path.NativePathToFileMakerPath 6147
- 121.8 Path.RemoveLastPathComponent 6149
- 121.9 Path.ShortPath 6151
- 124.17 Platform 6281
- 124.18 Plugin.BuildNumber 6283
- 124.19 Plugin.CallCounter 6284
- 124.20 Plugin.CallErrorScriptTrigger 6285
- 124.21 Plugin.CompileDate 6286
- 124.22 Plugin.DisableFunction 6287
- 124.23 Plugin.FunctionCount 6288
- 124.24 Plugin.Functions 6289
- 124.25 Plugin.GetSuccessReturn 6290
- 124.27 Plugin.IsPrerelease 6292
- 124.28 Plugin.JasperVersion 6293
- 124.29 Plugin.LibSSHVersion 6294
- 124.30 Plugin.LicenseeName 6295
- 124.31 Plugin.LimitFunction 6297
- 124.32 Plugin.LockFunction 6299
- 124.33 Plugin.OpenSSLVersion 6300
- 124.34 Plugin.PNGVersion 6301
- 124.35 Plugin.Path 6302
- 124.36 Plugin.ScriptStepParameter 6304
- 124.37 Plugin.ScriptStepParameterCount 6305
- 124.38 Plugin.Seats 6306
- 124.39 Plugin.SetErrorScriptTrigger 6307
- 124.40 Plugin.SetFunctions 6309
- 124.41 Plugin.SetPreviewSize 6311

	495
• 124.42 Plugin.SetSuccessReturn	6312
• 124.43 Plugin.StartTimeStamp	6313
• 124.44 Plugin.TiffVersion	6314
• 124.45 Plugin.UnlockFunction	6315
• 124.46 Plugin.UsedFunctions	6316
• 124.47 Plugin.ZLibVersion	6317
• 124.48 Plugin.isDebug	6318
• 125.1 PortMidi.Abort	6341
• 125.2 PortMidi.CheckHostError	6342
• 125.3 PortMidi.ClearDataAvailableHandler	6343
• 125.4 PortMidi.Close	6344
• 125.5 PortMidi.CurrentEvent	6345
• 125.6 PortMidi.DeviceCount	6346
• 125.7 PortMidi.GetChannelMask	6347
• 125.8 PortMidi.GetDefaultInputDeviceID	6348
• 125.9 PortMidi.GetDefaultOutputDeviceID	6349
• 125.10 PortMidi.GetDeviceID	6350
• 125.11 PortMidi.GetDeviceInfo	6351
• 125.12 PortMidi.GetDeviceName	6353
• 125.13 PortMidi.GetFilter	6354
• 125.14 PortMidi.OpenInput	6355
• 125.15 PortMidi.OpenOutput	6356
• 125.16 PortMidi.Poll	6358
• 125.17 PortMidi.ReadMessage	6359
• 125.18 PortMidi.Rescan	6360
• 125.19 PortMidi.SendMessage	6361
• 125.20 PortMidi.SendMessageRaw	6363
• 125.21 PortMidi.SendSysExHex	6364
• 125.22 PortMidi.SetChannelMask	6365

- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 125.24 PortMidi.SetDataAvailableHandler 6368
- 125.25 PortMidi.SetFilter 6370
- 125.26 PortMidi.TimeStamp 6372
- 126.2 Preferences.DeleteValue 6374
- 126.4 Preferences.GetValue 6376
- 126.5 Preferences.GetValueType 6378
- 126.6 Preferences.HasValue 6379
- 126.8 Preferences.SetValue 6381
- 128.1 Printer.CurrentNumberOfCopies 6449
- 128.2 Printer.CurrentPaperFormat 6450
- 128.3 Printer.CurrentPaperSource 6452
- 128.4 Printer.CurrentPrintWhat 6454
- 128.5 Printer.CurrentPrinterName 6456
- 128.6 Printer.ErrorLog 6458
- 128.7 Printer.GetDefaultPrinter 6459
- 128.8 Printer.PaperFormats 6460
- 128.9 Printer.PaperSources 6462
- 128.10 Printer.Print 6464
- 128.11 Printer.PrinterCount 6467
- 128.12 Printer.PrinterInfo 6468
- 128.13 Printer.PrinterName 6470
- 128.14 Printer.PrinterNames 6472
- 128.15 Printer.SetPrinter 6474
- 129.2 Process.FrontProcessName 6478
- 129.3 Process.FrontWindowTitle 6479
- 129.4 Process.GetCurrentDirectory 6480
- 129.5 Process.IsFrontMost 6481
- 129.8 Process.LoadLibrary 6484

	497
• 129.9 Process.SetCurrentDirectory	6485
• 129.10 Process.SetFrontMost	6486
• 130.1 ProgressDialog.ClearImage	6493
• 130.2 ProgressDialog.GetBottomText	6495
• 130.3 ProgressDialog.GetButtonCaption	6496
• 130.4 ProgressDialog.GetCancel	6497
• 130.5 ProgressDialog.GetImageHeight	6499
• 130.6 ProgressDialog.GetImageWidth	6500
• 130.7 ProgressDialog.GetPositionX	6501
• 130.8 ProgressDialog.GetPositionY	6502
• 130.9 ProgressDialog.GetProgress	6503
• 130.10 ProgressDialog.GetShowButton	6504
• 130.11 ProgressDialog.GetTitle	6505
• 130.12 ProgressDialog.GetTopMost	6506
• 130.13 ProgressDialog.GetTopText	6507
• 130.14 ProgressDialog.Hide	6508
• 130.15 ProgressDialog.Reset	6510
• 130.16 ProgressDialog.SetBottomText	6511
• 130.17 ProgressDialog.SetButtonCaption	6513
• 130.18 ProgressDialog.SetCancel	6515
• 130.19 ProgressDialog.SetFont	6517
• 130.20 ProgressDialog.SetImage	6519
• 130.21 ProgressDialog.SetImageHeight	6521
• 130.22 ProgressDialog.SetImageWidth	6522
• 130.23 ProgressDialog.SetPosition	6523
• 130.24 ProgressDialog.SetPositionCentered	6524
• 130.25 ProgressDialog.SetProgress	6525
• 130.26 ProgressDialog.SetShowButton	6527
• 130.27 ProgressDialog.SetTitle	6529

- 130.28 ProgressDialog.SetTopMost 6531
- 130.29 ProgressDialog.SetTopText 6533
- 130.30 ProgressDialog.Show 6535
- 130.31 ProgressDialog.Update 6537
- 130.32 Progressdialog.GetEvaluate 6539
- 130.33 Progressdialog.GetFileName 6540
- 130.34 Progressdialog.GetScriptName 6541
- 130.35 Progressdialog.SetEvaluate 6542
- 130.36 Progressdialog.SetScript 6543
- 131.1 Proj.BatchTransform 6545
- 131.2 Proj.Initialize 6546
- 131.3 Proj.IsInitialized 6547
- 131.4 Proj.Transform 6548
- 103.40 QuickList.AddList 5474
- 103.41 QuickList.AddMultiValue 5476
- 103.42 QuickList.AddPostfix 5478
- 103.43 QuickList.AddPrefix 5480
- 103.44 QuickList.AddQuickList 5482
- 103.45 QuickList.AddSQL 5483
- 103.46 QuickList.AddValue 5485
- 103.47 QuickList.And 5487
- 103.48 QuickList.AndColumn 5489
- 103.49 QuickList.BestMatch 5491
- 103.50 QuickList.CSVSplit 5492
- 103.51 QuickList.Clear 5493
- 103.52 QuickList.Clone 5494
- 103.53 QuickList.Count 5495
- 103.54 QuickList.CrossProduct 5497
- 103.55 QuickList.DeCombine 5499

	499
• 103.56 QuickList.Deserialize	5501
• 103.57 QuickList.FindEquals	5502
• 103.58 QuickList.FindUnequals	5503
• 103.59 QuickList.Free	5504
• 103.60 QuickList.GetList	5506
• 103.61 QuickList.GetValue	5508
• 103.62 QuickList.HasDuplicateItems	5510
• 103.63 QuickList.HasValue	5511
• 103.64 QuickList.InsertValue	5513
• 103.65 QuickList.List	5514
• 103.66 QuickList.MatchesPostfix	5515
• 103.67 QuickList.MatchesPrefix	5517
• 103.68 QuickList.MatchesSubString	5519
• 103.69 QuickList.New	5521
• 103.70 QuickList.Not	5523
• 103.71 QuickList.NotColumn	5525
• 103.72 QuickList.Or	5527
• 103.73 QuickList.OrColumn	5529
• 103.74 QuickList.Pop	5531
• 103.75 QuickList.PopFirst	5532
• 103.76 QuickList.Push	5533
• 103.77 QuickList.RegExMatch	5534
• 103.78 QuickList.Remove	5535
• 103.79 QuickList.RemoveDuplicateItems	5536
• 103.80 QuickList.RemoveEmptyItems	5537
• 103.81 QuickList.RemovePostfix	5538
• 103.82 QuickList.RemovePrefix	5540
• 103.83 QuickList.RemoveValue	5542
• 103.84 QuickList.Reserve	5543

- 103.85 QuickList.Reverse 5544
- 103.86 QuickList.Serialize 5545
- 103.87 QuickList.SetList 5547
- 103.88 QuickList.SetValue 5548
- 103.89 QuickList.Sort 5550
- 103.90 QuickList.SortWith 5552
- 103.91 QuickList.SubList 5555
- 103.92 QuickList.Trim 5557
- 103.93 QuickList.ValueIndex 5558
- 103.94 QuickList.XOr 5559
- 103.95 QuickList.XOrColumn 5560
- 73.12 RSA.DecryptPrivateKey 3469
- 73.13 RSA.EncryptPrivateKey 3471
- 149.13 RSA.GeneratePrivateKey 7075
- 149.14 RSA.GetPublicKey 7077
- 73.14 RSA.PrivateDecrypt 3473
- 73.15 RSA.PrivateEncrypt 3476
- 73.16 RSA.PublicDecrypt 3479
- 73.17 RSA.PublicEncrypt 3482
- 149.15 RSA.Sign 7079
- 149.16 RSA.Verify 7084
- 135.1 RegEx.CaptureCount 6643
- 135.2 RegEx.Compile 6645
- 135.3 RegEx.Execute 6648
- 135.4 RegEx.FindMatches 6651
- 135.5 RegEx.Free 6654
- 135.6 RegEx.List 6655
- 135.7 RegEx.Match 6656
- 135.8 RegEx.MatchList 6658

	501
• 135.9 RegEx.MinimumLength	6660
• 135.10 RegEx.NameCount	6661
• 135.11 RegEx.NamedSubstring	6662
• 135.12 RegEx.Options	6663
• 135.13 RegEx.Pattern	6664
• 135.14 RegEx.Quote	6665
• 135.15 RegEx.Replace	6666
• 135.16 RegEx.ReplaceAll	6668
• 135.17 RegEx.Results	6670
• 135.18 RegEx.Size	6672
• 135.19 RegEx.StringNumber	6673
• 135.20 RegEx.Study	6674
• 135.21 RegEx.Substring	6675
• 135.22 RegEx.SubstringList	6677
• 135.23 RegEx.Version	6678
• 124.49 Register	6320
• 124.50 Registration	6323
• 136.1 Registry.CreateKey	6679
• 136.2 Registry.DeleteKey	6681
• 136.3 Registry.DeleteTree	6682
• 136.4 Registry.DeleteValue	6683
• 136.5 Registry.FlushKey	6684
• 136.6 Registry.GetValue	6685
• 136.7 Registry.GetValueType	6687
• 136.8 Registry.ListKeys	6688
• 136.9 Registry.ListValues	6689
• 136.10 Registry.SetValue	6690
• 137.1 RemoteControl.ClickMouse	6693
• 137.2 RemoteControl.FindWindow	6695

- 137.3 RemoteControl.GetWindowsList 6696
- 137.4 RemoteControl.HideCursor 6697
- 137.5 RemoteControl.MouseX 6698
- 137.6 RemoteControl.MouseY 6699
- 137.7 RemoteControl.MoveMouse 6700
- 137.9 RemoteControl.PressControlKey 6702
- 137.12 RemoteControl.PressKey 6705
- 137.13 RemoteControl.PressKeyLater 6708
- 137.14 RemoteControl.PressOptionKey 6709
- 137.15 RemoteControl.PressShiftKey 6710
- 137.16 RemoteControl.ShowCursor 6711
- 139.1 RunTask.AddArgument 6755
- 139.2 RunTask.GetArgument 6757
- 139.3 RunTask.GetArgumentCount 6758
- 139.4 RunTask.GetCurrentDirectoryPath 6759
- 139.5 RunTask.GetLaunchPath 6760
- 139.6 RunTask.GetVerb 6761
- 139.7 RunTask.IsRunning 6762
- 139.8 RunTask.Launch 6763
- 139.9 RunTask.NewTask 6766
- 139.10 RunTask.ProcessIdentifier 6768
- 139.13 RunTask.SetArguments 6771
- 139.14 RunTask.SetCurrentDirectoryPath 6774
- 139.15 RunTask.SetLaunchPath 6775
- 139.16 RunTask.SetVerb 6777
- 139.17 RunTask.Terminate 6778
- 151.2 SNMP.SetRetries 7125
- 151.3 SNMP.SetTimeout 7126
- 156.2 SQL.Cancel 7295

	503
• 156.3 SQL.ClientVersion	7296
• 156.4 SQL.Close	7297
• 156.5 SQL.CommandText	7298
• 156.6 SQL.CommandType	7299
• 156.7 SQL.Commit	7300
• 156.8 SQL.Connect	7302
• 156.9 SQL.Disconnect	7308
• 156.10 SQL.Execute	7309
• 156.11 SQL.FetchFirst	7313
• 156.12 SQL.FetchLast	7314
• 156.13 SQL.FetchNext	7316
• 156.14 SQL.FetchPos	7319
• 156.15 SQL.FetchPrior	7320
• 156.16 SQL.FieldCount	7321
• 156.17 SQL.FreeAllConnections	7323
• 156.18 SQL.FreeCommand	7324
• 156.19 SQL.FreeConnection	7326
• 156.20 SQL.GetAutoCommit	7328
• 156.21 SQL.GetCommandOption	7329
• 156.22 SQL.GetCommandOptions	7330
• 156.23 SQL.GetCommandTag	7331
• 156.24 SQL.GetConnectionOption	7332
• 156.25 SQL.GetConnectionOptions	7333
• 156.26 SQL.GetConnectionTag	7334
• 156.27 SQL.GetFieldAsBoolean	7335
• 156.28 SQL.GetFieldAsContainer	7336
• 156.29 SQL.GetFieldAsDate	7337
• 156.30 SQL.GetFieldAsDateTime	7339
• 156.31 SQL.GetFieldAsFloat	7340

- 156.32 SQL.GetFieldAsJPEG 7342
- 156.33 SQL.GetFieldAsNumber 7344
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348
- 156.36 SQL.GetFieldAsText 7350
- 156.37 SQL.GetFieldAsTime 7352
- 156.38 SQL.GetFieldDataType 7353
- 156.39 SQL.GetFieldIsNull 7354
- 156.40 SQL.GetFieldName 7355
- 156.41 SQL.GetFieldNameList 7357
- 156.42 SQL.GetFieldOption 7359
- 156.43 SQL.GetFieldOptions 7360
- 156.44 SQL.GetFieldValue 7361
- 156.45 SQL.GetFieldValueList 7362
- 156.46 SQL.GetIsolationLevel 7364
- 156.47 SQL.GetParamAsBoolean 7365
- 156.48 SQL.GetParamAsContainer 7366
- 156.49 SQL.GetParamAsDate 7367
- 156.50 SQL.GetParamAsDateTime 7368
- 156.51 SQL.GetParamAsFloat 7369
- 156.52 SQL.GetParamAsJPEG 7371
- 156.53 SQL.GetParamAsNumber 7373
- 156.54 SQL.GetParamAsPDF 7375
- 156.55 SQL.GetParamAsPNG 7377
- 156.56 SQL.GetParamAsText 7379
- 156.57 SQL.GetParamAsTime 7380
- 156.58 SQL.GetParamDataType 7381
- 156.59 SQL.GetParamIsDefault 7382
- 156.60 SQL.GetParamIsNull 7383

	505
• 156.61 SQL.GetParamName	7384
• 156.62 SQL.GetParamNameList	7385
• 156.63 SQL.GetParamOption	7387
• 156.64 SQL.GetParamOptions	7388
• 156.65 SQL.GetParamValue	7389
• 156.66 SQL.GetParamValueList	7390
• 156.67 SQL.GetRecordsAsText	7392
• 156.68 SQL.InsertOrUpdateRecords	7394
• 156.69 SQL.InsertRecords	7397
• 156.70 SQL.InternalSQLiteLibrary.Activate	7399
• 156.71 SQL.InternalSQLiteLibrary.Activated	7400
• 156.72 SQL.InternalSQLiteLibrary.Deactivate	7401
• 156.73 SQL.InternalSQLiteLibrary.SourceID	7402
• 156.74 SQL.InternalSQLiteLibrary.Version	7403
• 156.75 SQL.InternalSQLiteLibrary.VersionNumber	7404
• 156.76 SQL.ListCommands	7405
• 156.77 SQL.ListConnections	7406
• 156.78 SQL.MySQL.InsertID	7407
• 156.79 SQL.NewCommand	7408
• 156.80 SQL.NewConnection	7412
• 156.81 SQL.Open	7415
• 156.82 SQL.ParamCount	7416
• 156.83 SQL.Prepare	7417
• 156.84 SQL.ResetCommand	7418
• 156.85 SQL.ResetConnection	7419
• 156.86 SQL.Rollback	7420
• 156.87 SQL.RowsAffected	7421
• 156.88 SQL.SQLite3.EnableLoadExtension	7423
• 156.89 SQL.SQLite3.LastInsertRowID	7424

- 156.90 SQL.SQLite3.MemoryHighwater 7425
- 156.91 SQL.SQLite3.MemoryUsed 7426
- 156.92 SQL.SQLite3.ReKey 7427
- 156.93 SQL.SQLite3.SetKey 7429
- 156.94 SQL.ServerVersion 7431
- 156.95 SQL.ServerVersionString 7432
- 156.96 SQL.SetAutoCommit 7433
- 156.97 SQL.SetClient 7434
- 156.98 SQL.SetCommandOption 7436
- 156.99 SQL.SetCommandTag 7438
- 156.100 SQL.SetCommandText 7439
- 156.101 SQL.SetConnectionOption 7441
- 156.102 SQL.SetConnectionTag 7446
- 156.103 SQL.SetFieldOption 7447
- 156.104 SQL.SetIsolationLevel 7448
- 156.105 SQL.SetParamAsBoolean 7449
- 156.106 SQL.SetParamAsContainer 7450
- 156.107 SQL.SetParamAsDate 7452
- 156.108 SQL.SetParamAsDateTime 7454
- 156.109 SQL.SetParamAsFloat 7456
- 156.110 SQL.SetParamAsNumber 7458
- 156.111 SQL.SetParamAsText 7460
- 156.112 SQL.SetParamAsTime 7462
- 156.113 SQL.SetParamDataType 7463
- 156.114 SQL.SetParamDefault 7464
- 156.115 SQL.SetParamNull 7465
- 156.116 SQL.SetParamOption 7466
- 156.117 SQL.SetParamTypesValues 7467
- 156.118 SQL.SetParamUnknown 7469

	507
• 156.119 SQL.SetParamValue	7470
• 156.120 SQL.SetParamValues	7472
• 156.121 SQL.isAlive	7474
• 156.122 SQL.isConnected	7475
• 156.123 SQL.isExecuted	7476
• 156.124 SQL.isOpened	7477
• 156.125 SQL.isResultSet	7478
• 157.1 SSH.CloseChannel	7479
• 157.2 SSH.Connect	7481
• 157.3 SSH.Disconnect	7485
• 157.4 SSH.EOF	7486
• 157.5 SSH.Execute	7487
• 157.6 SSH.Flush	7490
• 157.7 SSH.FreeChannel	7491
• 157.8 SSH.GetExitState	7492
• 157.9 SSH.GetIP	7493
• 157.10 SSH.GetPort	7494
• 157.11 SSH.GetTag	7495
• 157.12 SSH.GetTimeout	7496
• 157.13 SSH.GetUserName	7497
• 157.14 SSH.HostKey	7498
• 157.15 SSH.HostKeyHash	7499
• 157.16 SSH.IsAuthenticated	7500
• 157.17 SSH.New	7501
• 157.18 SSH.OpenSession	7504
• 157.19 SSH.ReadHex	7505
• 157.20 SSH.ReadText	7506
• 157.21 SSH.Release	7508
• 157.22 SSH.RequestPTY	7509

- 157.23 SSH.SendEOF 7510
- 157.24 SSH.SessionHandshake 7511
- 157.25 SSH.SetEnv 7512
- 157.26 SSH.SetTag 7513
- 157.27 SSH.SetTimeout 7514
- 157.28 SSH.Shell 7515
- 157.29 SSH.Tunnel.BytesReceived 7516
- 157.30 SSH.Tunnel.BytesSent 7517
- 157.31 SSH.Tunnel.Cancel 7518
- 157.32 SSH.Tunnel.Cancelled 7519
- 157.33 SSH.Tunnel.Messages 7520
- 157.34 SSH.Tunnel.Run 7521
- 157.35 SSH.Tunnel.Running 7523
- 157.36 SSH.UserAuthKeyboardInteractive 7524
- 157.37 SSH.UserAuthList 7525
- 157.38 SSH.UserAuthPassword 7526
- 157.39 SSH.UserAuthPublicKey 7527
- 157.40 SSH.UserAuthPublicKeyFile 7529
- 157.41 SSH.WaitClosed 7531
- 157.42 SSH.WaitEOF 7532
- 157.43 SSH.WaitSocket 7533
- 157.44 SSH.WriteHex 7534
- 157.45 SSH.WriteText 7535
- 140.1 Schedule.Check 6785
- 140.2 Schedule.ClearEvaluateResult 6786
- 140.3 Schedule.ClearSQLResult 6787
- 140.4 Schedule.EvaluateAfterDelay 6788
- 140.5 Schedule.EvaluateAtTime 6790
- 140.6 Schedule.EvaluateAtTimeStamp 6792

	509
• 140.7 Schedule.EvaluateOnIdle	6794
• 140.8 Schedule.ExecuteSQLAfterDelay	6795
• 140.9 Schedule.ExecuteSQLAtTime	6797
• 140.10 Schedule.ExecuteSQLAtTimeStamp	6799
• 140.11 Schedule.ExecuteSQLOnIdle	6801
• 140.12 Schedule.GetAutoRelease	6803
• 140.13 Schedule.GetEvaluate	6804
• 140.14 Schedule.GetEvaluateResult	6805
• 140.15 Schedule.GetFileName	6806
• 140.16 Schedule.GetLastTimeStamp	6807
• 140.17 Schedule.GetRepeatDelay	6808
• 140.18 Schedule.GetRunCount	6809
• 140.19 Schedule.GetSQL	6810
• 140.20 Schedule.GetSQLResult	6811
• 140.21 Schedule.GetScriptName	6812
• 140.22 Schedule.GetScriptParameter	6813
• 140.23 Schedule.GetTimeStamp	6814
• 140.24 Schedule.GetURL	6815
• 140.25 Schedule.List	6816
• 140.26 Schedule.Release	6817
• 140.27 Schedule.ReleaseAll	6819
• 140.28 Schedule.SetAutoRelease	6820
• 140.29 Schedule.SetEvaluate	6821
• 140.30 Schedule.SetFileName	6822
• 140.31 Schedule.SetRepeatDelay	6823
• 140.32 Schedule.SetSQL	6824
• 140.33 Schedule.SetScriptName	6825
• 140.34 Schedule.SetScriptParameter	6826
• 140.35 Schedule.SetTimeStamp	6827

- 140.36 Schedule.SetURL 6828
- 140.37 Schedule.StartScriptAfterDelay 6829
- 140.38 Schedule.StartScriptAtTime 6831
- 140.39 Schedule.StartScriptAtTimeStamp 6833
- 140.40 Schedule.StartScriptOnIdle 6835
- 141.1 Screen.Count 6837
- 141.4 Screen.Height 6840
- 141.5 Screen.Left 6841
- 141.6 Screen.Scale 6842
- 141.7 Screen.Top 6843
- 141.8 Screen.Width 6844
- 141.9 Screenshot 6845
- 141.10 ScreenshotRect 6847
- 175.11 SendCommand 8242
- 143.1 SendMail.AddAttachmentContainer 6875
- 143.2 SendMail.AddAttachmentFile 6878
- 143.3 SendMail.AddAttachmentText 6881
- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.6 SendMail.AddHeader 6887
- 143.7 SendMail.AddRecipient 6889
- 143.8 SendMail.AddReplyTo 6891
- 143.9 SendMail.AddTo 6892
- 143.10 SendMail.AttachmentCount 6894
- 143.11 SendMail.ClearAttachments 6895
- 143.12 SendMail.ClearHeaders 6896
- 143.13 SendMail.ClearRecipients 6897
- 143.14 SendMail.CreateEmail 6898
- 143.15 SendMail.GetHTMLText 6900

	511
• 143.16 SendMail.GetInReplyTo	6901
• 143.17 SendMail.GetMessageID	6902
• 143.18 SendMail.GetPlainText	6903
• 143.19 SendMail.GetRichText	6904
• 143.20 SendMail.GetSMTPPassword	6905
• 143.21 SendMail.GetSMTPServer	6906
• 143.22 SendMail.GetSMTPUserName	6907
• 143.23 SendMail.GetSource	6908
• 143.24 SendMail.GetSubject	6909
• 143.25 SendMail.PrepareCURL	6910
• 143.26 SendMail.Release	6912
• 143.27 SendMail.SetFrom	6913
• 143.28 SendMail.SetHTMLText	6915
• 143.29 SendMail.SetInReplyTo	6917
• 143.30 SendMail.SetMessageID	6918
• 143.31 SendMail.SetPlainText	6919
• 143.32 SendMail.SetRichText	6921
• 143.33 SendMail.SetSMTPPassword	6923
• 143.34 SendMail.SetSMTPServer	6925
• 143.35 SendMail.SetSMTPUserName	6927
• 143.36 SendMail.SetSubject	6929
• 144.1 SerialPort.AvailableBytes	6931
• 144.2 SerialPort.Clear	6933
• 144.3 SerialPort.ClearDataAvailableHandler	6934
• 144.4 SerialPort.Close	6935
• 144.5 SerialPort.CloseAll	6936
• 144.6 SerialPort.GetBaudRate	6937
• 144.7 SerialPort.GetCTS	6938
• 144.8 SerialPort.GetDSR	6939

- 144.9 SerialPort.GetDTR 6940
- 144.10 SerialPort.GetDataBits 6941
- 144.11 SerialPort.GetParity 6942
- 144.12 SerialPort.GetRTS 6943
- 144.13 SerialPort.GetStopBits 6944
- 144.14 SerialPort.GetXON 6945
- 144.15 SerialPort.HasLine 6946
- 144.16 SerialPort.IsSuspended 6947
- 144.17 SerialPort.LastError 6948
- 144.18 SerialPort.List 6949
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.21 SerialPort.ReadByte 6959
- 144.22 SerialPort.ReadHex 6960
- 144.23 SerialPort.ReadLine 6961
- 144.24 SerialPort.Resume 6962
- 144.25 SerialPort.SetBaudRate 6963
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.29 SerialPort.SetDataAvailableEvaluate 6967
- 144.30 SerialPort.SetDataAvailableHandler 6968
- 144.31 SerialPort.SetDataBits 6970
- 144.32 SerialPort.SetParity 6971
- 144.33 SerialPort.SetRTS 6972
- 144.34 SerialPort.SetStopBits 6973
- 144.35 SerialPort.SetXON 6974
- 144.36 SerialPort.Suspend 6976
- 144.37 SerialPort.Write 6977

	513
• 144.38 SerialPort.WriteByte	6979
• 144.39 SerialPort.WriteHex	6980
• 145.1 ServerSocket.Check	6983
• 145.2 ServerSocket.GetAllowedScripts	6984
• 145.3 ServerSocket.GetAllowedTypes	6985
• 145.4 ServerSocket.SendQuery	6986
• 145.5 ServerSocket.SetAllowedScripts	6988
• 145.6 ServerSocket.SetAllowedTypes	6989
• 145.7 ServerSocket.Start	6990
• 145.8 ServerSocket.Stop	6992
• 147.1 SharedMemory.Exists	6997
• 147.2 SharedMemory.GetValue	6998
• 147.3 SharedMemory.SetValue	6999
• 148.1 Shell.AddArgument	7001
• 148.2 Shell.AddEnvironment	7004
• 148.3 Shell.AvailableBytesError	7005
• 148.4 Shell.AvailableBytesOutput	7006
• 148.5 Shell.ClearArguments	7007
• 148.6 Shell.ClearEnvironment	7008
• 148.7 Shell.CloseInput	7009
• 148.8 Shell.CloseStreams	7010
• 148.9 Shell.Execute	7011
• 148.10 Shell.ExitCode	7019
• 148.11 Shell.GetApplicationName	7020
• 148.12 Shell.GetArgument	7021
• 148.13 Shell.GetArgumentCount	7022
• 148.14 Shell.GetArguments	7023
• 148.15 Shell.GetCompletedEvaluate	7024
• 148.16 Shell.GetCompletedScriptFileName	7025

- 148.17 Shell.GetCompletedScriptName 7026
- 148.18 Shell.GetCurrentDirectory 7027
- 148.19 Shell.GetDataAvailableEvaluate 7028
- 148.20 Shell.GetDataAvailableScriptFileName 7029
- 148.21 Shell.GetDataAvailableScriptName 7030
- 148.22 Shell.GetDomain 7031
- 148.23 Shell.GetEnvironment 7032
- 148.24 Shell.GetPassword 7033
- 148.25 Shell.GetUsername 7034
- 148.26 Shell.IsRunning 7035
- 148.27 Shell.New 7036
- 148.28 Shell.PeekErrorText 7037
- 148.29 Shell.PeekOutputText 7038
- 148.30 Shell.ProcessIdentifier 7039
- 148.31 Shell.ReadErrorText 7040
- 148.32 Shell.ReadOutputText 7041
- 148.33 Shell.Release 7043
- 148.34 Shell.SetApplicationName 7044
- 148.35 Shell.SetArguments 7045
- 148.36 Shell.SetArgumentsList 7046
- 148.37 Shell.SetCompletedEvaluate 7047
- 148.38 Shell.SetCompletedScript 7048
- 148.39 Shell.SetCurrentDirectory 7049
- 148.40 Shell.SetDataAvailableEvaluate 7050
- 148.41 Shell.SetDataAvailableScript 7051
- 148.42 Shell.SetDomain 7052
- 148.43 Shell.SetPassword 7053
- 148.44 Shell.SetUsername 7054
- 148.45 Shell.Terminate 7055

	515
• 148.47 Shell.Wait	7057
• 148.48 Shell.WriteInputText	7059
• 175.12 ShowURL	8243
• 150.1 SmartCard.Available	7087
• 150.2 SmartCard.BeginTransaction	7088
• 150.3 SmartCard.Cancel	7089
• 150.4 SmartCard.CancelTransaction	7090
• 150.5 SmartCard.Connect	7091
• 150.6 SmartCard.Control	7093
• 150.7 SmartCard.Disconnect	7094
• 150.8 SmartCard.EndTransaction	7095
• 150.9 SmartCard.GetActiveProtocol	7096
• 150.10 SmartCard.GetAttribute	7097
• 150.11 SmartCard.HeaderTemplate	7099
• 150.12 SmartCard.Init	7100
• 150.13 SmartCard.ListReaderGroups	7103
• 150.14 SmartCard.ListReaders	7104
• 150.15 SmartCard.PerformSignature	7106
• 150.16 SmartCard.ReadCertificate	7107
• 150.17 SmartCard.ReadFile	7108
• 150.18 SmartCard.Reconnect	7111
• 150.19 SmartCard.Release	7112
• 150.20 SmartCard.SetAttribute	7113
• 150.21 SmartCard.SplitValues	7114
• 150.22 SmartCard.Status	7116
• 150.23 SmartCard.Transmit	7117
• 150.24 SmartCard.TransmitReceiveHeader	7120
• 150.25 SmartCard.Valid	7121
• 154.1 Socket.AcceptNewConnection	7185

- 154.2 Socket.AddMembership 7187
- 154.3 Socket.AvailableBytes 7188
- 154.4 Socket.Check 7189
- 154.5 Socket.CheckAll 7190
- 154.6 Socket.ClearDataAvailableHandler 7191
- 154.7 Socket.ClearErrorHandler 7192
- 154.8 Socket.ClearNewConnectionHandler 7193
- 154.9 Socket.Close 7194
- 154.10 Socket.CloseAll 7196
- 154.11 Socket.Connect 7197
- 154.12 Socket.DropMembership 7202
- 154.13 Socket.GetBroadcast 7203
- 154.14 Socket.GetMulticastInterface 7204
- 154.15 Socket.GetMulticastLoop 7205
- 154.16 Socket.GetMulticastTimeToLive 7206
- 154.17 Socket.GetTag 7207
- 154.18 Socket.GetTimeToLive 7208
- 154.19 Socket.IsClosed 7209
- 154.20 Socket.IsListening 7210
- 154.21 Socket.LastError 7211
- 154.22 Socket.LastMessageIP 7212
- 154.23 Socket.LastMessagePort 7213
- 154.24 Socket.List 7214
- 154.25 Socket.Listen 7215
- 154.26 Socket.LocalIP 7217
- 154.27 Socket.LocalPort 7218
- 154.28 Socket.NewTCPSocket 7219
- 154.29 Socket.NewUDPSocket 7221
- 154.30 Socket.Peek 7223

	517
• 154.31 Socket.PeekAll	7224
• 154.32 Socket.PeekAllHex	7225
• 154.33 Socket.PeekHex	7226
• 154.34 Socket.Read	7227
• 154.35 Socket.ReadAll	7230
• 154.36 Socket.ReadAllHex	7232
• 154.37 Socket.ReadHex	7233
• 154.38 Socket.ReadLine	7234
• 154.39 Socket.ReadLineHex	7236
• 154.40 Socket.ReadMLLP	7237
• 154.41 Socket.RemoteIP	7238
• 154.42 Socket.RemotePort	7239
• 154.43 Socket.SSL.Accept	7240
• 154.44 Socket.SSL.Connect	7241
• 154.45 Socket.SSL.GetMethod	7242
• 154.46 Socket.SSL.Initialize	7243
• 154.47 Socket.SSL.Prepare	7244
• 154.48 Socket.SSL.SetMethod	7245
• 154.49 Socket.SSL.UseCertificateFile	7246
• 154.50 Socket.SSL.UsePrivateKeyFile	7247
• 154.51 Socket.SendMessage	7248
• 154.52 Socket.SendMessageHex	7250
• 154.53 Socket.SetBroadcast	7251
• 154.54 Socket.SetDataAvailableEvaluate	7252
• 154.55 Socket.SetDataAvailableHandler	7253
• 154.56 Socket.SetDataAvailableURL	7255
• 154.57 Socket.SetErrorEvaluate	7256
• 154.58 Socket.SetErrorHandler	7257
• 154.59 Socket.SetErrorURL	7259

- 154.60 Socket.SetMulticastInterface 7260
- 154.61 Socket.SetMulticastLoop 7261
- 154.62 Socket.SetMulticastTimeToLive 7262
- 154.63 Socket.SetNewConnectionEvaluate 7263
- 154.64 Socket.SetNewConnectionHandler 7264
- 154.65 Socket.SetNewConnectionURL 7266
- 154.66 Socket.SetTag 7267
- 154.67 Socket.SetTimeToLive 7268
- 154.68 Socket.Write 7269
- 154.69 Socket.WriteByte 7271
- 154.70 Socket.WriteHex 7272
- 154.71 Socket.WriteMLLP 7274
- 155.1 Speech.AvailableVoices 7275
- 155.2 Speech.IsPaused 7276
- 155.3 Speech.IsSpeaking 7277
- 155.4 Speech.Pause 7278
- 155.5 Speech.Resume 7279
- 155.6 Speech.Speak 7280
- 124.51 StoreRegistration 6324
- 160.1 System.Logout 7647
- 160.2 System.Restart 7648
- 160.3 System.Shutdown 7649
- 160.4 System.Sleep 7650
- 161.1 SystemInfo.ADSystemInfo 7651
- 161.2 SystemInfo.AvailableRAM 7653
- 161.3 SystemInfo.CPUBrandString 7654
- 161.4 SystemInfo.ComputerName 7655
- 161.5 SystemInfo.DomainName 7656
- 161.6 SystemInfo.DoubleClickTime 7657

	519
• 161.7 SystemInfo.HardDiscSerial	7658
• 161.8 SystemInfo.HostDNSName	7659
• 161.9 SystemInfo.HostName	7660
• 161.10 SystemInfo.IdleTime	7661
• 161.11 SystemInfo.Is64bitWindows	7662
• 161.12 SystemInfo.IsAdminUser	7663
• 161.13 SystemInfo.MACAddress	7664
• 161.27 SystemInfo.OSName	7680
• 161.28 SystemInfo.OSVersionString	7681
• 161.29 SystemInfo.PhysicalRAM	7682
• 161.30 SystemInfo.ProcessorCount	7683
• 161.31 SystemInfo.SystemFont	7684
• 161.32 SystemInfo.Time	7685
• 161.33 SystemInfo.UserName	7686
• 161.34 SystemInfo.UserShortName	7687
• 161.35 SystemInfo.WinBuildNumber	7688
• 161.36 SystemInfo.WinCSDVersion	7689
• 161.37 SystemInfo.WinMajorVersion	7690
• 161.38 SystemInfo.WinMinorVersion	7691
• 161.39 SystemInfo.WinPlatformId	7692
• 161.40 SystemInfo.WinProductKey	7693
• 161.41 SystemInfo.WinProductType	7694
• 161.42 SystemInfo.WinServicePackMajor	7695
• 161.43 SystemInfo.WinServicePackMinor	7696
• 161.44 SystemInfo.WinSuiteMask	7697
• 161.45 SystemInfo.WinSystemMetrics	7698
• 161.46 SystemInfo.WindowsAero	7700
• 161.47 SystemInfo.isCatalina	7701
• 161.48 SystemInfo.isElCapitan	7702

- 161.49 SystemInfo.isHighSierra 7703
- 161.50 SystemInfo.isLeopard 7704
- 161.51 SystemInfo.isLion 7705
- 161.52 SystemInfo.isMacOSX 7706
- 161.53 SystemInfo.isMavericks 7707
- 161.54 SystemInfo.isMojave 7708
- 161.55 SystemInfo.isMountainLion 7709
- 161.56 SystemInfo.isSierra 7710
- 161.57 SystemInfo.isSnowLeopard 7711
- 161.58 SystemInfo.isWindows10 7712
- 161.59 SystemInfo.isWindows2000 7713
- 161.60 SystemInfo.isWindows7 7714
- 161.61 SystemInfo.isWindows8 7715
- 161.62 SystemInfo.isWindowsVista 7716
- 161.63 SystemInfo.isWindowsXP 7717
- 161.64 SystemInfo.isYosemite 7718
- 163.1 TAPI.AddressCount 7725
- 163.2 TAPI.AddressValue 7727
- 163.3 TAPI.Answer 7728
- 163.4 TAPI.BlindTransfer 7729
- 163.5 TAPI.CallInfo 7730
- 163.6 TAPI.Connect 7732
- 163.7 TAPI.CreateCall 7733
- 163.8 TAPI.Dial 7735
- 163.9 TAPI.Disconnect 7736
- 163.10 TAPI.Finish 7737
- 163.11 TAPI.GetCallStateEvaluate 7738
- 163.12 TAPI.GetCallStateScriptFileName 7739
- 163.13 TAPI.GetCallStateScriptName 7740

	521
• 163.14 TAPI.GetCallStateURL	7741
• 163.15 TAPI.GetNewCallEvaluate	7742
• 163.16 TAPI.GetNewCallScriptFileName	7743
• 163.17 TAPI.GetNewCallScriptName	7744
• 163.18 TAPI.GetNewCallURL	7745
• 163.19 TAPI.HandoffDirect	7746
• 163.20 TAPI.Hold	7747
• 163.21 TAPI.Initialize	7748
• 163.22 TAPI.IsInitialized	7749
• 163.23 TAPI.ListenOnAddress	7750
• 163.24 TAPI.ListenOnAllAddresses	7751
• 163.25 TAPI.ParkDirect	7752
• 163.26 TAPI.ParkIndirect	7753
• 163.27 TAPI.Pickup	7754
• 163.28 TAPI.Release	7755
• 163.29 TAPI.ReleaseAll	7756
• 163.30 TAPI.RemoveFromConference	7757
• 163.31 TAPI.SetCallStateEvaluate	7758
• 163.32 TAPI.SetCallStateScript	7759
• 163.33 TAPI.SetCallStateURL	7760
• 163.34 TAPI.SetNewCallEvaluate	7761
• 163.35 TAPI.SetNewCallScript	7762
• 163.36 TAPI.SetNewCallURL	7763
• 163.37 TAPI.Shutdown	7764
• 163.38 TAPI.Transfer	7765
• 163.39 TAPI.Unpark	7766
• 164.1 Text.AddLineNumbers	7767
• 164.2 Text.AppendTextFile	7769
• 164.3 Text.CapitalCase	7771

- 164.4 Text.Character 7773
- 164.5 Text.Characters 7775
- 164.6 Text.Code 7776
- 164.7 Text.ConvertFromTextEncoding 7777
- 164.8 Text.ConvertToTextEncoding 7783
- 164.9 Text.ConvertUnicodeToCharacterComposition 7790
- 164.10 Text.ConvertUnicodeToCharacterDecomposition 7792
- 164.11 Text.CountWords 7793
- 164.12 Text.DecodeBytesFromBase64 7794
- 164.13 Text.DecodeFromBase64 7795
- 164.14 Text.DecodeFromBase64URL 7796
- 164.15 Text.DecodeFromBytes 7797
- 164.16 Text.DecodeFromHTML 7798
- 164.17 Text.DecodeFromHex 7800
- 164.18 Text.DecodeFromQuotedPrintable 7802
- 164.19 Text.DecodeFromURL 7803
- 164.20 Text.DecodeFromXML 7805
- 164.21 Text.DecodeHexFromBase64 7806
- 164.22 Text.DecodeIMAPFolderName 7807
- 164.23 Text.DecodeURLComponent 7808
- 164.24 Text.Deserialize 7809
- 164.25 Text.EncodeBytesToBase64 7810
- 164.26 Text.EncodeEmailSubject 7811
- 164.27 Text.EncodeHexToBase64 7812
- 164.28 Text.EncodeToBase64 7813
- 164.29 Text.EncodeToBase64URL 7814
- 164.30 Text.EncodeToBytes 7816
- 164.31 Text.EncodeToHTML 7817
- 164.32 Text.EncodeToHex 7819

	523
• 164.33 Text.EncodeToQuotedPrintable	7821
• 164.34 Text.EncodeToURL	7822
• 164.35 Text.EncodeToXML	7824
• 164.36 Text.EncodeURLComponent	7826
• 164.37 Text.FileExtensionToMimeType	7828
• 164.38 Text.FilterUTF16	7830
• 164.39 Text.FindBetween	7831
• 164.40 Text.InvalidCharactersForEncoding	7833
• 164.41 Text.JaroWinklerDistance	7834
• 164.42 Text.Length	7835
• 164.43 Text.LevenshteinDistance	7836
• 164.44 Text.ListWords	7837
• 164.45 Text.LowerCase	7838
• 164.46 Text.MergeFields	7839
• 164.47 Text.MimeTypeToFileExtension	7841
• 164.48 Text.ReadEMLXFile	7842
• 164.49 Text.ReadTextFile	7843
• 164.50 Text.ReadTextFromContainer	7847
• 164.51 Text.RedefineEncoding	7848
• 164.52 Text.RemoveAccents	7849
• 164.53 Text.RemoveAccentsCaseInsensitive	7850
• 164.54 Text.RemoveControlCharacters	7851
• 164.55 Text.RemoveNewLine	7852
• 164.56 Text.RemovePostfix	7853
• 164.57 Text.RemovePrefix	7854
• 164.58 Text.ReplaceAll	7856
• 164.59 Text.ReplaceNewline	7857
• 164.60 Text.Serialize	7860
• 164.61 Text.SoundEx	7861

- 164.62 Text.SoundExGerman 7862
- 164.63 Text.Styles 7863
- 164.64 Text.TextToHTML 7865
- 164.65 Text.TextToRTF 7867
- 164.66 Text.Trim 7869
- 164.67 Text.UpperCase 7870
- 164.68 Text.WriteTextFile 7871
- 164.69 Text.WriteToContainer 7875
- 165.1 TextView.CanUndo 7877
- 165.2 TextView.Copy 7878
- 165.3 TextView.CreateOnPopoverWithControl 7879
- 165.4 TextView.CreateOnPopoverWithSize 7881
- 165.5 TextView.CreateWithControl 7882
- 165.6 TextView.CreateWithSize 7884
- 165.7 TextView.CreateWithWindow 7885
- 165.8 TextView.Cut 7886
- 165.9 TextView.GetAutoCorrectionEnabled 7887
- 165.12 TextView.GetHeight 7890
- 165.13 TextView.GetLeft 7891
- 165.14 TextView.GetPlainText 7892
- 165.15 TextView.GetRTF 7893
- 165.16 TextView.GetReadOnly 7894
- 165.18 TextView.GetSpellCheckingEnabled 7896
- 165.19 TextView.GetStyled 7897
- 165.20 TextView.GetTag 7898
- 165.21 TextView.GetTop 7899
- 165.22 TextView.GetVisible 7900
- 165.23 TextView.GetWidth 7901
- 165.24 TextView.GetWindowRef 7902

	525
• 165.25 TextView.List	7903
• 165.26 TextView.Paste	7904
• 165.27 TextView.Release	7905
• 165.28 TextView.ReleaseAll	7906
• 165.29 TextView.SetAutoCorrectionEnabled	7907
• 165.31 TextView.SetFocus	7910
• 165.32 TextView.SetFrame	7911
• 165.33 TextView.SetFrameWithControl	7912
• 165.35 TextView.SetPlainText	7914
• 165.36 TextView.SetRTF	7915
• 165.37 TextView.SetReadOnly	7916
• 165.39 TextView.SetSpellCheckingEnabled	7918
• 165.40 TextView.SetStyled	7919
• 165.41 TextView.SetTag	7920
• 165.42 TextView.SetVisible	7921
• 165.43 TextView.ShowFontPanel	7922
• 165.44 TextView.Undo	7923
• 166.1 Time.Format	7925
• 175.13 Time.Sleep	8244
• 166.3 Time.TimeStampToUTC	7933
• 166.4 Time.TimeZoneOffset	7934
• 175.14 Time.UnixTimeStamp	8245
• 166.5 Time.UnixTimeStampToFileMaker	7935
• 124.52 Trace	6326
• 124.56 Trace.GetErrorsOnly	6332
• 124.57 Trace.GetWithTimes	6333
• 124.58 Trace.Off	6334
• 124.59 Trace.SetErrorsOnly	6335
• 124.60 Trace.SetWithTimes	6336

- 124.61 Trace.WriteLine 6337
- 169.1 Twain.Acquire 7987
- 169.2 Twain.ClearCancelScript 7989
- 169.3 Twain.ClearNotificationScript 7990
- 169.4 Twain.CloseDS 7991
- 169.5 Twain.CloseDSM 7992
- 169.6 Twain.CurrentDSIdentity 7993
- 169.7 Twain.CurrentImage 7994
- 169.8 Twain.DisableDS 7995
- 169.9 Twain.GetAutofeed 7996
- 169.10 Twain.GetAutomaticBorderDetection 7997
- 169.11 Twain.GetAutomaticBrightness 7998
- 169.12 Twain.GetAutomaticRotate 7999
- 169.13 Twain.GetBrightness 8000
- 169.14 Twain.GetCloseAfterTransfer 8001
- 169.15 Twain.GetCompressionQuality 8002
- 169.16 Twain.GetContrast 8003
- 169.17 Twain.GetDSIdentitiesCount 8004
- 169.18 Twain.GetDSIdentity 8005
- 169.19 Twain.GetDefaultIdentity 8006
- 169.20 Twain.GetDiscardBlankPages 8007
- 169.21 Twain.GetDuplexEnabled 8008
- 169.22 Twain.GetFeededEnabled 8009
- 169.23 Twain.GetFilePaths 8010
- 169.24 Twain.GetFileType 8011
- 169.25 Twain.GetFolderPath 8012
- 169.26 Twain.GetGamma 8013
- 169.27 Twain.GetHighlight 8014
- 169.28 Twain.GetImageCount 8015

	527
• 169.29 Twain.GetOrientation	8016
• 169.30 Twain.GetPaper	8017
• 169.31 Twain.GetPixelType	8018
• 169.32 Twain.GetResolutionX	8019
• 169.33 Twain.GetResolutionY	8020
• 169.34 Twain.GetShadow	8021
• 169.35 Twain.GetUIVisible	8022
• 169.36 Twain.ImageInfo	8023
• 169.37 Twain.Initialize	8025
• 169.38 Twain.IsDSEnabled	8027
• 169.39 Twain.IsInitialized	8028
• 169.40 Twain.OpenDS	8029
• 169.41 Twain.OpenDSM	8030
• 169.42 Twain.SelectDS	8031
• 169.43 Twain.SelectDSIdentity	8032
• 169.44 Twain.SetAutofeed	8033
• 169.45 Twain.SetAutomaticBorderDetection	8034
• 169.46 Twain.SetAutomaticBrightness	8035
• 169.47 Twain.SetAutomaticRotate	8036
• 169.48 Twain.SetBrightness	8037
• 169.49 Twain.SetCancelScript	8038
• 169.50 Twain.SetCloseAfterTransfer	8039
• 169.51 Twain.SetCompressionQuality	8040
• 169.52 Twain.SetContrast	8041
• 169.53 Twain.SetDefaultDSIdentity	8042
• 169.54 Twain.SetDiscardBlankPages	8043
• 169.55 Twain.SetDuplexEnabled	8044
• 169.56 Twain.SetFeededEnabled	8045
• 169.57 Twain.SetFileType	8047

- 169.58 Twain.SetFolderPath 8048
- 169.59 Twain.SetGamma 8049
- 169.60 Twain.SetHighlight 8050
- 169.61 Twain.SetNotificationScript 8051
- 169.62 Twain.SetOrientation 8052
- 169.63 Twain.SetPaper 8053
- 169.64 Twain.SetPaperSize 8055
- 169.65 Twain.SetPixelType 8056
- 169.66 Twain.SetResolutionX 8057
- 169.67 Twain.SetResolutionY 8058
- 169.68 Twain.SetShadow 8059
- 169.69 Twain.SupportsBW 8060
- 169.70 Twain.SupportsGray 8061
- 169.71 Twain.SupportsMemoryTransfer 8062
- 169.72 Twain.SupportsRGB 8063
- 169.73 Twain.TransferImage 8064
- 172.1 URLScheme.GetDefaultHandler 8141
- 172.3 URLScheme.SetDefaultHandler 8144
- 173.1 USB.Count 8147
- 173.2 USB.FindDevice 8149
- 173.3 USB.FindSerialNumber 8150
- 173.4 USB.GetProductID 8151
- 173.5 USB.GetProductName 8152
- 173.6 USB.GetSerialNumber 8153
- 173.7 USB.GetVendorID 8154
- 173.8 USB.GetVendorName 8155
- 176.1 UUID.Formatted 8247
- 176.2 UUID.FromNumber 8249
- 176.3 UUID.Hex 8251

	529
• 176.4 UUID.Number	8252
• 176.5 UUID.Raw	8253
• 176.6 UUID.ToNumber	8254
• 53.3 UnZipFile.Close	1476
• 53.4 UnZipFile.ExtractFiles	1477
• 53.5 UnZipFile.GlobalComment	1479
• 53.6 UnZipFile.ItemCRC	1480
• 53.7 UnZipFile.ItemComment	1481
• 53.8 UnZipFile.ItemCompressedSize	1482
• 53.9 UnZipFile.ItemCompressionMethod	1483
• 53.10 UnZipFile.ItemCount	1484
• 53.11 UnZipFile.ItemDate	1485
• 53.12 UnZipFile.ItemDiskNumberStart	1486
• 53.13 UnZipFile.ItemExternalFileAttributes	1487
• 53.14 UnZipFile.ItemFlag	1488
• 53.15 UnZipFile.ItemInternalFileAttributes	1490
• 53.16 UnZipFile.ItemName	1491
• 53.17 UnZipFile.ItemSizeFileComment	1492
• 53.18 UnZipFile.ItemSizeFileExtra	1493
• 53.19 UnZipFile.ItemSizeFileName	1494
• 53.20 UnZipFile.ItemUncompressedSize	1495
• 53.21 UnZipFile.ItemVersion	1496
• 53.22 UnZipFile.ItemVersionNeeded	1497
• 53.23 UnZipFile.OpenContainer	1498
• 53.24 UnZipFile.OpenFile	1499
• 53.25 UnZipFile.ReadAsFileContainer	1501
• 53.26 UnZipFile.ReadAsGIFContainer	1502
• 53.27 UnZipFile.ReadAsHex	1503
• 53.28 UnZipFile.ReadAsJPEGContainer	1504

- 53.29 UnZipFile.ReadAsPNGContainer 1505
- 53.30 UnZipFile.ReadAsText 1506
- 53.31 UnZipFile.ReadToFile 1507
- 53.32 UnZipFile.UsePassword 1508
- 171.1 Updater.CheckForUpdates 8129
- 171.2 Updater.CheckForUpdatesInBackground 8130
- 171.3 Updater.GetAutomaticallyChecksForUpdates 8131
- 171.7 Updater.LastUpdateCheckDate 8135
- 171.8 Updater.SetAutomaticallyChecksForUpdates 8136
- 124.62 Version 6338
- 124.63 VersionAutoUpdate 6340
- 181.1 WIA.ClearCurrentDevice 8493
- 181.2 WIA.DeviceCount 8494
- 181.3 WIA.DeviceProperties 8495
- 181.4 WIA.DevicePropertyKeys 8497
- 181.5 WIA.DevicePropertyValue 8500
- 181.6 WIA.GetCurrentDevice 8503
- 181.7 WIA.GetCurrentItem 8504
- 181.8 WIA.Image 8505
- 181.9 WIA.ImageCount 8507
- 181.10 WIA.ImageDialog 8508
- 181.11 WIA.Images 8510
- 181.12 WIA.Initialize 8511
- 181.13 WIA.ItemProperties 8512
- 181.14 WIA.ItemPropertyKeys 8514
- 181.15 WIA.ItemPropertyValue 8517
- 181.16 WIA.ListItems 8520
- 181.17 WIA.Scan 8521
- 181.18 WIA.SelectDeviceDialog 8523

	531
• 181.19 WIA.SetCurrentDevice	8524
• 181.20 WIA.SetDevicePropertyValue	8525
• 181.21 WIA.SetItemPropertyValue	8527
• 187.1 WMFP.Create	8767
• 187.2 WMFP.FrameStep	8770
• 187.3 WMFP.GetBalance	8771
• 187.4 WMFP.GetDuration	8772
• 187.5 WMFP.GetIdealVideoSize	8773
• 187.6 WMFP.GetLoop	8774
• 187.7 WMFP.GetMute	8775
• 187.8 WMFP.GetNativeVideoSize	8776
• 187.9 WMFP.GetPosition	8777
• 187.10 WMFP.GetRate	8778
• 187.11 WMFP.GetState	8779
• 187.12 WMFP.GetTag	8780
• 187.13 WMFP.GetVisible	8781
• 187.14 WMFP.GetVolume	8782
• 187.15 WMFP.Pause	8783
• 187.16 WMFP.Play	8784
• 187.17 WMFP.Release	8785
• 187.18 WMFP.Screenshot	8786
• 187.19 WMFP.SetBalance	8787
• 187.20 WMFP.SetBorder	8788
• 187.21 WMFP.SetFrame	8789
• 187.22 WMFP.SetLoop	8790
• 187.23 WMFP.SetMute	8791
• 187.24 WMFP.SetPlaybackEndedScriptTrigger	8792
• 187.25 WMFP.SetPosition	8793
• 187.26 WMFP.SetRate	8794

- 187.27 WMFP.SetTag 8795
- 187.28 WMFP.SetVisible 8796
- 187.29 WMFP.SetVolume 8797
- 187.30 WMFP.Stop 8798
- 187.31 WMFP.UpdateVideo 8799
- 188.1 WMIQuery.Connect 8801
- 188.2 WMIQuery.New 8805
- 188.3 WMIQuery.Next 8806
- 188.4 WMIQuery.PropertyNames 8807
- 188.5 WMIQuery.PropertyType 8808
- 188.6 WMIQuery.PropertyValue 8809
- 188.7 WMIQuery.Query 8810
- 188.8 WMIQuery.Release 8812
- 180.29 WebView.CallFunction 8315
- 180.30 WebView.ClearBrowserSession 8316
- 180.31 WebView.ClearSelection 8317
- 180.32 WebView.ClickInput 8318
- 180.37 WebView.Copy 8324
- 180.38 WebView.CopyFormattedText 8325
- 180.41 WebView.Cut 8330
- 180.43 WebView.EstimatedProgress 8332
- 180.44 WebView.Evaluate 8333
- 180.45 WebView.ExecCommand 8337
- 180.46 WebView.FindByName 8339
- 180.47 WebView.FindWindowByIndex 8341
- 180.48 WebView.FindWindowByTitle 8342
- 180.49 WebView.FormReset 8344
- 180.50 WebView.FormSubmit 8345
- 180.54 WebView.GetEditable 8349

	533
• 180.55 WebView.GetForm	8350
• 180.56 WebView.GetFormButtonValue	8351
• 180.57 WebView.GetFormCount	8352
• 180.58 WebView.GetFormInputChecked	8353
• 180.59 WebView.GetFormInputValue	8354
• 180.60 WebView.GetFormSelectOptions	8356
• 180.61 WebView.GetFormSelectValue	8357
• 180.62 WebView.GetFormTextAreaValue	8359
• 180.63 WebView.GetFormValue	8361
• 180.65 WebView.GetHTMLText	8365
• 180.68 WebView.GetImage	8369
• 180.69 WebView.GetImageCount	8371
• 180.70 WebView.GetInternetExplorerVersion	8372
• 180.71 WebView.GetLink	8373
• 180.72 WebView.GetLinkCount	8374
• 180.73 WebView.GetPlainText	8375
• 180.77 WebView.GetSilent	8381
• 180.78 WebView.GetSource	8382
• 180.80 WebView.GetTitle	8384
• 180.81 WebView.GetURL	8385
• 180.82 WebView.GoBack	8386
• 180.83 WebView.GoForward	8387
• 180.84 WebView.HasOnlySecureContent	8388
• 180.85 WebView.InstallCallback	8389
• 180.87 WebView.IsLoading	8392
• 180.88 WebView.LoadHTML	8394
• 180.89 WebView.LoadJavascriptURL	8395
• 180.90 WebView.LoadURL	8396
• 180.97 WebView.Paste	8406

- 180.98 WebView.PostURL 8407
- 180.99 WebView.PressKey 8409
- 180.100 WebView.Print 8410
- 180.101 WebView.PrintPreview 8412
- 180.103 WebView.Release 8415
- 180.104 WebView.Reload 8416
- 180.107 WebView.RenderImage 8419
- 180.109 WebView.RunJavaScript 8423
- 180.110 WebView.RunJavaScriptReturnTitle 8433
- 180.111 WebView.Screenshot 8435
- 180.117 WebView.SearchText 8442
- 180.118 WebView.SelectAll 8444
- 180.119 WebView.SelectedText 8445
- 180.120 WebView.SendCommand 8447
- 180.124 WebView.SetEditable 8453
- 180.125 WebView.SetFocus 8454
- 180.126 WebView.SetFormButtonValue 8455
- 180.127 WebView.SetFormInputChecked 8457
- 180.128 WebView.SetFormInputValue 8459
- 180.129 WebView.SetFormSelectValue 8462
- 180.130 WebView.SetFormTextAreaValue 8464
- 180.131 WebView.SetFormValue 8466
- 180.133 WebView.SetInternetExplorerVersion 8469
- 180.137 WebView.SetSilent 8477
- 180.138 WebView.SetTitle 8478
- 180.149 WebView.setZoom 8489
- 186.1 WinSendMail.AddAttachmentContainer 8739
- 186.2 WinSendMail.AddAttachmentFile 8741
- 186.3 WinSendMail.AddAttachmentText 8743

	535
• 186.4 WinSendMail.AddBCC	8744
• 186.5 WinSendMail.AddCC	8746
• 186.6 WinSendMail.AddRecipient	8748
• 186.7 WinSendMail.AddTo	8750
• 186.8 WinSendMail.AttachmentCount	8752
• 186.9 WinSendMail.ClearAttachments	8753
• 186.10 WinSendMail.ClearRecipients	8754
• 186.11 WinSendMail.CreateEmail	8755
• 186.12 WinSendMail.GetSubject	8757
• 186.13 WinSendMail.GetText	8758
• 186.14 WinSendMail.Release	8759
• 186.15 WinSendMail.Send	8760
• 186.16 WinSendMail.SendAnsi	8761
• 186.17 WinSendMail.SendAsync	8762
• 186.18 WinSendMail.SetFrom	8763
• 186.19 WinSendMail.SetSubject	8764
• 186.20 WinSendMail.SetText	8765
• 182.5 Window.Activate	8537
• 182.8 Window.ClearFocus	8542
• 182.11 Window.Current	8545
• 182.12 Window.DisableScrollbars	8546
• 182.13 Window.EnableScrollbars	8547
• 182.14 Window.Fade	8548
• 182.15 Window.FindByIndex	8550
• 182.16 Window.FindByTitle	8552
• 182.17 Window.FlashWindow	8556
• 182.18 Window.GetAlpha	8558
• 182.19 Window.GetClassName	8559
• 182.20 Window.GetCurrentTag	8560

- 182.21 Window.GetHeight 8561
- 182.22 Window.GetLeft 8562
- 182.27 Window.GetTag 8567
- 182.28 Window.GetTitle 8568
- 182.34 Window.GetTop 8574
- 182.35 Window.GetTopMost 8575
- 182.36 Window.GetWidth 8576
- 182.37 Window.HasCloseButton 8577
- 182.38 Window.HasMiniaturizeButton 8578
- 182.40 Window.HasZoomButton 8580
- 182.41 Window.Hide 8581
- 182.44 Window.HideScrollbars 8585
- 182.49 Window.IsMaximized 8591
- 182.50 Window.IsMinimized 8592
- 182.52 Window.IsVisible 8594
- 182.53 Window.List 8595
- 182.55 Window.Maximize 8597
- 182.56 Window.Minimize 8598
- 182.57 Window.ModalDialogFront 8599
- 182.58 Window.Move 8600
- 182.59 Window.PositionNextDialog 8602
- 182.60 Window.RemoveMenu 8604
- 182.61 Window.Resizable 8605
- 182.62 Window.Resize 8606
- 182.66 Window.Screenshot 8613
- 182.69 Window.Scrollbar.getHorizontalMaximum 8618
- 182.70 Window.Scrollbar.getHorizontalPosition 8619
- 182.71 Window.Scrollbar.getVerticalMaximum 8620
- 182.72 Window.Scrollbar.getVerticalPosition 8621

	537
• 182.73 Window.Scrollbar.set	8622
• 182.74 Window.ScrollbarsVisible	8623
• 182.75 Window.SetAlpha	8624
• 182.76 Window.SetBounds	8626
• 182.77 Window.SetCloseButton	8628
• 182.78 Window.SetCurrentTag	8630
• 182.80 Window.SetFocus	8633
• 182.88 Window.SetMiniaturizeButton	8641
• 182.90 Window.SetProgress	8644
• 182.91 Window.SetResizable	8646
• 182.94 Window.SetTag	8651
• 182.95 Window.SetTitle	8652
• 182.96 Window.SetTitleIcon	8653
• 182.101 Window.SetTopMost	8658
• 182.102 Window.SetZoomButton	8659
• 182.103 Window.Show	8661
• 182.104 Window.ShowCharacterPalette	8663
• 182.106 Window.ShowKeyboard	8665
• 182.108 Window.ShowScrollbars	8668
• 182.112 Window.TopHeight	8673
• 182.113 Window.Update	8674
• 183.1 WindowsScript.AddCode	8675
• 183.2 WindowsScript.Close	8680
• 183.3 WindowsScript.Create	8684
• 183.4 WindowsScript.ErrorClear	8688
• 183.5 WindowsScript.ErrorColumn	8689
• 183.6 WindowsScript.ErrorDescription	8690
• 183.7 WindowsScript.ErrorLine	8691
• 183.8 WindowsScript.ErrorNumber	8692

- 183.9 WindowsScript.ErrorSource 8693
- 183.10 WindowsScript.ErrorText 8694
- 183.11 WindowsScript.Eval 8695
- 183.12 WindowsScript.ExecuteFunction 8696
- 183.13 WindowsScript.ExecuteStatement 8700
- 183.14 WindowsScript.GetAllowUI 8701
- 183.15 WindowsScript.GetLanguage 8702
- 183.16 WindowsScript.GetTimeout 8703
- 183.17 WindowsScript.GetUseSafeSubset 8704
- 183.18 WindowsScript.SetAllowUI 8705
- 183.19 WindowsScript.SetLanguage 8706
- 183.20 WindowsScript.SetTimeout 8709
- 183.21 WindowsScript.SetUseSafeSubset 8710
- 184.1 WindowsUserNotification.Available 8711
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.6 WindowsUserNotification.HideNotification 8716
- 184.7 WindowsUserNotification.Initialize 8717
- 184.8 WindowsUserNotification.Isinitialized 8719
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728
- 184.16 WindowsUserNotification.ShowNotification 8730

	539
• 184.17 WindowsUserNotification.XMLUsed	8731
• 189.1 WordFile.AddMediaFile	8813
• 189.2 WordFile.Append	8815
• 189.3 WordFile.AppendTableRow	8816
• 189.4 WordFile.DuplicateTableRow	8818
• 189.5 WordFile.FieldNames	8819
• 189.6 WordFile.GetCaseless	8820
• 189.7 WordFile.GetFieldText	8821
• 189.8 WordFile.GetMediaFile	8822
• 189.9 WordFile.GetXML	8823
• 189.10 WordFile.HasTag	8824
• 189.11 WordFile.MediaFiles	8825
• 189.12 WordFile.OpenContainer	8826
• 189.13 WordFile.OpenFile	8828
• 189.14 WordFile.OpenText	8830
• 189.15 WordFile.Parts	8831
• 189.16 WordFile.Release	8832
• 189.17 WordFile.RemoveTableRow	8833
• 189.18 WordFile.ReplaceTag	8835
• 189.19 WordFile.SetCaseless	8838
• 189.20 WordFile.SetFieldText	8839
• 189.21 WordFile.SetMarkers	8840
• 189.22 WordFile.SetMediaFile	8841
• 189.23 WordFile.SetXML	8843
• 189.24 WordFile.Texts	8844
• 189.25 WordFile.WriteFile	8846
• 48.22 X509.Description	1369
• 48.23 X509.Duplicate	1370
• 48.24 X509.IssuerName	1371

- 48.25 X509.Name 1372
- 48.26 X509.Read 1373
- 48.27 X509.ReadFromContainer 1374
- 48.28 X509.ReadFromFile 1375
- 48.29 X509.Release 1376
- 48.30 X509.SerialNumber 1377
- 48.32 X509.SubjectName 1379
- 48.33 X509.Version 1380
- 48.34 X509.Write 1381
- 190.1 XL.Book.AddCustomNumFormat 8849
- 190.2 XL.Book.AddFont 8852
- 190.3 XL.Book.AddFormat 8854
- 190.4 XL.Book.AddPictureContainer 8857
- 190.5 XL.Book.AddPictureFile 8859
- 190.6 XL.Book.AddSheet 8860
- 190.7 XL.Book.BiffVersion 8862
- 190.8 XL.Book.CustomNumFormat 8863
- 190.9 XL.Book.DeleteSheet 8864
- 190.10 XL.Book.DeleteSheetsExcept 8867
- 190.11 XL.Book.FontCount 8868
- 190.12 XL.Book.FormatCount 8869
- 190.13 XL.Book.GetActiveSheet 8870
- 190.14 XL.Book.GetDefaultFontName 8871
- 190.15 XL.Book.GetDefaultFontSize 8872
- 190.16 XL.Book.GetPicture 8873
- 190.17 XL.Book.GetPictureType 8874
- 190.18 XL.Book.GetRGBMode 8875
- 190.19 XL.Book.GetRefR1C1 8876
- 190.20 XL.Book.GetText 8877

	541
• 190.21 XL.Book.InsertSheet	8878
• 190.22 XL.Book.IsDate1904	8879
• 190.23 XL.Book.IsTemplate	8880
• 190.24 XL.Book.MoveSheet	8881
• 190.25 XL.Book.PictureCount	8882
• 190.26 XL.Book.Release	8883
• 190.27 XL.Book.ReleaseAll	8885
• 190.28 XL.Book.Save	8886
• 190.29 XL.Book.SaveToFile	8888
• 190.30 XL.Book.SetActiveSheet	8890
• 190.31 XL.Book.SetDate1904	8891
• 190.32 XL.Book.SetDefaultFont	8892
• 190.33 XL.Book.SetRGBMode	8893
• 190.34 XL.Book.SetRefR1C1	8894
• 190.35 XL.Book.SetTemplate	8895
• 190.36 XL.Book.SheetCount	8896
• 190.37 XL.Book.SheetIndexForName	8897
• 190.38 XL.Book.Sheets	8898
• 190.39 XL.Book.Version	8899
• 190.40 XL.Color.Pack	8900
• 190.41 XL.Color.UnPack	8902
• 190.42 XL.CopyContent	8904
• 190.43 XL.CopyRow	8906
• 190.44 XL.CopySheet	8908
• 190.45 XL.Date.DoubleToTimeStamp	8910
• 190.46 XL.Date.Pack	8911
• 190.47 XL.Date.TimeStampToDouble	8913
• 190.48 XL.Date.UnPack	8914
• 190.49 XL.Font.GetBold	8915

- 190.50 XL.Font.GetColor 8916
- 190.51 XL.Font.GetItalic 8917
- 190.52 XL.Font.GetName 8918
- 190.53 XL.Font.GetScript 8919
- 190.54 XL.Font.GetSize 8920
- 190.55 XL.Font.GetStrikeOut 8921
- 190.56 XL.Font.GetUnderline 8922
- 190.57 XL.Font.SetBold 8923
- 190.58 XL.Font.SetColor 8925
- 190.59 XL.Font.SetItalic 8928
- 190.60 XL.Font.SetName 8929
- 190.61 XL.Font.SetScript 8931
- 190.62 XL.Font.SetSize 8932
- 190.63 XL.Font.SetStrikeOut 8934
- 190.64 XL.Font.SetUnderline 8935
- 190.65 XL.Format.GetAlignH 8936
- 190.66 XL.Format.GetAlignV 8937
- 190.67 XL.Format.GetBorderBottom 8938
- 190.68 XL.Format.GetBorderBottomColor 8939
- 190.69 XL.Format.GetBorderDiagonal 8940
- 190.70 XL.Format.GetBorderDiagonalColor 8941
- 190.71 XL.Format.GetBorderDiagonalStyle 8942
- 190.72 XL.Format.GetBorderLeft 8943
- 190.73 XL.Format.GetBorderLeftColor 8944
- 190.74 XL.Format.GetBorderRight 8945
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.76 XL.Format.GetBorderTop 8947
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.78 XL.Format.GetFillPattern 8949

	543
• 190.79 XL.Format.GetFont	8950
• 190.80 XL.Format.GetHidden	8951
• 190.81 XL.Format.GetIndent	8952
• 190.82 XL.Format.GetLocked	8953
• 190.83 XL.Format.GetNumFormat	8954
• 190.84 XL.Format.GetPatternBackgroundColor	8955
• 190.85 XL.Format.GetPatternForegroundColor	8956
• 190.86 XL.Format.GetRotation	8957
• 190.87 XL.Format.GetShrinkToFit	8958
• 190.88 XL.Format.GetWrap	8959
• 190.89 XL.Format.SetAlignH	8960
• 190.90 XL.Format.SetAlignV	8963
• 190.91 XL.Format.SetBorder	8965
• 190.92 XL.Format.SetBorderBottom	8967
• 190.93 XL.Format.SetBorderBottomColor	8969
• 190.94 XL.Format.SetBorderColor	8970
• 190.95 XL.Format.SetBorderDiagonal	8972
• 190.96 XL.Format.SetBorderDiagonalColor	8974
• 190.97 XL.Format.SetBorderDiagonalStyle	8975
• 190.98 XL.Format.SetBorderLeft	8976
• 190.99 XL.Format.SetBorderLeftColor	8978
• 190.100 XL.Format.SetBorderRight	8979
• 190.101 XL.Format.SetBorderRightColor	8981
• 190.102 XL.Format.SetBorderTop	8982
• 190.103 XL.Format.SetBorderTopColor	8984
• 190.104 XL.Format.SetFillPattern	8985
• 190.105 XL.Format.SetFont	8987
• 190.106 XL.Format.SetHidden	8989
• 190.107 XL.Format.SetIndent	8990

- 190.108 XL.Format.SetLocked 8991
- 190.109 XL.Format.SetNumFormat 8993
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.112 XL.Format.SetRotation 9000
- 190.113 XL.Format.SetShrinkToFit 9001
- 190.114 XL.Format.SetWrap 9002
- 190.115 XL.Initialize 9005
- 190.116 XL.IsInitialized 9008
- 190.117 XL.LoadBook 9010
- 190.118 XL.LoadBookPartially 9013
- 190.119 XL.NewBook 9015
- 190.120 XL.Sheet.AddHyperlink 9017
- 190.121 XL.Sheet.AddIgnoredError 9019
- 190.122 XL.Sheet.AddrToRowCol 9021
- 190.123 XL.Sheet.ApplyFilter 9022
- 190.124 XL.Sheet.AutoFilter 9023
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.126 XL.Sheet.AutoFilter.Clear 9026
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.130 XL.Sheet.AutoFilter.FilterType 9030
- 190.131 XL.Sheet.AutoFilter.GetCustomFilter 9032
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.134 XL.Sheet.AutoFilter.GetSortRange 9035
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.136 XL.Sheet.AutoFilter.SetCustomFilter 9037

	545
• 190.137 XL.Sheet.AutoFilter.SetRef	9039
• 190.138 XL.Sheet.AutoFilter.SetSort	9041
• 190.139 XL.Sheet.AutoFilter.SetTop10	9042
• 190.140 XL.Sheet.CellIsDate	9044
• 190.141 XL.Sheet.CellIsFormula	9045
• 190.142 XL.Sheet.CellReadBlank	9046
• 190.143 XL.Sheet.CellReadBoolean	9047
• 190.144 XL.Sheet.CellReadBooleans	9048
• 190.145 XL.Sheet.CellReadComment	9050
• 190.146 XL.Sheet.CellReadComments	9051
• 190.147 XL.Sheet.CellReadDate	9053
• 190.148 XL.Sheet.CellReadDates	9055
• 190.149 XL.Sheet.CellReadFormula	9057
• 190.150 XL.Sheet.CellReadFormulas	9058
• 190.151 XL.Sheet.CellReadNumber	9060
• 190.152 XL.Sheet.CellReadNumbers	9061
• 190.153 XL.Sheet.CellReadText	9063
• 190.154 XL.Sheet.CellReadTexts	9065
• 190.155 XL.Sheet.CellType	9067
• 190.156 XL.Sheet.CellWriteBlank	9068
• 190.157 XL.Sheet.CellWriteBlanks	9070
• 190.158 XL.Sheet.CellWriteBoolean	9072
• 190.159 XL.Sheet.CellWriteBooleans	9074
• 190.160 XL.Sheet.CellWriteComment	9076
• 190.161 XL.Sheet.CellWriteComments	9078
• 190.162 XL.Sheet.CellWriteDate	9080
• 190.163 XL.Sheet.CellWriteDates	9082
• 190.164 XL.Sheet.CellWriteError	9084
• 190.165 XL.Sheet.CellWriteFormula	9086

- 190.166 XL.Sheet.CellWriteFormulaBoolean 9089
- 190.167 XL.Sheet.CellWriteFormulaNumber 9091
- 190.168 XL.Sheet.CellWriteFormulaText 9093
- 190.169 XL.Sheet.CellWriteFormulas 9095
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.174 XL.Sheet.Clear 9108
- 190.175 XL.Sheet.ClearPrintArea 9109
- 190.176 XL.Sheet.ClearPrintRepeats 9110
- 190.177 XL.Sheet.CopyCell 9111
- 190.178 XL.Sheet.DelHyperlink 9112
- 190.179 XL.Sheet.DelMergeByIndex 9113
- 190.180 XL.Sheet.DeleteMerge 9114
- 190.181 XL.Sheet.DeleteNamedRange 9115
- 190.182 XL.Sheet.GetCellError 9116
- 190.183 XL.Sheet.GetCellErrors 9117
- 190.184 XL.Sheet.GetCellFormat 9119
- 190.185 XL.Sheet.GetCellFormats 9120
- 190.186 XL.Sheet.GetColHidden 9122
- 190.187 XL.Sheet.GetColWidth 9123
- 190.188 XL.Sheet.GetDisplayGridlines 9124
- 190.189 XL.Sheet.GetFirstCol 9125
- 190.190 XL.Sheet.GetFirstRow 9126
- 190.191 XL.Sheet.GetFooter 9127
- 190.192 XL.Sheet.GetFooterMargin 9128
- 190.193 XL.Sheet.GetGroupSummaryBelow 9129
- 190.194 XL.Sheet.GetGroupSummaryRight 9130

	547
• 190.195 XL.Sheet.GetHCenter	9131
• 190.196 XL.Sheet.GetHeader	9132
• 190.197 XL.Sheet.GetHeaderMargin	9133
• 190.198 XL.Sheet.GetHidden	9134
• 190.199 XL.Sheet.GetHorPageBreak	9135
• 190.200 XL.Sheet.GetHorPageBreakCount	9136
• 190.201 XL.Sheet.GetLandscape	9137
• 190.202 XL.Sheet.GetLastCol	9138
• 190.203 XL.Sheet.GetLastRow	9139
• 190.204 XL.Sheet.GetMarginBottom	9140
• 190.205 XL.Sheet.GetMarginLeft	9141
• 190.206 XL.Sheet.GetMarginRight	9142
• 190.207 XL.Sheet.GetMarginTop	9143
• 190.208 XL.Sheet.GetMerge	9144
• 190.209 XL.Sheet.GetName	9146
• 190.210 XL.Sheet.GetNamedRange	9147
• 190.211 XL.Sheet.GetPaper	9148
• 190.212 XL.Sheet.GetPicture	9150
• 190.213 XL.Sheet.GetPrintArea	9152
• 190.214 XL.Sheet.GetPrintFit	9153
• 190.215 XL.Sheet.GetPrintGridlines	9154
• 190.216 XL.Sheet.GetPrintRepeatCols	9155
• 190.217 XL.Sheet.GetPrintRepeatRows	9156
• 190.218 XL.Sheet.GetPrintRow	9157
• 190.219 XL.Sheet.GetPrintZoom	9158
• 190.220 XL.Sheet.GetProtect	9159
• 190.221 XL.Sheet.GetRowHeight	9160
• 190.222 XL.Sheet.GetRowHidden	9161
• 190.223 XL.Sheet.GetText	9162

- 190.224 XL.Sheet.GetTopLeftView 9163
- 190.225 XL.Sheet.GetVCenter 9164
- 190.226 XL.Sheet.GetVerPageBreak 9165
- 190.227 XL.Sheet.GetVerPageBreakCount 9166
- 190.228 XL.Sheet.GetZoom 9167
- 190.229 XL.Sheet.GroupCols 9168
- 190.230 XL.Sheet.GroupRows 9169
- 190.231 XL.Sheet.Hyperlink 9170
- 190.232 XL.Sheet.HyperlinkSize 9171
- 190.233 XL.Sheet.InsertCol 9172
- 190.234 XL.Sheet.InsertRow 9173
- 190.235 XL.Sheet.Merge 9174
- 190.236 XL.Sheet.MergeSize 9175
- 190.237 XL.Sheet.NamedRange 9176
- 190.238 XL.Sheet.NamedRangeCount 9177
- 190.239 XL.Sheet.PictureCount 9178
- 190.240 XL.Sheet.RemoveCol 9179
- 190.241 XL.Sheet.RemoveComment 9180
- 190.242 XL.Sheet.RemoveComments 9181
- 190.243 XL.Sheet.RemoveFilter 9183
- 190.244 XL.Sheet.RemoveRow 9184
- 190.245 XL.Sheet.RightToLeft 9186
- 190.246 XL.Sheet.RowColToAddr 9187
- 190.247 XL.Sheet.SetAutoFitArea 9189
- 190.248 XL.Sheet.SetCellFormat 9190
- 190.249 XL.Sheet.SetCellFormats 9192
- 190.250 XL.Sheet.SetCol 9194
- 190.251 XL.Sheet.SetColHidden 9197
- 190.252 XL.Sheet.SetColumn 9198

	549
• 190.253 XL.Sheet.SetDisplayGridlines	9200
• 190.254 XL.Sheet.SetFooter	9201
• 190.255 XL.Sheet.SetGroupSummaryBelow	9203
• 190.256 XL.Sheet.SetGroupSummaryRight	9204
• 190.257 XL.Sheet.SetHCenter	9205
• 190.258 XL.Sheet.SetHeader	9206
• 190.259 XL.Sheet.SetHorPageBreak	9208
• 190.260 XL.Sheet.SetLandscape	9209
• 190.261 XL.Sheet.SetMarginBottom	9210
• 190.262 XL.Sheet.SetMarginLeft	9211
• 190.263 XL.Sheet.SetMarginRight	9212
• 190.264 XL.Sheet.SetMarginTop	9213
• 190.265 XL.Sheet.SetMerge	9214
• 190.266 XL.Sheet.SetName	9216
• 190.267 XL.Sheet.SetNamedRange	9217
• 190.268 XL.Sheet.SetPaper	9219
• 190.269 XL.Sheet.SetPictureWithScale	9220
• 190.270 XL.Sheet.SetPictureWithSize	9222
• 190.271 XL.Sheet.SetPrintArea	9225
• 190.272 XL.Sheet.SetPrintFit	9227
• 190.273 XL.Sheet.SetPrintGridlines	9228
• 190.274 XL.Sheet.SetPrintRepeatCols	9229
• 190.275 XL.Sheet.SetPrintRepeatRows	9230
• 190.276 XL.Sheet.SetPrintRow	9231
• 190.277 XL.Sheet.SetPrintZoom	9232
• 190.278 XL.Sheet.SetProtect	9233
• 190.279 XL.Sheet.SetProtectEx	9234
• 190.280 XL.Sheet.SetRightToLeft	9236
• 190.281 XL.Sheet.SetRow	9237

- 190.282 XL.Sheet.SetRowHidden 9239
- 190.283 XL.Sheet.SetTabColor 9240
- 190.284 XL.Sheet.SetTabColorRGB 9241
- 190.285 XL.Sheet.SetTopLeftView 9242
- 190.286 XL.Sheet.SetVCenter 9243
- 190.287 XL.Sheet.SetVerPageBreak 9244
- 190.288 XL.Sheet.SetZoom 9245
- 190.289 XL.Sheet.Split 9246
- 190.290 XL.Sheet.SplitInfo 9247
- 190.291 XL.Sheet.Table 9248
- 190.292 XL.Sheet.TableSize 9249
- 190.293 XL.Sheet.Type 9250
- 190.294 XL.Uninitialize 9251
- 191.2 XML.ApplyStylesheet 9256
- 191.3 XML.Canonical 9258
- 191.4 XML.ClearVariables 9260
- 191.5 XML.Colorize 9261
- 191.6 XML.DeletePath 9263
- 191.7 XML.ExtractText 9265
- 191.8 XML.Format 9267
- 191.9 XML.GetAttribute 9269
- 191.10 XML.GetPathValue 9270
- 191.11 XML.HasAttribute 9272
- 191.12 XML.Import 9273
- 191.13 XML.Import.Cancel 9277
- 191.14 XML.Import.ErrorCount 9278
- 191.15 XML.Import.Errors 9279
- 191.16 XML.Import.SetBaseFields 9280
- 191.17 XML.Import.SetExtraField 9281

	551
• 191.18 XML.Import.Status	9282
• 191.19 XML.Import.TODO	9283
• 191.20 XML.Import.Total	9284
• 191.21 XML.Import.Work	9285
• 191.22 XML.ListAttributes	9287
• 191.23 XML.NodeCount	9288
• 191.24 XML.NodeNames	9289
• 191.25 XML.Parse	9291
• 191.26 XML.Query	9293
• 191.27 XML.ReadContainer	9296
• 191.28 XML.ReadFile	9297
• 191.29 XML.Release	9299
• 191.30 XML.ReleaseAll	9300
• 191.31 XML.SetPathValue	9301
• 191.32 XML.SetPathXML	9303
• 191.33 XML.SetVariables	9305
• 191.34 XML.SubTree	9307
• 191.35 XML.ToJSON	9310
• 191.36 XML.Validate	9311
• 191.37 XML.ValidateFile	9313
• 53.33 ZipFile.CRCFile	1509
• 53.34 ZipFile.Close	1510
• 53.35 ZipFile.CompressFiles	1511
• 53.36 ZipFile.CreateFile	1513
• 53.37 ZipFile.Open	1515
• 53.38 ZipFile.SetCompressionLevel	1517
• 53.39 ZipFile.UsePassword	1518
• 53.40 ZipFile.WriteContainer	1520
• 53.41 ZipFile.WriteFile	1521
• 53.42 ZipFile.WriteHex	1523
• 53.43 ZipFile.WriteText	1524

3965 functions.

Chapter 6

Functions compatible with Server

• 38.1 AVAsset.AvailableMetadataFormats	987
• 38.2 AVAsset.Duration	989
• 38.3 AVAsset.Framerate	990
• 38.4 AVAsset.HasProtectedContent	991
• 38.5 AVAsset.Image	992
• 38.6 AVAsset.ImageActualTime	994
• 38.7 AVAsset.IsComposable	995
• 38.8 AVAsset.IsExportable	996
• 38.9 AVAsset.IsPlayable	997
• 38.10 AVAsset.IsReadable	998
• 38.11 AVAsset.Loaded	999
• 38.12 AVAsset.Lyrics	1000
• 38.13 AVAsset.Metadata	1001
• 38.14 AVAsset.MetadataKeys	1002
• 38.15 AVAsset.NaturalHeight	1004
• 38.16 AVAsset.NaturalWidth	1005
• 38.17 AVAsset.OpenContainer	1006
• 38.18 AVAsset.OpenFile	1008
• 38.19 AVAsset.OpenURL	1010

- 38.20 AVAsset.PreferredRate 1012
- 38.21 AVAsset.PreferredVolume 1013
- 38.22 AVAsset.Release 1014
- 38.23 AVAsset.RequestImageTimePrecision 1016
- 38.24 AVAsset.TimeCodes 1018
- 38.25 AVAsset.TrackCount 1019
- 38.26 AVAsset.TrackInfo 1020
- 38.27 AVAsset.URL 1024
- 38.28 AVAsset.WaitForLoaded 1025
- 39.1 AVExport.AllExportPresets 1027
- 39.2 AVExport.CancelExport 1029
- 39.3 AVExport.Duration 1030
- 39.4 AVExport.Error 1031
- 39.5 AVExport.EstimatedOutputFileLength 1032
- 39.6 AVExport.ExportAsynchronously 1033
- 39.7 AVExport.ExportSession 1035
- 39.8 AVExport.ExportSessionMerge 1038
- 39.9 AVExport.GetOutputFileType 1040
- 39.10 AVExport.GetOutputPath 1041
- 39.11 AVExport.GetOutputURL 1042
- 39.12 AVExport.GetShouldOptimizeForNetworkUse 1043
- 39.13 AVExport.GetTimeRange 1044
- 39.14 AVExport.OutputFileExtension 1045
- 39.15 AVExport.PresetName 1046
- 39.16 AVExport.Progress 1047
- 39.17 AVExport.Release 1048
- 39.18 AVExport.SetOutputFileType 1049
- 39.19 AVExport.SetOutputPath 1050
- 39.20 AVExport.SetOutputURL 1052

	555
• 39.21 AVExport.SetShouldOptimizeForNetworkUse	1053
• 39.22 AVExport.SetTimeRange	1054
• 39.23 AVExport.Status	1055
• 39.24 AVExport.SupportedFileTypes	1056
• 34.3 App.CompactMemory	911
• 34.4 App.EffectiveUserID	912
• 34.6 App.GetDockIcon	914
• 34.7 App.GetProcessName	915
• 34.8 App.GetProcessPath	916
• 34.9 App.MemoryUsed	917
• 34.11 App.ProcessID	919
• 34.14 App.SetDockIcon	922
• 34.15 App.SetProcessName	923
• 34.16 App.UserID	924
• 35.1 AppleScript.Close	925
• 35.2 AppleScript.Compile	927
• 35.3 AppleScript.Execute	928
• 35.4 AppleScript.GetPropertyName	929
• 35.5 AppleScript.GetPropertyValue	931
• 35.6 AppleScript.LastError	932
• 35.7 AppleScript.LastErrorMessage	933
• 35.8 AppleScript.PropertyCount	934
• 35.9 AppleScript.Run	935
• 35.10 AppleScript.SetPropertyValue	940
• 36.1 Archive.Compress	943
• 36.2 Archive.Content	946
• 36.3 Archive.Extract	948
• 36.4 Archive.FileList	949
• 36.5 Archive.LibVersion	950

- 36.6 Archive.LibVersionDetails 951
- 36.7 Archive.SupportedFormats 952
- 36.8 Archive.Verify 953
- 37.1 Audit.Backup 955
- 37.2 Audit.Backup2 957
- 37.3 Audit.Changed 958
- 37.4 Audit.Changed2 962
- 37.5 Audit.ClearCaches 964
- 37.6 Audit.Delete 965
- 37.7 Audit.Delete2 967
- 37.8 Audit.FieldIDForName 968
- 37.9 Audit.FieldNameForID 969
- 37.10 Audit.GetEnabled 970
- 37.11 Audit.GetIgnoreCalculations 971
- 37.12 Audit.GetIgnoreSummaryFields 972
- 37.13 Audit.GetIgnoreUnderscoreFieldNames 973
- 37.14 Audit.GetIgnoredFieldNames 974
- 37.15 Audit.GetLogAccess 975
- 37.16 Audit.GetUUIDField 976
- 37.17 Audit.SetEnabled 977
- 37.18 Audit.SetIgnoreCalculations 978
- 37.19 Audit.SetIgnoreSummaryFields 979
- 37.20 Audit.SetIgnoreUnderscoreFieldNames 980
- 37.21 Audit.SetIgnoredFieldNames 981
- 37.22 Audit.SetLogAccess 983
- 37.23 Audit.SetUUIDField 984
- 37.24 Audit.TableIDForName 985
- 37.25 Audit.TableNameForID 986
- 43.1 Barcode.Detect 1137

	557
• 43.2 Barcode.DrawBarcode	1140
• 43.3 Barcode.EANChecksum	1142
• 43.4 Barcode.Generate	1143
• 43.5 Barcode.GenerateJSON	1149
• 43.6 Barcode.GetInputMode	1151
• 43.7 Barcode.GetOption	1152
• 43.8 Barcode.GetPrimary	1153
• 43.9 Barcode.ISBNChecksum	1154
• 43.10 Barcode.LibVersion	1156
• 43.11 Barcode.SetInputMode	1157
• 43.12 Barcode.SetOption	1159
• 43.13 Barcode.SetOptions	1161
• 43.14 Barcode.SetPrimary	1164
• 43.15 Barcode.UPCChecksum	1166
• 43.16 Barcode.WriteFile	1167
• 44.1 BinaryFile.Append	1171
• 44.2 BinaryFile.Close	1173
• 44.3 BinaryFile.Create	1174
• 44.4 BinaryFile.EOF	1176
• 44.5 BinaryFile.Length	1177
• 44.6 BinaryFile.Open	1178
• 44.7 BinaryFile.Position	1180
• 44.8 BinaryFile.ReadByte	1181
• 44.9 BinaryFile.ReadContainer	1182
• 44.10 BinaryFile.ReadFloat	1183
• 44.11 BinaryFile.ReadHex	1184
• 44.12 BinaryFile.ReadInt	1186
• 44.13 BinaryFile.ReadPDF	1187
• 44.14 BinaryFile.ReadText	1189

- 44.15 BinaryFile.Seek 1191
- 44.16 BinaryFile.WriteByte 1192
- 44.17 BinaryFile.WriteContainer 1193
- 44.18 BinaryFile.WriteFloat 1194
- 44.19 BinaryFile.WriteHex 1195
- 44.20 BinaryFile.WriteInt 1197
- 44.21 BinaryFile.WriteText 1199
- 46.1 Bonjour.Browse 1223
- 46.2 Bonjour.JSON 1225
- 46.3 Bonjour.Register 1227
- 46.4 Bonjour.RegisteredName 1228
- 49.1 CGImageSource.ClearProperties 1383
- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389
- 49.6 CGImageSource.Export 1390
- 49.7 CGImageSource.FileName 1392
- 49.8 CGImageSource.HasProperty 1393
- 49.9 CGImageSource.ImageAtIndex 1394
- 49.10 CGImageSource.Keys 1396
- 49.11 CGImageSource.Properties 1398
- 49.12 CGImageSource.Property 1401
- 49.13 CGImageSource.Release 1403
- 49.14 CGImageSource.SetProperty 1405
- 49.15 CGImageSource.Status 1407
- 49.16 CGImageSource.SupportedExportTypes 1409
- 49.17 CGImageSource.SupportedTypes 1410
- 49.18 CGImageSource.ThumbnailAtIndex 1411

	559
• 49.19 CGImageSource.Type	1413
• 175.1 CGPSConverter.Convert	8229
• 50.1 CLGeocoder.Cancel	1415
• 50.2 CLGeocoder.Cancelled	1417
• 50.3 CLGeocoder.Close	1418
• 50.4 CLGeocoder.Distance	1419
• 50.5 CLGeocoder.Done	1421
• 50.6 CLGeocoder.Error	1422
• 50.7 CLGeocoder.ErrorMessage	1423
• 50.8 CLGeocoder.GeocodeAddressString	1424
• 50.9 CLGeocoder.JSON	1426
• 50.10 CLGeocoder.PlacemarkCount	1428
• 50.11 CLGeocoder.PlacemarkValue	1429
• 50.12 CLGeocoder.ReverseGeocodeLocation	1432
• 60.1 CUPS.CancelJob	1733
• 60.2 CUPS.GetDefaultPrinterName	1735
• 60.3 CUPS.GetJobCompletionTime	1736
• 60.4 CUPS.GetJobCreationTime	1737
• 60.5 CUPS.GetJobFormat	1738
• 60.6 CUPS.GetJobID	1739
• 60.7 CUPS.GetJobIndex	1740
• 60.8 CUPS.GetJobPrinter	1741
• 60.9 CUPS.GetJobPriority	1742
• 60.10 CUPS.GetJobProcessingTime	1743
• 60.11 CUPS.GetJobSize	1744
• 60.12 CUPS.GetJobState	1745
• 60.13 CUPS.GetJobTitle	1746
• 60.14 CUPS.GetJobUser	1747
• 60.15 CUPS.GetJobsCount	1748

- 60.16 CUPS.GetPrinterCount 1750
- 60.17 CUPS.GetPrinterDefault 1751
- 60.18 CUPS.GetPrinterName 1752
- 60.19 CUPS.LastErrorCode 1753
- 60.20 CUPS.LastErrorMessage 1754
- 60.21 CUPS.PrintData 1755
- 60.22 CUPS.PrintDataEncoding 1757
- 60.23 CUPS.PrintFile 1759
- 61.1 CURL.AddInputFile 1761
- 61.2 CURL.AddInputGIF 1763
- 61.3 CURL.AddInputJPEG 1764
- 61.4 CURL.AddInputPDF 1765
- 61.5 CURL.AddInputPNG 1766
- 61.6 CURL.AddInputText 1768
- 61.7 CURL.Cancel 1770
- 61.8 CURL.Check 1771
- 61.9 CURL.Cleanup 1772
- 61.10 CURL.CloseDebugFile 1775
- 61.11 CURL.CloseHeaderFile 1776
- 61.12 CURL.CloseInputFile 1777
- 61.13 CURL.CloseOutputFile 1778
- 61.14 CURL.CreateDebugOutputFile 1780
- 61.15 CURL.CreateHeaderOutputFile 1782
- 61.16 CURL.CreateOutputFile 1784
- 61.17 CURL.ErrorCode 1788
- 61.18 CURL.ErrorMessage 1791
- 61.19 CURL.Features 1792
- 61.20 CURL.FileInfos 1793
- 61.21 CURL.FormAddKeyContainer 1796

	561
• 61.22 CURL.FormAddKeyContainerContentType	1798
• 61.23 CURL.FormAddKeyFile	1800
• 61.24 CURL.FormAddKeyFileContentType	1802
• 61.25 CURL.FormAddKeyText	1804
• 61.26 CURL.FormAddKeyTextContentType	1806
• 61.27 CURL.FormAddKeyValue	1808
• 61.28 CURL.FormAddKeyValueContentType	1810
• 61.29 CURL.FormClear	1812
• 61.30 CURL.FormFinish	1813
• 61.31 CURL.GetActiveSocket	1815
• 61.32 CURL.GetAppConnectTime	1816
• 61.33 CURL.GetBatchCurrentFileName	1817
• 61.34 CURL.GetBatchCurrentFilePath	1818
• 61.35 CURL.GetBatchDestinationPath	1819
• 61.36 CURL.GetBatchFileNames	1820
• 61.37 CURL.GetCertInfo	1821
• 61.38 CURL.GetConditionUnmet	1823
• 61.39 CURL.GetConnectTime	1824
• 61.40 CURL.GetContentLengthDownload	1825
• 61.41 CURL.GetContentLengthUpload	1826
• 61.42 CURL.GetContentType	1827
• 61.43 CURL.GetCookieList	1828
• 61.44 CURL.GetDebugAsText	1831
• 61.45 CURL.GetDebugLength	1834
• 61.46 CURL.GetDebugWithData	1835
• 61.47 CURL.GetDebugWithProgress	1836
• 61.48 CURL.GetDebugWithTime	1837
• 61.49 CURL.GetEffectiveURL	1838
• 61.50 CURL.GetFTPEntryPath	1840

- 61.51 `CURL.GetFileTime` 1841
- 61.52 `CURL.GetFinishedEvaluate` 1842
- 61.53 `CURL.GetFinishedFileName` 1843
- 61.54 `CURL.GetFinishedScriptName` 1844
- 61.55 `CURL.GetFormData` 1845
- 61.56 `CURL.GetHTTPAuthAvail` 1847
- 61.57 `CURL.GetHTTPConnectCode` 1848
- 61.58 `CURL.GetHTTPVersion` 1849
- 61.59 `CURL.GetHeaderAsText` 1850
- 61.60 `CURL.GetHeaderLength` 1852
- 61.61 `CURL.GetHeaderSize` 1853
- 61.62 `CURL.GetInputAsText` 1854
- 61.63 `CURL.GetInputLength` 1856
- 61.64 `CURL.GetLastSocket` 1857
- 61.65 `CURL.GetLocalIP` 1858
- 61.66 `CURL.GetLocalPort` 1859
- 61.67 `CURL.GetMultiOptionChunkLengthPenaltySize` 1860
- 61.68 `CURL.GetMultiOptionContentLengthPenaltySize` 1861
- 61.69 `CURL.GetMultiOptionMaxConcurrentStreams` 1862
- 61.70 `CURL.GetMultiOptionMaxConnects` 1863
- 61.71 `CURL.GetMultiOptionMaxHostConnections` 1864
- 61.72 `CURL.GetMultiOptionMaxPipelineLength` 1865
- 61.73 `CURL.GetMultiOptionMaxTotalConnections` 1866
- 61.74 `CURL.GetMultiOptionPipelining` 1867
- 61.75 `CURL.GetMultiRunningTransfers` 1868
- 61.76 `CURL.GetNameLookupTime` 1869
- 61.77 `CURL.GetNumConnects` 1870
- 61.78 `CURL.GetOS_errno` 1871
- 61.79 `CURL.GetOptionConnectTo` 1872

	563
• 61.80 CURL.GetOptionHTTP200Aliases	1873
• 61.81 CURL.GetOptionHTTPHeader	1874
• 61.82 CURL.GetOptionMailRecipients	1875
• 61.83 CURL.GetOptionPostQuote	1876
• 61.84 CURL.GetOptionPreQuote	1877
• 61.85 CURL.GetOptionProxyHeader	1878
• 61.86 CURL.GetOptionQuote	1879
• 61.87 CURL.GetOptionResolve	1880
• 61.88 CURL.GetOptionTelnetOptions	1881
• 61.89 CURL.GetPreTransferTime	1882
• 61.90 CURL.GetPrimaryIP	1883
• 61.91 CURL.GetPrimaryPort	1884
• 61.92 CURL.GetProgressCurrentDownload	1885
• 61.93 CURL.GetProgressCurrentUpload	1886
• 61.94 CURL.GetProgressEvaluate	1887
• 61.95 CURL.GetProgressFileName	1888
• 61.96 CURL.GetProgressPercent	1889
• 61.97 CURL.GetProgressScriptName	1890
• 61.98 CURL.GetProgressTotalDownload	1891
• 61.99 CURL.GetProgressTotalUpload	1892
• 61.100 CURL.GetProtocol	1893
• 61.101 CURL.GetProxyAuthAvail	1894
• 61.102 CURL.GetProxySSLVerifyResult	1895
• 61.103 CURL.GetRTSPCSEQRecv	1896
• 61.104 CURL.GetRTSPClientCSEQ	1897
• 61.105 CURL.GetRTSPServerCSEQ	1898
• 61.106 CURL.GetRTSPSessionID	1899
• 61.107 CURL.GetRedirectCount	1900
• 61.108 CURL.GetRedirectTime	1901

- 61.109 CURL.GetRedirectURL 1902
- 61.110 CURL.GetRequestSize 1904
- 61.111 CURL.GetResponseCode 1905
- 61.112 CURL.GetResultAsContainer 1907
- 61.113 CURL.GetResultAsData 1910
- 61.114 CURL.GetResultAsEMailList 1912
- 61.115 CURL.GetResultAsEmail 1914
- 61.116 CURL.GetResultAsGIF 1916
- 61.117 CURL.GetResultAsJPEG 1918
- 61.118 CURL.GetResultAsMime 1920
- 61.119 CURL.GetResultAsPDF 1922
- 61.120 CURL.GetResultAsPNG 1924
- 61.121 CURL.GetResultAsText 1926
- 61.122 CURL.GetResultLength 1930
- 61.123 CURL.GetSSLEngines 1931
- 61.124 CURL.GetSSLVerifyResult 1932
- 61.125 CURL.GetScheme 1933
- 61.126 CURL.GetSizeDownload 1934
- 61.127 CURL.GetSizeUpload 1935
- 61.128 CURL.GetSpeedDownload 1936
- 61.129 CURL.GetSpeedUpload 1937
- 61.130 CURL.GetStartTransferTime 1938
- 61.131 CURL.GetTag 1939
- 61.132 CURL.GetTotalTime 1940
- 61.133 CURL.Host 1941
- 61.134 CURL.IsRunning 1942
- 61.135 CURL.LibIDNVersion 1943
- 61.136 CURL.LibSSHVersion 1944
- 61.137 CURL.LibSSLVersion 1945

	565
• 61.138 CURL.List	1946
• 61.139 CURL.New	1947
• 61.140 CURL.NumberOfRunningTransfers	1950
• 61.141 CURL.OpenInputFile	1951
• 61.142 CURL.Perform	1954
• 61.144 CURL.PerformInBackground	1965
• 61.145 CURL.Protocols	1967
• 61.146 CURL.ReceiveData	1968
• 61.147 CURL.ReceiveText	1970
• 61.148 CURL.Reset	1973
• 61.149 CURL.RunningTransfers	1974
• 61.150 CURL.SendData	1975
• 61.151 CURL.SendText	1977
• 61.152 CURL.SetBatchDestinationPath	1979
• 61.153 CURL.SetDebugWithData	1981
• 61.154 CURL.SetDebugWithProgress	1983
• 61.155 CURL.SetDebugWithTime	1985
• 61.156 CURL.SetFinishedEvaluate	1987
• 61.158 CURL.SetInputFile	1991
• 61.159 CURL.SetInputGIF	1994
• 61.160 CURL.SetInputJPEG	1996
• 61.161 CURL.SetInputPDF	1998
• 61.162 CURL.SetInputPNG	2000
• 61.163 CURL.SetInputText	2002
• 61.164 CURL.SetMultiOptionChunkLengthPenaltySize	2005
• 61.165 CURL.SetMultiOptionContentLengthPenaltySize	2006
• 61.166 CURL.SetMultiOptionMaxConcurrentStreams	2007
• 61.167 CURL.SetMultiOptionMaxConnects	2008
• 61.168 CURL.SetMultiOptionMaxHostConnections	2009

- 61.169 `CURL.SetMultiOptionMaxPipelineLength` 2010
- 61.170 `CURL.SetMultiOptionMaxTotalConnections` 2011
- 61.171 `CURL.SetMultiOptionPipelining` 2012
- 61.172 `CURL.SetOptionAbstractUnixSocket` 2013
- 61.173 `CURL.SetOptionAcceptEncoding` 2014
- 61.174 `CURL.SetOptionAcceptTimeoutMS` 2016
- 61.175 `CURL.SetOptionAddressScope` 2017
- 61.176 `CURL.SetOptionAppend` 2018
- 61.177 `CURL.SetOptionAutoReferer` 2019
- 61.178 `CURL.SetOptionBufferSize` 2020
- 61.179 `CURL.SetOptionCAINFO` 2022
- 61.180 `CURL.SetOptionCAPATH` 2025
- 61.181 `CURL.SetOptionCRLF` 2027
- 61.182 `CURL.SetOptionCRLFfile` 2028
- 61.183 `CURL.SetOptionCertInfo` 2030
- 61.184 `CURL.SetOptionConnectOnly` 2032
- 61.185 `CURL.SetOptionConnectTimeoutMS` 2035
- 61.186 `CURL.SetOptionConnectTo` 2036
- 61.187 `CURL.SetOptionConnectionTimeout` 2037
- 61.188 `CURL.SetOptionCookie` 2039
- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.190 `CURL.SetOptionCookieJar` 2044
- 61.191 `CURL.SetOptionCookieList` 2046
- 61.192 `CURL.SetOptionCookieSession` 2047
- 61.193 `CURL.SetOptionCustomRequest` 2048
- 61.194 `CURL.SetOptionDNSSCacheTimeout` 2053
- 61.195 `CURL.SetOptionDNSInterface` 2054
- 61.196 `CURL.SetOptionDNSLocalIPv4` 2055
- 61.197 `CURL.SetOptionDNSLocalIPv6` 2056

	567
• 61.198 CURL.SetOptionDNSServers	2057
• 61.199 CURL.SetOptionDNSShuffleAddresses	2058
• 61.200 CURL.SetOptionDOHURL	2059
• 61.201 CURL.SetOptionDefaultProtocol	2061
• 61.202 CURL.SetOptionDirListOnly	2062
• 61.203 CURL.SetOptionDisallowUserNameInURL	2064
• 61.204 CURL.SetOptionEGDSocket	2065
• 61.205 CURL.SetOptionExpect100TimeoutMS	2066
• 61.206 CURL.SetOptionFTPAccount	2067
• 61.207 CURL.SetOptionFTPAlternativeToUser	2068
• 61.208 CURL.SetOptionFTPCreateMissingDirs	2069
• 61.209 CURL.SetOptionFTPFileMethod	2072
• 61.210 CURL.SetOptionFTPPort	2073
• 61.211 CURL.SetOptionFTPResponseTimeout	2075
• 61.212 CURL.SetOptionFTPSSLAUTH	2076
• 61.213 CURL.SetOptionFTPSSLCCC	2078
• 61.214 CURL.SetOptionFTPSkipPasvIP	2079
• 61.215 CURL.SetOptionFTPUseEPRT	2080
• 61.216 CURL.SetOptionFTPUseEPSV	2081
• 61.217 CURL.SetOptionFTPUsePret	2082
• 61.218 CURL.SetOptionFailOnError	2083
• 61.219 CURL.SetOptionFileOnlyMode	2084
• 61.220 CURL.SetOptionFileTime	2085
• 61.221 CURL.SetOptionFollowLocation	2086
• 61.222 CURL.SetOptionForbidReuse	2088
• 61.223 CURL.SetOptionFreshConnect	2089
• 61.224 CURL.SetOptionGSSAPIDelegation	2090
• 61.225 CURL.SetOptionGet	2091
• 61.226 CURL.SetOptionHAProxyProtocol	2093

- 61.227 `CURL.SetOptionHTTP200Aliases` 2094
- 61.228 `CURL.SetOptionHTTPAuth` 2095
- 61.229 `CURL.SetOptionHTTPContentDecoding` 2097
- 61.230 `CURL.SetOptionHTTPHeader` 2098
- 61.231 `CURL.SetOptionHTTPProxyTunnel` 2102
- 61.232 `CURL.SetOptionHTTPTransferDecoding` 2103
- 61.233 `CURL.SetOptionHTTPVersion` 2104
- 61.234 `CURL.SetOptionHappyEyeballsTimeOutMS` 2105
- 61.235 `CURL.SetOptionHeader` 2106
- 61.236 `CURL.SetOptionHeaderOptions` 2107
- 61.237 `CURL.SetOptionIPResolve` 2108
- 61.238 `CURL.SetOptionIgnoreContentLength` 2109
- 61.239 `CURL.SetOptionInFileSize` 2110
- 61.240 `CURL.SetOptionInterface` 2112
- 61.241 `CURL.SetOptionIssuerCert` 2113
- 61.242 `CURL.SetOptionKRBLevel` 2115
- 61.243 `CURL.SetOptionKeepSendingOnError` 2116
- 61.244 `CURL.SetOptionKeyPassword` 2117
- 61.245 `CURL.SetOptionLocalPort` 2119
- 61.246 `CURL.SetOptionLocalPortRange` 2120
- 61.247 `CURL.SetOptionLoginOptions` 2121
- 61.248 `CURL.SetOptionLowSpeedLimit` 2123
- 61.249 `CURL.SetOptionLowSpeedTime` 2124
- 61.250 `CURL.SetOptionMailAuth` 2125
- 61.251 `CURL.SetOptionMailFrom` 2127
- 61.252 `CURL.SetOptionMailRecipients` 2128
- 61.253 `CURL.SetOptionMaxAgeConn` 2129
- 61.254 `CURL.SetOptionMaxConnects` 2130
- 61.255 `CURL.SetOptionMaxFileSize` 2131

	569
• 61.256 CURL.SetOptionMaxRecvSpeed	2132
• 61.257 CURL.SetOptionMaxRedirs	2133
• 61.258 CURL.SetOptionMaxSendSpeed	2135
• 61.259 CURL.SetOptionNETRCFile	2136
• 61.260 CURL.SetOptionNetRC	2137
• 61.261 CURL.SetOptionNewDirectoryPerms	2139
• 61.262 CURL.SetOptionNewFilePerms	2140
• 61.263 CURL.SetOptionNoBody	2141
• 61.264 CURL.SetOptionNoProxy	2143
• 61.265 CURL.SetOptionPassword	2145
• 61.266 CURL.SetOptionPathAsIs	2148
• 61.267 CURL.SetOptionPinnedPublicKey	2149
• 61.268 CURL.SetOptionPipeWait	2150
• 61.269 CURL.SetOptionPort	2151
• 61.270 CURL.SetOptionPost	2153
• 61.271 CURL.SetOptionPostFieldSize	2157
• 61.272 CURL.SetOptionPostFields	2158
• 61.273 CURL.SetOptionPostQuote	2162
• 61.274 CURL.SetOptionPostRedir	2164
• 61.275 CURL.SetOptionPreProxy	2166
• 61.276 CURL.SetOptionPreQuote	2167
• 61.277 CURL.SetOptionProtocols	2169
• 61.278 CURL.SetOptionProxy	2171
• 61.279 CURL.SetOptionProxyAuth	2173
• 61.280 CURL.SetOptionProxyCAInfo	2174
• 61.281 CURL.SetOptionProxyCAPath	2175
• 61.282 CURL.SetOptionProxyCRLFile	2176
• 61.283 CURL.SetOptionProxyHeader	2177
• 61.284 CURL.SetOptionProxyKeyPassword	2178

- 61.285 `CURL.SetOptionProxyPassword` 2179
- 61.286 `CURL.SetOptionProxyPinnedPublicKey` 2180
- 61.287 `CURL.SetOptionProxyPort` 2181
- 61.288 `CURL.SetOptionProxySSLCert` 2182
- 61.289 `CURL.SetOptionProxySSLCertType` 2183
- 61.290 `CURL.SetOptionProxySSLCipherList` 2184
- 61.291 `CURL.SetOptionProxySSLKey` 2185
- 61.292 `CURL.SetOptionProxySSLKeyType` 2186
- 61.293 `CURL.SetOptionProxySSLOptions` 2187
- 61.294 `CURL.SetOptionProxySSLVerifyHost` 2188
- 61.295 `CURL.SetOptionProxySSLVerifyPeer` 2189
- 61.296 `CURL.SetOptionProxySSLVersion` 2190
- 61.297 `CURL.SetOptionProxyServiceName` 2192
- 61.298 `CURL.SetOptionProxyTLS13Ciphers` 2193
- 61.299 `CURL.SetOptionProxyTLSAuthPassword` 2194
- 61.300 `CURL.SetOptionProxyTLSAuthType` 2195
- 61.301 `CURL.SetOptionProxyTLSAuthUsername` 2196
- 61.302 `CURL.SetOptionProxyTransferMode` 2197
- 61.303 `CURL.SetOptionProxyType` 2198
- 61.304 `CURL.SetOptionProxyUsername` 2200
- 61.305 `CURL.SetOptionPut` 2201
- 61.306 `CURL.SetOptionQuote` 2203
- 61.307 `CURL.SetOptionRTSPClientCSEQ` 2206
- 61.308 `CURL.SetOptionRTSPRequest` 2207
- 61.309 `CURL.SetOptionRTSPServerCSEQ` 2208
- 61.310 `CURL.SetOptionRTSPSessionID` 2209
- 61.311 `CURL.SetOptionRTSPStreamURI` 2210
- 61.312 `CURL.SetOptionRTSPTransport` 2211
- 61.313 `CURL.SetOptionRandomFile` 2212

	571
• 61.314 CURL.SetOptionRange	2213
• 61.315 CURL.SetOptionRedirProtocols	2215
• 61.316 CURL.SetOptionReferer	2217
• 61.317 CURL.SetOptionRequestTarget	2218
• 61.318 CURL.SetOptionResolve	2219
• 61.319 CURL.SetOptionResumeFrom	2220
• 61.320 CURL.SetOptionSASLAUTHZID	2221
• 61.321 CURL.SetOptionSASLIR	2222
• 61.322 CURL.SetOptionSSHAUTHTypes	2223
• 61.323 CURL.SetOptionSSHCompression	2225
• 61.324 CURL.SetOptionSSHHostPublicKeyMD5	2226
• 61.325 CURL.SetOptionSSHKnownHosts	2227
• 61.326 CURL.SetOptionSSHPrivateKeyfile	2228
• 61.327 CURL.SetOptionSSHPublicKeyfile	2230
• 61.328 CURL.SetOptionSSLCert	2232
• 61.329 CURL.SetOptionSSLCertType	2236
• 61.330 CURL.SetOptionSSLCipherList	2238
• 61.331 CURL.SetOptionSSEnableALPN	2240
• 61.332 CURL.SetOptionSSEnableNPN	2241
• 61.333 CURL.SetOptionSSLEngine	2242
• 61.334 CURL.SetOptionSSLEngineDefault	2243
• 61.335 CURL.SetOptionSSLFalseStart	2244
• 61.336 CURL.SetOptionSSLKey	2245
• 61.337 CURL.SetOptionSSLKeyType	2247
• 61.338 CURL.SetOptionSSLOptions	2249
• 61.339 CURL.SetOptionSSLSessionIDCache	2250
• 61.340 CURL.SetOptionSSLVerifyHost	2251
• 61.341 CURL.SetOptionSSLVerifyPeer	2254
• 61.342 CURL.SetOptionSSLVerifyStatus	2257

- 61.343 `CURL.SetOptionSSLVersion` 2258
- 61.344 `CURL.SetOptionServiceName` 2261
- 61.345 `CURL.SetOptionSocks5Auth` 2262
- 61.346 `CURL.SetOptionSocks5GSSAPINec` 2263
- 61.347 `CURL.SetOptionSocks5GSSAPIService` 2264
- 61.348 `CURL.SetOptionStreamDepends` 2265
- 61.349 `CURL.SetOptionStreamDependsE` 2266
- 61.350 `CURL.SetOptionStreamWeight` 2267
- 61.351 `CURL.SetOptionSuppressConnectHeaders` 2268
- 61.352 `CURL.SetOptionTCPFastOpen` 2269
- 61.353 `CURL.SetOptionTCPKeepAlive` 2270
- 61.354 `CURL.SetOptionTCPKeepIdle` 2271
- 61.355 `CURL.SetOptionTCPKeepInterval` 2272
- 61.356 `CURL.SetOptionTCPNoDelay` 2273
- 61.357 `CURL.SetOptionTFTPBlockSize` 2274
- 61.358 `CURL.SetOptionTFTPNoOptions` 2275
- 61.359 `CURL.SetOptionTLS13Ciphers` 2276
- 61.360 `CURL.SetOptionTLSAuthPassword` 2277
- 61.361 `CURL.SetOptionTLSAuthType` 2278
- 61.362 `CURL.SetOptionTLSAuthUsername` 2279
- 61.363 `CURL.SetOptionTelnetOptions` 2280
- 61.364 `CURL.SetOptionTimeCondition` 2281
- 61.365 `CURL.SetOptionTimeOut` 2282
- 61.366 `CURL.SetOptionTimeValue` 2284
- 61.367 `CURL.SetOptionTimeoutMS` 2285
- 61.368 `CURL.SetOptionTransferEncoding` 2286
- 61.369 `CURL.SetOptionTransferText` 2287
- 61.370 `CURL.SetOptionURL` 2288
- 61.371 `CURL.SetOptionUnixSocketPath` 2296

	573
• 61.372 CURL.SetOptionUnrestrictedAuth	2297
• 61.373 CURL.SetOptionUpkeepIntervalMS	2298
• 61.374 CURL.SetOptionUpload	2299
• 61.375 CURL.SetOptionUploadBufferSize	2301
• 61.376 CURL.SetOptionUseSSL	2302
• 61.377 CURL.SetOptionUserAgent	2304
• 61.378 CURL.SetOptionUsername	2305
• 61.379 CURL.SetOptionVerbose	2307
• 61.380 CURL.SetOptionWildcardMatch	2309
• 61.381 CURL.SetOptionXOAuth2Bearer	2312
• 61.382 CURL.SetProgressEvaluate	2313
• 61.384 CURL.SetTag	2316
• 61.385 CURL.SetUpdateProgressDialog	2318
• 61.386 CURL.SetupAWS	2320
• 61.387 CURL.SetupOAuth	2324
• 61.388 CURL.Upkeep	2329
• 61.389 CURL.UseSystemCertificates	2330
• 61.390 CURL.Version	2332
• 47.34 Calendar.Initialize	1266
• 124.1 ClearRegistration	6261
• 51.1 Clipboard.DetectFileMakerDataType	1435
• 124.2 CompileDate	6262
• 124.3 CompileTime	6263
• 55.1 Container.Compress	1605
• 55.2 Container.DecodeFromBase64	1607
• 55.3 Container.DecodeFromHex	1609
• 55.4 Container.Decompress	1610
• 55.5 Container.Deserialize	1612
• 55.6 Container.Export	1613

- 55.7 Container.ExtractStream 1616
- 55.8 Container.GetBase64 1617
- 55.9 Container.GetCount 1619
- 55.10 Container.GetDataURL 1621
- 55.11 Container.GetHeight 1622
- 55.12 Container.GetHex 1623
- 55.17 Container.GetName 1628
- 55.18 Container.GetResolution 1629
- 55.19 Container.GetSize 1631
- 55.20 Container.GetText 1633
- 55.21 Container.GetTotalSize 1635
- 55.22 Container.GetType 1636
- 55.23 Container.GetTypeSize 1638
- 55.24 Container.GetTypes 1640
- 55.25 Container.GetWidth 1642
- 55.26 Container.IsCompressed 1643
- 55.27 Container.ReadArchive 1644
- 55.28 Container.ReadFile 1645
- 55.29 Container.ReadImage 1648
- 55.30 Container.Remove 1650
- 55.31 Container.Rename 1652
- 55.32 Container.RenameStream 1654
- 55.33 Container.Serialize 1655
- 55.34 Container.WriteArchive 1656
- 55.35 Container.WriteFile 1658
- 57.1 CoreImage.Detect 1667
- 58.1 CoreLocation.ClearFailHandler 1669
- 58.2 CoreLocation.ClearUpdateLocationHandler 1670
- 58.9 CoreLocation.altitude 1678

	575
• 58.11 CoreLocation.course	1680
• 58.12 CoreLocation.description	1681
• 58.13 CoreLocation.desiredAccuracy	1682
• 58.15 CoreLocation.distanceFilter	1684
• 58.16 CoreLocation.distanceFromLocation	1685
• 58.17 CoreLocation.hasLocation	1686
• 58.18 CoreLocation.headingAvailable	1687
• 58.19 CoreLocation.horizontalAccuracy	1688
• 58.20 CoreLocation.latitude	1689
• 58.21 CoreLocation.locationServicesEnabled	1690
• 58.22 CoreLocation.longitude	1691
• 58.23 CoreLocation.purpose	1692
• 58.27 CoreLocation.setDesiredAccuracy	1696
• 58.28 CoreLocation.setDistanceFilter	1697
• 58.29 CoreLocation.setPurpose	1698
• 58.30 CoreLocation.significantLocationChangeMonitoringAvailable	1699
• 58.31 CoreLocation.speed	1700
• 58.32 CoreLocation.startMonitoringSignificantLocationChanges	1701
• 58.34 CoreLocation.startUpdatingLocation	1703
• 58.35 CoreLocation.stopMonitoringSignificantLocationChanges	1704
• 58.37 CoreLocation.stopUpdatingLocation	1706
• 58.38 CoreLocation.timestamp	1707
• 58.39 CoreLocation.verticalAccuracy	1708
• 59.1 CoreML.AddArrayParameter	1709
• 59.2 CoreML.AddDoubleParameter	1711
• 59.3 CoreML.AddImageParameter	1712
• 59.4 CoreML.AddIntegerParameter	1714
• 59.5 CoreML.AddTextParameter	1715
• 59.6 CoreML.AddUndefinedParameter	1716

- 59.7 CoreML.Available 1717
- 59.8 CoreML.Clear 1718
- 59.9 CoreML.CompileModel 1719
- 59.10 CoreML.Description 1721
- 59.11 CoreML.GetUsesCPUOnly 1724
- 59.12 CoreML.OpenModel 1725
- 59.13 CoreML.PredictionFromFeatures 1727
- 59.14 CoreML.Release 1729
- 59.15 CoreML.ResultImage 1730
- 59.16 CoreML.SetUsesCPUOnly 1731
- 59.17 CoreML.Update 1732
- 67.1 DNSLookup.Address 2451
- 67.2 DNSLookup.AddressCount 2453
- 67.3 DNSLookup.Alias 2454
- 67.4 DNSLookup.AliasCount 2455
- 67.5 DNSLookup.LookupHostByAddress 2456
- 67.6 DNSLookup.LookupHostByName 2458
- 67.7 DNSLookup.Name 2460
- 67.8 DNSLookup.Release 2461
- 65.1 Dictionary.AddSQL 2397
- 80.1 Dictionary.AddSQLRecord 4065
- 80.2 Dictionary.AddSQLRecords 4067
- 65.4 Dictionary.Clear 2404
- 65.5 Dictionary.Clone 2405
- 65.6 Dictionary.Count 2406
- 65.7 Dictionary.Create 2407
- 65.8 Dictionary.CreateNamed 2410
- 65.9 Dictionary.Deserialize 2411
- 65.10 Dictionary.HasKey 2413

	577
• 65.11 Dictionary.KeyAtIndex	2414
• 65.12 Dictionary.Keys	2415
• 65.13 Dictionary.List	2416
• 65.14 Dictionary.Release	2417
• 65.15 Dictionary.RemoveKey	2418
• 65.16 Dictionary.Serialize	2419
• 65.17 Dictionary.SetList	2421
• 65.18 Dictionary.SetQuickList	2422
• 65.19 Dictionary.SetValueForKey	2423
• 65.20 Dictionary.SetVariables	2426
• 100.1 Dictionary.ToJSON	5231
• 65.22 Dictionary.ToText	2429
• 191.1 Dictionary.ToXML	9253
• 65.24 Dictionary.ValueForKey	2433
• 65.25 Dictionary.ValueTypeForKey	2435
• 65.26 Dictionary.Values	2436
• 66.1 DirectoryWatcher.AddDirectory	2437
• 66.2 DirectoryWatcher.ChangeCount	2439
• 66.3 DirectoryWatcher.Create	2440
• 66.7 DirectoryWatcher.NextChange	2444
• 66.8 DirectoryWatcher.Release	2445
• 66.9 DirectoryWatcher.ReleaseAll	2446
• 70.1 DynaPDF.AddActionToObj	2549
• 70.2 DynaPDF.AddAnnotToPage	2552
• 70.3 DynaPDF.AddBookmark	2553
• 70.4 DynaPDF.AddBookmarkEx	2555
• 70.5 DynaPDF.AddContinueText	2557
• 70.6 DynaPDF.AddDeviceNProcessColorants	2558
• 70.7 DynaPDF.AddDeviceNSeparations	2560

- 70.8 DynaPDF.AddFontSearchPath 2563
- 70.9 DynaPDF.AddOutputIntent 2564
- 70.10 DynaPDF.AddOutputIntentEx 2565
- 70.11 DynaPDF.AddValToChoiceField 2567
- 70.12 DynaPDF.AllowPageBreak 2569
- 70.13 DynaPDF.AppendImagePage 2571
- 70.14 DynaPDF.AppendImagePages 2573
- 70.15 DynaPDF.AppendPage 2575
- 70.16 DynaPDF.AssociateEmbFile 2577
- 70.17 DynaPDF.AttachFile 2579
- 70.18 DynaPDF.AttachFileContainer 2581
- 70.19 DynaPDF.AttachFileText 2582
- 70.20 DynaPDF.BeginContinueText 2584
- 70.21 DynaPDF.BeginLayer 2586
- 70.22 DynaPDF.BeginPattern 2587
- 70.23 DynaPDF.BeginTemplate 2588
- 70.24 DynaPDF.Bezier123 2589
- 70.25 DynaPDF.Bezier13 2591
- 70.26 DynaPDF.Bezier23 2592
- 70.27 DynaPDF.CMYK 2593
- 70.28 DynaPDF.ChangeAnnotName 2595
- 70.29 DynaPDF.ChangeAnnotPos 2596
- 70.30 DynaPDF.ChangeBookmark 2597
- 70.31 DynaPDF.ChangeFont 2599
- 70.32 DynaPDF.ChangeFontSize 2600
- 70.33 DynaPDF.ChangeFontStyle 2601
- 70.34 DynaPDF.ChangeFontStyleEx 2602
- 70.35 DynaPDF.ChangeLinkAnnot 2603
- 70.36 DynaPDF.ChangeSeparationColor 2604

	579
• 70.37 DynaPDF.CheckConformance	2605
• 70.38 DynaPDF.CheckFieldNames	2608
• 70.39 DynaPDF.CircleAnnot	2609
• 70.40 DynaPDF.Clear	2611
• 70.41 DynaPDF.ClipPath	2612
• 70.42 DynaPDF.CloseImportFile	2614
• 70.43 DynaPDF.ClosePath	2615
• 70.44 DynaPDF.ConvertColors	2617
• 70.45 DynaPDF.ConvertStyledText	2619
• 70.46 DynaPDF.CreateButton	2620
• 70.47 DynaPDF.CreateCheckBox	2623
• 70.48 DynaPDF.CreateComboBox	2625
• 70.49 DynaPDF.CreateDeviceNColorSpace	2628
• 70.50 DynaPDF.CreateGoToAction	2630
• 70.51 DynaPDF.CreateGoToActionEx	2632
• 70.52 DynaPDF.CreateGoToRAction	2634
• 70.53 DynaPDF.CreateGoToRActionEx	2636
• 70.54 DynaPDF.CreateGroupField	2638
• 70.55 DynaPDF.CreateJSAction	2640
• 70.56 DynaPDF.CreateListBox	2643
• 70.57 DynaPDF.CreateNamedDest	2646
• 70.58 DynaPDF.CreateRadioButton	2648
• 70.59 DynaPDF.CreateSeparationCS	2650
• 70.60 DynaPDF.CreateSigField	2653
• 70.61 DynaPDF.CreateSigFieldAP	2656
• 70.62 DynaPDF.CreateStructureTree	2657
• 70.63 DynaPDF.CreateTextField	2659
• 70.64 DynaPDF.CreateXFASStream	2661
• 70.65 DynaPDF.DeleteAcroForm	2662

- 70.66 DynaPDF.DeleteActionFromObjEx 2663
- 70.67 DynaPDF.DeleteAnnotation 2664
- 70.68 DynaPDF.DeleteBookmark 2665
- 70.69 DynaPDF.DeleteEmbeddedFile 2666
- 70.70 DynaPDF.DeleteField 2667
- 70.71 DynaPDF.DeleteFieldEx 2668
- 70.72 DynaPDF.DeleteJavaScripts 2669
- 70.73 DynaPDF.DeletePage 2670
- 70.74 DynaPDF.DeletePageLabels 2671
- 70.75 DynaPDF.DeleteSeparationInfo 2672
- 70.76 DynaPDF.DeleteTemplate 2673
- 70.77 DynaPDF.DeleteTemplateEx 2674
- 70.78 DynaPDF.DeleteXFAForm 2675
- 70.79 DynaPDF.DrawArc 2676
- 70.80 DynaPDF.DrawArcEx 2678
- 70.81 DynaPDF.DrawChord 2680
- 70.82 DynaPDF.DrawCircle 2682
- 70.83 DynaPDF.DrawPie 2684
- 70.84 DynaPDF.EditPage 2686
- 70.85 DynaPDF.EditTemplate 2688
- 70.86 DynaPDF.EditTemplate2 2690
- 70.87 DynaPDF.Ellipse 2691
- 70.88 DynaPDF.EnableEncryption 2693
- 70.89 DynaPDF.EndLayer 2696
- 70.90 DynaPDF.EndPage 2697
- 70.91 DynaPDF.EndPattern 2699
- 70.92 DynaPDF.EndTemplate 2700
- 70.93 DynaPDF.ExchangeBookmarks 2701
- 70.94 DynaPDF.ExchangePages 2702

	581
• 70.95 DynaPDF.ExtractDocumentText	2703
• 70.96 DynaPDF.ExtractImages	2705
• 70.97 DynaPDF.ExtractPageRectText	2707
• 70.98 DynaPDF.ExtractPageText	2709
• 70.99 DynaPDF.ExtractText	2711
• 70.100 DynaPDF.FileAttachAnnot	2714
• 70.101 DynaPDF.FileAttachAnnotEx	2716
• 70.102 DynaPDF.FileLink	2718
• 70.103 DynaPDF.FindBookmark	2720
• 70.104 DynaPDF.FindEmbeddedFile	2722
• 70.105 DynaPDF.FindField	2723
• 70.106 DynaPDF.FindLinkAnnot	2724
• 70.107 DynaPDF.FindNextBookmark	2725
• 70.108 DynaPDF.FindPattern	2726
• 70.109 DynaPDF.FindText	2727
• 70.110 DynaPDF.FlattenAnnotOrField	2729
• 70.111 DynaPDF.FlattenAnnots	2730
• 70.112 DynaPDF.FlattenForm	2732
• 70.113 DynaPDF.FlushPages	2734
• 70.114 DynaPDF.FontInfo	2736
• 70.115 DynaPDF.FreeTextAnnot	2738
• 70.116 DynaPDF.GeneratePreview	2740
• 70.117 DynaPDF.GetAnnotCount	2743
• 70.118 DynaPDF.GetAnnotFlags	2744
• 70.119 DynaPDF.GetAnnotLink	2745
• 70.120 DynaPDF.GetAnnotType	2746
• 70.121 DynaPDF.GetAnnotation	2748
• 70.122 DynaPDF.GetAscent	2750
• 70.123 DynaPDF.GetBBox	2751

- 70.124 DynaPDF.GetBookmark 2753
- 70.125 DynaPDF.GetBookmarkCount 2755
- 70.126 DynaPDF.GetBorderStyle 2756
- 70.127 DynaPDF.GetCMapCount 2757
- 70.128 DynaPDF.GetCharacterSpacing 2758
- 70.129 DynaPDF.GetCheckBoxChar 2759
- 70.130 DynaPDF.GetCheckBoxCharEx 2760
- 70.131 DynaPDF.GetCheckBoxDefState 2761
- 70.132 DynaPDF.GetColorSpace 2762
- 70.133 DynaPDF.GetColorSpaceCount 2763
- 70.134 DynaPDF.GetColorSpaceInfo 2764
- 70.135 DynaPDF.GetCompressionFilter 2765
- 70.136 DynaPDF.GetCompressionLevel 2766
- 70.137 DynaPDF.GetContent 2767
- 70.138 DynaPDF.GetDocInfo 2768
- 70.139 DynaPDF.GetDocInfoCount 2770
- 70.140 DynaPDF.GetDocUsesTransparency 2771
- 70.141 DynaPDF.GetDrawDirection 2772
- 70.142 DynaPDF.GetDynaPDFVersion 2773
- 70.143 DynaPDF.GetEmbeddedFile 2774
- 70.144 DynaPDF.GetEmbeddedFileAsContainer 2776
- 70.145 DynaPDF.GetEmbeddedFileCount 2777
- 70.146 DynaPDF.GetFTextHeight 2779
- 70.147 DynaPDF.GetFTextHeightEx 2781
- 70.148 DynaPDF.GetField 2783
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.151 DynaPDF.GetFieldBorderStyle 2787
- 70.152 DynaPDF.GetFieldBorderWidth 2788

	583
• 70.153 DynaPDF.GetFieldChoiceValue	2789
• 70.154 DynaPDF.GetFieldColor	2790
• 70.155 DynaPDF.GetFieldCount	2791
• 70.156 DynaPDF.GetFieldExpValCount	2792
• 70.157 DynaPDF.GetFieldExpValue	2793
• 70.158 DynaPDF.GetFieldExpValueEx	2794
• 70.159 DynaPDF.GetFieldFlags	2796
• 70.160 DynaPDF.GetFieldGroupType	2797
• 70.161 DynaPDF.GetFieldHighlightMode	2798
• 70.162 DynaPDF.GetFieldIndex	2799
• 70.163 DynaPDF.GetFieldMapName	2800
• 70.164 DynaPDF.GetFieldName	2801
• 70.165 DynaPDF.GetFieldOrientation	2802
• 70.166 DynaPDF.GetFieldTextAlign	2803
• 70.167 DynaPDF.GetFieldTextColor	2804
• 70.168 DynaPDF.GetFieldToolTip	2805
• 70.169 DynaPDF.GetFieldType	2806
• 70.170 DynaPDF.GetFontCount	2807
• 70.171 DynaPDF.GetFontOrigin	2808
• 70.172 DynaPDF.GetFontSelMode	2809
• 70.173 DynaPDF.GetFontWeight	2810
• 70.174 DynaPDF.GetGStateFlags	2811
• 70.175 DynaPDF.GetImage	2812
• 70.176 DynaPDF.GetImageCount	2815
• 70.177 DynaPDF.GetImportDocInfo	2817
• 70.178 DynaPDF.GetImportFlags	2819
• 70.179 DynaPDF.GetImportFlags2	2820
• 70.180 DynaPDF.GetImportOrientation	2821
• 70.181 DynaPDF.GetImportPDFVersion	2822

- 70.182 DynaPDF.GetImportPageBounds 2823
- 70.183 DynaPDF.GetImportPageCount 2825
- 70.184 DynaPDF.GetInDocInfoCount 2828
- 70.185 DynaPDF.GetInFieldCount 2829
- 70.186 DynaPDF.GetInIsCollection 2830
- 70.187 DynaPDF.GetInIsEncrypted 2831
- 70.188 DynaPDF.GetInIsSigned 2832
- 70.189 DynaPDF.GetInIsTrapped 2833
- 70.190 DynaPDF.GetInIsXFAForm 2834
- 70.191 DynaPDF.GetInMetadata 2835
- 70.192 DynaPDF.GetInPrintSettings 2837
- 70.193 DynaPDF.GetInRepairMode 2838
- 70.194 DynaPDF.GetIsFixedPitch 2839
- 70.195 DynaPDF.GetIsTaggingEnabled 2840
- 70.196 DynaPDF.GetJPEGQuality 2841
- 70.197 DynaPDF.GetJavaScriptCount 2842
- 70.198 DynaPDF.GetLanguage 2843
- 70.199 DynaPDF.GetLastErrorMessage 2844
- 70.200 DynaPDF.GetLastTextPosX 2845
- 70.201 DynaPDF.GetLastTextPosY 2846
- 70.202 DynaPDF.GetLeading 2847
- 70.203 DynaPDF.GetLineWidth 2848
- 70.204 DynaPDF.GetLinkHighlightMode 2849
- 70.205 DynaPDF.GetLogMetafileSize 2850
- 70.206 DynaPDF.GetLogMetafileSizeEx 2851
- 70.207 DynaPDF.GetMetaConvFlags 2852
- 70.208 DynaPDF.GetMetadata 2853
- 70.209 DynaPDF.GetOCG 2855
- 70.210 DynaPDF.GetOCGContUsage 2858

	585
• 70.211 DynaPDF.GetOCGCount	2860
• 70.212 DynaPDF.GetOCGUsageUserName	2861
• 70.213 DynaPDF.GetOpacity	2862
• 70.214 DynaPDF.GetOrientation	2863
• 70.215 DynaPDF.GetOutputIntent	2864
• 70.216 DynaPDF.GetOutputIntentCount	2866
• 70.217 DynaPDF.GetPDFVersion	2867
• 70.218 DynaPDF.GetPageAnnotCount	2868
• 70.219 DynaPDF.GetPageAnnotation	2869
• 70.220 DynaPDF.GetPageBBox	2870
• 70.221 DynaPDF.GetPageCoords	2872
• 70.222 DynaPDF.GetPageCount	2873
• 70.223 DynaPDF.GetPageFieldCount	2875
• 70.224 DynaPDF.GetPageHeight	2876
• 70.225 DynaPDF.GetPageLabel	2878
• 70.226 DynaPDF.GetPageLabelCount	2880
• 70.227 DynaPDF.GetPageLayout	2881
• 70.228 DynaPDF.GetPageMode	2882
• 70.229 DynaPDF.GetPageNum	2883
• 70.230 DynaPDF.GetPageWidth	2884
• 70.231 DynaPDF.GetPrintSettings	2886
• 70.232 DynaPDF.GetReplaceICCProfile	2887
• 70.233 DynaPDF.GetReplaceICCProfileData	2888
• 70.234 DynaPDF.GetReplaceICCProfilesCounter	2889
• 70.235 DynaPDF.GetResolution	2890
• 70.236 DynaPDF.GetSaveNewImageFormat	2891
• 70.237 DynaPDF.GetTemplCount	2892
• 70.238 DynaPDF.GetTemplHeight	2893
• 70.239 DynaPDF.GetTemplWidth	2894

- 70.240 DynaPDF.GetTextDrawMode 2895
- 70.241 DynaPDF.GetTextFieldDefaultValue 2896
- 70.242 DynaPDF.GetTextFieldValue 2897
- 70.243 DynaPDF.GetTextRise 2898
- 70.244 DynaPDF.GetTextScaling 2899
- 70.245 DynaPDF.GetTextWidth 2900
- 70.246 DynaPDF.GetTransparentColor 2902
- 70.247 DynaPDF.GetTrapped 2903
- 70.248 DynaPDF.GetUseExactPwd 2904
- 70.249 DynaPDF.GetUseGlobalImpFiles 2905
- 70.250 DynaPDF.GetUseStdFonts 2906
- 70.251 DynaPDF.GetUseSystemFonts 2907
- 70.252 DynaPDF.GetUseTransparency 2908
- 70.253 DynaPDF.GetUseVisibleCoords 2909
- 70.254 DynaPDF.GetUserRights 2910
- 70.255 DynaPDF.GetUserUnit 2911
- 70.256 DynaPDF.GetUsesTransparency 2912
- 70.257 DynaPDF.GetViewerPreferences 2914
- 70.258 DynaPDF.GetWMFDefExtent 2915
- 70.259 DynaPDF.GetWMFPixelPerInch 2916
- 70.260 DynaPDF.GetWordSpacing 2917
- 70.261 DynaPDF.GetXFASStream 2918
- 70.262 DynaPDF.GetXFASStreamCount 2920
- 70.263 DynaPDF.HaveOpenDocument 2921
- 70.264 DynaPDF.HaveOpenPage 2922
- 70.265 DynaPDF.HighlightAnnot 2923
- 70.266 DynaPDF.HighlightPattern 2925
- 70.267 DynaPDF.ImportEncryptionSettings 2927
- 70.268 DynaPDF.ImportPDFFile 2928

	587
• 70.269 DynaPDF.ImportPDFPage	2931
• 70.270 DynaPDF.ImportPageAsTemplate	2934
• 70.271 DynaPDF.InitColorManagement	2936
• 70.272 DynaPDF.InitColorManagementEx	2939
• 70.273 DynaPDF.Initialize	2941
• 70.274 DynaPDF.InsertBookmark	2948
• 70.275 DynaPDF.InsertBookmarkEx	2950
• 70.276 DynaPDF.InsertImage	2952
• 70.277 DynaPDF.InsertImageFile	2956
• 70.278 DynaPDF.InsertMetafile	2959
• 70.279 DynaPDF.InsertMetafileEx	2961
• 70.280 DynaPDF.IsColorPage	2963
• 70.281 DynaPDF.IsEmptyPage	2965
• 70.282 DynaPDF.IsInitialized	2966
• 70.283 DynaPDF.LineAnnot	2969
• 70.284 DynaPDF.LineTo	2971
• 70.285 DynaPDF.List	2973
• 70.286 DynaPDF.ListImages	2974
• 70.287 DynaPDF.LockLayer	2977
• 70.288 DynaPDF.MovePage	2978
• 70.289 DynaPDF.MoveTo	2979
• 70.290 DynaPDF.New	2981
• 70.291 DynaPDF.OpenOutputFile	2984
• 70.292 DynaPDF.OpenOutputFileEncrypted	2986
• 70.293 DynaPDF.OpenPDFFromContainer	2988
• 70.294 DynaPDF.OpenPDFFromFile	2992
• 70.295 DynaPDF.Optimize	2995
• 70.296 DynaPDF.PageLink	3001
• 70.297 DynaPDF.PageLinkEx	3004

- 70.298 DynaPDF.PageStatistics 3008
- 70.299 DynaPDF.ParseContent 3011
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.301 DynaPDF.PlaceTemplateEx 3015
- 70.302 DynaPDF.Print 3017
- 70.307 DynaPDF.RGB 3026
- 70.308 DynaPDF.ReadImageFormat 3028
- 70.309 DynaPDF.ReadImageResolution 3030
- 70.310 DynaPDF.Rectangle 3031
- 70.311 DynaPDF.Release 3033
- 70.312 DynaPDF.RenameSpotColor 3035
- 70.313 DynaPDF.RenderPDFFile 3036
- 70.314 DynaPDF.RenderPDFFileEx 3038
- 70.315 DynaPDF.RenderPage 3040
- 70.316 DynaPDF.ReplaceImage 3043
- 70.317 DynaPDF.ReplacePattern 3046
- 70.318 DynaPDF.ResetEncryptionSettings 3049
- 70.319 DynaPDF.RestoreGraphicState 3050
- 70.320 DynaPDF.RotateCoords 3052
- 70.321 DynaPDF.RotateTemplate 3055
- 70.322 DynaPDF.RoundRect 3058
- 70.323 DynaPDF.RoundRectEx 3060
- 70.324 DynaPDF.Save 3062
- 70.325 DynaPDF.SaveAndSignFile 3065
- 70.326 DynaPDF.SaveAndSignFileWinCrypt 3067
- 70.328 DynaPDF.SaveGraphicState 3071
- 70.329 DynaPDF.ScaleCoords 3072
- 70.330 DynaPDF.SetAlpha 3074
- 70.331 DynaPDF.SetAnnotBorderStyle 3076

	589
• 70.332 DynaPDF.SetAnnotBorderWidth	3078
• 70.333 DynaPDF.SetAnnotColor	3079
• 70.334 DynaPDF.SetAnnotDate	3081
• 70.335 DynaPDF.SetAnnotFlags	3083
• 70.336 DynaPDF.SetAnnotFlagsEx	3085
• 70.337 DynaPDF.SetAnnotHighlightMode	3086
• 70.338 DynaPDF.SetAnnotIcon	3087
• 70.339 DynaPDF.SetAnnotLineEndStyle	3088
• 70.340 DynaPDF.SetAnnotOpacity	3089
• 70.341 DynaPDF.SetAnnotOpenState	3090
• 70.342 DynaPDF.SetAnnotString	3091
• 70.343 DynaPDF.SetAnnotSubject	3092
• 70.344 DynaPDF.SetBBox	3093
• 70.345 DynaPDF.SetBookmarkDest	3095
• 70.346 DynaPDF.SetBookmarkStyle	3097
• 70.347 DynaPDF.SetBorderStyle	3099
• 70.348 DynaPDF.SetCMapDir	3100
• 70.349 DynaPDF.SetCharacterSpacing	3101
• 70.350 DynaPDF.SetCheckBoxChar	3102
• 70.351 DynaPDF.SetCheckBoxDefState	3103
• 70.352 DynaPDF.SetCheckBoxState	3104
• 70.353 DynaPDF.SetColorSpace	3105
• 70.354 DynaPDF.SetCompressionFilter	3107
• 70.355 DynaPDF.SetCompressionLevel	3109
• 70.356 DynaPDF.SetContent	3110
• 70.357 DynaPDF.SetDocInfo	3111
• 70.358 DynaPDF.SetDocInfoEx	3113
• 70.359 DynaPDF.SetDrawDirection	3115
• 70.360 DynaPDF.SetExtColorSpace	3116

- 70.361 DynaPDF.SetExtFillColorSpace 3118
- 70.362 DynaPDF.SetExtStrokeColorSpace 3119
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.364 DynaPDF.SetFieldBackColor 3122
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.366 DynaPDF.SetFieldBorderStyle 3124
- 70.367 DynaPDF.SetFieldBorderWidth 3125
- 70.368 DynaPDF.SetFieldColor 3127
- 70.369 DynaPDF.SetFieldDate 3129
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.371 DynaPDF.SetFieldExpValueEx 3132
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.373 DynaPDF.SetFieldFont 3136
- 70.374 DynaPDF.SetFieldFontEx 3138
- 70.375 DynaPDF.SetFieldFontSize 3140
- 70.376 DynaPDF.SetFieldHighlightMode 3141
- 70.377 DynaPDF.SetFieldIndex 3142
- 70.378 DynaPDF.SetFieldMapName 3143
- 70.379 DynaPDF.SetFieldName 3144
- 70.380 DynaPDF.SetFieldOrientation 3146
- 70.381 DynaPDF.SetFieldTextAlign 3147
- 70.382 DynaPDF.SetFieldTextColor 3148
- 70.383 DynaPDF.SetFieldToolTip 3149
- 70.384 DynaPDF.SetFillColor 3150
- 70.385 DynaPDF.SetFloatPrecision 3153
- 70.386 DynaPDF.SetFont 3154
- 70.387 DynaPDF.SetFontEx 3156
- 70.388 DynaPDF.SetFontOrigin 3158
- 70.389 DynaPDF.SetFontSearchOrder 3159

	591
• 70.390 DynaPDF.SetFontSelMode	3161
• 70.391 DynaPDF.SetFontWeight	3162
• 70.392 DynaPDF.SetGStateFlags	3164
• 70.393 DynaPDF.SetImportFlags	3166
• 70.394 DynaPDF.SetImportFlags2	3170
• 70.395 DynaPDF.SetJPEGQuality	3172
• 70.396 DynaPDF.SetLanguage	3174
• 70.397 DynaPDF.SetLeading	3176
• 70.398 DynaPDF.SetLineJoinStyle	3177
• 70.399 DynaPDF.SetLineWidth	3178
• 70.400 DynaPDF.SetLinkHighlightMode	3180
• 70.401 DynaPDF.SetMetaConvFlags	3181
• 70.402 DynaPDF.SetMetadata	3183
• 70.403 DynaPDF.SetMiterLimit	3185
• 70.404 DynaPDF.SetNumberFormat	3186
• 70.405 DynaPDF.SetOCGState	3188
• 70.406 DynaPDF.SetOpacity	3190
• 70.407 DynaPDF.SetOrientation	3191
• 70.408 DynaPDF.SetOrientationEx	3192
• 70.409 DynaPDF.SetPDFVersion	3195
• 70.410 DynaPDF.SetPageBBox	3197
• 70.411 DynaPDF.SetPageCoords	3199
• 70.412 DynaPDF.SetPageFormat	3201
• 70.413 DynaPDF.SetPageHeight	3203
• 70.414 DynaPDF.SetPageLayout	3206
• 70.415 DynaPDF.SetPageMode	3207
• 70.416 DynaPDF.SetPageWidth	3208
• 70.417 DynaPDF.SetPrintSettings	3211
• 70.418 DynaPDF.SetReplaceICCProfile	3213

- 70.419 DynaPDF.SetReplaceICCProfileData 3215
- 70.420 DynaPDF.SetResolution 3217
- 70.421 DynaPDF.SetSaveNewImageFormat 3219
- 70.422 DynaPDF.SetSeparationInfo 3221
- 70.423 DynaPDF.SetStrokeColor 3222
- 70.424 DynaPDF.SetTextDrawMode 3224
- 70.425 DynaPDF.SetTextFieldValue 3226
- 70.426 DynaPDF.SetTextFieldValueEx 3228
- 70.427 DynaPDF.SetTextRect 3229
- 70.428 DynaPDF.SetTextRise 3231
- 70.429 DynaPDF.SetTextScaling 3232
- 70.430 DynaPDF.SetTransparentColor 3233
- 70.431 DynaPDF.SetTrapped 3234
- 70.432 DynaPDF.SetUseExactPwD 3235
- 70.433 DynaPDF.SetUseGlobalImpFiles 3236
- 70.434 DynaPDF.SetUseStdFonts 3237
- 70.435 DynaPDF.SetUseSystemFonts 3239
- 70.436 DynaPDF.SetUseTransparency 3241
- 70.437 DynaPDF.SetUseVisibleCoords 3242
- 70.438 DynaPDF.SetUserUnit 3243
- 70.439 DynaPDF.SetViewerPreferences 3244
- 70.440 DynaPDF.SetWMFDefExtent 3245
- 70.441 DynaPDF.SetWMFPixelPerInch 3246
- 70.442 DynaPDF.SetWordSpacing 3247
- 70.443 DynaPDF.SetXFASStream 3248
- 70.444 DynaPDF.ShowDifferences 3249
- 70.445 DynaPDF.SkewCoords 3251
- 70.446 DynaPDF.SquareAnnot 3253
- 70.447 DynaPDF.StampAnnot 3255

	593
• 70.448 DynaPDF.StrokePath	3257
• 70.449 DynaPDF.SysFontInfo	3259
• 70.450 DynaPDF.Table.AddColumn	3261
• 70.451 DynaPDF.Table.AddRow	3262
• 70.452 DynaPDF.Table.AddRows	3264
• 70.453 DynaPDF.Table.ClearColumn	3265
• 70.454 DynaPDF.Table.ClearContent	3266
• 70.455 DynaPDF.Table.ClearRow	3268
• 70.456 DynaPDF.Table.Create	3270
• 70.457 DynaPDF.Table.DeleteCol	3273
• 70.458 DynaPDF.Table.DeleteRow	3274
• 70.459 DynaPDF.Table.DeleteRows	3275
• 70.460 DynaPDF.Table.Draw	3276
• 70.461 DynaPDF.Table.GetFirstRow	3279
• 70.462 DynaPDF.Table.GetNextHeight	3280
• 70.463 DynaPDF.Table.GetNextHeightRow	3281
• 70.464 DynaPDF.Table.GetNextRow	3282
• 70.465 DynaPDF.Table.GetNumCols	3283
• 70.466 DynaPDF.Table.GetNumRows	3284
• 70.467 DynaPDF.Table.GetPDF	3285
• 70.468 DynaPDF.Table.GetTableHeight	3286
• 70.469 DynaPDF.Table.GetTableWidth	3287
• 70.470 DynaPDF.Table.HaveMore	3288
• 70.471 DynaPDF.Table.Release	3289
• 70.472 DynaPDF.Table.SetBorderWidth	3290
• 70.473 DynaPDF.Table.SetBoxProperty	3292
• 70.474 DynaPDF.Table.SetCellAction	3294
• 70.475 DynaPDF.Table.SetCellImage	3296
• 70.476 DynaPDF.Table.SetCellImageEx	3299

- 70.477 DynaPDF.Table.SetCellOrientation 3301
- 70.478 DynaPDF.Table.SetCellPadding 3303
- 70.479 DynaPDF.Table.SetCellSpacing 3305
- 70.480 DynaPDF.Table.SetCellTable 3307
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.484 DynaPDF.Table.SetColor 3316
- 70.485 DynaPDF.Table.SetColorFloat 3318
- 70.486 DynaPDF.Table.SetFlags 3320
- 70.487 DynaPDF.Table.SetFont 3322
- 70.488 DynaPDF.Table.SetFontSelMode 3324
- 70.489 DynaPDF.Table.SetFontSize 3325
- 70.490 DynaPDF.Table.SetGridWidth 3327
- 70.491 DynaPDF.Table.SetPDF 3329
- 70.492 DynaPDF.Table.SetRGBColor 3330
- 70.493 DynaPDF.Table.SetRowHeight 3332
- 70.494 DynaPDF.Table.SetTableWidth 3333
- 70.495 DynaPDF.TextAnnot 3335
- 70.496 DynaPDF.TranslateCoords 3337
- 70.497 DynaPDF.Triangle 3339
- 70.498 DynaPDF.UnLockLayer 3341
- 70.499 DynaPDF.Uninitialize 3342
- 70.500 DynaPDF.WatermarkAnnot 3343
- 70.501 DynaPDF.WebLink 3345
- 70.502 DynaPDF.WriteDemoText 3348
- 70.503 DynaPDF.WriteFText 3350
- 70.504 DynaPDF.WriteFTextEx 3352
- 70.505 DynaPDF.WriteFTextExRotated 3356

	595
• 70.506 DynaPDF.WriteStyledText	3358
• 70.507 DynaPDF.WriteStyledTextEx	3360
• 70.508 DynaPDF.WriteStyledTextExRotated	3362
• 70.509 DynaPDF.WriteText	3364
• 149.1 ECKey.BuiltInCurves	7061
• 149.2 ECKey.Description	7063
• 149.3 ECKey.Duplicate	7064
• 149.4 ECKey.Generate	7065
• 149.5 ECKey.PrivateKey	7067
• 149.6 ECKey.PublicKey	7068
• 149.7 ECKey.ReadPrivateKey	7069
• 149.8 ECKey.ReadPublicKey	7070
• 149.9 ECKey.Release	7071
• 149.10 ECKey.Sign	7072
• 149.11 ECKey.Size	7073
• 149.12 ECKey.Verify	7074
• 175.2 Email.Verify	8231
• 72.1 EmailParser.Address	3403
• 72.2 EmailParser.AddressCount	3406
• 72.3 EmailParser.AttachedEmails	3407
• 72.4 EmailParser.Attachment	3408
• 72.5 EmailParser.AttachmentCount	3410
• 72.6 EmailParser.Free	3411
• 72.7 EmailParser.HTMLText	3413
• 72.8 EmailParser.HTMLToPlainText	3415
• 72.9 EmailParser.HasHeader	3416
• 72.10 EmailParser.Hash	3417
• 72.11 EmailParser.Header	3418
• 72.12 EmailParser.HeaderCount	3420

- 72.13 EmailParser.HeaderValue 3421
- 72.14 EmailParser.Inline 3422
- 72.15 EmailParser.InlineCount 3424
- 72.16 EmailParser.List 3425
- 72.17 EmailParser.MessageID 3426
- 72.18 EmailParser.Parse 3427
- 72.19 EmailParser.ParseContainer 3431
- 72.20 EmailParser.ParseFile 3432
- 72.21 EmailParser.PlainText 3433
- 72.22 EmailParser.ProcessImageReferences 3435
- 72.23 EmailParser.ReceiveDate 3436
- 72.24 EmailParser.SentDate 3437
- 72.25 EmailParser.Source 3438
- 72.26 EmailParser.SourceWithoutAttachments 3439
- 72.27 EmailParser.Subject 3440
- 72.28 EmailParser.WriteAttachment 3442
- 72.29 EmailParser.WriteInline 3443
- 73.1 Encryption.Cipher 3445
- 73.2 Encryption.CipherNames 3451
- 73.3 Encryption.DecryptAES 3452
- 73.4 Encryption.DecryptBlowfish 3454
- 73.5 Encryption.DecryptContainerAES 3456
- 73.6 Encryption.DecryptContainerBlowfish 3458
- 73.7 Encryption.DigestNames 3460
- 73.8 Encryption.EncryptAES 3461
- 73.9 Encryption.EncryptBlowfish 3463
- 73.10 Encryption.EncryptContainerAES 3465
- 73.11 Encryption.EncryptContainerBlowfish 3467
- 74.1 EnvironmentVariables.ClearValue 3485

	597
• 74.2 EnvironmentVariables.Count	3487
• 74.3 EnvironmentVariables.Name	3488
• 74.4 EnvironmentVariables.Names	3489
• 74.5 EnvironmentVariables.SetValue	3490
• 74.6 EnvironmentVariables.Value	3491
• 75.3 EventMonitor.GetEnabled	3495
• 75.10 EventMonitor.SetEnabled	3504
• 79.2 FM.Argument	3885
• 79.3 FM.ArgumentCount	3886
• 79.4 FM.Beep	3887
• 80.3 FM.CompareTables	4069
• 79.7 FM.CurrentScriptID	3893
• 79.8 FM.CurrentScriptName	3894
• 79.9 FM.CurrentThreadID	3895
• 79.10 FM.DataType	3896
• 80.4 FM.DeleteRecord	4073
• 80.5 FM.DeleteRecords	4076
• 79.17 FM.Evaluate	3907
• 80.6 FM.ExecuteFileSQL	4079
• 80.7 FM.ExecuteFileSQLOnIdle	4086
• 80.8 FM.ExecuteSQL	4088
• 80.9 FM.ExecuteSQL.LastError	4094
• 80.10 FM.ExecuteSQL.LastErrorMessage	4096
• 80.11 FM.ExecuteSQL.LastSQL	4099
• 80.13 FM.GetSQLBatchMode	4103
• 79.29 FM.InitMessageFilter	3936
• 80.14 FM.InsertOrUpdateRecord	4104
• 80.15 FM.InsertOrUpdateRecord2	4107
• 80.16 FM.InsertOrUpdateRecord3	4110

- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115
- 80.19 FM.InsertRecordCSV 4119
- 80.20 FM.InsertRecordQuery 4122
- 80.21 FM.InsertRecordQueryIgnoreDuplicates 4126
- 80.22 FM.InsertRecordTSV 4129
- 79.40 FM.IsMainThread 3967
- 79.41 FM.Loop 3968
- 79.42 FM.MainThreadID 3972
- 80.24 FM.NULL 4134
- 79.46 FM.QueryBaseTableNames 3978
- 79.47 FM.QueryFieldsForBaseTableName 3979
- 79.48 FM.QueryFieldsForTableName 3980
- 79.49 FM.QueryTableNames 3982
- 79.55 FM.SQL.Avg 3992
- 80.25 FM.SQL.CSV 4135
- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.29 FM.SQL.FieldType 4145
- 80.30 FM.SQL.InsertRecords 4146
- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 100.2 FM.SQL.JSONRecord 5234
- 100.3 FM.SQL.JSONRecords 5236
- 79.65 FM.SQL.Max 4014
- 79.66 FM.SQL.Min 4016
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 79.69 FM.SQL.Sum 4022

	599
• 80.36 FM.SQL.Text	4159
• 79.71 FM.ScriptIDForScriptName	4027
• 79.72 FM.ScriptNameForScriptID	4028
• 79.73 FM.ScriptNames	4029
• 80.37 FM.SetSQLBatchMode	4162
• 79.76 FM.SetThreadName	4033
• 79.77 FM.StopScriptIdle	4034
• 79.78 FM.TableStatistics	4035
• 80.38 FM.UpdateRecord	4164
• 79.80 FM.UpdateRecord2	4041
• 79.81 FM.UpdateRecord3	4043
• 80.39 FM.UpdateRecords	4167
• 79.83 FM.UpdateRecords2	4048
• 79.84 FM.UpdateRecords3	4050
• 178.1 FM.VariableAdd	8259
• 178.2 FM.VariableAppend	8261
• 178.3 FM.VariableClear	8262
• 178.4 FM.VariableClearAll	8263
• 178.5 FM.VariableExists	8264
• 178.6 FM.VariableGet	8265
• 178.7 FM.VariableList	8267
• 178.8 FM.VariableNames	8268
• 178.9 FM.VariableReset	8269
• 178.10 FM.VariableSet	8270
• 83.1 FSEvents.Create	4205
• 83.2 FSEvents.CreateRelativeToDevice	4209
• 83.3 FSEvents.CurrentEventId	4210
• 83.4 FSEvents.Description	4211
• 83.5 FSEvents.DeviceBeingWatched	4212

- 83.6 FSEvents.DeviceID 4213
- 83.7 FSEvents.EventCount 4214
- 83.8 FSEvents.FlushASync 4215
- 83.9 FSEvents.FlushSync 4216
- 83.10 FSEvents.GetEvaluate 4217
- 83.11 FSEvents.GetExclusionPaths 4218
- 83.12 FSEvents.GetFileName 4219
- 83.13 FSEvents.GetScriptName 4220
- 83.14 FSEvents.HasNextEvent 4221
- 83.15 FSEvents.LastEventIdForDeviceBeforeTime 4222
- 83.16 FSEvents.LatestEventId 4223
- 83.17 FSEvents.NextEvent 4224
- 83.18 FSEvents.PathsBeingWatched 4228
- 83.19 FSEvents.Release 4229
- 83.21 FSEvents.SetExclusionPaths 4231
- 83.24 FSEvents.Show 4234
- 83.25 FSEvents.Start 4235
- 83.26 FSEvents.Started 4236
- 83.27 FSEvents.Stop 4237
- 83.28 FSEvents.UUIDForDevice 4238
- 78.1 Files.AccessDate 3771
- 78.2 Files.AddedToDirectoryDate 3773
- 78.3 Files.AppPath 3774
- 78.4 Files.AudioTags 3775
- 78.5 Files.CanOpenFile 3777
- 78.6 Files.CopyFile 3778
- 78.7 Files.CopyFiles 3780
- 78.8 Files.CreateAlias 3782
- 78.9 Files.CreateBookmark 3784

	601
• 78.10 Files.CreateDirectory	3785
• 78.11 Files.CreateHardLink	3787
• 78.12 Files.CreateSymbolicLink	3789
• 78.13 Files.CreationDate	3790
• 78.14 Files.Delete	3792
• 78.15 Files.DeleteFolder	3794
• 78.16 Files.DirectoryExists	3796
• 78.17 Files.DiskInfo	3798
• 78.18 Files.FileDisplayName	3800
• 78.19 Files.FileExists	3801
• 78.20 Files.FileExtension	3803
• 78.21 Files.FileInfo	3804
• 78.22 Files.FileKind	3806
• 78.23 Files.FileName	3807
• 78.24 Files.FileSize	3808
• 78.25 Files.FileUTITypes	3810
• 78.26 Files.FolderSize	3811
• 78.27 Files.GetComment	3813
• 78.28 Files.GetFinderLabel	3814
• 78.29 Files.GetNodeID	3815
• 78.30 Files.GetPathFromNodeID	3817
• 78.31 Files.GetPosixPermissions	3819
• 78.32 Files.GetTagNames	3820
• 78.33 Files.IsHidden	3821
• 78.34 Files.ItemExists	3822
• 78.35 Files.Launch	3823
• 78.36 Files.LaunchFile	3826
• 78.37 Files.List	3828
• 78.38 Files.ListRecursive	3831

- 78.39 Files.ListVolumes 3833
- 78.40 Files.ModificationDate 3834
- 78.41 Files.Mount 3836
- 78.42 Files.MountPath 3839
- 78.43 Files.MoveFile 3840
- 78.44 Files.MoveToTrash 3842
- 78.45 Files.ReadFile 3844
- 78.46 Files.ReadJPEG 3847
- 78.47 Files.ReadPDF 3849
- 78.48 Files.ReadPNG 3851
- 78.49 Files.RenameFile 3853
- 78.50 Files.ResolveAlias 3855
- 78.51 Files.ResolveBookmark 3857
- 78.53 Files.SetAudioTags 3860
- 78.54 Files.SetComment 3862
- 78.55 Files.SetCreationDate 3863
- 78.56 Files.SetFinderLabel 3864
- 78.57 Files.SetHidden 3865
- 78.58 Files.SetModificationDate 3866
- 78.59 Files.SetPosixPermissions 3867
- 78.60 Files.SetTagNames 3869
- 78.61 Files.Unmount 3870
- 78.62 Files.WriteFile 3871
- 81.1 Folders.Applications 4169
- 81.2 Folders.LocalFonts 4170
- 81.3 Folders.LocalPreferences 4171
- 81.4 Folders.SharedDocuments 4172
- 81.5 Folders.System 4173
- 81.6 Folders.SystemFonts 4174

	603
• 81.7 Folders.SystemTemporary	4175
• 81.8 Folders.UserDesktop	4177
• 81.9 Folders.UserDocuments	4179
• 81.11 Folders.UserFonts	4182
• 81.12 Folders.UserHome	4183
• 81.13 Folders.UserMusic	4184
• 81.14 Folders.UserPictures	4185
• 81.15 Folders.UserPreferences	4186
• 81.16 Folders.UserTemporary	4187
• 81.17 Folders.UserTrash	4189
• 81.18 Folders.UserVideo	4190
• 81.19 Folders.Windows	4191
• 82.2 Font.CalculateTextFits	4195
• 82.3 Font.CalculateTextHeight	4197
• 82.4 Font.CalculateTextWidth	4199
• 85.1 GMImage.AdaptiveThreshold	4337
• 85.2 GMImage.AddNoise	4339
• 85.3 GMImage.AddNoiseChannel	4340
• 85.4 GMImage.AddPathArcAbs	4341
• 85.5 GMImage.AddPathArcRel	4343
• 85.6 GMImage.AddPathClosePath	4345
• 85.7 GMImage.AddPathCurvetoAbs	4346
• 85.8 GMImage.AddPathCurvetoRel	4348
• 85.9 GMImage.AddPathLinetoAbs	4350
• 85.10 GMImage.AddPathLinetoHorizontalAbs	4351
• 85.11 GMImage.AddPathLinetoHorizontalRel	4352
• 85.12 GMImage.AddPathLinetoRel	4353
• 85.13 GMImage.AddPathLinetoVerticalAbs	4354
• 85.14 GMImage.AddPathLinetoVerticalRel	4355

- 85.15 GMImage.AddPathMovetoAbs 4356
- 85.16 GMImage.AddPathMovetoRel 4357
- 85.17 GMImage.AddPathQuadraticCurvetoAbs 4358
- 85.18 GMImage.AddPathQuadraticCurvetoRel 4359
- 85.19 GMImage.AddPathSmoothCurvetoAbs 4360
- 85.20 GMImage.AddPathSmoothCurvetoRel 4361
- 85.21 GMImage.AddPathSmoothQuadraticCurvetoAbs 4362
- 85.22 GMImage.AddPathSmoothQuadraticCurvetoRel 4363
- 85.23 GMImage.Affine 4364
- 85.24 GMImage.Annotate 4365
- 85.25 GMImage.AutoOrient 4369
- 85.26 GMImage.AveragePixelValue 4370
- 85.27 GMImage.BaseColumns 4372
- 85.28 GMImage.BaseFilename 4373
- 85.29 GMImage.BaseRows 4374
- 85.30 GMImage.Blur 4375
- 85.31 GMImage.BlurChannel 4377
- 85.32 GMImage.Border 4378
- 85.33 GMImage.BoundingBox 4380
- 85.34 GMImage.Channel 4381
- 85.35 GMImage.Charcoal 4383
- 85.36 GMImage.Chop 4385
- 85.37 GMImage.ClipMask 4386
- 85.38 GMImage.ClipPath 4387
- 85.39 GMImage.Coders 4388
- 85.40 GMImage.Colorize 4389
- 85.41 GMImage.ColorizeRGB 4391
- 85.42 GMImage.Columns 4393
- 85.43 GMImage.Compare 4394

	605
• 85.44 GImage.Composite	4396
• 85.45 GImage.CompositeXY	4398
• 85.46 GImage.Contrast	4400
• 85.47 GImage.Copy	4401
• 85.48 GImage.CopyChannel	4402
• 85.49 GImage.Crop	4405
• 85.50 GImage.CycleColormap	4407
• 85.51 GImage.Despeckle	4408
• 85.52 GImage.Directory	4409
• 85.53 GImage.DrawArc	4410
• 85.54 GImage.DrawCircle	4412
• 85.55 GImage.DrawEllipse	4414
• 85.56 GImage.DrawLine	4416
• 85.57 GImage.DrawPath	4418
• 85.58 GImage.DrawRectangle	4419
• 85.59 GImage.DrawRoundRectangle	4422
• 85.60 GImage.Edge	4424
• 85.61 GImage.Emboss	4425
• 85.62 GImage.Enhance	4427
• 85.63 GImage.Equalize	4428
• 85.64 GImage.Erase	4429
• 85.65 GImage.ExifThumbnail	4430
• 85.66 GImage.Extent	4431
• 85.67 GImage.FillPattern	4433
• 85.68 GImage.FindColorInColumn	4434
• 85.69 GImage.FindColorInRow	4436
• 85.70 GImage.Flip	4438
• 85.71 GImage.FloodFillColor	4440
• 85.72 GImage.FloodFillColorXY	4442

- 85.73 GImage.FloodFillOpacity 4444
- 85.74 GImage.FloodFillTexture 4445
- 85.75 GImage.FloodFillTextureXY 4446
- 85.76 GImage.Flop 4447
- 85.77 GImage.FontMap 4449
- 85.78 GImage.FontTypeMetrics 4450
- 85.79 GImage.Format 4452
- 85.80 GImage.Frame 4453
- 85.81 GImage.Free 4455
- 85.82 GImage.FreeAll 4457
- 85.83 GImage.Gamma 4458
- 85.84 GImage.GaussianBlur 4459
- 85.85 GImage.GaussianBlurChannel 4460
- 85.86 GImage.Geometry 4461
- 85.87 GImage.GetAdjoin 4462
- 85.88 GImage.GetAnimationDelay 4463
- 85.89 GImage.GetAnimationIterations 4464
- 85.90 GImage.GetAntiAlias 4465
- 85.91 GImage.GetAttribute 4466
- 85.92 GImage.GetAttributeNames 4468
- 85.93 GImage.GetAttributesJSON 4469
- 85.94 GImage.GetBackgroundColor 4471
- 85.95 GImage.GetBackgroundTexture 4472
- 85.96 GImage.GetBorderColor 4473
- 85.97 GImage.GetBoxColor 4474
- 85.98 GImage.GetChannelDepth 4475
- 85.99 GImage.GetClassType 4476
- 85.100 GImage.GetClipMask 4477
- 85.101 GImage.GetColorFuzz 4478

	607
• 85.102 GImage.GetColorMapSize	4479
• 85.103 GImage.GetColorSpace	4480
• 85.104 GImage.GetComment	4482
• 85.105 GImage.GetCompose	4483
• 85.106 GImage.GetCompressType	4484
• 85.107 GImage.GetDebug	4485
• 85.108 GImage.GetDefineSet	4486
• 85.109 GImage.GetDefineValue	4487
• 85.110 GImage.GetDensity	4488
• 85.111 GImage.GetDepth	4489
• 85.112 GImage.GetEXIFOrientation	4490
• 85.113 GImage.GetEndian	4491
• 85.114 GImage.GetFileName	4492
• 85.115 GImage.GetFileSize	4493
• 85.116 GImage.GetFillColor	4494
• 85.117 GImage.GetFillRule	4495
• 85.118 GImage.GetFilterType	4496
• 85.119 GImage.GetFont	4497
• 85.120 GImage.GetFontPointsize	4498
• 85.121 GImage.GetGamma	4499
• 85.122 GImage.GetGifDisposeMethod	4500
• 85.123 GImage.GetHeight	4501
• 85.124 GImage.GetICCColorProfile	4503
• 85.125 GImage.GetIPTCProfile	4504
• 85.126 GImage.GetIPTCProfileValues	4505
• 85.127 GImage.GetInterlaceType	4506
• 85.128 GImage.GetIsValid	4507
• 85.129 GImage.GetJPEGAsBase64	4508
• 85.130 GImage.GetJPEGAsHex	4509

- 85.131 GImage.GetLabel 4510
- 85.132 GImage.GetLineWidth 4511
- 85.133 GImage.GetMagick 4512
- 85.134 GImage.GetMatte 4513
- 85.135 GImage.GetMatteColor 4514
- 85.136 GImage.GetModulusDepth 4515
- 85.137 GImage.GetMonochrome 4516
- 85.138 GImage.GetOrientation 4517
- 85.139 GImage.GetPNGAsBase64 4519
- 85.140 GImage.GetPNGAsHex 4520
- 85.141 GImage.GetPage 4521
- 85.142 GImage.GetPixelColor 4522
- 85.143 GImage.GetProfile 4524
- 85.144 GImage.GetQuality 4525
- 85.145 GImage.GetQuantizeColorSpace 4526
- 85.146 GImage.GetQuantizeColors 4527
- 85.147 GImage.GetQuantizeDither 4528
- 85.148 GImage.GetQuantizeTreeDepth 4529
- 85.149 GImage.GetQuiet 4530
- 85.150 GImage.GetRenderingIntent 4531
- 85.151 GImage.GetResolutionUnits 4532
- 85.152 GImage.GetScene 4533
- 85.153 GImage.GetSize 4534
- 85.154 GImage.GetStrokeAntiAlias 4535
- 85.155 GImage.GetStrokeColor 4536
- 85.156 GImage.GetStrokeDashArray 4537
- 85.157 GImage.GetStrokeDashOffset 4538
- 85.158 GImage.GetStrokeLineCap 4539
- 85.159 GImage.GetStrokeLineJoin 4540

	609
• 85.160 GImage.GetStrokeMiterLimit	4541
• 85.161 GImage.GetStrokeWidth	4542
• 85.162 GImage.GetSubImage	4543
• 85.163 GImage.GetSubRange	4544
• 85.164 GImage.GetTextEncoding	4545
• 85.165 GImage.GetTileName	4546
• 85.166 GImage.GetType	4547
• 85.167 GImage.GetVerbose	4548
• 85.168 GImage.GetView	4549
• 85.169 GImage.GetWidth	4550
• 85.170 GImage.GetXMP	4552
• 85.171 GImage.GetcolorMap	4554
• 85.172 GImage.Hash	4555
• 85.173 GImage.ImageCount	4557
• 85.174 GImage.Implode	4558
• 85.175 GImage.InvertChannel	4559
• 85.176 GImage.IsGray	4561
• 85.177 GImage.Level	4562
• 85.178 GImage.LevelChannel	4563
• 85.179 GImage.List	4565
• 85.180 GImage.Magnify	4566
• 85.181 GImage.Map	4567
• 85.182 GImage.MatteFloodfill	4568
• 85.183 GImage.MeanErrorPerPixel	4569
• 85.184 GImage.MedianFilter	4570
• 85.185 GImage.Minify	4571
• 85.186 GImage.Modulate	4572
• 85.187 GImage.MontageGeometry	4574
• 85.188 GImage.MotionBlur	4575

- 85.189 GImage.MultiplyChannel 4576
- 85.190 GImage.Negate 4578
- 85.191 GImage.New 4580
- 85.192 GImage.NewFromBase64 4583
- 85.193 GImage.NewFromContainer 4584
- 85.194 GImage.NewFromFile 4586
- 85.195 GImage.NewFromHex 4588
- 85.196 GImage.NewImagesFromContainer 4589
- 85.197 GImage.NewImagesFromFile 4590
- 85.198 GImage.Normalize 4592
- 85.199 GImage.NormalizedMaxError 4593
- 85.200 GImage.NormalizedMeanError 4595
- 85.201 GImage.OilPaint 4596
- 85.202 GImage.Opacity 4597
- 85.203 GImage.Opaque 4598
- 85.204 GImage.PopClipPath 4599
- 85.205 GImage.PurgeTemporaryFiles 4600
- 85.206 GImage.PushClipPath 4601
- 85.207 GImage.Quantize 4602
- 85.208 GImage.QuantumDepth 4604
- 85.209 GImage.Raise 4605
- 85.210 GImage.RandomThreshold 4607
- 85.211 GImage.RandomThresholdChannel 4608
- 85.212 GImage.Read 4609
- 85.213 GImage.ReduceNoise 4611
- 85.214 GImage.Release 4612
- 85.215 GImage.ReleaseAll 4614
- 85.216 GImage.Repage 4615
- 85.217 GImage.ReplaceColor 4616

	611
• 85.218 GImage.Resize	4619
• 85.219 GImage.Roll	4621
• 85.220 GImage.Rollxy	4622
• 85.221 GImage.Rotate	4623
• 85.222 GImage.Rotating	4625
• 85.223 GImage.Rows	4626
• 85.224 GImage.Sample	4627
• 85.225 GImage.Scale	4628
• 85.226 GImage.Scaling	4632
• 85.227 GImage.Segment	4633
• 85.228 GImage.SetAdjoin	4634
• 85.229 GImage.SetAnimationDelay	4635
• 85.230 GImage.SetAnimationIterations	4636
• 85.231 GImage.SetAntiAlias	4637
• 85.232 GImage.SetAttribute	4638
• 85.233 GImage.SetBackgroundColor	4639
• 85.234 GImage.SetBackgroundTexture	4641
• 85.235 GImage.SetBorderColor	4642
• 85.236 GImage.SetBoxColor	4644
• 85.237 GImage.SetCacheThreshold	4645
• 85.238 GImage.SetClassType	4646
• 85.239 GImage.SetColorFuzz	4647
• 85.240 GImage.SetColorMapSize	4649
• 85.241 GImage.SetColorSpace	4650
• 85.242 GImage.SetComment	4651
• 85.243 GImage.SetCompose	4652
• 85.244 GImage.SetCompressType	4653
• 85.245 GImage.SetDebug	4655
• 85.246 GImage.SetDefineSet	4656

- 85.247 GImage.SetDefineValue 4657
- 85.248 GImage.SetDensity 4658
- 85.249 GImage.SetDepth 4660
- 85.250 GImage.SetEXIFOrientation 4661
- 85.251 GImage.SetEndian 4662
- 85.252 GImage.SetFileName 4663
- 85.253 GImage.SetFillColor 4664
- 85.254 GImage.SetFillRule 4666
- 85.255 GImage.SetFilterType 4667
- 85.256 GImage.SetFont 4668
- 85.257 GImage.SetFontSize 4669
- 85.258 GImage.SetGifDisposeMethod 4670
- 85.259 GImage.SetICCColorProfile 4671
- 85.260 GImage.SetIPTCProfile 4673
- 85.261 GImage.SetInterlaceType 4674
- 85.262 GImage.SetIsValid 4675
- 85.263 GImage.SetLabel 4676
- 85.264 GImage.SetLineWidth 4677
- 85.265 GImage.SetMagick 4678
- 85.266 GImage.SetMatte 4680
- 85.267 GImage.SetMatteColor 4682
- 85.268 GImage.SetModulusDepth 4683
- 85.269 GImage.SetMonochrome 4684
- 85.270 GImage.SetOrientation 4685
- 85.271 GImage.SetPage 4687
- 85.272 GImage.SetPixelColor 4688
- 85.273 GImage.SetProfile 4690
- 85.274 GImage.SetQuality 4692
- 85.275 GImage.SetQuantizeColorSpace 4694

	613
• 85.276 GImage.SetQuantizeColors	4695
• 85.277 GImage.SetQuantizeDither	4696
• 85.278 GImage.SetQuantizeTreeDepth	4697
• 85.279 GImage.SetQuiet	4698
• 85.280 GImage.SetRenderingIntent	4699
• 85.281 GImage.SetResolutionUnits	4700
• 85.282 GImage.SetScene	4702
• 85.283 GImage.SetSize	4703
• 85.284 GImage.SetStrokeAntiAlias	4704
• 85.285 GImage.SetStrokeColor	4706
• 85.286 GImage.SetStrokeDashArray	4708
• 85.287 GImage.SetStrokeDashOffset	4709
• 85.288 GImage.SetStrokeLineCap	4710
• 85.289 GImage.SetStrokeLineJoin	4711
• 85.290 GImage.SetStrokeMiterLimit	4712
• 85.291 GImage.SetStrokeWidth	4713
• 85.292 GImage.SetSubImage	4714
• 85.293 GImage.SetSubRange	4715
• 85.294 GImage.SetTextEncoding	4716
• 85.295 GImage.SetTileName	4717
• 85.296 GImage.SetType	4718
• 85.297 GImage.SetVerbose	4721
• 85.298 GImage.SetView	4722
• 85.299 GImage.SetXMP	4723
• 85.300 GImage.SetchannelDepth	4724
• 85.301 GImage.SetcolorMap	4725
• 85.302 GImage.Shade	4726
• 85.303 GImage.Sharpen	4727
• 85.304 GImage.SharpenChannel	4729

- 85.305 GImage.Shave 4730
- 85.306 GImage.Shear 4732
- 85.307 GImage.Signature 4733
- 85.308 GImage.SkewX 4734
- 85.309 GImage.SkewY 4735
- 85.310 GImage.Solarize 4736
- 85.311 GImage.Spread 4738
- 85.312 GImage.Stegano 4739
- 85.313 GImage.Stereo 4740
- 85.314 GImage.Strip 4741
- 85.315 GImage.StrokePattern 4742
- 85.316 GImage.Swirl 4743
- 85.317 GImage.Texture 4744
- 85.318 GImage.Threshold 4745
- 85.319 GImage.TotalColors 4747
- 85.320 GImage.Transform 4748
- 85.321 GImage.TransformOrigin 4749
- 85.322 GImage.TransformReset 4750
- 85.323 GImage.TransformRotation 4751
- 85.324 GImage.TransformScale 4752
- 85.325 GImage.TransformSkewX 4753
- 85.326 GImage.TransformSkewY 4754
- 85.327 GImage.Translation 4755
- 85.328 GImage.Transparent 4756
- 85.329 GImage.Trim 4758
- 85.330 GImage.Unsharpmask 4760
- 85.331 GImage.UnsharpmaskChannel 4761
- 85.332 GImage.Wave 4762
- 85.333 GImage.WriteImages 4763

	615
• 85.334 GImage.WriteToBMPContainer	4765
• 85.335 GImage.WriteToContainer	4766
• 85.336 GImage.WriteToFile	4768
• 85.337 GImage.WriteToGIFContainer	4771
• 85.338 GImage.WriteToJPEGContainer	4773
• 85.339 GImage.WriteToPDFContainer	4775
• 85.340 GImage.WriteToPNGContainer	4777
• 85.341 GImage.WriteToTiffContainer	4780
• 85.342 GImage.XResolution	4782
• 85.343 GImage.YResolution	4783
• 85.344 GImage.Zoom	4784
• 53.1 GZipFile.Compress	1473
• 53.2 GZipFile.Decompress	1475
• 86.1 Hash.CRC32	4785
• 86.2 Hash.Digest	4787
• 86.3 Hash.DigestFile	4791
• 86.4 Hash.MD5	4793
• 86.5 Hash.MD5.HMAC	4795
• 86.6 Hash.PBKDF2.HMAC	4797
• 86.7 Hash.RandomHexString	4799
• 86.8 Hash.RandomString	4800
• 86.9 Hash.SHA1	4802
• 86.10 Hash.SHA1.HMAC	4805
• 86.11 Hash.SHA256	4807
• 86.12 Hash.SHA256.HMAC	4809
• 86.13 Hash.SHA512	4812
• 86.14 Hash.SHA512.HMAC	4814
• 134.1 Icon.ClearIcon	6615
• 134.2 Icon.GetIcon	6617

- 134.3 Icon.GetIconWithQuickLook 6619
- 134.4 Icon.SetIcon 6621
- 124.4 Is64bit 6264
- 124.5 IsClient 6265
- 124.6 IsError 6266
- 124.7 IsIOS 6268
- 124.8 IsIOSDevice 6269
- 124.9 IsIOSSimulator 6270
- 124.10 IsLinux 6271
- 124.11 IsMacOS 6272
- 124.12 IsMobile 6273
- 124.13 IsRegistered 6274
- 124.14 IsRuntime 6277
- 124.15 IsServer 6278
- 124.16 IsWindows 6280
- 98.1 JS.AddFileMakerEvaluateFunction 5181
- 98.2 JS.AddFileMakerRunScriptFunction 5183
- 98.3 JS.AddFileMakerSQLFunction 5185
- 98.4 JS.AddFunction 5186
- 98.5 JS.CallFunction 5188
- 98.6 JS.Evaluate 5190
- 98.7 JS.EvaluateToString 5194
- 98.8 JS.Free 5196
- 98.9 JS.GetGlobalProperty 5198
- 98.10 JS.GetGlobalPropertyValue 5200
- 98.11 JS.New 5201
- 98.12 JS.Now 5203
- 98.13 JS.ObjectCount 5204
- 98.14 JS.SetGlobalProperty 5205

	617
• 98.15 JS.SetGlobalPropertyValue	5207
• 98.16 JS.StringCount	5209
• 98.17 JS.TimeToDateComponents	5210
• 98.18 JS.TimeToUTCDate	5212
• 98.19 JS.UTCDateToTime	5213
• 100.4 JSON.AddBooleanToObject	5238
• 100.5 JSON.AddFalseToObject	5240
• 100.6 JSON.AddItemToArray	5242
• 100.7 JSON.AddItemToObject	5244
• 100.8 JSON.AddNullToObject	5247
• 100.9 JSON.AddNumberToArray	5249
• 100.10 JSON.AddNumberToObject	5251
• 100.11 JSON.AddStringToArray	5253
• 100.12 JSON.AddStringToObject	5255
• 100.13 JSON.AddTrueToObject	5258
• 100.14 JSON.Clone	5260
• 100.15 JSON.Colorize	5261
• 100.16 JSON.Compact	5263
• 100.17 JSON.CreateArray	5264
• 100.18 JSON.CreateArrayRef	5265
• 100.19 JSON.CreateBool	5268
• 100.20 JSON.CreateBoolean	5269
• 100.21 JSON.CreateDoubleArray	5270
• 100.22 JSON.CreateFalse	5271
• 100.23 JSON.CreateIntegerArray	5272
• 100.24 JSON.CreateNull	5273
• 100.25 JSON.CreateNumber	5274
• 100.26 JSON.CreateObject	5276
• 100.27 JSON.CreateObjectRef	5278

- 100.28 JSON.CreateString 5281
- 100.29 JSON.CreateStringArray 5282
- 100.30 JSON.CreateStringArrayWithList 5283
- 100.31 JSON.CreateTrue 5284
- 100.32 JSON.CreateValue 5285
- 100.33 JSON.DeleteItemFromArray 5286
- 100.34 JSON.DeleteItemFromObject 5287
- 100.35 JSON.EqualContent 5288
- 100.36 JSON.Equals 5289
- 100.37 JSON.FindValueInArray 5291
- 100.38 JSON.FindValueInObjectArray 5293
- 100.39 JSON.Format 5295
- 100.40 JSON.GetArrayItem 5297
- 100.41 JSON.GetArrayItemsAsList 5299
- 100.42 JSON.GetArrayPathItems 5301
- 100.43 JSON.GetArraySize 5303
- 100.44 JSON.GetDoubleValue 5304
- 100.45 JSON.GetIntegerValue 5305
- 100.46 JSON.GetObjectItem 5306
- 100.47 JSON.GetObjectItemTree 5309
- 100.48 JSON.GetObjectItemTreeRef 5310
- 100.49 JSON.GetObjectName 5311
- 100.50 JSON.GetObjectNameList 5312
- 100.51 JSON.GetObjectSize 5313
- 100.52 JSON.GetPathItem 5314
- 100.53 JSON.GetStringValue 5317
- 100.54 JSON.GetType 5319
- 100.55 JSON.GetValue 5320
- 100.56 JSON.Import 5322

	619
• 100.57 JSON.Import.Cancel	5325
• 100.58 JSON.Import.ErrorCount	5326
• 100.59 JSON.Import.Errors	5327
• 100.60 JSON.Import.Status	5328
• 100.61 JSON.Import.TODO	5329
• 100.62 JSON.Import.Total	5330
• 100.63 JSON.Import.Work	5331
• 100.64 JSON.IsValid	5332
• 100.65 JSON.Parse	5333
• 100.66 JSON.Release	5336
• 100.67 JSON.ReleaseAll	5338
• 100.68 JSON.ReplaceItemInArray	5339
• 100.69 JSON.ReplaceItemInObject	5340
• 100.70 JSON.SetPathItem	5341
• 100.71 JSON.Sort	5343
• 100.72 JSON.ToHTML	5344
• 97.1 Java.CallObjectMethod	5157
• 97.2 Java.CallStaticMethod	5159
• 97.3 Java.GetContainerFileName	5161
• 97.4 Java.GetObjectField	5162
• 97.5 Java.GetStaticField	5164
• 97.6 Java.Initialize	5166
• 97.7 Java.Initialized	5169
• 97.8 Java.NewClassObject	5170
• 97.9 Java.ObjectClassName	5172
• 97.10 Java.Release	5173
• 97.11 Java.ReleaseAll	5174
• 97.12 Java.SetContainerFileName	5175
• 97.13 Java.SetObjectField	5176

- 97.14 Java.SetStaticField 5178
- 99.1 JavaScript.CheckScriptSyntax 5215
- 99.2 JavaScript.EvaluateScript 5217
- 99.3 JavaScript.GetProperty 5220
- 99.4 JavaScript.HasProperty 5221
- 99.5 JavaScript.New 5222
- 99.6 JavaScript.RegisterEvaluateFunction 5223
- 99.7 JavaScript.RegisterFunction 5225
- 99.8 JavaScript.RegisterRunScriptFunction 5227
- 99.9 JavaScript.RegisterSQLQueryFunction 5228
- 99.10 JavaScript.Release 5229
- 99.11 JavaScript.SetProperty 5230
- 175.3 LCMS.ProfileInfo 8232
- 102.1 LDAP.Add 5363
- 102.2 LDAP.AddJSON 5365
- 102.3 LDAP.AddList 5369
- 102.4 LDAP.AddRecord 5371
- 102.5 LDAP.Bind 5373
- 102.6 LDAP.Connect 5375
- 102.7 LDAP.Delete 5378
- 102.8 LDAP.GetNetworkTimeOut 5379
- 102.9 LDAP.GetProtocolVersion 5380
- 102.10 LDAP.GetReferrals 5381
- 102.11 LDAP.GetTimeOut 5382
- 102.12 LDAP.JSON 5383
- 102.13 LDAP.Modify 5388
- 102.14 LDAP.ModifyJSON 5389
- 102.15 LDAP.ModifyRecord 5391
- 102.16 LDAP.Release 5393

	621
• 102.17 LDAP.Rename	5394
• 102.18 LDAP.Search	5395
• 102.19 LDAP.SearchResult.AttributeCount	5397
• 102.20 LDAP.SearchResult.AttributeName	5399
• 102.21 LDAP.SearchResult.AttributeNames	5400
• 102.22 LDAP.SearchResult.AttributeValue	5401
• 102.23 LDAP.SearchResult.AttributeValueCount	5402
• 102.24 LDAP.SearchResult.AttributeValues	5403
• 102.25 LDAP.SearchResult.AttributeValuesByName	5405
• 102.26 LDAP.SearchResult.Count	5407
• 102.27 LDAP.SearchResult.DistinguishedName	5409
• 102.28 LDAP.SetNetworkTimeOut	5410
• 102.29 LDAP.SetProtocolVersion	5411
• 102.30 LDAP.SetReferrals	5412
• 102.31 LDAP.SetTimeOut	5413
• 102.32 LDAP.SimpleBind	5414
• 102.33 LDAP.StartTLS	5415
• 103.1 List.AddPostfix	5417
• 103.2 List.AddPrefix	5419
• 103.3 List.AddValue	5420
• 103.4 List.And	5421
• 103.5 List.AndColumn	5422
• 103.6 List.BestMatch	5424
• 103.7 List.CSVSplit	5425
• 103.8 List.CountValues	5427
• 103.9 List.CrossProduct	5428
• 103.10 List.DeCombine	5430
• 103.11 List.Deserialize	5432
• 103.12 List.FindEquals	5433

- 103.13 List.FindUnequals 5434
- 103.14 List.GetValue 5436
- 103.15 List.HasDuplicateItems 5437
- 103.16 List.HasValue 5438
- 103.17 List.InsertValue 5440
- 103.18 List.MatchesPostfix 5441
- 103.19 List.MatchesPrefix 5442
- 103.20 List.Not 5443
- 103.21 List.NotColumn 5444
- 103.22 List.Or 5446
- 103.23 List.OrColumn 5447
- 103.24 List.RegExMatch 5449
- 103.25 List.Remove 5451
- 103.26 List.RemoveDuplicateItems 5452
- 103.27 List.RemoveEmptyItems 5454
- 103.28 List.RemovePostfix 5455
- 103.29 List.RemovePrefix 5457
- 103.30 List.RemoveValue 5459
- 103.31 List.Reverse 5461
- 103.32 List.Serialize 5462
- 103.33 List.SetValue 5463
- 103.34 List.Sort 5464
- 103.35 List.SubList 5467
- 103.36 List.Trim 5469
- 103.37 List.ValueIndex 5470
- 103.38 List.XOr 5471
- 103.39 List.XOrColumn 5472
- 175.4 Log 8233
- 106.10 MapView.FormatDistance 5654

	623
• 106.51 MapView.ParseDistance	5696
• 106.52 MapView.PlanRoute	5697
• 106.58 MapView.RemoveOverlays	5704
• 106.95 MapView.Snapshot	5746
• 107.1 Markdown.CSS	5749
• 107.2 Markdown.Create	5750
• 107.3 Markdown.HTML	5751
• 107.4 Markdown.Release	5752
• 108.1 Math.BitwiseAND	5753
• 108.2 Math.BitwiseNOT	5755
• 108.3 Math.BitwiseOR	5756
• 108.4 Math.BitwiseShiftLeft	5757
• 108.5 Math.BitwiseShiftRight	5758
• 108.6 Math.BitwiseXOR	5759
• 108.7 Math.DecToHex	5760
• 108.8 Math.DecodeNumber	5761
• 108.9 Math.EncodeNumber	5763
• 108.10 Math.HexToDec	5765
• 108.11 Math.InchToPixel	5766
• 108.12 Math.InsidePolygon	5767
• 108.13 Math.IsValidCC	5768
• 108.14 Math.MillimeterToPixel	5769
• 108.15 Math.NumberToText	5770
• 108.16 Math.PixelToInch	5771
• 108.17 Math.PixelToMillimeter	5772
• 108.18 Math.PolylineDecode	5773
• 108.19 Math.PolylineEncode	5774
• 108.20 Math.TextToNumber	5776
• 109.1 Matrix.AddColumn	5779

- 109.2 Matrix.AddColumnns 5781
- 109.3 Matrix.AddRow 5782
- 109.4 Matrix.AddRows 5783
- 109.5 Matrix.Avg 5784
- 109.6 Matrix.CSV 5785
- 109.7 Matrix.Clear 5787
- 109.8 Matrix.ClearValues 5788
- 109.9 Matrix.Clone 5789
- 109.10 Matrix.DataType 5790
- 109.11 Matrix.Free 5791
- 109.12 Matrix.GetColumn 5792
- 109.13 Matrix.GetRow 5793
- 109.14 Matrix.GetText 5794
- 109.15 Matrix.GetValue 5795
- 109.16 Matrix.Height 5797
- 109.17 Matrix.InsertRecords 5798
- 109.18 Matrix.InsertRecordsToSQL 5800
- 109.19 Matrix.JSONRecord 5802
- 109.20 Matrix.JSONRecords 5803
- 109.21 Matrix.Max 5804
- 109.22 Matrix.Min 5805
- 109.23 Matrix.New 5806
- 109.24 Matrix.NewWithSQL 5808
- 109.25 Matrix.RemoveColumn 5809
- 109.26 Matrix.RemoveRow 5810
- 109.27 Matrix.Resize 5811
- 109.28 Matrix.SetColumn 5812
- 109.29 Matrix.SetRow 5814
- 109.30 Matrix.SetValue 5816

	625
• 109.31 Matrix.Sum	5818
• 109.32 Matrix.Text	5820
• 109.33 Matrix.Width	5822
• 110.1 MatrixDongle.Count	5823
• 110.2 MatrixDongle.Find	5825
• 110.3 MatrixDongle.GetDriverFlag	5826
• 110.4 MatrixDongle.GetVersionAPI	5827
• 110.5 MatrixDongle.GetVersionDRV	5828
• 110.6 MatrixDongle.GetVersionDRV.USB	5829
• 110.7 MatrixDongle.Initialize	5830
• 110.8 MatrixDongle.Initialized	5832
• 110.9 MatrixDongle.MemorySize	5833
• 110.10 MatrixDongle.Model	5834
• 110.11 MatrixDongle.ReadHex	5835
• 110.12 MatrixDongle.ReadSerialNumber	5837
• 110.13 MatrixDongle.ReadText	5838
• 110.14 MatrixDongle.Release	5840
• 110.15 MatrixDongle.SetDriverFlag	5841
• 110.16 MatrixDongle.Version	5843
• 110.17 MatrixDongle.WriteHex	5844
• 110.18 MatrixDongle.WriteText	5845
• 115.1 MetaDataQuery.AttributesForFile	6031
• 115.2 MetaDataQuery.Close	6033
• 115.3 MetaDataQuery.Create	6034
• 115.4 MetaDataQuery.GetEvaluate	6035
• 115.5 MetaDataQuery.GetScriptFileName	6036
• 115.6 MetaDataQuery.GetScriptName	6037
• 115.7 MetaDataQuery.IsGathering	6038
• 115.8 MetaDataQuery.IsStarted	6039

- 115.9 MetaDataQuery.IsStopped 6040
- 115.10 MetaDataQuery.PathAtIndex 6041
- 115.11 MetaDataQuery.Paths 6043
- 115.12 MetaDataQuery.QueryString 6044
- 115.13 MetaDataQuery.ResultAtIndex 6045
- 115.14 MetaDataQuery.ResultCount 6046
- 115.15 MetaDataQuery.Results 6047
- 115.16 MetaDataQuery.SearchScopes 6048
- 115.17 MetaDataQuery.SetEvaluate 6049
- 115.18 MetaDataQuery.SetQueryString 6050
- 115.19 MetaDataQuery.SetScript 6052
- 115.20 MetaDataQuery.SetSearchScopes 6053
- 115.21 MetaDataQuery.StartQuery 6055
- 115.22 MetaDataQuery.StopQuery 6056
- 175.5 Modbus.CalculateRTUMessageCRC 8234
- 175.8 MouseCursor.Set 8237
- 175.10 MsgBox 8241
- 117.1 NetworkInterfaces.Count 6089
- 117.2 NetworkInterfaces.Default 6090
- 117.3 NetworkInterfaces.JSON 6091
- 117.4 NetworkInterfaces.Update 6092
- 117.5 NetworkInterfaces.Value 6093
- 118.1 Notification.List 6095
- 118.3 Notification.Send 6098
- 118.4 Notification.SendDirect 6099
- 118.5 Notification.Unlisten 6100
- 118.6 Notification.UnlistenAll 6101
- 120.1 OCR.Cleanup 6109
- 120.2 OCR.Clear 6110

	627
• 120.3 OCR.GetBoxText	6111
• 120.4 OCR.GetHOCText	6112
• 120.5 OCR.GetPageSegMode	6113
• 120.6 OCR.GetText	6114
• 120.7 OCR.GetTextWithCoordinates	6116
• 120.8 OCR.GetVariable	6118
• 120.9 OCR.Initialize	6119
• 120.10 OCR.IsInitialized	6121
• 120.11 OCR.Language	6122
• 120.12 OCR.MeanTextConf	6123
• 120.13 OCR.Recognize	6124
• 120.14 OCR.SetImage	6125
• 120.15 OCR.SetPageSegMode	6127
• 120.16 OCR.SetRectangle	6129
• 120.17 OCR.SetResolution	6130
• 120.18 OCR.SetVariable	6131
• 120.19 OCR.WriteToPDF	6132
• 122.1 PDFKit.AddEmptyPage	6153
• 122.2 PDFKit.AddImageFilePage	6155
• 122.3 PDFKit.AddImagePage	6157
• 122.4 PDFKit.AppendPages	6159
• 122.5 PDFKit.Combine	6160
• 122.6 PDFKit.CombineRef	6162
• 122.7 PDFKit.GeneratePreview	6164
• 122.8 PDFKit.GetCurrentFilter	6166
• 122.9 PDFKit.GetIgnoreCombineErrors	6167
• 122.10 PDFKit.GetPDFAttribute	6168
• 122.11 PDFKit.GetPDFDocument	6171
• 122.12 PDFKit.GetPDFPageCount	6173

- 122.13 PDFKit.GetPDFPageDisplayAnnotation 6175
- 122.14 PDFKit.GetPDFPageFormattedText 6176
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180
- 122.17 PDFKit.GetPDFPagePDFRef 6182
- 122.18 PDFKit.GetPDFPageRotation 6183
- 122.19 PDFKit.GetPDFPageText 6184
- 122.20 PDFKit.GetPDFPageValue 6186
- 122.21 PDFKit.GetPDFPagesPDF 6188
- 122.22 PDFKit.GetPDFPagesPDFRef 6190
- 122.23 PDFKit.GetPDFText 6191
- 122.26 PDFKit.GetPrintSetting 6194
- 122.27 PDFKit.NewPDFDocument 6196
- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200
- 122.30 PDFKit.OpenPath 6202
- 122.31 PDFKit.OpenURL 6204
- 122.32 PDFKit.PageBounds 6205
- 122.33 PDFKit.Print 6207
- 122.34 PDFKit.Release 6209
- 122.35 PDFKit.ResetPrintSettings 6211
- 122.36 PDFKit.RestorePrintSettings 6212
- 122.37 PDFKit.SavePrintSettings 6213
- 122.38 PDFKit.SetCurrentFilter 6214
- 122.39 PDFKit.SetIgnoreCombineErrors 6216
- 122.40 PDFKit.SetPDFAttribute 6217
- 122.41 PDFKit.SetPDFPageDisplayAnnotation 6220
- 122.42 PDFKit.SetPDFPageRotation 6222
- 122.44 PDFKit.SetPrintSetting 6226

	629
• 122.45 PDFKit.Watermark	6230
• 122.46 PDFKit.WriteToPath	6233
• 122.47 PDFKit.allowsCopying	6235
• 122.48 PDFKit.allowsPrinting	6237
• 122.49 PDFKit.isEncrypted	6239
• 122.50 PDFKit.isLocked	6241
• 123.1 PHP.Execute	6247
• 123.2 PHP.ExistsVariable	6249
• 123.3 PHP.GetResultContainer	6250
• 123.4 PHP.GetResultString	6251
• 123.5 PHP.GetVariable	6252
• 123.6 PHP.Init	6253
• 123.7 PHP.IsInitialized	6255
• 123.8 PHP.Load	6256
• 123.9 PHP.Run	6257
• 123.10 PHP.SetVariable	6258
• 123.11 PHP.ShutDown	6259
• 48.1 PKCS12.CA	1345
• 48.2 PKCS12.CACount	1347
• 48.3 PKCS12.Cert	1348
• 48.4 PKCS12.PKey	1349
• 48.5 PKCS12.ReadFromContainer	1350
• 48.6 PKCS12.ReadFromFile	1352
• 48.7 PKCS12.Release	1354
• 48.9 PKCS7.ReadFromContainer	1356
• 48.10 PKCS7.ReadFromFile	1357
• 48.11 PKCS7.Release	1358
• 48.12 PKCS7.SignedDataCert	1359
• 48.13 PKCS7.SignedDataCertCount	1360

- 48.14 PKCS7.SignedDataContent 1361
- 48.15 PKey.Bits 1362
- 48.16 PKey.DescriptionPrivateKey 1363
- 48.17 PKey.DescriptionPublicKey 1364
- 48.18 PKey.GetPrivateKey 1365
- 48.19 PKey.GetPublicKey 1366
- 48.20 PKey.Release 1367
- 48.21 PKey.Type 1368
- 121.1 Path.AddPathComponent 6135
- 121.2 Path.FileMakerPathToNativePath 6139
- 121.3 Path.FilePathToFileURL 6141
- 121.4 Path.FileURLToFilePath 6143
- 121.5 Path.LastPathComponent 6144
- 121.6 Path.LongPath 6146
- 121.7 Path.NativePathToFileMakerPath 6147
- 121.8 Path.RemoveLastPathComponent 6149
- 121.9 Path.ShortPath 6151
- 124.17 Platform 6281
- 124.18 Plugin.BuildNumber 6283
- 124.19 Plugin.CallCounter 6284
- 124.21 Plugin.CompileDate 6286
- 124.22 Plugin.DisableFunction 6287
- 124.23 Plugin.FunctionCount 6288
- 124.24 Plugin.Functions 6289
- 124.25 Plugin.GetSuccessReturn 6290
- 124.26 Plugin.InstallSignalHandlers 6291
- 124.27 Plugin.IsPrerelease 6292
- 124.28 Plugin.JasperVersion 6293
- 124.29 Plugin.LibSSHVersion 6294

	631
• 124.30 Plugin.LicenseeName	6295
• 124.31 Plugin.LimitFunction	6297
• 124.32 Plugin.LockFunction	6299
• 124.33 Plugin.OpenSSLVersion	6300
• 124.34 Plugin.PNGVersion	6301
• 124.35 Plugin.Path	6302
• 124.36 Plugin.ScriptStepParameter	6304
• 124.37 Plugin.ScriptStepParameterCount	6305
• 124.38 Plugin.Seats	6306
• 124.40 Plugin.SetFunctions	6309
• 124.41 Plugin.SetPreviewSize	6311
• 124.42 Plugin.SetSuccessReturn	6312
• 124.43 Plugin.StartTimeStamp	6313
• 124.44 Plugin.TiffVersion	6314
• 124.45 Plugin.UnlockFunction	6315
• 124.46 Plugin.UsedFunctions	6316
• 124.47 Plugin.ZLibVersion	6317
• 124.48 Plugin.isDebug	6318
• 126.2 Preferences.DeleteValue	6374
• 126.3 Preferences.GetTextSelectionWithDragAndDrop	6375
• 126.4 Preferences.GetValue	6376
• 126.5 Preferences.GetValueType	6378
• 126.6 Preferences.HasValue	6379
• 126.7 Preferences.SetTextSelectionWithDragAndDrop	6380
• 126.8 Preferences.SetValue	6381
• 128.7 Printer.GetDefaultPrinter	6459
• 128.11 Printer.PrinterCount	6467
• 128.12 Printer.PrinterInfo	6468
• 128.13 Printer.PrinterName	6470

- 129.4 Process.GetCurrentDirectory 6480
- 129.6 Process.IsRunning 6482
- 129.8 Process.LoadLibrary 6484
- 129.9 Process.SetCurrentDirectory 6485
- 129.10 Process.SetFrontMost 6486
- 129.11 ProcessActivity.List 6487
- 129.12 ProcessActivity.Options 6488
- 129.13 ProcessActivity.Reason 6489
- 129.14 ProcessActivity.beginActivity 6490
- 129.15 ProcessActivity.endActivity 6492
- 130.15 ProgressDialog.Reset 6510
- 131.1 Proj.BatchTransform 6545
- 131.2 Proj.Initialize 6546
- 131.3 Proj.IsInitialized 6547
- 131.4 Proj.Transform 6548
- 103.40 QuickList.AddList 5474
- 103.41 QuickList.AddMultiValue 5476
- 103.42 QuickList.AddPostfix 5478
- 103.43 QuickList.AddPrefix 5480
- 103.44 QuickList.AddQuickList 5482
- 103.45 QuickList.AddSQL 5483
- 103.46 QuickList.AddValue 5485
- 103.47 QuickList.And 5487
- 103.48 QuickList.AndColumn 5489
- 103.49 QuickList.BestMatch 5491
- 103.50 QuickList.CSVSplit 5492
- 103.51 QuickList.Clear 5493
- 103.52 QuickList.Clone 5494
- 103.53 QuickList.Count 5495

	633
• 103.54 QuickList.CrossProduct	5497
• 103.55 QuickList.DeCombine	5499
• 103.56 QuickList.Deserialize	5501
• 103.57 QuickList.FindEquals	5502
• 103.58 QuickList.FindUnequals	5503
• 103.59 QuickList.Free	5504
• 103.60 QuickList.GetList	5506
• 103.61 QuickList.GetValue	5508
• 103.62 QuickList.HasDuplicateItems	5510
• 103.63 QuickList.HasValue	5511
• 103.64 QuickList.InsertValue	5513
• 103.65 QuickList.List	5514
• 103.66 QuickList.MatchesPostfix	5515
• 103.67 QuickList.MatchesPrefix	5517
• 103.68 QuickList.MatchesSubString	5519
• 103.69 QuickList.New	5521
• 103.70 QuickList.Not	5523
• 103.71 QuickList.NotColumn	5525
• 103.72 QuickList.Or	5527
• 103.73 QuickList.OrColumn	5529
• 103.74 QuickList.Pop	5531
• 103.75 QuickList.PopFirst	5532
• 103.76 QuickList.Push	5533
• 103.77 QuickList.RegExMatch	5534
• 103.78 QuickList.Remove	5535
• 103.79 QuickList.RemoveDuplicateItems	5536
• 103.80 QuickList.RemoveEmptyItems	5537
• 103.81 QuickList.RemovePostfix	5538
• 103.82 QuickList.RemovePrefix	5540

- 103.83 QuickList.RemoveValue 5542
- 103.84 QuickList.Reserve 5543
- 103.85 QuickList.Reverse 5544
- 103.86 QuickList.Serialize 5545
- 103.87 QuickList.SetList 5547
- 103.88 QuickList.SetValue 5548
- 103.89 QuickList.Sort 5550
- 103.90 QuickList.SortWith 5552
- 103.91 QuickList.SubList 5555
- 103.92 QuickList.Trim 5557
- 103.93 QuickList.ValueIndex 5558
- 103.94 QuickList.XOr 5559
- 103.95 QuickList.XOrColumn 5560
- 73.12 RSA.DecryptPrivateKey 3469
- 73.13 RSA.EncryptPrivateKey 3471
- 149.13 RSA.GeneratePrivateKey 7075
- 149.14 RSA.GetPublicKey 7077
- 73.14 RSA.PrivateDecrypt 3473
- 73.15 RSA.PrivateEncrypt 3476
- 73.16 RSA.PublicDecrypt 3479
- 73.17 RSA.PublicEncrypt 3482
- 149.15 RSA.Sign 7079
- 149.16 RSA.Verify 7084
- 135.1 RegEx.CaptureCount 6643
- 135.2 RegEx.Compile 6645
- 135.3 RegEx.Execute 6648
- 135.4 RegEx.FindMatches 6651
- 135.5 RegEx.Free 6654
- 135.6 RegEx.List 6655

	635
• 135.7 RegEx.Match	6656
• 135.8 RegEx.MatchList	6658
• 135.9 RegEx.MinimumLength	6660
• 135.10 RegEx.NameCount	6661
• 135.11 RegEx.NamedSubstring	6662
• 135.12 RegEx.Options	6663
• 135.13 RegEx.Pattern	6664
• 135.14 RegEx.Quote	6665
• 135.15 RegEx.Replace	6666
• 135.16 RegEx.ReplaceAll	6668
• 135.17 RegEx.Results	6670
• 135.18 RegEx.Size	6672
• 135.19 RegEx.StringNumber	6673
• 135.20 RegEx.Study	6674
• 135.21 RegEx.Substring	6675
• 135.22 RegEx.SubstringList	6677
• 135.23 RegEx.Version	6678
• 124.49 Register	6320
• 124.50 Registration	6323
• 136.1 Registry.CreateKey	6679
• 136.2 Registry.DeleteKey	6681
• 136.3 Registry.DeleteTree	6682
• 136.4 Registry.DeleteValue	6683
• 136.5 Registry.FlushKey	6684
• 136.6 Registry.GetValue	6685
• 136.7 Registry.GetValueType	6687
• 136.8 Registry.ListKeys	6688
• 136.9 Registry.ListValues	6689
• 136.10 Registry.SetValue	6690

- 138.1 RichText.AppendFormattedText 6713
- 138.2 RichText.AppendText 6714
- 138.3 RichText.Attribute 6715
- 138.4 RichText.Clear 6716
- 138.5 RichText.FormattedText 6717
- 138.6 RichText.GeneratePDF 6719
- 138.7 RichText.HTMLText 6720
- 138.8 RichText.RTF 6721
- 138.9 RichText.ReadContainer 6722
- 138.10 RichText.ReadFile 6724
- 138.12 RichText.ReadRTF 6728
- 138.13 RichText.ReadText 6729
- 138.14 RichText.ReadURL 6731
- 138.16 RichText.Release 6733
- 138.17 RichText.ReplaceText 6734
- 138.18 RichText.ReplaceTexts 6736
- 138.19 RichText.SetAttribute 6737
- 138.20 RichText.SetFormattedText 6738
- 138.21 RichText.SetText 6740
- 138.22 RichText.Text 6741
- 138.23 RichText.TextLength 6742
- 138.24 RichText.WriteContainer 6743
- 138.25 RichText.WriteDOC 6745
- 138.26 RichText.WriteFile 6747
- 138.27 RichText.WritePDF 6750
- 138.28 RichText.WriteRTF 6752
- 139.1 RunTask.AddArgument 6755
- 139.2 RunTask.GetArgument 6757
- 139.3 RunTask.GetArgumentCount 6758

	637
• 139.4 RunTask.GetCurrentDirectoryPath	6759
• 139.5 RunTask.GetLaunchPath	6760
• 139.6 RunTask.GetVerb	6761
• 139.7 RunTask.IsRunning	6762
• 139.8 RunTask.Launch	6763
• 139.9 RunTask.NewTask	6766
• 139.10 RunTask.ProcessIdentifier	6768
• 139.11 RunTask.ReadErrorText	6769
• 139.12 RunTask.ReadOutputText	6770
• 139.13 RunTask.SetArguments	6771
• 139.14 RunTask.SetCurrentDirectoryPath	6774
• 139.15 RunTask.SetLaunchPath	6775
• 139.16 RunTask.SetVerb	6777
• 139.17 RunTask.Terminate	6778
• 139.18 RunTask.TerminationReason	6779
• 139.19 RunTask.TerminationStatus	6780
• 139.20 RunTask.Wait	6781
• 139.21 RunTask.WriteInputText	6783
• 151.1 SNMP.Get	7123
• 151.2 SNMP.SetRetries	7125
• 151.3 SNMP.SetTimeout	7126
• 156.2 SQL.Cancel	7295
• 156.3 SQL.ClientVersion	7296
• 156.4 SQL.Close	7297
• 156.5 SQL.CommandText	7298
• 156.6 SQL.CommandType	7299
• 156.7 SQL.Commit	7300
• 156.8 SQL.Connect	7302
• 156.9 SQL.Disconnect	7308

- 156.10 SQL.Execute 7309
- 156.11 SQL.FetchFirst 7313
- 156.12 SQL.FetchLast 7314
- 156.13 SQL.FetchNext 7316
- 156.14 SQL.FetchPos 7319
- 156.15 SQL.FetchPrior 7320
- 156.16 SQL.FieldCount 7321
- 156.17 SQL.FreeAllConnections 7323
- 156.18 SQL.FreeCommand 7324
- 156.19 SQL.FreeConnection 7326
- 156.20 SQL.GetAutoCommit 7328
- 156.21 SQL.GetCommandOption 7329
- 156.22 SQL.GetCommandOptions 7330
- 156.23 SQL.GetCommandTag 7331
- 156.24 SQL.GetConnectionOption 7332
- 156.25 SQL.GetConnectionOptions 7333
- 156.26 SQL.GetConnectionTag 7334
- 156.27 SQL.GetFieldAsBoolean 7335
- 156.28 SQL.GetFieldAsContainer 7336
- 156.29 SQL.GetFieldAsDate 7337
- 156.30 SQL.GetFieldAsDateTime 7339
- 156.31 SQL.GetFieldAsFloat 7340
- 156.32 SQL.GetFieldAsJPEG 7342
- 156.33 SQL.GetFieldAsNumber 7344
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348
- 156.36 SQL.GetFieldAsText 7350
- 156.37 SQL.GetFieldAsTime 7352
- 156.38 SQL.GetFieldDataType 7353

	639
• 156.39 SQL.GetFieldIsNull	7354
• 156.40 SQL.GetFieldName	7355
• 156.41 SQL.GetFieldNameList	7357
• 156.42 SQL.GetFieldOption	7359
• 156.43 SQL.GetFieldOptions	7360
• 156.44 SQL.GetFieldValue	7361
• 156.45 SQL.GetFieldValueList	7362
• 156.46 SQL.GetIsolationLevel	7364
• 156.47 SQL.GetParamAsBoolean	7365
• 156.48 SQL.GetParamAsContainer	7366
• 156.49 SQL.GetParamAsDate	7367
• 156.50 SQL.GetParamAsDateTime	7368
• 156.51 SQL.GetParamAsFloat	7369
• 156.52 SQL.GetParamAsJPEG	7371
• 156.53 SQL.GetParamAsNumber	7373
• 156.54 SQL.GetParamAsPDF	7375
• 156.55 SQL.GetParamAsPNG	7377
• 156.56 SQL.GetParamAsText	7379
• 156.57 SQL.GetParamAsTime	7380
• 156.58 SQL.GetParamDataType	7381
• 156.59 SQL.GetParamIsDefault	7382
• 156.60 SQL.GetParamIsNull	7383
• 156.61 SQL.GetParamName	7384
• 156.62 SQL.GetParamNameList	7385
• 156.63 SQL.GetParamOption	7387
• 156.64 SQL.GetParamOptions	7388
• 156.65 SQL.GetParamValue	7389
• 156.66 SQL.GetParamValueList	7390
• 156.67 SQL.GetRecordsAsText	7392

- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397
- 156.70 SQL.InternalSQLiteLibrary.Activate 7399
- 156.71 SQL.InternalSQLiteLibrary.Activated 7400
- 156.72 SQL.InternalSQLiteLibrary.Deactivate 7401
- 156.73 SQL.InternalSQLiteLibrary.SourceID 7402
- 156.74 SQL.InternalSQLiteLibrary.Version 7403
- 156.75 SQL.InternalSQLiteLibrary.VersionNumber 7404
- 156.76 SQL.ListCommands 7405
- 156.77 SQL.ListConnections 7406
- 156.78 SQL.MySQL.InsertID 7407
- 156.79 SQL.NewCommand 7408
- 156.80 SQL.NewConnection 7412
- 156.81 SQL.Open 7415
- 156.82 SQL.ParamCount 7416
- 156.83 SQL.Prepare 7417
- 156.84 SQL.ResetCommand 7418
- 156.85 SQL.ResetConnection 7419
- 156.86 SQL.Rollback 7420
- 156.87 SQL.RowsAffected 7421
- 156.88 SQL.SQLite3.EnableLoadExtension 7423
- 156.89 SQL.SQLite3.LastInsertRowID 7424
- 156.90 SQL.SQLite3.MemoryHighwater 7425
- 156.91 SQL.SQLite3.MemoryUsed 7426
- 156.92 SQL.SQLite3.ReKey 7427
- 156.93 SQL.SQLite3.SetKey 7429
- 156.94 SQL.ServerVersion 7431
- 156.95 SQL.ServerVersionString 7432
- 156.96 SQL.SetAutoCommit 7433

	641
• 156.97 SQL.SetClient	7434
• 156.98 SQL.SetCommandOption	7436
• 156.99 SQL.SetCommandTag	7438
• 156.100 SQL.SetCommandText	7439
• 156.101 SQL.SetConnectionOption	7441
• 156.102 SQL.SetConnectionTag	7446
• 156.103 SQL.SetFieldOption	7447
• 156.104 SQL.SetIsolationLevel	7448
• 156.105 SQL.SetParamAsBoolean	7449
• 156.106 SQL.SetParamAsContainer	7450
• 156.107 SQL.SetParamAsDate	7452
• 156.108 SQL.SetParamAsDateTime	7454
• 156.109 SQL.SetParamAsFloat	7456
• 156.110 SQL.SetParamAsNumber	7458
• 156.111 SQL.SetParamAsText	7460
• 156.112 SQL.SetParamAsTime	7462
• 156.113 SQL.SetParamDataType	7463
• 156.114 SQL.SetParamDefault	7464
• 156.115 SQL.SetParamNull	7465
• 156.116 SQL.SetParamOption	7466
• 156.117 SQL.SetParamTypesValues	7467
• 156.118 SQL.SetParamUnknown	7469
• 156.119 SQL.SetParamValue	7470
• 156.120 SQL.SetParamValues	7472
• 156.121 SQL.isAlive	7474
• 156.122 SQL.isConnected	7475
• 156.123 SQL.isExecuted	7476
• 156.124 SQL.isOpened	7477
• 156.125 SQL.isResultSet	7478

- 157.1 SSH.CloseChannel 7479
- 157.2 SSH.Connect 7481
- 157.3 SSH.Disconnect 7485
- 157.4 SSH.EOF 7486
- 157.5 SSH.Execute 7487
- 157.6 SSH.Flush 7490
- 157.7 SSH.FreeChannel 7491
- 157.8 SSH.GetExitState 7492
- 157.9 SSH.GetIP 7493
- 157.10 SSH.GetPort 7494
- 157.11 SSH.GetTag 7495
- 157.12 SSH.GetTimeout 7496
- 157.13 SSH.GetUserName 7497
- 157.14 SSH.HostKey 7498
- 157.15 SSH.HostKeyHash 7499
- 157.16 SSH.IsAuthenticated 7500
- 157.17 SSH.New 7501
- 157.18 SSH.OpenSession 7504
- 157.19 SSH.ReadHex 7505
- 157.20 SSH.ReadText 7506
- 157.21 SSH.Release 7508
- 157.22 SSH.RequestPTY 7509
- 157.23 SSH.SendEOF 7510
- 157.24 SSH.SessionHandshake 7511
- 157.25 SSH.SetEnv 7512
- 157.26 SSH.SetTag 7513
- 157.27 SSH.SetTimeout 7514
- 157.28 SSH.Shell 7515
- 157.29 SSH.Tunnel.BytesReceived 7516

	643
• 157.30 SSH.Tunnel.BytesSent	7517
• 157.31 SSH.Tunnel.Cancel	7518
• 157.32 SSH.Tunnel.Cancelled	7519
• 157.33 SSH.Tunnel.Messages	7520
• 157.34 SSH.Tunnel.Run	7521
• 157.35 SSH.Tunnel.Running	7523
• 157.36 SSH.UserAuthKeyboardInteractive	7524
• 157.37 SSH.UserAuthList	7525
• 157.38 SSH.UserAuthPassword	7526
• 157.39 SSH.UserAuthPublicKey	7527
• 157.40 SSH.UserAuthPublicKeyFile	7529
• 157.41 SSH.WaitClosed	7531
• 157.42 SSH.WaitEOF	7532
• 157.43 SSH.WaitSocket	7533
• 157.44 SSH.WriteHex	7534
• 157.45 SSH.WriteText	7535
• 140.16 Schedule.GetLastTimeStamp	6807
• 140.24 Schedule.GetURL	6815
• 140.27 Schedule.ReleaseAll	6819
• 140.36 Schedule.SetURL	6828
• 141.1 Screen.Count	6837
• 141.3 Screen.DockWidth	6839
• 141.4 Screen.Height	6840
• 141.5 Screen.Left	6841
• 141.6 Screen.Scale	6842
• 141.7 Screen.Top	6843
• 141.8 Screen.Width	6844
• 141.9 Screenshot	6845
• 141.10 ScreenshotRect	6847

- 175.11 SendCommand 8242
- 143.1 SendMail.AddAttachmentContainer 6875
- 143.2 SendMail.AddAttachmentFile 6878
- 143.3 SendMail.AddAttachmentText 6881
- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.6 SendMail.AddHeader 6887
- 143.7 SendMail.AddRecipient 6889
- 143.8 SendMail.AddReplyTo 6891
- 143.9 SendMail.AddTo 6892
- 143.10 SendMail.AttachmentCount 6894
- 143.11 SendMail.ClearAttachments 6895
- 143.12 SendMail.ClearHeaders 6896
- 143.13 SendMail.ClearRecipients 6897
- 143.14 SendMail.CreateEmail 6898
- 143.15 SendMail.GetHTMLText 6900
- 143.16 SendMail.GetInReplyTo 6901
- 143.17 SendMail.GetMessageID 6902
- 143.18 SendMail.GetPlainText 6903
- 143.19 SendMail.GetRichText 6904
- 143.20 SendMail.GetSMTPPassword 6905
- 143.21 SendMail.GetSMTPServer 6906
- 143.22 SendMail.GetSMTPUserName 6907
- 143.23 SendMail.GetSource 6908
- 143.24 SendMail.GetSubject 6909
- 143.25 SendMail.PrepareCURL 6910
- 143.26 SendMail.Release 6912
- 143.27 SendMail.SetFrom 6913
- 143.28 SendMail.SetHTMLText 6915

	645
• 143.29 SendMail.SetInReplyTo	6917
• 143.30 SendMail.SetMessageID	6918
• 143.31 SendMail.SetPlainText	6919
• 143.32 SendMail.SetRichText	6921
• 143.33 SendMail.SetSMTPPassword	6923
• 143.34 SendMail.SetSMTPServer	6925
• 143.35 SendMail.SetSMTPUserName	6927
• 143.36 SendMail.SetSubject	6929
• 144.1 SerialPort.AvailableBytes	6931
• 144.4 SerialPort.Close	6935
• 144.5 SerialPort.CloseAll	6936
• 144.6 SerialPort.GetBaudRate	6937
• 144.7 SerialPort.GetCTS	6938
• 144.8 SerialPort.GetDSR	6939
• 144.9 SerialPort.GetDTR	6940
• 144.10 SerialPort.GetDataBits	6941
• 144.11 SerialPort.GetParity	6942
• 144.12 SerialPort.GetRTS	6943
• 144.13 SerialPort.GetStopBits	6944
• 144.14 SerialPort.GetXON	6945
• 144.15 SerialPort.HasLine	6946
• 144.17 SerialPort.LastError	6948
• 144.18 SerialPort.List	6949
• 144.19 SerialPort.Open	6950
• 144.20 SerialPort.Read	6956
• 144.21 SerialPort.ReadByte	6959
• 144.22 SerialPort.ReadHex	6960
• 144.23 SerialPort.ReadLine	6961
• 144.25 SerialPort.SetBaudRate	6963

- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.31 SerialPort.SetDataBits 6970
- 144.32 SerialPort.SetParity 6971
- 144.33 SerialPort.SetRTS 6972
- 144.34 SerialPort.SetStopBits 6973
- 144.35 SerialPort.SetXON 6974
- 144.37 SerialPort.Write 6977
- 144.38 SerialPort.WriteByte 6979
- 144.39 SerialPort.WriteHex 6980
- 145.1 ServerSocket.Check 6983
- 145.2 ServerSocket.GetAllowedScripts 6984
- 145.3 ServerSocket.GetAllowedTypes 6985
- 145.4 ServerSocket.SendQuery 6986
- 145.5 ServerSocket.SetAllowedScripts 6988
- 145.6 ServerSocket.SetAllowedTypes 6989
- 145.7 ServerSocket.Start 6990
- 145.8 ServerSocket.Stop 6992
- 147.1 SharedMemory.Exists 6997
- 147.2 SharedMemory.GetValue 6998
- 147.3 SharedMemory.SetValue 6999
- 148.1 Shell.AddArgument 7001
- 148.2 Shell.AddEnvironment 7004
- 148.3 Shell.AvailableBytesError 7005
- 148.4 Shell.AvailableBytesOutput 7006
- 148.5 Shell.ClearArguments 7007
- 148.6 Shell.ClearEnvironment 7008
- 148.7 Shell.CloseInput 7009

	647
• 148.8 Shell.CloseStreams	7010
• 148.9 Shell.Execute	7011
• 148.10 Shell.ExitCode	7019
• 148.11 Shell.GetApplicationName	7020
• 148.12 Shell.GetArgument	7021
• 148.13 Shell.GetArgumentCount	7022
• 148.14 Shell.GetArguments	7023
• 148.18 Shell.GetCurrentDirectory	7027
• 148.22 Shell.GetDomain	7031
• 148.23 Shell.GetEnvironment	7032
• 148.24 Shell.GetPassword	7033
• 148.25 Shell.GetUsername	7034
• 148.26 Shell.IsRunning	7035
• 148.27 Shell.New	7036
• 148.28 Shell.PeekErrorText	7037
• 148.29 Shell.PeekOutputText	7038
• 148.30 Shell.ProcessIdentifier	7039
• 148.31 Shell.ReadErrorText	7040
• 148.32 Shell.ReadOutputText	7041
• 148.33 Shell.Release	7043
• 148.34 Shell.SetApplicationName	7044
• 148.35 Shell.SetArguments	7045
• 148.36 Shell.SetArgumentsList	7046
• 148.39 Shell.SetCurrentDirectory	7049
• 148.42 Shell.SetDomain	7052
• 148.43 Shell.SetPassword	7053
• 148.44 Shell.SetUsername	7054
• 148.45 Shell.Terminate	7055
• 148.46 Shell.TerminationReason	7056

- 148.47 Shell.Wait 7057
- 148.48 Shell.WriteInputText 7059
- 175.12 ShowURL 8243
- 150.1 SmartCard.Available 7087
- 150.2 SmartCard.BeginTransaction 7088
- 150.3 SmartCard.Cancel 7089
- 150.4 SmartCard.CancelTransaction 7090
- 150.5 SmartCard.Connect 7091
- 150.6 SmartCard.Control 7093
- 150.7 SmartCard.Disconnect 7094
- 150.8 SmartCard.EndTransaction 7095
- 150.9 SmartCard.GetActiveProtocol 7096
- 150.10 SmartCard.GetAttribute 7097
- 150.12 SmartCard.Init 7100
- 150.13 SmartCard.ListReaderGroups 7103
- 150.14 SmartCard.ListReaders 7104
- 150.15 SmartCard.PerformSignature 7106
- 150.16 SmartCard.ReadCertificate 7107
- 150.17 SmartCard.ReadFile 7108
- 150.18 SmartCard.Reconnect 7111
- 150.19 SmartCard.Release 7112
- 150.20 SmartCard.SetAttribute 7113
- 150.21 SmartCard.SplitValues 7114
- 150.22 SmartCard.Status 7116
- 150.23 SmartCard.Transmit 7117
- 150.24 SmartCard.TransmitReceiveHeader 7120
- 150.25 SmartCard.Valid 7121
- 154.1 Socket.AcceptNewConnection 7185
- 154.2 Socket.AddMembership 7187

	649
• 154.3 Socket.AvailableBytes	7188
• 154.4 Socket.Check	7189
• 154.5 Socket.CheckAll	7190
• 154.6 Socket.ClearDataAvailableHandler	7191
• 154.7 Socket.ClearErrorHandler	7192
• 154.8 Socket.ClearNewConnectionHandler	7193
• 154.9 Socket.Close	7194
• 154.10 Socket.CloseAll	7196
• 154.11 Socket.Connect	7197
• 154.12 Socket.DropMembership	7202
• 154.13 Socket.GetBroadcast	7203
• 154.14 Socket.GetMulticastInterface	7204
• 154.15 Socket.GetMulticastLoop	7205
• 154.16 Socket.GetMulticastTimeToLive	7206
• 154.17 Socket.GetTag	7207
• 154.18 Socket.GetTimeToLive	7208
• 154.19 Socket.IsClosed	7209
• 154.20 Socket.IsListening	7210
• 154.21 Socket.LastError	7211
• 154.22 Socket.LastMessageIP	7212
• 154.23 Socket.LastMessagePort	7213
• 154.24 Socket.List	7214
• 154.25 Socket.Listen	7215
• 154.26 Socket.LocalIP	7217
• 154.27 Socket.LocalPort	7218
• 154.28 Socket.NewTCPSocket	7219
• 154.29 Socket.NewUDPSocket	7221
• 154.30 Socket.Peek	7223
• 154.31 Socket.PeekAll	7224

- 154.32 Socket.PeekAllHex 7225
- 154.33 Socket.PeekHex 7226
- 154.34 Socket.Read 7227
- 154.35 Socket.ReadAll 7230
- 154.36 Socket.ReadAllHex 7232
- 154.37 Socket.ReadHex 7233
- 154.38 Socket.ReadLine 7234
- 154.39 Socket.ReadLineHex 7236
- 154.40 Socket.ReadMLLP 7237
- 154.41 Socket.RemoteIP 7238
- 154.42 Socket.RemotePort 7239
- 154.43 Socket.SSL.Accept 7240
- 154.44 Socket.SSL.Connect 7241
- 154.45 Socket.SSL.GetMethod 7242
- 154.46 Socket.SSL.Initialize 7243
- 154.47 Socket.SSL.Prepare 7244
- 154.48 Socket.SSL.SetMethod 7245
- 154.49 Socket.SSL.UseCertificateFile 7246
- 154.50 Socket.SSL.UsePrivateKeyFile 7247
- 154.51 Socket.SendMessage 7248
- 154.52 Socket.SendMessageHex 7250
- 154.53 Socket.SetBroadcast 7251
- 154.56 Socket.SetDataAvailableURL 7255
- 154.59 Socket.SetErrorURL 7259
- 154.60 Socket.SetMulticastInterface 7260
- 154.61 Socket.SetMulticastLoop 7261
- 154.62 Socket.SetMulticastTimeToLive 7262
- 154.65 Socket.SetNewConnectionURL 7266
- 154.66 Socket.SetTag 7267

	651
• 154.67 Socket.SetTimeToLive	7268
• 154.68 Socket.Write	7269
• 154.69 Socket.WriteByte	7271
• 154.70 Socket.WriteHex	7272
• 154.71 Socket.WriteMLLP	7274
• 155.7 SpeechRecognition.AuthorizationStatus	7282
• 155.8 SpeechRecognition.Initialize	7283
• 155.9 SpeechRecognition.IsInitialized	7284
• 155.10 SpeechRecognition.Recognize	7285
• 155.11 SpeechRecognition.RequestAuthorization	7287
• 155.12 SpeechRecognition.SupportedLocales	7288
• 155.13 SpeechRecognition.SupportsOnDeviceRecognition	7290
• 124.51 StoreRegistration	6324
• 159.26 SyntaxColoring.GetRelationGraphSearchBoxPreferredSize	7590
• 159.63 SyntaxColoring.SetRelationGraphSearchBoxPreferredSize	7630
• 160.1 System.Logout	7647
• 160.2 System.Restart	7648
• 160.3 System.Shutdown	7649
• 160.4 System.Sleep	7650
• 161.2 SystemInfo.AvailableRAM	7653
• 161.3 SystemInfo.CPUBrandString	7654
• 161.4 SystemInfo.ComputerName	7655
• 161.5 SystemInfo.DomainName	7656
• 161.6 SystemInfo.DoubleClickTime	7657
• 161.7 SystemInfo.HardDiscSerial	7658
• 161.8 SystemInfo.HostDNSName	7659
• 161.9 SystemInfo.HostName	7660
• 161.11 SystemInfo.Is64bitWindows	7662
• 161.12 SystemInfo.IsAdminUser	7663

- 161.13 SystemInfo.MACAddress 7664
- 161.15 SystemInfo.MacBoardID 7666
- 161.16 SystemInfo.MacBugFixVersion 7667
- 161.17 SystemInfo.MacHasHardwareAcceleratedCoreImage 7668
- 161.18 SystemInfo.MacMajorVersion 7669
- 161.19 SystemInfo.MacMinorVersion 7670
- 161.20 SystemInfo.MacModel 7671
- 161.21 SystemInfo.MacROMBootVersion 7672
- 161.22 SystemInfo.MacSerialNumber 7673
- 161.23 SystemInfo.MacSystemDarkMode 7674
- 161.24 SystemInfo.MacUUID 7675
- 161.25 SystemInfo.MacVRAMSize 7676
- 161.26 SystemInfo.NetworkStats 7677
- 161.27 SystemInfo.OSName 7680
- 161.28 SystemInfo.OSVersionString 7681
- 161.29 SystemInfo.PhysicalRAM 7682
- 161.30 SystemInfo.ProcessorCount 7683
- 161.31 SystemInfo.SystemFont 7684
- 161.32 SystemInfo.Time 7685
- 161.33 SystemInfo.UserName 7686
- 161.34 SystemInfo.UserShortName 7687
- 161.35 SystemInfo.WinBuildNumber 7688
- 161.36 SystemInfo.WinCSDVersion 7689
- 161.37 SystemInfo.WinMajorVersion 7690
- 161.38 SystemInfo.WinMinorVersion 7691
- 161.39 SystemInfo.WinPlatformId 7692
- 161.40 SystemInfo.WinProductKey 7693
- 161.41 SystemInfo.WinProductType 7694
- 161.42 SystemInfo.WinServicePackMajor 7695

	653
• 161.43 SystemInfo.WinServicePackMinor	7696
• 161.44 SystemInfo.WinSuiteMask	7697
• 161.45 SystemInfo.WinSystemMetrics	7698
• 161.46 SystemInfo.WindowsAero	7700
• 161.47 SystemInfo.isCatalina	7701
• 161.48 SystemInfo.isElCapitan	7702
• 161.49 SystemInfo.isHighSierra	7703
• 161.50 SystemInfo.isLeopard	7704
• 161.51 SystemInfo.isLion	7705
• 161.52 SystemInfo.isMacOSX	7706
• 161.53 SystemInfo.isMavericks	7707
• 161.54 SystemInfo.isMojave	7708
• 161.55 SystemInfo.isMountainLion	7709
• 161.56 SystemInfo.isSierra	7710
• 161.57 SystemInfo.isSnowLeopard	7711
• 161.58 SystemInfo.isWindows10	7712
• 161.59 SystemInfo.isWindows2000	7713
• 161.60 SystemInfo.isWindows7	7714
• 161.61 SystemInfo.isWindows8	7715
• 161.62 SystemInfo.isWindowsVista	7716
• 161.63 SystemInfo.isWindowsXP	7717
• 161.64 SystemInfo.isYosemite	7718
• 163.1 TAPI.AddressCount	7725
• 163.2 TAPI.AddressValue	7727
• 163.3 TAPI.Answer	7728
• 163.4 TAPI.BlindTransfer	7729
• 163.5 TAPI.CallInfo	7730
• 163.6 TAPI.Connect	7732
• 163.7 TAPI.CreateCall	7733

- 163.8 TAPI.Dial 7735
- 163.9 TAPI.Disconnect 7736
- 163.10 TAPI.Finish 7737
- 163.11 TAPI.GetCallStateEvaluate 7738
- 163.12 TAPI.GetCallStateScriptFileName 7739
- 163.13 TAPI.GetCallStateScriptName 7740
- 163.14 TAPI.GetCallStateURL 7741
- 163.15 TAPI.GetNewCallEvaluate 7742
- 163.16 TAPI.GetNewCallScriptFileName 7743
- 163.17 TAPI.GetNewCallScriptName 7744
- 163.18 TAPI.GetNewCallURL 7745
- 163.19 TAPI.HandoffDirect 7746
- 163.20 TAPI.Hold 7747
- 163.21 TAPI.Initialize 7748
- 163.22 TAPI.IsInitialized 7749
- 163.23 TAPI.ListenOnAddress 7750
- 163.24 TAPI.ListenOnAllAddresses 7751
- 163.25 TAPI.ParkDirect 7752
- 163.26 TAPI.ParkIndirect 7753
- 163.27 TAPI.Pickup 7754
- 163.28 TAPI.Release 7755
- 163.29 TAPI.ReleaseAll 7756
- 163.30 TAPI.RemoveFromConference 7757
- 163.31 TAPI.SetCallStateEvaluate 7758
- 163.33 TAPI.SetCallStateURL 7760
- 163.34 TAPI.SetNewCallEvaluate 7761
- 163.36 TAPI.SetNewCallURL 7763
- 163.37 TAPI.Shutdown 7764
- 163.38 TAPI.Transfer 7765

	655
• 163.39 TAPI.Unpark	7766
• 164.1 Text.AddLineNumbers	7767
• 164.2 Text.AppendTextFile	7769
• 164.3 Text.CapitalCase	7771
• 164.4 Text.Character	7773
• 164.5 Text.Characters	7775
• 164.6 Text.Code	7776
• 164.7 Text.ConvertFromTextEncoding	7777
• 164.8 Text.ConvertToTextEncoding	7783
• 164.9 Text.ConvertUnicodeToCharacterComposition	7790
• 164.10 Text.ConvertUnicodeToCharacterDecomposition	7792
• 164.11 Text.CountWords	7793
• 164.12 Text.DecodeBytesFromBase64	7794
• 164.13 Text.DecodeFromBase64	7795
• 164.14 Text.DecodeFromBase64URL	7796
• 164.15 Text.DecodeFromBytes	7797
• 164.16 Text.DecodeFromHTML	7798
• 164.17 Text.DecodeFromHex	7800
• 164.18 Text.DecodeFromQuotedPrintable	7802
• 164.19 Text.DecodeFromURL	7803
• 164.20 Text.DecodeFromXML	7805
• 164.21 Text.DecodeHexFromBase64	7806
• 164.22 Text.DecodeIMAPFolderName	7807
• 164.23 Text.DecodeURLComponent	7808
• 164.24 Text.Deserialize	7809
• 164.25 Text.EncodeBytesToBase64	7810
• 164.26 Text.EncodeEmailSubject	7811
• 164.27 Text.EncodeHexToBase64	7812
• 164.28 Text.EncodeToBase64	7813

- 164.29 Text.EncodeToBase64URL 7814
- 164.30 Text.EncodeToBytes 7816
- 164.31 Text.EncodeToHTML 7817
- 164.32 Text.EncodeToHex 7819
- 164.33 Text.EncodeToQuotedPrintable 7821
- 164.34 Text.EncodeToURL 7822
- 164.35 Text.EncodeToXML 7824
- 164.36 Text.EncodeURLComponent 7826
- 164.37 Text.FileExtensionToMimeType 7828
- 164.38 Text.FilterUTF16 7830
- 164.39 Text.FindBetween 7831
- 164.40 Text.InvalidCharactersForEncoding 7833
- 164.41 Text.JaroWinklerDistance 7834
- 164.42 Text.Length 7835
- 164.43 Text.LevenshteinDistance 7836
- 164.44 Text.ListWords 7837
- 164.45 Text.LowerCase 7838
- 164.46 Text.MergeFields 7839
- 164.47 Text.MimeTypeToFileExtension 7841
- 164.48 Text.ReadEMLXFile 7842
- 164.49 Text.ReadTextFile 7843
- 164.50 Text.ReadTextFromContainer 7847
- 164.51 Text.RedefineEncoding 7848
- 164.52 Text.RemoveAccents 7849
- 164.53 Text.RemoveAccentsCaseInsensitive 7850
- 164.54 Text.RemoveControlCharacters 7851
- 164.55 Text.RemoveNewLine 7852
- 164.56 Text.RemovePostfix 7853
- 164.57 Text.RemovePrefix 7854

	657
• 164.58 Text.ReplaceAll	7856
• 164.59 Text.ReplaceNewline	7857
• 164.60 Text.Serialize	7860
• 164.61 Text.SoundEx	7861
• 164.62 Text.SoundExGerman	7862
• 164.63 Text.Styles	7863
• 164.64 Text.TextToHTML	7865
• 164.65 Text.TextToRTF	7867
• 164.66 Text.Trim	7869
• 164.67 Text.UpperCase	7870
• 164.68 Text.WriteTextFile	7871
• 164.69 Text.WriteToContainer	7875
• 166.1 Time.Format	7925
• 166.2 Time.Parse	7929
• 175.13 Time.Sleep	8244
• 166.3 Time.TimeStampToUTC	7933
• 166.4 Time.TimeZoneOffset	7934
• 175.14 Time.UnixTimeStamp	8245
• 166.5 Time.UnixTimeStampToFileMaker	7935
• 124.52 Trace	6326
• 124.56 Trace.GetErrorsOnly	6332
• 124.57 Trace.GetWithTimes	6333
• 124.58 Trace.Off	6334
• 124.59 Trace.SetErrorsOnly	6335
• 124.60 Trace.SetWithTimes	6336
• 124.61 Trace.WriteLine	6337
• 172.1 URLScheme.GetDefaultHandler	8141
• 173.1 USB.Count	8147
• 173.2 USB.FindDevice	8149

- 173.3 USB.FindSerialNumber 8150
- 173.4 USB.GetProductID 8151
- 173.5 USB.GetProductName 8152
- 173.6 USB.GetSerialNumber 8153
- 173.7 USB.GetVendorID 8154
- 173.8 USB.GetVendorName 8155
- 176.1 UUID.Formatted 8247
- 176.2 UUID.FromNumber 8249
- 176.3 UUID.Hex 8251
- 176.4 UUID.Number 8252
- 176.5 UUID.Raw 8253
- 176.6 UUID.ToNumber 8254
- 53.3 UnZipFile.Close 1476
- 53.4 UnZipFile.ExtractFiles 1477
- 53.5 UnZipFile.GlobalComment 1479
- 53.6 UnZipFile.ItemCRC 1480
- 53.7 UnZipFile.ItemComment 1481
- 53.8 UnZipFile.ItemCompressedSize 1482
- 53.9 UnZipFile.ItemCompressionMethod 1483
- 53.10 UnZipFile.ItemCount 1484
- 53.11 UnZipFile.ItemDate 1485
- 53.12 UnZipFile.ItemDiskNumberStart 1486
- 53.13 UnZipFile.ItemExternalFileAttributes 1487
- 53.14 UnZipFile.ItemFlag 1488
- 53.15 UnZipFile.ItemInternalFileAttributes 1490
- 53.16 UnZipFile.ItemName 1491
- 53.17 UnZipFile.ItemSizeFileComment 1492
- 53.18 UnZipFile.ItemSizeFileExtra 1493
- 53.19 UnZipFile.ItemSizeFileName 1494

	659
• 53.20 UnZipFile.ItemUncompressedSize	1495
• 53.21 UnZipFile.ItemVersion	1496
• 53.22 UnZipFile.ItemVersionNeeded	1497
• 53.23 UnZipFile.OpenContainer	1498
• 53.24 UnZipFile.OpenFile	1499
• 53.25 UnZipFile.ReadAsFileContainer	1501
• 53.26 UnZipFile.ReadAsGIFContainer	1502
• 53.27 UnZipFile.ReadAsHex	1503
• 53.28 UnZipFile.ReadAsJPEGContainer	1504
• 53.29 UnZipFile.ReadAsPNGContainer	1505
• 53.30 UnZipFile.ReadAsText	1506
• 53.31 UnZipFile.ReadToFile	1507
• 53.32 UnZipFile.UsePassword	1508
• 177.1 Validate.CheckReceipt	8255
• 177.2 Validate.Exit	8257
• 177.3 Validate.FindReceipt	8258
• 124.62 Version	6338
• 124.63 VersionAutoUpdate	6340
• 179.1 Vision.ClassifyImage	8273
• 179.2 Vision.DetectBarcode	8275
• 179.3 Vision.KnownClassifications	8276
• 179.4 Vision.RecognizeText	8277
• 179.5 Vision.SupportedRecognitionLanguages	8279
• 179.6 Vision.SupportedSymbologies	8280
• 187.1 WMFP.Create	8767
• 187.2 WMFP.FrameStep	8770
• 187.3 WMFP.GetBalance	8771
• 187.4 WMFP.GetDuration	8772
• 187.5 WMFP.GetIdealVideoSize	8773

- 187.7 WMFP.GetMute 8775
- 187.8 WMFP.GetNativeVideoSize 8776
- 187.9 WMFP.GetPosition 8777
- 187.10 WMFP.GetRate 8778
- 187.11 WMFP.GetState 8779
- 187.12 WMFP.GetTag 8780
- 187.14 WMFP.GetVolume 8782
- 187.15 WMFP.Pause 8783
- 187.16 WMFP.Play 8784
- 187.17 WMFP.Release 8785
- 187.19 WMFP.SetBalance 8787
- 187.21 WMFP.SetFrame 8789
- 187.23 WMFP.SetMute 8791
- 187.24 WMFP.SetPlaybackEndedScriptTrigger 8792
- 187.25 WMFP.SetPosition 8793
- 187.26 WMFP.SetRate 8794
- 187.27 WMFP.SetTag 8795
- 187.29 WMFP.SetVolume 8797
- 187.30 WMFP.Stop 8798
- 188.1 WMIQuery.Connect 8801
- 188.2 WMIQuery.New 8805
- 188.3 WMIQuery.Next 8806
- 188.4 WMIQuery.PropertyNames 8807
- 188.5 WMIQuery.PropertyType 8808
- 188.6 WMIQuery.PropertyValue 8809
- 188.7 WMIQuery.Query 8810
- 188.8 WMIQuery.Release 8812
- 180.28 WebView.AllowsAnyHTTPSCertificateForHost 8314
- 180.120 WebView.SendCommand 8447

	661
• 183.1 WindowsScript.AddCode	8675
• 183.2 WindowsScript.Close	8680
• 183.3 WindowsScript.Create	8684
• 183.4 WindowsScript.ErrorClear	8688
• 183.5 WindowsScript.ErrorColumn	8689
• 183.6 WindowsScript.ErrorDescription	8690
• 183.7 WindowsScript.ErrorLine	8691
• 183.8 WindowsScript.ErrorNumber	8692
• 183.9 WindowsScript.ErrorSource	8693
• 183.10 WindowsScript.ErrorText	8694
• 183.11 WindowsScript.Eval	8695
• 183.12 WindowsScript.ExecuteFunction	8696
• 183.13 WindowsScript.ExecuteStatement	8700
• 183.14 WindowsScript.GetAllowUI	8701
• 183.15 WindowsScript.GetLanguage	8702
• 183.16 WindowsScript.GetTimeout	8703
• 183.17 WindowsScript.GetUseSafeSubset	8704
• 183.18 WindowsScript.SetAllowUI	8705
• 183.19 WindowsScript.SetLanguage	8706
• 183.20 WindowsScript.SetTimeout	8709
• 183.21 WindowsScript.SetUseSafeSubset	8710
• 189.1 WordFile.AddMediaFile	8813
• 189.2 WordFile.Append	8815
• 189.3 WordFile.AppendTableRow	8816
• 189.4 WordFile.DuplicateTableRow	8818
• 189.5 WordFile.FieldNames	8819
• 189.6 WordFile.GetCaseless	8820
• 189.7 WordFile.GetFieldText	8821
• 189.8 WordFile.GetMediaFile	8822

- 189.9 WordFile.GetXML 8823
- 189.10 WordFile.HasTag 8824
- 189.11 WordFile.MediaFiles 8825
- 189.12 WordFile.OpenContainer 8826
- 189.13 WordFile.OpenFile 8828
- 189.14 WordFile.OpenText 8830
- 189.15 WordFile.Parts 8831
- 189.16 WordFile.Release 8832
- 189.17 WordFile.RemoveTableRow 8833
- 189.18 WordFile.ReplaceTag 8835
- 189.19 WordFile.SetCaseless 8838
- 189.20 WordFile.SetFieldText 8839
- 189.21 WordFile.SetMarkers 8840
- 189.22 WordFile.SetMediaFile 8841
- 189.23 WordFile.SetXML 8843
- 189.24 WordFile.Texts 8844
- 189.25 WordFile.WriteFile 8846
- 48.22 X509.Description 1369
- 48.23 X509.Duplicate 1370
- 48.24 X509.IssuerName 1371
- 48.25 X509.Name 1372
- 48.26 X509.Read 1373
- 48.27 X509.ReadFromContainer 1374
- 48.28 X509.ReadFromFile 1375
- 48.29 X509.Release 1376
- 48.30 X509.SerialNumber 1377
- 48.32 X509.SubjectName 1379
- 48.33 X509.Version 1380
- 48.34 X509.Write 1381

	663
• 190.1 XL.Book.AddCustomNumFormat	8849
• 190.2 XL.Book.AddFont	8852
• 190.3 XL.Book.AddFormat	8854
• 190.4 XL.Book.AddPictureContainer	8857
• 190.5 XL.Book.AddPictureFile	8859
• 190.6 XL.Book.AddSheet	8860
• 190.7 XL.Book.BiffVersion	8862
• 190.8 XL.Book.CustomNumFormat	8863
• 190.9 XL.Book.DeleteSheet	8864
• 190.10 XL.Book.DeleteSheetsExcept	8867
• 190.11 XL.Book.FontCount	8868
• 190.12 XL.Book.FormatCount	8869
• 190.13 XL.Book.GetActiveSheet	8870
• 190.14 XL.Book.GetDefaultFontName	8871
• 190.15 XL.Book.GetDefaultFontSize	8872
• 190.16 XL.Book.GetPicture	8873
• 190.17 XL.Book.GetPictureType	8874
• 190.18 XL.Book.GetRGBMode	8875
• 190.19 XL.Book.GetRefR1C1	8876
• 190.20 XL.Book.GetText	8877
• 190.21 XL.Book.InsertSheet	8878
• 190.22 XL.Book.IsDate1904	8879
• 190.23 XL.Book.IsTemplate	8880
• 190.24 XL.Book.MoveSheet	8881
• 190.25 XL.Book.PictureCount	8882
• 190.26 XL.Book.Release	8883
• 190.27 XL.Book.ReleaseAll	8885
• 190.28 XL.Book.Save	8886
• 190.29 XL.Book.SaveToFile	8888

- 190.30 XL.Book.SetActiveSheet 8890
- 190.31 XL.Book.SetDate1904 8891
- 190.32 XL.Book.SetDefaultFont 8892
- 190.33 XL.Book.SetRGBMode 8893
- 190.34 XL.Book.SetRefR1C1 8894
- 190.35 XL.Book.SetTemplate 8895
- 190.36 XL.Book.SheetCount 8896
- 190.37 XL.Book.SheetIndexForName 8897
- 190.38 XL.Book.Sheets 8898
- 190.39 XL.Book.Version 8899
- 190.40 XL.Color.Pack 8900
- 190.41 XL.Color.UnPack 8902
- 190.42 XL.CopyContent 8904
- 190.43 XL.CopyRow 8906
- 190.44 XL.CopySheet 8908
- 190.45 XL.Date.DoubleToTimeStamp 8910
- 190.46 XL.Date.Pack 8911
- 190.47 XL.Date.TimeStampToDouble 8913
- 190.48 XL.Date.UnPack 8914
- 190.49 XL.Font.GetBold 8915
- 190.50 XL.Font.GetColor 8916
- 190.51 XL.Font.GetItalic 8917
- 190.52 XL.Font.GetName 8918
- 190.53 XL.Font.GetScript 8919
- 190.54 XL.Font.GetSize 8920
- 190.55 XL.Font.GetStrikeOut 8921
- 190.56 XL.Font.GetUnderline 8922
- 190.57 XL.Font.SetBold 8923
- 190.58 XL.Font.SetColor 8925

	665
• 190.59 XL.Font.SetItalic	8928
• 190.60 XL.Font.SetName	8929
• 190.61 XL.Font.SetScript	8931
• 190.62 XL.Font.SetSize	8932
• 190.63 XL.Font.SetStrikeOut	8934
• 190.64 XL.Font.SetUnderline	8935
• 190.65 XL.Format.GetAlignH	8936
• 190.66 XL.Format.GetAlignV	8937
• 190.67 XL.Format.GetBorderBottom	8938
• 190.68 XL.Format.GetBorderBottomColor	8939
• 190.69 XL.Format.GetBorderDiagonal	8940
• 190.70 XL.Format.GetBorderDiagonalColor	8941
• 190.71 XL.Format.GetBorderDiagonalStyle	8942
• 190.72 XL.Format.GetBorderLeft	8943
• 190.73 XL.Format.GetBorderLeftColor	8944
• 190.74 XL.Format.GetBorderRight	8945
• 190.75 XL.Format.GetBorderRightColor	8946
• 190.76 XL.Format.GetBorderTop	8947
• 190.77 XL.Format.GetBorderTopColor	8948
• 190.78 XL.Format.GetFillPattern	8949
• 190.79 XL.Format.GetFont	8950
• 190.80 XL.Format.GetHidden	8951
• 190.81 XL.Format.GetIndent	8952
• 190.82 XL.Format.GetLocked	8953
• 190.83 XL.Format.GetNumFormat	8954
• 190.84 XL.Format.GetPatternBackgroundColor	8955
• 190.85 XL.Format.GetPatternForegroundColor	8956
• 190.86 XL.Format.GetRotation	8957
• 190.87 XL.Format.GetShrinkToFit	8958

- 190.88 XL.Format.GetWrap 8959
- 190.89 XL.Format.SetAlignH 8960
- 190.90 XL.Format.SetAlignV 8963
- 190.91 XL.Format.SetBorder 8965
- 190.92 XL.Format.SetBorderBottom 8967
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.94 XL.Format.SetBorderColor 8970
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.97 XL.Format.SetBorderDiagonalStyle 8975
- 190.98 XL.Format.SetBorderLeft 8976
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.100 XL.Format.SetBorderRight 8979
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.102 XL.Format.SetBorderTop 8982
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.104 XL.Format.SetFillPattern 8985
- 190.105 XL.Format.SetFont 8987
- 190.106 XL.Format.SetHidden 8989
- 190.107 XL.Format.SetIndent 8990
- 190.108 XL.Format.SetLocked 8991
- 190.109 XL.Format.SetNumFormat 8993
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.112 XL.Format.SetRotation 9000
- 190.113 XL.Format.SetShrinkToFit 9001
- 190.114 XL.Format.SetWrap 9002
- 190.115 XL.Initialize 9005
- 190.116 XL.IsInitialized 9008

	667
• 190.117 XL.LoadBook	9010
• 190.118 XL.LoadBookPartially	9013
• 190.119 XL.NewBook	9015
• 190.120 XL.Sheet.AddHyperlink	9017
• 190.121 XL.Sheet.AddIgnoredError	9019
• 190.122 XL.Sheet.AddrToRowCol	9021
• 190.123 XL.Sheet.ApplyFilter	9022
• 190.124 XL.Sheet.AutoFilter	9023
• 190.125 XL.Sheet.AutoFilter.AddFilter	9024
• 190.126 XL.Sheet.AutoFilter.Clear	9026
• 190.127 XL.Sheet.AutoFilter.ColumnSize	9027
• 190.128 XL.Sheet.AutoFilter.Filter	9028
• 190.129 XL.Sheet.AutoFilter.FilterSize	9029
• 190.130 XL.Sheet.AutoFilter.FilterType	9030
• 190.131 XL.Sheet.AutoFilter.GetCustomFilter	9032
• 190.132 XL.Sheet.AutoFilter.GetRef	9033
• 190.133 XL.Sheet.AutoFilter.GetSort	9034
• 190.134 XL.Sheet.AutoFilter.GetSortRange	9035
• 190.135 XL.Sheet.AutoFilter.GetTop10	9036
• 190.136 XL.Sheet.AutoFilter.SetCustomFilter	9037
• 190.137 XL.Sheet.AutoFilter.SetRef	9039
• 190.138 XL.Sheet.AutoFilter.SetSort	9041
• 190.139 XL.Sheet.AutoFilter.SetTop10	9042
• 190.140 XL.Sheet.CellIsDate	9044
• 190.141 XL.Sheet.CellIsFormula	9045
• 190.142 XL.Sheet.CellReadBlank	9046
• 190.143 XL.Sheet.CellReadBoolean	9047
• 190.144 XL.Sheet.CellReadBooleans	9048
• 190.145 XL.Sheet.CellReadComment	9050

- 190.146 XL.Sheet.CellReadComments 9051
- 190.147 XL.Sheet.CellReadDate 9053
- 190.148 XL.Sheet.CellReadDates 9055
- 190.149 XL.Sheet.CellReadFormula 9057
- 190.150 XL.Sheet.CellReadFormulas 9058
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.152 XL.Sheet.CellReadNumbers 9061
- 190.153 XL.Sheet.CellReadText 9063
- 190.154 XL.Sheet.CellReadTexts 9065
- 190.155 XL.Sheet.CellType 9067
- 190.156 XL.Sheet.CellWriteBlank 9068
- 190.157 XL.Sheet.CellWriteBlanks 9070
- 190.158 XL.Sheet.CellWriteBoolean 9072
- 190.159 XL.Sheet.CellWriteBooleans 9074
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.161 XL.Sheet.CellWriteComments 9078
- 190.162 XL.Sheet.CellWriteDate 9080
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.164 XL.Sheet.CellWriteError 9084
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.166 XL.Sheet.CellWriteFormulaBoolean 9089
- 190.167 XL.Sheet.CellWriteFormulaNumber 9091
- 190.168 XL.Sheet.CellWriteFormulaText 9093
- 190.169 XL.Sheet.CellWriteFormulas 9095
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.174 XL.Sheet.Clear 9108

	669
• 190.175 XL.Sheet.ClearPrintArea	9109
• 190.176 XL.Sheet.ClearPrintRepeats	9110
• 190.177 XL.Sheet.CopyCell	9111
• 190.178 XL.Sheet.DelHyperlink	9112
• 190.179 XL.Sheet.DelMergeByIndex	9113
• 190.180 XL.Sheet.DeleteMerge	9114
• 190.181 XL.Sheet.DeleteNamedRange	9115
• 190.182 XL.Sheet.GetCellError	9116
• 190.183 XL.Sheet.GetCellErrors	9117
• 190.184 XL.Sheet.GetCellFormat	9119
• 190.185 XL.Sheet.GetCellFormats	9120
• 190.186 XL.Sheet.GetColHidden	9122
• 190.187 XL.Sheet.GetColWidth	9123
• 190.188 XL.Sheet.GetDisplayGridlines	9124
• 190.189 XL.Sheet.GetFirstCol	9125
• 190.190 XL.Sheet.GetFirstRow	9126
• 190.191 XL.Sheet.GetFooter	9127
• 190.192 XL.Sheet.GetFooterMargin	9128
• 190.193 XL.Sheet.GetGroupSummaryBelow	9129
• 190.194 XL.Sheet.GetGroupSummaryRight	9130
• 190.195 XL.Sheet.GetHCenter	9131
• 190.196 XL.Sheet.GetHeader	9132
• 190.197 XL.Sheet.GetHeaderMargin	9133
• 190.198 XL.Sheet.GetHidden	9134
• 190.199 XL.Sheet.GetHorPageBreak	9135
• 190.200 XL.Sheet.GetHorPageBreakCount	9136
• 190.201 XL.Sheet.GetLandscape	9137
• 190.202 XL.Sheet.GetLastCol	9138
• 190.203 XL.Sheet.GetLastRow	9139

- 190.204 XL.Sheet.GetMarginBottom 9140
- 190.205 XL.Sheet.GetMarginLeft 9141
- 190.206 XL.Sheet.GetMarginRight 9142
- 190.207 XL.Sheet.GetMarginTop 9143
- 190.208 XL.Sheet.GetMerge 9144
- 190.209 XL.Sheet.GetName 9146
- 190.210 XL.Sheet.GetNamedRange 9147
- 190.211 XL.Sheet.GetPaper 9148
- 190.212 XL.Sheet.GetPicture 9150
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.215 XL.Sheet.GetPrintGridlines 9154
- 190.216 XL.Sheet.GetPrintRepeatCols 9155
- 190.217 XL.Sheet.GetPrintRepeatRows 9156
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.219 XL.Sheet.GetPrintZoom 9158
- 190.220 XL.Sheet.GetProtect 9159
- 190.221 XL.Sheet.GetRowHeight 9160
- 190.222 XL.Sheet.GetRowHidden 9161
- 190.223 XL.Sheet.GetText 9162
- 190.224 XL.Sheet.GetTopLeftView 9163
- 190.225 XL.Sheet.GetVCenter 9164
- 190.226 XL.Sheet.GetVerPageBreak 9165
- 190.227 XL.Sheet.GetVerPageBreakCount 9166
- 190.228 XL.Sheet.GetZoom 9167
- 190.229 XL.Sheet.GroupCols 9168
- 190.230 XL.Sheet.GroupRows 9169
- 190.231 XL.Sheet.Hyperlink 9170
- 190.232 XL.Sheet.HyperlinkSize 9171

	671
• 190.233 XL.Sheet.InsertCol	9172
• 190.234 XL.Sheet.InsertRow	9173
• 190.235 XL.Sheet.Merge	9174
• 190.236 XL.Sheet.MergeSize	9175
• 190.237 XL.Sheet.NamedRange	9176
• 190.238 XL.Sheet.NamedRangeCount	9177
• 190.239 XL.Sheet.PictureCount	9178
• 190.240 XL.Sheet.RemoveCol	9179
• 190.241 XL.Sheet.RemoveComment	9180
• 190.242 XL.Sheet.RemoveComments	9181
• 190.243 XL.Sheet.RemoveFilter	9183
• 190.244 XL.Sheet.RemoveRow	9184
• 190.245 XL.Sheet.RightToLeft	9186
• 190.246 XL.Sheet.RowColToAddr	9187
• 190.247 XL.Sheet.SetAutoFitArea	9189
• 190.248 XL.Sheet.SetCellFormat	9190
• 190.249 XL.Sheet.SetCellFormats	9192
• 190.250 XL.Sheet.SetCol	9194
• 190.251 XL.Sheet.SetColHidden	9197
• 190.252 XL.Sheet.SetColumn	9198
• 190.253 XL.Sheet.SetDisplayGridlines	9200
• 190.254 XL.Sheet.SetFooter	9201
• 190.255 XL.Sheet.SetGroupSummaryBelow	9203
• 190.256 XL.Sheet.SetGroupSummaryRight	9204
• 190.257 XL.Sheet.SetHCenter	9205
• 190.258 XL.Sheet.SetHeader	9206
• 190.259 XL.Sheet.SetHorPageBreak	9208
• 190.260 XL.Sheet.SetLandscape	9209
• 190.261 XL.Sheet.SetMarginBottom	9210

- 190.262 XL.Sheet.SetMarginLeft 9211
- 190.263 XL.Sheet.SetMarginRight 9212
- 190.264 XL.Sheet.SetMarginTop 9213
- 190.265 XL.Sheet.SetMerge 9214
- 190.266 XL.Sheet.SetName 9216
- 190.267 XL.Sheet.SetNamedRange 9217
- 190.268 XL.Sheet.SetPaper 9219
- 190.269 XL.Sheet.SetPictureWithScale 9220
- 190.270 XL.Sheet.SetPictureWithSize 9222
- 190.271 XL.Sheet.SetPrintArea 9225
- 190.272 XL.Sheet.SetPrintFit 9227
- 190.273 XL.Sheet.SetPrintGridliens 9228
- 190.274 XL.Sheet.SetPrintRepeatCols 9229
- 190.275 XL.Sheet.SetPrintRepeatRows 9230
- 190.276 XL.Sheet.SetPrintRow 9231
- 190.277 XL.Sheet.SetPrintZoom 9232
- 190.278 XL.Sheet.SetProtect 9233
- 190.279 XL.Sheet.SetProtectEx 9234
- 190.280 XL.Sheet.SetRightToLeft 9236
- 190.281 XL.Sheet.SetRow 9237
- 190.282 XL.Sheet.SetRowHidden 9239
- 190.283 XL.Sheet.SetTabColor 9240
- 190.284 XL.Sheet.SetTabColorRGB 9241
- 190.285 XL.Sheet.SetTopLeftView 9242
- 190.286 XL.Sheet.SetVCenter 9243
- 190.287 XL.Sheet.SetVerPageBreak 9244
- 190.288 XL.Sheet.SetZoom 9245
- 190.289 XL.Sheet.Split 9246
- 190.290 XL.Sheet.SplitInfo 9247

	673
• 190.291 XL.Sheet.Table	9248
• 190.292 XL.Sheet.TableSize	9249
• 190.293 XL.Sheet.Type	9250
• 190.294 XL.Uninitialize	9251
• 191.2 XML.ApplyStylesheet	9256
• 191.3 XML.Canonical	9258
• 191.4 XML.ClearVariables	9260
• 191.5 XML.Colorize	9261
• 191.6 XML.DeletePath	9263
• 191.7 XML.ExtractText	9265
• 191.8 XML.Format	9267
• 191.9 XML.GetAttribute	9269
• 191.10 XML.GetPathValue	9270
• 191.11 XML.HasAttribute	9272
• 191.12 XML.Import	9273
• 191.13 XML.Import.Cancel	9277
• 191.14 XML.Import.ErrorCount	9278
• 191.15 XML.Import.Errors	9279
• 191.16 XML.Import.SetBaseFields	9280
• 191.17 XML.Import.SetExtraField	9281
• 191.18 XML.Import.Status	9282
• 191.19 XML.Import.TODO	9283
• 191.20 XML.Import.Total	9284
• 191.21 XML.Import.Work	9285
• 191.22 XML.ListAttributes	9287
• 191.23 XML.NodeCount	9288
• 191.24 XML.NodeNames	9289
• 191.25 XML.Parse	9291
• 191.26 XML.Query	9293

• 191.27 XML.ReadContainer	9296
• 191.28 XML.ReadFile	9297
• 191.29 XML.Release	9299
• 191.30 XML.ReleaseAll	9300
• 191.31 XML.SetPathValue	9301
• 191.32 XML.SetPathXML	9303
• 191.33 XML.SetVariables	9305
• 191.34 XML.SubTree	9307
• 191.35 XML.ToJSON	9310
• 191.36 XML.Validate	9311
• 191.37 XML.ValidateFile	9313
• 53.33 ZipFile.CRCFile	1509
• 53.34 ZipFile.Close	1510
• 53.35 ZipFile.CompressFiles	1511
• 53.36 ZipFile.CreateFile	1513
• 53.37 ZipFile.Open	1515
• 53.38 ZipFile.SetCompressionLevel	1517
• 53.39 ZipFile.UsePassword	1518
• 53.40 ZipFile.WriteContainer	1520
• 53.41 ZipFile.WriteFile	1521
• 53.42 ZipFile.WriteHex	1523
• 53.43 ZipFile.WriteText	1524

3521 functions.

Chapter 7

New in Version 6.0

- 51.5 Clipboard.GetHTMLText 1441
- 51.13 Clipboard.SetHTMLText 1452
- 67.1 DNSLookup.Address 2451
- 67.2 DNSLookup.AddressCount 2453
- 67.3 DNSLookup.Alias 2454
- 67.4 DNSLookup.AliasCount 2455
- 67.5 DNSLookup.LookupHostByAddress 2456
- 67.6 DNSLookup.LookupHostByName 2458
- 67.7 DNSLookup.Name 2460
- 67.8 DNSLookup.Release 2461
- 70.16 DynaPDF.AssociateEmbFile 2577
- 70.17 DynaPDF.AttachFile 2579
- 70.18 DynaPDF.AttachFileContainer 2581
- 70.19 DynaPDF.AttachFileText 2582
- 70.95 DynaPDF.ExtractDocumentText 2703
- 70.240 DynaPDF.GetTextDrawMode 2895
- 70.272 DynaPDF.InitColorManagementEx 2939
- 70.295 DynaPDF.Optimize 2995
- 70.340 DynaPDF.SetAnnotOpacity 3089

• 70.424 DynaPDF.SetTextDrawMode	3224
• 80.4 FM.DeleteRecord	4073
• 80.5 FM.DeleteRecords	4076
• 80.14 FM.InsertOrUpdateRecord	4104
• 80.21 FM.InsertRecordQueryIgnoreDuplicates	4126
• 79.76 FM.SetThreadName	4033
• 80.38 FM.UpdateRecord	4164
• 80.39 FM.UpdateRecords	4167
• 83.2 FSEvents.CreateRelativeToDevice	4209
• 83.5 FSEvents.DeviceBeingWatched	4212
• 83.6 FSEvents.DeviceID	4213
• 83.11 FSEvents.GetExclusionPaths	4218
• 83.15 FSEvents.LastEventIdForDeviceBeforeTime	4222
• 83.21 FSEvents.SetExclusionPaths	4231
• 83.28 FSEvents.UUIDForDevice	4238
• 100.4 JSON.AddBooleanToObject	5238
• 100.18 JSON.CreateArrayRef	5265
• 100.20 JSON.CreateBoolean	5269
• 100.27 JSON.CreateObjectRef	5278
• 100.48 JSON.GetObjectItemTreeRef	5310
• 100.65 JSON.Parse	5333
• 100.66 JSON.Release	5336
• 100.67 JSON.ReleaseAll	5338
• 102.1 LDAP.Add	5363
• 102.5 LDAP.Bind	5373
• 102.6 LDAP.Connect	5375
• 102.7 LDAP.Delete	5378
• 102.8 LDAP.GetNetworkTimeOut	5379
• 102.9 LDAP.GetProtocolVersion	5380

	677
• 102.10 LDAP.GetReferrals	5381
• 102.11 LDAP.GetTimeOut	5382
• 102.13 LDAP.Modify	5388
• 102.16 LDAP.Release	5393
• 102.17 LDAP.Rename	5394
• 102.18 LDAP.Search	5395
• 102.19 LDAP.SearchResult.AttributeCount	5397
• 102.20 LDAP.SearchResult.AttributeName	5399
• 102.21 LDAP.SearchResult.AttributeNames	5400
• 102.22 LDAP.SearchResult.AttributeValue	5401
• 102.23 LDAP.SearchResult.AttributeValueCount	5402
• 102.24 LDAP.SearchResult.AttributeValues	5403
• 102.26 LDAP.SearchResult.Count	5407
• 102.27 LDAP.SearchResult.DistinguishedName	5409
• 102.28 LDAP.SetNetworkTimeOut	5410
• 102.29 LDAP.SetProtocolVersion	5411
• 102.30 LDAP.SetReferrals	5412
• 102.31 LDAP.SetTimeOut	5413
• 102.32 LDAP.SimpleBind	5414
• 122.13 PDFKit.GetPDFPageDisplayAnnotation	6175
• 122.41 PDFKit.SetPDFPageDisplayAnnotation	6220
• 121.1 Path.AddPathComponent	6135
• 121.5 Path.LastPathComponent	6144
• 121.8 Path.RemoveLastPathComponent	6149
• 126.2 Preferences.DeleteValue	6374
• 126.6 Preferences.HasValue	6379
• 103.68 QuickList.MatchesSubString	5519
• 138.7 RichText.HTMLText	6720
• 159.11 SyntaxColoring.ContextualMenuEnabled.GetEnabled	7574

- 159.12 SyntaxColoring.ContextualMenuEnabled.SetEnabled 7575
- 53.4 UnZipFile.ExtractFiles 1477
- 182.29 Window.GetTitleVisible 8569
- 182.30 Window.GetTitlebarAppearsTransparent 8570
- 182.55 Window.Maximize 8597
- 182.56 Window.Minimize 8598
- 182.63 Window.ResizeContentView 8608
- 182.97 Window.SetTitleVisible 8654
- 182.98 Window.SetTitlebarAppearsTransparent 8655
- 53.35 ZipFile.CompressFiles 1511

87 functions.

Chapter 8

New in Version 6.1

• 39.1 AVExport.AllExportPresets	1027
• 39.2 AVExport.CancelExport	1029
• 39.3 AVExport.Duration	1030
• 39.4 AVExport.Error	1031
• 39.5 AVExport.EstimatedOutputFileLength	1032
• 39.6 AVExport.ExportAsynchronously	1033
• 39.7 AVExport.ExportSession	1035
• 39.9 AVExport.GetOutputFileType	1040
• 39.10 AVExport.GetOutputPath	1041
• 39.11 AVExport.GetOutputURL	1042
• 39.12 AVExport.GetShouldOptimizeForNetworkUse	1043
• 39.13 AVExport.GetTimeRange	1044
• 39.14 AVExport.OutputFileExtension	1045
• 39.15 AVExport.PresetName	1046
• 39.16 AVExport.Progress	1047
• 39.17 AVExport.Release	1048
• 39.18 AVExport.SetOutputFileType	1049
• 39.19 AVExport.SetOutputPath	1050
• 39.20 AVExport.SetOutputURL	1052

- 39.21 AVExport.SetShouldOptimizeForNetworkUse 1053
- 39.22 AVExport.SetTimeRange 1054
- 39.23 AVExport.Status 1055
- 39.24 AVExport.SupportedFileTypes 1056
- 41.1 AVRecorder.AddPreviewToWindow 1089
- 41.2 AVRecorder.AudioDeviceCount 1091
- 41.3 AVRecorder.AudioDeviceInfo 1092
- 41.6 AVRecorder.ClosePreview 1097
- 41.10 AVRecorder.GetAudioDevice 1101
- 41.13 AVRecorder.GetFilePath 1104
- 41.14 AVRecorder.GetVideoDevice 1105
- 41.17 AVRecorder.Init 1108
- 41.18 AVRecorder.IsRecording 1111
- 41.20 AVRecorder.Release 1113
- 41.22 AVRecorder.SetAudioDevice 1115
- 41.25 AVRecorder.SetFilePath 1118
- 41.27 AVRecorder.SetVideoDevice 1121
- 41.30 AVRecorder.StartPreview 1125
- 41.32 AVRecorder.StartRecording 1128
- 41.34 AVRecorder.StopRecording 1130
- 41.35 AVRecorder.VideoDeviceCount 1131
- 41.36 AVRecorder.VideoDeviceInfo 1132
- 33.39 Addressbook.multivalue.identifiers 847
- 33.45 Addressbook.multivalue.labels 854
- 33.53 Addressbook.multivalue.valueForLabel 865
- 33.54 Addressbook.multivalue.values 866
- 33.58 Addressbook.person.ExternalUID 870
- 33.84 Addressbook.searchPersonWithExternalUID 907
- 34.1 App.CancelUserAttentionRequest 909

	681
• 34.12 App.RequestUserAttention	920
• 50.4 CLGeocoder.Distance	1419
• 61.52 CURL.GetFinishedEvaluate	1842
• 61.94 CURL.GetProgressEvaluate	1887
• 61.156 CURL.SetFinishedEvaluate	1987
• 61.382 CURL.SetProgressEvaluate	2313
• 65.5 Dictionary.Clone	2405
• 100.1 Dictionary.ToJSON	5231
• 65.22 Dictionary.ToText	2429
• 191.1 Dictionary.ToXML	9253
• 70.232 DynaPDF.GetReplaceICCProfile	2887
• 70.234 DynaPDF.GetReplaceICCProfilesCounter	2889
• 70.418 DynaPDF.SetReplaceICCProfile	3213
• 79.10 FM.DataType	3896
• 80.15 FM.InsertOrUpdateRecord2	4107
• 80.16 FM.InsertOrUpdateRecord3	4110
• 88.2 HotKey.GetEvaluate	4832
• 88.15 HotKey.SetEvaluate	4848
• 124.7 IsIOS	6268
• 124.10 IsLinux	6271
• 124.11 IsMacOS	6272
• 124.16 IsWindows	6280
• 100.14 JSON.Clone	5260
• 100.52 JSON.GetPathItem	5314
• 100.55 JSON.GetValue	5320
• 100.70 JSON.SetPathItem	5341
• 103.1 List.AddPostfix	5417
• 103.2 List.AddPrefix	5419
• 103.9 List.CrossProduct	5428

- 103.28 List.RemovePostfix 5455
- 103.29 List.RemovePrefix 5457
- 112.9 Menu.GetEvaluate 5869
- 112.30 Menu.SetEvaluate 5895
- 112.44 MenuItem.GetEvaluate 5911
- 112.85 MenuItem.SetEvaluate 5955
- 113.7 Menubar.SetMenuCommandTitle 6002
- 127.39 PrintDialog.GetTray 6425
- 127.57 PrintDialog.SetTray 6448
- 132.1 QTExport.CloseMovie 6549
- 132.2 QTExport.Duration 6551
- 132.3 QTExport.Export 6552
- 132.4 QTExport.GetHighResolution 6554
- 132.5 QTExport.GetMovieHeight 6555
- 132.6 QTExport.GetMovieWidth 6556
- 132.7 QTExport.GetSettings 6557
- 132.8 QTExport.GetShowProgress 6558
- 132.9 QTExport.GetSoundChannelCount 6559
- 132.10 QTExport.GetSoundSampleRate 6560
- 132.11 QTExport.GetSoundSampleSize 6561
- 132.12 QTExport.ListExporters 6562
- 132.13 QTExport.OpenExporter 6563
- 132.14 QTExport.OpenMovie 6565
- 132.15 QTExport.Release 6566
- 132.16 QTExport.SetHighResolution 6567
- 132.17 QTExport.SetMovieHeight 6568
- 132.18 QTExport.SetMovieWidth 6569
- 132.19 QTExport.SetSettings 6570
- 132.20 QTExport.SetShowProgress 6571

	683
• 132.21 QTEExport.SetSoundChannelCount	6572
• 132.22 QTEExport.SetSoundSampleRate	6573
• 132.23 QTEExport.SetSoundSampleSize	6574
• 132.24 QTEExport.SetupDialog	6575
• 132.25 QTEExport.Validate	6576
• 103.42 QuickList.AddPostfix	5478
• 103.43 QuickList.AddPrefix	5480
• 103.52 QuickList.Clone	5494
• 103.54 QuickList.CrossProduct	5497
• 103.81 QuickList.RemovePostfix	5538
• 103.82 QuickList.RemovePrefix	5540
• 143.12 SendMail.ClearHeaders	6896
• 159.30 SyntaxColoring.GetScriptIfColor	7594
• 159.31 SyntaxColoring.GetScriptLoopColor	7595
• 159.32 SyntaxColoring.GetScriptSearchColor	7596
• 159.38 SyntaxColoring.GetUseBoldFont	7602
• 159.67 SyntaxColoring.SetScriptIfColor	7635
• 159.68 SyntaxColoring.SetScriptLoopColor	7636
• 159.69 SyntaxColoring.SetScriptSearchColor	7637
• 159.73 SyntaxColoring.SetUseBoldFont	7641
• 164.56 Text.RemovePostfix	7853
• 164.57 Text.RemovePrefix	7854
• 166.3 Time.TimeStampToUTC	7933
• 182.8 Window.ClearFocus	8542
• 182.17 Window.FlashWindow	8556

131 functions.

Chapter 9

New in Version 6.2

- 39.8 AVExport.ExportSessionMerge 1038
- 41.5 AVRecorder.CaptureStillPhoto 1095
- 33.1 Addressbook.Account.Name 799
- 33.2 Addressbook.Account.Type 801
- 33.3 Addressbook.Account.URL 802
- 33.4 Addressbook.Account.isMainAccount 803
- 33.9 Addressbook.Notification.Evaluate 809
- 33.18 Addressbook.Record.Account 818
- 33.20 Addressbook.allAccounts 822
- 33.21 Addressbook.defaultAccount 823
- 33.22 Addressbook.enabledAccounts 824
- 33.56 Addressbook.persistentAccounts 868
- 61.46 CURL.GetDebugWithData 1835
- 61.48 CURL.GetDebugWithTime 1837
- 61.153 CURL.SetDebugWithData 1981
- 61.155 CURL.SetDebugWithTime 1985
- 47.79 Calendar.Notification.Evaluate 1320
- 58.5 CoreLocation.SetFailEvaluate 1673
- 58.7 CoreLocation.SetUpdateLocationEvaluate 1675

- 63.17 Dialog.GetSheetEvaluate 2356
- 63.41 Dialog.SetSheetEvaluate 2382
- 65.17 Dictionary.SetList 2421
- 70.97 DynaPDF.ExtractPageRectText 2707
- 76.1 Events.Alarm.Copy 3505
- 76.2 Events.Alarm.GetAbsoluteDate 3507
- 76.3 Events.Alarm.GetEmailAddress 3508
- 76.4 Events.Alarm.GetProximity 3509
- 76.5 Events.Alarm.GetRelativeOffset 3510
- 76.6 Events.Alarm.GetSound 3511
- 76.7 Events.Alarm.GetStructuredLocation 3512
- 76.8 Events.Alarm.GetURL 3513
- 76.9 Events.Alarm.SetAbsoluteDate 3514
- 76.10 Events.Alarm.SetEmailAddress 3515
- 76.11 Events.Alarm.SetProximity 3516
- 76.12 Events.Alarm.SetRelativeOffset 3517
- 76.13 Events.Alarm.SetSound 3518
- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.15 Events.Alarm.SetURL 3522
- 76.16 Events.Alarm.TriggerDateRelativeTo 3523
- 76.17 Events.Alarm.Type 3524
- 76.18 Events.AuthorizationStatusForEntityType 3525
- 76.19 Events.Calendar.AllowsContentModifications 3527
- 76.20 Events.Calendar.CalendarIdentifier 3528
- 76.21 Events.Calendar.Duplicate 3529
- 76.22 Events.Calendar.GetColor 3530
- 76.23 Events.Calendar.GetSource 3532
- 76.24 Events.Calendar.GetTitle 3533
- 76.25 Events.Calendar.GetType 3534

	687
• 76.26 Events.Calendar.Immutable	3535
• 76.27 Events.Calendar.SetColor	3536
• 76.28 Events.Calendar.SetSource	3537
• 76.29 Events.Calendar.SetTitle	3538
• 76.30 Events.Calendar.Subscribed	3539
• 76.31 Events.Calendar.allowedEntityTypes	3540
• 76.32 Events.Calendar.supportedEventAvailabilities	3541
• 76.33 Events.CalendarCount	3542
• 76.34 Events.CalendarItemsWithExternalIdentifier	3543
• 76.35 Events.Calendars	3544
• 76.36 Events.ClearNotification	3545
• 76.37 Events.Commit	3546
• 76.38 Events.CompletedReminders	3547
• 76.39 Events.DelegateSources	3548
• 76.40 Events.Event.BirthdayPersonUniqueID	3549
• 76.41 Events.Event.GetAllDay	3550
• 76.42 Events.Event.GetAvailability	3551
• 76.43 Events.Event.GetEndDate	3552
• 76.44 Events.Event.GetStartDate	3553
• 76.45 Events.Event.GetStructuredLocation	3554
• 76.46 Events.Event.IsDetached	3555
• 76.47 Events.Event.OccurrenceDate	3556
• 76.48 Events.Event.Refresh	3557
• 76.49 Events.Event.SetAllDay	3558
• 76.50 Events.Event.SetAvailability	3559
• 76.51 Events.Event.SetEndDate	3560
• 76.52 Events.Event.SetStartDate	3562
• 76.53 Events.Event.SetStructuredLocation	3564
• 76.54 Events.Event.Status	3565

- 76.55 Events.Event.compareStartDateWithEvent 3566
- 76.56 Events.Event.organizer 3567
- 76.57 Events.EventStoreIdentifier 3568
- 76.58 Events.Events 3569
- 76.59 Events.IncompleteReminders 3570
- 76.60 Events.Initialize 3571
- 76.61 Events.Item.AddAlarm 3572
- 76.62 Events.Item.AddRecurrenceRule 3574
- 76.63 Events.Item.Alarms 3575
- 76.64 Events.Item.Attendees 3576
- 76.65 Events.Item.CalendarItemExternalIdentifier 3577
- 76.66 Events.Item.CalendarItemIdentifier 3579
- 76.67 Events.Item.Duplicate 3580
- 76.68 Events.Item.GetCalendar 3581
- 76.69 Events.Item.GetLocation 3582
- 76.70 Events.Item.GetNotes 3583
- 76.71 Events.Item.GetTimeZone 3584
- 76.72 Events.Item.GetTitle 3585
- 76.73 Events.Item.GetURL 3586
- 76.74 Events.Item.HasAlarms 3587
- 76.75 Events.Item.HasAttendees 3588
- 76.76 Events.Item.HasNotes 3589
- 76.77 Events.Item.HasRecurrenceRules 3590
- 76.78 Events.Item.RecurrenceRules 3591
- 76.79 Events.Item.RemoveAlarm 3592
- 76.80 Events.Item.RemoveRecurrenceRule 3593
- 76.81 Events.Item.SetCalendar 3594
- 76.82 Events.Item.SetLocation 3596
- 76.83 Events.Item.SetNotes 3598

	689
• 76.84 Events.Item.SetTimeZone	3600
• 76.85 Events.Item.SetTitle	3601
• 76.86 Events.Item.SetURL	3603
• 76.87 Events.Item.creationDate	3605
• 76.88 Events.Item.lastModifiedDate	3606
• 76.89 Events.NewAlarm	3607
• 76.90 Events.NewAlarmWithAbsoluteDate	3609
• 76.91 Events.NewAlarmWithRelativeOffset	3610
• 76.92 Events.NewCalendar	3611
• 76.93 Events.NewEvent	3612
• 76.94 Events.NewReminder	3614
• 76.95 Events.Object.HasChanges	3616
• 76.96 Events.Object.IsNew	3617
• 76.97 Events.Object.Refresh	3618
• 76.98 Events.Object.Reset	3619
• 76.99 Events.Object.Rollback	3620
• 76.100 Events.Participant.GetName	3621
• 76.101 Events.Participant.GetStatus	3622
• 76.102 Events.Participant.IsCurrentUser	3623
• 76.103 Events.Participant.Name	3624
• 76.104 Events.Participant.Person	3625
• 76.105 Events.Participant.Role	3626
• 76.106 Events.Participant.Status	3627
• 76.107 Events.Participant.Type	3628
• 76.108 Events.Participant.URL	3629
• 76.109 Events.RecurrenceDayOfWeek.Copy	3630
• 76.110 Events.RecurrenceDayOfWeek.DayOfTheWeek	3631
• 76.111 Events.RecurrenceDayOfWeek.NewWithDayOfTheWeek	3632
• 76.112 Events.RecurrenceDayOfWeek.WeekNumber	3633

- 76.113 Events.RecurrenceEnd.Copy 3634
- 76.114 Events.RecurrenceEnd.EndDate 3635
- 76.115 Events.RecurrenceEnd.NewWithEndDate 3636
- 76.116 Events.RecurrenceEnd.NewWithOccurrenceCount 3637
- 76.117 Events.RecurrenceEnd.OccurrenceCount 3638
- 76.118 Events.RecurrenceRule.CalendarIdentifier 3639
- 76.119 Events.RecurrenceRule.Copy 3640
- 76.120 Events.RecurrenceRule.DaysOfTheMonth 3641
- 76.121 Events.RecurrenceRule.DaysOfTheWeek 3642
- 76.122 Events.RecurrenceRule.DaysOfTheYear 3643
- 76.124 Events.RecurrenceRule.FirstDayOfTheWeek 3645
- 76.125 Events.RecurrenceRule.Frequency 3646
- 76.126 Events.RecurrenceRule.GetRecurrenceEnd 3647
- 76.127 Events.RecurrenceRule.Interval 3648
- 76.128 Events.RecurrenceRule.MonthsOfTheYear 3649
- 76.129 Events.RecurrenceRule.NewWithFrequency 3650
- 76.130 Events.RecurrenceRule.SetPositions 3653
- 76.131 Events.RecurrenceRule.SetRecurrenceEnd 3654
- 76.132 Events.RecurrenceRule.WeeksOfTheYear 3655
- 76.133 Events.RefreshSourcesIfNecessary 3656
- 76.134 Events.Reminder.GetCompleted 3657
- 76.135 Events.Reminder.GetCompletionDate 3658
- 76.136 Events.Reminder.GetDueDate 3659
- 76.138 Events.Reminder.GetPriority 3661
- 76.139 Events.Reminder.GetStartDate 3662
- 76.141 Events.Reminder.SetCompleted 3664
- 76.142 Events.Reminder.SetCompletionDate 3665
- 76.143 Events.Reminder.SetDueDate 3666
- 76.144 Events.Reminder.SetDueDateComponents 3668

	691
• 76.145 Events.Reminder.SetPriority	3670
• 76.146 Events.Reminder.SetStartDate	3672
• 76.147 Events.Reminder.SetStartDateComponents	3674
• 76.148 Events.Reminders	3676
• 76.149 Events.RemoveCalendar	3677
• 76.150 Events.RemoveEvent	3678
• 76.151 Events.RemoveReminder	3679
• 76.152 Events.Reset	3680
• 76.153 Events.SaveCalendar	3681
• 76.154 Events.SaveEvent	3682
• 76.155 Events.SaveReminder	3684
• 76.156 Events.SelectEvent	3687
• 76.157 Events.SetNotification	3688
• 76.158 Events.SetNotificationEvaluate	3690
• 76.159 Events.Source.Calendars	3691
• 76.160 Events.Source.Title	3692
• 76.161 Events.Source.Type	3693
• 76.162 Events.SourceWithType	3694
• 76.163 Events.Sources	3695
• 76.164 Events.StructuredLocation.Copy	3696
• 76.165 Events.StructuredLocation.GetGeoLocation	3697
• 76.166 Events.StructuredLocation.GetRadius	3698
• 76.167 Events.StructuredLocation.NewLocationWithTitle	3699
• 76.168 Events.StructuredLocation.SetGeoLocation	3701
• 76.169 Events.StructuredLocation.SetRadius	3702
• 76.170 Events.StructuredLocation.Title	3703
• 76.171 Events.defaultCalendarForNewEvents	3704
• 76.172 Events.defaultCalendarForNewReminders	3705
• 76.173 Events.requestAccessToEntityType	3706

- 80.23 FM.InsertSetUpdateProgressDialog 4132
- 83.10 FSEvents.GetEvaluate 4217
- 83.20 FSEvents.SetEvaluate 4230
- 78.26 Files.FolderSize 3811
- 78.27 Files.GetComment 3813
- 78.28 Files.GetFinderLabel 3814
- 78.54 Files.SetComment 3862
- 78.56 Files.SetFinderLabel 3864
- 81.10 Folders.UserDownloads 4181
- 81.16 Folders.UserTemporary 4187
- 82.6 FontManager.FontFile 4202
- 85.126 GImage.GetIPTCProfileValues 4505
- 113.4 Menubar.RemoveMenuCommand 5998
- 124.29 Plugin.LibSSHVersion 6294
- 124.33 Plugin.OpenSSLVersion 6300
- 127.19 PrintDialog.ClearOption 6403
- 127.20 PrintDialog.ClearOptions 6404
- 127.23 PrintDialog.GetAllPages 6408
- 127.25 PrintDialog.GetCopies 6410
- 127.28 PrintDialog.GetFirstPage 6413
- 127.29 PrintDialog.GetLastPage 6414
- 127.30 PrintDialog.GetLastSettings 6415
- 127.32 PrintDialog.GetOption 6418
- 127.41 PrintDialog.SetAllPages 6428
- 127.43 PrintDialog.SetCopies 6430
- 127.46 PrintDialog.SetFirstPage 6434
- 127.47 PrintDialog.SetLastPage 6435
- 127.49 PrintDialog.SetOption 6438
- 103.90 QuickList.SortWith 5552

	693
• 149.13 RSA.GeneratePrivateKey	7075
• 149.14 RSA.GetPublicKey	7077
• 73.14 RSA.PrivateDecrypt	3473
• 73.15 RSA.PrivateEncrypt	3476
• 73.16 RSA.PublicDecrypt	3479
• 73.17 RSA.PublicEncrypt	3482
• 149.15 RSA.Sign	7079
• 149.16 RSA.Verify	7084
• 137.10 RemoteControl.PressDialogButton	6703
• 137.11 RemoteControl.PressDialogButton.Clear	6704
• 137.13 RemoteControl.PressKeyLater	6708
• 156.28 SQL.GetFieldAsContainer	7336
• 156.48 SQL.GetParamAsContainer	7366
• 140.16 Schedule.GetLastTimeStamp	6807
• 144.29 SerialPort.SetDataAvailableEvaluate	6967
• 154.54 Socket.SetDataAvailableEvaluate	7252
• 154.57 Socket.SetErrorEvaluate	7256
• 154.63 Socket.SetNewConnectionEvaluate	7263
• 180.28 WebView.AllowsAnyHTTTPSCertificateForHost	8314
• 180.99 WebView.PressKey	8409
• 182.69 Window.Scrollbar.getHorizontalMaximum	8618
• 182.70 Window.Scrollbar.getHorizontalPosition	8619
• 182.71 Window.Scrollbar.getVerticalMaximum	8620
• 182.72 Window.Scrollbar.getVerticalPosition	8621
• 182.73 Window.Scrollbar.set	8622
• 189.9 WordFile.GetXML	8823
• 189.15 WordFile.Parts	8831
• 189.23 WordFile.SetXML	8843
• 191.3 XML.Canonical	9258
• 191.8 XML.Format	9267

252 functions.

Chapter 10

New in Version 6.3

- 60.22 CUPS.PrintDataEncoding 1757
- 61.47 CURL.GetDebugWithProgress 1836
- 61.154 CURL.SetDebugWithProgress 1983
- 51.6 Clipboard.GetPicture 1442
- 51.14 Clipboard.SetPicture 1454
- 70.13 DynaPDF.AppendImagePage 2571
- 70.14 DynaPDF.AppendImagePages 2573
- 70.104 DynaPDF.FindEmbeddedFile 2722
- 72.19 EmailParser.ParseContainer 3431
- 72.22 EmailParser.ProcessImageReferences 3435
- 75.3 EventMonitor.GetEnabled 3495
- 75.10 EventMonitor.SetEnabled 3504
- 79.11 FM.DataViewerContent 3897
- 79.43 FM.MouseWheelScriptTrigger 3973
- 78.11 Files.CreateHardLink 3787
- 78.12 Files.CreateSymbolicLink 3789
- 85.170 GImage.GetXMP 4552
- 85.299 GImage.SetXMP 4723
- 100.64 JSON.IsValid 5332

- 103.10 List.DeCombine 5430
- 112.66 MenuItem.GetSelectable 5933
- 112.103 MenuItem.SetSelectable 5981
- 113.2 Menubar.IsMenuCommandChecked 5995
- 156.17 SQL.FreeAllConnections 7323
- 157.1 SSH.CloseChannel 7479
- 157.2 SSH.Connect 7481
- 157.3 SSH.Disconnect 7485
- 157.4 SSH.EOF 7486
- 157.5 SSH.Execute 7487
- 157.6 SSH.Flush 7490
- 157.7 SSH.FreeChannel 7491
- 157.8 SSH.GetExitState 7492
- 157.9 SSH.GetIP 7493
- 157.10 SSH.GetPort 7494
- 157.11 SSH.GetTag 7495
- 157.12 SSH.GetTimeout 7496
- 157.13 SSH.GetUserName 7497
- 157.14 SSH.HostKey 7498
- 157.15 SSH.HostKeyHash 7499
- 157.16 SSH.IsAuthenticated 7500
- 157.17 SSH.New 7501
- 157.18 SSH.OpenSession 7504
- 157.19 SSH.ReadHex 7505
- 157.20 SSH.ReadText 7506
- 157.21 SSH.Release 7508
- 157.22 SSH.RequestPTY 7509
- 157.23 SSH.SendEOF 7510
- 157.24 SSH.SessionHandshake 7511

	697
• 157.25 SSH.SetEnv	7512
• 157.26 SSH.SetTag	7513
• 157.27 SSH.SetTimeout	7514
• 157.28 SSH.Shell	7515
• 157.36 SSH.UserAuthKeyboardInteractive	7524
• 157.37 SSH.UserAuthList	7525
• 157.38 SSH.UserAuthPassword	7526
• 157.39 SSH.UserAuthPublicKey	7527
• 157.40 SSH.UserAuthPublicKeyFile	7529
• 157.41 SSH.WaitClosed	7531
• 157.42 SSH.WaitEOF	7532
• 157.43 SSH.WaitSocket	7533
• 157.44 SSH.WriteHex	7534
• 157.45 SSH.WriteText	7535
• 150.1 SmartCard.Available	7087
• 150.2 SmartCard.BeginTransaction	7088
• 150.3 SmartCard.Cancel	7089
• 150.4 SmartCard.CancelTransaction	7090
• 150.5 SmartCard.Connect	7091
• 150.6 SmartCard.Control	7093
• 150.7 SmartCard.Disconnect	7094
• 150.8 SmartCard.EndTransaction	7095
• 150.9 SmartCard.GetActiveProtocol	7096
• 150.10 SmartCard.GetAttribute	7097
• 150.12 SmartCard.Init	7100
• 150.13 SmartCard.ListReaderGroups	7103
• 150.14 SmartCard.ListReaders	7104
• 150.18 SmartCard.Reconnect	7111
• 150.19 SmartCard.Release	7112

• 150.20 SmartCard.SetAttribute	7113
• 150.22 SmartCard.Status	7116
• 150.23 SmartCard.Transmit	7117
• 150.24 SmartCard.TransmitReceiveHeader	7120
• 150.25 SmartCard.Valid	7121
• 155.6 Speech.Speak	7280
• 159.26 SyntaxColoring.GetRelationGraphSearchBoxPreferredSize	7590
• 159.63 SyntaxColoring.SetRelationGraphSearchBoxPreferredSize	7630
• 161.45 SystemInfo.WinSystemMetrics	7698
• 161.48 SystemInfo.isElCapitan	7702
• 161.56 SystemInfo.isSierra	7710
• 161.64 SystemInfo.isYosemite	7718
• 180.94 WebView.Passwords.Clear	8401
• 180.95 WebView.Passwords.Install	8402
• 180.96 WebView.Passwords.Set	8404
• 182.20 Window.GetCurrentTag	8560
• 182.27 Window.GetTag	8567
• 182.78 Window.SetCurrentTag	8630
• 182.94 Window.SetTag	8651
• 189.8 WordFile.GetMediaFile	8822
• 189.11 WordFile.MediaFiles	8825
• 189.21 WordFile.SetMarkers	8840
• 189.22 WordFile.SetMediaFile	8841

100 functions.

Chapter 11

New in Version 6.4

- 55.28 Container.ReadFile 1645
- 55.35 Container.WriteFile 1658
- 63.1 Dialog.AddField 2339
- 63.2 Dialog.ClearFields 2341
- 63.9 Dialog.GetFieldText 2348
- 63.34 Dialog.SetFieldText 2375
- 70.1 DynaPDF.AddActionToObj 2549
- 70.46 DynaPDF.CreateButton 2620
- 70.55 DynaPDF.CreateJSAction 2640
- 70.123 DynaPDF.GetBBox 2751
- 70.134 DynaPDF.GetColorSpaceInfo 2764
- 70.175 DynaPDF.GetImage 2812
- 70.176 DynaPDF.GetImageCount 2815
- 70.286 DynaPDF.ListImages 2974
- 70.292 DynaPDF.OpenOutputFileEncrypted 2986
- 70.404 DynaPDF.SetNumberFormat 3186
- 72.23 EmailParser.ReceiveDate 3436
- 80.13 FM.GetSQLBatchMode 4103
- 80.30 FM.SQL.InsertRecords 4146

• 156.1 FM.SQL.InsertRecordsToSQL	7291
• 80.37 FM.SetSQLBatchMode	4162
• 78.2 Files.AddedToDirectoryDate	3773
• 90.7 IKSlideShow.Count	4898
• 90.8 IKSlideShow.GetAudioFile	4899
• 90.13 IKSlideShow.GetScreen	4904
• 90.17 IKSlideShow.ItemAtIndex	4908
• 90.19 IKSlideShow.SetAudioFile	4911
• 90.24 IKSlideShow.SetScreen	4916
• 91.64 ImageCapture.CloseDevice	4991
• 91.66 ImageCapture.DeviceInfo	4993
• 91.67 ImageCapture.Devices	4995
• 91.70 ImageCapture.Features	4999
• 91.71 ImageCapture.GetFeatureValue	5000
• 91.73 ImageCapture.GetParameter	5002
• 91.75 ImageCapture.ImagePaths	5006
• 91.76 ImageCapture.Initialize	5007
• 91.79 ImageCapture.OpenDevice	5010
• 91.81 ImageCapture.PreferredDevice	5013
• 91.85 ImageCapture.RequestOverviewScan	5017
• 91.86 ImageCapture.RequestScan	5018
• 91.87 ImageCapture.RequestSelectFunctionalUnit	5021
• 91.90 ImageCapture.SetFeatureValue	5025
• 91.91 ImageCapture.SetParameter	5026
• 91.93 ImageCapture.cancelScan	5031
• 102.3 LDAP.AddList	5369
• 103.16 List.HasValue	5438
• 108.8 Math.DecodeNumber	5761
• 108.9 Math.EncodeNumber	5763

	701
• 123.3 PHP.GetResultContainer	6250
• 130.15 ProgressDialog.Reset	6510
• 138.18 RichText.ReplaceTexts	6736
• 139.20 RunTask.Wait	6781
• 156.23 SQL.GetCommandTag	7331
• 156.26 SQL.GetConnectionTag	7334
• 156.76 SQL.ListCommands	7405
• 156.77 SQL.ListConnections	7406
• 156.99 SQL.SetCommandTag	7438
• 156.102 SQL.SetConnectionTag	7446
• 140.27 Schedule.ReleaseAll	6819
• 150.11 SmartCard.HeaderTemplate	7099
• 155.1 Speech.AvailableVoices	7275
• 166.1 Time.Format	7925
• 166.2 Time.Parse	7929
• 167.4 Toolbar.SetImage	7942
• 167.5 Toolbar.SetLabel	7944
• 167.6 Toolbar.SetPaletteLabel	7946
• 167.7 Toolbar.SetTooltip	7947
• 180.70 WebView.GetInternetExplorerVersion	8372
• 180.133 WebView.SetInternetExplorerVersion	8469

69 functions.

Chapter 12

New in Version 6.5

- 38.6 AVAsset.ImageActualTime 994
- 38.23 AVAsset.RequestImageTimePrecision 1016
- 34.9 App.MemoryUsed 917
- 55.3 Container.DecodeFromHex 1609
- 55.12 Container.GetHex 1623
- 70.45 DynaPDF.ConvertStyledText 2619
- 70.261 DynaPDF.GetXFASStream 2918
- 70.262 DynaPDF.GetXFASStreamCount 2920
- 70.385 DynaPDF.SetFloatPrecision 3153
- 70.506 DynaPDF.WriteStyledText 3358
- 70.507 DynaPDF.WriteStyledTextEx 3360
- 80.7 FM.ExecuteFileSQLOnIdle 4086
- 78.39 Files.ListVolumes 3833
- 82.4 Font.CalculateTextWidth 4199
- 85.112 GMImage.GetEXIFOrientation 4490
- 85.250 GMImage.SetEXIFOrientation 4661
- 91.1 IKDeviceBrowserPanel.Close 4921
- 91.2 IKDeviceBrowserPanel.GetCancelButtonLabel 4923
- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924

- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.7 IKDeviceBrowserPanel.GetHeight 4928
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.9 IKDeviceBrowserPanel.GetPrompt 4930
- 91.10 IKDeviceBrowserPanel.GetSelectButtonLabel 4931
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.12 IKDeviceBrowserPanel.GetWindowTitle 4933
- 91.13 IKDeviceBrowserPanel.Hide 4934
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.15 IKDeviceBrowserPanel.SelectedDeviceID 4936
- 91.16 IKDeviceBrowserPanel.SelectedDeviceName 4937
- 91.17 IKDeviceBrowserPanel.SetCancelButtonLabel 4938
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.25 IKDeviceBrowserPanel.SetSelectButtonLabel 4946
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.28 IKDeviceBrowserPanel.SetWindowTitle 4950
- 91.29 IKDeviceBrowserPanel.Show 4951
- 91.30 IKDeviceBrowserPanel.Visible 4953
- 91.31 IKScannerDevicePanel.ClearImage 4954
- 91.32 IKScannerDevicePanel.Close 4955

	705
• 91.33 IKScannerDevicePanel.GetCombine	4956
• 91.34 IKScannerDevicePanel.GetDocumentName	4957
• 91.35 IKScannerDevicePanel.GetDownloadsDirectory	4958
• 91.36 IKScannerDevicePanel.GetHeight	4959
• 91.37 IKScannerDevicePanel.GetMode	4960
• 91.38 IKScannerDevicePanel.GetOverviewControlLabel	4961
• 91.39 IKScannerDevicePanel.GetScanControlLabel	4962
• 91.40 IKScannerDevicePanel.GetScannerDeviceID	4963
• 91.41 IKScannerDevicePanel.GetScannerDeviceName	4964
• 91.42 IKScannerDevicePanel.GetWidth	4965
• 91.43 IKScannerDevicePanel.GetWindowTitle	4966
• 91.44 IKScannerDevicePanel.Hide	4967
• 91.45 IKScannerDevicePanel.ImageCount	4968
• 91.46 IKScannerDevicePanel.NextImage	4969
• 91.47 IKScannerDevicePanel.Reset	4970
• 91.49 IKScannerDevicePanel.SetCombine	4973
• 91.50 IKScannerDevicePanel.SetDocumentName	4974
• 91.51 IKScannerDevicePanel.SetDownloadsDirectory	4975
• 91.52 IKScannerDevicePanel.SetHeight	4976
• 91.53 IKScannerDevicePanel.SetMode	4977
• 91.54 IKScannerDevicePanel.SetOverviewControlLabel	4978
• 91.55 IKScannerDevicePanel.SetScanControlLabel	4979
• 91.56 IKScannerDevicePanel.SetScannerDeviceID	4980
• 91.57 IKScannerDevicePanel.SetScannerDeviceName	4981
• 91.58 IKScannerDevicePanel.SetTrigger	4982
• 91.59 IKScannerDevicePanel.SetWidth	4984
• 91.60 IKScannerDevicePanel.SetWindowTitle	4985
• 91.61 IKScannerDevicePanel.Show	4986
• 91.62 IKScannerDevicePanel.Visible	4988

- 97.1 Java.CallObjectMethod 5157
- 97.2 Java.CallStaticMethod 5159
- 97.3 Java.GetContainerFileName 5161
- 97.4 Java.GetObjectField 5162
- 97.5 Java.GetStaticField 5164
- 97.6 Java.Initialize 5166
- 97.7 Java.Initialized 5169
- 97.8 Java.NewClassObject 5170
- 97.9 Java.ObjectClassName 5172
- 97.10 Java.Release 5173
- 97.11 Java.ReleaseAll 5174
- 97.12 Java.SetContainerFileName 5175
- 97.13 Java.SetObjectField 5176
- 97.14 Java.SetStaticField 5178
- 104.14 ListDialog.GetPositionX 5577
- 104.15 ListDialog.GetPositionY 5578
- 104.34 ListDialog.SetPosition 5597
- 104.35 ListDialog.SetPositionX 5598
- 104.36 ListDialog.SetPositionY 5599
- 112.16 Menu.GetURL 5876
- 112.36 Menu.SetURL 5902
- 112.41 MenuItem.GetBackColor 5908
- 112.45 MenuItem.GetFontColor 5912
- 112.68 MenuItem.GetStrikeOut 5935
- 112.73 MenuItem.GetURL 5941
- 112.82 MenuItem.SetBackColor 5950
- 112.86 MenuItem.SetFontColor 5956
- 112.105 MenuItem.SetStrikeOut 5984
- 112.110 MenuItem.SetURL 5989

	707
• 120.7 OCR.GetTextWithCoordinates	6116
• 126.1 Preferences.ClearRecentFiles	6373
• 127.38 PrintDialog.GetResetDestination	6424
• 127.56 PrintDialog.SetResetDestination	6447
• 128.2 Printer.CurrentPaperFormat	6450
• 128.3 Printer.CurrentPaperSource	6452
• 128.4 Printer.CurrentPrintWhat	6454
• 128.5 Printer.CurrentPrinterName	6456
• 128.6 Printer.ErrorLog	6458
• 128.8 Printer.PaperFormats	6460
• 128.9 Printer.PaperSources	6462
• 128.10 Printer.Print	6464
• 128.12 Printer.PrinterInfo	6468
• 128.14 Printer.PrinterNames	6472
• 128.15 Printer.SetPrinter	6474
• 129.4 Process.GetCurrentDirectory	6480
• 129.8 Process.LoadLibrary	6484
• 129.9 Process.SetCurrentDirectory	6485
• 138.8 RichText.RTF	6721
• 140.24 Schedule.GetURL	6815
• 140.36 Schedule.SetURL	6828
• 143.3 SendMail.AddAttachmentText	6881
• 143.10 SendMail.AttachmentCount	6894
• 154.56 Socket.SetDataAvailableURL	7255
• 154.59 Socket.SetErrorURL	7259
• 154.65 Socket.SetNewConnectionURL	7266
• 159.51 SyntaxColoring.ScriptIfLoopHighlight.GetEnabled	7617
• 159.52 SyntaxColoring.ScriptIfLoopHighlight.SetEnabled	7618
• 163.11 TAPI.GetCallStateEvaluate	7738

- 163.14 TAPI.GetCallStateURL 7741
- 163.15 TAPI.GetNewCallEvaluate 7742
- 163.18 TAPI.GetNewCallURL 7745
- 163.31 TAPI.SetCallStateEvaluate 7758
- 163.33 TAPI.SetCallStateURL 7760
- 163.34 TAPI.SetNewCallEvaluate 7761
- 163.36 TAPI.SetNewCallURL 7763
- 168.2 TouchBar.AddButton 7960
- 168.3 TouchBar.AssignToApp 7963
- 168.4 TouchBar.AssignToWindow 7965
- 168.5 TouchBar.Available 7967
- 168.6 TouchBar.Clear 7968
- 168.7 TouchBar.Create 7969
- 168.8 TouchBar.GetAutomaticCustomizeTouchBarItemEnabled 7970
- 168.9 TouchBar.GetCustomizationAllowedItemIdentifiers 7971
- 168.10 TouchBar.GetCustomizationIdentifier 7972
- 168.11 TouchBar.GetCustomizationRequiredItemIdentifiers 7973
- 168.12 TouchBar.GetDefaultItemIdentifiers 7974
- 168.13 TouchBar.GetItemIdentifiers 7975
- 168.14 TouchBar.GetPrincipalItemIdentifier 7976
- 168.15 TouchBar.Release 7977
- 168.16 TouchBar.SetAutomaticCustomizeTouchBarItemEnabled 7978
- 168.17 TouchBar.SetCustomizationAllowedItemIdentifiers 7979
- 168.18 TouchBar.SetCustomizationIdentifier 7980
- 168.19 TouchBar.SetCustomizationRequiredItemIdentifiers 7981
- 168.20 TouchBar.SetDefaultItemIdentifiers 7982
- 168.21 TouchBar.SetPrincipalItemIdentifier 7983
- 168.22 TouchBar.ToggleCustomizationPalette 7984
- 168.23 TouchBar.Visible 7985

	709
• 171.1 Updater.CheckForUpdates	8129
• 171.2 Updater.CheckForUpdatesInBackground	8130
• 171.3 Updater.GetAutomaticallyChecksForUpdates	8131
• 171.4 Updater.GetAutomaticallyDownloadsUpdates	8132
• 171.5 Updater.GetFeedURL	8133
• 171.6 Updater.GetSendsSystemProfile	8134
• 171.7 Updater.LastUpdateCheckDate	8135
• 171.8 Updater.SetAutomaticallyChecksForUpdates	8136
• 171.9 Updater.SetAutomaticallyDownloadsUpdates	8137
• 171.10 Updater.SetSendsSystemProfile	8138
• 171.11 Updater.UpdateInProgress	8139
• 181.1 WIA.ClearCurrentDevice	8493
• 181.2 WIA.DeviceCount	8494
• 181.4 WIA.DevicePropertyKeys	8497
• 181.5 WIA.DevicePropertyValue	8500
• 181.6 WIA.GetCurrentDevice	8503
• 181.8 WIA.Image	8505
• 181.9 WIA.ImageCount	8507
• 181.10 WIA.ImageDialog	8508
• 181.12 WIA.Initialize	8511
• 181.14 WIA.ItemPropertyKeys	8514
• 181.15 WIA.ItemPropertyValue	8517
• 181.16 WIA.ListItems	8520
• 181.17 WIA.Scan	8521
• 181.18 WIA.SelectDeviceDialog	8523
• 181.19 WIA.SetCurrentDevice	8524
• 181.20 WIA.SetDevicePropertyValue	8525
• 181.21 WIA.SetItemPropertyValue	8527
• 180.77 WebView.GetSilent	8381

- 180.137 `WebView.SetSilent` 8477
- 182.23 `Window.GetMaxHeight` 8563
- 182.24 `Window.GetMaxWidth` 8564
- 182.25 `Window.GetMinHeight` 8565
- 182.26 `Window.GetMinWidth` 8566
- 182.54 `Window.ListCommands` 8596
- 182.64 `Window.RunCommand` 8610
- 182.67 `Window.Scrollbar.GetScrollElasticity` 8615
- 182.68 `Window.Scrollbar.SetScrollElasticity` 8616
- 182.84 `Window.SetMaxHeight` 8637
- 182.85 `Window.SetMaxWidth` 8638
- 182.86 `Window.SetMinHeight` 8639
- 182.87 `Window.SetMinWidth` 8640
- 182.109 `Window.ShowTableViewDialog` 8670
- 190.43 `XL.CopyRow` 8906
- 190.44 `XL.CopySheet` 8908
- 190.166 `XL.Sheet.CellWriteFormulaBoolean` 9089
- 190.167 `XL.Sheet.CellWriteFormulaNumber` 9091
- 190.168 `XL.Sheet.CellWriteFormulaText` 9093
- 190.241 `XL.Sheet.RemoveComment` 9180

213 functions.

Chapter 13

New in Version 7.0

- 61.33 CURL.GetBatchCurrentFileName 1817
- 61.34 CURL.GetBatchCurrentFilePath 1818
- 61.35 CURL.GetBatchDestinationPath 1819
- 61.36 CURL.GetBatchFileNames 1820
- 61.152 CURL.SetBatchDestinationPath 1979
- 70.2 DynaPDF.AddAnnotToPage 2552
- 70.92 DynaPDF.EndTemplate 2700
- 70.137 DynaPDF.GetContent 2767
- 70.204 DynaPDF.GetLinkHighlightMode 2849
- 70.267 DynaPDF.ImportEncryptionSettings 2927
- 70.296 DynaPDF.PageLink 3001
- 70.297 DynaPDF.PageLinkEx 3004
- 70.303 DynaPDF.Print.GetDevMode 3021
- 70.304 DynaPDF.Print.GetDevNames 3022
- 70.305 DynaPDF.Print.SetDevMode 3023
- 70.306 DynaPDF.Print.SetDevNames 3025
- 70.318 DynaPDF.ResetEncryptionSettings 3049
- 70.321 DynaPDF.RotateTemplate 3055
- 70.356 DynaPDF.SetContent 3110

• 70.400 DynaPDF.SetLinkHighlightMode	3180
• 70.500 DynaPDF.WatermarkAnnot	3343
• 79.1 FM.AllowFileDragDrop	3883
• 80.25 FM.SQL.CSV	4135
• 80.36 FM.SQL.Text	4159
• 85.215 GMImage.ReleaseAll	4614
• 102.4 LDAP.AddRecord	5371
• 102.15 LDAP.ModifyRecord	5391
• 48.1 PKCS12.CA	1345
• 48.2 PKCS12.CACount	1347
• 48.3 PKCS12.Cert	1348
• 48.4 PKCS12.PKey	1349
• 48.5 PKCS12.ReadFromContainer	1350
• 48.6 PKCS12.ReadFromFile	1352
• 48.7 PKCS12.Release	1354
• 48.15 PKey.Bits	1362
• 48.16 PKey.DescriptionPrivateKey	1363
• 48.17 PKey.DescriptionPublicKey	1364
• 48.18 PKey.GetPrivateKey	1365
• 48.19 PKey.GetPublicKey	1366
• 48.20 PKey.Release	1367
• 48.21 PKey.Type	1368
• 125.10 PortMidi.GetDeviceID	6350
• 125.12 PortMidi.GetDeviceName	6353
• 125.26 PortMidi.TimeStamp	6372
• 127.33 PrintDialog.GetPageNumberingOffset	6419
• 127.37 PrintDialog.GetReset	6423
• 127.50 PrintDialog.SetPageNumberingOffset	6440
• 127.55 PrintDialog.SetReset	6446

	713
• 144.15 SerialPort.HasLine	6946
• 144.23 SerialPort.ReadLine	6961
• 150.15 SmartCard.PerformSignature	7106
• 150.16 SmartCard.ReadCertificate	7107
• 189.17 WordFile.RemoveTableRow	8833
• 48.22 X509.Description	1369
• 48.23 X509.Duplicate	1370
• 48.24 X509.IssuerName	1371
• 48.25 X509.Name	1372
• 48.26 X509.Read	1373
• 48.27 X509.ReadFromContainer	1374
• 48.28 X509.ReadFromFile	1375
• 48.29 X509.Release	1376
• 48.30 X509.SerialNumber	1377
• 48.32 X509.SubjectName	1379
• 48.33 X509.Version	1380
• 191.4 XML.ClearVariables	9260
• 191.7 XML.ExtractText	9265
• 191.9 XML.GetAttribute	9269
• 191.11 XML.HasAttribute	9272
• 191.22 XML.ListAttributes	9287
• 191.23 XML.NodeCount	9288
• 191.24 XML.NodeNames	9289
• 191.33 XML.SetVariables	9305
• 191.34 XML.SubTree	9307

73 functions.

Chapter 14

New in Version 7.1

• 40.3 AVPlayer.GetDuration	1060
• 40.7 AVPlayer.GetMuted	1064
• 40.10 AVPlayer.GetRate	1067
• 40.11 AVPlayer.GetTime	1068
• 40.12 AVPlayer.GetVolume	1069
• 40.13 AVPlayer.OpenContainer	1070
• 40.14 AVPlayer.OpenFile	1072
• 40.15 AVPlayer.OpenURL	1074
• 40.16 AVPlayer.Pause	1075
• 40.17 AVPlayer.Play	1076
• 40.18 AVPlayer.Release	1078
• 40.19 AVPlayer.ReleaseAll	1079
• 40.22 AVPlayer.SetMuted	1082
• 40.25 AVPlayer.SetRate	1086
• 40.26 AVPlayer.SetTime	1087
• 40.27 AVPlayer.SetVolume	1088
• 37.10 Audit.GetEnabled	970
• 37.17 Audit.SetEnabled	977
• 43.8 Barcode.GetPrimary	1153

- 43.14 Barcode.SetPrimary 1164
- 63.5 Dialog.GetButton 2344
- 63.31 Dialog.SetButton 2371
- 65.18 Dictionary.SetQuickList 2422
- 66.1 DirectoryWatcher.AddDirectory 2437
- 66.2 DirectoryWatcher.ChangeCount 2439
- 66.3 DirectoryWatcher.Create 2440
- 66.4 DirectoryWatcher.GetEvaluate 2441
- 66.5 DirectoryWatcher.GetFileName 2442
- 66.6 DirectoryWatcher.GetScriptName 2443
- 66.7 DirectoryWatcher.NextChange 2444
- 66.8 DirectoryWatcher.Release 2445
- 66.10 DirectoryWatcher.SetEvaluate 2447
- 66.11 DirectoryWatcher.SetFileName 2448
- 66.12 DirectoryWatcher.SetScriptName 2449
- 70.263 DynaPDF.HaveOpenDocument 2921
- 70.264 DynaPDF.HaveOpenPage 2922
- 78.33 Files.IsHidden 3821
- 78.57 Files.SetHidden 3865
- 88.5 HotKey.GetKeyUp 4835
- 88.17 HotKey.SetKeyUp 4852
- 100.42 JSON.GetArrayPathItems 5301
- 103.3 List.AddValue 5420
- 103.14 List.GetValue 5436
- 103.17 List.InsertValue 5440
- 103.25 List.Remove 5451
- 103.30 List.RemoveValue 5459
- 103.33 List.SetValue 5463
- 124.48 Plugin.isDebug 6318

	717
• 125.5 PortMidi.CurrentEvent	6345
• 129.7 Process.KeepFrontMost	6483
• 130.32 Progressdialog.GetEvaluate	6539
• 130.33 Progressdialog.GetFileName	6540
• 130.34 Progressdialog.GetScriptName	6541
• 130.35 Progressdialog.SetEvaluate	6542
• 130.36 Progressdialog.SetScript	6543
• 133.25 QTMovie.ReleaseAll	6606
• 143.15 SendMail.GetHTMLText	6900
• 143.16 SendMail.GetInReplyTo	6901
• 143.17 SendMail.GetMessageID	6902
• 143.18 SendMail.GetPlainText	6903
• 143.19 SendMail.GetRichText	6904
• 143.20 SendMail.GetSMTPPassword	6905
• 143.21 SendMail.GetSMTPServer	6906
• 143.22 SendMail.GetSMTPUserName	6907
• 143.24 SendMail.GetSubject	6909
• 159.6 SyntaxColoring.CheckVariableDeclaration.Notification.Disable	7569
• 159.7 SyntaxColoring.CheckVariableDeclaration.Notification.Enable	7570
• 159.8 SyntaxColoring.CheckVariableDeclaration.Notification.Enabled	7571
• 180.66 WebView.GetHidden	8367
• 180.132 WebView.SetHidden	8468
• 186.1 WinSendMail.AddAttachmentContainer	8739
• 186.2 WinSendMail.AddAttachmentFile	8741
• 186.3 WinSendMail.AddAttachmentText	8743
• 186.4 WinSendMail.AddBCC	8744
• 186.5 WinSendMail.AddCC	8746
• 186.6 WinSendMail.AddRecipient	8748
• 186.7 WinSendMail.AddTo	8750

• 186.8 WinSendMail.AttachmentCount	8752
• 186.9 WinSendMail.ClearAttachments	8753
• 186.10 WinSendMail.ClearRecipients	8754
• 186.11 WinSendMail.CreateEmail	8755
• 186.12 WinSendMail.GetSubject	8757
• 186.13 WinSendMail.GetText	8758
• 186.14 WinSendMail.Release	8759
• 186.15 WinSendMail.Send	8760
• 186.16 WinSendMail.SendAnsi	8761
• 186.18 WinSendMail.SetFrom	8763
• 186.19 WinSendMail.SetSubject	8764
• 186.20 WinSendMail.SetText	8765
• 189.3 WordFile.AppendTableRow	8816
• 189.4 WordFile.DuplicateTableRow	8818
• 191.16 XML.Import.SetBaseFields	9280
• 191.17 XML.Import.SetExtraField	9281

93 functions.

Chapter 15

New in Version 7.2

- 61.146 `CURL.ReceiveData` 1968
- 61.147 `CURL.ReceiveText` 1970
- 61.150 `CURL.SendData` 1975
- 61.151 `CURL.SendText` 1977
- 61.184 `CURL.SetOptionConnectOnly` 2032
- 61.386 `CURL.SetupAWS` 2320
- 61.389 `CURL.UseSystemCertificates` 2330
- 55.20 `Container.GetText` 1633
- 63.6 `Dialog.GetButtonPressed` 2345
- 70.36 `DynaPDF.ChangeSeparationColor` 2604
- 70.102 `DynaPDF.FileLink` 2718
- 70.312 `DynaPDF.RenameSpotColor` 3035
- 76.123 `Events.RecurrenceRule.Description` 3644
- 78.55 `Files.SetCreationDate` 3863
- 78.58 `Files.SetModificationDate` 3866
- 81.14 `Folders.UserPictures` 4185
- 124.12 `IsMobile` 6273
- 118.6 `Notification.UnlistenAll` 6101
- 122.2 `PDFKit.AddImageFilePage` 6155

- 124.23 Plugin.FunctionCount 6288
- 124.36 Plugin.ScriptStepParameter 6304
- 124.37 Plugin.ScriptStepParameterCount 6305
- 103.41 QuickList.AddMultiValue 5476
- 136.1 Registry.CreateKey 6679
- 136.2 Registry.DeleteKey 6681
- 136.3 Registry.DeleteTree 6682
- 136.4 Registry.DeleteValue 6683
- 136.5 Registry.FlushKey 6684
- 136.6 Registry.GetValue 6685
- 136.7 Registry.GetValueType 6687
- 136.8 Registry.ListKeys 6688
- 136.9 Registry.ListValues 6689
- 136.10 Registry.SetValue 6690
- 154.8 Socket.ClearNewConnectionHandler 7193
- 159.25 SyntaxColoring.GetMinCalcFontSize 7589
- 159.62 SyntaxColoring.SetMinCalcFontSize 7629
- 159.76 SyntaxColoring.ZoomButton.GetEnabled 7644
- 159.77 SyntaxColoring.ZoomButton.SetEnabled 7645
- 164.42 Text.Length 7835
- 170.1 UNNotification.Action 8065
- 170.2 UNNotification.AddUserInfo 8067
- 170.5 UNNotification.Badge 8070
- 170.6 UNNotification.Body 8071
- 170.7 UNNotification.CategoryIdentifier 8072
- 170.8 UNNotification.Date 8073
- 170.10 UNNotification.DeliveredNotifications 8075
- 170.12 UNNotification.Identifier 8077
- 170.13 UNNotification.IsRegisteredForRemoteNotifications 8078

	721
• 170.14 UNNotification.LaunchImageName	8079
• 170.15 UNNotification.New	8080
• 170.16 UNNotification.NextTriggerDate	8082
• 170.17 UNNotification.NotificationSettings	8083
• 170.18 UNNotification.PendingNotificationRequests	8085
• 170.19 UNNotification.Region	8086
• 170.20 UNNotification.Release	8088
• 170.21 UNNotification.ReleaseAll	8089
• 170.22 UNNotification.RemoteNotificationsDeviceToken	8090
• 170.23 UNNotification.RemoteNotificationsError	8091
• 170.24 UNNotification.RemoveAllDeliveredNotifications	8092
• 170.25 UNNotification.RemoveAllPendingNotificationRequests	8093
• 170.26 UNNotification.RemoveDeliveredNotificationsWithIdentifiers	8094
• 170.27 UNNotification.RemovePendingNotificationRequestsWithIdentifiers	8095
• 170.28 UNNotification.Repeats	8096
• 170.29 UNNotification.Schedule	8097
• 170.30 UNNotification.SetActionScript	8099
• 170.31 UNNotification.SetBadge	8100
• 170.32 UNNotification.SetBody	8102
• 170.34 UNNotification.SetCalendarTrigger	8105
• 170.35 UNNotification.SetCategoryIdentifier	8107
• 170.36 UNNotification.SetLaunchImageName	8108
• 170.37 UNNotification.SetLocationTrigger	8109
• 170.39 UNNotification.SetScript	8112
• 170.40 UNNotification.SetSound	8114
• 170.41 UNNotification.SetSubTitle	8115
• 170.42 UNNotification.SetThreadIdentifier	8116
• 170.43 UNNotification.SetTimeIntervalTrigger	8117
• 170.44 UNNotification.SetTitle	8119

- 170.45 UNNotification.SubTitle 8121
- 170.46 UNNotification.ThreadIdentifier 8122
- 170.47 UNNotification.TimeInterval 8123
- 170.48 UNNotification.Title 8124
- 170.49 UNNotification.Type 8126
- 170.50 UNNotification.UserInfoKeys 8127
- 170.51 UNNotification.UserInfoValue 8128
- 182.104 Window.ShowCharacterPalette 8663
- 184.1 WindowsUserNotification.Available 8711
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.6 WindowsUserNotification.HideNotification 8716
- 184.7 WindowsUserNotification.Initialize 8717
- 184.8 WindowsUserNotification.Isinitialized 8719
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.16 WindowsUserNotification.ShowNotification 8730
- 184.17 WindowsUserNotification.XMLUsed 8731
- 190.22 XL.Book.IsDate1904 8879
- 190.23 XL.Book.IsTemplate 8880
- 190.24 XL.Book.MoveSheet 8881
- 190.31 XL.Book.SetDate1904 8891
- 190.35 XL.Book.SetTemplate 8895

	723
• 190.39 XL.Book.Version	8899
• 190.121 XL.Sheet.AddIgnoredError	9019
• 190.123 XL.Sheet.ApplyFilter	9022
• 190.124 XL.Sheet.AutoFilter	9023
• 190.127 XL.Sheet.AutoFilter.ColumnSize	9027
• 190.132 XL.Sheet.AutoFilter.GetRef	9033
• 190.133 XL.Sheet.AutoFilter.GetSort	9034
• 190.134 XL.Sheet.AutoFilter.GetSortRange	9035
• 190.137 XL.Sheet.AutoFilter.SetRef	9039
• 190.138 XL.Sheet.AutoFilter.SetSort	9041
• 190.164 XL.Sheet.CellWriteError	9084
• 190.243 XL.Sheet.RemoveFilter	9183
• 190.245 XL.Sheet.RightToLeft	9186
• 190.279 XL.Sheet.SetProtectEx	9234
• 190.280 XL.Sheet.SetRightToLeft	9236
• 190.283 XL.Sheet.SetTabColor	9240
• 190.284 XL.Sheet.SetTabColorRGB	9241
• 190.291 XL.Sheet.Table	9248
• 190.292 XL.Sheet.TableSize	9249
• 190.293 XL.Sheet.Type	9250
• 95.1 iOSDevice.BatteryLevel	5133
• 95.2 iOSDevice.BatteryState	5134
• 95.3 iOSDevice.IdentifierForVendor	5135
• 95.4 iOSDevice.IsBatteryMonitoringEnabled	5136
• 95.5 iOSDevice.LocalizedModel	5137
• 95.6 iOSDevice.Model	5138
• 95.7 iOSDevice.Name	5139
• 95.8 iOSDevice.Orientation	5140
• 95.9 iOSDevice.OrientationIsLandscape	5141

- 95.10 `iOSDevice.OrientationIsPortrait` 5142
- 95.11 `iOSDevice.SetBatteryMonitoringEnabled` 5143
- 95.12 `iOSDevice.SystemName` 5144
- 95.13 `iOSDevice.SystemVersion` 5145
- 95.14 `iOSDevice.UserInterfaceIdiom` 5146

140 functions.

Chapter 16

New in Version 7.3

• 40.1 AVPlayer.FindPlayers	1057
• 40.2 AVPlayer.GetAsset	1059
• 37.14 Audit.GetIgnoredFieldNames	974
• 37.16 Audit.GetUUIDField	976
• 37.23 Audit.SetUUIDField	984
• 44.1 BinaryFile.Append	1171
• 44.2 BinaryFile.Close	1173
• 44.3 BinaryFile.Create	1174
• 44.4 BinaryFile.EOF	1176
• 44.5 BinaryFile.Length	1177
• 44.6 BinaryFile.Open	1178
• 44.7 BinaryFile.Position	1180
• 44.8 BinaryFile.ReadByte	1181
• 44.9 BinaryFile.ReadContainer	1182
• 44.10 BinaryFile.ReadFloat	1183
• 44.11 BinaryFile.ReadHex	1184
• 44.12 BinaryFile.ReadInt	1186
• 44.13 BinaryFile.ReadPDF	1187
• 44.14 BinaryFile.ReadText	1189

- 44.15 BinaryFile.Seek 1191
- 44.16 BinaryFile.WriteByte 1192
- 44.17 BinaryFile.WriteContainer 1193
- 44.18 BinaryFile.WriteFloat 1194
- 44.19 BinaryFile.WriteHex 1195
- 44.20 BinaryFile.WriteInt 1197
- 44.21 BinaryFile.WriteText 1199
- 63.13 Dialog.GetLeft 2352
- 63.25 Dialog.GetTop 2364
- 63.37 Dialog.SetLeft 2378
- 63.47 Dialog.SetTop 2389
- 70.205 DynaPDF.GetLogMetafileSize 2850
- 70.206 DynaPDF.GetLogMetafileSizeEx 2851
- 70.207 DynaPDF.GetMetaConvFlags 2852
- 70.258 DynaPDF.GetWMFDefExtent 2915
- 70.259 DynaPDF.GetWMFPixelPerInch 2916
- 70.278 DynaPDF.InsertMetafile 2959
- 70.279 DynaPDF.InsertMetafileEx 2961
- 70.401 DynaPDF.SetMetaConvFlags 3181
- 70.440 DynaPDF.SetWMFDefExtent 3245
- 70.441 DynaPDF.SetWMFPixelPerInch 3246
- 75.2 EventMonitor.ClearCardWindow 3494
- 75.7 EventMonitor.LastMousePositionX 3499
- 75.8 EventMonitor.LastMousePositionY 3500
- 75.9 EventMonitor.SetCardWindow 3501
- 81.12 Folders.UserHome 4183
- 85.48 GImage.CopyChannel 4402
- 85.78 GImage.FontTypeMetrics 4450
- 85.100 GImage.GetClipMask 4477

	727
• 92.6 ImagePicker.AvailableCaptureModesForCameraDevice	5039
• 92.7 ImagePicker.AvailableMediaTypesForSourceType	5040
• 92.8 ImagePicker.ClearMedia	5041
• 92.10 ImagePicker.Dismiss	5043
• 92.11 ImagePicker.GetAllowsEditing	5044
• 92.12 ImagePicker.GetCameraCaptureMode	5045
• 92.13 ImagePicker.GetCameraDevice	5046
• 92.14 ImagePicker.GetCameraFlashMode	5047
• 92.15 ImagePicker.GetEvaluate	5048
• 92.16 ImagePicker.GetFileName	5049
• 92.17 ImagePicker.GetScriptName	5050
• 92.18 ImagePicker.GetShowsCameraControls	5051
• 92.19 ImagePicker.GetSourceType	5052
• 92.20 ImagePicker.GetVideoMaximumDuration	5053
• 92.21 ImagePicker.HasMedia	5054
• 92.22 ImagePicker.IsCameraDeviceAvailable	5055
• 92.23 ImagePicker.IsFlashAvailableForCameraDevice	5056
• 92.24 ImagePicker.IsPresented	5057
• 92.25 ImagePicker.IsSourceTypeAvailable	5058
• 92.26 ImagePicker.MediaCropRect	5060
• 92.27 ImagePicker.MediaEditedImage	5061
• 92.28 ImagePicker.MediaIsImage	5062
• 92.29 ImagePicker.MediaIsVideo	5063
• 92.30 ImagePicker.MediaOriginalImage	5064
• 92.31 ImagePicker.MediaPath	5066
• 92.32 ImagePicker.MediaReferenceURL	5067
• 92.33 ImagePicker.MediaType	5068
• 92.34 ImagePicker.MediaTypes	5069
• 92.35 ImagePicker.MediaURL	5070

- 92.36 UIImagePickerController.New 5071
- 92.37 UIImagePickerController.Present 5073
- 92.38 UIImagePickerController.SetAllowsEditing 5074
- 92.39 UIImagePickerController.SetCameraCaptureMode 5075
- 92.40 UIImagePickerController.SetCameraDevice 5076
- 92.41 UIImagePickerController.SetCameraFlashMode 5077
- 92.42 UIImagePickerController.SetEvaluate 5078
- 92.44 UIImagePickerController.SetScript 5080
- 92.45 UIImagePickerController.SetShowsCameraControls 5081
- 92.46 UIImagePickerController.SetSourceType 5082
- 92.47 UIImagePickerController.SetVideoMaximumDuration 5083
- 92.48 UIImagePickerController.StartVideoCapture 5084
- 92.49 UIImagePickerController.StopVideoCapture 5085
- 92.50 UIImagePickerController.TakePicture 5086
- 92.51 UIImagePickerController.VideoIsCompatibleWithSavedPhotosAlbum 5087
- 92.52 UIImagePickerController.WriteImageToSavedPhotosAlbum 5088
- 92.53 UIImagePickerController.WriteVideoToSavedPhotosAlbum 5090
- 105.1 MailComposer.AddAttachmentContainer 5609
- 105.2 MailComposer.AddAttachmentFile 5611
- 105.3 MailComposer.AddAttachmentText 5612
- 105.4 MailComposer.CanSendMail 5613
- 105.5 MailComposer.Dismiss 5614
- 105.6 MailComposer.Error 5615
- 105.7 MailComposer.GetBCCRecipients 5616
- 105.8 MailComposer.GetCCRecipients 5617
- 105.9 MailComposer.GetEvaluate 5618
- 105.10 MailComposer.GetFileName 5619
- 105.11 MailComposer.GetMessageBody 5620
- 105.12 MailComposer.GetScriptName 5621

	729
• 105.13 MailComposer.GetSubject	5622
• 105.14 MailComposer.GetTORecipients	5623
• 105.15 MailComposer.IsPresented	5624
• 105.16 MailComposer.New	5625
• 105.17 MailComposer.Present	5626
• 105.18 MailComposer.Result	5628
• 105.19 MailComposer.SetBCCRecipients	5629
• 105.20 MailComposer.SetCCRecipients	5630
• 105.21 MailComposer.SetEvaluate	5631
• 105.22 MailComposer.SetMessageBody	5632
• 105.23 MailComposer.SetScript	5633
• 105.24 MailComposer.SetSubject	5635
• 105.25 MailComposer.SetTORecipients	5636
• 114.1 MessageComposer.AddAttachmentContainer	6005
• 114.2 MessageComposer.AddAttachmentFile	6007
• 114.3 MessageComposer.AttachmentCount	6008
• 114.4 MessageComposer.CanSendAttachments	6009
• 114.5 MessageComposer.CanSendSubject	6010
• 114.6 MessageComposer.CanSendText	6011
• 114.7 MessageComposer.Dismiss	6012
• 114.8 MessageComposer.GetEvaluate	6013
• 114.9 MessageComposer.GetFileName	6014
• 114.10 MessageComposer.GetMessageBody	6015
• 114.11 MessageComposer.GetRecipients	6016
• 114.12 MessageComposer.GetScriptName	6017
• 114.13 MessageComposer.GetSubject	6018
• 114.14 MessageComposer.IsPresented	6019
• 114.15 MessageComposer.New	6020
• 114.16 MessageComposer.Present	6021

- 114.17 MessageComposer.Result 6023
- 114.18 MessageComposer.SetEvaluate 6024
- 114.19 MessageComposer.SetMessageBody 6025
- 114.20 MessageComposer.SetRecipients 6026
- 114.21 MessageComposer.SetScript 6027
- 114.22 MessageComposer.SetSubject 6029
- 114.23 MessageComposer.disableUserAttachments 6030
- 123.7 PHP.IsInitialized 6255
- 124.34 Plugin.PNGVersion 6301
- 156.68 SQL.InsertOrUpdateRecords 7394
- 153.1 SocialComposer.AddImageContainer 7159
- 153.2 SocialComposer.AddImageFile 7161
- 153.3 SocialComposer.AddURL 7162
- 153.4 SocialComposer.Dismiss 7163
- 153.5 SocialComposer.GetEvaluate 7164
- 153.6 SocialComposer.GetFileName 7165
- 153.7 SocialComposer.GetInitialText 7166
- 153.8 SocialComposer.GetScriptName 7167
- 153.9 SocialComposer.ImageCount 7168
- 153.10 SocialComposer.IsAvailableForServiceType 7169
- 153.11 SocialComposer.IsPresented 7170
- 153.12 SocialComposer.New 7171
- 153.13 SocialComposer.Present 7173
- 153.14 SocialComposer.RemoveAllImages 7175
- 153.15 SocialComposer.RemoveAllURLs 7176
- 153.16 SocialComposer.Result 7177
- 153.17 SocialComposer.ServiceType 7178
- 153.18 SocialComposer.SetEvaluate 7179
- 153.19 SocialComposer.SetInitialText 7180

	731
• 153.20 SocialComposer.SetScript	7181
• 153.21 SocialComposer.URLCount	7183
• 164.58 Text.ReplaceAll	7856
• 170.3 UNNotification.AuthorizationError	8068
• 170.4 UNNotification.AuthorizationGranted	8069
• 180.45 WebView.ExecCommand	8337
• 180.120 WebView.SendCommand	8447
• 182.90 Window.SetProgress	8644
• 190.125 XL.Sheet.AutoFilter.AddFilter	9024
• 190.126 XL.Sheet.AutoFilter.Clear	9026
• 190.128 XL.Sheet.AutoFilter.Filter	9028
• 190.129 XL.Sheet.AutoFilter.FilterSize	9029
• 190.130 XL.Sheet.AutoFilter.FilterType	9030
• 190.131 XL.Sheet.AutoFilter.GetCustomFilter	9032
• 190.135 XL.Sheet.AutoFilter.GetTop10	9036
• 190.136 XL.Sheet.AutoFilter.SetCustomFilter	9037
• 190.139 XL.Sheet.AutoFilter.SetTop10	9042
• 191.25 XML.Parse	9291
• 191.29 XML.Release	9299
• 191.30 XML.ReleaseAll	9300

184 functions.

Chapter 17

New in Version 7.4

- 38.26 AVAsset.TrackInfo 1020
- 40.4 AVPlayer.GetFinishedEvaluate 1061
- 40.5 AVPlayer.GetFinishedFileName 1062
- 40.6 AVPlayer.GetFinishedScriptName 1063
- 40.8 AVPlayer.GetProgressEvaluate 1065
- 40.9 AVPlayer.GetProgressInterval 1066
- 40.20 AVPlayer.SetFinishedEvaluate 1080
- 40.21 AVPlayer.SetFinishedScript 1081
- 40.23 AVPlayer.SetProgressEvaluate 1083
- 40.24 AVPlayer.SetProgressInterval 1085
- 41.11 AVRecorder.GetAutomaticallyAdjustsVideoMirroring 1102
- 41.15 AVRecorder.GetVideoMirrored 1106
- 41.19 AVRecorder.IsVideoMirroringSupported 1112
- 41.23 AVRecorder.SetAutomaticallyAdjustsVideoMirroring 1116
- 41.28 AVRecorder.SetVideoMirrored 1122
- 34.10 App.OpenFile 918
- 60.7 CUPS.GetJobIndex 1740
- 57.1 CoreImage.Detect 1667
- 59.1 CoreML.AddArrayParameter 1709

- 59.2 CoreML.AddDoubleParameter 1711
- 59.3 CoreML.AddImageParameter 1712
- 59.4 CoreML.AddIntegerParameter 1714
- 59.5 CoreML.AddTextParameter 1715
- 59.6 CoreML.AddUndefinedParameter 1716
- 59.7 CoreML.Available 1717
- 59.8 CoreML.Clear 1718
- 59.9 CoreML.CompileModel 1719
- 59.10 CoreML.Description 1721
- 59.11 CoreML.GetUsesCPUOnly 1724
- 59.12 CoreML.OpenModel 1725
- 59.13 CoreML.PredictionFromFeatures 1727
- 59.14 CoreML.Release 1729
- 59.15 CoreML.ResultImage 1730
- 59.16 CoreML.SetUsesCPUOnly 1731
- 62.1 Debugger.BringToFront 2333
- 62.3 Debugger.GetCallStack 2335
- 62.4 Debugger.IsVisible 2336
- 62.5 Debugger.Title 2337
- 62.6 Debugger.Window 2338
- 80.1 Dictionary.AddSQLRecord 4065
- 80.2 Dictionary.AddSQLRecords 4067
- 66.9 DirectoryWatcher.ReleaseAll 2446
- 70.6 DynaPDF.AddDeviceNProcessColorants 2558
- 70.7 DynaPDF.AddDeviceNSeparations 2560
- 70.49 DynaPDF.CreateDeviceNColorSpace 2628
- 70.59 DynaPDF.CreateSeparationCS 2650
- 70.360 DynaPDF.SetExtColorSpace 3116
- 70.361 DynaPDF.SetExtFillColorSpace 3118

	735
• 70.362 DynaPDF.SetExtStrokeColorSpace	3119
• 70.422 DynaPDF.SetSeparationInfo	3221
• 70.505 DynaPDF.WriteFTextExRotated	3356
• 70.508 DynaPDF.WriteStyledTextExRotated	3362
• 72.9 EmailParser.HasHeader	3416
• 72.13 EmailParser.HeaderValue	3421
• 80.11 FM.ExecuteSQL.LastSQL	4099
• 80.19 FM.InsertRecordCSV	4119
• 85.339 GMImage.WriteToPDFContainer	4775
• 93.1 ImageView.Clear	5091
• 93.2 ImageView.CreateWithControl	5092
• 93.3 ImageView.CreateWithSize	5094
• 93.4 ImageView.CreateWithWindow	5096
• 93.5 ImageView.GetHeight	5097
• 93.6 ImageView.GetLeft	5098
• 93.7 ImageView.GetTag	5099
• 93.8 ImageView.GetToolTip	5100
• 93.9 ImageView.GetTop	5101
• 93.10 ImageView.GetVisible	5102
• 93.11 ImageView.GetWidth	5103
• 93.12 ImageView.Release	5104
• 93.13 ImageView.ReleaseAll	5105
• 93.14 ImageView.SetFrame	5106
• 93.16 ImageView.SetImage	5108
• 93.17 ImageView.SetTag	5109
• 93.18 ImageView.SetToolTip	5110
• 93.19 ImageView.SetVisible	5111
• 102.25 LDAP.SearchResult.AttributeValuesByName	5405
• 103.7 List.CSVSplit	5425

- 103.50 QuickList.CSVSplit 5492
- 156.90 SQL.SQLite3.MemoryHighwater 7425
- 156.91 SQL.SQLite3.MemoryUsed 7426
- 142.1 ScriptWorkspace.BringToFront 6849
- 142.3 ScriptWorkspace.CurrentTab 6851
- 142.4 ScriptWorkspace.ExpandScriptFolders 6852
- 142.7 ScriptWorkspace.IsVisible 6855
- 142.8 ScriptWorkspace.LineCount 6856
- 142.9 ScriptWorkspace.OpenScript 6857
- 142.10 ScriptWorkspace.ScriptNames 6858
- 142.15 ScriptWorkspace.SelectLine 6863
- 142.17 ScriptWorkspace.SelectedLine 6865
- 142.22 ScriptWorkspace.Tabs 6870
- 142.23 ScriptWorkspace.Title 6871
- 142.26 ScriptWorkspace.Window 6874
- 144.2 SerialPort.Clear 6933
- 144.16 SerialPort.IsSuspended 6947
- 144.24 SerialPort.Resume 6962
- 144.36 SerialPort.Suspend 6976
- 159.21 SyntaxColoring.GetBlackFieldPicker 7585
- 159.28 SyntaxColoring.GetResizeFieldPicker 7592
- 159.33 SyntaxColoring.GetShowFieldAndTableIDs 7597
- 159.35 SyntaxColoring.GetShowScriptIDs 7599
- 159.58 SyntaxColoring.SetBlackFieldPicker 7625
- 159.65 SyntaxColoring.SetResizeFieldPicker 7632
- 159.70 SyntaxColoring.SetShowFieldAndTableIDs 7638
- 159.72 SyntaxColoring.SetShowScriptIDs 7640
- 180.31 WebView.ClearSelection 8317
- 180.33 WebView.Close 8320

	737
• 180.37 WebView.Copy	8324
• 180.39 WebView.Create	8326
• 180.41 WebView.Cut	8330
• 180.97 WebView.Paste	8406
• 180.118 WebView.SelectAll	8444
• 189.6 WordFile.GetCaseless	8820
• 189.19 WordFile.SetCaseless	8838
• 191.6 XML.DeletePath	9263
• 191.10 XML.GetPathValue	9270
• 191.27 XML.ReadContainer	9296
• 191.28 XML.ReadFile	9297
• 191.31 XML.SetPathValue	9301
• 94.2 iOSApp.GetDidEnterBackgroundEvaluate	5114
• 94.3 iOSApp.GetDidReceiveMemoryWarningEvaluate	5115
• 94.5 iOSApp.GetSignificantTimeChangeEvaluate	5117
• 94.6 iOSApp.GetWillEnterForegroundEvaluate	5118
• 94.10 iOSApp.SetDidEnterBackgroundEvaluate	5122
• 94.11 iOSApp.SetDidEnterBackgroundScript	5123
• 94.12 iOSApp.SetDidReceiveMemoryWarningEvaluate	5124
• 94.13 iOSApp.SetDidReceiveMemoryWarningScript	5125
• 94.15 iOSApp.SetSignificantTimeChangeEvaluate	5127
• 94.16 iOSApp.SetSignificantTimeChangeScript	5128
• 94.17 iOSApp.SetWillEnterForegroundEvaluate	5129
• 94.18 iOSApp.SetWillEnterForegroundScript	5130
• 96.1 iOSKeyboard.GetDidHideEvaluate	5147
• 96.2 iOSKeyboard.GetDidShowEvaluate	5148
• 96.3 iOSKeyboard.GetWillHideEvaluate	5149
• 96.4 iOSKeyboard.GetWillShowEvaluate	5150
• 96.5 iOSKeyboard.SetDidHideEvaluate	5151

- 96.6 `iosKeyboard.SetDidShowEvaluate` 5152
- 96.7 `iosKeyboard.SetWillHideEvaluate` 5153
- 96.8 `iosKeyboard.SetWillShowEvaluate` 5154
- 96.9 `iosKeyboard.State` 5155

139 functions.

Chapter 18

New in Version 7.5

- 61.173 `CURL.SetOptionAcceptEncoding` 2014
- 55.26 `Container.IsCompressed` 1643
- 70.233 `DynaPDF.GetReplaceICCProfileData` 2888
- 70.316 `DynaPDF.ReplaceImage` 3043
- 70.419 `DynaPDF.SetReplaceICCProfileData` 3215
- 103.15 `List.HasDuplicateItems` 5437
- 103.35 `List.SubList` 5467
- 103.36 `List.Trim` 5469
- 104.44 `ListDialog.Sort` 5608
- 175.6 `MouseCursor.Hide` 8235
- 175.7 `MouseCursor.HideUntilMouseMoves` 8236
- 175.9 `MouseCursor.Show` 8240
- 120.8 `OCR.GetVariable` 6118
- 120.18 `OCR.SetVariable` 6131
- 122.7 `PDFKit.GeneratePreview` 6164
- 103.55 `QuickList.DeCombine` 5499
- 103.62 `QuickList.HasDuplicateItems` 5510
- 103.91 `QuickList.SubList` 5555
- 103.92 `QuickList.Trim` 5557

- 73.12 RSA.DecryptPrivateKey 3469
- 73.13 RSA.EncryptPrivateKey 3471
- 135.14 RegEx.Quote 6665
- 135.15 RegEx.Replace 6666
- 135.16 RegEx.ReplaceAll 6668
- 142.12 ScriptWorkspace.ScriptsVisible 6860
- 142.20 ScriptWorkspace.StepsVisible 6868
- 142.24 ScriptWorkspace.TriggerScripts 6872
- 142.25 ScriptWorkspace.TriggerSteps 6873
- 148.1 Shell.AddArgument 7001
- 148.2 Shell.AddEnvironment 7004
- 148.3 Shell.AvailableBytesError 7005
- 148.4 Shell.AvailableBytesOutput 7006
- 148.5 Shell.ClearArguments 7007
- 148.6 Shell.ClearEnvironment 7008
- 148.9 Shell.Execute 7011
- 148.10 Shell.ExitCode 7019
- 148.11 Shell.GetApplicationName 7020
- 148.12 Shell.GetArgument 7021
- 148.13 Shell.GetArgumentCount 7022
- 148.15 Shell.GetCompletedEvaluate 7024
- 148.16 Shell.GetCompletedScriptFileName 7025
- 148.17 Shell.GetCompletedScriptName 7026
- 148.18 Shell.GetCurrentDirectory 7027
- 148.22 Shell.GetDomain 7031
- 148.23 Shell.GetEnvironment 7032
- 148.24 Shell.GetPassword 7033
- 148.25 Shell.GetUsername 7034
- 148.26 Shell.IsRunning 7035

	741
• 148.27 Shell.New	7036
• 148.28 Shell.PeekErrorText	7037
• 148.29 Shell.PeekOutputText	7038
• 148.30 Shell.ProcessIdentifier	7039
• 148.31 Shell.ReadErrorText	7040
• 148.32 Shell.ReadOutputText	7041
• 148.33 Shell.Release	7043
• 148.34 Shell.SetApplicationName	7044
• 148.35 Shell.SetArguments	7045
• 148.36 Shell.SetArgumentsList	7046
• 148.37 Shell.SetCompletedEvaluate	7047
• 148.38 Shell.SetCompletedScript	7048
• 148.39 Shell.SetCurrentDirectory	7049
• 148.42 Shell.SetDomain	7052
• 148.43 Shell.SetPassword	7053
• 148.44 Shell.SetUsername	7054
• 148.45 Shell.Terminate	7055
• 148.46 Shell.TerminationReason	7056
• 148.47 Shell.Wait	7057
• 148.48 Shell.WriteInputText	7059
• 154.2 Socket.AddMembership	7187
• 154.12 Socket.DropMembership	7202
• 154.14 Socket.GetMulticastInterface	7204
• 154.60 Socket.SetMulticastInterface	7260
• 155.3 Speech.IsSpeaking	7277
• 159.34 SyntaxColoring.GetShowLayoutIDs	7598
• 159.54 SyntaxColoring.ScriptSearchBox.GetText	7620
• 159.56 SyntaxColoring.ScriptSearchBox.SetText	7623
• 159.71 SyntaxColoring.SetShowLayoutIDs	7639

- 161.49 SystemInfo.isHighSierra 7703
- 164.14 Text.DecodeFromBase64URL 7796
- 164.29 Text.EncodeToBase64URL 7814
- 180.52 WebView.GetAutoResizingMask 8347
- 180.122 WebView.SetAutoResizingMask 8449
- 182.79 Window.SetDockImage 8631
- 189.2 WordFile.Append 8815
- 189.5 WordFile.FieldNames 8819
- 189.7 WordFile.GetFieldText 8821
- 189.20 WordFile.SetFieldText 8839

87 functions.

Chapter 19

New in Version 8.0

• 38.28 AVAsset.WaitForLoaded	1025
• 34.4 App.EffectiveUserID	912
• 34.11 App.ProcessID	919
• 34.16 App.UserID	924
• 37.9 Audit.FieldNameForID	969
• 37.25 Audit.TableNameForID	986
• 70.99 DynaPDF.ExtractText	2711
• 70.101 DynaPDF.FileAttachAnnotEx	2716
• 70.314 DynaPDF.RenderPDFFileEx	3038
• 79.80 FM.UpdateRecord2	4041
• 79.81 FM.UpdateRecord3	4043
• 79.83 FM.UpdateRecords2	4048
• 79.84 FM.UpdateRecords3	4050
• 178.8 FM.VariableNames	8268
• 124.8 IsIOSDevice	6269
• 124.9 IsIOSSimulator	6270
• 102.2 LDAP.AddJSON	5365
• 102.12 LDAP.JSON	5383
• 102.14 LDAP.ModifyJSON	5389

- 115.1 MetaDataQuery.AttributesForFile 6031
- 115.2 MetaDataQuery.Close 6033
- 115.3 MetaDataQuery.Create 6034
- 115.4 MetaDataQuery.GetEvaluate 6035
- 115.5 MetaDataQuery.GetScriptFileName 6036
- 115.6 MetaDataQuery.GetScriptName 6037
- 115.7 MetaDataQuery.IsGathering 6038
- 115.8 MetaDataQuery.IsStarted 6039
- 115.9 MetaDataQuery.IsStopped 6040
- 115.10 MetaDataQuery.PathAtIndex 6041
- 115.11 MetaDataQuery.Paths 6043
- 115.12 MetaDataQuery.QueryString 6044
- 115.13 MetaDataQuery.ResultAtIndex 6045
- 115.14 MetaDataQuery.ResultCount 6046
- 115.15 MetaDataQuery.Results 6047
- 115.16 MetaDataQuery.SearchScopes 6048
- 115.17 MetaDataQuery.SetEvaluate 6049
- 115.18 MetaDataQuery.SetQueryString 6050
- 115.19 MetaDataQuery.SetScript 6052
- 115.20 MetaDataQuery.SetSearchScopes 6053
- 115.21 MetaDataQuery.StartQuery 6055
- 115.22 MetaDataQuery.StopQuery 6056
- 127.24 PrintDialog.GetConfiguration 6409
- 127.42 PrintDialog.SetConfiguration 6429
- 154.26 Socket.LocalIP 7217
- 154.27 Socket.LocalPort 7218
- 159.20 SyntaxColoring.GetAddFindbars 7584
- 159.57 SyntaxColoring.SetAddFindbars 7624
- 180.25 WebView.AddScriptMessageHandler 8308

	745
• 180.106 WebView.RemoveScriptMessageHandler	8418
• 190.118 XL.LoadBookPartially	9013
• 190.144 XL.Sheet.CellReadBooleans	9048
• 190.146 XL.Sheet.CellReadComments	9051
• 190.148 XL.Sheet.CellReadDates	9055
• 190.150 XL.Sheet.CellReadFormulas	9058
• 190.152 XL.Sheet.CellReadNumbers	9061
• 190.154 XL.Sheet.CellReadTexts	9065
• 190.157 XL.Sheet.CellWriteBlanks	9070
• 190.159 XL.Sheet.CellWriteBooleans	9074
• 190.161 XL.Sheet.CellWriteComments	9078
• 190.163 XL.Sheet.CellWriteDates	9082
• 190.169 XL.Sheet.CellWriteFormulas	9095
• 190.171 XL.Sheet.CellWriteNumbers	9100
• 190.173 XL.Sheet.CellWriteTexts	9106
• 190.183 XL.Sheet.GetCellErrors	9117
• 190.185 XL.Sheet.GetCellFormats	9120
• 190.242 XL.Sheet.RemoveComments	9181
• 190.249 XL.Sheet.SetCellFormats	9192

67 functions.

Chapter 20

New in Version 8.1

- 43.6 Barcode.GetInputMode 1151
- 43.7 Barcode.GetOption 1152
- 43.11 Barcode.SetInputMode 1157
- 43.12 Barcode.SetOption 1159
- 65.8 Dictionary.CreateNamed 2410
- 69.15 DragDrop.GetFileDescriptor 2499
- 69.16 DragDrop.GetFileDescriptorCount 2501
- 70.285 DynaPDF.List 2973
- 79.45 FM.PatchNotificationProblem 3977
- 100.2 FM.SQL.JSONRecord 5234
- 100.3 FM.SQL.JSONRecords 5236
- 85.179 GImage.List 4565
- 91.48 IKScannerDevicePanel.SetCloseTrigger 4971
- 103.8 List.CountValues 5427
- 124.47 Plugin.ZLibVersion 6317
- 164.11 Text.CountWords 7793
- 164.44 Text.ListWords 7837
- 180.40 WebView.CreateOnPopover 8328
- 191.32 XML.SetPathXML 9303
- 191.36 XML.Validate 9311

20 functions.

Chapter 21

New in Version 8.2

- 33.41 Addressbook.multivalue.indexForLabel 849
- 37.8 Audit.FieldIDForName 968
- 37.24 Audit.TableIDForName 985
- 61.31 CURL.GetActiveSocket 1815
- 61.55 CURL.GetFormData 1845
- 61.58 CURL.GetHTTPVersion 1849
- 61.64 CURL.GetLastSocket 1857
- 61.67 CURL.GetMultiOptionChunkLengthPenaltySize 1860
- 61.68 CURL.GetMultiOptionContentLengthPenaltySize 1861
- 61.70 CURL.GetMultiOptionMaxConnects 1863
- 61.71 CURL.GetMultiOptionMaxHostConnections 1864
- 61.72 CURL.GetMultiOptionMaxPipelineLength 1865
- 61.73 CURL.GetMultiOptionMaxTotalConnections 1866
- 61.74 CURL.GetMultiOptionPipelining 1867
- 61.75 CURL.GetMultiRunningTransfers 1868
- 61.79 CURL.GetOptionConnectTo 1872
- 61.80 CURL.GetOptionHTTP200Aliases 1873
- 61.81 CURL.GetOptionHTTPHeader 1874
- 61.82 CURL.GetOptionMailRecipients 1875

- 61.83 `CURL.GetOptionPostQuote` 1876
- 61.84 `CURL.GetOptionPreQuote` 1877
- 61.85 `CURL.GetOptionProxyHeader` 1878
- 61.86 `CURL.GetOptionQuote` 1879
- 61.87 `CURL.GetOptionResolve` 1880
- 61.88 `CURL.GetOptionTelnetOptions` 1881
- 61.100 `CURL.GetProtocol` 1893
- 61.102 `CURL.GetProxySSLVerifyResult` 1895
- 61.125 `CURL.GetScheme` 1933
- 61.135 `CURL.LibIDNVersion` 1943
- 61.136 `CURL.LibSSHVersion` 1944
- 61.164 `CURL.SetMultiOptionChunkLengthPenaltySize` 2005
- 61.165 `CURL.SetMultiOptionContentLengthPenaltySize` 2006
- 61.167 `CURL.SetMultiOptionMaxConnects` 2008
- 61.168 `CURL.SetMultiOptionMaxHostConnections` 2009
- 61.169 `CURL.SetMultiOptionMaxPipelineLength` 2010
- 61.170 `CURL.SetMultiOptionMaxTotalConnections` 2011
- 61.171 `CURL.SetMultiOptionPipelining` 2012
- 61.172 `CURL.SetOptionAbstractUnixSocket` 2013
- 61.174 `CURL.SetOptionAcceptTimeoutMS` 2016
- 61.186 `CURL.SetOptionConnectTo` 2036
- 61.198 `CURL.SetOptionDNSServers` 2057
- 61.199 `CURL.SetOptionDNSShuffleAddresses` 2058
- 61.201 `CURL.SetOptionDefaultProtocol` 2061
- 61.205 `CURL.SetOptionExpect100TimeoutMS` 2066
- 61.224 `CURL.SetOptionGSSAPIDelegation` 2090
- 61.226 `CURL.SetOptionHAProxyProtocol` 2093
- 61.234 `CURL.SetOptionHappyEyeballsTimeOutMS` 2105
- 61.236 `CURL.SetOptionHeaderOptions` 2107

	751
• 61.243 CURL.SetOptionKeepSendingOnError	2116
• 61.266 CURL.SetOptionPathAsIs	2148
• 61.267 CURL.SetOptionPinnedPublicKey	2149
• 61.268 CURL.SetOptionPipeWait	2150
• 61.275 CURL.SetOptionPreProxy	2166
• 61.280 CURL.SetOptionProxyCAInfo	2174
• 61.281 CURL.SetOptionProxyCAPath	2175
• 61.282 CURL.SetOptionProxyCRLFile	2176
• 61.283 CURL.SetOptionProxyHeader	2177
• 61.284 CURL.SetOptionProxyKeyPassword	2178
• 61.286 CURL.SetOptionProxyPinnedPublicKey	2180
• 61.288 CURL.SetOptionProxySSLCert	2182
• 61.289 CURL.SetOptionProxySSLCertType	2183
• 61.290 CURL.SetOptionProxySSLCipherList	2184
• 61.291 CURL.SetOptionProxySSLKey	2185
• 61.292 CURL.SetOptionProxySSLKeyType	2186
• 61.293 CURL.SetOptionProxySSLOptions	2187
• 61.294 CURL.SetOptionProxySSLVerifyHost	2188
• 61.295 CURL.SetOptionProxySSLVerifyPeer	2189
• 61.296 CURL.SetOptionProxySSLVersion	2190
• 61.297 CURL.SetOptionProxyServiceName	2192
• 61.299 CURL.SetOptionProxyTLSAuthPassword	2194
• 61.300 CURL.SetOptionProxyTLSAuthType	2195
• 61.301 CURL.SetOptionProxyTLSAuthUsername	2196
• 61.307 CURL.SetOptionRTSPClientCSEQ	2206
• 61.308 CURL.SetOptionRTSPRequest	2207
• 61.309 CURL.SetOptionRTSPServerCSEQ	2208
• 61.310 CURL.SetOptionRTSPSessionID	2209
• 61.311 CURL.SetOptionRTSPStreamURI	2210

- 61.312 `CURL.SetOptionRTSPTransport` 2211
- 61.317 `CURL.SetOptionRequestTarget` 2218
- 61.318 `CURL.SetOptionResolve` 2219
- 61.321 `CURL.SetOptionSASLIR` 2222
- 61.323 `CURL.SetOptionSSHCompression` 2225
- 61.331 `CURL.SetOptionSSLEnableALPN` 2240
- 61.332 `CURL.SetOptionSSLEnableNPN` 2241
- 61.335 `CURL.SetOptionSSLFalseStart` 2244
- 61.338 `CURL.SetOptionSSLOptions` 2249
- 61.342 `CURL.SetOptionSSLVerifyStatus` 2257
- 61.344 `CURL.SetOptionServiceName` 2261
- 61.345 `CURL.SetOptionSocks5Auth` 2262
- 61.348 `CURL.SetOptionStreamDepends` 2265
- 61.349 `CURL.SetOptionStreamDependsE` 2266
- 61.350 `CURL.SetOptionStreamWeight` 2267
- 61.351 `CURL.SetOptionSuppressConnectHeaders` 2268
- 61.352 `CURL.SetOptionTCPFastOpen` 2269
- 61.358 `CURL.SetOptionTFTPNoOptions` 2275
- 61.371 `CURL.SetOptionUnixSocketPath` 2296
- 61.381 `CURL.SetOptionXOAuth2Bearer` 2312
- 70.140 `DynaPDF.GetDocUsesTransparency` 2771
- 70.256 `DynaPDF.GetUsesTransparency` 2912
- 70.358 `DynaPDF.SetDocInfoEx` 3113
- 70.410 `DynaPDF.SetPageBBox` 3197
- 79.4 `FM.Beep` 3887
- 79.41 `FM.Loop` 3968
- 79.78 `FM.TableStatistics` 4035
- 87.1 `HealthKit.AuthorizationStatusForType` 4817
- 87.2 `HealthKit.BiologicalSex` 4819

	753
• 87.3 HealthKit.BloodType	4820
• 87.4 HealthKit.DateOfBirth	4821
• 87.5 HealthKit.DateOfBirthComponents	4822
• 87.6 HealthKit.FitzpatrickSkinType	4823
• 87.7 HealthKit.RequestAuthorizationToShareTypes	4824
• 87.8 HealthKit.SampleQuery	4827
• 87.9 HealthKit.WheelchairUse	4829
• 87.10 HealthKit.isHealthDataAvailable	4830
• 100.15 JSON.Colorize	5261
• 100.72 JSON.ToHTML	5344
• 158.1 StoreKit.AddPayment	7537
• 158.2 StoreKit.CanMakePayments	7539
• 158.3 StoreKit.FinishTransaction	7540
• 158.4 StoreKit.InvalidProductIdentifiers	7541
• 158.5 StoreKit.IsProductViewVisible	7542
• 158.6 StoreKit.ProductQueryRunning	7543
• 158.7 StoreKit.Products	7544
• 158.8 StoreKit.QueryProducts	7545
• 158.9 StoreKit.RequestReview	7546
• 158.10 StoreKit.RestoreCompletedTransactions	7547
• 158.11 StoreKit.SetProductViewFinishedTrigger	7548
• 158.12 StoreKit.SetRestoreCompletedTransactionsTrigger	7549
• 158.13 StoreKit.SetUpdatedTransactionsTrigger	7550
• 158.14 StoreKit.ShowProductView	7551
• 158.15 StoreKit.Transactions	7552
• 164.66 Text.Trim	7869
• 176.2 UUID.FromNumber	8249
• 176.4 UUID.Number	8252
• 176.6 UUID.ToNumber	8254

- 191.5 XML.Colorize 9261
- 191.35 XML.ToJSON 9310
- 191.37 XML.ValidateFile 9313
- 94.1 iOSApp.GetDidBecomeActiveEvaluate 5113
- 94.7 iOSApp.GetWillResignActiveEvaluate 5119
- 94.8 iOSApp.SetDidBecomeActiveEvaluate 5120
- 94.9 iOSApp.SetDidBecomeActiveScript 5121
- 94.19 iOSApp.SetWillResignActiveEvaluate 5131
- 94.20 iOSApp.SetWillResignActiveScript 5132

144 functions.

Chapter 22

New in Version 8.3

- 49.11 CGImageSource.Properties 1398
- 61.203 CURL.SetOptionDisallowUserNameInURL 2064
- 61.298 CURL.SetOptionProxyTLS13Ciphers 2193
- 61.359 CURL.SetOptionTLS13Ciphers 2276
- 61.387 CURL.SetupOAuth 2324
- 52.1 ColorPanel.Choose 1461
- 52.2 ColorPanel.GetColor 1463
- 52.3 ColorPanel.GetColorChangedEvaluate 1464
- 52.4 ColorPanel.GetColorChangedScript 1465
- 52.5 ColorPanel.Hide 1466
- 52.6 ColorPanel.SetColor 1467
- 52.7 ColorPanel.SetColorChangedEvaluate 1468
- 52.8 ColorPanel.SetColorChangedScript 1469
- 52.9 ColorPanel.Show 1471
- 79.29 FM.InitMessageFilter 3936
- 178.1 FM.VariableAdd 8259
- 78.42 Files.MountPath 3839
- 85.176 GMImage.IsGray 4561
- 85.208 GMImage.QuantumDepth 4604

- 85.212 GImage.Read 4609
- 86.1 Hash.CRC32 4785
- 91.63 ImageCapture.CameraInfo 4989
- 91.65 ImageCapture.Contents 4992
- 91.68 ImageCapture.DevicesJSON 4997
- 91.69 ImageCapture.Download 4998
- 91.72 ImageCapture.GetFeatures 5001
- 91.74 ImageCapture.GetParameters 5005
- 91.77 ImageCapture.MediaFileNames 5008
- 91.78 ImageCapture.MediaFiles 5009
- 91.82 ImageCapture.RequestDeleteFiles 5014
- 91.83 ImageCapture.RequestDisableTethering 5015
- 91.84 ImageCapture.RequestEnableTethering 5016
- 91.88 ImageCapture.RequestSyncClock 5023
- 91.89 ImageCapture.RequestTakePicture 5024
- 91.92 ImageCapture.Thumbnail 5030
- 92.9 ImagePicker.ClearOverlay 5042
- 92.43 ImagePicker.SetOverlayImage 5079
- 124.30 Plugin.LicenseeName 6295
- 124.46 Plugin.UsedFunctions 6316
- 141.2 Screen.DockHeight 6838
- 141.3 Screen.DockWidth 6839
- 148.7 Shell.CloseInput 7009
- 148.8 Shell.CloseStreams 7010
- 154.17 Socket.GetTag 7207
- 154.66 Socket.SetTag 7267
- 155.2 Speech.IsPaused 7276
- 155.4 Speech.Pause 7278
- 155.5 Speech.Resume 7279

	757
• 163.22 TAPI.IsInitialized	7749
• 164.1 Text.AddLineNumbers	7767
• 166.5 Time.UnixTimeStampToFileMaker	7935
• 181.3 WIA.DeviceProperties	8495
• 181.7 WIA.GetCurrentItem	8504
• 181.13 WIA.ItemProperties	8512
• 182.10 Window.ConfigureToolBarMenu	8544
• 182.112 Window.TopHeight	8673
• 184.15 WindowsUserNotification.Setting	8728

57 functions.

Chapter 23

New in Version 8.4

- 41.4 AVRecorder.AuthorizationStatusForMediaType 1094
- 41.7 AVRecorder.CurrentQRCode 1098
- 41.16 AVRecorder.HasQRCode 1107
- 41.21 AVRecorder.RequestAccessForMediaType 1114
- 41.26 AVRecorder.SetScreenInput 1119
- 41.31 AVRecorder.StartQRCodeDetection 1126
- 41.33 AVRecorder.StopQRCodeDetection 1129
- 168.1 App.ClearTouchBar 7959
- 46.1 Bonjour.Browse 1223
- 46.2 Bonjour.JSON 1225
- 46.3 Bonjour.Register 1227
- 46.4 Bonjour.RegisteredName 1228
- 54.1 CNContact.AddEmailAddress 1527
- 54.2 CNContact.AddInstantMessage 1529
- 54.3 CNContact.AddInstantMessageJSON 1530
- 54.4 CNContact.AddPhoneNumber 1531
- 54.5 CNContact.AddPostalAddress 1532
- 54.6 CNContact.AddPostalAddressJSON 1534
- 54.7 CNContact.AddRelation 1535

- 54.8 CNContact.AddSocialProfile 1536
- 54.9 CNContact.AddSocialProfileJSON 1538
- 54.10 CNContact.AddURLAddress 1539
- 54.12 CNContact.EditInAddressbook 1542
- 54.14 CNContact.JSON 1544
- 54.15 CNContact.MailingAddress 1546
- 54.16 CNContact.Name 1547
- 54.17 CNContact.SetValue 1548
- 54.19 CNContact.ShowInAddressbook 1552
- 54.21 CNContact.Value 1554
- 54.26 CNContactStore.AddContact 1562
- 54.27 CNContactStore.AddGroup 1564
- 54.28 CNContactStore.AddMember 1566
- 54.29 CNContactStore.AddSubgroup 1567
- 54.30 CNContactStore.AuthorizationError 1568
- 54.31 CNContactStore.AuthorizationStatus 1569
- 54.33 CNContactStore.ContactsInContainer 1571
- 54.34 CNContactStore.ContactsInGroup 1572
- 54.35 CNContactStore.ContactsMatchingName 1573
- 54.36 CNContactStore.ContactsWithData 1574
- 54.37 CNContactStore.ContainerForContact 1575
- 54.38 CNContactStore.ContainerForGroup 1576
- 54.39 CNContactStore.Containers 1577
- 54.40 CNContactStore.Country 1578
- 54.41 CNContactStore.DataWithContacts 1579
- 54.42 CNContactStore.DefaultContainerIdentifier 1580
- 54.43 CNContactStore.DeleteContact 1581
- 54.44 CNContactStore.DeleteGroup 1582
- 54.46 CNContactStore.Groups 1585

	761
• 54.47 CNContactStore.GroupsByName	1587
• 54.48 CNContactStore.GroupsForContact	1588
• 54.49 CNContactStore.GroupsInContainer	1589
• 54.50 CNContactStore.NewContact	1590
• 54.51 CNContactStore.RemoveMember	1592
• 54.52 CNContactStore.RemoveSubgroup	1593
• 54.53 CNContactStore.RenameGroup	1594
• 54.54 CNContactStore.RequestAccesss	1595
• 54.55 CNContactStore.SetChangeScript	1597
• 54.56 CNContactStore.Subgroups	1598
• 54.57 CNContactStore.UnifiedMeContact	1599
• 54.58 CNContactStore.UpdateContact	1601
• 54.59 CNContainer.Name	1602
• 54.60 CNContainer.Type	1603
• 54.61 CNGroup.Name	1604
• 55.29 Container.ReadImage	1648
• 80.17 FM.InsertOrUpdateRecordQuery	4113
• 78.8 Files.CreateAlias	3782
• 78.50 Files.ResolveAlias	3855
• 82.2 Font.CalculateTextFits	4195
• 82.3 Font.CalculateTextHeight	4197
• 85.39 GMImage.Coders	4388
• 85.81 GMImage.Free	4455
• 85.82 GMImage.FreeAll	4457
• 85.175 GMImage.InvertChannel	4559
• 101.1 Keychain.AddPassword	5357
• 101.2 Keychain.DeletePassword	5359
• 101.3 Keychain.ListAccounts	5360
• 101.4 Keychain.ListDatabases	5361

- 101.5 Keychain.UpdatePassword 5362
- 117.3 NetworkInterfaces.JSON 6091
- 134.5 QLPreviewPanel.AddContainer 6622
- 134.10 QLPreviewPanel.CurrentPreviewItemIndex 6628
- 134.11 QLPreviewPanel.CurrentPreviewItemPath 6629
- 134.12 QLPreviewPanel.CurrentPreviewItemTitle 6630
- 134.21 QLPreviewPanel.SetCurrentPreviewItemIndex 6640
- 156.22 SQL.GetCommandOptions 7330
- 156.25 SQL.GetConnectionOptions 7333
- 156.43 SQL.GetFieldOptions 7360
- 156.63 SQL.GetParamOption 7387
- 156.64 SQL.GetParamOptions 7388
- 156.116 SQL.SetParamOption 7466
- 161.54 SystemInfo.isMojave 7708
- 180.27 WebView.AllCookies 8312
- 182.9 Window.ClearTouchBar 8543
- 191.2 XML.ApplyStylesheet 9256

94 functions.

Chapter 24

New in Version 8.5

• 34.3 App.CompactMemory	911
• 37.1 Audit.Backup	955
• 37.2 Audit.Backup2	957
• 54.13 CNContact.IsUnifiedWithContact	1543
• 54.20 CNContact.UnifiedContacts	1553
• 54.32 CNContactStore.Contacts	1570
• 54.45 CNContactStore.GroupHierarchy	1583
• 61.20 CURL.FileInfos	1793
• 61.200 CURL.SetOptionDOHURL	2059
• 61.373 CURL.SetOptionUpkeepIntervalMS	2298
• 61.375 CURL.SetOptionUploadBufferSize	2301
• 61.388 CURL.Upkeep	2329
• 62.2 Debugger.CurrentLineNumber	2334
• 69.44 DragDrop.SetFrameWithControl	2541
• 70.38 DynaPDF.CheckFieldNames	2608
• 73.2 Encryption.CipherNames	3451
• 73.7 Encryption.DigestNames	3460
• 77.25 FileDialog.GetUseSheet	3735
• 77.42 FileDialog.SetSheetScriptTrigger	3764

- 77.45 FileDialog.SetUseSheet 3767
- 84.1 GameKit.Achievement.Completed 4239
- 84.2 GameKit.Achievement.GetPercentComplete 4240
- 84.3 GameKit.Achievement.GetShowsCompletionBanner 4241
- 84.4 GameKit.Achievement.LastReportedDate 4242
- 84.5 GameKit.Achievement.New 4243
- 84.6 GameKit.Achievement.Player 4244
- 84.7 GameKit.Achievement.SetPercentComplete 4245
- 84.8 GameKit.Achievement.SetShowsCompletionBanner 4246
- 84.9 GameKit.AchievementDescription.AchievedDescription 4247
- 84.10 GameKit.AchievementDescription.GroupIdentifier 4248
- 84.11 GameKit.AchievementDescription.Hidden 4249
- 84.12 GameKit.AchievementDescription.Image 4250
- 84.13 GameKit.AchievementDescription.IncompleteAchievementImage 4251
- 84.14 GameKit.AchievementDescription.MaximumPoints 4252
- 84.15 GameKit.AchievementDescription.PlaceholderCompletedAchievementImage 4253
- 84.16 GameKit.AchievementDescription.Replayable 4254
- 84.17 GameKit.AchievementDescription.Title 4255
- 84.18 GameKit.AchievementDescription.UnachievedDescription 4256
- 84.19 GameKit.AnonymousGuestPlayer 4257
- 84.20 GameKit.Challenge.Achievement 4258
- 84.21 GameKit.Challenge.CompletionDate 4259
- 84.22 GameKit.Challenge.Decline 4260
- 84.23 GameKit.Challenge.IssueDate 4261
- 84.24 GameKit.Challenge.IssuingPlayer 4262
- 84.25 GameKit.Challenge.Message 4263
- 84.26 GameKit.Challenge.ReceivingPlayer 4264
- 84.27 GameKit.Challenge.Score 4265
- 84.28 GameKit.Challenge.State 4266

	765
• 84.29 GameKit.DefaultLeaderboardIdentifier	4267
• 84.30 GameKit.GameCenterView.Dismiss	4268
• 84.31 GameKit.GameCenterView.GetLeaderboardIdentifier	4269
• 84.32 GameKit.GameCenterView.GetLeaderboardTimeScope	4270
• 84.33 GameKit.GameCenterView.GetViewState	4271
• 84.34 GameKit.GameCenterView.Initialize	4272
• 84.35 GameKit.GameCenterView.Present	4273
• 84.36 GameKit.GameCenterView.SetLeaderboardIdentifier	4274
• 84.37 GameKit.GameCenterView.SetLeaderboardTimeScope	4275
• 84.38 GameKit.GameCenterView.SetScriptTrigger	4276
• 84.39 GameKit.GameCenterView.SetViewState	4277
• 84.40 GameKit.GameCenterView.ShowBannerWithTitle	4278
• 84.41 GameKit.Initialize	4279
• 84.42 GameKit.Leaderboard.GetPlayerScope	4280
• 84.43 GameKit.Leaderboard.GetRange	4281
• 84.44 GameKit.Leaderboard.GetTimeScope	4282
• 84.45 GameKit.Leaderboard.GroupIdentifier	4283
• 84.46 GameKit.Leaderboard.Image	4284
• 84.47 GameKit.Leaderboard.LoadScores	4285
• 84.48 GameKit.Leaderboard.Loading	4286
• 84.49 GameKit.Leaderboard.LocalPlayerScore	4287
• 84.50 GameKit.Leaderboard.MaxRange	4288
• 84.51 GameKit.Leaderboard.New	4289
• 84.52 GameKit.Leaderboard.Scores	4290
• 84.53 GameKit.Leaderboard.SetPlayerScope	4291
• 84.54 GameKit.Leaderboard.SetRange	4292
• 84.55 GameKit.Leaderboard.SetTimeScope	4293
• 84.56 GameKit.Leaderboard.Title	4294
• 84.57 GameKit.LeaderboardSet.GroupIdentifier	4295

- 84.58 GameKit.LeaderboardSet.Image 4296
- 84.59 GameKit.LeaderboardSet.Title 4297
- 84.60 GameKit.LoadAchievementDescriptions 4298
- 84.61 GameKit.LoadAchievements 4299
- 84.62 GameKit.LoadLeaderboardSets 4300
- 84.63 GameKit.LoadLeaderboards 4301
- 84.64 GameKit.LoadPlayers 4302
- 84.65 GameKit.LoadReceivedChallenges 4303
- 84.66 GameKit.LocalPlayer 4304
- 84.67 GameKit.LocalPlayer.Authenticate 4305
- 84.68 GameKit.LocalPlayer.AuthenticateError 4306
- 84.69 GameKit.LocalPlayer.ClearAuthenticateHandler 4307
- 84.70 GameKit.LocalPlayer.isAuthenticated 4308
- 84.71 GameKit.LocalPlayer.isUnderage 4309
- 84.72 GameKit.Player.Alias 4310
- 84.73 GameKit.Player.DisplayName 4311
- 84.74 GameKit.Player.GuestIdentifier 4312
- 84.75 GameKit.Player.Photo 4313
- 84.76 GameKit.RecentPlayers 4314
- 84.77 GameKit.ReportAchievements 4315
- 84.78 GameKit.ReportAchievementsWithEligibleChallenges 4316
- 84.79 GameKit.ReportScores 4317
- 84.80 GameKit.ReportScoresWithEligibleChallenges 4318
- 84.81 GameKit.ResetAchievements 4319
- 84.82 GameKit.Score.Date 4320
- 84.83 GameKit.Score.FormattedValue 4321
- 84.84 GameKit.Score.GetContext 4322
- 84.85 GameKit.Score.GetShouldSetDefaultLeaderboard 4323
- 84.86 GameKit.Score.GetValue 4324

	767
• 84.87 GameKit.Score.LeaderboardIdentifier	4325
• 84.88 GameKit.Score.New	4326
• 84.89 GameKit.Score.Player	4327
• 84.90 GameKit.Score.Rank	4328
• 84.91 GameKit.Score.SetContext	4329
• 84.92 GameKit.Score.SetShouldSetDefaultLeaderboard	4330
• 84.93 GameKit.Score.SetValue	4331
• 84.94 GameKit.SelectChallengeablePlayers	4332
• 84.95 GameKit.SetDefaultLeaderboardIdentifier	4333
• 84.96 GameKit.SetPlayerDidChangeScriptTrigger	4334
• 84.97 GameKit.ShowChallengeComposeDialog	4335
• 124.20 Plugin.CallErrorScriptTrigger	6285
• 124.39 Plugin.SetErrorScriptTrigger	6307
• 125.3 PortMidi.ClearDataAvailableHandler	6343
• 125.23 PortMidi.SetDataAvailableEvaluate	6367
• 125.24 PortMidi.SetDataAvailableHandler	6368
• 157.29 SSH.Tunnel.BytesReceived	7516
• 157.30 SSH.Tunnel.BytesSent	7517
• 157.31 SSH.Tunnel.Cancel	7518
• 157.32 SSH.Tunnel.Cancelled	7519
• 157.33 SSH.Tunnel.Messages	7520
• 157.34 SSH.Tunnel.Run	7521
• 157.35 SSH.Tunnel.Running	7523
• 150.17 SmartCard.ReadFile	7108
• 150.21 SmartCard.SplitValues	7114
• 159.27 SyntaxColoring.GetRememberColumnWidths	7591
• 159.64 SyntaxColoring.SetRememberColumnWidths	7631
• 164.46 Text.MergeFields	7839
• 180.30 WebView.ClearBrowserSession	8316
• 182.80 Window.SetFocus	8633

136 functions.

Chapter 25

New in Version 9.0

• 35.11 Applescript.DeterminePermissionToAutomateTarget	941
• 36.1 Archive.Compress	943
• 36.2 Archive.Content	946
• 36.3 Archive.Extract	948
• 36.4 Archive.FileList	949
• 36.5 Archive.LibVersion	950
• 36.6 Archive.LibVersionDetails	951
• 36.7 Archive.SupportedFormats	952
• 61.29 CURL.FormClear	1812
• 61.114 CURL.GetResultAsEMailList	1912
• 85.25 GMImage.AutoOrient	4369
• 85.66 GMImage.Extent	4431
• 85.149 GMImage.GetQuiet	4530
• 85.216 GMImage.Repage	4615
• 85.218 GMImage.Resize	4619
• 85.279 GMImage.SetQuiet	4698
• 93.15 ImageView.SetFrameWithControl	5107
• 100.32 JSON.CreateValue	5285
• 100.36 JSON.Equals	5289

- 100.37 JSON.FindValueInArray 5291
- 100.38 JSON.FindValueInObjectArray 5293
- 106.2 MapView.AddPin 5639
- 106.3 MapView.AddPinWithAddress 5641
- 106.8 MapView.CreateWithControl 5650
- 106.9 MapView.CreateWithSize 5652
- 106.15 MapView.GetAutoResizingMask 5659
- 106.16 MapView.GetCenterCoordinateLatitude 5660
- 106.17 MapView.GetCenterCoordinateLongitude 5661
- 106.18 MapView.GetHeight 5662
- 106.19 MapView.GetLeft 5663
- 106.20 MapView.GetMapType 5664
- 106.25 MapView.GetPitchEnabled 5670
- 106.26 MapView.GetRegion 5671
- 106.27 MapView.GetRegionLatitude 5672
- 106.28 MapView.GetRegionLatitudeSpan 5673
- 106.29 MapView.GetRegionLongitude 5674
- 106.30 MapView.GetRegionLongitudeSpan 5675
- 106.31 MapView.GetRotateEnabled 5676
- 106.32 MapView.GetScrollEnabled 5677
- 106.33 MapView.GetShowsBuildings 5678
- 106.34 MapView.GetShowsCompass 5679
- 106.35 MapView.GetShowsPointsOfInterest 5680
- 106.36 MapView.GetShowsScale 5681
- 106.37 MapView.GetShowsTraffic 5682
- 106.38 MapView.GetShowsUserLocation 5683
- 106.39 MapView.GetShowsZoomControls 5684
- 106.40 MapView.GetTag 5685
- 106.41 MapView.GetToolTip 5686

	771
• 106.42 MapView.GetTop	5687
• 106.43 MapView.GetVisible	5688
• 106.44 MapView.GetVisibleMapRect	5689
• 106.45 MapView.GetWidth	5690
• 106.46 MapView.GetZoomEnabled	5691
• 106.48 MapView.IsUserLocationVisible	5693
• 106.53 MapView.Release	5699
• 106.54 MapView.ReleaseAll	5700
• 106.65 MapView.SetAutoResizingMask	5712
• 106.67 MapView.SetCoordinate	5715
• 106.68 MapView.SetFrame	5716
• 106.69 MapView.SetFrameWithControl	5717
• 106.70 MapView.SetMapType	5718
• 106.75 MapView.SetPitchEnabled	5723
• 106.76 MapView.SetRegion	5724
• 106.77 MapView.SetRotateEnabled	5725
• 106.79 MapView.SetScrollEnabled	5728
• 106.80 MapView.SetShowsBuildings	5729
• 106.81 MapView.SetShowsCompass	5730
• 106.82 MapView.SetShowsPointsOfInterest	5731
• 106.83 MapView.SetShowsScale	5732
• 106.84 MapView.SetShowsTraffic	5733
• 106.85 MapView.SetShowsUserLocation	5734
• 106.86 MapView.SetShowsZoomControls	5736
• 106.87 MapView.SetTag	5737
• 106.88 MapView.SetToolTip	5738
• 106.89 MapView.SetVisible	5739
• 106.90 MapView.SetVisibleMapRect	5740
• 106.91 MapView.SetZoomEnabled	5741

- 106.93 MapView.ShowAddress 5743
- 106.95 MapView.Snapshot 5746
- 121.6 Path.LongPath 6146
- 121.9 Path.ShortPath 6151
- 124.28 Plugin.JasperVersion 6293
- 124.44 Plugin.TiffVersion 6314
- 142.11 ScriptWorkspace.ScriptText 6859
- 142.13 ScriptWorkspace.ScrollToLine 6861
- 142.14 ScriptWorkspace.ScrollToSelection 6862
- 142.16 ScriptWorkspace.SelectLines 6864
- 154.19 Socket.IsClosed 7209
- 154.20 Socket.IsListening 7210
- 182.49 Window.IsMaximized 8591
- 182.50 Window.IsMinimized 8592

91 functions.

Chapter 26

New in Version 9.1

- 41.8 AVRecorder.EncoderCount 1099
- 41.9 AVRecorder.EncoderInfo 1100
- 41.12 AVRecorder.GetEncoder 1103
- 41.24 AVRecorder.SetEncoder 1117
- 41.29 AVRecorder.ShowPropertyDialog 1123
- 58.3 CoreLocation.RegionMonitoringAvailable 1671
- 58.4 CoreLocation.RegionMonitoringEnabled 1672
- 58.10 CoreLocation.authorizationStatus 1679
- 58.14 CoreLocation.dismissHeadingCalibrationDisplay 1683
- 58.24 CoreLocation.requestAlwaysAuthorization 1693
- 58.25 CoreLocation.requestLocation 1694
- 58.26 CoreLocation.requestWhenInUseAuthorization 1695
- 58.33 CoreLocation.startUpdatingHeading 1702
- 58.36 CoreLocation.stopUpdatingHeading 1705
- 77.1 DocumentPicker.Dismiss 3709
- 77.2 DocumentPicker.Export 3710
- 77.3 DocumentPicker.File 3711
- 77.4 DocumentPicker.FileCount 3712
- 77.5 DocumentPicker.Files 3713

- 77.6 DocumentPicker.Import 3714
- 77.7 DocumentPicker.IsVisible 3715
- 77.8 DocumentPicker.Move 3716
- 77.9 DocumentPicker.Open 3717
- 77.10 DocumentPicker.SetTrigger 3718
- 69.9 DragDrop.GetAutoResizingMask 2493
- 69.38 DragDrop.SetAutoResizingMask 2530
- 70.209 DynaPDF.GetOCG 2855
- 70.210 DynaPDF.GetOCGContUsage 2858
- 70.211 DynaPDF.GetOCGCount 2860
- 70.212 DynaPDF.GetOCGUsageUserName 2861
- 70.405 DynaPDF.SetOCGState 3188
- 70.474 DynaPDF.Table.SetCellAction 3294
- 79.55 FM.SQL.Avg 3992
- 79.65 FM.SQL.Max 4014
- 79.66 FM.SQL.Min 4016
- 79.69 FM.SQL.Sum 4022
- 91.80 ImageCapture.PDF 5012
- 106.56 MapView.RemoveAnnotations 5702
- 106.58 MapView.RemoveOverlays 5704
- 106.94 MapView.ShowAllAnnotations 5745
- 48.9 PKCS7.ReadFromContainer 1356
- 48.10 PKCS7.ReadFromFile 1357
- 48.11 PKCS7.Release 1358
- 48.12 PKCS7.SignedDataCert 1359
- 48.13 PKCS7.SignedDataCertCount 1360
- 48.14 PKCS7.SignedDataContent 1361
- 166.4 Time.TimeZoneOffset 7934
- 124.61 Trace.WriteLine 6337

	775
• 181.11 WIA.Images	8510
• 186.17 WinSendMail.SendAsync	8762
• 189.1 WordFile.AddMediaFile	8813
• 48.34 X509.Write	1381

52 functions.

Chapter 27

New in Version 9.2

- 36.8 Archive.Verify 953
- 47.34 Calendar.Initialize 1266
- 92.1 ContinuityCamera.Clear 5033
- 92.2 ContinuityCamera.Import 5034
- 92.3 ContinuityCamera.PopupMenu 5035
- 92.4 ContinuityCamera.Result 5037
- 92.5 ContinuityCamera.SetScriptTrigger 5038
- 69.4 DragDrop.CreateOnPopoverWithControl 2483
- 69.5 DragDrop.CreateOnPopoverWithSize 2485
- 69.17 DragDrop.GetHTML 2502
- 69.25 DragDrop.GetRTF 2514
- 70.44 DynaPDF.ConvertColors 2617
- 70.257 DynaPDF.GetViewerPreferences 2914
- 70.439 DynaPDF.SetViewerPreferences 3244
- 79.51 FM.RunSaveAsXML 3985
- 85.92 GMImage.GetAttributeNames 4468
- 85.93 GMImage.GetAttributesJSON 4469
- 86.3 Hash.DigestFile 4791
- 104.4 ListDialog.ClearColumnHeaders 5567

- 104.6 ListDialog.ColumnCount 5569
- 104.10 ListDialog.GetColumnHeader 5573
- 104.29 ListDialog.SetColumnCount 5592
- 104.30 ListDialog.SetColumnHeader 5593
- 106.10 MapView.FormatDistance 5654
- 106.51 MapView.ParseDistance 5696
- 106.52 MapView.PlanRoute 5697
- 108.18 Math.PolylineDecode 5773
- 108.19 Math.PolylineEncode 5774
- 109.1 Matrix.AddColumn 5779
- 109.2 Matrix.AddColumns 5781
- 109.3 Matrix.AddRow 5782
- 109.4 Matrix.AddRows 5783
- 109.5 Matrix.Avg 5784
- 109.6 Matrix.CSV 5785
- 109.7 Matrix.Clear 5787
- 109.8 Matrix.ClearValues 5788
- 109.9 Matrix.Clone 5789
- 109.10 Matrix.DataType 5790
- 109.11 Matrix.Free 5791
- 109.12 Matrix.GetColumn 5792
- 109.13 Matrix.GetRow 5793
- 109.14 Matrix.GetText 5794
- 109.15 Matrix.GetValue 5795
- 109.16 Matrix.Height 5797
- 109.17 Matrix.InsertRecords 5798
- 109.18 Matrix.InsertRecordsToSQL 5800
- 109.19 Matrix.JSONRecord 5802
- 109.20 Matrix.JSONRecords 5803

	779
• 109.21 Matrix.Max	5804
• 109.22 Matrix.Min	5805
• 109.23 Matrix.New	5806
• 109.24 Matrix.NewWithSQL	5808
• 109.25 Matrix.RemoveColumn	5809
• 109.26 Matrix.RemoveRow	5810
• 109.27 Matrix.Resize	5811
• 109.28 Matrix.SetColumn	5812
• 109.29 Matrix.SetRow	5814
• 109.30 Matrix.SetValue	5816
• 109.31 Matrix.Sum	5818
• 109.32 Matrix.Text	5820
• 109.33 Matrix.Width	5822
• 122.24 PDFKit.GetPrintLastSettings	6192
• 122.25 PDFKit.GetPrintOption	6193
• 122.43 PDFKit.SetPrintOption	6224
• 48.8 PKCS12.ShowDialog	1355
• 127.1 PageSetupDialog.ClearOption	6383
• 127.2 PageSetupDialog.ClearOptions	6384
• 127.3 PageSetupDialog.Disable	6385
• 127.4 PageSetupDialog.Enable	6386
• 127.5 PageSetupDialog.GetLastSettings	6388
• 127.6 PageSetupDialog.GetNoDialog	6389
• 127.7 PageSetupDialog.GetOption	6390
• 127.8 PageSetupDialog.GetPaperName	6391
• 127.9 PageSetupDialog.GetPaperOrientation	6392
• 127.10 PageSetupDialog.GetPrinterName	6393
• 127.11 PageSetupDialog.GetScalingFactor	6394
• 127.12 PageSetupDialog.Install	6395

- 127.13 PageSetupDialog.SetNoDialog 6397
- 127.14 PageSetupDialog.SetOption 6398
- 127.15 PageSetupDialog.SetPaperName 6399
- 127.16 PageSetupDialog.SetPaperOrientation 6400
- 127.17 PageSetupDialog.SetPrinterName 6401
- 127.18 PageSetupDialog.SetScalingFactor 6402
- 128.1 Printer.CurrentNumberOfCopies 6449
- 130.5 ProgressDialog.GetImageHeight 6499
- 130.6 ProgressDialog.GetImageWidth 6500
- 130.21 ProgressDialog.SetImageHeight 6521
- 130.22 ProgressDialog.SetImageWidth 6522
- 141.6 Screen.Scale 6842
- 154.24 Socket.List 7214
- 164.22 Text.DecodeIMAPFolderName 7807
- 165.1 TextView.CanUndo 7877
- 165.2 TextView.Copy 7878
- 165.3 TextView.CreateOnPopoverWithControl 7879
- 165.4 TextView.CreateOnPopoverWithSize 7881
- 165.5 TextView.CreateWithControl 7882
- 165.6 TextView.CreateWithSize 7884
- 165.7 TextView.CreateWithWindow 7885
- 165.8 TextView.Cut 7886
- 165.9 TextView.GetAutoCorrectionEnabled 7887
- 165.10 TextView.GetAutoResizingMask 7888
- 165.11 TextView.GetHTMLText 7889
- 165.12 TextView.GetHeight 7890
- 165.13 TextView.GetLeft 7891
- 165.14 TextView.GetPlainText 7892
- 165.15 TextView.GetRTF 7893

	781
• 165.16 TextView.GetReadOnly	7894
• 165.17 TextView.GetRulerVisible	7895
• 165.18 TextView.GetSpellCheckingEnabled	7896
• 165.19 TextView.GetStyled	7897
• 165.20 TextView.GetTag	7898
• 165.21 TextView.GetTop	7899
• 165.22 TextView.GetVisible	7900
• 165.23 TextView.GetWidth	7901
• 165.24 TextView.GetWindowRef	7902
• 165.25 TextView.List	7903
• 165.26 TextView.Paste	7904
• 165.27 TextView.Release	7905
• 165.28 TextView.ReleaseAll	7906
• 165.29 TextView.SetAutoCorrectionEnabled	7907
• 165.30 TextView.SetAutoResizingMask	7908
• 165.31 TextView.SetFocus	7910
• 165.32 TextView.SetFrame	7911
• 165.33 TextView.SetFrameWithControl	7912
• 165.34 TextView.SetHTMLText	7913
• 165.35 TextView.SetPlainText	7914
• 165.36 TextView.SetRTF	7915
• 165.37 TextView.SetReadOnly	7916
• 165.38 TextView.SetRulerVisible	7917
• 165.39 TextView.SetSpellCheckingEnabled	7918
• 165.40 TextView.SetStyled	7919
• 165.41 TextView.SetTag	7920
• 165.42 TextView.SetVisible	7921
• 165.43 TextView.ShowFontPanel	7922
• 165.44 TextView.Undo	7923
• 174.44 UserNotification.removeAllScheduledNotifications	8203
• 48.31 X509.ShowDialog	1378

137 functions.

Chapter 28

New in Version 9.3

• 43.10 Barcode.LibVersion	1156
• 61.253 CURL.SetOptionMaxAgeConn	2129
• 76.137 Events.Reminder.GetDueTimestamp	3660
• 76.140 Events.Reminder.GetStartTimestamp	3663
• 80.3 FM.CompareTables	4069
• 85.335 GImage.WriteToContainer	4766
• 100.58 JSON.Import.ErrorCount	5326
• 100.59 JSON.Import.Errors	5327
• 100.71 JSON.Sort	5343
• 102.33 LDAP.StartTLS	5415
• 106.59 MapView.Screenshot	5705
• 106.78 MapView.SetScript	5726
• 124.19 Plugin.CallCounter	6284
• 124.26 Plugin.InstallSignalHandlers	6291
• 126.5 Preferences.GetValueType	6378
• 148.14 Shell.GetArguments	7023
• 161.1 SystemInfo.ADSystemInfo	7651
• 161.47 SystemInfo.isCatalina	7701
• 164.38 Text.FilterUTF16	7830

- 164.63 Text.Styles 7863
- 124.56 Trace.GetErrorsOnly 6332
- 124.57 Trace.GetWithTimes 6333
- 124.59 Trace.SetErrorsOnly 6335
- 124.60 Trace.SetWithTimes 6336
- 170.9 UNNotification.Deliver 8074
- 170.11 UNNotification.GetDescription 8076
- 170.33 UNNotification.SetCalendarDateTrigger 8104
- 180.51 WebView.GetAllowsLinkPreview 8346
- 180.84 WebView.HasOnlySecureContent 8388
- 180.121 WebView.SetAllowsLinkPreview 8448
- 180.139 WebView.StopLoading 8479
- 191.14 XML.Import.ErrorCount 9278
- 191.15 XML.Import.Errors 9279

33 functions.

Chapter 29

New in Version 9.4

- 43.5 Barcode.GenerateJSON 1149
- 45.1 BlueThermProbe.ConnectToDevice 1201
- 45.2 BlueThermProbe.ConnectedDevices 1203
- 45.3 BlueThermProbe.Device 1204
- 45.4 BlueThermProbe.DeviceSensor 1205
- 45.5 BlueThermProbe.Devices 1207
- 45.6 BlueThermProbe.DisconnectFromDevice 1208
- 45.7 BlueThermProbe.Initialize 1209
- 45.8 BlueThermProbe.IsBluetoothAvailable 1210
- 45.9 BlueThermProbe.IsInitialized 1211
- 45.10 BlueThermProbe.RemoveDevice 1212
- 45.11 BlueThermProbe.SendCommand 1213
- 45.12 BlueThermProbe.SetBatteryLevelScript 1214
- 45.13 BlueThermProbe.SetDeviceUpdatedScript 1215
- 45.14 BlueThermProbe.SetDisconnectedScript 1216
- 45.15 BlueThermProbe.SetNewDeviceScript 1217
- 45.16 BlueThermProbe.SetNotificationReceivedScript 1218
- 45.17 BlueThermProbe.SetSensorUpdatedSScript 1219
- 45.18 BlueThermProbe.StartDeviceScan 1220

- 45.19 BlueThermProbe.StopDeviceScan 1221
- 45.20 BlueThermProbe.VersionNumber 1222
- 49.1 CGImageSource.ClearProperties 1383
- 49.6 CGImageSource.Export 1390
- 49.7 CGImageSource.FileName 1392
- 49.8 CGImageSource.HasProperty 1393
- 49.14 CGImageSource.SetProperty 1405
- 49.16 CGImageSource.SupportedExportTypes 1409
- 61.320 CURL.SetOptionSASLAuthZID 2221
- 58.17 CoreLocation.hasLocation 1686
- 72.3 EmailParser.AttachedEmails 3407
- 79.5 FM.ChooseDictionary 3888
- 79.25 FM.GetDictionary 3932
- 79.26 FM.GetDictionaryList 3933
- 78.4 Files.AudioTags 3775
- 78.53 Files.SetAudioTags 3860
- 85.172 GMMImage.Hash 4555
- 106.1 MapView.AddCircle 5637
- 106.4 MapView.AddPoint 5643
- 106.5 MapView.AddPolygon 5645
- 106.6 MapView.AddPolyline 5647
- 106.7 MapView.Annotations 5649
- 106.11 MapView.GetAnnotationCoordinate 5655
- 106.50 MapView.Overlays 5695
- 106.55 MapView.RemoveAnnotation 5701
- 106.57 MapView.RemoveOverlay 5703
- 106.61 MapView.SetAnnotationCoordinate 5708
- 106.66 MapView.SetColor 5714
- 155.7 SpeechRecognition.AuthorizationStatus 7282

	787
• 155.8 <code>SpeechRecognition.Initialize</code>	7283
• 155.9 <code>SpeechRecognition.IsInitialized</code>	7284
• 155.10 <code>SpeechRecognition.Recognize</code>	7285
• 155.11 <code>SpeechRecognition.RequestAuthorization</code>	7287
• 155.12 <code>SpeechRecognition.SupportedLocales</code>	7288
• 155.13 <code>SpeechRecognition.SupportsOnDeviceRecognition</code>	7290
• 161.15 <code>SystemInfo.MacBoardID</code>	7666
• 161.21 <code>SystemInfo.MacROMBootVersion</code>	7672
• 164.7 <code>Text.ConvertFromTextEncoding</code>	7777
• 164.8 <code>Text.ConvertToTextEncoding</code>	7783
• 170.38 <code>UNNotification.SetNFCScript</code>	8111
• 179.1 <code>Vision.ClassifyImage</code>	8273
• 179.2 <code>Vision.DetectBarcode</code>	8275
• 179.3 <code>Vision.KnownClassifications</code>	8276
• 179.4 <code>Vision.RecognizeText</code>	8277
• 179.5 <code>Vision.SupportedRecognitionLanguages</code>	8279
• 179.6 <code>Vision.SupportedSymbologies</code>	8280
• 180.125 <code>WebView.SetFocus</code>	8454

66 functions.

Chapter 30

New in Version 9.5

- 70.64 DynaPDF.CreateXFASStream 2661
- 70.254 DynaPDF.GetUserRights 2910
- 70.443 DynaPDF.SetXFASStream 3248
- 178.2 FM.VariableAppend 8261
- 104.12 ListDialog.GetOtherButtonEvaluate 5575
- 104.13 ListDialog.GetOtherButtonLabel 5576
- 104.32 ListDialog.SetOtherButtonEvaluate 5595
- 104.33 ListDialog.SetOtherButtonLabel 5596
- 106.12 MapView.GetAnnotationDragImage 5656
- 106.13 MapView.GetAnnotationImage 5657
- 106.14 MapView.GetAnnotationSelectedImage 5658
- 106.21 MapView.GetOverlayFillColor 5665
- 106.22 MapView.GetOverlayLineWidth 5666
- 106.23 MapView.GetOverlayPoints 5667
- 106.24 MapView.GetOverlayStrokeColor 5669
- 106.47 MapView.GetZoomLevel 5692
- 106.49 MapView.MouseCoordinate 5694
- 106.60 MapView.SelectedAnnotations 5707
- 106.62 MapView.SetAnnotationDragImage 5709

- 106.63 `MapView.SetAnnotationImage` 5710
- 106.64 `MapView.SetAnnotationSelectedImage` 5711
- 106.71 `MapView.SetOverlayFillColor` 5719
- 106.72 `MapView.SetOverlayLineWidth` 5720
- 106.73 `MapView.SetOverlayPoints` 5721
- 106.74 `MapView.SetOverlayStrokeColor` 5722
- 106.92 `MapView.SetZoomLevel` 5742
- 124.43 `Plugin.StartTimeStamp` 6313
- 159.1 `SyntaxColoring.AddContextMenuCommand` 7553
- 159.10 `SyntaxColoring.ClearContextMenuCommands` 7573
- 159.47 `SyntaxColoring.RemoveContextMenuCommand` 7612
- 159.74 `SyntaxColoring.ShowTextPositions.GetEnabled` 7642
- 159.75 `SyntaxColoring.ShowTextPositions.SetEnabled` 7643
- 161.14 `SystemInfo.MacAppDarkMode` 7665
- 161.23 `SystemInfo.MacSystemDarkMode` 7674
- 180.26 `WebView.AddUserScript` 8310
- 180.76 `WebView.GetPrivateBrowsing` 8380
- 180.105 `WebView.RemoveAllUserScripts` 8417
- 180.136 `WebView.SetPrivateBrowsing` 8476
- 180.140 `WebView.UserScripts` 8480
- 182.106 `Window.ShowKeyboard` 8665

40 functions.

Chapter 31

New in Version 10.0

- 61.69 `CURL.GetMultiOptionMaxConcurrentStreams` 1862
- 61.118 `CURL.GetResultAsMime` 1920
- 61.166 `CURL.SetMultiOptionMaxConcurrentStreams` 2007
- 59.17 `CoreML.Update` 1732
- 68.1 `DocumentCameraScan.Clear` 2463
- 68.2 `DocumentCameraScan.Close` 2465
- 68.3 `DocumentCameraScan.ErrorMessage` 2466
- 68.4 `DocumentCameraScan.Initialize` 2467
- 68.5 `DocumentCameraScan.IsInitialized` 2469
- 68.6 `DocumentCameraScan.PageCount` 2470
- 68.7 `DocumentCameraScan.PageImage` 2471
- 68.8 `DocumentCameraScan.Scan` 2473
- 68.9 `DocumentCameraScan.SetScript` 2474
- 68.10 `DocumentCameraScan.Supported` 2476
- 68.11 `DocumentCameraScan.Title` 2477
- 68.12 `DocumentCameraScan.Visible` 2478
- 70.50 `DynaPDF.CreateGoToAction` 2630
- 70.51 `DynaPDF.CreateGoToActionEx` 2632
- 70.52 `DynaPDF.CreateGoToRAction` 2634

- 70.53 DynaPDF.CreateGoToRActionEx 2636
- 70.110 DynaPDF.FlattenAnnotOrField 2729
- 71.1 EIDSDK.Address 3367
- 71.2 EIDSDK.BeginTransaction 3368
- 71.3 EIDSDK.CardDeliveryMunicipality 3369
- 71.4 EIDSDK.CardNumber 3370
- 71.5 EIDSDK.CardValidFrom 3371
- 71.6 EIDSDK.CardValidTo 3372
- 71.7 EIDSDK.ChipNumber 3373
- 71.8 EIDSDK.Close 3374
- 71.9 EIDSDK.DateOfBirth 3375
- 71.10 EIDSDK.DocTypeInt 3376
- 71.11 EIDSDK.Duplicate 3377
- 71.12 EIDSDK.EndTransaction 3378
- 71.13 EIDSDK.FirstName 3379
- 71.14 EIDSDK.Initialize 3380
- 71.15 EIDSDK.LastName 3381
- 71.16 EIDSDK.MemberOfFamily 3382
- 71.17 EIDSDK.Municipality 3383
- 71.18 EIDSDK.NatNumber 3384
- 71.19 EIDSDK.Nationality 3385
- 71.20 EIDSDK.NobleCondition 3386
- 71.21 EIDSDK.Open 3387
- 71.22 EIDSDK.PhotoDigest 3388
- 71.23 EIDSDK.Picture 3389
- 71.24 EIDSDK.PlaceOfBirth 3390
- 71.25 EIDSDK.PostalCode 3391
- 71.26 EIDSDK.SDKReleaseDate 3392
- 71.27 EIDSDK.SDKVersion 3393

	793
• 71.28 EIDSDK.SetTrigger	3394
• 71.29 EIDSDK.Sex	3395
• 71.30 EIDSDK.SpecialOrganisation	3396
• 71.31 EIDSDK.SpecialStatus	3397
• 71.32 EIDSDK.StartScan	3398
• 71.33 EIDSDK.StopScan	3399
• 71.34 EIDSDK.SupportsPinPad	3400
• 71.35 EIDSDK.ThirdName	3401
• 71.36 EIDSDK.Version	3402
• 78.7 Files.CopyFiles	3780
• 98.1 JS.AddFileMakerEvaluateFunction	5181
• 98.2 JS.AddFileMakerRunScriptFunction	5183
• 98.3 JS.AddFileMakerSQLFunction	5185
• 98.4 JS.AddFunction	5186
• 98.5 JS.CallFunction	5188
• 98.6 JS.Evaluate	5190
• 98.7 JS.EvaluateToString	5194
• 98.8 JS.Free	5196
• 98.9 JS.GetGlobalProperty	5198
• 98.10 JS.GetGlobalPropertyValue	5200
• 98.11 JS.New	5201
• 98.14 JS.SetGlobalProperty	5205
• 98.15 JS.SetGlobalPropertyValue	5207
• 100.35 JSON.EqualContent	5288
• 103.5 List.AndColumn	5422
• 103.21 List.NotColumn	5444
• 103.23 List.OrColumn	5447
• 103.39 List.XOrColumn	5472
• 104.25 ListDialog.Reset	5588

- 124.21 Plugin.CompileDate 6286
- 124.27 Plugin.IsPrerelease 6292
- 103.48 QuickList.AndColumn 5489
- 103.71 QuickList.NotColumn 5525
- 103.73 QuickList.OrColumn 5529
- 103.95 QuickList.XOrColumn 5560
- 138.1 RichText.AppendFormattedText 6713
- 138.2 RichText.AppendText 6714
- 142.5 ScriptWorkspace.GetScriptListSearch 6853
- 142.6 ScriptWorkspace.IsActive 6854
- 142.18 ScriptWorkspace.SelectedLines 6866
- 142.19 ScriptWorkspace.SetScriptListSearch 6867
- 148.19 Shell.GetDataAvailableEvaluate 7028
- 148.20 Shell.GetDataAvailableScriptFileName 7029
- 148.21 Shell.GetDataAvailableScriptName 7030
- 148.40 Shell.SetDataAvailableEvaluate 7050
- 148.41 Shell.SetDataAvailableScript 7051
- 159.24 SyntaxColoring.GetFormulasWithLinks 7588
- 159.44 SyntaxColoring.ListContextMenuCommand 7609
- 159.61 SyntaxColoring.SetFormulasWithLinks 7628
- 161.26 SystemInfo.NetworkStats 7677
- 187.1 WMFP.Create 8767
- 187.2 WMFP.FrameStep 8770
- 187.3 WMFP.GetBalance 8771
- 187.4 WMFP.GetDuration 8772
- 187.5 WMFP.GetIdealVideoSize 8773
- 187.7 WMFP.GetMute 8775
- 187.8 WMFP.GetNativeVideoSize 8776
- 187.9 WMFP.GetPosition 8777

	795
• 187.10 WMFP.GetRate	8778
• 187.11 WMFP.GetState	8779
• 187.12 WMFP.GetTag	8780
• 187.13 WMFP.GetVisible	8781
• 187.14 WMFP.GetVolume	8782
• 187.15 WMFP.Pause	8783
• 187.16 WMFP.Play	8784
• 187.17 WMFP.Release	8785
• 187.19 WMFP.SetBalance	8787
• 187.20 WMFP.SetBorder	8788
• 187.21 WMFP.SetFrame	8789
• 187.23 WMFP.SetMute	8791
• 187.24 WMFP.SetPlaybackEndedScriptTrigger	8792
• 187.25 WMFP.SetPosition	8793
• 187.26 WMFP.SetRate	8794
• 187.27 WMFP.SetTag	8795
• 187.28 WMFP.SetVisible	8796
• 187.29 WMFP.SetVolume	8797
• 187.30 WMFP.Stop	8798
• 187.31 WMFP.UpdateVideo	8799
• 180.29 WebView.CallFunction	8315
• 180.44 WebView.Evaluate	8333
• 182.59 Window.PositionNextDialog	8602
• 190.27 XL.Book.ReleaseAll	8885

130 functions.

Chapter 32

New in Version 10.1

- 50.9 CLGeocoder.JSON 1426
- 54.11 CNContact.DeleteValue 1540
- 54.18 CNContact.Show 1550
- 54.22 CNContactPicker.Close 1557
- 54.23 CNContactPicker.Current 1558
- 54.24 CNContactPicker.SetTrigger 1559
- 54.25 CNContactPicker.Show 1560
- 61.19 CURL.Features 1792
- 51.1 Clipboard.DetectFileMakerDataType 1435
- 70.326 DynaPDF.SaveAndSignFileWinCrypt 3067
- 70.327 DynaPDF.SaveAndSignFileWinCryptDialog 3069
- 70.499 DynaPDF.Uninitialize 3342
- 79.27 FM.GetDisableContextualMenus 3934
- 79.74 FM.SetDisableContextualMenus 4030
- 85.65 GMImage.ExifThumbnail 4430
- 85.77 GMImage.FontMap 4449
- 98.12 JS.Now 5203
- 98.13 JS.ObjectCount 5204
- 98.16 JS.StringCount 5209

• 98.17 JS.TimeToDateComponents	5210
• 98.18 JS.TimeToUTCDate	5212
• 98.19 JS.UTCDateToTime	5213
• 112.20 Menu.List	5880
• 112.78 MenuItem.List	5946
• 131.1 Proj.BatchTransform	6545
• 131.2 Proj.Initialize	6546
• 131.3 Proj.IsInitialized	6547
• 131.4 Proj.Transform	6548
• 142.2 ScriptWorkspace.CopyScriptText	6850
• 142.21 ScriptWorkspace.StyledScriptText	6869
• 147.1 SharedMemory.Exists	6997
• 147.2 SharedMemory.GetValue	6998
• 147.3 SharedMemory.SetValue	6999
• 159.22 SyntaxColoring.GetFontName	7586
• 159.23 SyntaxColoring.GetFontSize	7587
• 159.59 SyntaxColoring.SetFontName	7626
• 159.60 SyntaxColoring.SetFontSize	7627
• 187.6 WMFP.GetLoop	8774
• 187.18 WMFP.Screenshot	8786
• 187.22 WMFP.SetLoop	8790
• 180.98 WebView.PostURL	8407
• 190.294 XL.Uninitialize	9251
• 94.4 iOSApp.GetIdleTimerDisabled	5116
• 94.14 iOSApp.SetIdleTimerDisabled	5126

44 functions.

Chapter 33

Addressbook

Functions for the Mac OS X addressbook.

You can use this to sync contacts from FileMaker database to system addressbook. As your addressbook can be synchronized via iCloud to iPhones or via Google/Exchange to any other devices, you only need one Mac to sync contacts to devices.

On Server you can only use addressbook functions if you got a addressbook for the user account where the server runs. Normally the server user account has no addressbook. For 32-bit and 64-bit Mac application.

See contacts functions for newer API which works better with multiple accounts.

33.1 Addressbook.Account.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.Account.Name"; Account)

Parameters

Account

The account identifier for this account.

\$account

Result Returns text or error.

Description

Examples

Query name of local account:

MBS("Addressbook.Account.Name"; "_local")

See also

- 33.2 Addressbook.Account.Type 801
- 33.3 Addressbook.Account.URL 802
- 33.20 Addressbook.allAccounts 822
- 33.21 Addressbook.defaultAccount 823
- 33.22 Addressbook.enabledAccounts 824
- 33.56 Addressbook.persistentAccounts 868
- 33.18 Addressbook.Record.Account 818

Created 17th March 2016, last changed 17th March 2016.

33.2 Addressbook.Account.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.Account.Type"; Account)

Parameters

Account

The account identifier for this account.

\$account

Result Returns text or error.

Description

See also

- [33.1 Addressbook.Account.Name](#) 799
- [33.3 Addressbook.Account.URL](#) 802
- [33.20 Addressbook.allAccounts](#) 822
- [33.21 Addressbook.defaultAccount](#) 823
- [33.22 Addressbook.enabledAccounts](#) 824
- [33.56 Addressbook.persistentAccounts](#) 868

Created 17th March 2016, last changed 17th March 2016.

33.3 Addressbook.Account.URL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.Account.URL"; Account)

Parameters

Account

The account identifier for this account.

\$account

Result Returns URL or error.

Description

See also

- 33.1 Addressbook.Account.Name 799
- 33.2 Addressbook.Account.Type 801
- 33.20 Addressbook.allAccounts 822
- 33.21 Addressbook.defaultAccount 823
- 33.22 Addressbook.enabledAccounts 824
- 33.56 Addressbook.persistentAccounts 868

Created 17th March 2016, last changed 17th March 2016.

33.4 Addressbook.Account.isMainAccount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.Account.isMainAccount"; Account)

Parameters

Account

The account identifier for this account.

\$account

Result Returns 1, 0 or error.

Description

Returns 1 if main or 0 if not.

See also

- 33.20 Addressbook.allAccounts 822
- 33.21 Addressbook.defaultAccount 823
- 33.22 Addressbook.enabledAccounts 824
- 33.56 Addressbook.persistentAccounts 868

Created 17th March 2016, last changed 17th March 2016.

33.5 Addressbook.LocalizedPropertyOrLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.LocalizedPropertyOrLabel"; key)

Parameters

key

The identifier for label or property.

"Creation"

Result Returns localized name.

Description

Examples

Query localized name of PhoneProperty

MBS("Addressbook.LocalizedPropertyOrLabel"; "PhoneProperty")

Example result: "Telefon" in Germany

Created 18th August 2014, last changed 11st December 2016.

33.6 Addressbook.NewGroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.NewGroup")

Result Returns ID for new group.

Description

This group has no ID assigned until you save it to the addressbook. So the plugin returns a special ID where the plugin knows that when you change the group, you refer to the new group.

Address book item reference numbers are starting at 26000 and counting up for each new item.

Examples

Create group and save changes:

```
$groupID = MBS( "Addressbook.NewGroup" )
$r = MBS( "Addressbook.record.SetValueForProperty"; $groupID; "GroupNameProperty"; "Friends" )
$r = MBS( "Addressbook.addRecord"; $groupID )
$r = MBS( "Addressbook.save" )
```

See also

- 33.19 Addressbook.addRecord 819
- 33.31 Addressbook.groups 833
- 33.7 Addressbook.NewPerson 806
- 33.68 Addressbook.record.SetValueForProperty 880
- 33.76 Addressbook.save 896

Created 18th August 2014, last changed 5th April 2016.

33.7 Addressbook.NewPerson

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.NewPerson")

Result Returns ID for new person.

Description

This person has no ID assigned until you save it to the addressbook. So the plugin returns a special ID where the plugin knows that when you change the person, you refer to the new person.

Address book item reference numbers are starting at 26000 and counting up for each new item.

Examples

Create person and save changes:

```
$personID = MBS( "Addressbook.NewPerson" )
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "FirstNameProperty"; "John" )
$r = MBS( "Addressbook.addRecord"; $personID )
$r = MBS( "Addressbook.save" )
```

Add a new person to addressbook.

```
# Fields to variables
#
Set Variable [ $vn; Value:Adressen::Extra ]
Set Variable [ $nn; Value:Adressen::Nachname ]
Set Variable [ $org; Value:Adressen::Name ]
Set Variable [ $str; Value:Adressen::Straße ]
Set Variable [ $land; Value:Adressen::Land ]
Set Variable [ $plz; Value:Adressen::PLZ ]
Set Variable [ $ort; Value:Adressen::Stadt ]
Set Variable [ $email; Value:Adressen::EMail ]
Set Variable [ $tel; Value:Adressen::Tel ]
Set Variable [ $mob; Value:Adressen::Mobil ]
#
# Create new person
#
Set Variable [ $personID; Value:MBS ( "Addressbook.NewPerson" ) ]
# Add first name
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "FirstName-
Property"; $vn ) ]
# Add last name
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "LastName-
Property"; $nn ) ]
# Organization
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "Organization-
```

```

Property"; $org ) ]
# Add one address
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New"; 1 )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addAddress"; $str; $plz; $ort; $land; ""; "" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "AddressProp-
erty"; "multivalue" ) ]
# add an email
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addValue"; $email; "EmailWorkLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "EmailProp-
erty"; "multivalue" ) ]
# Add phone numbers
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" ]
Set Variable [ $tel_id; Value:MBS ( "Addressbook.multivalue.addValue"; $tel; "PhoneWorkLabel" ) ]
Set Variable [ $mob_id; Value:MBS ( "Addressbook.multivalue.addValue"; $mob; "PhoneMobileLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $mob_id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "PhoneProp-
erty"; "multivalue" ) ]
#
# Save record
Set Variable [ $result; Value:MBS ( "Addressbook.addRecord"; $personID ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.save" ) ]

```

See also

- 33.19 Addressbook.addRecord 819
- 33.35 Addressbook.multivalue.addAddress 839
- 33.36 Addressbook.multivalue.addValue 841
- 33.34 Addressbook.multivalue.New 837
- 33.50 Addressbook.multivalue.setPrimaryIdentifier 860
- 33.6 Addressbook.NewGroup 805
- 33.68 Addressbook.record.SetValueForProperty 880
- 33.69 Addressbook.record.UniqueID 884
- 33.76 Addressbook.save 896

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 18th October 2016.

33.8 Addressbook.Notification.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.Clear")

Result Returns OK.

Description

Examples

Clears script:

MBS("Addressbook.Notification.Clear")

See also

- [33.9 Addressbook.Notification.Evaluate](#) 809
- [33.17 Addressbook.Notification.Set](#) 817

Created 18th August 2014, last changed 18th August 2014.

33.9 Addressbook.Notification.Evaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.Notification.Evaluate"; Expression)

Parameters

Expression

The expression to evaluate.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

This expression is evaluated whenever something in the addressbook database changed.

See also

- [33.8 Addressbook.Notification.Clear](#) 808
- [33.17 Addressbook.Notification.Set](#) 817

33.9.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 29th March 2016.

33.10 Addressbook.Notification.GetChangedExternally

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.GetChangedExternally")

Result Returns 1 or 0.

Description

If this function returns zero, the change was made by your own FileMaker solution.

This property is not always set by the OS for all changes, especially with some sync services.

See also

- [47.80 Calendar.Notification.GetChangedExternally](#) 1321

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

Created 18th August 2014, last changed 12nd January 2015.

33.11 Addressbook.Notification.GetDeletedRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.GetDeletedRecords")

Result Returns list of record IDs.

Description

Only valid in a notification script.

Please note that the plugin may not be able to provide information for deleted record contents.

See also

- [33.12 Addressbook.Notification.GetInsertedRecords](#) 812
- [33.15 Addressbook.Notification.GetUpdatedRecords](#) 815
- [47.81 Calendar.Notification.GetDeletedRecords](#) 1322

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

Created 18th August 2014, last changed 18th August 2014.

33.12 Addressbook.Notification.GetInsertedRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.GetInsertedRecords")

Result Returns list of record IDs.

Description

Only valid in a notification script.

See also

- [33.11 Addressbook.Notification.GetDeletedRecords](#) 811
- [33.15 Addressbook.Notification.GetUpdatedRecords](#) 815
- [47.82 Calendar.Notification.GetInsertedRecords](#) 1323

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

Created 18th August 2014, last changed 18th August 2014.

33.13 Addressbook.Notification.GetProcessID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.GetProcessID")

Result Returns proces identifier.

Description

In a notification script you can use this function to learn who made the change for external changes. For notifications caused by your own solution, this value may be undefined.

See also

- 33.14 Addressbook.Notification.GetProcessName 814
- 33.16 Addressbook.Notification.GetUserUID 816
- 47.83 Calendar.Notification.GetProcessID 1324

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

Created 18th August 2014, last changed 18th August 2014.

33.14 Addressbook.Notification.GetProcessName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.GetProcessName")

Result Returns process name.

Description

In a notification script you can use this function to learn who made the change for external changes. For notifications caused by your own solution, this value may be undefined.

See also

- [33.13 Addressbook.Notification.GetProcessID](#) 813
- [33.16 Addressbook.Notification.GetUserUID](#) 816
- [47.84 Calendar.Notification.GetProcessName](#) 1325

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

Created 18th August 2014, last changed 18th August 2014.

33.15 Addressbook.Notification.GetUpdatedRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.GetUpdatedRecords")

Result Returns list of record IDs.

Description

Only valid in a notification script.

See also

- [33.11 Addressbook.Notification.GetDeletedRecords](#) 811
- [33.12 Addressbook.Notification.GetInsertedRecords](#) 812
- [47.85 Calendar.Notification.GetUpdatedRecords](#) 1326

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

Created 18th August 2014, last changed 18th August 2014.

33.16 Addressbook.Notification.GetUserUID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.GetUserUID")

Result Returns user ID as number.

Description

In a notification script you can use this function to learn who made the change for external changes. For notifications caused by your own solution, this value may be undefined.

See also

- [33.13 Addressbook.Notification.GetProcessID](#) 813
- [33.14 Addressbook.Notification.GetProcessName](#) 814
- [33.17 Addressbook.Notification.Set](#) 817

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

Created 18th August 2014, last changed 18th August 2014.

33.17 Addressbook.Notification.Set

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.Notification.Set"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK on success.

Description

This script is called whenever something in the addressbook database changed.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Installs notification script:

MBS("Addressbook.Notification.Set"; "test.fp7"; "MyScript")

See also

- [33.8 Addressbook.Notification.Clear](#) 808
- [33.9 Addressbook.Notification.Evaluate](#) 809
- [33.16 Addressbook.Notification.GetUserUID](#) 816

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

Created 18th August 2014, last changed 24th October 2018.

33.18 Addressbook.Record.Account

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.Record.Account"; RecordID)

Parameters

RecordID

The unique ID for the target person or group.

\$personID

Result Returns account identifier or error.

Description

Examples

Query account for me:

```
MBS( "Addressbook.Record.Account"; MBS( "Addressbook.me" ) )
```

Query account name for me:

```
MBS( "Addressbook.Account.name"; MBS( "Addressbook.Record.Account"; MBS( "Addressbook.me" ) ) )
```

See also

- 33.1 Addressbook.Account.Name 799
- 33.21 Addressbook.defaultAccount 823
- 33.33 Addressbook.me 835

Created 17th March 2016, last changed 17th March 2016.

33.19 Addressbook.addRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.addRecord"; RecordID)

Parameters

RecordID

The unique ID for the target person or group.

\$personID

Result Returns OK or error message.

Description

You may want to call Addressbook.save later to saves changes permanently.

Examples

Create person and save changes:

```
$personID = MBS( "Addressbook.NewPerson" )
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "FirstNameProperty"; "John" )
$r = MBS( "Addressbook.addRecord"; $personID )
$r = MBS( "Addressbook.save" )
```

Add a new person to addressbook.

```
# Fields to variables
#
Set Variable [ $vn; Value:Adressen::Extra ]
Set Variable [ $nn; Value:Adressen::Nachname ]
Set Variable [ $org; Value:Adressen::Name ]
Set Variable [ $str; Value:Adressen::Straße ]
Set Variable [ $land; Value:Adressen::Land ]
Set Variable [ $plz; Value:Adressen::PLZ ]
Set Variable [ $ort; Value:Adressen::Stadt ]
Set Variable [ $email; Value:Adressen::EMail ]
Set Variable [ $tel; Value:Adressen::Tel ]
Set Variable [ $mob; Value:Adressen::Mobil ]
#
# Create new person
#
Set Variable [ $personID; Value:MBS ( "Addressbook.NewPerson" ) ]
# Add first name
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "FirstName-Property"; $vn ) ]
# Add last name
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "LastName-
```

```

Property"; $mn ) ]
# Organization
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "Organization-
Property"; $org ) ]
# Add one address
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New"; 1 )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addAddress"; $str; $plz; $ort; $land; "" ; "" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "AddressProp-
erty"; "multivalue" ) ]
# add an email
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addValue"; $email; "EmailWorkLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "EmailProp-
erty"; "multivalue" ) ]
# Add phone numbers
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" ]
Set Variable [ $tel_id; Value:MBS ( "Addressbook.multivalue.addValue"; $tel; "PhoneWorkLabel" ) ]
Set Variable [ $mob_id; Value:MBS ( "Addressbook.multivalue.addValue"; $mob; "PhoneMobileLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $mob_id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "PhoneProp-
erty"; "multivalue" ) ]
#
# Save record
Set Variable [ $result; Value:MBS ( "Addressbook.addRecord"; $personID ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.save" ) ]

```

See also

- 33.35 Addressbook.multivalue.addAddress 839
- 33.36 Addressbook.multivalue.addValue 841
- 33.34 Addressbook.multivalue.New 837
- 33.50 Addressbook.multivalue.setPrimaryIdentifier 860
- 33.6 Addressbook.NewGroup 805
- 33.7 Addressbook.NewPerson 806
- 33.68 Addressbook.record.SetValueForProperty 880
- 33.69 Addressbook.record.UniqueID 884
- 33.75 Addressbook.removeRecord 895
- 33.76 Addressbook.save 896

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 24th September 2019.

33.20 Addressbook.allAccounts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.allAccounts")

Result Returns list or error.

Description

Examples

Show all accounts:

```
Set Variable [ $accounts; Value:MBS( "Addressbook.allAccounts" ) ]
Set Variable [ $count; Value:ValueCount($accounts) ]
Set Variable [ $index; Value:1 ]
Loop
Set Variable [ $account; Value:GetValue($accounts; $index) ]
Show Custom Dialog [ "Identifier: " & $account & $&
"Name: " & MBS( "Addressbook.Account.Name"; $account) & $&
"Type: " & MBS( "Addressbook.Account.Type"; $account) & $&
"Main: " & MBS( "Addressbook.Account.isMainAccount"; $account) & $&
"URL: " & MBS( "Addressbook.Account.URL"; $account) ]
Set Variable [ $index; Value:$index +1 ]
Exit Loop If [ $index >$count ]
End Loop
```

See also

- 33.4 Addressbook.Account.isMainAccount 803
- 33.1 Addressbook.Account.Name 799
- 33.2 Addressbook.Account.Type 801
- 33.3 Addressbook.Account.URL 802
- 33.21 Addressbook.defaultAccount 823
- 33.22 Addressbook.enabledAccounts 824

Created 17th March 2016, last changed 17th March 2016.

33.21 Addressbook.defaultAccount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.defaultAccount")

Result Returns identifier or error.

Description

Examples

Show all accounts:

```
Set Variable [ $account; Value:MBS( "Addressbook.defaultAccount" ) ]
Show Custom Dialog [ "Identifier: " & $account & §&
"Name: " & MBS( "Addressbook.Account.Name"; $account ) & §&
"Type: " & MBS( "Addressbook.Account.Type"; $account ) & §&
"Main: " & MBS( "Addressbook.Account.isMainAccount"; $account ) & §&
"URL: " & MBS( "Addressbook.Account.URL"; $account ) ]
```

See also

- 33.4 Addressbook.Account.isMainAccount 803
- 33.1 Addressbook.Account.Name 799
- 33.2 Addressbook.Account.Type 801
- 33.3 Addressbook.Account.URL 802
- 33.20 Addressbook.allAccounts 822
- 33.22 Addressbook.enabledAccounts 824
- 33.18 Addressbook.Record.Account 818

Created 17th March 2016, last changed 17th March 2016.

33.22 Addressbook.enabledAccounts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.enabledAccounts")

Result Returns list or error.

Description

Examples

Show enabled accounts:

```
Set Variable [ $accounts; Value:MBS( "Addressbook.enabledAccounts" ) ]
Set Variable [ $count; Value:ValueCount($accounts) ]
Set Variable [ $index; Value:1 ]
Loop
Set Variable [ $account; Value:GetValue($accounts; $index) ]
Show Custom Dialog [ "Identifier: " & $account & $&
"Name: " & MBS( "Addressbook.Account.Name"; $account) & $&
"Type: " & MBS( "Addressbook.Account.Type"; $account) & $&
"Main: " & MBS( "Addressbook.Account.isMainAccount"; $account) & $&
"URL: " & MBS( "Addressbook.Account.URL"; $account) ]
Set Variable [ $index; Value:$index +1 ]
Exit Loop If [ $index >$count ]
End Loop
```

See also

- 33.4 Addressbook.Account.isMainAccount 803
- 33.1 Addressbook.Account.Name 799
- 33.2 Addressbook.Account.Type 801
- 33.3 Addressbook.Account.URL 802
- 33.20 Addressbook.allAccounts 822
- 33.21 Addressbook.defaultAccount 823
- 33.56 Addressbook.persistentAccounts 868

Created 17th March 2016, last changed 17th March 2016.

33.23 Addressbook.formattedAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.formattedAddress"; address)

Parameters

address

The dictionary containing a street address. Same format as Addressbook.record.valueForProperty returns.
\$address

Result Returns formatted address text or error.

Description

The address is usually defined by plugin to have keys like Street, City, State, Country or Zip followed by an equal sign and the actual value.

See also

- 33.73 Addressbook.record.valueForProperty

889

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 21st August 2014.

33.24 Addressbook.group.addMember

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.group.addMember"; GroupID; PersonID)

Parameters

GroupID

The unique ID for the target group.

\$groupID

PersonID

The unique ID for the person to be added to the group.

\$personID

Result Returns 1 for success or 0 for failure on Mac. Returns OK on success and error on failure on iOS.

Description

If the person argument is already part of the group, this method does nothing and returns OK.

Prior to OS X v10.6, if the person record is already in the group, this method does nothing and returns failure.

Examples

Add person to group:

```
# add to group
Set Variable [ $r ; Value: MBS( "Addressbook.group.addMember"; "Best Friends"; $PersonID ) ]
# save changes
Set Variable [ $r ; Value: MBS( "Addressbook.save"; $personID ) ]
```

See also

- 33.25 Addressbook.group.addSubgroup 827
- 33.26 Addressbook.group.members 828
- 33.28 Addressbook.group.removeMember 830
- 33.76 Addressbook.save 896

Created 18th August 2014, last changed 6th November 2017.

33.25 Addressbook.group.addSubgroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.group.addSubgroup"; GroupID; SubGroupID)

Parameters

GroupID

The unique ID for the target group.

\$groupID

SubGroupID

The unique ID for the subgroup.

\$subgroupID

Result Returns 1 for success or 0 for failure on Mac. Returns OK on success and error on failure on iOS.

Description

If the group argument is already part of the group, this method does nothing and returns Failure. If adding the group would create a recursion, this method also does nothing and returns Failure. (For example, if the group Animal Lovers is in Dog Lovers, and you add Dog Lovers to Animal Lovers, that would create a recursion, which this method won't allow.)

See also

- 33.24 Addressbook.group.addMember 826
- 33.27 Addressbook.group.parentGroups 829
- 33.29 Addressbook.group.removeSubgroup 831
- 33.30 Addressbook.group.subgroups 832

Created 18th August 2014, last changed 6th November 2017.

33.26 Addressbook.group.members

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.group.members"; GroupID)

Parameters

GroupID

The unique ID for the target group.

\$groupID

Result Returns list of person IDs.

Description

If this group doesn't contain any people, this method returns an empty array.

Since version 5.3 you can pass group names for GroupID and plugin lookups ID for you.

Examples

Query group members:

MBS("Addressbook.group.members" ; "Family")

See also

- [33.24 Addressbook.group.addMember](#) 826
- [33.28 Addressbook.group.removeMember](#) 830
- [33.30 Addressbook.group.subgroups](#) 832

Created 18th August 2014, last changed 21st September 2015.

33.27 Addressbook.group.parentGroups

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.group.parentGroups"; GroupID)

Parameters**GroupID**

The unique ID for the target group.

\$groupID

Result Returns list of parent group IDs.

Description

If this group doesn't belong to any groups, this method returns an empty array.

See also

- 33.25 Addressbook.group.addSubgroup 827
- 33.30 Addressbook.group.subgroups 832
- 33.64 Addressbook.person.parentGroups 876

Created 18th August 2014, last changed 18th August 2014.

33.28 Addressbook.group.removeMember

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.group.removeMember"; GroupID; PersonID)

Parameters

GroupID

The unique ID for the target group.

\$groupID

PersonID

The unique ID for the target person.

\$personID

Result Returns 1 for success or 0 for failure on Mac. Returns OK on success and error on failure on iOS.

Description

If the person argument is not in the group, this method does nothing and returns Failure.

See also

- 33.24 Addressbook.group.addMember 826
- 33.26 Addressbook.group.members 828
- 33.29 Addressbook.group.removeSubgroup 831

Created 18th August 2014, last changed 6th November 2017.

33.29 Addressbook.group.removeSubgroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.group.removeSubgroup"; GroupID; SubGroupID)

Parameters**GroupID**

The unique ID for the target group.

\$groupID

SubGroupID

The unique ID for the subgroup to remove.

\$subgroupID

Result Returns 1 for success or 0 for failure on Mac. Returns OK on success and error on failure on iOS.

Description

If the group argument is not a subgroup, this method does nothing and returns Failure.

See also

- 33.25 Addressbook.group.addSubgroup 827
- 33.28 Addressbook.group.removeMember 830
- 33.30 Addressbook.group.subgroups 832

Created 18th August 2014, last changed 6th November 2017.

33.30 Addressbook.group.subgroups

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.group.subgroups"; GroupID)

Parameters

GroupID

The unique ID for the target group.

\$groupID

Result Returns list of group IDs.

Description

If this group doesn't contain any groups, this method returns an empty array.

See also

- 33.25 Addressbook.group.addSubgroup 827
- 33.26 Addressbook.group.members 828
- 33.27 Addressbook.group.parentGroups 829
- 33.29 Addressbook.group.removeSubgroup 831

Created 18th August 2014, last changed 18th August 2014.

33.31 Addressbook.groups

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

```
MBS( "Addressbook.groups" { ; Account } )
```

Parameters

Account

Optional

The account identifier to limit search for.

_local

Result Returns list of group IDs.

Description

If the database doesn't contain any groups, this method returns an empty array.

You can use `Addressbook.record.displayname` to find the display name of a group. Or you query the group name property with `Addressbook.record.valueForProperty`.

Examples

Query list of group IDs:

```
MBS( "Addressbook.groups" )
```

Query display name of first group:

```
MBS( "Addressbook.record.displayname"; ElementLeft ( MBS( "Addressbook.groups" ) ; 1 ) )
```

See also

- 33.6 `Addressbook.NewGroup` 805
- 33.55 `Addressbook.people` 867
- 33.70 `Addressbook.record.displayname` 885
- 33.73 `Addressbook.record.valueForProperty` 889

Created 18th August 2014, last changed 24th May 2016.

33.32 Addressbook.hasUnsavedChanges

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.hasUnsavedChanges")

Result Returns 1 if there are unsaved changes; otherwise, 0.

Description

The unsaved changes flag is set automatically whenever changes are made.
Created 18th August 2014, last changed 18th August 2014.

33.33 Addressbook.me

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.me")

Result Returns ID of person.

Description

If the user never specified such a record, this method returns empty string.

Examples

Query ID of the owner's record:

```
MBS( "Addressbook.me" )
```

Example result: "B895CE29-B747-4D28-8981-690C358F8A3D:ABPerson"

Show me in addressbook:

```
$id = MBS("Addressbook.me")
$r = MBS( "Addressbook.person.ShowInAddressbook"; $id)
```

See also

- [33.37 Addressbook.multivalue.count](#) 844
- [33.51 Addressbook.multivalue.valueAtIndex](#) 862
- [33.59 Addressbook.person.GetImage](#) 871
- [33.63 Addressbook.person.linkedPeople](#) 875
- [33.18 Addressbook.Record.Account](#) 818
- [33.70 Addressbook.record.displayname](#) 885
- [33.68 Addressbook.record.SetValueForProperty](#) 880
- [33.73 Addressbook.record.valueForProperty](#) 889
- [33.76 Addressbook.save](#) 896
- [33.85 Addressbook.setMe](#) 908

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

33.33.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)

Created 18th August 2014, last changed 11st December 2016.

33.34 Addressbook.multivalued.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalued.New" { ; Addresses })

Parameters

Addresses

Optional

Whether you want to store address information. Pass 1 if you plan to use this multivalued with AddressProperty.

1

Result Returns OK on success and error on failure.

Description

You create such a MultiValue object, add values to it and then use Addressbook.record.SetValueForProperty to assign it to a record.

Examples

Add a new URL to a contact:

```
Set Variable [ $r; MBS( "Addressbook.multivalued.New" ) ]
Set Variable [ $ID; MBS( "Addressbook.multivalued.addValue"; "http://www.mbsplugins.de"; "WorkLabel" ) ]
Set Variable [ $r; MBS( "Addressbook.multivalued.setPrimaryIdentifier"; $ID ) ]
Set Variable [ $r; MBS( "Addressbook.record.SetValueForProperty"; $personID; "URLsProperty"; "multivalued" ) ]
```

Add work and home emails:

```
$r = MBS( "Addressbook.multivalued.New" )
$WorkEmailID = MBS( "Addressbook.multivalued.addValue"; Addressbook::WorkEmail; "EmailWorkLabel" )
$HomeEmailID = MBS( "Addressbook.multivalued.addValue"; Addressbook::HomeEmail; "EmailHomeLabel" )
$r = MBS( "Addressbook.multivalued.setPrimaryIdentifier"; $WorkEmailID )
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "EmailProperty"; "multivalued" )
```

Add an address:

```
Set Variable [ $result; Value:MBS ( "Addressbook.multivalued.New"; 1 ) ]
Set Variable [ $id; Value:MBS ( "Addressbook.multivalued.addAddress"; $str; $plz; $ort; $land; "" ; "" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalued.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "AddressProperty"; "multivalued" ) ]
```

Add an email:

```
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addValue"; $email; "EmailWorkLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "EmailProperty"; "multivalue" ) ]
```

Add phone numbers:

```
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" ) ]
Set Variable [ $tel_id; Value:MBS ( "Addressbook.multivalue.addValue"; $tel; "PhoneWorkLabel" ) ]
Set Variable [ $mob_id; Value:MBS ( "Addressbook.multivalue.addValue"; $mob; "PhoneMobileLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $mob_id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "PhoneProperty"; "multivalue" ) ]
```

See also

- 33.19 Addressbook.addRecord 819
- 33.35 Addressbook.multivalue.addAddress 839
- 33.36 Addressbook.multivalue.addValue 841
- 33.37 Addressbook.multivalue.count 844
- 33.45 Addressbook.multivalue.labels 854
- 33.50 Addressbook.multivalue.setPrimaryIdentifier 860
- 33.54 Addressbook.multivalue.values 866
- 33.7 Addressbook.NewPerson 806
- 33.68 Addressbook.record.SetValueForProperty 880
- 33.76 Addressbook.save 896

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 18th October 2016.

33.35 Addressbook.multivalue.addAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	5.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.addAddress"; label; street; zip; city; country; countrycode; state)

Parameters**label**

The label to associate with the value.

"Work"

street

The street for the address. Can be empty if unknown.

"Main Street 123"

zip

The zip code for the address. Can be empty if unknown.

"12345"

city

The city for the address. Can be empty if unknown.

"Springfield"

country

The country for the address. Can be empty if unknown.

"Germany"

countrycode

The country code for the address. Can be empty if unknown.

"US"

state

The state for the address. Can be empty if unknown.

"CA"

Result Returns identifier or error.

Description

Only useful for addresses.

Returns the new identifier if value is added successfully; otherwise, nil.

Values which are empty text are not added to the address.

Examples

Creates a new address:

```
MBS( "Addressbook.multivalue.addAddress"; "AddressHomeLabel"; "Main Street 123"; "12345"; "Springfield"; "USA" )
```

Adds address without zip code:

MBS("Addressbook.multivalue.addAddress"; "Work"; "Hlíðarbyggð"; ""; "Garðabær"; "Island"; ""; "IS")

See also

- 33.19 Addressbook.addRecord 819
- 33.36 Addressbook.multivalue.addValue 841
- 33.39 Addressbook.multivalue.identifiers 847
- 33.45 Addressbook.multivalue.labels 854
- 33.34 Addressbook.multivalue.New 837
- 33.54 Addressbook.multivalue.values 866
- 33.7 Addressbook.NewPerson 806
- 33.76 Addressbook.save 896

Created 7th March 2015, last changed 7th March 2015.

33.36 Addressbook.multivalue.addValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.addValue"; value; label)

Parameters

value

The value to add.

"test@test.test"

label

The label to associate with the value.

"Work"

Result Returns identifier or error.

Description

Returns the new identifier if value is added successfully; otherwise, nil.

Possible labels are:

kABHomePageLabel, kABEmailWorkLabel, kABEmailHomeLabel, kABAddressHomeLabel, kABAddressWorkLabel, kABAnniversaryLabel, kABFatherLabel, kABMotherLabel, kABParentLabel, kABBrotherLabel, kABSisterLabel, kABChildLabel, kABFriendLabel, kABSpouseLabel, kABPartnerLabel, kABAssistantLabel, kABManagerLabel, kABPhoneWorkLabel, kABPhoneHomeLabel, kABPhoneiPhoneLabel, kABPhoneMobileLabel, kABPhoneMainLabel, kABPhoneHomeFAXLabel, kABPhoneWorkFAXLabel, kABPhonePagerLabel, kABAIMWorkLabel, kABAIMHomeLabel, kABJabberWorkLabel, kABJabberHomeLabel, kABMSNWorkLabel, kABMSNHomeLabel, kABYahooWorkLabel, kABYahooHomeLabel, kABICQWorkLabel, kABICQHomeLabel, kABWorkLabel, kABHomeLabel, kABOtherLabel or kABMobileMeLabel.

Examples

Add a new URL to a contact:

```
Set Variable [ $r; MBS( "Addressbook.multivalue.New" ) ]
Set Variable [ $ID; MBS( "Addressbook.multivalue.addValue"; "http://www.mbsplugins.de"; "WorkLabel" ) ]
Set Variable [ $r; MBS( "Addressbook.multivalue.setPrimaryIdentifier"; $ID ) ]
Set Variable [ $r; MBS( "Addressbook.record.SetValueForProperty"; $personID; "URLsProperty"; "multivalue" ) ]
```

Add work and home emails:

```
$r = MBS( "Addressbook.multivalue.New" )
$WorkEmailID = MBS( "Addressbook.multivalue.addValue"; Addressbook::WorkEmail; "EmailWorkLabel" )
$HomeEmailID = MBS( "Addressbook.multivalue.addValue"; Addressbook::HomeEmail; "EmailHomeLabel" )
```

```
$r = MBS( "Addressbook.multivalue.setPrimaryIdentifier"; $WorkEmailID )
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "EmailProperty"; "multivalue" )
```

Add an address:

```
# Add one address
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New"; 1 )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addAddress"; $str; $plz; $ort; $land; ""; "" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "AddressProperty"; "multivalue" ) ]
```

Add an email:

```
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addValue"; $email; "EmailWorkLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "EmailProperty"; "multivalue" ) ]
```

Add phone numbers:

```
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" ) ]
Set Variable [ $tel_id; Value:MBS ( "Addressbook.multivalue.addValue"; $tel; "PhoneWorkLabel" ) ]
Set Variable [ $mob_id; Value:MBS ( "Addressbook.multivalue.addValue"; $mob; "PhoneMobileLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $mob_id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "PhoneProperty"; "multivalue" ) ]
```

Add homepage URLs:

```
# add homepages
Set Variable [ $r ; Value: MBS( "Addressbook.multivalue.New" ) ]
Set Variable [ $Blog_URL_ID ; Value: MBS( "Addressbook.multivalue.addValue"; "http://www.mbs-plugins.com/"; "Blog" ) ]
Set Variable [ $Homepage_URL_ID ; Value: MBS( "Addressbook.multivalue.addValue"; "http://www.monkeybreadsoftware.de/"; "HomePageLabel" ) ]
Set Variable [ $r ; Value: MBS( "Addressbook.multivalue.setPrimaryIdentifier"; $Homepage_URL_ID ) ]
Set Variable [ $r ; Value: MBS( "Addressbook.record.SetValueForProperty"; $personID; "URLsProperty"; "multivalue" ) ]
```

See also

- 33.19 Addressbook.addRecord 819
- 33.37 Addressbook.multivalue.count 844

<i>33.36. ADDRESSBOOK.MULTIVALUE.ADDVALUE</i>	843
• 33.39 Addressbook.multivalued.identifiers	847
• 33.42 Addressbook.multivalued.insertValue	850
• 33.45 Addressbook.multivalued.labels	854
• 33.34 Addressbook.multivalued.New	837
• 33.50 Addressbook.multivalued.setPrimaryIdentifier	860
• 33.54 Addressbook.multivalued.values	866
• 33.68 Addressbook.record.SetValueForProperty	880
• 33.76 Addressbook.save	896

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

33.36.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)

Created 18th August 2014, last changed 9th March 2018.

33.37 Addressbook.multivalue.count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.count")

Result Returns count.

Description

Examples

Query number of emails:

```
$personID = MBS( "Addressbook.me" )
$r = MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" )
$count = MBS( "Addressbook.multivalue.count")
```

Query all my URLs:

```
Set Variable [ $personID; Value:MBS( "Addressbook.me" ) ]
Set Variable [ $URLs; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "URLsProperty" ) ]
Set Variable [ $count; Value:MBS( "Addressbook.multivalue.count" ) ]
If [ $count >0 ]
# for loop
Set Variable [ $index; Value:0 ]
Loop
Set Variable [ $value; Value:MBS( "Addressbook.multivalue.valueAtIndex"; $index ) ]
Show Custom Dialog [ "URL"; $value ]
# next
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index = $count ]
End Loop
End If
```

See also

- 33.33 Addressbook.me 835
- 33.36 Addressbook.multivalue.addValue 841
- 33.40 Addressbook.multivalue.indexForIdentifier 848
- 33.41 Addressbook.multivalue.indexForLabel 849
- 33.45 Addressbook.multivalue.labels 854
- 33.34 Addressbook.multivalue.New 837
- 33.51 Addressbook.multivalue.valueAtIndex 862

<i>33.37. ADDRESSBOOK.MULTIVALUE.COUNT</i>	845
• 33.54 Addressbook.multivalued.values	866
• 33.73 Addressbook.record.valueForProperty	889

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

33.37.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)

Created 18th August 2014, last changed 26th February 2016.

33.38 Addressbook.multiple.identifierAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multiple.identifierAtIndex"; index)

Parameters**index**

The index of the identifier to be returned.

\$index

Result Returns the identifier or error.

Description

If the index argument is out of bounds, this method returns an error.

See also

- 33.39 Addressbook.multiple.identifiers 847
- 33.43 Addressbook.multiple.labelAtIndex 851
- 33.48 Addressbook.multiple.replaceLabelAtIndex 857
- 33.50 Addressbook.multiple.setPrimaryIdentifier 860
- 33.51 Addressbook.multiple.valueAtIndex 862

Created 18th August 2014, last changed 18th August 2014.

33.39 Addressbook.multivalue.identifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.identifiers")

Result Returns list or error.

Description

Examples

Show identifiers for my emails:

```
Set Variable [ $personID; Value:"637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson" ]
Set Variable [ $r; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" ) ]
Set Variable [ $r; Value:MBS( "Addressbook.multivalue.identifiers" ) ]
Show Custom Dialog [ "Identifiers"; $r ]
```

See also

- 33.38 Addressbook.multivalue.identifierAtIndex 846
- 33.40 Addressbook.multivalue.indexForIdentifier 848
- 33.41 Addressbook.multivalue.indexForLabel 849
- 33.42 Addressbook.multivalue.insertValue 850
- 33.43 Addressbook.multivalue.labelAtIndex 851
- 33.44 Addressbook.multivalue.labelForIdentifier 853
- 33.46 Addressbook.multivalue.primaryIdentifier 855
- 33.51 Addressbook.multivalue.valueAtIndex 862
- 33.52 Addressbook.multivalue.valueForIdentifier 864
- 33.73 Addressbook.record.valueForProperty 889

33.39.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 26th February 2016, last changed 26th February 2016.

33.40 Addressbook.multiple.indexForIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multiple.indexForIdentifier"; identifier)

Parameters

identifier

The identifier whose index will be returned.

\$identifier

Result Returns index or error.

Description

If the identifier is not found, returns MaxInt, a value >count from Addressbook.multiple.count.

See also

- 33.37 Addressbook.multiple.count 844
- 33.39 Addressbook.multiple.identifiers 847
- 33.41 Addressbook.multiple.indexForLabel 849
- 33.44 Addressbook.multiple.labelForIdentifier 853
- 33.46 Addressbook.multiple.primaryIdentifier 855
- 33.50 Addressbook.multiple.setPrimaryIdentifier 860
- 33.52 Addressbook.multiple.valueForIdentifier 864

Created 18th August 2014, last changed 8th May 2018.

33.41 Addressbook.multivalue.indexForLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	8.2	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.indexForLabel"; label)

Parameters

label

The label to search.

"HomeLabel"

Result Returns index or error.

Description

If the identifier is not found, returns MaxInt, a value >count from Addressbook.multivalue.count.

See also

- 33.37 Addressbook.multivalue.count 844
- 33.39 Addressbook.multivalue.identifiers 847
- 33.40 Addressbook.multivalue.indexForIdentifier 848
- 33.42 Addressbook.multivalue.insertValue 850
- 33.53 Addressbook.multivalue.valueForLabel 865

33.41.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr7](#)

Created 8th May 2018, last changed 8th May 2018.

33.42 Addressbook.multivalue.insertValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.insertValue"; value; label; index)

Parameters

value

The value to add.

\$value

label

The label to associate with the value.

\$label

index

The index where the value will be inserted.

\$index

Result Returns identifier or error.

Description

Returns the identifier of the inserted value and label if they are added successfully; otherwise, empty result. If either the value or the label is empty or if the index is out of bounds, this method returns an error.

Possible labels are:

kABHomePageLabel, kABEmailWorkLabel, kABEmailHomeLabel, kABAddressHomeLabel, kABAddressWorkLabel, kABAnniversaryLabel, kABFatherLabel, kABMotherLabel, kABParentLabel, kABBrotherLabel, kABSisterLabel, kABChildLabel, kABFriendLabel, kABSpouseLabel, kABPartnerLabel, kABAssistantLabel, kABManagerLabel, kABPhoneWorkLabel, kABPhoneHomeLabel, kABPhoneiPhoneLabel, kABPhoneMobileLabel, kABPhoneMainLabel, kABPhoneHomeFAXLabel, kABPhoneWorkFAXLabel, kABPhonePagerLabel, kABAIMWorkLabel, kABAIMHomeLabel, kABJabberWorkLabel, kABJabberHomeLabel, kABMSNWorkLabel, kABMSNHomeLabel, kABYahooWorkLabel, kABYahooHomeLabel, kABICQWorkLabel, kABICQHomeLabel, kABWorkLabel, kABHomeLabel, kABOtherLabel or kABMobileMeLabel.

See also

- 33.36 Addressbook.multivalue.addValue 841
- 33.39 Addressbook.multivalue.identifiers 847
- 33.41 Addressbook.multivalue.indexForLabel 849
- 33.43 Addressbook.multivalue.labelAtIndex 851
- 33.51 Addressbook.multivalue.valueAtIndex 862
- 33.54 Addressbook.multivalue.values 866

Created 18th August 2014, last changed 18th August 2014.

33.43 Addressbook.multivalue.labelAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.labelAtIndex"; index)

Parameters**index**

The index for the label to be returned.

\$index

Result Returns label text or error.

Description

If the index argument is out of bounds, this method returns an error.

Possible labels are:

kABHomePageLabel, kABEmailWorkLabel, kABEmailHomeLabel, kABAddressHomeLabel, kABAddressWorkLabel, kABAnniversaryLabel, kABFatherLabel, kABMotherLabel, kABParentLabel, kABBrotherLabel, kABSisterLabel, kABChildLabel, kABFriendLabel, kABSpouseLabel, kABPartnerLabel, kABAssistantLabel, kABManagerLabel, kABPhoneWorkLabel, kABPhoneHomeLabel, kABPhoneiPhoneLabel, kABPhoneMobileLabel, kABPhoneMainLabel, kABPhoneHomeFAXLabel, kABPhoneWorkFAXLabel, kABPhonePagerLabel, kABAIMWorkLabel, kABAIMHomeLabel, kABJabberWorkLabel, kABJabberHomeLabel, kABMSNWorkLabel, kABMSNHomeLabel, kABYahooWorkLabel, kABYahooHomeLabel, kABICQWorkLabel, kABICQHomeLabel, kABWorkLabel, kABHomeLabel, kABOtherLabel or kABMobileMeLabel.

See also

- 33.38 Addressbook.multivalue.identifierAtIndex 846
- 33.39 Addressbook.multivalue.identifiers 847
- 33.42 Addressbook.multivalue.insertValue 850
- 33.44 Addressbook.multivalue.labelForIdentifier 853
- 33.45 Addressbook.multivalue.labels 854
- 33.48 Addressbook.multivalue.replaceLabelAtIndex 857
- 33.49 Addressbook.multivalue.replaceValueAtIndex 858
- 33.51 Addressbook.multivalue.valueAtIndex 862
- 33.53 Addressbook.multivalue.valueForLabel 865

33.43.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)

Created 18th August 2014, last changed 18th August 2014.

33.44 Addressbook.multivalue.labelForIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.labelForIdentifier"; identifier)

Parameters**identifier**

The identifier for the label to be returned.

\$identifier

Result Returns label or error.

Description

If the identifier is not found, this method returns "".

Available in OS X v10.5 and later.

Possible labels are:

kABHomePageLabel, kABEmailWorkLabel, kABEmailHomeLabel, kABAddressHomeLabel, kABAddressWorkLabel, kABAnniversaryLabel, kABFatherLabel, kABMotherLabel, kABParentLabel, kABBrotherLabel, kABSisterLabel, kABChildLabel, kABFriendLabel, kABSpouseLabel, kABPartnerLabel, kABAssistantLabel, kABManagerLabel, kABPhoneWorkLabel, kABPhoneHomeLabel, kABPhoneiPhoneLabel, kABPhoneMobileLabel, kABPhoneMainLabel, kABPhoneHomeFAXLabel, kABPhoneWorkFAXLabel, kABPhonePagerLabel, kABAIMWorkLabel, kABAIMHomeLabel, kABJabberWorkLabel, kABJabberHomeLabel, kABMSNWorkLabel, kABMSNHomeLabel, kABYahooWorkLabel, kABYahooHomeLabel, kABICQWorkLabel, kABICQHomeLabel, kABWorkLabel, kABHomeLabel, kABOtherLabel or kABMobileMeLabel.

See also

- 33.39 Addressbook.multivalue.identifiers 847
- 33.40 Addressbook.multivalue.indexForIdentifier 848
- 33.43 Addressbook.multivalue.labelAtIndex 851
- 33.46 Addressbook.multivalue.primaryIdentifier 855
- 33.50 Addressbook.multivalue.setPrimaryIdentifier 860
- 33.52 Addressbook.multivalue.valueForIdentifier 864

Created 18th August 2014, last changed 18th August 2014.

33.45 Addressbook.multivalue.labels

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.labels")

Result Returns list or error.

Description

Examples

Show email labels:

```
Set Variable [ $personID; Value:"637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson" ]
Set Variable [ $r; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" ) ]
Set Variable [ $r; Value:MBS( "Addressbook.multivalue.labels" ) ]
Show Custom Dialog [ "Labels"; $r ]
```

See also

- 33.35 Addressbook.multivalue.addAddress 839
- 33.36 Addressbook.multivalue.addValue 841
- 33.37 Addressbook.multivalue.count 844
- 33.43 Addressbook.multivalue.labelAtIndex 851
- 33.34 Addressbook.multivalue.New 837
- 33.54 Addressbook.multivalue.values 866
- 33.73 Addressbook.record.valueForProperty 889

33.45.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 26th February 2016, last changed 26th February 2016.

33.46 Addressbook.multivalue.primaryIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.primaryIdentifier")

Result Returns identifier or error.

Description**See also**

- 33.39 Addressbook.multivalue.identifiers 847
- 33.40 Addressbook.multivalue.indexForIdentifier 848
- 33.44 Addressbook.multivalue.labelForIdentifier 853
- 33.50 Addressbook.multivalue.setPrimaryIdentifier 860
- 33.52 Addressbook.multivalue.valueForIdentifier 864

Created 18th August 2014, last changed 18th August 2014.

33.47 Addressbook.multiple.removeValueAndLabelAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multiple.removeValueAndLabelAtIndex"; index)

Parameters

index

The index of the value-label pair that will be removed.

\$index

Result Returns OK on success or error on failure.

Description

If the index is out of bounds, this method returns an error.

See also

- 33.48 Addressbook.multiple.replaceLabelAtIndex 857
- 33.49 Addressbook.multiple.replaceValueAtIndex 858

Created 18th August 2014, last changed 18th August 2014.

33.48 Addressbook.multivalue.replaceLabelAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.replaceLabelAtIndex"; index; label)

Parameters**index**

The index of the label that will be replaced.

\$index

label

The new label.

\$label

Result Returns OK on success and error on failure.

Description

If the label is empty or if the index is out of bounds, this method returns an error.

See also

- 33.38 Addressbook.multivalue.identifierAtIndex 846
- 33.43 Addressbook.multivalue.labelAtIndex 851
- 33.47 Addressbook.multivalue.removeValueAndLabelAtIndex 856
- 33.49 Addressbook.multivalue.replaceValueAtIndex 858
- 33.51 Addressbook.multivalue.valueAtIndex 862

Created 18th August 2014, last changed 18th August 2014.

33.49 Addressbook.multivalue.replaceValueAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.replaceValueAtIndex"; index; value)

Parameters

index

The index of the value that will be replaced.

\$index

value

The new value.

\$value

Result Returns OK on success and error on failure.

Description

Examples

Replace an email:

```
# find my ID
Set Variable [ $personID; Value:MBS( "Addressbook.me" ) ]
# get email list
Set Variable [ $r; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" ) ]
# show first email in list
Set Variable [ $firstValue; Value:MBS( "Addressbook.multivalue.valueAtIndex"; 0 ) ]
Show Custom Dialog [ "First Email"; $firstValue ]
# replace first email with new email
Set Variable [ $r; Value:MBS( "Addressbook.multivalue.replaceValueAtIndex"; 0; "test@test.test" ) ]
# show changed email
Set Variable [ $firstValue; Value:MBS( "Addressbook.multivalue.valueAtIndex"; 0 ) ]
Show Custom Dialog [ "First Email"; $firstValue ]
# set back the email list
Set Variable [ $r; Value:MBS( "Addressbook.record.SetValueForProperty"; $personID; "EmailProperty"; "" ) ]
# save it
Set Variable [ $r; Value:MBS( "Addressbook.save" ) ]
Show Custom Dialog [ "Saved"; $r ]
```

Replace an address:

```
# Find someone...
Set Variable [ $personID ; Value: MBS( "Addressbook.searchPeopleWithName"; "Jon"; "Test" ) ]
If [ Length($personID) >0 ]
# set Address
```

```

Set Variable [ $r ; Value: MBS( "Addressbook.record.valueForProperty"; $personID; "AddressProperty" ) ]
Set Variable [ $r ; Value: MBS( "Addressbook.multivalued.replaceValueAtIndex"; 0; "Street=5th avenue$Zip=12345$Country=USA$City=New York" ) ]
Set Variable [ $r ; Value: MBS( "Addressbook.record.SetValueForProperty"; $personID; "AddressProperty"; "multivalued" ) ]
Set Variable [ $r ; Value: MBS( "Addressbook.save" ) ]
# get Address and show
Set Variable [ $r ; Value: MBS( "Addressbook.record.valueForProperty"; $personID; "AddressProperty" ) ]
Set Variable [ $Address ; Value: MBS( "Addressbook.multivalued.valueAtIndex"; 0 ) ]
Show Custom Dialog [ "Address" ; $Address ]
End If

```

See also

- 33.33 Addressbook.me 835
- 33.43 Addressbook.multivalued.labelAtIndex 851
- 33.47 Addressbook.multivalued.removeValueAndLabelAtIndex 856
- 33.48 Addressbook.multivalued.replaceLabelAtIndex 857
- 33.51 Addressbook.multivalued.valueAtIndex 862
- 33.68 Addressbook.record.SetValueForProperty 880
- 33.73 Addressbook.record.valueForProperty 889
- 33.76 Addressbook.save 896
- 33.83 Addressbook.searchPeopleWithName 906

33.49.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)

Created 18th August 2014, last changed 9th December 2019.

33.50 Addressbook.multivalue.setPrimaryIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.multivalue.setPrimaryIdentifier"; identifier)

Parameters

identifier

The identifier whose value will be used as the primary value for a multivalue property.

\$identifier

Result Returns OK on success and error on failure.

Description

If the identifier is empty, this method returns an error. Use the Addressbook.multivalue.identifierAtIndex method to get the identifier given the index.

Examples

Add a new URL to a contact:

```
Set Variable [ $r; MBS( "Addressbook.multivalue.New" ) ]
Set Variable [ $ID; MBS( "Addressbook.multivalue.addValue"; "http://www.mbsplugins.de"; "WorkLabel" ) ]
Set Variable [ $r; MBS( "Addressbook.multivalue.setPrimaryIdentifier"; $ID ) ]
Set Variable [ $r; MBS( "Addressbook.record.SetValueForProperty"; $personID; "URLsProperty"; "multivalue" ) ]
```

Add work and home emails:

```
$r = MBS( "Addressbook.multivalue.New" )
$WorkEmailID = MBS( "Addressbook.multivalue.addValue"; Addressbook::WorkEmail; "EmailWorkLabel" )
$HomeEmailID = MBS( "Addressbook.multivalue.addValue"; Addressbook::HomeEmail; "EmailHomeLabel" )
$r = MBS( "Addressbook.multivalue.setPrimaryIdentifier"; $WorkEmailID )
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "EmailProperty"; "multivalue" )
```

See also

- 33.19 Addressbook.addRecord 819
- 33.36 Addressbook.multivalue.addValue 841
- 33.38 Addressbook.multivalue.identifierAtIndex 846
- 33.40 Addressbook.multivalue.indexForIdentifier 848
- 33.44 Addressbook.multivalue.labelForIdentifier 853

<i>33.50. ADDRESSBOOK.MULTIVALUE.SETPRIMARYIDENTIFIER</i>	861
• 33.34 Addressbook.multivalue.New	837
• 33.46 Addressbook.multivalue.primaryIdentifier	855
• 33.52 Addressbook.multivalue.valueForIdentifier	864
• 33.68 Addressbook.record.SetValueForProperty	880
• 33.76 Addressbook.save	896

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 18th August 2014.

33.51 Addressbook.multivalue.valueAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.valueAtIndex"; index)

Parameters

index

The index for the value to be returned.

Result Returns value or error.

Description

If the index argument is out of bounds, this method returns an error.

Examples

Queries first email of me:

```
$personID = MBS( "Addressbook.me" )
$r = MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" )
$count = MBS( "Addressbook.multivalue.count" )
$email = MBS( "Addressbook.multivalue.valueAtIndex"; 0)
```

Query all my URLs:

```
Set Variable [ $personID; Value:MBS( "Addressbook.me" ) ]
Set Variable [ $URLs; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "URLsProperty" ) ]
Set Variable [ $count; Value:MBS( "Addressbook.multivalue.count" ) ]
If [ $count >0 ]
# for loop
Set Variable [ $index; Value:0 ]
Loop
Set Variable [ $value; Value:MBS( "Addressbook.multivalue.valueAtIndex"; $index ) ]
Show Custom Dialog [ "URL"; $value ]
# next
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index = $count ]
End Loop
End If
```

See also

- 33.33 Addressbook.me 835
- 33.37 Addressbook.multivalue.count 844
- 33.38 Addressbook.multivalue.identifierAtIndex 846

<i>33.51. ADDRESSBOOK.MULTIVALUE.VALUEATINDEX</i>	863
• 33.39 Addressbook.multivalued.identifiers	847
• 33.42 Addressbook.multivalued.insertValue	850
• 33.43 Addressbook.multivalued.labelAtIndex	851
• 33.48 Addressbook.multivalued.replaceLabelAtIndex	857
• 33.53 Addressbook.multivalued.valueForLabel	865
• 33.54 Addressbook.multivalued.values	866
• 33.73 Addressbook.record.valueForProperty	889

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 26th February 2016.

33.52 Addressbook.multiple.valueForIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.multiple.valueForIdentifier"; identifier)

Parameters

identifier

The identifier you want to lookup the value for.

\$identifier

Result Returns value or error.

Description

If the identifier is not found, returns empty result.

Available in OS X v10.5 and later.

See also

- [33.39 Addressbook.multiple.identifiers](#) 847
- [33.40 Addressbook.multiple.indexForIdentifier](#) 848
- [33.44 Addressbook.multiple.labelForIdentifier](#) 853
- [33.46 Addressbook.multiple.primaryIdentifier](#) 855
- [33.50 Addressbook.multiple.setPrimaryIdentifier](#) 860
- [33.51 Addressbook.multiple.valueAtIndex](#) 862
- [33.53 Addressbook.multiple.valueForLabel](#) 865

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 18th August 2014.

33.53 Addressbook.multivalue.valueForLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.valueForLabel"; label)

Parameters

label

The label to query.

\$label

Result Returns value or error.

Description

Examples

Shows different emails:

```
Set Variable [ $personID; Value:"637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson" ]
Set Variable [ $r; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" ) ]
Set Variable [ $w; Value:MBS( "Addressbook.multivalue.valueForLabel"; "EmailWorkLabel" ) ]
Set Variable [ $h; Value:MBS( "Addressbook.multivalue.valueForLabel"; "EmailHomeLabel" ) ]
Set Variable [ $o; Value:MBS( "Addressbook.multivalue.valueForLabel"; "OtherLabel" ) ]
Show Custom Dialog [ "Emails"; "Work email: " & $w & §& "Home email: " & $h & §& "Other email: " & $o ]
# there may be more than 3 labels!
```

See also

- [33.41 Addressbook.multivalue.indexForLabel](#) 849
- [33.43 Addressbook.multivalue.labelAtIndex](#) 851
- [33.51 Addressbook.multivalue.valueAtIndex](#) 862
- [33.52 Addressbook.multivalue.valueForIdentifier](#) 864
- [33.54 Addressbook.multivalue.values](#) 866
- [33.73 Addressbook.record.valueForProperty](#) 889

33.53.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)
- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 26th February 2016, last changed 26th February 2016.

33.54 Addressbook.multivalue.values

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.1	Yes	No	No	No	Yes

MBS("Addressbook.multivalue.values")

Result Returns list or error.

Description

Examples

Shows emails for a record:

```
Set Variable [ $personID; Value:"637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson" ]
Set Variable [ $r; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" ) ]
Set Variable [ $r; Value:MBS( "Addressbook.multivalue.values" ) ]
Show Custom Dialog [ "Emails"; $r ]
```

See also

- 33.35 Addressbook.multivalue.addAddress 839
- 33.36 Addressbook.multivalue.addValue 841
- 33.37 Addressbook.multivalue.count 844
- 33.42 Addressbook.multivalue.insertValue 850
- 33.45 Addressbook.multivalue.labels 854
- 33.34 Addressbook.multivalue.New 837
- 33.51 Addressbook.multivalue.valueAtIndex 862
- 33.53 Addressbook.multivalue.valueForLabel 865
- 33.73 Addressbook.record.valueForProperty 889

33.54.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 26th February 2016, last changed 26th February 2016.

33.55 Addressbook.people

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.people" { ; Account })

Parameters

Account

Optional

The account identifier to limit search for.

_local

Result Returns list of all person IDs.

Description

If the database doesn't contain any people, this method returns an empty array.

Examples

Get list of people IDs and show name of first person:

```
Set Variable [ $people; Value:MBS( "Addressbook.people" ) ]
```

```
Set Variable [ $firstPerson; Value:GetValue($people; 1) ]
```

```
Show Custom Dialog [ "Name of first person"; MBS( "Addressbook.record.displayname"; $firstPerson ) ]
```

See also

- [33.31 Addressbook.groups](#) 833
- [33.70 Addressbook.record.displayname](#) 885
- [33.85 Addressbook.setMe](#) 908
- [54.32 CNContactStore.Contacts](#) 1570

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 17th March 2016.

33.56 Addressbook.persistentAccounts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.2	Yes	No	No	No	No

MBS("Addressbook.persistentAccounts")

Result Returns list or error.

Description

Examples

Show persistent accounts:

```
Set Variable [ $accounts; Value:MBS( "Addressbook.persistentAccounts" ) ]
Set Variable [ $count; Value:ValueCount($accounts) ]
Set Variable [ $index; Value:1 ]
Loop
Set Variable [ $account; Value:GetValue($accounts; $index) ]
Show Custom Dialog [ "Identifier: " & $account & $&
"Name: " & MBS( "Addressbook.Account.Name"; $account) & $&
"Type: " & MBS( "Addressbook.Account.Type"; $account) & $&
"Main: " & MBS( "Addressbook.Account.isMainAccount"; $account) & $&
"URL: " & MBS( "Addressbook.Account.URL"; $account) ]
Set Variable [ $index; Value:$index +1 ]
Exit Loop If [ $index >$count ]
End Loop
```

See also

- 33.4 Addressbook.Account.isMainAccount 803
- 33.1 Addressbook.Account.Name 799
- 33.2 Addressbook.Account.Type 801
- 33.3 Addressbook.Account.URL 802
- 33.22 Addressbook.enabledAccounts 824

Created 17th March 2016, last changed 8th June 2017.

33.57 Addressbook.person.EditInAddressbook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.person.EditInAddressbook"; PersonID)

Parameters**PersonID**

The unique ID for the target person.

\$personID

Result Returns OK on success or error on failure.

Description**Examples**

Show owner in addressbook:

MBS("Addressbook.person.ShowInAddressbook"; MBS("Addressbook.me"))

Edit owner in addressbook:

MBS("Addressbook.person.EditInAddressbook"; MBS("Addressbook.me"))

See also

- [33.33 Addressbook.me](#) 835
- [33.62 Addressbook.person.ShowInAddressbook](#) 874

Created 18th August 2014, last changed 3th August 2018.

33.58 Addressbook.person.ExternalUID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.1	Yes	No	No	No	Yes

MBS("Addressbook.person.ExternalUID"; PersonID)

Parameters

PersonID

The unique ID for the target person.

\$personID

Result Returns text or error.

Description

As given by CardDAV server for example.

Examples

Find external UID:

MBS("Addressbook.person.ExternalUID"; "637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson")

33.58.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 18th February 2016, last changed 18th February 2016.

33.59 Addressbook.person.GetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.person.GetImage"; PersonID { ; ImageType; Filename })

Parameters

PersonID

The unique ID for the target person.

\$personID

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns an image as container value or error.

Description

Examples

Get my image into container field:

```
Set Variable [ $myID; Value:MBS( "Addressbook.me" ) ]
Set Variable [ $image; Value:MBS( "Addressbook.person.GetImage"; $myID) ]
Set Field [ Test::Image; $image ]
```

See also

- 33.33 Addressbook.me 835
- 33.61 Addressbook.person.SetImage 873

Created 18th August 2014, last changed 16th December 2015.

33.60 Addressbook.person.SetBirthdayComponents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	5.4	Yes	No	No	No	Yes

MBS("Addressbook.person.SetBirthdayComponents"; PersonID; Year; Month; Day)

Parameters

PersonID

The unique ID for the target person.

\$personID

Year

The year. Can be empty for no year.

1981

Month

The month. Can be empty for no month.

12

Day

The day. Can be empty for no day.

1

Result Returns OK or error.

Description

This allows to set a birthday without knowing the year.

Require OS X 10.7 or newer.

Examples

Set birthday to 6th May:

```
MBS( "Addressbook.person.SetBirthdayComponents"; $personID; ""; 5; 6)
```

33.60.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 23th October 2015, last changed 23th October 2015.

33.61 Addressbook.person.SetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.person.SetImage"; PersonID; Image)

Parameters

PersonID

The unique ID for the target person.

\$personID

Image

The image to you. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK on success.

Description

See also

- 33.59 Addressbook.person.GetImage

871

Created 18th August 2014, last changed 18th August 2014.

33.62 Addressbook.person.ShowInAddressbook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.person.ShowInAddressbook"; PersonID)

Parameters

PersonID

The unique ID for the target person.

\$personID

Result Returns OK or error.

Description

Examples

Show owner in addressbook:

```
MBS( "Addressbook.person.ShowInAddressbook"; MBS( "Addressbook.me" ) )
```

Edit owner in addressbook:

```
MBS( "Addressbook.person.EditInAddressbook"; MBS( "Addressbook.me" ) )
```

See also

- [33.33 Addressbook.me](#) 835
- [33.57 Addressbook.person.EditInAddressbook](#) 869

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

33.62.1 Blog Entries

- [MBS FileMaker Plugin 3.2 for OS X/Windows](#)

Created 18th August 2014, last changed 3th August 2018.

33.63 Addressbook.person.linkedPeople

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.person.linkedPeople"; PersonID)

Parameters**PersonID**

The unique ID for the target person.

\$personID

Result Returns list of person IDs.

Description

Available in OS X v10.8 and later.

Examples

Show related people to me:

Set Variable [\$myID; Value:MBS("Addressbook.me")]

Show Custom Dialog [MBS("Addressbook.person.linkedPeople"; \$myID)]

See also

- 33.33 Addressbook.me

33.64 Addressbook.person.parentGroups

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.person.parentGroups"; PersonID)

Parameters

PersonID

The unique ID for the target person.

\$personID

Result Returns list of unique IDs for the parent groups.

Description

If the person doesn't belong to any groups, this method returns an empty array.

See also

- 33.27 Addressbook.group.parentGroups

829

Created 18th August 2014, last changed 18th August 2014.

33.65 Addressbook.person.vCardRepresentation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.person.vCardRepresentation"; PersonID { ; Filename; asText })

Parameters

PersonID

The unique ID for the target person.

\$personID

Filename

Optional

The file name for the container value with the vcard. Default is "person.vcf".

\$name & ".vcf"

asText

Optional

Pass 1 to get back result as text instead of container.

1

Result Returns vcard file data.

Description

You can store this in a container and export to a file or email.

See also

- [33.66 Addressbook.personFromVCardRepresentation](#) 878
- [33.67 Addressbook.personFromVCardTextRepresentation](#) 879

33.65.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 18th August 2014, last changed 18th February 2016.

33.66 Addressbook.personFromVCardRepresentation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.personFromVCardRepresentation"; vcard)

Parameters

vcard

The vcard file to use for the person. Can be a container value with vcard file.

\$vcard

Result Returns OK or error.

Description

Version 2.1 and 3.0 of the vCard format are supported.

You still need to add this person to the database and save changes.

Please use Addressbook.personFromVCardTextRepresentation if you have vcard as text.

See also

- 33.65 Addressbook.person.vCardRepresentation 877
- 33.67 Addressbook.personFromVCardTextRepresentation 879

Created 18th August 2014, last changed 18th August 2014.

33.67 Addressbook.personFromVCardTextRepresentation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	Yes

MBS("Addressbook.personFromVCardTextRepresentation"; vcard)

Parameters**vcard**

The vcard as text.

\$vcard

Result Returns OK or error.

Description

Version 2.1 and 3.0 of the vCard format are supported.

You still need to add this person to the database and save changes.

Please use Addressbook.personFromVCardRepresentation if you have vcard as file in container.

See also

- 33.65 Addressbook.person.vCardRepresentation 877
- 33.66 Addressbook.personFromVCardRepresentation 878

Created 18th August 2014, last changed 18th August 2014.

33.68 Addressbook.record.SetValueForProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.record.SetValueForProperty"; RecordID; PropertyName; Value)

Parameters

RecordID

The unique ID for the target person or group.

\$personID

PropertyName

The name of the property.

"EmailProperty"

Value

The value as text, date or number.

\$value

Result Returns OK on success and error on failure.

Description

For multivalue items, please use an empty string as value and the plugin will put in the current multivalue. Possible property names are UIDProperty, CreationDateProperty, ModificationDateProperty, FirstNameProperty, LastNameProperty, FirstNamePhoneticProperty, LastNamePhoneticProperty, NicknameProperty, MaidenNameProperty, BirthdayProperty, BirthdayComponentsProperty, OrganizationProperty, JobTitleProperty, HomePageProperty, URLsProperty, CalendarURIsProperty, EmailProperty, AddressProperty, OtherDatesProperty, OtherDateComponentsProperty, RelatedNamesProperty, DepartmentProperty, PhoneProperty, AIMInstantProperty, JabberInstantProperty, MSNInstantProperty, YahooInstantProperty, ICQInstantProperty, InstantMessageProperty, SocialProfileProperty, NoteProperty, MiddleNameProperty, MiddleNamePhoneticProperty, TitleProperty, SuffixProperty and GroupNameProperty.

Examples

Set first name on a person:

```
MBS( "Addressbook.record.SetValueForProperty"; $personID; "FirstNameProperty"; Addressbook::FirstName )
```

Add a new URL to a contact:

```
Set Variable [ $r; MBS( "Addressbook.multivalue.New" ) ]
Set Variable [ $ID; MBS( "Addressbook.multivalue.addValue"; "http://www.mbsplugins.de"; "WorkLabel" ) ]
Set Variable [ $r; MBS( "Addressbook.multivalue.setPrimaryIdentifier"; $ID ) ]
Set Variable [ $r; MBS( "Addressbook.record.SetValueForProperty"; $personID; "URLsProperty"; "multivalue" ) ]
```

Add work and home emails:

```
$r = MBS( "Addressbook.multivalue.New" )
$WorkEmailID = MBS( "Addressbook.multivalue.addValue"; Addressbook::WorkEmail; "EmailWorkLabel"
)
$HomeEmailID = MBS( "Addressbook.multivalue.addValue"; Addressbook::HomeEmail; "EmailHomeLabel" )
$r = MBS( "Addressbook.multivalue.setPrimaryIdentifier"; $WorkEmailID )
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "EmailProperty"; "multivalue" )
```

Set flags, so entry shows as company:

```
MBS( "Addressbook.record.SetValueForProperty"; $personID; "PersonFlags"; 1 )
```

Edit existing person:

```
# get an UUID for a person record
$personID = "637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson"
# set a new name
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "FirstNameProperty"; "John" )
# save it
$r = MBS( "Addressbook.save" )
```

Replace an email:

```
# find my ID
Set Variable [ $personID; Value:MBS( "Addressbook.me" ) ]
# get email list
Set Variable [ $r; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" ) ]
# show first email in list
Set Variable [ $firstValue; Value:MBS( "Addressbook.multivalue.valueAtIndex"; 0 ) ]
Show Custom Dialog [ "First Email"; $firstValue ]
# replace first email with new email
Set Variable [ $r; Value:MBS( "Addressbook.multivalue.replaceValueAtIndex"; 0; "test@test.test" ) ]
# show changed email
Set Variable [ $firstValue; Value:MBS( "Addressbook.multivalue.valueAtIndex"; 0 ) ]
Show Custom Dialog [ "First Email"; $firstValue ]
# set back the email list
Set Variable [ $r; Value:MBS( "Addressbook.record.SetValueForProperty"; $personID; "EmailProperty"; ""
) ]
# save it
Set Variable [ $r; Value:MBS( "Addressbook.save" ) ]
Show Custom Dialog [ "Saved"; $r ]
```

Add first and last name:

```
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "FirstName-
```

```
Property"; $vn ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "LastName-Property"; $nn ) ]
```

Set organization:

```
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "Organization-Property"; $org ) ]
```

Add homepage URLs:

```
# add homepages
Set Variable [ $r ; Value: MBS( "Addressbook.multivalue.New" ) ]
Set Variable [ $Blog_URL_ID ; Value: MBS( "Addressbook.multivalue.addValue"; "http://www.mbs-plugins.com/"; "Blog" ) ]
Set Variable [ $Homepage_URL_ID ; Value: MBS( "Addressbook.multivalue.addValue"; "http://www.monkeybreadsoftware.de/"; "HomePageLabel" ) ]
Set Variable [ $r ; Value: MBS( "Addressbook.multivalue.setPrimaryIdentifier"; $Homepage_URL_ID ) ]
Set Variable [ $r ; Value: MBS( "Addressbook.record.SetValueForProperty"; $personID; "URLsProperty"; "multivalue" ) ]
```

See also

- 33.19 Addressbook.addRecord 819
- 33.33 Addressbook.me 835
- 33.36 Addressbook.multivalue.addValue 841
- 33.34 Addressbook.multivalue.New 837
- 33.50 Addressbook.multivalue.setPrimaryIdentifier 860
- 33.51 Addressbook.multivalue.valueAtIndex 862
- 33.72 Addressbook.record.removeValueForProperty 888
- 33.69 Addressbook.record.UniqueID 884
- 33.73 Addressbook.record.valueForProperty 889
- 33.76 Addressbook.save 896

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

33.68.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)
- [MBS FileMaker Plugin, version 8.2pr6](#)

Created 18th August 2014, last changed 9th March 2018.

33.69 Addressbook.record.UniqueID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.record.UniqueID"; RecordID)

Parameters

RecordID

The unique ID for the target person or group.

\$personID

Result Returns the unique ID for a record.

Description

Use this method to query the record ID for a new person or group after you saved it.

Examples

Create person and save changes:

```
$personID = MBS( "Addressbook.NewPerson" )
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "FirstNameProperty"; "John" )
$r = MBS( "Addressbook.addRecord"; $personID )
$r = MBS( "Addressbook.save" )
# Learn real ID for new record
$personID = MBS( "Addressbook.record.UniqueID"; $personID )
```

See also

- 33.19 Addressbook.addRecord 819
- 33.7 Addressbook.NewPerson 806
- 33.68 Addressbook.record.SetValueForProperty 880
- 33.76 Addressbook.save 896

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

Created 18th August 2014, last changed 18th August 2014.

33.70 Addressbook.record.displayname

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.record.displayname"; RecordID)

Parameters

RecordID

The unique ID for the target person or group.

\$personID

Result Returns name or error.

Description

Returns firstname & lastname for persons, organization name for organizations and group name for groups.

Examples

Query display name of first group:

```
MBS( "Addressbook.record.displayname"; ElementLeft ( MBS( "Addressbook.groups" ) ; 1 ) )
```

Query display name of addressbook's owner:

```
MBS( "Addressbook.record.displayname"; MBS( "Addressbook.me" ) )
```

Query display name based on a ID:

```
MBS( "Addressbook.record.displayname"; "CFD73A44-24DD-480F-A1DE-A31926BC4AC7:ABPerson" )
```

See also

- [33.31 Addressbook.groups](#) 833
- [33.33 Addressbook.me](#) 835
- [33.55 Addressbook.people](#) 867
- [33.71 Addressbook.record.isReadOnly](#) 887
- [33.74 Addressbook.recordsMatchingSearchElement](#) 893
- [33.77 Addressbook.searchElementForConjunction](#) 899
- [33.78 Addressbook.searchElementForProperty](#) 900

Example Databases

- [Mac and iOS/Addressbook/Addressbook Changes](#)

33.71 Addressbook.record.isReadOnly

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.record.isReadOnly"; RecordID)

Parameters**RecordID**

The unique ID for the target person or group.

\$personID

Result Returns 1 if the record is read-only; otherwise, 0.

Description**Examples**

Check me:

```
$ID = MBS("Addressbook.me")
```

```
$readonly = MBS( "Addressbook.record.isReadOnly"; $ID )
```

See also

- [33.33 Addressbook.me](#) 835
- [33.70 Addressbook.record.displayname](#) 885

Created 18th August 2014, last changed 18th August 2014.

33.72 Addressbook.record.removeValueForProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.record.removeValueForProperty"; RecordID; PropertyName)

Parameters

RecordID

The unique ID for the target person or group.

\$personID

PropertyName

The name of the property to remove.

"EmailProperty"

Result Returns OK or error.

Description

Possible property names are UIDProperty, CreationDateProperty, ModificationDateProperty, FirstNameProperty, LastNameProperty, FirstNamePhoneticProperty, LastNamePhoneticProperty, NicknameProperty, MaidenNameProperty, BirthdayProperty, BirthdayComponentsProperty, OrganizationProperty, JobTitleProperty, HomePageProperty, URLsProperty, CalendarURIsProperty, EmailProperty, AddressProperty, OtherDatesProperty, OtherDateComponentsProperty, RelatedNamesProperty, DepartmentProperty, PhoneProperty, AIMInstantProperty, JabberInstantProperty, MSNInstantProperty, YahooInstantProperty, ICQInstantProperty, InstantMessageProperty, SocialProfileProperty, NoteProperty, MiddleNameProperty, MiddleNamePhoneticProperty, TitleProperty, SuffixProperty and GroupNameProperty.

See also

- 33.68 Addressbook.record.SetValueForProperty 880
- 33.73 Addressbook.record.valueForProperty 889

Created 18th August 2014, last changed 18th August 2014.

33.73 Addressbook.record.valueForProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.record.valueForProperty"; RecordID; PropertyName)

Parameters

RecordID

The unique ID for the target person or group.

\$personID

PropertyName

The name of the property to query.

"EmailProperty"

Result Returns the value of a given property for a record.

Description

Possible property names are UIDProperty, CreationDateProperty, ModificationDateProperty, FirstNameProperty, LastNameProperty, FirstNamePhoneticProperty, LastNamePhoneticProperty, NicknameProperty, MaidenNameProperty, BirthdayProperty, BirthdayComponentsProperty, OrganizationProperty, JobTitleProperty, HomePageProperty, URLsProperty, CalendarURIsProperty, EmailProperty, AddressProperty, OtherDatesProperty, OtherDateComponentsProperty, RelatedNamesProperty, DepartmentProperty, PhoneProperty, AIMInstantProperty, JabberInstantProperty, MSNInstantProperty, YahooInstantProperty, ICQInstantProperty, InstantMessageProperty, SocialProfileProperty, NoteProperty, MiddleNameProperty, MiddleNamePhoneticProperty, TitleProperty, SuffixProperty and GroupNameProperty.

Examples

Query first name of a person:

```
MBS( "Addressbook.record.valueForProperty"; $personID; "FirstNameProperty" )
```

Query group name of a group:

```
MBS( "Addressbook.record.valueForProperty"; "57956420-03A4-4C09-8219-6874B897D25F:ABGroup"; "GroupName" )
```

Query my ID:

```
MBS( "Addressbook.record.valueForProperty"; MBS( "Addressbook.me" ); "UIDProperty" )
```

Query creation date of my record:

```
MBS( "Addressbook.record.valueForProperty"; MBS( "Addressbook.me" ); "CreationDateProperty" )
```

Query birthday of my record:

```
MBS( "Addressbook.record.valueForProperty"; MBS( "Addressbook.me" ); "BirthdayProperty" )
```

Query birthday components for my record:

```
MBS( "Addressbook.record.valueForProperty"; MBS( "Addressbook.me" ); "BirthdayComponentsProperty" )
```

Query my company name:

```
MBS( "Addressbook.record.valueForProperty"; MBS( "Addressbook.me" ); "OrganizationProperty" )
```

Query my job title:

```
MBS( "Addressbook.record.valueForProperty"; MBS( "Addressbook.me" ); "JobTitleProperty" )
```

Query my department:

```
MBS( "Addressbook.record.valueForProperty"; MBS( "Addressbook.me" ); "DepartmentProperty" )
```

Query my note:

```
MBS( "Addressbook.record.valueForProperty"; MBS( "Addressbook.me" ); "NoteProperty" )
```

Query all my URLs:

```
Set Variable [ $personID; Value:MBS( "Addressbook.me" ) ]
Set Variable [ $Urls; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "URLsProperty" ) ]
Set Variable [ $count; Value:MBS( "Addressbook.multivalue.count" ) ]
If [ $count >0 ]
# for loop
Set Variable [ $index; Value:0 ]
Loop
Set Variable [ $value; Value:MBS( "Addressbook.multivalue.valueAtIndex"; $index ) ]
Show Custom Dialog [ "URL"; $value ]
# next
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index = $count ]
End Loop
End If
```

Shows different emails:

```
Set Variable [ $personID; Value:"637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson" ]
Set Variable [ $r; Value:MBS( "Addressbook.record.valueForProperty"; $personID; "EmailProperty" ) ]
Set Variable [ $w; Value:MBS( "Addressbook.multivalue.valueForLabel"; "EmailWorkLabel" ) ]
Set Variable [ $h; Value:MBS( "Addressbook.multivalue.valueForLabel"; "EmailHomeLabel" ) ]
```

```
Set Variable [ $o; Value:MBS( "Addressbook.multivalue.valueForLabel"; "OtherLabel" ) ]
Show Custom Dialog [ "Emails"; "Work email: " & $w & $& "Home email: " & $h & $& "Other email: "
& $o ]
# there may be more than 3 labels!
```

Show note of an user:

```
MBS( "Addressbook.record.valueForProperty"; "637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson";
"NoteProperty" )
```

Query an address:

```
# Find someone...
Set Variable [ $personID ; Value: MBS( "Addressbook.searchPeopleWithName"; "Jon"; "Test" ) ]
If [ Length($personID) >0 ]
# get Address
Set Variable [ $r ; Value: MBS( "Addressbook.record.valueForProperty"; $personID; "AddressProperty" ) ]
Set Variable [ $Address ; Value: MBS( "Addressbook.multivalue.valueAtIndex"; 0) ]
Show Custom Dialog [ "Address" ; $Address ]
End If
```

Example result: Street=Some street. 123

Zip=12345

Country=Deutschland

City=Test

See also

- [33.23 Addressbook.formattedAddress](#) 825
- [33.31 Addressbook.groups](#) 833
- [33.33 Addressbook.me](#) 835
- [33.37 Addressbook.multivalue.count](#) 844
- [33.45 Addressbook.multivalue.labels](#) 854
- [33.49 Addressbook.multivalue.replaceValueAtIndex](#) 858
- [33.53 Addressbook.multivalue.valueForLabel](#) 865
- [33.54 Addressbook.multivalue.values](#) 866
- [33.68 Addressbook.record.SetValueForProperty](#) 880
- [33.83 Addressbook.searchPeopleWithName](#) 906

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

33.73.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)

Created 18th August 2014, last changed 9th December 2019.

33.74 Addressbook.recordsMatchingSearchElement

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	5.4	Yes	No	No	No	No

MBS("Addressbook.recordsMatchingSearchElement"; SearchElement)

Parameters

SearchElement

The ID for the search element.

\$SearchElement

Result Returns list or error.

Description

Returns a list of records that match the given search element, or returns an empty array if no records match the search element.

Examples

Find a person with first name being Christian:

```
Set Variable [ $e1; Value:MBS( "Addressbook.searchElementForProperty"; "person"; "FirstNameProperty";
""; ""; "Christian"; "Equal" ) ]
Set Variable [ $records; Value:MBS( "Addressbook.recordsMatchingSearchElement"; $e1 ) ]
Set Variable [ $record; Value:GetValue($records; 1) ]
Set Variable [ $name; Value:MBS( "Addressbook.record.displayname"; $record ) ]
Show Custom Dialog [ $name ]
```

Search people with related name being John:

```
Set Variable [ $e1; Value:MBS( "Addressbook.searchElementForProperty"; "person"; "RelatedNamesProp-
erty"; ""; ""; "John"; "ContainsSubStringCaseInsensitive" ) ]
Set Variable [ $records; Value:MBS( "Addressbook.recordsMatchingSearchElement"; $e1 ) ]
Set Variable [ $record; Value:GetValue($records; 1) ]
Set Variable [ $name; Value:MBS( "Addressbook.record.displayname"; $record ) ]
Show Custom Dialog [ $name ]
```

See also

- 33.70 Addressbook.record.displayname 885
- 33.77 Addressbook.searchElementForConjunction 899
- 33.78 Addressbook.searchElementForProperty 900

33.74.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 26th October 2015, last changed 26th October 2015.

33.75 Addressbook.removeRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.removeRecord"; RecordID)

Parameters**RecordID**

The unique ID for the target person or group.

\$personID

Result Returns OK on success and error on failure.

Description

You may want to call Addressbook.save later to saves changes permanently.

See also

- 33.19 Addressbook.addRecord 819
- 33.76 Addressbook.save 896

Created 18th August 2014, last changed 24th September 2019.

33.76 Addressbook.save

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

```
MBS( "Addressbook.save" )
```

Result Returns OK on success and error on failure.

Description

Examples

Create person and save changes:

```
$personID = MBS( "Addressbook.NewPerson" )
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "FirstNameProperty"; "John" )
$r = MBS( "Addressbook.addRecord"; $personID )
$r = MBS( "Addressbook.save" )
```

Edit existing person:

```
# get an UUID for a person record
$personID = "637FA922-7A2B-4F9A-BFA3-023253D4A3D5:ABPerson"
# set a new name
$r = MBS( "Addressbook.record.SetValueForProperty"; $personID; "FirstNameProperty"; "John" )
# save it
$r = MBS( "Addressbook.save" )
```

Add a new person to addressbook.

```
# Fields to variables
#
Set Variable [ $vn; Value:Adressen::Extra ]
Set Variable [ $nn; Value:Adressen::Nachname ]
Set Variable [ $org; Value:Adressen::Name ]
Set Variable [ $str; Value:Adressen::Straße ]
Set Variable [ $land; Value:Adressen::Land ]
Set Variable [ $plz; Value:Adressen::PLZ ]
Set Variable [ $ort; Value:Adressen::Stadt ]
Set Variable [ $email; Value:Adressen::EMail ]
Set Variable [ $tel; Value:Adressen::Tel ]
Set Variable [ $mob; Value:Adressen::Mobil ]
#
# Create new person
#
Set Variable [ $personID; Value:MBS ( "Addressbook.NewPerson" ) ]
# Add first name
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "FirstName-
```

```

Property"; $vn ) ]
# Add last name
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "LastName-
Property"; $nn ) ]
# Organization
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "Organization-
Property"; $org ) ]
# Add one address
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New"; 1 )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addAddress"; $str; $plz; $ort; $land; "" ; "" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "AddressProp-
erty"; "multivalue" ) ]
# add an email
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" )
Set Variable [ $id; Value:MBS ( "Addressbook.multivalue.addValue"; $email; "EmailWorkLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "EmailProp-
erty"; "multivalue" ) ]
# Add phone numbers
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.New" ]
Set Variable [ $tel_id; Value:MBS ( "Addressbook.multivalue.addValue"; $tel; "PhoneWorkLabel" ) ]
Set Variable [ $mob_id; Value:MBS ( "Addressbook.multivalue.addValue"; $mob; "PhoneMobileLabel" ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.multivalue.setPrimaryIdentifier"; $mob_id ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.record.SetValueForProperty"; $personID; "PhoneProp-
erty"; "multivalue" ) ]
#
# Save record
Set Variable [ $result; Value:MBS ( "Addressbook.addRecord"; $personID ) ]
Set Variable [ $result; Value:MBS ( "Addressbook.save" ) ]

```

See also

- 33.19 Addressbook.addRecord 819
- 33.24 Addressbook.group.addMember 826
- 33.33 Addressbook.me 835
- 33.35 Addressbook.multivalue.addAddress 839
- 33.34 Addressbook.multivalue.New 837
- 33.50 Addressbook.multivalue.setPrimaryIdentifier 860
- 33.6 Addressbook.NewGroup 805
- 33.69 Addressbook.record.UniqueID 884
- 33.75 Addressbook.removeRecord 895

- 33.85 Addressbook.setMe

Example Databases

- [Mac and iOS/Addressbook/Addressbook](#)

33.76.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)

Created 18th August 2014, last changed 18th October 2016.

33.77 Addressbook.searchElementForConjunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	5.4	Yes	No	No	No	No

MBS("Addressbook.searchElementForConjunction"; conjunction; SearchElements)

Parameters

conjunction

The logical operator with which to combine the search elements. Can be "AND" or "OR".
"AND"

SearchElements

List of search element IDs.

Result Returns ID or error.

Description

Returns a compound search element, created by combining the search elements in an array with the given conjunction.

Examples

Find people with last name and email matching:

```
Set Variable [ $e1; Value:MBS( "Addressbook.searchElementForProperty"; "person"; "LastNameProperty";
""; ""; "Schmitz"; "ContainsSubStringCaseInsensitive" ) ]
Set Variable [ $e2; Value:MBS( "Addressbook.searchElementForProperty"; "person"; "EmailProperty"; "";
""; "monkeybread"; "ContainsSubStringCaseInsensitive" ) ]
Set Variable [ $e; Value:MBS( "Addressbook.searchElementForConjunction"; "and"; $e1 & $e2 ) ]
Set Variable [ $records; Value:MBS( "Addressbook.recordsMatchingSearchElement"; $e ) ]
Set Variable [ $record; Value:GetValue($records; 1) ]
Set Variable [ $name; Value:MBS( "Addressbook.record.displayname"; $record ) ]
Show Custom Dialog [ $name ]
```

See also

- [33.70 Addressbook.record.displayname](#) 885
- [33.74 Addressbook.recordsMatchingSearchElement](#) 893
- [33.78 Addressbook.searchElementForProperty](#) 900

33.77.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 26th October 2015, last changed 26th October 2015.

33.78 Addressbook.searchElementForProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	5.4	Yes	No	No	No	No

MBS("Addressbook.searchElementForProperty"; Type; Property; Label; Key; Value; Comparison)

Parameters

Type

Whether to make search element for group or person. Can be "Group" or "Person".
"Person"

Property

The name of the property to search on, such as ABAddressProperty or ABLastNameProperty.
"LastNameProperty"

Label

The label name for a multivalue list, such as kABAddressHomeLabel, kABPhoneWorkLabel, or a user-specified label, such as Summer Home. If the specified property does not have multiple values, pass "". If the specified property does have multiple values, pass "" to search all the values.

Key

The key name for a dictionary, such as kABAddressCityKey or kABAddressStreetKey. If the specified property is not a dictionary, pass "". If the specified property is a dictionary, pass "" to search all keys.

Value

What you're searching for. If empty, then the only supported value for comparison is ABEqual or ABNotEqual.

Comparison

The comparison operator. Can be Equal, NotEqual, LessThan, LessThanOrEqual, GreaterThan, GreaterThanOrEqual, EqualCaseInsensitive, ContainsSubString, ContainsSubStringCaseInsensitive, PrefixMatch, PrefixMatchCaseInsensitive, BitsInBitFieldMatch, DoesNotContainSubString, DoesNotContainSubStringCaseInsensitive, NotEqualCaseInsensitive, SuffixMatch, SuffixMatchCaseInsensitive, WithinIntervalAroundToday, WithinIntervalAroundTodayYearless, NotWithinIntervalAroundToday, NotWithinIntervalAroundTodayYearless, WithinIntervalFromToday, WithinIntervalFromTodayYearless, NotWithinIntervalFromToday or NotWithinIntervalFromTodayYearless.
"Equal"

Result Returns ID or error.

Description

Returns a search element object that specifies a query for records of this type.

Possible property names are UIDProperty, CreationDateProperty, ModificationDateProperty, FirstNameProperty, LastNameProperty, FirstNamePhoneticProperty, LastNamePhoneticProperty, NicknameProperty, MaidenNameProperty, BirthdayProperty, BirthdayComponentsProperty, OrganizationProperty, JobTitleProperty, HomePageProperty, URLsProperty, CalendarURIsProperty, EmailProperty, AddressProperty, OtherDatesProperty, OtherDateComponentsProperty, RelatedNamesProperty, DepartmentProperty, PhoneProp-

erty, AIMInstantProperty, JabberInstantProperty, MSNInstantProperty, YahooInstantProperty, ICQInstantProperty, InstantMessageProperty, SocialProfileProperty, NoteProperty, MiddleNameProperty, MiddleNamePhoneticProperty, TitleProperty, SuffixProperty and GroupNameProperty.

Examples

Find a person with first name being Christian:

```
Set Variable [ $e1; Value:MBS( "Addressbook.searchElementForProperty"; "person"; "FirstNameProperty";
""; ""; "Christian"; "Equal" ) ]
Set Variable [ $records; Value:MBS( "Addressbook.recordsMatchingSearchElement"; $e1 ) ]
Set Variable [ $record; Value:GetValue($records; 1) ]
Set Variable [ $name; Value:MBS( "Addressbook.record.displayname"; $record ) ]
Show Custom Dialog [ $name ]
```

Search people with related name being John:

```
Set Variable [ $e1; Value:MBS( "Addressbook.searchElementForProperty"; "person"; "RelatedNamesProp-
erty"; ""; ""; "John"; "ContainsSubStringCaseInsensitive" ) ]
Set Variable [ $records; Value:MBS( "Addressbook.recordsMatchingSearchElement"; $e1 ) ]
Set Variable [ $record; Value:GetValue($records; 1) ]
Set Variable [ $name; Value:MBS( "Addressbook.record.displayname"; $record ) ]
Show Custom Dialog [ $name ]
```

Find all companies:

```
# Companies have PersonFlags = 1 while normal people have 0.
Set Variable [ $e; Value:MBS( "Addressbook.searchElementForProperty"; "person"; "PersonFlags"; ""; "";
1; "Equal" ) ]
Set Variable [ $records; Value:MBS( "Addressbook.recordsMatchingSearchElement"; $e ) ]
Set Variable [ $record; Value:GetValue($records; 1) ]
Set Variable [ $name; Value:MBS( "Addressbook.record.displayname"; $record ) ]
Show Custom Dialog [ $name ]
```

See also

- 33.70 Addressbook.record.displayname 885
- 33.74 Addressbook.recordsMatchingSearchElement 893
- 33.77 Addressbook.searchElementForConjunction 899

33.78.1 Blog Entries

- [Store your ID in URLs in Mac address book](#)
- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 26th October 2015, last changed 26th October 2015.

33.79 Addressbook.searchGroupsWithName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.3	Yes	No	No	No	No

MBS("Addressbook.searchGroupsWithName"; GroupName)

Parameters

GroupName

The group name or search for.
"Friends"

Result Returns list of all group IDs.

Description

This search is case insensitive.

Examples

Search for group named Friends:

MBS("Addressbook.searchGroupsWithName"; "Friends")

See also

- 33.81 Addressbook.searchPeopleWithEmail 904
- 33.83 Addressbook.searchPeopleWithName 906

33.79.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr4](#)
- [MBS Filemaker Plugin, version 3.3pr3](#)

Created 18th August 2014, last changed 8th September 2015.

33.80 Addressbook.searchPeopleWithCreationDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.searchPeopleWithCreationDate"; StartDate { ; EndDate })

Parameters**StartDate**

The start date for the search range.

Date(10; 1; 2013)

EndDate

Optional

The end date for the search range.

Date(11; 1; 2013)

Result Returns list of all person IDs.

Description**Examples**

Searches all people created between 1st of September and 1st of December 2013:

MBS("Addressbook.searchPeopleWithCreationDate"; Date (9 ; 1 ; 2013); Date (10 ; 1 ; 2013))

Searches all people created after 1st of September:

MBS("Addressbook.searchPeopleWithModificationDate"; Date (9 ; 1 ; 2013))

See also

- 33.82 Addressbook.searchPeopleWithModificationDate

33.81 Addressbook.searchPeopleWithEmail

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.searchPeopleWithEmail"; Email)

Parameters

Email

The email address to search for.

"test@test.test"

Result Returns list of all person IDs.

Description

This search is case insensitive.

Examples

Search for test email:

MBS("Addressbook.searchPeopleWithEmail"; "test@test.test")

See also

- 33.79 Addressbook.searchGroupsWithName 902
- 33.83 Addressbook.searchPeopleWithName 906

Created 18th August 2014, last changed 18th August 2014.

33.82 Addressbook.searchPeopleWithModificationDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.5	Yes	No	No	No	No

MBS("Addressbook.searchPeopleWithModificationDate"; StartDate { ; EndDate })

Parameters**StartDate**

The start date for the search range.

Date(10; 1; 2013)

EndDate

Optional

The end date for the search range.

Date(11; 1; 2013)

Result Returns list of all person IDs.

Description**Examples**

Searches all people modified between 1st of September and 1st of December 2013:

MBS("Addressbook.searchPeopleWithModificationDate"; Date (9 ; 1 ; 2013); Date (10 ; 1 ; 2013))

Searches all people modified after 1st of September:

MBS("Addressbook.searchPeopleWithModificationDate"; Date (9 ; 1 ; 2013))

See also

- 33.80 Addressbook.searchPeopleWithCreationDate

33.83 Addressbook.searchPeopleWithName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	No

MBS("Addressbook.searchPeopleWithName"; FirstName; LastName)

Parameters

FirstName

The first name or search for. Can be empty to search only for last name.
"Christian"

LastName

The last name or search for. Can be empty to search only for first name.
"Schmitz"

Result Returns list of all person IDs.

Description

This search is case insensitive.

Examples

Search for Peter Miller:

MBS("Addressbook.searchPeopleWithName"; "Peter"; "Miller")

Search for Peter only:

MBS("Addressbook.searchPeopleWithName"; "Peter"; "")

See also

- 33.49 Addressbook.multivalue.replaceValueAtIndex 858
- 33.73 Addressbook.record.valueForProperty 889
- 33.79 Addressbook.searchGroupsWithName 902
- 33.81 Addressbook.searchPeopleWithEmail 904

Created 18th August 2014, last changed 18th August 2014.

33.84 Addressbook.searchPersonWithExternalUID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	6.1	Yes	No	No	No	No

MBS("Addressbook.searchPersonWithExternalUID"; UID)

Parameters

UID

The external UID. Not the unique ID we use elsewhere for person.
"cfd73a44-24dd-480f-a1de-a31926bc4ac1"

Result Returns person ID or error.

Description

The plugin has to look into each person, find the external ID and compare it.
So this call can take a while.

Examples

Find unique ID for record based on external ID:

MBS("Addressbook.searchPersonWithExternalUID"; "637fa922-7a2b-4f9a-bfa3-023253d4a3d5")

33.84.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 18th February 2016, last changed 18th February 2016.

33.85 Addressbook.setMe

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
33 Addressbook	3.1	Yes	No	No	No	Yes

MBS("Addressbook.setMe"; PersonID)

Parameters

PersonID

The unique ID for the target person.

\$personID

Result Returns OK on success and error on failure.

Description

If you don't want a record to represent the logged-in user, then pass empty string as the person argument. Note that this will not delete the existing record, if one is set.

See also

- 33.33 Addressbook.me 835
- 33.55 Addressbook.people 867
- 33.76 Addressbook.save 896

Created 18th August 2014, last changed 18th August 2014.

Chapter 34

App

Functions to modify the current application.

34.1 App.CancelUserAttentionRequest

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	6.1	Yes	No	No	No	No

MBS("App.CancelUserAttentionRequest"; ID)

Parameters

ID

The number for the user attention request.

Result Returns OK or error.

Description

A request is also canceled automatically by user activation of the app.

See also

- [34.12 App.RequestUserAttention](#)

920

34.1.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 2nd March 2016, last changed 2nd March 2016.

34.2 App.ClearTouchBar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App 168 TouchBar	8.4	Yes	No	No	No	No

MBS("App.ClearTouchBar")

Result Returns OK or error.

Description

You assign the TouchBar with TouchBar.AssignToApp function.

See also

- 168.3 TouchBar.AssignToApp

7963

34.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr2](#)

Created 8th August 2018, last changed 8th August 2018.

34.3 App.CompactMemory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	8.5	No	Yes	Yes, Windows only	No	No

MBS("App.CompactMemory")

Result Returns OK or error.

Description

Passed back memory which is no longer needed, but kept for reuse.
Reducing physical memory used may lead to storing data in swap file on disk.

See also App.MemoryUsed to learn how much memory is used.

See also

- 34.9 App.MemoryUsed

917

34.3.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr9](#)

Created 23th November 2018, last changed 23th November 2018.

34.4 App.EffectiveUserID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	8.0	Yes	No	Yes	Yes	Yes

MBS("App.EffectiveUserID")

Result Returns number or error.

Description

34.4.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)

Created 10th December 2017, last changed 10th December 2017.

34.5 App.GetDockBadgeLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	2.6	Yes	No	No	No	Yes

MBS("App.GetDockBadgeLabel")

(old name: AppDockTile.getBadgeLabel)

Result Returns text or error.

Description

Available in Mac OS X v10.5 and later.

iOS added in 7.2, but the badge is a number.

Examples

Set and query dock badge:

```
Set Variable [ $r; Value:MBS( "App.SetDockBadgeLabel"; "123" ) ]
```

```
Show Custom Dialog [ MBS( "App.GetDockBadgeLabel" ) ]
```

See also

- [34.13 App.SetDockBadgeLabel](#)

921

34.5.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr3](#)

Created 18th August 2014, last changed 15th April 2017.

34.6 App.GetDockIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	3.2	Yes	No	Yes, macOS only	No	No

MBS("App.GetDockIcon" { ; ImageType; Filename })

Parameters

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

Only queries a dock item image you set before with App.SetDockIcon

Returns nothing if no image was set.

See also

- 34.14 App.SetDockIcon

922

34.6.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 5th July 2015.

34.7 App.GetProcessName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	3.2	Yes	Yes	Yes	Yes	Yes

MBS("App.GetProcessName")

Result Returns name or error.

Description

This value does not change by App.SetProcessName as it queries the true name. For FileMaker Pro, this is "FileMaker Pro", even if you have Advanced version.

See also

- [34.8 App.GetProcessPath](#) 916
- [34.15 App.SetProcessName](#) 923

Example Databases

- [Mac only/Dock Tile](#)

34.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)
- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 15th October 2017.

34.8 App.GetProcessPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	3.5	Yes	Yes	Yes	Yes	Yes

MBS("App.GetProcessPath")

Result Returns path or error.

Description

This value does not change by App.SetProcessName as it queries the file path.

Examples

Get app folder path:

```
MBS( "Path.RemoveLastPathComponent"; MBS( "App.GetProcessPath" ) )
```

See also

- [34.7 App.GetProcessName](#) 915
- [34.15 App.SetProcessName](#) 923
- [78.35 Files.Launch](#) 3823
- [121.8 Path.RemoveLastPathComponent](#) 6149
- [172.3 URLScheme.SetDefaultHandler](#) 8144

34.8.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)
- [Restart FileMaker with same database](#)
- [MBS Filemaker Plugin, version 3.5pr6](#)

Created 18th August 2014, last changed 16th October 2017.

34.9 App.MemoryUsed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	6.5	Yes	Yes	Yes	No	No

MBS("App.MemoryUsed")

Result Returns number or error.

Description

This is to query the memory used in bytes for the current application.

On Server this would query the scripting process.

The value returned is not exactly the same as in Task Manager or Activity Monitor as this includes some shared memory for your process, which those don't count per app.

See also App.CompactMemory for Windows to reduce memory.

Examples

Query memory used

```
Round(MBS("App.MemoryUsed") / 1024 / 1024; 0) & " MB"
```

See also

- [34.3 App.CompactMemory](#) 911
- [161.2 SystemInfo.AvailableRAM](#) 7653

34.9.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

Created 15th November 2016, last changed 23th November 2018.

34.10 App.OpenFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	7.4	Yes	No	No	No	No

MBS("App.OpenFile"; path)

Parameters

path

The native file path to the file to open.

"/Users/cs/Desktop/test.fmp12"

Result Returns OK or error.

Description

This happens asynchronously, so we have no idea if it works or not.

FileMaker may show error dialogs.

This call must be last in a script as you can't open a file while a script is running, the file should open when the script is done. You can use FM.RunScriptLater to run a script in a few seconds to follow up. There you can check with window functions and see if there is a new window in front.

See also Files.Launch and Files.LaunchFile.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Open a database:

```
Set Variable [ $r ; Value: MBS("App.OpenFile"; "/Users/cs/Desktop/test.fmp12") ]
```

See also

- 78.35 Files.Launch 3823
- 78.36 Files.LaunchFile 3826
- 79.52 FM.RunScript 3986
- 79.54 FM.RunScriptLater 3990
- 121.2 Path.FileMakerPathToNativePath 6139

34.10.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)

Created 21st August 2017, last changed 20th September 2017.

34.11 App.ProcessID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	8.0	Yes	Yes	Yes	Yes	Yes

MBS("App.ProcessID")

Result Returns process ID or error.

Description

If it changes while your server runs, that means the scripting process crashed in-between.

34.11.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)

Created 10th December 2017, last changed 10th December 2017.

34.12 App.RequestUserAttention

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	6.1	Yes	No	No	No	No

MBS("App.RequestUserAttention" { ; Critical })

Parameters

Critical

Optional

Pass 1 if critical or 0 if informative.

0

Result Returns number or error.

Description

Returns the identifier for the request. You can use this value to cancel the request later using the `App.CancelUserAttentionRequest` method.

Activating the app cancels the user attention request. A spoken notification will occur if spoken notifications are enabled. Sending `App.RequestUserAttention` to an app that is already active has no effect.

If the inactive app presents a modal panel, this method will be invoked with `critical = 1` automatically. The modal panel is not brought to the front for an inactive app.

This method is a way to have the dock icon jumping.

Examples

Request attention:

```
Set Variable [ $r; Value:MBS( "App.RequestUserAttention"; 1 ) ]
```

See also

- [34.1 App.CancelUserAttentionRequest](#)

909

Example Databases

- [Window/Flash Window and Jump Dock](#)

34.12.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 2nd March 2016, last changed 2nd March 2016.

34.13 App.SetDockBadgeLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	2.6	Yes	No	No	No	Yes

MBS("App.SetDockBadgeLabel"; text)

(old name: AppDockTile.setBadgeLabel)

Parameters

text

The localized string to display. This string can contain a count value or other badging information. To clear the badge string, specify an empty string "".

"123"

Result Returns OK on success.

Description

The appearance of the badge area is system defined.
Available in Mac OS X v10.5 and later.

iOS added in 7.2, but the badge is a number.

Examples

Set and query dock badge:

```
Set Variable [ $r; Value:MBS( "App.SetDockBadgeLabel"; "123" ) ]
Show Custom Dialog [ MBS( "App.GetDockBadgeLabel" ) ]
```

See also

- [34.5 App.GetDockBadgeLabel](#)

913

34.13.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr3](#)
- [More customization of FileMaker solutions](#)

Created 18th August 2014, last changed 15th April 2017.

34.14 App.SetDockIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	3.2	Yes	No	Yes, macOS only	No	No

MBS("App.SetDockIcon"; Image)

Parameters

Image

The image to use. Pass a container value with JPEG, TIFF, PNG or other image formats.
\$image

Result Returns OK or error.

Description

Works with FileMaker Pro and runtimes.

See also

- [34.6 App.GetDockIcon](#)

914

Example Databases

- [Mac only/Dock Tile](#)

34.14.1 Blog Entries

- [More customization of FileMaker solutions](#)
- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 28th April 2016.

34.15 App.SetProcessName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	3.2	Yes	No	Yes, macOS only	No	No

MBS("App.SetProcessName"; name)

Parameters

name

The new name to display.

"MyApp"

Result Returns OK or error.

Description

So for a runtime or FileMaker itself, this changes the name in the menubar.

See also

- [34.7 App.GetProcessName](#) 915
- [34.8 App.GetProcessPath](#) 916

Example Databases

- [Mac only/Dock Tile](#)

34.15.1 Blog Entries

- [More customization of FileMaker solutions](#)
- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 28th April 2016.

34.16 App.UserID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App	8.0	Yes	No	Yes	Yes	Yes

MBS("App.UserID")

Result Returns number or error.

Description

Returns e.g. 1001 on FileMaker Cloud.

34.16.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)

Created 10th December 2017, last changed 10th December 2017.

Chapter 35

AppleScript

Run Apple Scripts.

The script source can be calculated. Precompile a script to run it several times with better performance. Between runs you can use properties in AppleScript to exchange values.

35.1 AppleScript.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	1.0	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.Close"; Script ID)

Parameters

Script ID

The ID returned by the "Applescript.Compile" function.

1

Result Returns "OK" or an error message.

Description

Not really necessary since scripts don't take much space.

Examples

Remove A compiled Script from memory

MBS("Applescript.Close" ; \$scriptID)

See also

- 35.2 AppleScript.Compile

927

- 35.4 AppleScript.GetPropertyNames 929
- 35.8 AppleScript.PropertyCount 934
- 35.9 AppleScript.Run 935

Created 18th August 2014, last changed 31st October 2016.

35.2 AppleScript.Compile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	1.0	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.Compile"; Script Text)

Parameters

Script Text

This is the text of the script to compile
"3 + 4"

Result Returns ScriptID or error.

Description

You can use the Script ID to run the script using the Applescript.Execute function. The compiled script is stored in memory. This is useful if you have large script that needs to be run over and over again.

Examples

Compile a script

MBS("Applescript.Compile" ; \$Applescript)

See also

- 35.1 AppleScript.Close 925
- 35.3 AppleScript.Execute 928
- 35.4 AppleScript.GetPropertyname 929
- 35.5 AppleScript.GetPropertyvalue 931
- 35.8 AppleScript.PropertyCount 934
- 35.9 AppleScript.Run 935
- 35.10 AppleScript.SetPropertyvalue 940

Created 18th August 2014, last changed 31st October 2016.

35.3 AppleScript.Execute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	1.0	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.Execute"; Script ID)

Parameters

Script ID

The Id of the script you want to execute. This ID returned by the Applescript.Compile function.

1

Description

AppleScripts can return a result to the object that called them. This is similar to the Script Results that were introduced in FileMaker 8.0.

Older plugin versions used to put quotes around result. 6.4 and newer don't include quotes.

Examples

Execute a stored Applescript

MBS("Applescript.Execute" ; \$ScriptID)

See also

- 35.2 AppleScript.Compile 927
- 35.9 AppleScript.Run 935

Created 18th August 2014, last changed 31st October 2016.

35.4 AppleScript.GetPropertyNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	4.2	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.GetPropertyNames"; Script ID; Index)

Parameters

Script ID

The ID of the script you want to execute. This ID returned by the Applescript.Compile function.

1

Index

The index of the property from 0 to Applescript.PropertyCount-1.

0

Result Returns name or error.

Description

Lasterror is set.

Examples

List properties by name:

```
Set Variable [ $scriptId; Value:MBS( "Applescript.Compile"; AppleScript Properties::AppleScriptCode ) ]
If [ MBS("isError") ]
Show Custom Dialog [ Message: MBS("AppleScript.LastErrorMessage"); Buttons: "OK", "Cancel" ]
Exit Script [ ]
End If
Set Variable [ $count; Value:MBS( "Applescript.PropertyCount"; $scriptId) ]
Set Variable [ $list; Value:"" ]
Set Variable [ $i; Value:0 ]
If [ GetAsNumber($count) >0 ]
Loop
Set Variable [ $n; Value:MBS( "Applescript.GetPropertyNames"; $scriptId; $i ) ]
Set Variable [ $list; Value:$list & $n & $]
Set Variable [ $i; Value:$i+1 ]
Exit Loop If [ $count = $i ]
End Loop
Show Custom Dialog [ Title: $count & " Properties"; Message: $list; Buttons: "OK", "Cancel" ]
End If
Set Variable [ $r; Value:MBS( "Applescript.Close"; $scriptId) ]
```

See also

- 35.1 AppleScript.Close 925
- 35.2 AppleScript.Compile 927

- 35.5 AppleScript.GetPropertyValue 931
- 35.6 AppleScript.LastError 932
- 35.7 AppleScript.LastErrorMessage 933
- 35.8 AppleScript.PropertyCount 934
- 35.10 AppleScript.SetPropertyValue 940
- 124.6 IsError 6266

Created 18th August 2014, last changed 31st October 2016.

35.5 AppleScript.GetPropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	4.2	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.GetPropertyValue"; Script ID; Name)

Parameters

Script ID

The Id of the script you want to execute. This ID returned by the Applescript.Compile function.

1

Name

The name of the property.

"MyValue"

Result Returns value or error.

Description

Lasterror is set.

Examples

Query a property:

Show Custom Dialog [MBS("Applescript.GetPropertyValue"; \$scriptID; "MySubject")]

See also

- 35.2 AppleScript.Compile 927
- 35.4 AppleScript.GetPropertyName 929
- 35.10 AppleScript.SetPropertyValue 940

Created 18th August 2014, last changed 31st October 2016.

35.6 AppleScript.LastError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	1.0	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.LastError")

Description

Any AppleScript Errors that are not trapped using "try" blocks, will abort the AppleScript. Also returns AppleScript compile errors. This function is useful for error trapping your scripts.

Examples

Get Last Error

MBS("Applescript.LastError")

See also

- 35.4 AppleScript.GetPropertyNames 929
- 35.7 AppleScript.LastErrorMessage 933

Created 18th August 2014, last changed 31st October 2016.

35.7 AppleScript.LastErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	1.0	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.LastErrorMessage")

Description

Any AppleScript Errors that are not trapped using "try" blocks, will abort the AppleScript. AppleScript Compile errors are also reported here. This function is useful for error trapping your scripts.

Examples

Get the Last Applescript Error as text

```
MBS( "Applescript.LastErrorMessage")
```

See also

- [35.4 AppleScript.GetPropertyNames](#) 929
- [35.6 AppleScript.LastError](#) 932

Example Databases

- [OS Scripting/AppleScript Print with Preview](#)
- [OS Scripting/AppleScript Properties](#)
- [OS Scripting/Email Text from Apple Mail](#)

Created 18th August 2014, last changed 31st October 2016.

35.8 AppleScript.PropertyCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	4.2	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.PropertyCount"; Script ID)

Parameters

Script ID

The Id of the script you want to execute. This ID returned by the Applescript.Compile function.

1

Result Returns number or error.

Description

Lasterror is set.

Examples

Compiles code and query property count:

```
Set Variable [ $scriptID; Value:MBS( "Applescript.Compile"; AppleScript Properties::AppleScriptCode ) ]
Set Variable [ $count; Value:MBS( "Applescript.PropertyCount"; $scriptID) ]
Set Variable [ $r; Value:MBS( "Applescript.Close"; $scriptID) ]
```

See also

- 35.1 AppleScript.Close 925
- 35.2 AppleScript.Compile 927
- 35.4 AppleScript.GetPropertyNames 929

Created 18th August 2014, last changed 31st October 2016.

35.9 AppleScript.Run

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	1.0	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.Run"; Script Text)

Parameters

Script Text

This is the text of the script to run

"3 + 4"

Description

Any Result returned by the AppleScript is returned as the result of the calculation. This is similar to the Script Results that were introduced in FileMaker 8.0. This is much easier then using Applescript.Compile, Applescript.Execute and Applescript.Close

Older plugin versions used to put quotes around result. 6.4 and newer don't include quotes.

Examples

Trigger a FileMaker Script Using OS Scripting

```
Let(
[
// — the name of the script to run —————

ScriptName = "Triggered Script";
FileName = Get(FileName);

//—————

//— don't need to edit anything below this line ——

Applescript = "do script " & Quote(ScriptName);

VBScriptText =
"FUNCTION DoFMSCript(FileName, ScriptName)" & "§" &
"Set fmApp = CreateObject(\"FMPro.Application\")" & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
"For Each fmDoc In fmDocs" & "§" &
"If InStr(LCase(fmDoc.fullname), LCase(FileName)) >0 Then" & "§" &
" fmDoc.dofmscript (ScriptName)" & "§" &
"End If" & "§" &
"Next" & "§" &
```

```

"END FUNCTION";

ScriptID = MBS("WindowsScript.Create");
lang= MBS("WindowsScript.SetLanguage"; ScriptID; "VBScript");
addcode = MBS("WindowsScript.AddCode"; ScriptID; VBScriptText)

];
Case(
Get ( SystemPlatform ) = 1;

// Mac OSX Case
MBS(
"Applescript.Run";
Applescript
);

// Windows Case
MBS("WindowsScript.ExecuteFunction";ScriptID; "DoFMScript";FileName; ScriptName) &
MBS("WindowsScript.Close"; ScriptID)

)
)

Create A Folder

Let(
[
/*-----PARAMETERS-----*/
folderName = "My New Folder";

scriptText =
"set folder_name to " & Quote(folderName) & "§" &
"tell application " & Quote("Finder") & "§" &
" set f to make new folder at desktop" & "§" &
" set the name of f to folder_name" & "§" &
"end tell"

];
/*-----FUNCTION-----*/
MBS(
"Applescript.Run";
scriptText
)
)

/*-----/

```

Creates a folder called "My New Folder on the users desktop
/

Get Names From Address Book

```
Let(
[
/*-----PARAMETERS-----*/
scriptText =
"tell application \"Address Book\" & \"§\" &
" set the_list to \"\" & \"§\" &
" set person_list to the name of every person\" & \"§\" &
" repeat with this_name in person_list\" & \"§\" &
" set the_list to the_list & this_name & return\" & \"§\" &
" end repeat\" & \"§\" &
"end tell"
```

```
];
/*-----FUNCTION-----*/
MBS(
"Applescript.Run";
scriptText
)
)
```

```
/*-----/
Creates a folder called "My New Folder on the users desktop
/
```

Trigger A FileMaker Script (Custom Function)

```
MBS_TriggerScript ( "Triggered Script" ; Get ( FileName ) )
```

Custom Function Definition

```
/*#####
#####
#####
```

```
MBS_TriggerScript
created 10/26/06, by Todd Geist, todd@geistinteractive.com
```

Parameters: theScriptName, theFileName

Dependencies: MBS FileMaker Plug-in.

Notes: Uses VBScript and Applescript to run a script

Speak using AppleScript:

```
Set Variable [ $text ; Value: "Hello \"Test\"" ]  
Set Variable [ $voice ; Value: "Daniel" ]  
Set Variable [ $rate ; Value: 100 ]  
Set Variable [ $pitch ; Value: 60 ]
```

```
Set Variable [ $text ; Value: Substitute($text; "\"" ; "\\\"") ]  
Set Variable [ $r ; Value: MBS( "AppleScript.Run"; "say \" & $text & \"" using \" & $voice & \""  
speaking rate \" & $rate & \" pitch \" & $pitch ) ]
```

Show dialog:

```
Set Variable [ $r ; Value: MBS("AppleScript.Run"; "display dialog \"Did I start yet?\"") ]
```

See also

- 35.1 AppleScript.Close 925
- 35.2 AppleScript.Compile 927
- 35.3 AppleScript.Execute 928
- 183.1 WindowsScript.AddCode 8675
- 183.2 WindowsScript.Close 8680
- 183.3 WindowsScript.Create 8684
- 183.12 WindowsScript.ExecuteFunction 8696
- 183.19 WindowsScript.SetLanguage 8706

35.9.1 Blog Entries

- [4000 functions in 10 years](#)

Created 18th August 2014, last changed 9th February 2019.

35.10 AppleScript.SetPropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
35 AppleScript	4.2	Yes	No	Yes, macOS only	No	No

MBS("AppleScript.SetPropertyValue"; Script ID; Name; Value)

Parameters

Script ID

The Id of the script you want to execute. This ID returned by the Applescript.Compile function.

1

Name

The name of the property.

"MyValue"

Value

The value of the property.

"Hello"

Result Returns OK or error.

Description

Lasterror is set.

Examples

Sets a property:

```
Set Variable [ $r; Value:MBS( "Applescript.SetPropertyValue"; $scriptID; "MySubject"; AppleScript Properties::Subject) ]
```

See also

- 35.2 AppleScript.Compile 927
- 35.4 AppleScript.GetPropertyname 929
- 35.5 AppleScript.GetPropertyvalue 931

Created 18th August 2014, last changed 31st October 2016.

35.11 Applescript.DeterminePermissionToAutomateTarget

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Applescript	9.0	Yes	No	No	No	No

```
MBS( "Applescript.DeterminePermissionToAutomateTarget"; BundleID; AEEEventClass; AEEEventID { ;
askUserIfNeeded } )
```

Parameters

BundleID

The bundle ID of the application to control.

The target address descriptor must refer to a running application. If the target application is on another machine, then Remote AppleEvents must be enabled on that machine for the user.

"com.apple.Safari"

AEEEventClass

The event class of the Apple event to determine permission for. **** for wildcard to use all.

AEEEventID

The event ID of the Apple event to determine permission for. **** for wildcard to use all.

askUserIfNeeded

Optional

Whether dialog can show to ask user if needed. Pass 1 to allow dialog or 0 to disallow.

If 1, and if this application does not yet have permission to send events to the target application, then prompt the user to obtain permission. If 0, do not prompt the user. Default is 0.

1

Result Returns OK, ApplicationNotRunning, NotPermitted, WouldRequireUserConsent, or error.

Description

Determines whether the current application is able to send an AppleEvent with the given eventClass and eventID to the application described as target via bundle ID.

Mac OS 10.14 and later impose additional requirements on applications when they send AppleEvents to other applications in order to insure that users are aware of and consent to allowing such control or information exchange. Generally this involves the user being prompted in a secure fashion the first time an application attempts to send an AppleEvent to another application. If the user consents then this application can send events to the target. If the user does not consent then any future attempts to send AppleEvents will result in a failure with errAEEEventNotPermitted being returned.

Certain AppleEvents are allowed to be sent without prompting the user. Pass typeWildcard (****) for the eventClass and eventID to determine if every event is allowed to be sent from this application to the target.

Applications can determine, without sending an `AppleEvent` to a target application, whether they are allowed to send `AppleEvents` to the target with this function. If `askUserIfNeeded` is true, and this application does not yet have permission to send `AppleEvents` to the target, then the user will be asked if permission can be granted; if `askUserIfNeeded` is 0 and permission has not been granted, then `WouldRequireUserConsent` will be returned.

The target bundle ID must refer to an already running application.

If the current application is permitted to send the given `AppleEvent` to the target, then `OK` will be returned. If the current application is not permitted to send the event, `NotPermitted` will be returned. If the target application is not running, then `ApplicationNotRunning` will be returned. If `askUserIfNeeded` is false, and this application is not yet permitted to send `AppleEvents` to the target, then `WouldRequireUserConsent` will be returned.

Requires MacOS 10.14 or newer.

May not work in FileMaker 18 due to missing entitlements for the FileMaker app. You can try FileMaker 17 instead, where it works. Or run FileMaker 18 from Terminal, where it also works.

Examples

Ask for permissions for Safari:

```
MBS( "Applescript.DeterminePermissionToAutomateTarget"; "com.apple.Safari"; "*****"; "*****"; 1 )
```

Ask for permissions for Finder:

```
MBS( "Applescript.DeterminePermissionToAutomateTarget"; "com.apple.Finder"; "*****"; "*****"; 1 )
```

Ask for permissions for Mail:

```
MBS( "Applescript.DeterminePermissionToAutomateTarget"; "com.apple.Mail"; "*****"; "*****"; 1 )
```

35.11.1 Blog Entries

- [New MBS FileMaker Plugin 9.0](#)
- [Neues MBS FileMaker Plugin 9.0](#)
- [MBS FileMaker Plugin, version 8.6pr4](#)
- [Ask for permissions to control applications with AppleScript in FileMaker](#)

Created 13th December 2018, last changed 28th November 2019.

Chapter 36

Archive

Functions to work with archives including zip, tar and bz2.

36.1 Archive.Compress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
36 Archive	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Archive.Compress"; Format; Filter; Destination; BasePath; List { ; Options; Password })

Parameters

Format

The format to use. Formats: 7zip, ar, arbsd, argnu, arsvr4, bsdtar, cd9660, cpio, gnutar, iso, iso9660,mtree,mtree-classic, newc, odc, oldtar, pax, paxr, posix, raw, rpax, shar, shardedump, ustar, v7tar, v7, warc, xar, zip.

"zip"

Filter

The filter to use. For zip format can be store or deflate. Filters: b64encode, bzip2, compress, gzip, gzipped, lrzip, lz4, lzip, lzma, lzop, uuencode, xz, zstd.

Not all filters can be combined with all formats.

"deflate"

Destination

The native file path to the destination archive. Or file name for container.

"C:\test.zip"

BasePath

The bath path to the folder where to look for files.

"C:\test"

List

the list of files and folders to add to archive.

"test.txt"

Options

Optional

The options to pass to writer. This is a comma-separated list of options. Option names can be prefixed with module name.

Sample options: compression=9 zip:encryption=zipcrypt zip:encryption=aes128 zip:encryption=aes256 zip64
gzip:compression-level=9 hdrcharset=UTF-8

"zip:encryption=zipcrypt"

Password

Optional

The passphrase to use for password protection.

"secret"

Result Returns OK or error.

Description

Supports various compression algorithms and encryption.

The archive usually should not contain the absolute paths of the files, so we need a base path and relative to that base path the list of files and folders to zip.

Examples

Compression examples:

```
# list of files in the folder to archive
```

```
Set Variable [ $list ; Value: "minitar.c$simplebar.rbp" ]
```

```
# write zip file with password
```

```
Set Variable [ $r ; Value: MBS( "Archive.Compress"; "zip"; "deflate"; "/Users/cs/Desktop/minitar.zip";  
"/Users/cs/Desktop/"; $list; "zip:encryption=zipcrypt"; "secret password" ) ]
```

```
# Write bzip2 compress tar file:
```

```
Set Variable [ $r ; Value: MBS( "Archive.Compress"; "ustar"; "bzip2"; "/Users/cs/Desktop/minitar.tar";  
"/Users/cs/Desktop/" ) ]
```

```
# and write zip with aes encryption to container file:
```

```
Set Variable [ $r ; Value: MBS( "Archive.Compress"; "zip"; "deflate"; "minitar.zip"; "/Users/cs/Desktop/";  
$list; "zip:encryption=aes128"; "secret password" ) ]
```

```
Set Field [ Archive Read::Container ; $r ]
```

Compress with UTF-8 file names:

```
MBS( "Archive.Compress"; "zip"; "deflate"; "C:\Users\Christian\Desktop\test.zip"; "C:\Users\Christian\Desk-  
top"; "Bücher"; "hdrcharset=UTF-8" )
```

36.1. *ARCHIVE.COMPRESS* 945

See also

- 53.23 UnZipFile.OpenContainer 1498
- 53.24 UnZipFile.OpenFile 1499
- 53.35 ZipFile.CompressFiles 1511
- 53.36 ZipFile.CreateFile 1513
- 53.37 ZipFile.Open 1515

36.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 17th December 2018, last changed 9th December 2019.

36.2 Archive.Content

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
36 Archive	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Archive.Content"; Archive { ; Passphrase })

Parameters

Archive

Either container with archive or native file path.

"C:\test\test.zip"

Passphrase

Optional

Password to use.

Result Returns JSON or error.

Description

JSON has an entry count for the file count, an entry format for the format type and an entry for files array.

Examples

Check archive content:

```
Set Variable [ $list ; Value: MBS("Archive.Content"; If(IsEmpty($Path); $Container; $Path)) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to read container" ; $list ]
Else
Set Field [ $Content ; MBS("JSON.Colorize"; $list) ]
End If
```

Get content of encrypted archive:

```
MBS( "Archive.Content";
"/Users/cs/Desktop/invoices-2019-02-12_1924.zip"; /* path to archive (or container) */
"98234kjh245234" /* password */) 
```

See also

- 36.4 Archive.FileList 949
- 124.6 IsError 6266
- 100.15 JSON.Colorize 5261

36.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 8th December 2018, last changed 12nd February 2019.

36.3 Archive.Extract

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
36 Archive	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Archive.Extract"; Archive; FileList; DestinationFolder { ; Passphrase })

Parameters

Archive

Either container with archive or native file path.

"C:\test\test.zip"

FileList

Optional list of files to extract. Pass empty text when you need all files.

""

DestinationFolder

The native path to the destination folder.

"/Users/cs/Desktop"

Passphrase

Optional

Password to use.

Result Returns OK or error.

Description

Restores file permissions, times, Mac metadata and file flags.

Examples

Expand an archive:

```
MBS( "Archive.Extract";
"/Users/cs/Desktop/invoices-2019-02-12_1924.zip"; /* path to archive (or container) */
"" /* all files */;
"/Users/cs/Desktop/"; /* dest */
"98234kjh245234" /* password */)

```

See also

- 36.4 Archive.FileList 949
- 36.8 Archive.Verify 953

Created 11st December 2018, last changed 12nd February 2019.

36.4 Archive.FileList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
36 Archive	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Archive.FileList"; Archive { ; Passphrase })

Parameters

Archive

Either container with archive or native file path.

"C:\test\test.zip"

Passphrase

Optional

Password to use.

Result Returns list or error.

Description

Please use Archive.Content if you need more details.

This provides file list, which you can filter and then pass to Archive.Extract.

Examples

Get file list:

```
Set Variable [ $list ; Value: MBS("Archive.FileList"; If(IsEmpty($Path); $Container; $Path)) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to read container" ; $list ]
Else
Set Field [ $Content ; MBS("JSON.Colorize"; $list) ]
End If
```

See also

- [36.2 Archive.Content](#) 946
- [36.3 Archive.Extract](#) 948
- [124.6 IsError](#) 6266
- [100.15 JSON.Colorize](#) 5261

36.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)

Created 8th December 2018, last changed 17th December 2018.

36.5 Archive.LibVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
36 Archive	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Archive.LibVersion")

Result Returns text or error.

Description

Examples

Shows version of libarchive:

```
Show Custom Dialog [ "Archive" ; MBS( "Archive.LibVersion" ) ]
```

See also

- 36.6 Archive.LibVersionDetails 951
- 43.10 Barcode.LibVersion 1156

Created 8th December 2018, last changed 11st December 2018.

36.6 Archive.LibVersionDetails

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
36 Archive	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Archive.LibVersionDetails")

Result Returns text or error.

Description

Examples

Shows detailed version of libarchive:

Show Custom Dialog ["Archive" ; MBS("Archive.LibVersionDetails")]

See also

- 36.5 Archive.LibVersion

950

Created 8th December 2018, last changed 17th December 2018.

36.7 Archive.SupportedFormats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
36 Archive	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Archive.SupportedFormats")

Result Returns list or error.

Description

Currently, the list is ar, cpio, lha, mtree, tar, xar, warc, 7zip, cab, rar, iso9660, zip.

Read about supported formats on libArchive website:

<https://github.com/libarchive/libarchive/wiki/LibarchiveFormats>

Examples

Query formats:

```
Show Custom Dialog [ "Archive" ; MBS( "Archive.SupportedFormats" ) ]
```

Created 11st December 2018, last changed 17th December 2018.

36.8 Archive.Verify

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
36 Archive	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Archive.Verify"; Archive { ; Passphrase })

Parameters

Archive

Either container with archive or native file path.

"C:\test\test.zip"

Passphrase

Optional

Password to use.

Result Returns OK or error.

Description

Same as Archive.Extract, but doesn't actually write anything.

Examples

Check an archive:

MBS("Archive.Verify"; "/Users/cs/Desktop/Archiv.zip")

Example result: "[MBS] ZIP decompression failed (-5)"

See also

- 36.3 Archive.Extract

948

36.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 20th March 2019, last changed 20th March 2019.

Chapter 37

Audit

Log all changes to your database.

For FileMaker Pro. We define fields in each table which trigger our Audit function, so with any change in a record, the plugin can keep track of changes.

37.1 Audit.Backup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	8.5	Yes	Yes	Yes	Yes	Yes

MBS("Audit.Backup"; timestamp; TableName { ; FieldsToIgnore })

Parameters

timestamp

Pass here the timestamp field you added for auditing to the table.

AuditTimeStamp

TableName

The name of the table.

"Firma"

FieldsToIgnore

Optional

A list of field names to ignore. Global fields and those set with Audit.SetIgnoredFieldNames are always ignored.

"myField"

Result Returns OK or error.

Description

Same as Audit.Changed, but uses Backup for the action field.

You can call this function before loading a record to make sure all data from the record are logged. Than you are sure to have old values for an undo.

See also

- 37.2 Audit.Backup2 957
- 37.3 Audit.Changed 958
- 37.21 Audit.SetIgnoredFieldNames 981

37.1.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)

Created 27th October 2018, last changed 27th October 2018.

37.2 Audit.Backup2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	8.5	Yes	Yes	Yes	Yes	Yes

MBS("Audit.Backup2"; timestamp; TableName; FieldsToCheck)

Parameters

timestamp

Pass here the timestamp field you added for auditing to the table.
AuditTimeStamp

TableName

The name of the table.
"Firma"

FieldsToCheck

A list of field names to check.
"myField"

Result Returns OK or error.

Description

Same as Audit.Changed2, but uses Backup for the action field.

You can call this function before loading a record to make sure all data from the record are logged. Than you are sure to have old values for an undo.

See also

- [37.1 Audit.Backup](#) 955
- [37.3 Audit.Changed](#) 958
- [37.4 Audit.Changed2](#) 962

37.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)

Created 27th October 2018, last changed 27th October 2018.

37.3 Audit.Changed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	2.8	Yes	Yes	Yes	Yes	Yes

MBS("Audit.Changed"; timestamp; TableName { ; FieldsToIgnore })

Parameters

timestamp

Pass here the timestamp field you added for auditing to the table.

AuditTimeStamp

TableName

The name of the table.

"Firma"

FieldsToIgnore

Optional

A list of field names to ignore. Global fields and those set with Audit.SetIgnoredFieldNames are always ignored.

"myField"

Result Returns 1.

Description

In order to setup this for a table, please add two fields to the table. First a field called AuditTimeStamp which is of type timestamp. In the options enable in the Auto-Enter tab the option to set a new timestamp on modification. Next create a new field AuditState and make it a calculated value with the calculation MBS("Audit.Changed"; AuditTimeStamp; TableName). The Field "AuditTimeStamp" can be renamed to something like "sAuditTS" but has to be correctly referred to and should be included in the "Audit.SetIgnoredFieldNames" call if changed. By passing here an auto entered modification timestamp you make sure the plugin is informed about all changes to this table. Please uncheck the checkbox for "Do not replace existing value of field (if any)".

For logging you need a table named AuditLog with a few fields. Required are fields named FieldName, FieldHash, TableName, RecordID. Optionally you can add more fields: FieldValue, FieldOldValue, FieldType, UserName, IP, CurrentTimestamp, TimeStamp, CurrentTime, CurrentDate, Action, CurrentHostTimeStamp, PrivilegeSetName, AccountName, LayoutNumber, ApplicationVersion, FileName, HostApplicationVersion, HostName, HostIPAddress, LayoutName, PageNumber, LayoutTableName, TableID, FieldID, CurrentTimeUTCMilliseconds, ScriptName and WindowName.

The plugin will fill those fields with values evaluated from Get() function. FieldOldValue is only filled if we find an older log entry for the field based on the hash. With 4.2 plugin you can also use field Platform to know if plugin was executed on server or client.

You can get access of a record logged if you use a script trigger to set the AuditTimeStamp field with a new timestamp whenever a record is loaded.

This functions work even with separated files where data and layouts are in separated database files. The AuditLog table can be in a separated file as long as the plugin can find a table occurrence named "AuditLog", referencing to the original table which may be located in another FileMaker file and a layout based on this table occurrence, named "AuditLog", to write into the log.

The two fields AuditTimeStamp and AuditState can have different names. In that case we recommend to call Audit.SetIgnoredFieldNames in order to have the plugin ignore those fields. Or pass the field names to this function.

To get all your existing records introduced to this Audit Function, move over all records in a loop in a script and call Audit.Changed to log the current one. This helps to fill the FieldOldValue field. And finally if you like, you can even built yourself an undo mechanism by restoring changes.

On FileMaker 10 the Audit functions only work if tables and base tables have same name. Also we can't record FieldID or TableID on FileMaker 10. For FileMaker 11 and 12 everything works nice.

In the fields to ignore parameters you can pass extra values "FieldName | Value" to assign special values automatically to your fields. As this parameter can be build with a calculation, you can query variables or other tables for information you want to log. With plugin version 7.2 and newer this works for number fields in addition to text fields.

Table names are case sensitive. If you change case of a table name, the fields may be logged again. With plugin version 4.4 you can use * on the end of the name to match all names starting with same text.

Indexes in the AuditLog table help to speedup the queries internally made by plugin. Especially indexes for the fields FieldHash, FieldName, RecordID and TableName.

Version 8.5 can use either FieldName or FieldID in AuditLog table to identify the field. For the value we prefer to use FieldHash, but if you have no such field, we use FieldValue. AuditLog field list is now queried via SQL instead of using a layout. So with version 8.5 the AuditLog layout is optional.

If there is a failure in the generated SQL, you may see it with FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastSQL functions.

Examples

Log record on changes:

```
MBS( "Audit.Changed"; MyTable::AuditTimeStamp; "MyTable" )
```

Log record on changes except fields fullname and zipCity:

```
MBS( "Audit.Changed"; MyTable::AuditTimeStamp; "MyTable"; "fullname"; "zipCity" )
```

Log change and pass value for custom log field "InsideScript" with value of variable:

```
MBS("Audit.Changed"; AuditTimeStamp; "Audit"; "InsideScript | " & $$InsideScript)
```

Log changes and pass custom GUID field while also checking a global variable to disable auditing for batch imports:

```
If ($$AuditDisabled; 0;
MBS("Audit.Changed"; AuditTimeStamp; "Audit"; "GUID | " & GUID)
)
```

Run Audit.Changed with list of fields in a global field in the table:

```
Evaluate("MBS(\\"Audit.Changed\\"; GetAsTimeStamp(\\"" & Events::AuditTimeStamp & "\\"); \\"Events\\";
\\"" & Substitute(Events::AuditFields; "$"; "\\"; \\"") & "\\")")
```

Run Audit with GetFieldName with v8.3 or newer:

```
MBS("Audit.Changed2"; // call with positive list
AuditTimeStamp; // the timestamp field to trigger this
"Audit"; // the name of table
GetFieldName ( SomeText); // the fields to check
GetFieldName ( SomeNumber);
GetFieldName ( SomeTime);
GetFieldName ( SomeTimeStamp);
GetFieldName ( SomeContainer);
"InsideScript | " & $$InsideScript) // and we pass an extra field with global variable
```

See also

- 37.1 Audit.Backup 955
- 37.2 Audit.Backup2 957
- 37.4 Audit.Changed2 962
- 37.17 Audit.SetEnabled 977
- 37.21 Audit.SetIgnoredFieldNames 981
- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.11 FM.ExecuteSQL.LastSQL 4099

Example Databases

- [Audit/Audit](#)

37.3.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr4](#)
- [MBS FileMaker Plugin, version 8.5pr5](#)
- [Audit with MBS FileMaker Plugin](#)
- [Audit with MBS Plugin and FileMaker Server, works with FileMaker go!](#)
- [Audit Tip for Importing](#)
- [Introducing Audit Plugin Functions for Filemaker](#)

37.3.2 FileMaker Magazin

- [Ausgabe 4/2017, Seite 40](#)

Created 18th August 2014, last changed 18th February 2019.

37.4 Audit.Changed2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Audit.Changed2"; timestamp; TableName; FieldsToCheck)

Parameters

timestamp

Pass here the timestamp field you added for auditing to the table.

AuditTimeStamp

TableName

The name of the table.

"Firma"

FieldsToCheck

A list of field names to check.

"myField"

Result Returns 1.

Description

With plugin version 4.4 you can use * on the end of the name to match all names starting with same text.

The Audit.Changed2 function with passing field list is quicker than the Audit.Changed function as we skip querying the field list from FileMaker.

Examples

Log record on changes:

```
MBS( "Audit.Changed2"; MyTable::AuditTimeStamp; "MyTable"; "firstName"; "lastName"; "age" )
```

Run Audit.Changed2 with list of fields in a global field in the table:

```
Evaluate("MBS(\ Audit.Changed2\ "; GetAsTimeStamp(\ "" & Events::AuditTimeStamp & "\"); \ Events\ ";
\ "" & Substitute(Events::AuditFields; "$"; "\"; \") & "\")")
```

Run Audit with GetFieldName with v8.3 or newer:

```
MBS("Audit.Changed2"; // call with positive list
AuditTimeStamp; // the timestamp field to trigger this
"Audit"; // the name of table
GetFieldName ( SomeText); // the fields to check
GetFieldName ( SomeNumber);
GetFieldName ( SomeTime);
GetFieldName ( SomeTimeStamp);
GetFieldName ( SomeContainer);
```

37.4. *AUDIT.CHANGED2* 963

”InsideScript | ” & \$\$InsideScript) // and we pass an extra field with global variable

See also

- 37.2 Audit.Backup2 957
- 37.3 Audit.Changed 958
- 37.17 Audit.SetEnabled 977

Example Databases

- [Audit/Event Management with Audit/Event Management with Audit](#)

37.4.1 Blog Entries

- [Audit with MBS FileMaker Plugin](#)

37.4.2 FileMaker Magazin

- Ausgabe 4/2017, Seite 41
- Ausgabe 4/2017, Seite 40

Created 18th August 2014, last changed 27th October 2018.

37.5 Audit.ClearCaches

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Audit.ClearCaches")

Result Returns OK on success.

Description

The plugin caches information about which fields belong to which tables and what type a field has for up to a minute.

37.5.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr6](#)
- [MBS Filemaker Plugin, version 3.1pr6](#)

Created 18th August 2014, last changed 18th August 2014.

37.6 Audit.Delete

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	2.8	Yes	Yes	Yes	Yes	Yes

MBS("Audit.Delete"; TimeStamp; TableName { ; FieldsToIgnore })

Parameters

TimeStamp

Pass here the timestamp field you added for auditing to the table.

AuditTimeStamp

TableName

The name of the table.

"Firma"

FieldsToIgnore

Optional

A list of field names to ignore. Global fields and those set with Audit.SetIgnoredFieldNames are always ignored.

"myField"

Result Returns 1.

Description

In order to log record deletion, please go to "Manage Accounts & Privileges" dialog in FileMaker. Check the Privileges Sets tab and create a new custom privilege set. You can duplicate one of the existing ones like the "Data Entry Only" set. Edit the new privilege set and select for Records the custom privileges option in the popupmenu. For the custom record privileges, you choose for delete the limited option in the popupmenu. Now in the specify calculation dialog, you enter the function: MBS("Audit.Delete"). Done for this table. Repeat for other tables and for other privilege sets you need.

The plugin will analyse the record on deletion now and write down values to AuditLog table with Create/Changed entries if the record was not yet analyzed or not completely analyzed so far. Finally for a delete operation, it logs a delete entry.

In the fields to ignore parameters you can pass also "FieldName | Value" to assign special values automatically. As this parameter can be build with a calculation, you can query variables or other tables for information you want to log.

You can call Audit.SetIgnoredFieldNames in order to have the plugin ignore some fields. Or pass the field names to this function.

Be aware that even if you call this function from the calculation in privileges the deletion may be cancelled later and you have deleted logged, but not executed. You can work around by implementing your own dialog for user to cancel.

Examples

Log record on delete:

```
MBS( "Audit.Delete"; MyTable::AuditTimeStamp; "MyTable" )
```

See also

- [37.7 Audit.Delete2](#) 967
- [37.17 Audit.SetEnabled](#) 977
- [37.21 Audit.SetIgnoredFieldNames](#) 981

37.6.1 Blog Entries

- [Audit with MBS FileMaker Plugin](#)
- [Introducing Audit Plugin Functions for Filemaker](#)

37.6.2 FileMaker Magazin

- [Ausgabe 4/2017, Seite 41](#)

Created 18th August 2014, last changed 2nd January 2017.

37.7 Audit.Delete2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Audit.Delete2"; timestamp; TableName; FieldsToCheck)

Parameters

timestamp

Pass here the timestamp field you added for auditing to the table.
AuditTimeStamp

TableName

The name of the table.
"Firma"

FieldsToCheck

A list of field names to check.
"myField"

Result Returns 1.

Description

Examples

Log record on delete:

```
MBS( "Audit.Delete2"; MyTable::AuditTimeStamp; "MyTable"; "firstName"; "lastName"; "age" )
```

See also

- [37.6 Audit.Delete](#) 965
- [37.17 Audit.SetEnabled](#) 977

37.7.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr6](#)

Created 18th August 2014, last changed 18th August 2014.

37.8 Audit.FieldIDForName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	8.2	Yes	Yes	Yes	Yes	Yes

MBS("Audit.FieldIDForName"; TableName; FieldName)

Parameters

TableName

The table name or ID. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"MyTable"

FieldName

The field name to lookup.

"123"

Result Returns text or error.

Description

Returns empty result if not found.

Examples

Queries field named for third field in a table by ID:

```
MBS( "Audit.FieldNameForID"; "1065089"; 3 )
```

Example result: "First"

Queries field name for 4th field:

```
MBS( "Audit.FieldNameForID"; "Contacts"; 4 )
```

Example result: "Last"

See also

- [37.9 Audit.FieldNameForID](#) 969
- [37.24 Audit.TableIDForName](#) 985

37.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr4](#)

Created 20th April 2018, last changed 17th January 2020.

37.9 Audit.FieldNameForID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	8.0	Yes	Yes	Yes	Yes	Yes

MBS("Audit.FieldNameForID"; TableName; FieldID)

Parameters

TableName

The table name or ID. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"MyTable"

FieldID

The field ID to lookup.

1

Result Returns field name or error.

Description

Returns empty result if not found.

Version 8.2 allows you to pass table reference by ID.

Examples

Query first field name in Kontakte:

MBS("Audit.FieldNameForID"; "Kontakte"; 1)

Example result: "KONTAKT_ID ABGLEICHSFELD"

See also

- [37.8 Audit.FieldIDForName](#) 968
- [37.25 Audit.TableNameForID](#) 986

37.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr4](#)

Created 20th January 2018, last changed 17th January 2020.

37.10 Audit.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	7.1	Yes	Yes	Yes	Yes	Yes

MBS("Audit.GetEnabled")

Result Returns 1 or 0.

Description

Returns 1 if enabled (default) or 0 if disabled.

See also

- 37.17 Audit.SetEnabled

977

37.10.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

Created 24th January 2017, last changed 24th January 2017.

37.11 Audit.GetIgnoreCalculations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	4.4	Yes	Yes	Yes	Yes	Yes

MBS("Audit.GetIgnoreCalculations")

Result Returns 0 or 1.

Description

See also

- [37.18 Audit.SetIgnoreCalculations](#)

978

37.11.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr3](#)

Created 25th September 2014, last changed 8th November 2015.

37.12 Audit.GetIgnoreSummaryFields

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Audit.GetIgnoreSummaryFields")

Result Returns 0 or 1.

Description

See also

- 37.19 Audit.SetIgnoreSummaryFields

979

37.12.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 8th November 2015, last changed 8th November 2015.

37.13 Audit.GetIgnoreUnderscoreFieldNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Audit.GetIgnoreUnderscoreFieldNames")

Result Returns 0 or 1.

Description

Returns 1 if the audit function ignores field names starting with underscore character.

See also

- 37.20 Audit.SetIgnoreUnderscoreFieldNames

980

Created 3th September 2015, last changed 3th September 2015.

37.14 Audit.GetIgnoredFieldNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	7.3	Yes	Yes	Yes	Yes	Yes

MBS("Audit.GetIgnoredFieldNames")

Result Returns list.

Description

See also

- 37.21 Audit.SetIgnoredFieldNames

981

Created 15th May 2017, last changed 15th May 2017.

37.15 Audit.GetLogAccess

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Audit.GetLogAccess")

Result Returns 0 or 1.

Description

See also [Audit.SetLogAccess](#).

See also

- [37.22 Audit.SetLogAccess](#)

983

37.15.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr3](#)

Created 18th August 2014, last changed 18th August 2014.

37.16 Audit.GetUUIDField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	7.3	Yes	Yes	Yes	Yes	Yes

MBS("Audit.GetUUIDField")

Result Returns OK or error.

Description

See also

- 37.23 Audit.SetUUIDField

984

Created 15th May 2017, last changed 15th May 2017.

37.17 Audit.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	7.1	Yes	Yes	Yes	Yes	Yes

MBS("Audit.SetEnabled"; State)

Parameters

State

The new state. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Default is enabled.

You can turn off for batch imports.

The Audit.Changed, Audit.Changed2, Audit.Delete and Audit.Delete2 functions return 1 if disabled, so any boolean operation using the result still works.

Examples

Enable audit globally:

```
MBS( "Audit.SetEnabled"; 1 )
```

Disable audit globally:

```
MBS( "Audit.SetEnabled"; 0 )
```

See also

- [37.3 Audit.Changed](#) 958
- [37.4 Audit.Changed2](#) 962
- [37.6 Audit.Delete](#) 965
- [37.7 Audit.Delete2](#) 967
- [37.10 Audit.GetEnabled](#) 970

37.17.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

Created 24th January 2017, last changed 25th January 2017.

37.18 Audit.SetIgnoreCalculations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	4.4	Yes	Yes	Yes	Yes	Yes

MBS("Audit.SetIgnoreCalculations"; Value)

Parameters

Value

The new setting. 1 to ignore and 0 to audit.

1

Result Returns OK or error.

Description

Unstored calculations are always ignored. This setting allows you to disable auditing of stored calculations. Due to field type caching, setting this property does not take effect immediately.

See also

- [37.11 Audit.GetIgnoreCalculations](#)

971

37.18.1 Blog Entries

- [Audit with MBS FileMaker Plugin](#)
- [MBS Filemaker Plugin, version 4.4pr3](#)

37.18.2 FileMaker Magazin

- [Ausgabe 4/2017, Seite 41](#)

Created 25th September 2014, last changed 16th March 2017.

37.19 Audit.SetIgnoreSummaryFields

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Audit.SetIgnoreSummaryFields"; Value)

Parameters

Value

The new setting. 1 to ignore and 0 to audit.

1

Result Returns OK or error.

Description

Unstored calculations are always ignored. This setting allows you to disable auditing of summary fields. Due to field type caching, setting this property does not take effect immediately.

Examples

Disable summary field auditing:

```
MBS("Audit.SetIgnoreSummaryFields"; 1)
```

See also

- [37.12 Audit.GetIgnoreSummaryFields](#)

972

37.19.1 Blog Entries

- [Audit with MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 8th November 2015, last changed 8th November 2015.

37.20 Audit.SetIgnoreUnderscoreFieldNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Audit.SetIgnoreUnderscoreFieldNames"; Value)

Parameters

Value

The new setting. Can be 0 or 1.

1

Result Returns OK or error.

Description

If you have internal fields in a table like creation date and you store it in a field starting with `_` in the name, we can automatically ignore those fields.

Examples

Enable ignoring of underscore field names:

MBS("Audit.SetIgnoreUnderscoreFieldNames"; 1)

See also

- [37.13 Audit.GetIgnoreUnderscoreFieldNames](#) 973

37.20.1 Blog Entries

- [Audit with MBS FileMaker Plugin](#)

Created 3th September 2015, last changed 3th September 2015.

37.21 Audit.SetIgnoredFieldNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	2.8	Yes	Yes	Yes	Yes	Yes

MBS("Audit.SetIgnoredFieldNames"; fields)

Parameters

fields

The field name to ignore. Pass one parameter per field. Version 7.3 or newer accepts a list of names here. "MyField"

Result Returns OK on success.

Description

Default is "AuditState" and "AuditTimeStamp".

Best you call it once at startup of your solution.

With plugin version 4.4 you can use * on the end of the name to match all names starting with same text. This list is not limited. You can make a list as long as stuff fit in memory.

With plugin version 7.3 this can be a list of field names in each fields parameter.

Examples

Set ignored field names:

```
MBS( "Audit.SetIgnoredFieldNames"; "sAuditState"; "sAuditTimeStamp" )
```

Set ignored field names with a list of names:

```
MBS( "Audit.SetIgnoredFieldNames"; "sAuditState$sAuditTimeStamp" )
```

See also

- [37.1 Audit.Backup](#) 955
- [37.3 Audit.Changed](#) 958
- [37.6 Audit.Delete](#) 965
- [37.14 Audit.GetIgnoredFieldNames](#) 974

37.21.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)
- [Audit with MBS FileMaker Plugin](#)
- [Introducing Audit Plugin Functions for Filemaker](#)

- [MBS Filemaker Plugin, version 2.8pr9](#)

Created 18th August 2014, last changed 2nd June 2017.

37.22 Audit.SetLogAccess

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Audit.SetLogAccess"; value)

Parameters**value**

The new setting. Can be 0 or 1.

0

Result Returns OK or error.

Description

If a record is modified which the plugin does not log as fields are disabled for logging, the plugin will write an entry with access action. If you set this to zero, the access log entry is not written.

See also [Audit.GetLogAccess](#).

Examples

Disable access logging:

MBS("Audit.SetLogAccess"; 0)

See also

- [37.15 Audit.GetLogAccess](#)

975

37.22.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr3](#)

Created 18th August 2014, last changed 13th February 2015.

37.23 Audit.SetUUIDField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	7.3	Yes	Yes	Yes	Yes	Yes

MBS("Audit.SetUUIDField"; FieldName)

Parameters

FieldName

The field name.

"UUID"

Result Returns OK or error.

Description

If set, we use UUIDs for Record IDs. The name given here should be used in all tables for the unique ID field.

If no field with that name is in a table, we fall back to the normal RecordID.

Please add a field named UUID to the AuditLog table (and layout), so the plugin can fill and query this field.

Examples

Defines UUID to be the field where we store unique record IDs:

```
MBS( "Audit.SetUUIDField"; "UUID" )
```

See also

- 37.16 Audit.GetUUIDField

976

37.23.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 15th May 2017, last changed 15th May 2017.

37.24 Audit.TableIDForName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	8.2	Yes	Yes	Yes	Yes	Yes

MBS("Audit.TableIDForName"; TableName)

Parameters

TableName

The table name to lookup.
"Contacts"

Result Returns text or error.

Description

Returns empty result if not found.

Examples

Queries ID for name:

MBS("Audit.TableIDForName"; "Contacts")

Example result: 1065089

See also

- 37.8 Audit.FieldIDForName

968

37.24.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr4](#)

Created 20th April 2018, last changed 20th April 2018.

37.25 Audit.TableNameForID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
37 Audit	8.0	Yes	Yes	Yes	Yes	Yes

MBS("Audit.TableNameForID"; TableID)

Parameters

TableID

The table ID to lookup.

1

Result Returns name or error.

Description

Returns empty result if not found.

Examples

Query table name:

MBS("Audit.TableNameForID"; 1065089)

Example result: "Kontakte"

See also

- 37.9 Audit.FieldNameForID

969

Created 20th January 2018, last changed 20th January 2018.

Chapter 38

AVAsset

Modern functions on OS X to query metadata from movie files.

Extract video frames, query lyrics and other metadata from video files.

38.1 AVAsset.AvailableMetadataFormats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.AvailableMetadataFormats"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns list or error.

Description

Metadata formats may include ID3, iTunes metadata, and so on.

Examples

Queries available metadata formats:

MBS("AVAsset.AvailableMetadataFormats"; \$asset)

See also

- 38.14 AVAsset.MetadataKeys

1002

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Example Databases

- [Mac only/Movies/AVAsset Test](#)

Created 19th June 2015, last changed 19th June 2015.

38.2 AVAsset.Duration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.Duration"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns value or error.

Description

Examples

Query duration of a video:

MBS("AVAsset.Duration"; \$asset)

See also

- [38.17 AVAsset.OpenContainer](#) 1006
- [38.18 AVAsset.OpenFile](#) 1008
- [38.19 AVAsset.OpenURL](#) 1010

Example Databases

- [Mac and iOS/AVExport](#)
- [Mac only/Movies/AVAsset Test](#)

Created 19th June 2015, last changed 7th October 2015.

38.3 AVAsset.Framerate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.Framerate"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns number or error.

Description

Actual frame rate may be variable.

Examples

Queries framerate for file:

```
Set Variable [ $Asset; Value:MBS( "AVAsset.OpenFile"; "/Users/cs/Desktop/test.mp4" ) ]
```

```
Set Variable [ $Framerate; Value:MBS( "AVAsset.Framerate"; $Asset ) ]
```

```
Set Variable [ $r; Value:MBS( "AVAsset.Release"; $Asset ) ]
```

```
Show Custom Dialog [ "Framerate"; $Framerate ]
```

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.22 AVAsset.Release 1014

Created 1st August 2015, last changed 24th February 2016.

38.4 AVAsset.HasProtectedContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.HasProtectedContent"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns 1, 0 or error.

Description

Examples

Checks protection status:

MBS("AVAsset.HasProtectedContent"; \$status)

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 29th July 2017.

38.5 AVAsset.Image

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.Image"; Asset; Time { ; ImageType; Filename; Width; Height })

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Time

The position in the video in seconds.

5.2

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Width

Optional

The maximum width to use.

500

Height

Optional

The maximum height to use.

500

Result Returns container value with image or error.

Description

The time may not exactly be possible, so a nearby frame may be picked.

You can call AVAsset.RequestImageTimePrecision before to request exact timings for images. Query AVAsset.ImageActualTime function to see which time the image was created from.

Examples

Queries image at 5 seconds:

```
MBS( "AVAsset.Image"; $asset; 5; "jpeg"; "preview.jpg")
```

See also

38.5. AVASSET.IMAGE	993
• 38.6 AVAsset.ImageActualTime	994
• 38.17 AVAsset.OpenContainer	1006
• 38.18 AVAsset.OpenFile	1008
• 38.19 AVAsset.OpenURL	1010
• 38.23 AVAsset.RequestImageTimePrecision	1016
• 133.4 QTMovie.FrameImageAtTime	6581

Example Databases

- [iOS/Movie Container iOS and Mac](#)
- [Mac only/Movies/AVAsset Test](#)

Created 19th June 2015, last changed 21st February 2018.

38.6 AVAsset.ImageActualTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	6.5	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.ImageActualTime"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns number or error.

Description

After a call to AVAsset.Image, this returns the time of the picture you got.
Returns number of seconds.

Examples

Query image and time:

```
Set Variable [ $a ; Value: MBS( "AVAsset.OpenFile"; "/Users/cs/Desktop/Trampolin.mov" ) ]
```

```
Set Field [ test::Image ; MBS( "AVAsset.Image"; $a; 5; "JPEG"; "frame.jpg" ) ]
```

```
Show Custom Dialog [ "Image requested at 5 seconds and got image from:" ; MBS( "AVAsset.ImageActualTime"; $a ) ]
```

```
Set Variable [ $r ; Value: MBS( "AVAsset.Release"; $a ) ]
```

See also

- 38.5 AVAsset.Image 992
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.22 AVAsset.Release 1014

38.6.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr4](#)

Created 20th October 2016, last changed 25th November 2017.

38.7 AVAsset.IsComposable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.IsComposable"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns 1, 0 or error.

Description

Examples

Checks composable status:

MBS("AVAsset.IsComposable"; \$asset)

See also

- 38.8 AVAsset.IsExportable 996
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 19th June 2015.

38.8 AVAsset.IsExportable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.IsExportable"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns 1, 0 or error.

Description

Examples

Checks export status:

MBS("AVAsset.IsExportable"; \$asset)

See also

- 38.7 AVAsset.IsComposable 995
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 19th June 2015.

38.9 AVAsset.IsPlayable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.IsPlayable"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns 1, 0 or error.

Description

Examples

Checks play status:

MBS("AVAsset.IsPlayable"; \$asset)

See also

- 38.10 AVAsset.IsReadable 998
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 9th June 2018.

38.10 AVAsset.IsReadable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.IsReadable"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns 1, 0 or error.

Description

Examples

Checks play status:

MBS("AVAsset.IsReadable"; \$asset)

See also

- 38.9 AVAsset.IsPlayable 997
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 19th June 2015.

38.11 AVAsset.Loaded

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.Loaded"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns status or error.

Description

Returns status like Loading, Loaded, Cancelled, Failed or Unknown.

If status starts with "Failed: ", it is followed by a reason.

Examples

Load and check status:

```
Set Variable [ $Asset; Value:MBS( "AVAsset.OpenFile"; "/Users/cs/Desktop/test.mp4" ) ]
```

```
Set Variable [ $Loaded1; Value:MBS( "AVAsset.Loaded"; $Asset ) ]
```

```
Pause/Resume Script [ Duration (seconds): ,1 ]
```

```
Set Variable [ $Loaded2; Value:MBS( "AVAsset.Loaded"; $Asset ) ]
```

```
Set Variable [ $r; Value:MBS( "AVAsset.Release"; $Asset ) ]
```

```
Show Custom Dialog [ "Loaded"; $Loaded1 & $& $Loaded2 ]
```

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.22 AVAsset.Release 1014
- 38.28 AVAsset.WaitForLoaded 1025

Created 19th June 2015, last changed 24th February 2016.

38.12 AVAsset.Lyrics

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.Lyrics"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns text or error.

Description

Can be empty.

Examples

Queries lyrics:

MBS("AVAsset.Lyrics"; \$asset)

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 19th June 2015.

38.13 AVAsset.Metadata

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.Metadata"; Asset; Key)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Key

The metadata key to query.

Result Returns OK or error.

Description

Examples

Queries title:

MBS("AVAsset.Metadata"; "40001"; "uiso/titl")

See also

- [38.14 AVAsset.MetadataKeys](#) 1002
- [38.17 AVAsset.OpenContainer](#) 1006
- [38.18 AVAsset.OpenFile](#) 1008
- [38.19 AVAsset.OpenURL](#) 1010

Example Databases

- [Mac only/Movies/AVAsset Test](#)

Created 19th June 2015, last changed 19th June 2015.

38.14 AVAsset.MetadataKeys

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.MetadataKeys"; Asset { ; Format })

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Format

Optional

The metadata format to use.

"com.apple.quicktime.udta"

Result Returns list or error.

Description

You can pass empty format to query all keys.

Or you use AVAsset.AvailableMetadataFormats to query the list of formats and limit query to only the given format.

Examples

Queries metadata keys:

MBS("AVAsset.MetadataKeys"; "40001")

See also

- 38.1 AVAsset.AvailableMetadataFormats 987
- 38.13 AVAsset.Metadata 1001
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Example Databases

- [Mac only/Movies/AVAsset Test](#)

38.14.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 19th June 2015, last changed 5th July 2015.

38.15 AVAsset.NaturalHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.NaturalHeight"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns value or error.

Description

Examples

Query size of video:

MBS("AVAsset.NaturalWidth"; \$asset) & "x" & MBS("AVAsset.NaturalHeight"; \$asset)

See also

- 38.16 AVAsset.NaturalWidth 1005
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 19th June 2015.

38.16 AVAsset.NaturalWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.NaturalWidth"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns value or error.

Description

Examples

Query size of video:

MBS("AVAsset.NaturalWidth"; \$asset) & "x" & MBS("AVAsset.NaturalHeight"; \$asset)

See also

- 38.15 AVAsset.NaturalHeight 1004
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 19th June 2015.

38.17 AVAsset.OpenContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.OpenContainer"; Container)

Parameters

Container

The container with the movie file.

MyTable::MovieContainer

Result Returns asset reference number or error.

Description

Should work for external and internal containers.

Please allow a second to load video in background asynchronously.

Available in OS X v10.7 and later.

Please call AVAsset.Release later to free object from memory.

Examples

Open movie from container:

```
MBS( "AVAsset.OpenContainer"; MyTable::MyContainer )
```

Close it later

```
MBS( "AVAsset.Release"; $asset )
```

See also

- 38.11 AVAsset.Loaded 999
- 38.13 AVAsset.Metadata 1001
- 38.15 AVAsset.NaturalHeight 1004
- 38.16 AVAsset.NaturalWidth 1005
- 38.21 AVAsset.PreferredVolume 1013
- 38.22 AVAsset.Release 1014
- 38.23 AVAsset.RequestImageTimePrecision 1016
- 38.24 AVAsset.TimeCodes 1018
- 38.25 AVAsset.TrackCount 1019

38.17. AVASSET.OPENCONTAINER

1007

- 38.26 AVAsset.TrackInfo

1020

Example Databases

- [Mac and iOS/AVAsset Tracks](#)
- [Mac only/Movies/AVAsset Test](#)

38.17.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 19th June 2015, last changed 30th May 2017.

38.18 AVAsset.OpenFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.OpenFile"; Path)

Parameters

Path

The native file path to the movie file.

"/Test.mov"

Result Returns asset reference number or error.

Description

Please allow a second to load video in background asynchronously.
Available in OS X v10.7 and later.

Please call AVAsset.Release later to free object from memory.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Opens a movie file:

```
MBS( "AVAsset.OpenFile"; "/Users/cs/Desktop/test.mp4" )
```

Close it later

```
MBS( "AVAsset.Release"; $asset )
```

See also

- 38.13 AVAsset.Metadata 1001
- 38.15 AVAsset.NaturalHeight 1004
- 38.16 AVAsset.NaturalWidth 1005
- 38.20 AVAsset.PreferredRate 1012
- 38.24 AVAsset.TimeCodes 1018
- 38.25 AVAsset.TrackCount 1019
- 38.26 AVAsset.TrackInfo 1020

38.18. <i>AVASSET.OPENFILE</i>	1009
• 38.28 AVAsset.WaitForLoaded	1025
• 39.7 AVExport.ExportSession	1035
• 39.8 AVExport.ExportSessionMerge	1038

Example Databases

- [Mac and iOS/AVExport](#)
- [Mac only/Movies/AVAsset Export Session](#)

Created 19th June 2015, last changed 30th May 2017.

38.19 AVAsset.OpenURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.OpenURL"; URL)

Parameters

URL

The URL of the movie to open.

"http://example.test/mysound.mp3"

Result Returns asset reference number or error.

Description

Please allow a second to load video in background asynchronously.
Available in OS X v10.7 and later.

Please call AVAsset.Release later to free object from memory.

Examples

Opens movie file with URL:

MBS("AVAsset.OpenURL"; "file:/Users/cs/Desktop/test.mp4")

Close it later

MBS("AVAsset.Release"; \$asset)

See also

- 38.9 AVAsset.IsPlayable 997
- 38.11 AVAsset.Loaded 999
- 38.12 AVAsset.Lyrics 1000
- 38.14 AVAsset.MetadataKeys 1002
- 38.20 AVAsset.PreferredRate 1012
- 38.25 AVAsset.TrackCount 1019
- 38.26 AVAsset.TrackInfo 1020
- 38.28 AVAsset.WaitForLoaded 1025
- 39.7 AVExport.ExportSession 1035
- 39.8 AVExport.ExportSessionMerge 1038

Created 19th June 2015, last changed 30th May 2017.

38.20 AVAsset.PreferredRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.PreferredRate"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns value or error.

Description

This value is often, but not always, 1.0.

Examples

Query preferred rate:

MBS("AVAsset.PreferredRate"; \$asset)

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.21 AVAsset.PreferredVolume 1013

Created 19th June 2015, last changed 19th June 2015.

38.21 AVAsset.PreferredVolume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.PreferredVolume"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns value or error.

Description

Range from 0 to 1. This value is often, but not always, 1.0.

Examples

Query preferred volume:

MBS("AVAsset.PreferredVolume"; \$asset)

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.20 AVAsset.PreferredRate 1012

Created 19th June 2015, last changed 19th June 2015.

38.22 AVAsset.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.Release"; Asset)

Parameters

Asset

The reference number of the asset. Please use `AVAsset.OpenContainer`, `AVAsset.OpenFile` or `AVAsset.OpenURL` function to get asset reference.

\$asset

Result Returns OK or error.

Description

Please call this when you are done with an asset.

Examples

Release a video:

MBS("AVAsset.Release"; \$asset)

See also

- 38.3 AVAsset.Framerate 990
- 38.6 AVAsset.ImageActualTime 994
- 38.11 AVAsset.Loaded 999
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.24 AVAsset.TimeCodes 1018
- 38.28 AVAsset.WaitForLoaded 1025
- 39.7 AVExport.ExportSession 1035
- 40.2 AVPlayer.GetAsset 1059

Example Databases

- [iOS/Movie Container iOS and Mac](#)
- [Mac and iOS/AVAsset Tracks](#)

- [Mac and iOS/AVExport](#)
- [Mac only/Movies/AVAsset Export Session](#)
- [Mac only/Movies/AVAsset Test](#)

Created 19th June 2015, last changed 9th January 2018.

38.23 AVAsset.RequestImageTimePrecision

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	6.5	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.RequestImageTimePrecision"; Asset; toleranceBefore; toleranceAfter)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

toleranceBefore

Time tolerance in seconds before requested time.

0

toleranceAfter

Time tolerance in seconds after requested time.

0

Result Returns OK or error.

Description

The actual time of the generated images will be within the range [requestedTime-toleranceBefore, requestedTime+toleranceAfter] and may differ from the requested time for efficiency.

Pass 0 for both toleranceBefore and toleranceAfter to request frame-accurate image generation; this may incur additional decoding delay. Default is infinity.

Examples

Request exact timing:

```
MBS("AVAsset.RequestImageTimePrecision"; $asset; 0; 0)
```

Request \pm 0.5 seconds

```
MBS("AVAsset.RequestImageTimePrecision"; $asset; 0.5; 0.5)
```

See also

- 38.5 AVAsset.Image 992
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

38.23.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr4](#)

Created 20th October 2016, last changed 20th October 2016.

38.24 AVAsset.TimeCodes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.TimeCodes"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns text or error.

Description

Returns list of timecodes in format HH:MM:SS:FF.

Examples

Read time codes from a mov file:

```
Set Variable [ $asset; Value:MBS("AVAsset.OpenFile"; "/Users/cs/Downloads/test.MOV") ]
```

```
Set Variable [ $timecode; Value:MBS("AVAsset.TimeCodes"; $asset) ]
```

```
Set Variable [ $r; Value:MBS("AVAsset.Release"; $asset) ]
```

```
Set Field [ test::timecodes; $timecode ]
```

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.22 AVAsset.Release 1014

38.24.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr1](#)

Created 7th October 2015, last changed 7th October 2015.

38.25 AVAsset.TrackCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.TrackCount"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns track count or error.

Description

Examples

Query track count:

MBS("AVAsset.TrackCount"; \$asset)

See also

- [38.17 AVAsset.OpenContainer](#) 1006
- [38.18 AVAsset.OpenFile](#) 1008
- [38.19 AVAsset.OpenURL](#) 1010
- [38.26 AVAsset.TrackInfo](#) 1020

Example Databases

- [Mac and iOS/AVAsset Tracks](#)

Created 19th June 2015, last changed 19th June 2015.

38.26 AVAsset.TrackInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.TrackInfo"; Asset; TrackIndex; Selector)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

TrackIndex

The track index from 0 to AVAsset.TrackCount-1.

0

Selector

Which value to get.

"MediaType"

Result Returns OK or error.

Description

Allows you to query values for track.

Examples

Query media subtype:

MBS("AVAsset.TrackInfo"; \$Asset; 0; "MediaSubType")

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.25 AVAsset.TrackCount 1019

Example Databases

- [Mac and iOS/AVAsset Tracks](#)

38.26.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr1](#)

Created 29th July 2017, last changed 30th July 2017.

Selector	Description
trackID	Indicates the persistent unique identifier for this track of the asset
mediaType	Indicates the media type for this track as 4 letter code. e.g. "vide" for video or "soun" for sound.
playable	Indicates whether the receiver is playable in the current environment.
enabled	Indicates whether the track is enabled according to state stored in its container or construct.
selfContained	Indicates whether the track references sample data only within its storage container.
totalSampleDataLength	Indicates the total number of bytes of sample data required by the track.
estimatedDataRate	Indicates the estimated data rate of the media data referenced by the track, in units of bits per second.
naturalTimeScale	Indicates a timescale in which time values for the track can be operated upon without extraneous numerical conversion.
languageCode	Indicates the language associated with the track, as an ISO 639-2/T language code; may be "" if no language is indicated.
extendedLanguageTag	Indicates the language tag associated with the track, as an IETF BCP 47 (RFC 4646) language identifier; may be "" if no language tag is indicated.
naturalWidth	Indicates the natural dimensions of the media data referenced by the track.
naturalHeight	Indicates the natural dimensions of the media data referenced by the track.
preferredVolume	Indicates the volume specified in the track's storage container as the preferred volume of the audible media data.
nominalFrameRate	For tracks that carry a full frame per media sample, indicates the frame rate of the track in units of frames per second.
minFrameDuration	Indicates the minimum duration of the track's frames; the value will be kCM-TimeInvalid if the minimum frame duration is not known or cannot be calculated.
timeRangeStart	Indicates the time range of the track within the overall timeline of the asset
timeRangeDuration	Indicates the time range of the track within the overall timeline of the asset
preferredTransform	Indicates the transform specified in the track's storage container as the preferred transformation of the visual media data for display purposes; its value is often but not always identity
MediaSubType	The media subtype (codec).

Code	Name	Description
2vuy	422YpCbCr8	Component Y'CbCr 8-bit 4:2:2 ordered Cb Y'0 Cr Y'1
rle	Animation	Apple Animation format
cvid	Cinepak	Cinepak format
jpeg	JPEG	Joint Photographic Experts Group (JPEG) format
dmb1	JPEG_OpenDML	JPEG format with Open-DML extensions
SVQ1	SorensonVideo	Sorenson video format
SVQ3	SorensonVideo3	Sorenson 3 video format
h263	H263	ITU-T H.263 format
avc1	H264	ITU-T H.264 format (AKA ISO/IEC 14496-10 - MPEG-4 Part 10, Advanced Video Coding format)
hvc1	HEVC	ITU-T HEVC format
mp4v	MPEG4Video	ISO/IEC Moving Picture Experts Group (MPEG) MPEG-4 Part 2 video format
mp2v	MPEG2Video	MPEG-2 video format
mp1v	MPEG1Video	MPEG-1 video format
dvc	DVCNTSC	DV NTSC format
dvcv	DVCPAL	DV PAL format
dvpp	DVCProPAL	Panasonic DVCPro PAL format
dv5n	DVCPro50NTSC	Panasonic DVCPro-50 NTSC format
dv5p	DVCPro50PAL	Panasonic DVCPro-50 PAL format
dvhp	DVCProHD720p60	Panasonic DVCPro-HD 720p60 format
dvhq	DVCProHD720p50	Panasonic DVCPro-HD 720p50 format
dvh6	DVCProHD1080i60	Panasonic DVCPro-HD 1080i60 format
dvh5	DVCProHD1080i50	Panasonic DVCPro-HD 1080i50 format
dvh3	DVCProHD1080p30	Panasonic DVCPro-HD 1080p30 format
dvh2	DVCProHD1080p25	Panasonic DVCPro-HD 1080p25 format
ap4h	AppleProRes4444	Apple ProRes 4444 format
apch	AppleProRes422HQ	Apple ProRes 422 HQ format
apcn	AppleProRes422	Apple ProRes 422 format
apcs	AppleProRes422LT	Apple ProRes 422 LT format
apco	AppleProRes422Proxy	Apple ProRes 422 Proxy format

38.27 AVAsset.URL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.URL"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns URL as text or error.

Description

Empty if no URL is available.

Examples

Queries URL used to open movie:

MBS("AVAsset.URL"; \$asset)

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

Created 19th June 2015, last changed 30th May 2017.

38.28 AVAsset.WaitForLoaded

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
38 AVAsset	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("AVAsset.WaitForLoaded"; Asset)

Parameters

Asset

The reference number of the asset. Please use AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL function to get asset reference.

\$asset

Result Returns status or error.

Description

Returns status like Loading, Loaded, Cancelled, Failed or Unknown.

If status starts with "Failed: ", it is followed by a reason.

While AVAsset.Loaded returns directly and may return "Loading", this function can be called after AVAsset.OpenFile, AVAsset.OpenURL or AVAsset.OpenContainer to have the script wait for assets to load.

Examples

Load asset:

```
Set Variable [ $path ; Value: "/Users/cs/Movies/video.mov" ]
Set Variable [ $asset ; Value: MBS("AVAsset.OpenFile"; $path) ]
# now wait a few milliseconds to load
Set Variable [ $r1 ; Value: MBS( "AVAsset.WaitForLoaded"; $asset ) ]
# check status
Set Variable [ $r2 ; Value: MBS( "AVAsset.Loaded"; $asset ) ]
Show Custom Dialog [ "Loaded" ; $r1 & $r2 ]
Set Variable [ $r3 ; Value: MBS( "AVAsset.Release"; $asset ) ]
```

See also

- 38.11 AVAsset.Loaded 999
- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 38.22 AVAsset.Release 1014

Example Databases

- [Mac and iOS/AVExport](#)

38.28.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr7](#)

Created 9th January 2018, last changed 9th January 2018.

Chapter 39

AVExport

Modern functions on OS X to transcode video in different format.

Can be used to compress videos as MPEG 4 video file.

39.1 AVExport.AllExportPresets

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.AllExportPresets")

Result Returns list or error.

Description

Apple may add new export presets, so you can use this function to determinate which presets are available for the given OS X installation.

Examples

Query all presets:

MBS("AVExport.AllExportPresets")

See also

- 39.7 AVExport.ExportSession 1035
- 39.8 AVExport.ExportSessionMerge 1038

Example Databases

- [Mac only/Movies/AVAsset Export Session](#)

39.2 AVExport.CancelExport

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.CancelExport"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns OK or error.

Description

Cancel can be invoked when the export is running.

Examples

Cancel export:

```
Set Variable [ $r; Value:MBS( "AVExport.CancelExport"; $$AVExport ) ]
```

Example Databases

- [Mac and iOS/AVExport](#)
- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.3 AVExport.Duration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.Duration"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns number or error.

Description

Returns duration in seconds.

Examples

Query duration:

```
Set Field [ AVAsset Export Session::Duration; MBS( "AVExport.Duration"; $$AVExport ) ]
```

See also

- [39.7 AVExport.ExportSession](#) 1035
- [132.2 QTExport.Duration](#) 6551

Example Databases

- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.4 AVExport.Error

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.Error"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns text or error.

Description

See also

- 39.23 AVExport.Status

1055

Example Databases

- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 29th February 2016.

39.5 AVExport.EstimatedOutputFileLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.EstimatedOutputFileLength"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns number or error.

Description

Returns zero when export preset is Passthrough or AppleProRes422LPCM. This property will also return zero if a numeric value (ie. not invalid, indefinite, or infinite) for the timeRange property has not been set.

Example Databases

- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 29th February 2016.

39.6 AVExport.ExportAsynchronously

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.ExportAsynchronously"; AVExportSession)

Parameters**AVExportSession**

The session reference number.

\$AVExport

Result Returns OK or error.

Description

Starts the asynchronous execution of an export session.

If internal preparation for export fails, the export fails directly.

You must set output path or URL before starting export.

Please check AVExport.Status and AVExport.Progress regularly for updates.

Examples

Start export:

```
Set Variable [ $r; Value:MBS( "AVExport.ExportAsynchronously"; $$AVExport ) ]
```

```
If [ MBS("ISError") ]
```

```
Show Custom Dialog [ "Failed to start export session"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
```

```
Exit Script [ ]
```

```
End If
```

```
Install OnTimer Script [ "Update Status"; Interval: .5 ]
```

See also

- 39.16 AVExport.Progress 1047
- 39.18 AVExport.SetOutputFileType 1049
- 39.23 AVExport.Status 1055
- 124.6 IsError 6266
- 164.57 Text.RemovePrefix 7854

Example Databases

- [Mac and iOS/AVExport](#)

- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.7 AVExport.ExportSession

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.ExportSession"; Asset; Preset)

Parameters

Asset

The reference number of the asset. Please use `AVAsset.OpenContainer`, `AVAsset.OpenFile` or `AVAsset.OpenURL` function to get asset reference.

\$asset

Preset

The preset name to use. Can be one of the presets returned by `AVExport.AllExportPresets` or one of the predefined ones:

"640x480"

Result Returns reference number or error.

Description

Returns a reference number for the new `AVAsset` export session for the specified source asset and preset.

Presets:

These export options can be used to produce movie files with video size appropriate to the device. The export will not scale the video up from a smaller size. The video will be compressed using H.264 and the audio will be compressed using AAC.

LowQuality	Low Quality	OS X 10.11 and newer
MediumQuality	Medium Quality	OS X 10.11 and newer
HighestQuality	High Quality	OS X 10.11 and newer

These export options can be used to produce movie files with the specified video size.

The export will not scale the video up from a smaller size. The video will be compressed using H.264 and the audio will be compressed using AAC. Some devices cannot support some sizes.

640x480	VGA Resolution, 640 x 480 Pixel	OS X 10.7 and newer
960x540	Half HD Resolution, 960 x 540 Pixel	OS X 10.7 and newer
1280x720	720p Resolution, 1280 x 720 Pixel	OS X 10.7 and newer
1920x1080	Full HD Resolution, 1920 x 1080 Pixel,	OS X 10.7 and newer
3840x2160	4K Resolution, 3840 x 2160	OS X 10.10 and newer

These export options are used to produce files that can be played on the specified Apple devices. These presets are available for Desktop export only. The files should have .m4v extensions (or .m4a for exports

with audio only sources).

AppleM4VCellular	Cellular	OS X 10.7 and newer
AppleM4ViPod	iPod	OS X 10.7 and newer
AppleM4V480pSD	480p SD	OS X 10.7 and newer
AppleM4VAppleTV	AppleTV	OS X 10.7 and newer
AppleM4VWiFi	Wifi	OS X 10.7 and newer
AppleM4V720pHD	720p HD	OS X 10.7 and newer
AppleM4V1080pHD	1080p HD	OS X 10.8 and newer

Passthrough export option will cause the media of all tracks to be passed through to the output exactly as stored in the source asset, except for tracks for which passthrough is not possible, usually because of constraints of the container format as indicated by the specified `outputFileType`. This option is not included in the arrays returned by `AVExport.AllExportPresets`.

Passthrough	Pass through data if possible.	OS X 10.7 and newer
AppleM4A	Audio-only .m4a file with appropriate iTunes gapless playback data	OS X 10.7 and newer
AppleProRes422LPCM	QuickTime movie with Apple ProRes 422 video and LPCM audio.	OS X 10.7 and newer

Examples

Create export session:

```

If [ not IsEmpty($$AVExport) ]
Show Custom Dialog [ "We have a session already!?" ]
Exit Script [ ]
End If
Set Variable [ $Asset; Value:MBS( "AVAsset.OpenFile"; AVAsset Export Session::Input File Path ) ]
Set Variable [ $$AVExport; Value:MBS( "AVExport.ExportSession"; $Asset; AVAsset Export Session::PresetName ) ]
If [ MBS("IsError") ]
Set Variable [ $r; Value:MBS( "AVAsset.Release"; $Asset ) ]
Show Custom Dialog [ "Failed to create export sessio..."; MBS("Text.RemovePrefix"; $$AVExport; " [ MBS
] ") ]
Exit Script [ ]
End If
Set Variable [ $r; Value:MBS( "AVAsset.Release"; $Asset ) ]
Set Field [ AVAsset Export Session::Duration; MBS( "AVExport.Duration"; $$AVExport ) ]
Set Field [ AVAsset Export Session::SupportedFileTypes; MBS( "AVExport.SupportedFileTypes"; $$AVExport ) ]

```

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010

39.7. <i>AVEXPORT.EXPORTSESSION</i>	1037
• 38.22 AVAsset.Release	1014
• 39.1 AVExport.AllExportPresets	1027
• 39.3 AVExport.Duration	1030
• 39.8 AVExport.ExportSessionMerge	1038
• 39.24 AVExport.SupportedFileTypes	1056
• 124.6 IsError	6266
• 164.57 Text.RemovePrefix	7854

Example Databases

- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.8 AVExport.ExportSessionMerge

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.2	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.ExportSessionMerge"; AssetList; Preset)

Parameters

AssetList

A list of assets. Can contain reference numbers for assets obtained from AVAsset.OpenContainer, AVAsset.OpenFile or AVAsset.OpenURL. Or file paths to assets. (or a combination of both types)

"54001§54002§54003"

Preset

The preset name to use. Can be one of the presets returned by AVExport.AllExportPresets or one of the predefined ones:

"640x480"

Result Returns reference number or error.

Description

Returns a reference number for the new AVAsset export session for the specified source assets and preset. The given assets are joined and exported together as one movie. They should match in size/type.

Same as AVExport.ExportSession, but takes a list of AVAssets.

Examples

Export three videos:

```
MBS( "AVExport.ExportSessionMerge"; "/Users/cs/Movies/test1.m4v§/Users/cs/Movies/test2.m4v§/Users/cs/Movies/test3.m4v"; AVAsset Export Session::PresetName )
```

See also

- 38.17 AVAsset.OpenContainer 1006
- 38.18 AVAsset.OpenFile 1008
- 38.19 AVAsset.OpenURL 1010
- 39.1 AVExport.AllExportPresets 1027
- 39.7 AVExport.ExportSession 1035

Example Databases

- [Mac and iOS/AVExport](#)

39.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr7](#)
- [MBS FileMaker Plugin, version 6.2pr3](#)

Created 31st March 2016, last changed 14th June 2016.

39.9 AVExport.GetOutputFileType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.GetOutputFileType"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns text or error.

Description

Indicates the type of file to be written by the session.

See also

- 39.18 AVExport.SetOutputFileType

1049

Created 29th February 2016, last changed 29th February 2016.

39.10 AVExport.GetOutputPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.GetOutputPath"; AVExportSession)

Parameters**AVExportSession**

The session reference number.

\$AVExport

Result Returns text or error.

Description**See also**

- 39.11 AVExport.GetOutputURL 1042
- 39.19 AVExport.SetOutputPath 1050
- 39.20 AVExport.SetOutputURL 1052

Created 29th February 2016, last changed 29th February 2016.

39.11 AVExport.GetOutputURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.GetOutputURL"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns text or error.

Description

See also

- 39.10 AVExport.GetOutputPath 1041
- 39.19 AVExport.SetOutputPath 1050
- 39.20 AVExport.SetOutputURL 1052

Created 29th February 2016, last changed 29th February 2016.

39.12 AVExport.GetShouldOptimizeForNetworkUse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.GetShouldOptimizeForNetworkUse"; AVExportSession)

Parameters**AVExportSession**

The session reference number.

\$AVExport

Result Returns 1, 0 or error.

Description

Indicates that the output file should be optimized for network use, e.g. that a QuickTime movie file should support "fast start".

Returns 1 when optimization is enabled.

See also

- 39.21 AVExport.SetShouldOptimizeForNetworkUse

1053

Created 29th February 2016, last changed 29th February 2016.

39.13 AVExport.GetTimeRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.GetTimeRange"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns value or error.

Description

Result is returned a start time, §and duration, e.g. "60§180" for start after one minute and duration of 3 minutes.

See also

- 39.22 AVExport.SetTimeRange

1054

Created 29th February 2016, last changed 29th February 2016.

39.14 AVExport.OutputFileExtension

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.OutputFileExtension"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns text or error.

Description

Please set file type first via AVExport.SetOutputFileType.

Examples

Export to desktop folder:

```
Set Field [ AVAsset Export Session::Output File Path; MBS("Path.AddPathComponent"; MBS("Folders.UserDesktop"); "test." & AVAsset Export Session::OutputFileExtension) ]
```

```
Set Variable [ $r; Value:MBS( "AVExport.SetOutputPath"; $$AVExport; AVAsset Export Session::Output File Path) ]
```

Set output file type and query default file extension:

```
Set Variable [ $r; Value:MBS( "AVExport.SetOutputFileType"; $$AVExport; AVAsset Export Session::OutputFileType ) ]
```

```
Set Field [ AVAsset Export Session::OutputFileExtension; MBS( "AVExport.OutputFileExtension"; $$AVExport ) ]
```

See also

- [39.18 AVExport.SetOutputFileType](#) 1049
- [39.19 AVExport.SetOutputPath](#) 1050
- [39.20 AVExport.SetOutputURL](#) 1052
- [81.8 Folders.UserDesktop](#) 4177
- [121.1 Path.AddPathComponent](#) 6135

Example Databases

- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.15 AVExport.PresetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.PresetName"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns text or error.

Description

Indicates the name of the preset with which the AVExportSession was initialized.

Created 29th February 2016, last changed 29th February 2016.

39.16 AVExport.Progress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.Progress"; AVExportSession)

Parameters**AVExportSession**

The session reference number.

\$AVExport

Result Returns value or error.

Description

The progress of the export on a scale from 0 to 1.0.

A value of 0 means the export has not yet begun, A value of 1.0 means the export is complete.

See also

- [39.6 AVExport.ExportAsynchronously](#) 1033
- [39.23 AVExport.Status](#) 1055

Example Databases

- [Mac and iOS/AVExport](#)
- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 29th February 2016.

39.17 AVExport.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.Release"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns OK or error.

Description

All memory is released.

Please call this when you are done with the export.

Examples

Release export session:

```
Set Variable [ $r; Value:MBS("AVExport.Release"; $$AVExport) ]
```

```
Set Variable [ $$AVExport; Value:"" ]
```

See also

- [132.13 QTExport.OpenExporter](#) 6563
- [132.15 QTExport.Release](#) 6566

Example Databases

- [Mac and iOS/AVExport](#)
- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.18 AVExport.SetOutputFileType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.SetOutputFileType"; AVExportSession; FileType)

Parameters**AVExportSession**

The session reference number.

\$AVExport

FileType

The new file type.

"com.apple.quicktime-movie"

Result Returns OK or error.

Description

Indicates the type of file to be written by the session.

The value of this property must be set before you invoke `AVExport.ExportAsynchronously`; otherwise `AVExport.ExportAsynchronously` will return an error.

Setting the value of this property to a file type that's not among the session's supported file types will result in an error. See `AVExport.SupportedFileTypes`.

Examples

Set output file type and query default file extension:

```
Set Variable [ $r; Value:MBS( "AVExport.SetOutputFileType"; $$AVExport; AVAsset Export Session::OutputFileType ) ]
```

```
Set Field [ AVAsset Export Session::OutputFileExtension; MBS( "AVExport.OutputFileExtension"; $$AVExport ) ]
```

See also

- 39.6 `AVExport.ExportAsynchronously` 1033
- 39.9 `AVExport.GetOutputFileType` 1040
- 39.14 `AVExport.OutputFileExtension` 1045
- 39.24 `AVExport.SupportedFileTypes` 1056

Example Databases

- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.19 AVExport.SetOutputPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.SetOutputPath"; AVExportSession; Path)

Parameters

AVExportSession

The session reference number.

\$AVExport

Path

The new native file path.

"/Users/cs/Desktop/test.mov"

Result Returns OK or error.

Description

Indicates the native file path of the export session's output. You may use AVExport.OutputFileExtension to obtain an appropriate path extension for the outputFileType you have specified.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Export to desktop folder:

```
Set Field [ AVAsset Export Session::Output File Path; MBS("Path.AddPathComponent"; MBS("Folders.UserDesktop"); "test." & AVAsset Export Session::OutputFileExtension) ]
```

```
Set Variable [ $r; Value:MBS( "AVExport.SetOutputPath"; $$AVExport; AVAsset Export Session::Output File Path) ]
```

See also

- 39.10 AVExport.GetOutputPath 1041
- 39.11 AVExport.GetOutputURL 1042
- 39.14 AVExport.OutputFileExtension 1045
- 39.20 AVExport.SetOutputURL 1052
- 81.8 Folders.UserDesktop 4177
- 121.1 Path.AddPathComponent 6135
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [Mac and iOS/AVExport](#)
- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.20 AVExport.SetOutputURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.SetOutputURL"; AVExportSession; URL)

Parameters

AVExportSession

The session reference number.

\$AVExport

URL

The new output URL.

Result Returns text or error.

Description

Indicates the URL of the export session's output. You may use AVExport.OutputFileExtension to obtain an appropriate path extension for the outputFileType you have specified.

See also

- 39.10 AVExport.GetOutputPath 1041
- 39.11 AVExport.GetOutputURL 1042
- 39.14 AVExport.OutputFileExtension 1045
- 39.19 AVExport.SetOutputPath 1050

Created 29th February 2016, last changed 1st March 2016.

39.21 AVExport.SetShouldOptimizeForNetworkUse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.SetShouldOptimizeForNetworkUse"; AVExportSession; Setting)

Parameters**AVExportSession**

The session reference number.

\$AVExport

Setting

Pass 1 to enable optimization or 0 to disable.

1

Result Returns OK or error.

Description

Indicates that the output file should be optimized for network use, e.g. that a QuickTime movie file should support "fast start".

See also

- 39.12 AVExport.GetShouldOptimizeForNetworkUse

1043

Created 29th February 2016, last changed 29th February 2016.

39.22 AVExport.SetTimeRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.SetTimeRange"; AVExportSession; StartTime; Duration)

Parameters

AVExportSession

The session reference number.

\$AVExport

StartTime

Start time in seconds from beginning.

0

Duration

The duration of the video section to export in seconds.

5*60

Result Returns OK or error.

Description

The default timeRange of an export session is all, meaning that the full duration of the asset will be exported.

See also

- 39.13 AVExport.GetTimeRange

1044

Created 29th February 2016, last changed 29th February 2016.

39.23 AVExport.Status

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.Status"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns text or error.

Description

Can be Unknown, Waiting, Exporting, Completed, Failed or Cancelled.

Examples

Check Status:

```

If [ IsEmpty($$AVExport) ]
Set Field [ AVAsset Export Session::Progress; "" ]
Set Field [ AVAsset Export Session::Error; "" ]
Set Field [ AVAsset Export Session::Status; "" ]
Else
Set Field [ AVAsset Export Session::Progress; MBS( "AVExport.Progress"; $$AVExport ) ]
Set Field [ AVAsset Export Session::Error; MBS( "AVExport.Error"; $$AVExport ) ]
Set Field [ AVAsset Export Session::Status; MBS( "AVExport.Status"; $$AVExport ) ]
End If
If [ AVAsset Export Session::Status = "Completed" or AVAsset Export Session::Status = "Failed" ]
Install OnTimer Script [ ]
End If

```

See also

- [39.4 AVExport.Error](#) 1031
- [39.6 AVExport.ExportAsynchronously](#) 1033
- [39.16 AVExport.Progress](#) 1047

Example Databases

- [Mac and iOS/AVExport](#)
- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

39.24 AVExport.SupportedFileTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
39 AVExport	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("AVExport.SupportedFileTypes"; AVExportSession)

Parameters

AVExportSession

The session reference number.

\$AVExport

Result Returns list or error.

Description

Indicates the types of files the target can write, according to the preset the target was initialized with.

Does not perform an inspection of the AVAsset to determine whether its contents are compatible with the supported file types.

Examples

Query supported file types:

```
Set Field [ AVAsset Export Session::SupportedFileTypes; MBS( "AVExport.SupportedFileTypes"; $$AVExport ) ]
```

See also

- [39.7 AVExport.ExportSession](#) 1035
- [39.18 AVExport.SetOutputFileType](#) 1049

Example Databases

- [Mac only/Movies/AVAsset Export Session](#)

Created 29th February 2016, last changed 1st March 2016.

Chapter 40

AVPlayer

Play audio on Mac and iOS.

Play audio in background while doing work in FileMaker.

See also WMFP functions for Windows.

40.1 AVPlayer.FindPlayers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.3	Yes	No	No	No	Yes

MBS("AVPlayer.FindPlayers")

Result Returns list of identifiers or error.

Description

Looks for interactive containers using AVPlayer for playback and returns new identifiers for them. We added this function to query time of a playing interactive container on iOS.

Seems to work on Mac for FileMaker 16, too.

Looks on the current window with focus.

Examples

Query time of container playing container on iOS:

```
# find players
Set Variable [ $list; MBS( "AVPlayer.FindPlayers" ) ]
# pick first one
Set Variable [ $player; GetValue($list; 1) ]
# query time
Set Variable [ $time; MBS( "AVPlayer.GetTime"; AVPlayer ) ]
```

See also

- [40.11 AVPlayer.GetTime](#)

1068

Example Databases

- [iOS/Movie Container iOS and Mac](#)

40.1.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)
- [Control AVPlayer on Mac and iOS](#)

Created 30th May 2017, last changed 28th November 2017.

40.2 AVPlayer.GetAsset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.3	Yes	No	No	No	Yes

MBS("AVPlayer.GetAsset"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns asset reference number or error.

Description

This function allows you to query the file currently playing.

Please call AVAsset.Release later to free object from memory.

See also

- [38.22 AVAsset.Release](#) 1014
- [40.7 AVPlayer.GetMuted](#) 1064
- [40.10 AVPlayer.GetRate](#) 1067
- [40.11 AVPlayer.GetTime](#) 1068
- [40.22 AVPlayer.SetMuted](#) 1082

Example Databases

- [iOS/Movie Container iOS and Mac](#)

40.2.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)
- [Control AVPlayer on Mac and iOS](#)

Created 30th May 2017, last changed 6th June 2017.

40.3 AVPlayer.GetDuration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.GetDuration"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns number or error.

Description

See also

- [40.13 AVPlayer.OpenContainer](#) 1070
- [40.14 AVPlayer.OpenFile](#) 1072

Example Databases

- [iOS/Movie Container iOS and Mac](#)
- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 3th February 2017.

40.4 AVPlayer.GetFinishedEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.GetFinishedEvaluate"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns text or error.

Description

See also

- [40.5 AVPlayer.GetFinishedFileName](#) 1062
- [40.6 AVPlayer.GetFinishedScriptName](#) 1063
- [40.8 AVPlayer.GetProgressEvaluate](#) 1065
- [40.20 AVPlayer.SetFinishedEvaluate](#) 1080

40.4.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 6th September 2017, last changed 6th September 2017.

40.5 AVPlayer.GetFinishedFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.GetFinishedFileName"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns file name or error.

Description

See also

- [40.4 AVPlayer.GetFinishedEvaluate](#) 1061
- [40.6 AVPlayer.GetFinishedScriptName](#) 1063
- [40.20 AVPlayer.SetFinishedEvaluate](#) 1080

40.5.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 6th September 2017, last changed 6th September 2017.

40.6 AVPlayer.GetFinishedScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.GetFinishedScriptName"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns script name or error.

Description

See also

- [40.4 AVPlayer.GetFinishedEvaluate](#) 1061
- [40.5 AVPlayer.GetFinishedFileName](#) 1062
- [40.21 AVPlayer.SetFinishedScript](#) 1081

40.6.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 6th September 2017, last changed 6th September 2017.

40.7 AVPlayer.GetMuted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.GetMuted"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns 1, 0 or error.

Description

Returns 1 if muted or 0 if not.

See also

- 40.2 AVPlayer.GetAsset 1059
- 40.10 AVPlayer.GetRate 1067
- 40.11 AVPlayer.GetTime 1068
- 40.12 AVPlayer.GetVolume 1069
- 40.22 AVPlayer.SetMuted 1082
- 40.25 AVPlayer.SetRate 1086

Created 3th February 2017, last changed 3th February 2017.

40.8 AVPlayer.GetProgressEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.GetProgressEvaluate"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns OK or error.

Description

See also

- [40.4 AVPlayer.GetFinishedEvaluate](#) 1061
- [40.9 AVPlayer.GetProgressInterval](#) 1066
- [40.23 AVPlayer.SetProgressEvaluate](#) 1083

40.8.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 7th September 2017, last changed 7th September 2017.

40.9 AVPlayer.GetProgressInterval

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.GetProgressInterval"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns number or error.

Description

See also

- [40.8 AVPlayer.GetProgressEvaluate](#) 1065
- [40.24 AVPlayer.SetProgressInterval](#) 1085

40.9.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 8th September 2017, last changed 8th September 2017.

40.10 AVPlayer.GetRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.GetRate"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns value or error.

Description

Rate is 1.0 by default.

You for example can use 0.5 to play half speed or 2.0 for double speed.

See also

- 40.2 AVPlayer.GetAsset 1059
- 40.7 AVPlayer.GetMuted 1064
- 40.11 AVPlayer.GetTime 1068
- 40.13 AVPlayer.OpenContainer 1070
- 40.14 AVPlayer.OpenFile 1072
- 40.18 AVPlayer.Release 1078
- 40.22 AVPlayer.SetMuted 1082
- 40.25 AVPlayer.SetRate 1086
- 40.26 AVPlayer.SetTime 1087

Example Databases

- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 3th February 2017.

40.11 AVPlayer.GetTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.GetTime"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns value or error.

Description

Examples

Query time of container playing container on iOS:

```
# find players
Set Variable [ $list; MBS( "AVPlayer.FindPlayers" ) ]
# pick first one
Set Variable [ $player; GetValue($list; 1) ]
# query time
Set Variable [ $time; MBS( "AVPlayer.GetTime"; AVPlayer ) ]
```

See also

- [40.1 AVPlayer.FindPlayers](#) 1057
- [40.2 AVPlayer.GetAsset](#) 1059
- [40.7 AVPlayer.GetMuted](#) 1064
- [40.10 AVPlayer.GetRate](#) 1067
- [40.12 AVPlayer.GetVolume](#) 1069
- [40.25 AVPlayer.SetRate](#) 1086
- [40.26 AVPlayer.SetTime](#) 1087

Example Databases

- [iOS/Movie Container iOS and Mac](#)

Created 3th February 2017, last changed 30th May 2017.

40.12 AVPlayer.GetVolume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.GetVolume"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns number or error.

Description

See also

- [40.7 AVPlayer.GetMuted](#) 1064
- [40.11 AVPlayer.GetTime](#) 1068
- [40.13 AVPlayer.OpenContainer](#) 1070
- [40.14 AVPlayer.OpenFile](#) 1072
- [40.27 AVPlayer.SetVolume](#) 1088

Example Databases

- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 3th February 2017.

40.13 AVPlayer.OpenContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.OpenContainer"; Container)

Parameters

Container

The container with the audio file.

MyTable::MovieContainer

Result Returns player reference number or error.

Description

Returns the movie reference which must be released with AVPlayer.Release function. See also AVPlayer.OpenFile or AVPlayer.OpenURL.

Works with normal container, compressed container and referenced container file.

Examples

Open from container:

```
Set Variable [ $player; Value:MBS("AVPlayer.OpenContainer"; AVPlayer::Container) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error loading audio file."; $player ]
Exit Script [ ]
End If
Set Field [ AVPlayer::Duration; MBS("AVPlayer.GetDuration"; $player) ]
Set Field [ AVPlayer::Rate; MBS("AVPlayer.GetRate"; $$Player) ]
Set Field [ AVPlayer::Volume; MBS("AVPlayer.GetVolume"; $$Player) ]
Set Variable [ $$player; Value:$player ]
```

See also

- 38.17 AVAsset.OpenContainer 1006
- 40.3 AVPlayer.GetDuration 1060
- 40.10 AVPlayer.GetRate 1067
- 40.12 AVPlayer.GetVolume 1069
- 40.14 AVPlayer.OpenFile 1072
- 40.15 AVPlayer.OpenURL 1074
- 40.18 AVPlayer.Release 1078

40.13. AVPLAYER.OPENCONTAINER

1071

- 124.6 IsError

6266

Example Databases

- [Mac and iOS/AVPlayer](#)

40.13.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr6](#)

Created 3th February 2017, last changed 3th February 2017.

40.14 AVPlayer.OpenFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.OpenFile"; Path)

Parameters

Path

The native file path to the movie file.

"/Test.mov"

Result Returns player reference number or error.

Description

Returns the reference number which must be released with AVPlayer.Release function.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Open file:

```
Set Variable [ $player; Value:MBS("AVPlayer.OpenFile"; AVPlayer::FilePath) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error loading audio file."; $player ]
Exit Script [ ]
End If
Set Field [ AVPlayer::Duration; MBS("AVPlayer.GetDuration"; $player) ]
Set Field [ AVPlayer::Rate; MBS("AVPlayer.GetRate"; $$Player) ]
Set Field [ AVPlayer::Volume; MBS("AVPlayer.GetVolume"; $$Player) ]
Set Variable [ $$player; Value:$player ]
```

See also

- 40.3 AVPlayer.GetDuration 1060
- 40.10 AVPlayer.GetRate 1067
- 40.12 AVPlayer.GetVolume 1069
- 40.13 AVPlayer.OpenContainer 1070
- 40.15 AVPlayer.OpenURL 1074
- 40.18 AVPlayer.Release 1078
- 124.6 IsError 6266

40.14. *AVPLAYER.OPENFILE*

1073

- 121.2 Path.FileMakerPathToNativePath

6139

Example Databases

- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 3th February 2017.

40.15 AVPlayer.OpenURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.OpenURL"; URL)

Parameters

URL

The URL of the audio file to open.
"http://example.test/mysound.mp3"

Result Returns player reference number or error.

Description

Returns the player reference number which must be released with AVPlayer.Release function.

See also

- 40.13 AVPlayer.OpenContainer 1070
- 40.14 AVPlayer.OpenFile 1072
- 40.18 AVPlayer.Release 1078

Created 3th February 2017, last changed 3th February 2017.

40.16 AVPlayer.Pause

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.Pause"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns OK or error.

Description

Examples

Pause player:

```
If [ Length($$Player)>0 ]
Set Variable [ $r; Value:MBS("AVPlayer.Pause"; $$Player) ]
Else
Show Custom Dialog [ "Please open Movie first!" ]
End If
```

Example Databases

- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 3th February 2017.

40.17 AVPlayer.Play

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.Play"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns OK or error.

Description

Examples

Play audio:

```
If [ $$Player "" ]
Set Variable [ $r; Value:MBS("AVPlayer.Play"; $$Player) ]
Else
Show Custom Dialog [ "Please open Movie first!" ]
End If
```

Play with progress:

```
If [ $$Player "" ]
# set progress callback
Set Variable [ $r ; Value: MBS("AVPlayer.SetProgressEvaluate"; $$Player; "MBS(\ "FM.ExecuteFileSQL\ ";
\ "AVPlayer.fmp12\ "; \ "UPDATE \\\ "AVPlayer\\\ " SET \\\ "Position\\\ "=?\ "; 9; 13; $$Time$$ / 1000)" )
]
Set Variable [ $r ; Value: MBS("AVPlayer.SetProgressInterval"; $$Player; 1) ]
# now plays
Set Variable [ $r ; Value: MBS("AVPlayer.Play"; $$Player) ]
# commit. SQL can't update if record is edited.
Commit Records/Requests [ With dialog: Off ]
# Trigger script when sound is done.
Set Variable [ $r ; Value: MBS("AVPlayer.SetFinishedScript"; $$Player; Get(FileName); "Played") ]
Else
Show Custom Dialog [ "Please open Movie first!" ]
End If
```

See also

- 40.21 AVPlayer.SetFinishedScript 1081
- 40.23 AVPlayer.SetProgressEvaluate 1083

<i>40.17. AVPLAYER.PLAY</i>	1077
• 40.24 AVPlayer.SetProgressInterval	1085
• 80.6 FM.ExecuteFileSQL	4079

Example Databases

- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 8th September 2017.

40.18 AVPlayer.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.Release"; AVPlayer)

Parameters

AVPlayer

The reference number of the player.

\$Player

Result Returns OK or error.

Description

If you forget to release a player, the audio object stays in memory and if memory is low, FileMaker will crash.

To avoid this the plugin will only open up to 50 files simultaneously.

Examples

Release player:

```
# Close last movie if it was open.
If [ Length($$Player)>0 ]
Set Variable [ $r; Value:MBS("AVPlayer.Release"; $$Player) ]
Set Variable [ $$Player; Value:"" ]
End If
```

See also

- 40.10 AVPlayer.GetRate 1067
- 40.13 AVPlayer.OpenContainer 1070
- 40.14 AVPlayer.OpenFile 1072
- 40.15 AVPlayer.OpenURL 1074
- 40.19 AVPlayer.ReleaseAll 1079
- 40.25 AVPlayer.SetRate 1086

Example Databases

- [iOS/Movie Container iOS and Mac](#)
- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 3th February 2017.

40.19 AVPlayer.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.ReleaseAll")

Result Returns OK or error.

Description

See also

- 40.18 AVPlayer.Release

1078

Example Databases

- [iOS/Movie Container iOS and Mac](#)

Created 3th February 2017, last changed 3th February 2017.

40.20 AVPlayer.SetFinishedEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.SetFinishedEvaluate"; AVPlayer; Expression)

Parameters

AVPlayer

The reference number of the player.

\$Player

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the curl reference, so you can pass it to other functions if needed.

Examples

Sets evaluate for when player finished to show dialog:

```
Set Variable [ $r ; Value: MBS("AVPlayer.SetFinishedEvaluate"; $Player; "MBS( \Msgbox\"; \Player done.\") ) ]
```

See also

- 40.4 AVPlayer.GetFinishedEvaluate 1061
- 40.5 AVPlayer.GetFinishedFileName 1062
- 40.21 AVPlayer.SetFinishedScript 1081
- 40.23 AVPlayer.SetProgressEvaluate 1083

40.20.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 6th September 2017, last changed 24th January 2019.

40.21 AVPlayer.SetFinishedScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.SetFinishedScript"; AVPlayer; Filename; ScriptName)

Parameters

AVPlayer

The reference number of the player.

\$Player

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Set finished script:

```
Set Variable [ $r ; Value: MBS("AVPlayer.SetFinishedScript"; $$Player; Get(FileName); "Played") ]
```

See also

- [40.6 AVPlayer.GetFinishedScriptName](#) 1063
- [40.17 AVPlayer.Play](#) 1076
- [40.20 AVPlayer.SetFinishedEvaluate](#) 1080

40.21.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 6th September 2017, last changed 6th September 2017.

40.22 AVPlayer.SetMuted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.SetMuted"; AVPlayer; State)

Parameters

AVPlayer

The reference number of the player.

\$Player

State

The new mute state.

1

Result Returns OK or error.

Description

Pass 1 to mute or 0 to unmute.

See also

- 40.2 AVPlayer.GetAsset 1059
- 40.7 AVPlayer.GetMuted 1064
- 40.10 AVPlayer.GetRate 1067
- 40.25 AVPlayer.SetRate 1086
- 40.26 AVPlayer.SetTime 1087
- 40.27 AVPlayer.SetVolume 1088

Created 3th February 2017, last changed 3th February 2017.

40.23 AVPlayer.SetProgressEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.SetProgressEvaluate"; AVPlayer; Expression)

Parameters

AVPlayer

The reference number of the player.

\$Player

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

Result Returns OK or error.

Description

Evaluated once as second to update progress in GUI.

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the curl reference, so you can pass it to other functions if needed. \$\$Time\$\$ is replaced with current time in milliseconds.

Examples

Play and define progress expression:

```
Set Variable [ $r ; Value: MBS("AVPlayer.SetProgressEvaluate"; $$Player; "MBS(\ "FM.ExecuteFileSQL\"; \ "AVPlayer.fmp12\"; \ "UPDATE \\\ "AVPlayer\\\ " SET \\\ "Position\\\ "=?\"; 9; 13; $$Time$$ / 1000)") ]
```

```
Set Variable [ $r ; Value: MBS("AVPlayer.SetProgressInterval"; $$Player; 1) ]
```

```
Set Variable [ $r ; Value: MBS("AVPlayer.Play"; $$Player) ]
```

See also

- 40.8 AVPlayer.GetProgressEvaluate 1065
- 40.17 AVPlayer.Play 1076
- 40.20 AVPlayer.SetFinishedEvaluate 1080
- 40.24 AVPlayer.SetProgressInterval 1085
- 80.6 FM.ExecuteFileSQL 4079

40.23.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

40.24 AVPlayer.SetProgressInterval

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.4	Yes	No	No	No	Yes

MBS("AVPlayer.SetProgressInterval"; AVPlayer; Time)

Parameters

AVPlayer

The reference number of the player.

\$Player

Time

The time interval to use.

5

Result Returns OK or error.

Description

Using interval <1.0 can be a problem because FileMaker would evaluate only and not do anything else.

Examples

Play and define progress expression:

```
Set Variable [ $r ; Value: MBS("AVPlayer.SetProgressEvaluate"; $$Player; "MBS(\ "FM.ExecuteFileSQL\ ";
\ "AVPlayer.fmp12\ "; \ "UPDATE \\\ "AVPlayer\\\ " SET \\\ "Position\\\ "=?\ "; 9; 13; $$Time$$ / 1000)" )
]
Set Variable [ $r ; Value: MBS("AVPlayer.SetProgressInterval"; $$Player; 1) ]
Set Variable [ $r ; Value: MBS("AVPlayer.Play"; $$Player) ]
```

See also

- 40.9 AVPlayer.GetProgressInterval 1066
- 40.17 AVPlayer.Play 1076
- 40.23 AVPlayer.SetProgressEvaluate 1083
- 80.6 FM.ExecuteFileSQL 4079

40.24.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 8th September 2017, last changed 8th September 2017.

40.25 AVPlayer.SetRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.SetRate"; AVPlayer; Rate)

Parameters

AVPlayer

The reference number of the player.

\$Player

Rate

The new rate.

1.0

Result Returns OK or error.

Description

Default is 1.0.

You can for example set to 0.5 for half speed or 2.0 for double speed.

Examples

Sets rate:

```
Set Variable [ $r; Value:MBS("AVPlayer.SetRate"; $$Player; AVPlayer::Rate) ]
```

```
Set Field [ AVPlayer::Rate; MBS("AVPlayer.GetRate"; $$Player) ]
```

See also

- [40.7 AVPlayer.GetMuted](#) 1064
- [40.10 AVPlayer.GetRate](#) 1067
- [40.11 AVPlayer.GetTime](#) 1068
- [40.18 AVPlayer.Release](#) 1078
- [40.22 AVPlayer.SetMuted](#) 1082
- [40.26 AVPlayer.SetTime](#) 1087

Example Databases

- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 3th February 2017.

40.26 AVPlayer.SetTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.SetTime"; AVPlayer; Time)

Parameters

AVPlayer

The reference number of the player.

\$Player

Time

The new playback time in seconds.

10.0

Result Returns OK or error.

Description

See also

- 40.10 AVPlayer.GetRate 1067
- 40.11 AVPlayer.GetTime 1068
- 40.22 AVPlayer.SetMuted 1082
- 40.25 AVPlayer.SetRate 1086
- 40.27 AVPlayer.SetVolume 1088

Created 3th February 2017, last changed 3th February 2017.

40.27 AVPlayer.SetVolume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
40 AVPlayer	7.1	Yes	No	No	No	Yes

MBS("AVPlayer.SetVolume"; AVPlayer; Volume)

Parameters

AVPlayer

The reference number of the player.

\$Player

Volume

The new volume. Zero is no volume like muted.

1.0

Result Returns OK or error.

Description

Default is 1.0. You can for example set to 0.5 for half volume.

Examples

Sets volume:

```
Set Variable [ $r; Value:MBS("AVPlayer.SetVolume"; $$Player; AVPlayer::Volume) ]
```

```
Set Field [ AVPlayer::Volume; MBS("AVPlayer.GetVolume"; $$Player) ]
```

See also

- [40.12 AVPlayer.GetVolume](#) 1069
- [40.22 AVPlayer.SetMuted](#) 1082
- [40.26 AVPlayer.SetTime](#) 1087

Example Databases

- [Mac and iOS/AVPlayer](#)

Created 3th February 2017, last changed 3th February 2017.

Chapter 41

AVRecorder

Audio and video recording

Functions to record audio and/or video files.

41.1 AVRecorder.AddPreviewToWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.AddPreviewToWindow"; AVSession; WindowRef; X; Y; W; H { ; Rotation })

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

X

The x coordinate.

20

Y

The y coordinate

200

W

The width of the preview area.

320

H

The height of the preview area.

200

Rotation

Optional

Available in MBS FileMaker Plugin 8.1 or newer.

Rotation of image display. Mac only. e.g. pass in 90 or -90 to rotate by 90 or -90 degree.

0

Result Returns OK or error.

Description**Examples**

Start preview:

```
Set Variable [ $r; Value:MBS("AVRecorder.AddPreviewToWindow"; $Session; Get(WindowName); 50; 200; 320; 240) ]
```

```
Set Variable [ $r; Value:MBS("AVRecorder.StartPreview"; $Session) ]
```

See also

- 41.17 AVRecorder.Init 1108
- 41.30 AVRecorder.StartPreview 1125
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [AVRecorder/AVRecorder](#)

Created 18th February 2016, last changed 9th February 2018.

41.2 AVRecorder.AudioDeviceCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.AudioDeviceCount"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

Result Returns number or error.

Description

See also

- [41.3 AVRecorder.AudioDeviceInfo](#) 1092
- [41.17 AVRecorder.Init](#) 1108
- [41.35 AVRecorder.VideoDeviceCount](#) 1131

Example Databases

- [AVRecorder/AVRecorder Devices](#)

Created 18th February 2016, last changed 19th February 2016.

41.3 AVRecorder.AudioDeviceInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.AudioDeviceInfo"; AVSession; Index; Selector)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Index

The index of the device from 0 to AVRecorder.AudioDeviceCount-1 or the name or ID of the device.

0

Selector

Which value to return. Can be ID, Name, Description, Index. On Mac can also be manufacturer, modelID, transportType, connected, inUseByAnotherApplication or suspended.

"Name"

Result Returns value or error.

Description

Examples

Enumerate audio devices:

```
# list audio devices
Set Variable [ $count; Value:MBS("AVRecorder.AudioDeviceCount"; $recorder) ]
If [ $count >0 ]
Set Variable [ $index; Value:0 ]
Loop
# next
New Record/Request
Set Field [ AVRecorder Devices::Index; $index ]
Set Field [ AVRecorder Devices::ID; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "ID") ]
Set Field [ AVRecorder Devices::Name; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "Name") ]
Set Field [ AVRecorder Devices::Description; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "Description") ]
If [ MBS("SystemInfo.isMacOSX") ]
Set Field [ AVRecorder Devices::Manufacturer; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "manufacturer") ]
Set Field [ AVRecorder Devices::ModelID; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "modelID") ]
Set Field [ AVRecorder Devices::TransportType; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "transportType") ]
Set Field [ AVRecorder Devices::Connected; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "connected") ]
```



```
Set Field [ AVRecorder Devices::inUseByAnotherApplication; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "inUseByAnotherApplication") ]
Set Field [ AVRecorder Devices::suspended; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "suspended") ]
End If
Set Field [ AVRecorder Devices::Type; "Audio" ]
Commit Records/Requests [ ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $count = $index ]
End Loop
End If
```

See also

- 41.2 AVRecorder.AudioDeviceCount 1091
- 41.10 AVRecorder.GetAudioDevice 1101
- 41.17 AVRecorder.Init 1108
- 41.22 AVRecorder.SetAudioDevice 1115
- 41.36 AVRecorder.VideoDeviceInfo 1132
- 161.52 SystemInfo.isMacOSX 7706

Example Databases

- [AVRecorder/AVRecorder Devices](#)

Created 18th February 2016, last changed 19th February 2016.

41.4 AVRecorder.AuthorizationStatusForMediaType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	8.4	Yes	No	No	No	Yes

MBS("AVRecorder.AuthorizationStatusForMediaType"; MediaType)

Parameters

MediaType

The media type, can be video or audio.

"video"

Result Returns status or error.

Description

Returns the client's authorization status for accessing the underlying hardware that supports a given media type.

The possible values are:

NotDetermined	Indicates that the user has not yet made a choice regarding whether the client can access the hardware.
Restricted	The client is not authorized to access the hardware for the media type. The user cannot change the client's status, possibly due to active restrictions such as parental controls being in place.
Denied	The user explicitly denied access to the hardware supporting a media type for the client.
Authorized	The client is authorized to access the hardware supporting a media type.

See also

- [41.21 AVRecorder.RequestAccessForMediaType](#) 1114

Example Databases

- [AVRecorder/AVRecorder](#)

41.4.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr7](#)

Created 2nd September 2018, last changed 2nd September 2018.

41.5 AVRecorder.CaptureStillPhoto

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.2	Yes	Yes	No	No	Yes

MBS("AVRecorder.CaptureStillPhoto"; AVSession { ; FileName })

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

FileName

Optional

The file name for the jpeg image.
"still.jpg"

Result Returns image or error.

Description

The image is returned a JPEG image as container value on Mac and BMP on Windows.
Added Windows support with plugin version 6.5.
May require running the preview as we capture only current preview frame on Windows.

If you need content detection, you can always get current frame with AVRecorder.CaptureStillPhoto and pass it to OCR.SetImage for text recognition or Barcode.Detect to find different barcodes.

Examples

Init and Capture photo:

```
# Start session
Set Variable [ $capture; Value:MBS( "AVRecorder.Init" ) ]
# Pick first video device
Set Variable [ $r; Value:MBS( "AVRecorder.SetVideoDevice"; $capture; 0 ) ]
# Start preview
Set Variable [ $r; Value:MBS("AVRecorder.StartPreview"; $capture) ]
# Wait a bit to have camera get up and running
Pause/Resume Script [ Duration (seconds): .5 ]
# Take a picture
Set Variable [ $r; Value:MBS( "AVRecorder.CaptureStillPhoto"; $capture ) ]
# Put in container
Set Field [ test::Test; $r ]
# Cleanup
Set Variable [ $r; Value:MBS( "AVRecorder.Release"; $capture ) ]
```

See also

- 41.17 AVRecorder.Init 1108
- 41.20 AVRecorder.Release 1113
- 41.27 AVRecorder.SetVideoDevice 1121
- 41.30 AVRecorder.StartPreview 1125
- 41.31 AVRecorder.StartQRCodeDetection 1126
- 43.1 Barcode.Detect 1137
- 120.14 OCR.SetImage 6125

Example Databases

- [AVRecorder/AVRecorder](#)

41.5.1 Blog Entries

- [Live barcode reading for FileMaker on MacOS and iOS](#)
- [MBS FileMaker Plugin, version 6.5pr10](#)
- [MBS FileMaker Plugin, version 6.2pr7](#)

Created 2nd May 2016, last changed 30th August 2018.

41.6 AVRecorder.ClosePreview

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.ClosePreview"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns OK or error.

Description

Examples

Close preview:

MBS("AVRecorder.ClosePreview"; \$AVSession)

See also

- 41.17 AVRecorder.Init 1108
- 41.30 AVRecorder.StartPreview 1125

Created 18th February 2016, last changed 18th October 2016.

41.7 AVRecorder.CurrentQRCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	8.4	Yes	No	No	No	Yes

MBS("AVRecorder.CurrentQRCode"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns text or error.

Description

If you query this, a flag is cleared, which will start again the trigger to call script if new code is detected.

Returns empty if no QRCode is detected.

Examples

Update field with current code:

```
Set Field [ AVRecorder::Barcode ; MBS("AVRecorder.CurrentQRCode"; AVRecorder::Session) ]
```

See also

- [41.17 AVRecorder.Init](#)

1108

41.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)

Created 29th August 2018, last changed 30th August 2018.

41.8 AVRecorder.EncoderCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	9.1	No	Yes	No	No	No

MBS("AVRecorder.EncoderCount"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

Result Returns count or error.

Description

See also

- [41.9 AVRecorder.EncoderInfo](#) 1100
- [41.17 AVRecorder.Init](#) 1108

41.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 24th February 2019, last changed 24th February 2019.

41.9 AVRecorder.EncoderInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	9.1	No	Yes	No	No	No

MBS("AVRecorder.EncoderInfo"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns OK or error.

Description

Windows 10 includes usually the following encoders for video: WMVideo8 Encoder DMO, WMVideo9 Encoder DMO, MSScreen 9 encoder DMO, DV Video Encoder, MJPEG Compressor.

See also

- [41.8 AVRecorder.EncoderCount](#) 1099
- [41.17 AVRecorder.Init](#) 1108

41.9.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 24th February 2019, last changed 24th February 2019.

41.10 AVRecorder.GetAudioDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.GetAudioDevice"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns text or error.

Description

Examples

Query audio device:

```
Show Custom Dialog [ "Audio Device"; MBS("AVRecorder.GetAudioDevice"; AVRecorder::Session) ]
```

See also

- [41.3 AVRecorder.AudioDeviceInfo](#) 1092
- [41.14 AVRecorder.GetVideoDevice](#) 1105
- [41.17 AVRecorder.Init](#) 1108
- [41.22 AVRecorder.SetAudioDevice](#) 1115
- [41.27 AVRecorder.SetVideoDevice](#) 1121

Example Databases

- [AVRecorder/AVRecorder](#)

Created 9th February 2016, last changed 19th February 2016.

41.11 AVRecorder.GetAutomaticallyAdjustsVideoMirroring

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	7.4	Yes	No	No	No	Yes

MBS("AVRecorder.GetAutomaticallyAdjustsVideoMirroring"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns 1, 0 or error.

Description

For some session configurations, video data flowing through the connection will be mirrored by default. When the value of this property is 1, the value of videoMirrored may change depending on the configuration of the session, for example after switching to a different device input. The default value is 1.

See also

- [41.17 AVRecorder.Init](#) 1108
- [41.23 AVRecorder.SetAutomaticallyAdjustsVideoMirroring](#) 1116

41.11.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)

Created 15th August 2017, last changed 15th August 2017.

41.12 AVRecorder.GetEncoder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	9.1	No	Yes	No	No	No

MBS("AVRecorder.GetEncoder"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

Result Returns name or error.

Description

Examples

Query encoder:

```
MBS( "AVRecorder.GetEncoder"; 53001)
```

See also

- [41.17 AVRecorder.Init](#) 1108
- [41.24 AVRecorder.SetEncoder](#) 1117

41.12.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 24th February 2019, last changed 24th February 2019.

41.13 AVRecorder.GetFilePath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.GetFilePath"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

Result Returns OK or error.

Description

See also

- 41.17 AVRecorder.Init 1108
- 41.25 AVRecorder.SetFilePath 1118

Created 9th February 2016, last changed 19th February 2016.

41.14 AVRecorder.GetVideoDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.GetVideoDevice"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns text or error.

Description

Examples

Query video device:

Show Custom Dialog ["Video Device"; MBS("AVRecorder.GetVideoDevice"; AVRecorder::Session)]

See also

- [41.10 AVRecorder.GetAudioDevice](#) 1101
- [41.15 AVRecorder.GetVideoMirrored](#) 1106
- [41.17 AVRecorder.Init](#) 1108
- [41.22 AVRecorder.SetAudioDevice](#) 1115
- [41.27 AVRecorder.SetVideoDevice](#) 1121
- [41.36 AVRecorder.VideoDeviceInfo](#) 1132

Example Databases

- [AVRecorder/AVRecorder](#)

Created 9th February 2016, last changed 19th February 2016.

41.15 AVRecorder.GetVideoMirrored

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	7.4	Yes	No	No	No	Yes

MBS("AVRecorder.GetVideoMirrored"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns 1, 0 or error.

Description

Returns 1 if mirror is on.

See also

- [41.14 AVRecorder.GetVideoDevice](#) 1105
- [41.17 AVRecorder.Init](#) 1108
- [41.28 AVRecorder.SetVideoMirrored](#) 1122

41.15.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)

Created 15th August 2017, last changed 15th August 2017.

41.16 AVRecorder.HasQRCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	8.4	Yes	No	No	No	Yes

MBS("AVRecorder.HasQRCode"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

Result Returns 1, 0 or error.

Description

Returns 1 if there is a QRCode detected.

See also

- 41.17 AVRecorder.Init

1108

41.16.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)

Created 29th August 2018, last changed 30th August 2018.

41.17 AVRecorder.Init

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.Init")

Result Returns OK or error.

Description

You need to call init to get a new session ID which is needed for all other AVRecorder calls. Please call AVRecorder.Release when you are done with recording.

Examples

Enumerate audio and video devices:

```
# init
Set Variable [ $recorder; Value:MBS("AVRecorder.Init") ]
Delete All Records [ No dialog ]
# audio
Set Variable [ $count; Value:MBS("AVRecorder.AudioDeviceCount"; $recorder) ]
If [ $count >0 ]
Set Variable [ $index; Value:0 ]
Loop
# next
New Record/Request
Set Field [ AVRecorder Devices::Index; $index ]
Set Field [ AVRecorder Devices::ID; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "ID") ]
Set Field [ AVRecorder Devices::Name; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "Name") ]
Set Field [ AVRecorder Devices::Description; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "Description") ]
If [ MBS("SystemInfo.isMacOSX") ]
Set Field [ AVRecorder Devices::Manufacturer; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "manufacturer") ]
Set Field [ AVRecorder Devices::ModelID; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "modelID") ]
Set Field [ AVRecorder Devices::TransportType; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "transportType") ]
Set Field [ AVRecorder Devices::Connected; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "connected") ]
Set Field [ AVRecorder Devices::inUseByAnotherApplication; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "inUseByAnotherApplication") ]
Set Field [ AVRecorder Devices::suspended; MBS("AVRecorder.AudioDeviceInfo"; $recorder; $index; "suspended") ]
End If
Set Field [ AVRecorder Devices::Type; "Audio" ]
Commit Records/Requests [ ]
Set Variable [ $index; Value:$index + 1 ]
```



```

Exit Loop If [ $count = $index ]
End Loop
End If
# video
Set Variable [ $count; Value:MBS("AVRecorder.VideoDeviceCount"; $recorder) ]
If [ $count >0 ]
Set Variable [ $index; Value:0 ]
Loop
# next
New Record/Request
Set Field [ AVRecorder Devices::Index; $index ]
Set Field [ AVRecorder Devices::ID; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "ID") ]
Set Field [ AVRecorder Devices::Name; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "Name") ]
Set Field [ AVRecorder Devices::Description; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "Description") ]
If [ MBS("SystemInfo.isMacOSX") ]
Set Field [ AVRecorder Devices::Manufacturer; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "manufacturer") ]
Set Field [ AVRecorder Devices::ModelID; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "modelID") ]
Set Field [ AVRecorder Devices::TransportType; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "transportType") ]
Set Field [ AVRecorder Devices::Connected; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "connected") ]
Set Field [ AVRecorder Devices::inUseByAnotherApplication; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "inUseByAnotherApplication") ]
Set Field [ AVRecorder Devices::suspended; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "suspended") ]
End If
Set Field [ AVRecorder Devices::Type; "Video" ]
Commit Records/Requests [ ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $count = $index ]
End Loop
End If
# cleanup
Set Variable [ $r; Value:MBS("AVRecorder.Release"; $recorder) ]

```

See also

- 41.5 AVRecorder.CaptureStillPhoto 1095
- 41.18 AVRecorder.IsRecording 1111
- 41.19 AVRecorder.IsVideoMirroringSupported 1112
- 41.22 AVRecorder.SetAudioDevice 1115
- 41.26 AVRecorder.SetScreenInput 1119

- 41.27 AVRecorder.SetVideoDevice 1121
- 41.29 AVRecorder.ShowPropertyDialog 1123
- 41.30 AVRecorder.StartPreview 1125
- 41.31 AVRecorder.StartQRCodeDetection 1126
- 41.36 AVRecorder.VideoDeviceInfo 1132

Example Databases

- [AVRecorder/AVRecorder Devices](#)
- [AVRecorder/AVRecorder](#)

41.17.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr3](#)
- [Audio and Video Recording for FileMaker](#)

Created 9th February 2016, last changed 19th February 2016.

41.18 AVRecorder.IsRecording

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.IsRecording"; AVSession)

Parameters**AVSession**

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns state or error.

Description

Returns 1 if recording or 0 if not.

See also

- 41.17 AVRecorder.Init 1108
- 41.32 AVRecorder.StartRecording 1128
- 41.34 AVRecorder.StopRecording 1130

Created 9th February 2016, last changed 19th February 2016.

41.19 AVRecorder.IsVideoMirroringSupported

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	7.4	Yes	No	No	No	Yes

MBS("AVRecorder.IsVideoMirroringSupported"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

Result Returns 1, 0 or error.

Description

Returns 1 if mirror is possible.

See also

- [41.17 AVRecorder.Init](#)

1108

41.19.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)

Created 15th August 2017, last changed 15th August 2017.

41.20 AVRecorder.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.Release"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

Result Returns OK or error.

Description

Examples

Cleanup session

```
# cleanup
Set Variable [ $r; Value:MBS("AVRecorder.Release"; $recorder) ]
```

See also

- [41.5 AVRecorder.CaptureStillPhoto](#) 1095
- [41.17 AVRecorder.Init](#) 1108

Example Databases

- [AVRecorder/AVRecorder Devices](#)
- [AVRecorder/AVRecorder](#)

Created 9th February 2016, last changed 19th February 2016.

41.21 AVRecorder.RequestAccessForMediaType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	8.4	Yes	No	No	No	Yes

MBS("AVRecorder.RequestAccessForMediaType"; MediaType)

Parameters

MediaType

The media type, can be video or audio.

"video"

Result Returns OK or error.

Description

Requests access to the underlying hardware for the media type, showing a dialog to the user if necessary.

May show a dialog to user, so call early when the features are needed.

Check with AVRecorder.AuthorizationStatusForMediaType, whether you are allowed.

See also

- [41.4 AVRecorder.AuthorizationStatusForMediaType](#) 1094

Example Databases

- [AVRecorder/AVRecorder](#)

41.21.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr7](#)

Created 2nd September 2018, last changed 2nd September 2018.

41.22 AVRecorder.SetAudioDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.SetAudioDevice"; AVSession; Device)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Device

The device name, ID or index.

0

Result Returns OK or error.

Description

Examples

Sets first audio device:

```
Set Variable [ $r; Value:MBS("AVRecorder.SetAudioDevice"; AVRecorder::Session; 0) ]
```

Use audio device with name "Built-in Microphone":

```
Set Variable [ $r; Value:MBS("AVRecorder.SetAudioDevice"; AVRecorder::Session; "Built-in Microphone") ]
```

See also

- [41.3 AVRecorder.AudioDeviceInfo](#) 1092
- [41.10 AVRecorder.GetAudioDevice](#) 1101
- [41.14 AVRecorder.GetVideoDevice](#) 1105
- [41.17 AVRecorder.Init](#) 1108
- [41.27 AVRecorder.SetVideoDevice](#) 1121

Example Databases

- [AVRecorder/AVRecorder](#)

Created 9th February 2016, last changed 22nd February 2016.

41.23 AVRecorder.SetAutomaticallyAdjustsVideoMirroring

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	7.4	Yes	No	No	No	Yes

MBS("AVRecorder.SetAutomaticallyAdjustsVideoMirroring"; AVSession; Mode)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Mode

The new mode. Pass 1 to allow automatical mirroring or 0 to not mirror.

0

Result Returns OK or error.

Description

Examples

Turn on mirroring:

```
# disable auto mirror
```

```
Set Variable [ $r ; Value: MBS( "AVRecorder.SetAutomaticallyAdjustsVideoMirroring"; $AVSession; 0 ) ]
```

```
# enable mirror manually
```

```
Set Variable [ $r ; Value: MBS( "AVRecorder.SetVideoMirrored"; $AVSession; 1 ) ]
```

See also

- 41.11 AVRecorder.GetAutomaticallyAdjustsVideoMirroring 1102
- 41.17 AVRecorder.Init 1108
- 41.28 AVRecorder.SetVideoMirrored 1122

41.23.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)

Created 15th August 2017, last changed 28th November 2019.

41.24 AVRecorder.SetEncoder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	9.1	No	Yes	No	No	No

MBS("AVRecorder.SetEncoder"; AVSession; Encoder)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Encoder

The encoder name, ID or index.

0

Result Returns OK or error.

Description

Not all combinations of video source, encoder and destination file will work. AVRecorder.StartRecording may fail later.

On Mac and iOS we use standard encoder by default (H264 usually).

Examples

Set encoder:

```
MBS( "AVRecorder.SetEncoder"; $AVSession; "WMVideo9 Encoder DMO" )
```

Set DV encoder:

```
MBS("AVRecorder.SetEncoder"; AVRecorder::Session; "DV Video Encoder")
```

See also

- [41.12 AVRecorder.GetEncoder](#) 1103
- [41.17 AVRecorder.Init](#) 1108
- [41.32 AVRecorder.StartRecording](#) 1128

41.24.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 24th February 2019, last changed 24th February 2019.

41.25 AVRecorder.SetFilePath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.SetFilePath"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns OK or error.

Description

Please use a native path with .avi (Windows) or .m4v (Mac) for recording.

For Mac with audio only you can also use .m4a as extension.

Examples

Sets a file path:

```

If [ MBS("SystemInfo.isMacOSX") ]
Set Field [ AVRecorder::FilePath; MBS( "Folders.UserDesktop" ) & "/test.m4v" ]
Else
Set Field [ AVRecorder::FilePath; MBS( "Folders.UserDesktop" ) & "\test.avi" ]
End If
Set Variable [ $r; Value:MBS("AVRecorder.SetFilePath"; AVRecorder::Session; AVRecorder::FilePath) ]

```

See also

- 41.13 AVRecorder.GetFilePath 1104
- 41.17 AVRecorder.Init 1108
- 41.32 AVRecorder.StartRecording 1128
- 81.8 Folders.UserDesktop 4177
- 161.52 SystemInfo.isMacOSX 7706

Example Databases

- [AVRecorder/AVRecorder](#)

Created 9th February 2016, last changed 21st February 2016.

41.26 AVRecorder.SetScreenInput

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	8.4	Yes	No	No	No	No

MBS("AVRecorder.SetScreenInput"; AVSession { ; DisplayIndex; capturesCursor; capturesMouseClicks; cropRectLeft; cropRectBottom; cropRectWidth; cropRectHeight })

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

DisplayIndex

Optional

The index of the screen. Derfault is zero for main screen.

0

capturesCursor

Optional

Whether the cursor should be rendered to the captured output. By default, screen input draws the cursor in its captured output. If this parameter is zero, the captured output contains only the windows on the screen. Cursor is omitted. Note that cursor position and mouse button state at the time of capture is preserved in CMSampleBuffers emitted from screen input.

1

capturesMouseClicks

Optional

Whether mouse clicks should be highlighted in the captured output. By default, screen input does not highlight mouse clicks in its captured output. If this parameter is 1, mouse clicks are highlighted (a circle is drawn around the mouse for the duration of the click) in the captured output.

1

cropRectLeft

Optional

cropRectBottom

Optional

cropRectWidth

Optional

cropRectHeight

Optional

Result Returns OK or error.

Description

cropRectLeft, cropRectBottom, cropRectWidth, cropRectHeight indicate the bounding rectangle of the screen area to be captured in pixels.

Screen input captures the entire area of the display with which it is associated. To limit the capture rectangle to a subsection of the screen, set the cropRect property, which defines a smaller section of the screen in the screen's coordinate system. The origin (0,0) is the bottom-left corner of the screen.

This function is not available for iOS as AVFoundation framework on iOS has no screen input class.

See also

- 41.17 AVRecorder.Init

1108

41.26.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.4 - Über 5400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.4 - More than 5400 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.4pr1](#)

Created 17th July 2018, last changed 8th January 2019.

41.27 AVRecorder.SetVideoDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.SetVideoDevice"; AVSession; Device)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Device

The device name, ID or index.

0

Result Returns OK or error.

Description

Examples

Sets to use first video device:

```
Set Variable [ $r; Value:MBS("AVRecorder.SetVideoDevice"; AVRecorder::Session; 0) ]
```

Use video device with name "FaceTime HD Camera":

```
Set Variable [ $r; Value:MBS("AVRecorder.SetVideoDevice"; AVRecorder::Session; "FaceTime HD Camera") ]
```

See also

- [41.5 AVRecorder.CaptureStillPhoto](#) 1095
- [41.10 AVRecorder.GetAudioDevice](#) 1101
- [41.14 AVRecorder.GetVideoDevice](#) 1105
- [41.17 AVRecorder.Init](#) 1108
- [41.22 AVRecorder.SetAudioDevice](#) 1115
- [41.28 AVRecorder.SetVideoMirrored](#) 1122
- [41.36 AVRecorder.VideoDeviceInfo](#) 1132

Example Databases

- [AVRecorder/AVRecorder](#)

Created 9th February 2016, last changed 19th February 2016.

41.28 AVRecorder.SetVideoMirrored

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	7.4	Yes	No	No	No	Yes

MBS("AVRecorder.SetVideoMirrored"; AVSession; Mode)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Mode

The new mode. Pass 1 to mirror or 0 to not mirror.

0

Result Returns OK or error.

Description

Examples

Turn on mirroring:

```
# disable auto mirror
```

```
Set Variable [ $r ; Value: MBS( "AVRecorder.SetAutomaticallyAdjustsVideoMirroring"; $AVSession; 0 ) ]
```

```
# enable mirror manually
```

```
Set Variable [ $r ; Value: MBS( "AVRecorder.SetVideoMirrored"; $AVSession; 1 ) ]
```

See also

- 41.15 AVRecorder.GetVideoMirrored 1106
- 41.17 AVRecorder.Init 1108
- 41.23 AVRecorder.SetAutomaticallyAdjustsVideoMirroring 1116
- 41.27 AVRecorder.SetVideoDevice 1121

41.28.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)

Created 15th August 2017, last changed 21st August 2017.

41.29 AVRecorder.ShowPropertyDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	9.1	No	Yes	No	No	No

MBS("AVRecorder.ShowPropertyDialog"; AVSession; Object { ; WindowRef; X; Y })

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Object

Which object to ask for the dialog. Can be audioDevice, videodevice, encoder, VideoStreamConfig, AudioStreamConfig.

"audioDevice"

WindowRef

Optional

Parent window for dialog. Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

X

Optional

X position relative to parent window.

Y

Optional

Y position relative to parent window.

Result Returns OK or error.

Description

You can use this function to show standard dialog for video device, audio device, encoder, stream configuration and others. Not all dialogs are supported.

Examples

Show audio properties dialog:

```
MBS( "AVRecorder.ShowPropertyDialog"; AVRecorder::Session; "audioDevice" )
```

Show video properties dialog:

```
MBS( "AVRecorder.ShowPropertyDialog"; AVRecorder::Session; "videoDevice" )
```

Show video stream property dialog:

```
MBS( "AVRecorder.ShowPropertyDialog"; AVRecorder::Session; "VideoStreamConfig")
```

Show encoder options:

```
MBS( "AVRecorder.ShowPropertyDialog"; AVRecorder::Session; "Encoder")
```

See also

- [41.17 AVRecorder.Init](#) 1108
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

41.29.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 24th February 2019, last changed 24th February 2019.

41.30 AVRecorder.StartPreview

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.StartPreview"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns OK or error.

Description

Examples

Start preview:

```
Set Variable [ $r; Value:MBS("AVRecorder.AddPreviewToWindow"; $Session; Get(WindowName); 50; 200; 320; 240) ]
```

```
Set Variable [ $r; Value:MBS("AVRecorder.StartPreview"; $Session) ]
```

See also

- [41.1 AVRecorder.AddPreviewToWindow](#) 1089
- [41.5 AVRecorder.CaptureStillPhoto](#) 1095
- [41.6 AVRecorder.ClosePreview](#) 1097
- [41.17 AVRecorder.Init](#) 1108

Example Databases

- [AVRecorder/AVRecorder](#)

41.30.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr7](#)

Created 18th February 2016, last changed 19th February 2016.

41.31 AVRecorder.StartQRCodeDetection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	8.4	Yes	No	No	No	Yes

MBS("AVRecorder.StartQRCodeDetection"; AVSession { ; Filename; ScriptName })

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.
\$AVSession

Filename

Optional

The database file name where the script is located.
"test.fmp12"

ScriptName

Optional

The script to trigger if a barcode was detected.
"MyScript"

Result Returns OK or error.

Description

Optionally, we can trigger script when a new barcode is detected.
Parameter to the script is the session ID for the recording.

If you need different detection, you can always get current frame with AVRecorder.CaptureStillPhoto and pass it to OCR.SetImage for text recognition or Barcode.Detect to find different barcodes.

Examples

Start QRCode recognition:

```
Set Variable [ $r ; Value: MBS("AVRecorder.StartQRCodeDetection"; AVRecorder::Session; Get(Filename); "GotBarcode") ]
```

See also

- 41.5 AVRecorder.CaptureStillPhoto 1095
- 41.17 AVRecorder.Init 1108
- 41.33 AVRecorder.StopQRCodeDetection 1129
- 43.1 Barcode.Detect 1137
- 120.14 OCR.SetImage 6125

41.31.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)

Created 29th August 2018, last changed 30th August 2018.

41.32 AVRecorder.StartRecording

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.StartRecording"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns OK or error.

Description

Please call AVRecorder.SetFilePath before to define where to put file.

Examples

Start Recording:

```
Set Variable [ $r; Value:MBS("AVRecorder.SetFilePath"; AVRecorder::Session; AVRecorder::FilePath) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
Exit Script [ ]
End If
Set Variable [ $r; Value:MBS("AVRecorder.StartRecording"; AVRecorder::Session) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
Exit Script [ ]
End If
```

See also

- 41.17 AVRecorder.Init 1108
- 41.18 AVRecorder.IsRecording 1111
- 41.24 AVRecorder.SetEncoder 1117
- 41.25 AVRecorder.SetFilePath 1118
- 41.34 AVRecorder.StopRecording 1130
- 124.6 IsError 6266

Example Databases

- [AVRecorder/AVRecorder](#)

Created 9th February 2016, last changed 19th February 2016.

41.33 AVRecorder.StopQRCodeDetection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	8.4	Yes	No	No	No	Yes

MBS("AVRecorder.StopQRCodeDetection"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns OK or error.

Description

See also

- [41.17 AVRecorder.Init](#) 1108
- [41.31 AVRecorder.StartQRCodeDetection](#) 1126

41.33.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)

Created 29th August 2018, last changed 30th August 2018.

41.34 AVRecorder.StopRecording

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.StopRecording"; AVSession)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns OK or error.

Description

Currently on Mac the preview will continue (if enabled) and you can record again.

On Windows it looks like you can only tear down session.

Examples

Stops recording:

```
Set Variable [ $r; Value:MBS("AVRecorder.StopRecording"; $Session) ]
```

See also

- [41.17 AVRecorder.Init](#) 1108
- [41.18 AVRecorder.IsRecording](#) 1111
- [41.32 AVRecorder.StartRecording](#) 1128

Example Databases

- [AVRecorder/AVRecorder](#)

Created 9th February 2016, last changed 19th February 2016.

41.35 AVRecorder.VideoDeviceCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.VideoDeviceCount"; AVSession)

Parameters**AVSession**

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Result Returns number or error.

Description**See also**

- 41.2 AVRecorder.AudioDeviceCount 1091
- 41.17 AVRecorder.Init 1108
- 41.36 AVRecorder.VideoDeviceInfo 1132

Example Databases

- [AVRecorder/AVRecorder Devices](#)

Created 18th February 2016, last changed 19th February 2016.

41.36 AVRecorder.VideoDeviceInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
41 AVRecorder	6.1	Yes	Yes	No	No	Yes

MBS("AVRecorder.VideoDeviceInfo"; AVSession; Index; Selector)

Parameters

AVSession

The ID for the AVRecorder session as returned by AVRecorder.Init.

\$AVSession

Index

The index of the device from 0 to AVRecorder.VideoDeviceCount-1 or the name or ID of the device.

0

Selector

Which value to return. Can be ID, Name, Description, Index. On Mac can also be manufacturer, modelID, transportType, connected, inUseByAnotherApplication or suspended.

"Name"

Result Returns value or error.

Description

Examples

Enumerate video devices:

```
# list video devices
Set Variable [ $count; Value:MBS("AVRecorder.VideoDeviceCount"; $recorder) ]
If [ $count >0 ]
Set Variable [ $index; Value:0 ]
Loop
# next
New Record/Request
Set Field [ AVRecorder Devices::Index; $index ]
Set Field [ AVRecorder Devices::ID; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "ID") ]
Set Field [ AVRecorder Devices::Name; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "Name") ]
Set Field [ AVRecorder Devices::Description; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "Description") ]
If [ MBS("SystemInfo.isMacOSX") ]
Set Field [ AVRecorder Devices::Manufacturer; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "manufacturer") ]
Set Field [ AVRecorder Devices::ModelID; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "modelID") ]
Set Field [ AVRecorder Devices::TransportType; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "transportType") ]
Set Field [ AVRecorder Devices::Connected; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "connected") ]
```



```
Set Field [ AVRecorder Devices::inUseByAnotherApplication; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "inUseByAnotherApplication") ]
Set Field [ AVRecorder Devices::suspended; MBS("AVRecorder.VideoDeviceInfo"; $recorder; $index; "suspended") ]
End If
Set Field [ AVRecorder Devices::Type; "Video" ]
Commit Records/Requests [ ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $count = $index ]
End Loop
End If
```

See also

- 41.3 AVRecorder.AudioDeviceInfo 1092
- 41.14 AVRecorder.GetVideoDevice 1105
- 41.17 AVRecorder.Init 1108
- 41.27 AVRecorder.SetVideoDevice 1121
- 41.35 AVRecorder.VideoDeviceCount 1131
- 161.52 SystemInfo.isMacOSX 7706

Example Databases

- [AVRecorder/AVRecorder Devices](#)

Created 18th February 2016, last changed 19th February 2016.

Chapter 42

Backdrop

Show a backdrop behind FileMaker window.

42.1 Backdrop.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
42 Backdrop	2.1	Yes	No	No	No	No

MBS("Backdrop.Close")

Description

Examples

Close backdrop:

MBS("Backdrop.Close")

Example Databases

- [Mac only/Kiosk functions/Backdrop Window](#)

Created 18th August 2014, last changed 18th August 2014.

42.2 Backdrop.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
42 Backdrop	2.1	Yes	No	No	No	No

```
MBS( "Backdrop.Install"; Color { ; HideDesktop } )
```

Parameters

Color

The color in RGB separated by comma. Range of color components is from 0 (no color) to 255 (maximum color).

255,0,0

HideDesktop

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

Whether to move window to hide all icons on desktop. Default 0.

0

Description

With 8.2 plugin, you can pass 1 for HideDesktop parameter to move the window just above the desktop icons, so all windows of all apps can be in front of that shield window.

Examples

Install backdrop:

```
MBS("Backdrop.Install"; "255,127,127")
```

Example Databases

- [Mac only/Kiosk functions/Backdrop Window](#)

42.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 18th August 2014, last changed 9th March 2018.

Chapter 43

Barcode

Functions for generating and scanning barcodes.

Generate bar code as image, image file or write on PDF page.

43.1 Barcode.Detect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.Detect"; Image; type { ; ReturnType; TryRotation; Encoding })

Parameters

Image

The image to scan for a barcode. Can be container with image or an Image reference number from our GraphicsMagick image functions.

\$image

type

Which scanner to use. Supported types: Aztec, Codabar, Code39, Code93, Code128, DataMatrix, EAN8, EAN13, ITF, PDF417, QRCode, UPCA and UPCE. Pass All to scan for all types.

"QRCode"

ReturnType

Optional

A boolean to return the type as prefix. Pass 1 if you need prefix. Default is 0 for no prefix.

1

TryRotation

Optional

A boolean value. If 1, the plugin will rotate the image 90° to find vertical barcode. Default is 0.

0

Encoding

Optional

The text encoding for text parameter. Default is native.

UTF8

Result Returns barcode content text or error.**Description**

We use zxing library internally and can only detect what this library handles.

Internally all images are converted to grayscale. For you getting image, it's very important to get a sharp image.

You may need to rotate or crop the image before sending into this method.

Leave some white space around as some decoders don't want to start with black frame on the edge. The barcodes generated with Barcode.Generate often don't read as they have too little resolution (e.g. scale up by 3x) and no white border around (e.g. add 5 pixels).

If special characters or umlauts are not recognized correct, you may have a wrong encoding. Most modern apps use UTF8 for encoding.

For MacOS and iOS, you can also detect barcodes with CoreImage.Detect function.

Examples

Query a QRCode:

```
MBS( "Barcode.Detect"; Images::Image; "QRCode" )
```

See also

- 41.5 AVRecorder.CaptureStillPhoto 1095
- 41.31 AVRecorder.StartQRCodeDetection 1126
- 43.4 Barcode.Generate 1143
- 57.1 CoreImage.Detect 1667
- 179.2 Vision.DetectBarcode 8275

Example Databases

- [Barcode/Barcode Detection](#)

43.1.1 Blog Entries

- [Live barcode reading for FileMaker on MacOS and iOS](#)

- [MBS FileMaker Plugin, version 8.2pr9](#)
- [MBS FileMaker Plugin, version 8.0pr8](#)
- [MBS FileMaker Plugin, version 6.3pr5](#)
- [MBS FileMaker Plugin, version 5.4pr4](#)
- [MBS Filemaker Plugin, version 3.5pr6](#)

43.1.2 FileMaker Magazin

- [Ausgabe 3/2019, Seite 37](#)
- [Ausgabe 5/2018, Seite 29](#)

Created 18th August 2014, last changed 25th July 2018.

43.2 Barcode.DrawBarcode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.DrawBarcode"; PDF; symbology; Text; x; y { ; width; height; Encoding })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

symbology

The symbology to use.

"EANX"

Text

The text to encode in the barcode.

"12345"

x

The x coordinate.

100

y

The y coordinate.

100

width

Optional

The desired width of the barcode in points. Zero gives the auto size.

0

height

Optional

The desired height of the barcode in points. Zero gives the auto size.

0

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

UTF8

Result Returns OK or error.

Description

The plugin uses zint library internally, so we include the zint manual in documentation.

Possible symbologies: CODE11, C25MATRIX, C25INTER, C25IATA, C25LOGIC, C25IND, CODE39, EX-CODE39, EANX, EAN128, CODABAR, CODE128, DPLEIT, DPIDENT, CODE16K, CODE49, CODE93,

FLAT, RSS14, RSSLTD, RSSEXP, TELEPEN, UPCA, UPCE, POSTNET, MSIPLESSEY, FIM, LOGMARS, PHARMA, PZN, PHARMA_TWO, PDF417, PDF417TRUNC, MAXICODE, QRCODE, CODE128B, AUSPOST, AUSREPLY, AUSROUTE, AUSREDIRECT, ISBNX, RM4SCC, DATAMATRIX, EAN14, CODABLOCKF, NVE18, JAPANPOST, KOREAPOST, RSS14STACK, RSS14STACKOMNI, RSSEXPSTACK, PLANET, MICROPDF417, ONECODE, PLESSEY, TELEPEN_NUM, ITF14, KIX, AZTEC, DAFT, MICROQR, HIBC128, HIBC39, HIBCDM, HIBCQR, HIBCPDF, HIBCMICPDF, HIBCLOCKF, HIBCAZTEC, AZRUNE, CODE32, EANXCC, EAN128CC, RSS14CC, RSSLTDCC, RSSEXPCC, UPCACC, UPCECC, RSS14STACKCC, RSS14OMNICC, RSSEXPSTACKCC, CHANNEL, CODEONE, GRIDMATRIX, EANXCHK, UPCACHK, UPCECHK, DOTCODE, HANXIN, VIN, MAILMARK, UPNQR and ULTRA..

For the size, be aware that some types like UPC codes have fixed size depending on content. Please use `DynaPDF.SetPageCoords` to set the coordinate system to `TopDown` before drawing barcodes.

See also `Barcode.SetOptions` for further options.

See also

- 43.12 `Barcode.SetOption` 1159
- 43.13 `Barcode.SetOptions` 1161
- 70.290 `DynaPDF.New` 2981
- 70.411 `DynaPDF.SetPageCoords` 3199

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [Barcode/QRCode PDF](#)

43.2.1 Blog Entries

- [MBS Filemaker Plugin, version 3.5pr9](#)

43.2.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 28

Created 18th August 2014, last changed 30th August 2019.

43.3 Barcode.EANChecksum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.EANChecksum"; Text)

Parameters

Text

The text with the numbers for the barcode. Do use text and not number, where starting zeros would be skipped.

"12345"

Result The checksum as text.

Description

For EAN 8, please use Barcode.UPCChecksum function.

Examples

Calculates check for EAN:

```
// returns 3 for 12 digit EAN:
MBS( "Barcode.EANChecksum"; "425098421626" )
```

Example result: 3

Calculates EAN checksum for ISBN 978-3-16-148410-0:

```
MBS( "Barcode.EANChecksum"; "978-3-16-148410")
```

Example result: "0"

See also

- [43.9 Barcode.ISBNChecksum](#) 1154
- [43.15 Barcode.UPCChecksum](#) 1166

43.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)
- [MBS FileMaker Plugin, version 5.0pr9](#)

Created 26th January 2015, last changed 5th September 2019.

43.4 Barcode.Generate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.Generate"; symbology; Text { ; width; height; rotation; scale; Transparent; ShowText; Encoding })

Parameters

symbology

The symbology to use. e.g. EANX for EAN-13. Another possibility is to lookup the symbology code in the zint manual and pass the number here. EANX is 13 for example.

"EANX"

Text

The text to encode in the barcode.

"12345"

width

Optional

The desired width of the barcode in pixels. Zero gives the auto size.

0

height

Optional

The desired height of the barcode in pixels. Zero gives the auto size.

0

rotation

Optional

The rotation. Can be 0, 90, 180 or 270.

0

scale

Optional

The scale of the target image. Please use at least 4 for printing the barcode.

1.0

Transparent

Optional

0: black on white 1: black on transparent background 2: white on black (new in 7.2) 3: white on transparent background (new in 7.2)

1

ShowText

Optional

Whether to show text. Use 0 to hide text or 1 to show text.

1

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.
UTF8

Result Returns GImage reference or error.

Description

The plugin uses zint library internally, so we include the zint manual in documentation.

Possible symbologies: CODE11, C25MATRIX, C25INTER, C25IATA, C25LOGIC, C25IND, CODE39, EX-CODE39, EAN8, EANX, EAN128, CODABAR, CODE128, DPLEIT, DPIDENT, CODE16K, CODE49, CODE93, FLAT, RSS14, RSSLTD, RSSEXP, TELEPEN, UPCA, UPCE, POSTNET, MSIPLESSEY, FIM, LOGMARS, PHARMA, PZN, PHARMA_TWO, PDF417, PDF417TRUNC, MAXICODE, QRCODE, CODE128B, AUSPOST, AUSREPLY, AUSROUTE, AUSREDIRECT, ISBNX, RM4SCC, DATAMATRIX, EAN14, CODABLOCKF, NVE18, JAPANPOST, KOREAPOST, RSS14STACK, RSS14STACKOMNI, RSSEXPSTACK, PLANET, MICROPDF417, ONECODE, PLESSEY, TELEPEN_NUM, ITF14, KIX, AZTEC, DAFT, MICRQR, HIBC128, HIBC39, HIBCDM, HIBCQR, HIBCPDF, HIBCMICPDF, HIBCLOCKF, HIBCAZTEC, AZRUNE, CODE32, EANXCC, EAN128CC, RSS14CC, RSSLTDCC, RSSEXPCC, UPCACC, UPCECC, RSS14STACKCC, RSS14OMNICC, RSSEXPSTACKCC, CHANNEL, CODEONE, GRIDMATRIX, EANXCHK, UPCACHK, UPCECHK, DOTCODE, HANXIN, VIN, MAILMARK, UPNQR and ULTRA..

Please use EANX for EAN-2, EAN-5, EAN-8 and EAN-13. You may need to leave away the check digit for some barcodes. EAN-13 can be created with 12 or 13 digits, but for EAN-8, only pas 7 digits.

This function returns an image reference for our GImage functions. There you can either work on the image or simply store it in a container. On the end please free the image with GImage.Release function. For the size, be aware that some types like UPC codes have fixed size depending on content.

See also Barcode.SetOptions for further options.

For MicroQR barcodes, you can use ECC Level 1 to 3, where 1 is default. Length is limited to only 35 characters minus space for ECC.

Examples

Creates UPCA barcode:

```
MBS( "Barcode.Generate"; "UPCA"; "72527270270")
```

Create ISDN 9780271016368 barcode with EAN:

```
MBS( "Barcode.Generate"; "EANX"; "978027101636")
```

Make a barcode and store it as PNG in a container:

```
Set Variable [ $image; Value:MBS( "Barcode.Generate"; "UPCA"; "72527270270") ]
```

```
If [ MBS("Ierror") = 0 ]
```

```
Set Field [ MyTable::BarCodeContainer; MBS( "GImage.WriteToPNGContainer"; $image; "barcode.png"
```

```

) ]
Set Variable [ $r; Value:MBS("GImage.Release"; $image) ]
Else
Set Field [ MyTable::BarCodeContainer; "" ]
End If

```

Generate EAN 128

```
MBS( "Barcode.Generate"; "EAN128"; " [ 00 ] 993262210000005384")
```

Generate UPCA barcode:

```

Set Variable [ $Barcode ; Value: MBS( "Barcode.Generate"; "UPCA"; "76837100000"; 0; 0; 0; 1; 1; 1;
"UTF8" ) ]
If [ MBS( "IsError" ) = 0 ]
Set Field [ test::Barcode ; MBS("GImage.WriteToPNGContainer"; $Barcode; "768371000004.png") ]
Set Variable [ $r ; Value: MBS("GImage.Release"; $Barcode) ]
Else
Set Field [ test::Barcode ; "" ]
End If

```

Create a barcode and change color to red:

```

Set Field [ Barcode Generation::Image; "" ]
Set Variable [ $img; Value:MBS("Barcode.Generate"; Barcode Generation::Symbology; Barcode Genera-
tion::Text) ]
If [ GetAsNumber($img) >0 ]
Set Variable [ $r; Value:MBS("GImage.SetType"; $img; 7) ]
Set Variable [ $r; Value:MBS( "GImage.ReplaceColor"; $img; "black"; "red"; 3) ]
Set Field [ Barcode Generation::Image; MBS( "GImage.WriteToPNGContainer"; $img; "barcode.png") ]
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
End If

```

Create a data matrix barcode with size 10 and return as container:

```

Let ( [
// set options for Size 10 (32x32) square for data matrix
r = MBS("Barcode.SetOptions"; 0; 10; 100);
// create a data matrix barcode
p = MBS("Barcode.Generate"; "DATAMATRIX"; "12818670,3,1" ; 0; 0; 0; 4);
// success?
e1 = MBS("IsError");
// save as PNG
image = MBS( "GImage.WriteToPNGContainer"; p; "barcode.png" );
// success?
e2 = MBS("IsError");
// free image from memory

```

```
r = MBS("GMImage.Release"; p)
// return container if no error
]; If(e1 = 0 and e2 = 0; image; "") )
```

Generate Maxicode with mode=4:

```
Set Field [ Barcode Generation::Image; "" ]
Set Variable [ $img; Value:MBS("Barcode.SetOptions"; 4) ]
Set Variable [ $img; Value:MBS("Barcode.Generate"; "MAXICODE"; "A MaxiCode Message in Mode 4") ]
If [ MBS("IsError") = 0 ]
Set Field [ Barcode Generation::Image; MBS( "GMImage.WriteToPNGContainer"; $img; "barcode.png") ]
Set Variable [ $r; Value:MBS( "GMImage.Release"; $img ) ]
End If
```

Example for Maxicode creation, e.g. for UPS:

```
Set Variable [ $p ; Value: "LS97TF 826004" // primary text ]
Set Variable [ $t ; Value: " [ ]>{ RS } 01 { GS } 961Z42015596 { GS } UPSN { GS } 123W45 { GS } 339
{ GS } { GS } 1/1 { GS } 1 { GS } N { GS } { GS } LEEDS { GS } { RS } { EOT } " ]
Set Variable [ $t ; Value: Substitute($t; " { EOT } "; Char(4)) ]
Set Variable [ $t ; Value: Substitute($t; " { RS } "; Char(30)) ]
Set Variable [ $t ; Value: Substitute($t; " { GS } "; Char(29)) ]
Set Variable [ $r ; Value: MBS("Barcode.SetOptions"; 3) ]
// Set Variable [ $r ; Value: MBS( "Barcode.SetInputMode"; "data" ) ]
Set Variable [ $r ; Value: MBS( "Barcode.SetInputMode"; "unicode" ) ]
Set Variable [ $r ; Value: MBS("Barcode.SetPrimary"; $p) ]
Set Variable [ $img ; Value: MBS("Barcode.Generate"; "maxicode"; $t) ]
Set Field [ Barcode Generation::Image ; MBS( "GMImage.WriteToPNGContainer"; $img ) ]
Set Variable [ $r ; Value: MBS("GMImage.Release"; $img) ]
```

Create barcode and crop it:

```
Set Field [ Barcode Generation::Image ; "" ]
Set Variable [ $img ; Value: MBS("Barcode.Generate"; Barcode Generation::Symbology; Barcode Genera-
tion::Text) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $ImageHeight ; Value: MBS("GMImage.GetHeight"; $img) ]
Set Variable [ $ImageWidth ; Value: MBS("GMImage.GetWidth"; $img) ]
# calculate the crop rectangle
Set Variable [ $w ; Value: $ImageWidth ]
Set Variable [ $h ; Value: $ImageHeight ]
Set Variable [ $x ; Value: 0 ]
Set Variable [ $y ; Value: $ImageHeight - 50 ]
# crop
Set Variable [ $r ; Value: MBS("GMImage.Crop"; $img; $w & "x" & $h & "+" & $x & "+" & $y) ]
Set Field [ Barcode Generation::Image ; MBS( "GMImage.WriteToPNGContainer"; $img; "barcode.png") ]
Set Variable [ $r ; Value: MBS( "GMImage.Destroy"; $img ) ]
```

End If

Create barcode and cut away top half to get wider EAN codes:

```
Set Field [ Barcode Generation::Image ; "" ]
Set Variable [ $img ; Value: MBS( "Barcode.Generate"; /* Generates a barcode. */ Barcode Generation::Symbology; /* The symbology to use. e.g. EANX for EAN-13. Another possibility is to lookup the symbology code in the zint manual and pass the number here. EANX is 13 for example.e.g.... ]
If [ MBS("IsError") = 0 ]
# crop to top half
Set Variable [ $h ; Value: MBS("GMIImage.GetHeight"; $img) ]
Set Variable [ $w ; Value: MBS("GMIImage.GetWidth"; $img) ]
Set Variable [ $r ; Value: MBS("GMIImage.Crop"; $img; $w & "x" & ($h/2) & "+0+" & ($h/2)) ]
Set Field [ Barcode Generation::Image ; MBS( "GMIImage.WriteToPNGContainer"; $img; "barcode.png") ]
Set Variable [ $r ; Value: MBS( "GMIImage.Destroy"; $img ) ]
End If
```

Create Code39 barcode in Let statement:

```
Let ( [
// create a Code39 barcode
p = MBS("Barcode.Generate"; "CODE39"; $Stock ; 160 ; 25 ; 0 ; 2 ; 1 ; 0);
// success?
e1 = MBS("IsError");
// save as PNG
image = MBS( "GMIImage.WriteToPNGContainer"; p; "barcode.png" );
// success?
e2 = MBS("IsError");
// free image from memory
r = MBS("GMIImage.Release"; p)
// return container if no error
]; If(e1 = 0 and e2 = 0; image; "" )
```

See also

- 43.1 Barcode.Detect 1137
- 43.12 Barcode.SetOption 1159
- 43.13 Barcode.SetOptions 1161
- 43.14 Barcode.SetPrimary 1164
- 85.49 GMIImage.Crop 4405
- 85.123 GMIImage.GetHeight 4501
- 85.214 GMIImage.Release 4612
- 85.217 GMIImage.ReplaceColor 4616

- 85.296 GImage.SetType 4718
- 124.6 IsError 6266

Example Databases

- [Barcode/Barcode Generation](#)
- [Barcode/Swiss QR-Code for invoices ISO 20022](#)

43.4.1 Blog Entries

- [QR Codes for Invoices in Switzerland](#)
- [MBS FileMaker Plugin, version 7.4pr1](#)
- [MBS FileMaker Plugin, version 7.2pr5](#)
- [MBS FileMaker Plugin 3.5 for OS X/Windows - More than 2100 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 3.5pr7](#)
- [MBS Filemaker Plugin, version 3.5pr5](#)

43.4.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 29](#)
- [Ausgabe 5/2018, Seite 27](#)
- [Ausgabe 5/2018, Seite 26](#)

Created 18th August 2014, last changed 8th February 2020.

43.5 Barcode.GenerateJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	9.4	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.GenerateJSON"; JSON)

Parameters

JSON

The JSON block with all options.

```
{ "symbology": "QRCode", "Text": "Hello World", "Scale": 4 }
```

Result Returns GImage reference or error.

Description

All parameters come as values in JSON block and most are optional.

Key	Value	Example
Symbology	Symbol to use. Can be number or text name.	QRCode
Text	Human readable text, which usually consists of input data plus one more check digit.	"Hello World"
Transparent	Transparency mode: 0: black on white, 1: black on transparent background, 2: white on black, 3: white on transparent background	0
Rotation	Rotation angle to use. Multiply of 90°.	0
ShowText	Whether to show text. Pass 0 to hide text.	1
WhitespaceWidth	Whitespace width.	5
BorderWidth	Border width.	5
OutputOptions	Set various output file options as number.	0
Scale	Scale factor for adjusting size of image. Usually 4 or bigger for printing in high resolution.	4
Option1	Symbol specific options.	0
Option2	Symbol specific options.	0
Option3	Symbol specific options.	0
InputMode	Set encoding of input data. Pass 0 for data, 1 for unicode.	1
ECI	Extended Channel Interpretation mode.	3
DotSize	Size of dots used in dotted mode.	1.25
Primary	Primary message data for more complex symbols. ""	
ForegroundColor	Foreground (ink) colour as RGB hexadecimal string. Must be 6 characters.	"ff0000"
BackgroundColor	Background (paper) colour as RGB hexadecimal string. Must be 6 characters.	"0000ff"
OutputFile	Contains the name of the file to output a resulting barcode symbol to. Must end in .png, .gif, .eps, .pcx, .svg or .txt.	"C:\test.png"

Possible symbologies: CODE11, C25MATRIX, C25INTER, C25IATA, C25LOGIC, C25IND, CODE39, EX-CODE39, EAN8, EANX, EAN128, CODABAR, CODE128, DPLEIT, DPIDENT, CODE16K, CODE49, CODE93, FLAT, RSS14, RSSLTD, RSSEXP, TELEPEN, UPCA, UPCE, POSTNET, MSIPLESSEY, FIM, LOGMARS, PHARMA, PZN, PHARMA_TWO, PDF417, PDF417TRUNC, MAXICODE, QRCODE, CODE128B, AUSPOST, AUSREPLY, AUSROUTE, AUSREDIRECT, ISBNX, RM4SCC, DATAMATRIX, EAN14, CODABLOCKF, NVE18, JAPANPOST, KOREAPOST, RSS14STACK, RSS14STACKOMNI, RSSEXPSTACK, PLANET, MICROPDF417, ONECODE, PLESSEY, TELEPEN_NUM, ITF14, KIX, AZTEC, DAFT, MICRQR, HIBC128, HIBC39, HIBCDM, HIBCPDF, HIBCMICPDF, HIBCLOCKF, HIBCAZTEC, AZRUNE, CODE32, EANXCC, EAN128CC, RSS14CC, RSSLTDCC, RSSEXPCC, UPCACC, UPCECC, RSS14STACKCC, RSS14OMNICC, RSSEXPSTACKCC, CHANNEL, CODEONE, GRIDMATRIX, EANXCHK, UPCACHK, UPCECHK, DOTCODE, HANXIN, VIN, MAILMARK, UPNQR and ULTRA..

Please use EANX for EAN-2, EAN-5, EAN-8 and EAN-13. You may need to leave away the check digit for some barcodes. EAN-13 can be created with 12 or 13 digits, but for EAN-8, only pas 7 digits.

This function returns an image reference for our GImage functions. There you can either work on the image or simply store it in a container. On the end please free the image with GImage.Release function. For the size, be aware that some types like UPC codes have fixed size depending on content.

For MicroQR barcodes, you can use ECC Level 1 to 3, where 1 is default. Length is limited to only 35 characters minus space for ECC.

Examples

Create barcode based on JSON:

```
Set Field [ Barcode Generation JSON::Image ; "" ]
Set Variable [ $img ; Value: MBS("Barcode.GenerateJSON"; Barcode Generation JSON::JSON) ]
If [ MBS("IsError") = 0 ]
Set Field [ Barcode Generation JSON::Image ; MBS( "GMImage.WriteToPNGContainer"; $img; "barcode.png" ) ]
Set Variable [ $r ; Value: MBS( "GMImage.Destroy"; $img ) ]
Else
Show Custom Dialog [ "Failed to create barcode" ; $img ]
End If
```

See also

- [43.4 Barcode.Generate](#) 1143
- [85.214 GMImage.Release](#) 4612
- [85.340 GMImage.WriteToPNGContainer](#) 4777
- [124.6 IsError](#) 6266

Example Databases

- [Barcode/Barcode Generation JSON](#)

43.5.1 Blog Entries

- [Create Barcodes on Server from FileMaker Go](#)
- [Neue Funktionen des MBS FileMaker Plugin 9.4](#)
- [Neues MBS FileMaker Plugin 9.4](#)
- [MBS FileMaker Plugin 9.4 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.4pr6](#)

Created 5th September 2019, last changed 27th December 2019.

43.6 Barcode.GetInputMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	8.1	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.GetInputMode")

Result Returns current mode or error.

Description

Value can be data, unicode, GS1, Kanji and SJIS. Empty value for default.

See also

- 43.11 Barcode.SetInputMode

1157

43.6.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr5](#)

Created 23th February 2018, last changed 23th February 2018.

43.7 Barcode.GetOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	8.1	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.GetOption"; Index)

Parameters

Index

The index of the option. Can be 1, 2 or 3.

2

Result Returns value or error.

Description

See also

- [43.12 Barcode.SetOption](#) 1159
- [43.13 Barcode.SetOptions](#) 1161

43.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr5](#)

Created 23th February 2018, last changed 23th February 2018.

43.8 Barcode.GetPrimary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	7.1	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.GetPrimary")

Result Returns text or error.

Description

See also

- [43.14 Barcode.SetPrimary](#)

1164

43.8.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr4](#)

Created 1st March 2017, last changed 1st March 2017.

43.9 Barcode.ISBNChecksum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.ISBNChecksum"; Text)

Parameters

Text

The text with the numbers for the barcode. Do use text and not number, where starting zeros would be skipped.

"12345"

Result The checksum as text.

Description

We have a ISBN 10 and ISBN 13 algorithm depending on how many digits you pass.

Please make sure input has always 10 or 13 digits!

Examples

Calculates checksum for ISBN:

// returns 6 for 9 digit ISBN:

```
MBS( "Barcode.ISBNChecksum"; "074755100" )
```

Example result: 6

Calculates checksum for an ISBN 10:

```
MBS( "Barcode.ISBNChecksum"; "0-306-40615-0" )
```

pass any value for the checksum, if you don't know it.

Example result: "2"

Calculate checksum for a ISBN 13:

```
MBS( "Barcode.ISBNChecksum"; "978-0-306-40615-7" )
```

Example result: "7"

See also

- [43.3 Barcode.EANChecksum](#) 1142
- [43.15 Barcode.UPCChecksum](#) 1166

43.9.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)

- MBS FileMaker Plugin, version 5.0pr9

Created 26th January 2015, last changed 5th September 2019.

43.10 Barcode.LibVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	9.3	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.LibVersion")

Result Returns text or error.

Description

Returns e.g. 2.6.3

See also

- 36.5 Archive.LibVersion

950

43.10.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr2](#)

Created 6th June 2019, last changed 6th June 2019.

43.11 Barcode.SetInputMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	8.1	Yes	Yes	Yes	Yes	Yes

```
MBS( "Barcode.SetInputMode"; Mode )
```

Parameters

Mode

The new input mode.

"GS1"

Result Returns OK or error.

Description

Mode can be empty for default.

Values include data, unicode, GS1, Kanji or SJIS.

Examples

Set input mode for ASCII or data:

```
// Uses full ASCII range interpreted as Latin-1 or binary data.
```

```
MBS( "Barcode.SetInputMode"; "Data" )
```

Set input mode for Unicode:

```
// Uses pre-formatted UTF-8 input.
```

```
MBS( "Barcode.SetInputMode"; "Unicode" )
```

Set input mode for GS1:

```
// Encodes GS1 data using FNC1 characters.
```

```
MBS( "Barcode.SetInputMode"; "GS1" )
```

Encode Data Matrix with GS1:

```
Set Field [ Barcode Generation::Image ; "" ]
```

```
Set Variable [ $r ; Value: MBS( "Barcode.SetInputMode"; "GS1" ) ]
```

```
Set Variable [ $img ; Value: MBS("Barcode.Generate"; "DataMatrix"; " [ 01 ] 98898765432106 [ 3202 ] 012345 [ 15 ] 991231" ) ]
```

```
If [ MBS("IsError") = 0 ]
```

```
Set Field [ Barcode Generation::Image ; MBS( "GMImage.WriteToPNGContainer"; $img; "barcode.png" ) ]
```

```
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $img ) ]
```

```
End If
```

See also

- 43.4 Barcode.Generate 1143
- 43.6 Barcode.GetInputMode 1151
- 43.14 Barcode.SetPrimary 1164
- 85.214 GImage.Release 4612
- 85.340 GImage.WriteToPNGContainer 4777
- 124.6 IsError 6266

43.11.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr5](#)

Created 23th February 2018, last changed 21st December 2018.

43.12 Barcode.SetOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	8.1	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.SetOption"; Index; Value)

Parameters

Index

The index of the option. Can be 1, 2 or 3.

2

Value

The new value.

1

Result Returns OK or error.

Description

Index can be 1, 2 or 3.

See Barcode.SetOptions for details.

Examples

Set better ECC level for QRCode:

```
MBS( "Barcode.SetOption"; 1; 3)
```

Set square option for data matrix:

```
MBS( "Barcode.SetOption"; 3; 100 )
```

See also

- 43.2 Barcode.DrawBarcode 1140
- 43.4 Barcode.Generate 1143
- 43.7 Barcode.GetOption 1152
- 43.13 Barcode.SetOptions 1161
- 43.14 Barcode.SetPrimary 1164
- 43.16 Barcode.WriteFile 1167

43.12.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr5](#)

43.12.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 27

Created 23th February 2018, last changed 22nd February 2020.

43.13 Barcode.SetOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.SetOptions" { ; Option1; Option2; Option3 })

Parameters**Option1**

Optional

The first option.

1

Option2

Optional

The second option.

1

Option3

Optional

The third option.

1

Result Returns OK.

Description

Creating a barcode will reset those options to zero for next barcode.

For QRCode:

Option1 is the ECC Level with values from 1 = low, 2 = middle, 3 = better, 4 high. Default is low.

Option2 is version code from 1 to 40. Default is 0 to auto select.

For MicroQR you can use ECC Level 1 to 3 as 4 is not supported.

For Data Matrix:

Option2 size from 1 to 30. 0 is auto. See table in zint manual pdf.

Option3 can be 100 to force square size.

For Code 39:

You can set Option2 to 1 to add module 43 checksum.

For MaxiCode:

Option 1 is the mode.

For PDF 417:

Option 1 is a number between 0 and 8 where the number of codewords used for check information is deter-

mined by $2^{(\text{value} + 1)}$.

Option 2 is the number of columns between 1 and 30.

See also Barcode.DrawBarcode, Barcode.WriteFile and Barcode.Generate.

Examples

Set better ECC level for QRCode:

```
MBS( "Barcode.SetOptions"; 3)
```

Set square option for data matrix:

```
MBS( "Barcode.SetOptions"; 0; 0; 100 )
```

Create QRCode with UTF-8 and size 10:

```
Set Field [ Barcode Generation::Image; "" ]
# Better error correction and size 10
Set Variable [ $r; Value:MBS( "Barcode.SetOptions"; 3; 10 ) ]
# Generate QRCode with UTF-8
Set Variable [ $img; Value:MBS("Barcode.Generate"; "QRCode"; Barcode Generation::Text; 0; 0; 0; 1; 0; 1;
"UTF-8" ) ]
If [ GetAsNumber($img) >0 ]
Set Field [ Barcode Generation::Image; MBS( "GMIImage.WriteToPNGContainer"; $img; "barcode.png" ) ]
Set Variable [ $r; Value:MBS( "GMIImage.Release"; $img ) ]
End If
```

Create a data matrix barcode with size 10 and return as container:

```
Let ( [
// set options for Size 10 (32x32) square for data matrix
r = MBS("Barcode.SetOptions"; 0; 10; 100);
// create a data matrix barcode
p = MBS("Barcode.Generate"; "DATAMATRIX"; "12818670,3,1" ; 0; 0; 0; 4);
// success?
e1 = MBS("IsError");
// save as PNG
image = MBS( "GMIImage.WriteToPNGContainer"; p; "barcode.png" );
// success?
e2 = MBS("IsError");
// free image from memory
r = MBS("GMIImage.Release"; p)
// return container if no error
]; If(e1 = 0 and e2 = 0; image; "" )
```

Create Maxicode with mode 3:

43.13. *BARCODE.SETOPTIONS*

1163

```
Set Variable [ $p ; Value: "196LS97TF826004" // primary text ]
Set Variable [ $t ; Value: "1Z42015596UPSN123W123456/11NLEEDS" // second text ]
Set Variable [ $r ; Value: MBS("Barcode.SetOptions"; 3) ]
Set Variable [ $r ; Value: MBS("Barcode.SetPrimary"; $p) ]
Set Variable [ $img ; Value: MBS("Barcode.Generate"; "maxicode"; $t) ]
```

See also

- 43.2 Barcode.DrawBarcode 1140
- 43.4 Barcode.Generate 1143
- 43.7 Barcode.GetOption 1152
- 43.12 Barcode.SetOption 1159
- 43.14 Barcode.SetPrimary 1164
- 43.16 Barcode.WriteFile 1167
- 85.214 GImage.Release 4612
- 85.340 GImage.WriteToPNGContainer 4777
- 124.6 IsError 6266

Example Databases

- [Barcode/Swiss QR-Code for invoices ISO 20022](#)

43.13.1 Blog Entries

- [QR Codes for Invoices in Switzerland](#)
- [MBS Filemaker Plugin, version 4.3pr4](#)

43.13.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 29
- Ausgabe 5/2018, Seite 27

Created 18th August 2014, last changed 22nd February 2020.

43.14 Barcode.SetPrimary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	7.1	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.SetPrimary"; Text; Encoding)

Parameters

Text

The text to use.

"Hello World"

Encoding

The text encoding for text parameter. Default is UTF-8.

"UTF-8"

Result Returns OK or error.

Description

Needed for some barcodes like MaxiCode.

For Maxicode, length must be 15 characters. Last 3 characters must be service number as 3 digits. And next three characters before that are the country ID with 3 digits.

Examples

Create Maxicode with Primary text:

```
Set Field [ Barcode Generation::Image; "" ]
Set Variable [ $r; Value:MBS("Barcode.SetOptions"; 4) ]
Set Variable [ $r; Value:MBS("Barcode.SetPrimary"; "999999999840012") ]
Set Variable [ $img; Value:MBS("Barcode.Generate"; "MAXICODE"; "Secondary Message Here") ]
Set Variable [ $r; Value:MBS("Barcode.SetPrimary"; "" ) ]
If [ MBS("IsError") = 0 ]
Set Field [ Barcode Generation::Image; MBS( "GMImage.WriteToPNGContainer"; $img; "barcode.png" ) ]
Set Variable [ $r; Value:MBS( "GMImage.Release"; $img ) ]
End If
```

Create maxicode:

```
Set Field [ Barcode Generation::Image ; "" ]
Set Variable [ $img ; Value: MBS("Barcode.SetOptions"; 2) ]
Set Variable [ $img ; Value: MBS("Barcode.SetPrimary"; "999999999840012"; "utf8") ]
Set Variable [ $img ; Value: MBS("Barcode.Generate"; "Maxicode"; "Secondary Message Here") ]
If [ MBS("IsError") = 0 ]
Set Field [ Barcode Generation::Image ; MBS( "GMImage.WriteToPNGContainer"; $img; "barcode.png" ) ]
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $img ) ]
End If
```


Create Maxicode with mode 3:

```
Set Variable [ $p ; Value: "196LS97TF826004" // primary text ]
Set Variable [ $t ; Value: "1Z42015596UPSN123W123456/11NLEEDS" // second text ]
Set Variable [ $r ; Value: MBS("Barcode.SetOptions"; 3) ]
Set Variable [ $r ; Value: MBS("Barcode.SetPrimary"; $p) ]
Set Variable [ $img ; Value: MBS("Barcode.Generate"; "maxicode"; $t) ]
```

Example for Maxicode creation, e.g. for UPS:

```
Set Variable [ $p ; Value: "LS97TF 826004" // primary text ]
Set Variable [ $t ; Value: " [ ]>{ RS } 01 { GS } 961Z42015596 { GS } UPSN { GS } 123W45 { GS } 339
{ GS } { GS } 1/1 { GS } 1 { GS } N { GS } { GS } LEEDS { GS } { RS } { EOT } " ]
Set Variable [ $t ; Value: Substitute($t; " { EOT } "; Char(4)) ]
Set Variable [ $t ; Value: Substitute($t; " { RS } "; Char(30)) ]
Set Variable [ $t ; Value: Substitute($t; " { GS } "; Char(29)) ]
Set Variable [ $r ; Value: MBS("Barcode.SetOptions"; 3) ]
// Set Variable [ $r ; Value: MBS( "Barcode.SetInputMode"; "data" ) ]
Set Variable [ $r ; Value: MBS( "Barcode.SetInputMode"; "unicode" ) ]
Set Variable [ $r ; Value: MBS("Barcode.SetPrimary"; $p) ]
Set Variable [ $img ; Value: MBS("Barcode.Generate"; "maxicode"; $t) ]
Set Field [ Barcode Generation::Image ; MBS( "GMImage.WriteToPNGContainer"; $img ) ]
Set Variable [ $r ; Value: MBS("GMImage.Release"; $img) ]
```

See also

- 43.4 Barcode.Generate 1143
- 43.8 Barcode.GetPrimary 1153
- 43.11 Barcode.SetInputMode 1157
- 43.12 Barcode.SetOption 1159
- 43.13 Barcode.SetOptions 1161
- 85.214 GMImage.Release 4612
- 85.340 GMImage.WriteToPNGContainer 4777
- 124.6 IsError 6266

43.14.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr4](#)
- [MBS FileMaker Plugin, version 7.1pr4](#)

Created 1st March 2017, last changed 21st December 2018.

43.15 Barcode.UPCChecksum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.UPCChecksum"; Text)

Parameters

Text

The text with the numbers for the barcode. Do use text and not number, where starting zeros would be skipped.

"12345"

Result The checksum as text.

Description

Examples

Calculates a checksum:

MBS("Barcode.UPCChecksum"; "12345")

Calculates 7 for the EAN 5901234123457:

MBS("Barcode.UPCChecksum"; "590123412345")

See also

- [43.3 Barcode.EANChecksum](#) 1142
- [43.9 Barcode.ISBNChecksum](#) 1154

Example Databases

- [Barcode/DynaPDF Barcode](#)

43.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)
- [MBS Filemaker Plugin, version 3.5pr9](#)

Created 18th August 2014, last changed 5th September 2019.

43.16 Barcode.WriteFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
43 Barcode	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Barcode.WriteFile"; type; path; symbology; Text { ; width; height; rotation; scale; transparent; ShowText; Encoding })

Parameters

type

Which file type to generate. Can be PNG, TIFF, JPEG, SVG or PS.

"SVG"

path

The file path to use. Currently limited to 255 characters for SVG and PS.

"/tmp/test.svg"

symbology

The symbology to use. e.g. EANX for EAN-13.

"EANX"

Text

The text to encode in the barcode.

"12345"

width

Optional

The desired width of the barcode in pixels. Zero gives the auto size.

0

height

Optional

The desired height of the barcode in pixels. Zero gives the auto size.

0

rotation

Optional

The rotation. Can be 0, 90, 180 or 270.

0

scale

Optional

The scale of the target image. Please use at least 4 for printing the barcode.

1.0

transparent

Optional

Pass 1 to have the white background being transparent.

1

ShowText

Optional

Whether to show text. Use 0 to hide text or 1 to show text.

1

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

UTF8

Result Returns OK or error.

Description

The plugin uses zint library internally, so we include the zint manual in documentation.

Possible symbologies: CODE11, C25MATRIX, C25INTER, C25IATA, C25LOGIC, C25IND, CODE39, EX-CODE39, EANX, EAN128, CODABAR, CODE128, DPLEIT, DPIDENT, CODE16K, CODE49, CODE93, FLAT, RSS14, RSSLTD, RSSEXP, TELEPEN, UPCA, UPCE, POSTNET, MSIPLESSEY, FIM, LOGMARS, PHARMA, PZN, PHARMA_TWO, PDF417, PDF417TRUNC, MAXICODE, QRCODE, CODE128B, AUSPOST, AUSREPLY, AUSROUTE, AUSREDIRECT, ISBNX, RM4SCC, DATAMATRIX, EAN14, CODABLOCKF, NVE18, JAPANPOST, KOREAPOST, RSS14STACK, RSS14STACKOMNI, RSSEXPSTACK, PLANET, MICROPDF417, ONECODE, PLESSEY, TELEPEN_NUM, ITF14, KIX, AZTEC, DAFT, MICROQR, HIBC128, HIBC39, HIBCDM, HIBCQR, HIBCPDF, HIBCMICPDF, HIBCLOCKF, HIBCAZTEC, AZRUNE, CODE32, EANXCC, EAN128CC, RSS14CC, RSSLTDCC, RSSEXPCC, UPCACC, UPCECC, RSS14STACKCC, RSS14OMNICC, RSSEXPSTACKCC, CHANNEL, CODEONE, GRIDMATRIX, EANXCHK, UPCACHK, UPCECHK, DOTCODE, HANXIN, VIN, MAILMARK, UPNQR and ULTRA..

Please use EANX for EAN-8 and EAN-13. You may need to leave away the check digit for some barcodes. For the size, be aware that some types like UPC codes have fixed size depending on content.

See also Barcode.SetOptions for further options.

Examples

Creates UPCA barcode:

```
MBS( "Barcode.WriteFile"; "JPEG"; "/tmp/test.jpg"; "UPCA"; "72527270270")
```

Create ISDN 9780271016368 barcode with EAN:

```
MBS( "Barcode.WriteFile"; "SVG"; "/tmp/test.svg"; "EANX"; "978027101636")
```

Creates extended barcode with plus sign:

```
MBS( "Barcode.WriteFile"; "SVG"; "/tmp/test.svg"; "EANX"; "978027101636+90000")
```

Write JPEG file with EAN 128

```
MBS( "Barcode.WriteFile"; "jpg"; "/tmp/test.jpg"; "EAN128"; " [ 01 ] 98898765432106 [ 3202 ] 012345 [ 15
```

43.16. *BARCODE.WRITEFILE* 1169
] 991231”)

See also

- 43.12 Barcode.SetOption 1159
- 43.13 Barcode.SetOptions 1161

Example Databases

- [Barcode/Barcode Generation](#)

43.16.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr2](#)

Created 18th August 2014, last changed 15th January 2020.

Chapter 44

BinaryFile

Read binary data from a file and write it to a file.

44.1 BinaryFile.Append

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.Append"; FilePath)

Parameters

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac. `"test.txt"`

Result Returns reference number or error.

Description

See also `Text.AppendTextFile`.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Append text to a file:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Append"; "/Users/cs/Desktop/test.txt" ) ]  
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteText"; $fh; "Hello World" ) ]
```

Set Variable [\$r ; Value: MBS("BinaryFile.Close"; \$fh)]

See also

- 44.2 BinaryFile.Close 1173
- 44.6 BinaryFile.Open 1178
- 44.21 BinaryFile.WriteText 1199
- 121.2 Path.FileMakerPathToNativePath 6139
- 164.2 Text.AppendTextFile 7769

Created 12nd June 2017, last changed 12nd June 2017.

44.2 BinaryFile.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.Close"; BinaryFileRef)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Result Returns OK or error.

Description

Releases memory used for the file.

Examples

Create a file and write Hello:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Create"; "/Users/cs/Desktop/test.txt" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteText"; $fh; "Hello World" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- [44.3 BinaryFile.Create](#) 1174
- [44.11 BinaryFile.ReadHex](#) 1184
- [44.12 BinaryFile.ReadInt](#) 1186
- [44.13 BinaryFile.ReadPDF](#) 1187
- [44.15 BinaryFile.Seek](#) 1191
- [44.16 BinaryFile.WriteByte](#) 1192
- [44.17 BinaryFile.WriteContainer](#) 1193
- [44.18 BinaryFile.WriteFloat](#) 1194
- [44.20 BinaryFile.WriteInt](#) 1197
- [44.21 BinaryFile.WriteText](#) 1199

44.2.1 Blog Entries

- [Tip of the day: Split large files into smaller chunks](#)

Created 12nd June 2017, last changed 12nd June 2017.

44.3 BinaryFile.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.Create"; FilePath)

Parameters

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac. `"test.txt"`

Result Returns reference number or error.

Description

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Create a file and write Hello:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Create"; "/Users/cs/Desktop/test.txt" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteText"; $fh; "Hello World" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

Split files into smaller chunks:

```
Set Variable [ $InputPath ; Value: "/Users/cs/Desktop/test.mp4" ]
Set Variable [ $ChunkSize ; Value: 10*1024*1024 ]
#
Set Variable [ $InputStream ; Value: MBS( "BinaryFile.Open"; $InputPath ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to open file." ; $InputStream & $& $InputPath ]
Exit Script [ Text Result: ]
End If
Set Variable [ $InputLength ; Value: MBS( "BinaryFile.Length"; $InputStream ) ]
Set Variable [ $InputPosition ; Value: 0 ]
Set Variable [ $Counter ; Value: 1 ]
Loop
# Read chunk
Set Variable [ $Chunk ; Value: MBS( "BinaryFile.ReadHex"; $InputStream; $ChunkSize ) ]
#
# Write Chunk
Set Variable [ $OutputPath ; Value: $InputPath & "?" & $Counter ]
Set Variable [ $OutputStream ; Value: MBS( "BinaryFile.Create"; $OutputPath ) ]
If [ MBS("IsError") ]
```

44.3. BINARYFILE.CREATE

1175

```
Show Custom Dialog [ "Failed to create file." ; $InputStream & $OutputPath ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $InputStream ) ]
Exit Script [ Text Result: ]
End If
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteHex"; $OutputStream; $Chunk ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $OutputStream ) ]
#
# next
Set Variable [ $InputPosition ; Value: $InputPosition + $ChunkSize ]
Exit Loop If [ $InputPosition >$InputLength ]
Set Variable [ $Counter ; Value: $Counter +1 ]
End Loop
#
# cleanup
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $InputStream ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.5 BinaryFile.Length 1177
- 44.6 BinaryFile.Open 1178
- 44.8 BinaryFile.ReadByte 1181
- 44.11 BinaryFile.ReadHex 1184
- 44.16 BinaryFile.WriteByte 1192
- 44.19 BinaryFile.WriteHex 1195
- 44.20 BinaryFile.WriteInt 1197
- 44.21 BinaryFile.WriteText 1199
- 121.2 Path.FileMakerPathToNativePath 6139

44.3.1 Blog Entries

- [Tip of the day: Split large files into smaller chunks](#)

Created 12nd June 2017, last changed 19th August 2018.

44.4 BinaryFile.EOF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.EOF"; BinaryFileRef)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Result Returns 1, 0 or error.

Description

Returns 1 if we are at the end or 0 if not.

Examples

Try EOF:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/test.txt" ) ]
# Check End Of File usage
Set Variable [ $r ; Value: MBS( "BinaryFile.EOF"; $fh ) ]
# Read a lot of data
Set Variable [ $data ; Value: MBS( "BinaryFile.ReadText"; $fh; 10000000; "Latin1" ) ]
# Check End Of File usage
Set Variable [ $r ; Value: MBS( "BinaryFile.EOF"; $fh ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.6 BinaryFile.Open 1178
- 44.14 BinaryFile.ReadText 1189
- 44.15 BinaryFile.Seek 1191

Created 12nd June 2017, last changed 12nd June 2017.

44.5 BinaryFile.Length

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.Length"; BinaryFileRef)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Result Returns number or error.

Description

Examples

Query length:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/test.txt" ) ]
```

```
Set Variable [ $len ; Value: MBS( "BinaryFile.Length"; $fh ) ]
```

```
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.6 BinaryFile.Open 1178
- 44.7 BinaryFile.Position 1180
- 44.9 BinaryFile.ReadContainer 1182
- 44.13 BinaryFile.ReadPDF 1187
- 44.14 BinaryFile.ReadText 1189
- 44.15 BinaryFile.Seek 1191

44.5.1 Blog Entries

- [Tip of the day: Split large files into smaller chunks](#)

Created 12nd June 2017, last changed 12nd June 2017.

44.6 BinaryFile.Open

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.Open"; FilePath)

Parameters

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac. `"test.txt"`

Result Returns reference number or error.

Description

Examples

Open file:

```
MBS( "BinaryFile.Open"; "/Users/cs/Desktop/test.txt" )
```

Split files into smaller chunks:

```
Set Variable [ $InputPath ; Value: "/Users/cs/Desktop/test.mp4" ]
Set Variable [ $ChunkSize ; Value: 10*1024*1024 ]
#
Set Variable [ $InputStream ; Value: MBS( "BinaryFile.Open"; $inputPath ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to open file." ; $InputStream & $& $InputPath ]
Exit Script [ Text Result: ]
End If
Set Variable [ $InputLength ; Value: MBS( "BinaryFile.Length"; $InputStream ) ]
Set Variable [ $InputPosition ; Value: 0 ]
Set Variable [ $Counter ; Value: 1 ]
Loop
# Read chunk
Set Variable [ $Chunk ; Value: MBS( "BinaryFile.ReadHex"; $InputStream; $ChunkSize ) ]
#
# Write Chunk
Set Variable [ $OutputPath ; Value: $InputPath & "." & $Counter ]
Set Variable [ $OutputStream ; Value: MBS( "BinaryFile.Create"; $OutputPath ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create file." ; $InputStream & $& $OutputPath ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $InputStream ) ]
Exit Script [ Text Result: ]
End If
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteHex"; $OutputStream; $Chunk ) ]
```

44.6. *BINARYFILE.OPEN*

1179

```
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $OutputStream ) ]
#
# next
Set Variable [ $InputPosition ; Value: $InputPosition + $ChunkSize ]
Exit Loop If [ $InputPosition >$InputLength ]
Set Variable [ $Counter ; Value: $Counter +1 ]
End Loop
#
# cleanup
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $InputStream ) ]
```

See also

- 44.1 BinaryFile.Append 1171
- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.7 BinaryFile.Position 1180
- 44.9 BinaryFile.ReadContainer 1182
- 44.11 BinaryFile.ReadHex 1184
- 44.12 BinaryFile.ReadInt 1186
- 44.14 BinaryFile.ReadText 1189
- 44.15 BinaryFile.Seek 1191
- 124.6 IsError 6266

44.6.1 Blog Entries

- [Tip of the day: Split large files into smaller chunks](#)

Created 12nd June 2017, last changed 19th August 2018.

44.7 BinaryFile.Position

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.Position"; BinaryFileRef)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Result Returns number or error.

Description

Examples

Play with position:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "~/Users/cs/Desktop/test.txt" ) ]
# Query length
Set Variable [ $len ; Value: MBS( "BinaryFile.Length"; $fh ) ]
# move current position
Set Variable [ $r ; Value: MBS( "BinaryFile.Seek"; $fh; 6 ) ]
# query current position
Set Variable [ $pos ; Value: MBS( "BinaryFile.Position"; $fh ) ]
# read 5 bytes
Set Variable [ $text ; Value: MBS( "BinaryFile.ReadText"; $fh; 5; "UTF8" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.5 BinaryFile.Length 1177
- 44.6 BinaryFile.Open 1178
- 44.14 BinaryFile.ReadText 1189
- 44.15 BinaryFile.Seek 1191

Created 12nd June 2017, last changed 12nd June 2017.

44.8 BinaryFile.ReadByte

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.ReadByte"; BinaryFileRef)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Result Returns value or error.

Description

Returns empty result if reading fails.

See also BinaryFile.WriteByte for writing.

See also

- 44.3 BinaryFile.Create 1174
- 44.10 BinaryFile.ReadFloat 1183
- 44.11 BinaryFile.ReadHex 1184
- 44.12 BinaryFile.ReadInt 1186
- 44.13 BinaryFile.ReadPDF 1187
- 44.14 BinaryFile.ReadText 1189
- 44.16 BinaryFile.WriteByte 1192

44.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 12nd June 2017, last changed 12nd June 2017.

44.9 BinaryFile.ReadContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.ReadContainer"; BinaryFileRef; ByteCount; Filename)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

ByteCount

The number of Bytes to read.

1000

Filename

File name to use for container value. This is used to detect type of container.

"test.pdf"

Result Returns value or error.

Description

Depending on given file name, you get back a PDF, image, video or data container.

See also BinaryFile.WriteContainer for writing.

Examples

Read a JPEG:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/test.jpg" ) ]
Set Variable [ $len ; Value: MBS("BinaryFile.Length"; $fh) ]
Set Variable [ $image ; Value: MBS( "BinaryFile.ReadContainer"; $fh; $len; "test.jpg" ) ]
Set Field [ test::ContainerField ; $image ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.5 BinaryFile.Length 1177
- 44.6 BinaryFile.Open 1178
- 44.17 BinaryFile.WriteContainer 1193

Created 12nd June 2017, last changed 12nd June 2017.

44.10 BinaryFile.ReadFloat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.ReadFloat"; BinaryFileRef { ; Bits })

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Bits

Optional

The bit width of the value. Pass 32 for a 32-bit floating point number (single) or 64 for a 64-bit floating point number (double). Default is 32.

32

Result Returns value or error.

Description

See also BinaryFile.WriteFloat for writing.

Examples

Read floating point values:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/output.dat" ) ]
Set Variable [ $v1 ; Value: MBS( "BinaryFile.ReadFloat"; $fh; 32) ]
Set Variable [ $v1 ; Value: MBS( "BinaryFile.ReadFloat"; $fh; 64) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.6 BinaryFile.Open 1178
- 44.8 BinaryFile.ReadByte 1181
- 44.11 BinaryFile.ReadHex 1184
- 44.12 BinaryFile.ReadInt 1186
- 44.13 BinaryFile.ReadPDF 1187
- 44.14 BinaryFile.ReadText 1189
- 44.18 BinaryFile.WriteFloat 1194

Created 12nd June 2017, last changed 12nd June 2017.

44.11 BinaryFile.ReadHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.ReadHex"; BinaryFileRef; ByteCount)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

ByteCount

The number of Bytes to read.

1000

Result Returns hex text or error.

Description

The read text may be shorter.

Examples

Read hex encoded data:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/test.txt" ) ]
```

```
Set Variable [ $data ; Value: MBS( "BinaryFile.ReadHex"; $fh; 1000) ]
```

```
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.6 BinaryFile.Open 1178
- 44.8 BinaryFile.ReadByte 1181
- 44.10 BinaryFile.ReadFloat 1183
- 44.12 BinaryFile.ReadInt 1186
- 44.13 BinaryFile.ReadPDF 1187
- 44.14 BinaryFile.ReadText 1189
- 44.19 BinaryFile.WriteHex 1195

44.11.1 **Blog Entries**

- **Tip of the day:** [Split large files into smaller chunks](#)

Created 12nd June 2017, last changed 12nd June 2017.

44.12 BinaryFile.ReadInt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.ReadInt"; BinaryFileRef { ; Bits })

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Bits

Optional

The number of bits to use. Can be 8, 16, 32 or 64 bit. Default is 32 bit.

32

Result Returns value or error.

Description

See also BinaryFile.WriteInt for writing.

Examples

Play with reading integers:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/test.txt" ) ]
Set Variable [ $v1 ; Value: MBS( "BinaryFile.ReadInt"; $fh; 8 ) ]
Set Variable [ $v2 ; Value: MBS( "BinaryFile.ReadInt"; $fh; 16 ) ]
Set Variable [ $v3 ; Value: MBS( "BinaryFile.ReadInt"; $fh; 32 ) ]
Set Variable [ $v4 ; Value: MBS( "BinaryFile.ReadInt"; $fh; 64 ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.6 BinaryFile.Open 1178
- 44.8 BinaryFile.ReadByte 1181
- 44.10 BinaryFile.ReadFloat 1183
- 44.11 BinaryFile.ReadHex 1184
- 44.13 BinaryFile.ReadPDF 1187
- 44.14 BinaryFile.ReadText 1189
- 44.20 BinaryFile.WriteInt 1197

Created 12nd June 2017, last changed 12nd June 2017.

44.13 BinaryFile.ReadPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.ReadPDF"; BinaryFileRef; ByteCount { ; Filename })

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

ByteCount

The number of Bytes to read.

1000

Filename

Optional

Optional file name to use for PDF in container value.

"test.pdf"

Result Returns PDF, empty or error.

Description

This is a special method which actually reads the data and then looks inside the data for a PDF.

So there can be data before and after the PDF, which is ignored.

Returns nothing if no PDF is found.

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

Read some PDF from file:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/Tes0059.pdf" ) ]
Set Variable [ $len ; Value: MBS( "BinaryFile.Length"; $fh ) ]
Set Variable [ $pdf ; Value: MBS( "BinaryFile.ReadPDF"; $fh; $len; "test.pdf" ) ]
Set Field [ test::ContainerField ; $pdf ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.5 BinaryFile.Length 1177
- 44.6 BinaryFile.Open 1178
- 44.8 BinaryFile.ReadByte 1181

- 44.10 BinaryFile.ReadFloat 1183
- 44.11 BinaryFile.ReadHex 1184
- 44.12 BinaryFile.ReadInt 1186
- 44.14 BinaryFile.ReadText 1189

44.13.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)

Created 12nd June 2017, last changed 27th October 2019.

44.14 BinaryFile.ReadText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.ReadText"; BinaryFileRef; ByteCount { ; Encoding })

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

ByteCount

The number of Bytes to read.

1000

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns OK or error.

Description

You have to decide which encoding to use (if not UTF8). We support a few encodings, but we can add more if you need something special. Some characters will be wrong if the encoding is not correct. The read text may be shorter than requested if you hit end of file.

When passing UTF-16 as encoding, we can detect byte order if there is a Byte Order Mark.

See also Text.ReadTextFile and Text.ReadTextFromContainer.

Examples

Read some text:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/test.txt" ) ]
Set Variable [ $len ; Value: MBS("BinaryFile.Length"; $fh) ]
Set Variable [ $text ; Value: MBS( "BinaryFile.ReadText"; $fh; $len; "UTF-8" ) ]
Set Field [ test::ContainerField ; $text ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.4 BinaryFile.EOF 1176

- 44.5 BinaryFile.Length 1177
- 44.8 BinaryFile.ReadByte 1181
- 44.10 BinaryFile.ReadFloat 1183
- 44.11 BinaryFile.ReadHex 1184
- 44.12 BinaryFile.ReadInt 1186
- 44.15 BinaryFile.Seek 1191
- 44.21 BinaryFile.WriteText 1199
- 164.50 Text.ReadTextFromContainer 7847

Created 12nd June 2017, last changed 12nd June 2017.

44.15 BinaryFile.Seek

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.Seek"; BinaryFileRef; Position)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Position

The new position in the file.

123

Result Returns OK or error.

Description

Examples

Play with Seek:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Open"; "/Users/cs/Desktop/test.txt" ) ]
# Query length
Set Variable [ $len ; Value: MBS( "BinaryFile.Length"; $fh ) ]
# move current position
Set Variable [ $r ; Value: MBS( "BinaryFile.Seek"; $fh; 6 ) ]
# query current position
Set Variable [ $pos ; Value: MBS( "BinaryFile.Position"; $fh ) ]
# read 5 bytes
Set Variable [ $text ; Value: MBS( "BinaryFile.ReadText"; $fh; 5; "UTF8" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.4 BinaryFile.EOF 1176
- 44.5 BinaryFile.Length 1177
- 44.6 BinaryFile.Open 1178
- 44.7 BinaryFile.Position 1180
- 44.14 BinaryFile.ReadText 1189

Created 12nd June 2017, last changed 12nd June 2017.

44.16 BinaryFile.WriteByte

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.WriteByte"; BinaryFileRef; Value)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Value

The byte value to write. Range 0 to 255.

123

Result Returns OK or error.

Description

Examples

Write byte:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Create"; "/Users/cs/Desktop/test.txt" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteByte"; $fh; 65) // 65 is letter A for text files ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.8 BinaryFile.ReadByte 1181
- 44.18 BinaryFile.WriteFloat 1194
- 44.19 BinaryFile.WriteHex 1195
- 44.20 BinaryFile.WriteInt 1197
- 44.21 BinaryFile.WriteText 1199

Created 12nd June 2017, last changed 12nd June 2017.

44.17 BinaryFile.WriteContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.WriteContainer"; BinaryFileRef; Container)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Container

The container value to write.

MyTable::MyImage

Result Returns OK or error.

Description

Useful if your file should contain a picture or PDF file.

Examples

Write container to file:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Create"; "/Users/cs/Desktop/output.pdf" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteContainer"; $fh; test::ContainerField) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.9 BinaryFile.ReadContainer 1182
- 53.40 ZipFile.WriteContainer 1520

Created 12nd June 2017, last changed 12nd June 2017.

44.18 BinaryFile.WriteFloat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.WriteFloat"; BinaryFileRef; Value { ; Bits })

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Value

The floating point value.

123.456

Bits

Optional

The bit width of the value. Pass 32 for a 32-bit floating point number (single) or 64 for a 64-bit floating point number (double). Default is 32.

32

Result Returns OK or error.

Description

Examples

Write floating point values:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Create"; "/Users/cs/Desktop/output.dat" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteFloat"; $fh; 123,456; 32 ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteFloat"; $fh; 123,456; 64 ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.10 BinaryFile.ReadFloat 1183
- 44.16 BinaryFile.WriteByte 1192
- 44.19 BinaryFile.WriteHex 1195
- 44.20 BinaryFile.WriteInt 1197
- 44.21 BinaryFile.WriteText 1199

Created 12nd June 2017, last changed 12nd June 2017.

44.19 BinaryFile.WriteHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.WriteHex"; BinaryFileRef; HexText)

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

HexText

The hex encoded data as text.

"48656C6C6F20576F726C64"

Result Returns OK or error.

Description

Examples

Write Hello World to text:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Create"; "/Users/cs/Desktop/test.txt" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteHex"; $fh; "48656C6C6F20576F726C64" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- [44.2 BinaryFile.Close](#) 1173
- [44.3 BinaryFile.Create](#) 1174
- [44.6 BinaryFile.Open](#) 1178
- [44.11 BinaryFile.ReadHex](#) 1184
- [44.16 BinaryFile.WriteByte](#) 1192
- [44.18 BinaryFile.WriteFloat](#) 1194
- [44.20 BinaryFile.WriteInt](#) 1197
- [44.21 BinaryFile.WriteText](#) 1199

44.19.1 Blog Entries

- [More Text Encoding conversion for FileMaker](#)
- [Tip of the day: Split large files into smaller chunks](#)

44.20 BinaryFile.WriteInt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.WriteInt"; BinaryFileRef; Value { ; Bits })

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Value

The value to write.

123

Bits

Optional

The number of bits to use. Can be 8, 16, 32 or 64 bit. Default is 32 bit.

32

Result Returns OK or error.

Description

Examples

Write some integers:

```
Set Variable [ $fh ; Value: MBS( "BinaryFile.Create"; "/Users/cs/Desktop/test.txt" ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteInt"; $fh; 123; 8 ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteInt"; $fh; 12345; 16 ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteInt"; $fh; 123456789; 32 ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.WriteInt"; $fh; 123456789012345; 64 ) ]
Set Variable [ $r ; Value: MBS( "BinaryFile.Close"; $fh ) ]
```

See also

- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.12 BinaryFile.ReadInt 1186
- 44.16 BinaryFile.WriteByte 1192
- 44.18 BinaryFile.WriteFloat 1194
- 44.19 BinaryFile.WriteHex 1195
- 44.21 BinaryFile.WriteText 1199

44.21 BinaryFile.WriteText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
44 BinaryFile	7.3	Yes	Yes	Yes	Yes	Yes

MBS("BinaryFile.WriteText"; BinaryFileRef; Text { ; Encoding })

Parameters

BinaryFileRef

The reference number for the open file.

\$FH

Text

The text to write.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF-8"

Result Returns OK or error.

Description

You have to decide which encoding to use (if not UTF-8). We support a few encodings, but we can add more if you need something special.

Please use Text.ReplaceNewline to define which line endings the file has.

If text encoding doesn't support given characters, they are converted to close match if possible or replaced by question marks.

You can pass UTF-16, UTF-16LE or UTF-16BE for encoding, too.

See also Text.WriteTextFile and Text.WriteToContainer.

Examples

Write Hello:

MBS("BinaryFile.WriteText"; \$fh; "Hello"; "UTF8"

See also

- 44.1 BinaryFile.Append 1171
- 44.2 BinaryFile.Close 1173
- 44.3 BinaryFile.Create 1174
- 44.16 BinaryFile.WriteByte 1192

- 44.18 BinaryFile.WriteFloat 1194
- 44.19 BinaryFile.WriteHex 1195
- 44.20 BinaryFile.WriteInt 1197
- 164.59 Text.ReplaceNewline 7857
- 164.68 Text.WriteTextFile 7871
- 164.69 Text.WriteToContainer 7875

Created 12nd June 2017, last changed 12nd June 2017.

Chapter 45

BlueThermProbe

Functions to use a BlueTherm™ Probe device from ThermoWorks with iOS.

You need to get their SDK to use with MBS FileMaker iOS SDK.

45.1 BlueThermProbe.ConnectToDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.ConnectToDevice"; Device)

Parameters

Device

The device identifier, name or index. Empty value is first device.

0

Result Returns OK or error.

Description

Examples

Connect to first device:

MBS("BlueThermProbe.ConnectToDevice"; 0)

See also

- 45.2 BlueThermProbe.ConnectedDevices 1203
- 45.6 BlueThermProbe.DisconnectFromDevice 1208

- 45.10 BlueThermProbe.RemoveDevice

Created 15th August 2019, last changed 16th August 2019.

45.2 BlueThermProbe.ConnectedDevices

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.ConnectedDevices")

Result Returns JSON or error.

Description

This returns a big JSON array with an object for each device including the sensors array with an object for each sensor.

See also

- 45.1 BlueThermProbe.ConnectToDevice 1201
- 45.6 BlueThermProbe.DisconnectFromDevice 1208

Created 15th August 2019, last changed 15th August 2019.

45.3 BlueThermProbe.Device

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.Device"; Device)

Parameters

Device

The device identifier, name or index. Empty value is first device.

0

Result Returns JSON or error.

Description

Returns JSON block with details.

If you only need one sensor record, you can use BlueThermProbe.DeviceSensor function.

See also

- 45.5 BlueThermProbe.Devices 1207
- 45.4 BlueThermProbe.DeviceSensor 1205
- 45.10 BlueThermProbe.RemoveDevice 1212

Created 15th August 2019, last changed 15th August 2019.

45.4 BlueThermProbe.DeviceSensor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.DeviceSensor"; Device; Sensor)

Parameters

Device

The device identifier, name or index. Empty value is first device.

0

Sensor

The sensor name or index. Empty value is first sensor.

0

Result Returns JSON or error.

Description

Returns JSON block with details for sensor.

Examples

Query sensor details on first sensor of first device:

MBS("BlueThermProbe.DeviceSensor"; 0; 0)

```
Example result: {
  "readingUnitString" : "°C",
  "readingUnit" : 0,
  "readingAsDisplayed" : "",
  "fault" : false,
  "genericTypeString" : "Temperature",
  "index" : 1,
  "displayUnit" : 0,
  "typeString" : "K Thermocouple Fixed",
  "name" : "",
  "type" : 12,
  "readingCelsius" : 25.776786804199219,
  "readingTimestamp" : true,
  "trimValue" : 0,
  "lowAlarmBreached" : false,
  "genericType" : 1,
  "lowAlarm" : 0,
  "readingFahrenheit" : 78.398216247558594,
  "rangeHigh" : true,
  "enabled" : true,
  "highAlarmSignalled" : false,
  "highAlarmEnabled" : false,
  "reading" : 25.776786804199219,
```

```
"displayUnitString" : "°C",  
"highAlarmBreached" : false,  
"rangeLow" : true,  
"lowAlarmSignalled" : false,  
"highAlarm" : 0,  
"lowAlarmEnabled" : false  
}
```

See also

- 45.3 BlueThermProbe.Device 1204
- 45.5 BlueThermProbe.Devices 1207

45.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr3](#)

Created 15th August 2019, last changed 16th August 2019.

45.5 BlueThermProbe.Devices

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.Devices")

Result Returns JSON or error.

Description

This returns a big JSON array with an object for each device including the sensors array with an object for each sensor.

If you only need one device, you can use BlueThermProbe.Device function.

See also

- 45.3 BlueThermProbe.Device 1204
- 45.4 BlueThermProbe.DeviceSensor 1205

Created 15th August 2019, last changed 15th August 2019.

45.6 BlueThermProbe.DisconnectFromDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.DisconnectFromDevice"; Device)

Parameters

Device

The device identifier, name or index. Empty value is first device.

0

Result Returns OK or error.

Description

See also

- 45.2 BlueThermProbe.ConnectedDevices 1203
- 45.1 BlueThermProbe.ConnectToDevice 1201

Created 15th August 2019, last changed 15th August 2019.

45.7 BlueThermProbe.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.Initialize")

Result Returns OK or error.

Description

This function must be called once to initialize the library and setup all required things.

Rewritten in plugin version 9.4 for BlueTherm LE SDK iOS v2.0.

Please link libThermaLib.a into your FileMaker iOS SDK app by adding it as a required library. Add "Supported external accessory protocols" for Info.plist and add an item "uk.co.etilt.d.bluetherm1". For "Required background modes", please add "App communicates with an accessory".

You can call this in your start script.

See also

- 45.9 BlueThermProbe.IsInitialized

1211

Created 15th August 2019, last changed 15th August 2019.

45.8 BlueThermProbe.IsBluetoothAvailable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.IsBluetoothAvailable")

Result Returns 1, 0 or error.

Description

Created 15th August 2019, last changed 15th August 2019.

45.9 BlueThermProbe.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.IsInitialized")

Result Returns 1, 0 or error.

Description

Returns 0, if you need to call BlueThermProbe.Initialized or 1 if that function was called before.

See also

- 45.7 BlueThermProbe.Initialize

1209

Created 15th August 2019, last changed 18th August 2019.

45.10 BlueThermProbe.RemoveDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.RemoveDevice"; Device)

Parameters

Device

The device identifier, name or index. Empty value is first device.

0

Result Returns OK or error.

Description

The device will be re-added if it is rediscovered by a subsequent scan.

See also

- 45.1 BlueThermProbe.ConnectToDevice 1201
- 45.3 BlueThermProbe.Device 1204

Created 15th August 2019, last changed 15th August 2019.

45.11 BlueThermProbe.SendCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.SendCommand"; Device; Command)

Parameters

Device

The device identifier, name or index. Empty value is first device.

0

Command

Which command to run.

"Identify"

Result Returns OK or error.

Description

Command	Description
Measure	Requests the device takes a measurement immediately and transmits it.
Identify	Requests the device identifies itself, for example by flashing an LED
FactorySettings	Requests the device returns to factory settings, excluding trim values.
FactoryReset	requests the device returns to factory settings, including trim values.
refresh	Requests all values to be read from the device

Examples

Ask first device to identify:

MBS("BlueThermProbe.SendCommand"; 0; "Identify")

Created 15th August 2019, last changed 16th August 2019.

45.12 BlueThermProbe.SetBatteryLevelScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.SetBatteryLevelScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Called when device sends battery level notification.

Parameter is a JSON object with deviceName, deviceIdentifier and timestamp.

Created 15th August 2019, last changed 18th August 2019.

45.13 BlueThermProbe.SetDeviceUpdatedScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.SetDeviceUpdatedScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Called when device is updated. This may be the result of a read request or a write request.

Parameter is a JSON object with deviceName, deviceIdentifier and timestamp.

See also

- 45.14 BlueThermProbe.SetDisconnectedScript 1216
- 45.17 BlueThermProbe.SetSensorUpdatedSScript 1219

Created 15th August 2019, last changed 18th August 2019.

45.14 BlueThermProbe.SetDisconnectedScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.SetDisconnectedScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Called when device is disconnected. Please note that after disconnection, no information that would normally require a connection, including the serial number, will be accessible, so any information required after disconnection must be cached by the client.

Parameter is a JSON object with deviceName, deviceIdentifier, reason and timestamp.

See also

- 45.13 BlueThermProbe.SetDeviceUpdatedScript 1215
- 45.17 BlueThermProbe.SetSensorUpdatedSScript 1219

Created 15th August 2019, last changed 18th August 2019.

45.15 BlueThermProbe.SetNewDeviceScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.SetNewDeviceScript"; Filename; ScriptName)

Parameters**Filename**

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Called while scan for devices is running for each new device.

Parameter is a JSON object with deviceName, deviceIdentifier and timestamp.

See also

- 45.18 BlueThermProbe.StartDeviceScan 1220
- 45.19 BlueThermProbe.StopDeviceScan 1221

Created 15th August 2019, last changed 15th August 2019.

45.16 BlueThermProbe.SetNotificationReceivedScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.SetNotificationReceivedScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Called when device is sends notification. See type field in parameter to your script.

Parameter is a JSON object with deviceName, deviceIdentifier, type and timestamp.

Name	Type Number	Description
None	0	Button pressed on the device
ButtonPressed	1	Device is about to shut down
Shutdown	2	Device received an invalid setting
InvalidSetting	3	Device received an invalid command
InvalidCommand	4	Device requests app to re-read all data
RefreshRequest	5	Communication error detected
CommunicationError	6	Remote device checkpoint event
Checkpoint	7	Checkpoint

Created 15th August 2019, last changed 20th August 2019.

45.17 BlueThermProbe.SetSensorUpdatedSScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.SetSensorUpdatedSScript"; Filename; ScriptName)

Parameters**Filename**

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Called when sensor reading was updated.

Parameter is a JSON object with name, reading, deviceName, deviceIdentifier and timestamp.

For temperature, we include readingFahrenheit and readingCelsius.

See also

- 45.13 BlueThermProbe.SetDeviceUpdatedScript 1215
- 45.14 BlueThermProbe.SetDisconnectedScript 1216

Created 15th August 2019, last changed 15th August 2019.

45.18 BlueThermProbe.StartDeviceScan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.StartDeviceScan")

Result Returns OK or error.

Description

See also

- 45.15 BlueThermProbe.SetNewDeviceScript 1217
- 45.19 BlueThermProbe.StopDeviceScan 1221

Created 15th August 2019, last changed 15th August 2019.

45.19 BlueThermProbe.StopDeviceScan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.StopDeviceScan")

Result Returns OK or error.

Description

See also

- 45.15 BlueThermProbe.SetNewDeviceScript 1217
- 45.18 BlueThermProbe.StartDeviceScan 1220

Created 15th August 2019, last changed 15th August 2019.

45.20 BlueThermProbe.VersionNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
45 BlueThermProbe	9.4	No	No	No	No	Yes

MBS("BlueThermProbe.VersionNumber")

Result Returns text or error.

Description

May contain arbitrary characters.

Created 15th August 2019, last changed 15th August 2019.

Chapter 46

Bonjour

Lookup services on local network via zero config technology.

46.1 Bonjour.Browse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
46 Bonjour	8.4	Yes	Yes	Yes	No	No

MBS("Bonjour.Browse"; Type)

Parameters

Type

The type to browse for.
"_fmp12._tcp"

Result Returns OK or error.

Description

Results from last browse are cleared first.
You need Bonjour library installed on Windows to have this work.

Use Bonjour.JSON functions to query results later. Please let a small pause for network to provide results, which get updated in background.

Examples

Browser for SMB shares:

```
Set Variable [ $r ; Value: MBS("Bonjour.Browse"; "_smb._tcp.") ]
```

Browser for AFP shares:

Set Variable [\$r ; Value: MBS("Bonjour.Browse"; "_afpovertcp._tcp.")]

Browser for FileMaker server:

Set Variable [\$r ; Value: MBS("Bonjour.Browse"; "_fmpro-rcfmp12._tcp.")]

See also

- [46.2 Bonjour.JSON](#) 1225
- [46.3 Bonjour.Register](#) 1227

Example Databases

- [Network/Bonjour](#)

46.1.1 Blog Entries

- [Adding Bonjour functions for MBS FileMaker Plugin](#)

Created 28th July 2018, last changed 28th July 2018.

46.2 Bonjour.JSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
46 Bonjour	8.4	Yes	Yes	Yes	No	No

MBS("Bonjour.JSON")

Result Returns JSON or error.

Description

First level in JSON is an array with services found.

For each service, we list interfaceIndex, type, domain, serviceName, IP and port.

IP and port are brought down from found host and IP.

Hosts array for each service describes the hosts for that service. That can be one or more hosts. Each host may have several IPs to connect to.

Examples

Query results:

```
Set Variable [ $json; MBS( "Bonjour.JSON" ) ]
```

```
Example result: [ {
  "interfaceIndex": 4,
  "type": "_fmpro-rcfmp12._tcp.",
  "domain": "local.",
  "serviceName": "WIN-Test",
  "IP": "2003:e1:6bc2:c272:7029:44d3:99ae:ab87",
  "port": 5003,
  "hosts": [ {
    "interfaceIndex": 4,
    "port": 5003,
    "fullName": "WIN-Test._fmpro-rcfmp12._tcp.local.",
    "hostTarget": "WIN-Test.local.",
    "IPs": [ {
      "port": 5003,
      "interfaceIndex": 4,
      "ip": "2003:e1:6bc2:c272:7029:44d3:99ae:ab87",
      "hostName": "WIN-Test.local.",
      "protocol": "IPv6"
    }, {
      "port": 5003,
      "interfaceIndex": 4,
      "ip": "fe80::7029:44d3:99ae:ab87",
      "hostName": "WIN-Test.local.",
      "protocol": "IPv6"
    }, {
      "port": 5003,
```

```
"interfaceIndex": 4,  
"ip": "192.168.2.122",  
"hostName": "WIN-Test.local",  
"protocol": "IPv4"  
  } ]  
} ]  
} ]
```

See also

- [46.1 Bonjour.Browse](#)

1223

Example Databases

- [Network/Bonjour](#)

46.2.1 Blog Entries

- [Adding Bonjour functions for MBS FileMaker Plugin](#)

Created 28th July 2018, last changed 28th July 2018.

46.3 Bonjour.Register

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
46 Bonjour	8.4	Yes	Yes	Yes	No	Yes

MBS("Bonjour.Register"; Name; Type; Domain; Host; Port)

Parameters

Name

If non-empty, specifies the service name to be registered. Most applications will not specify a name, in which case the computer name is used. If a name is specified, it must be 1-63 bytes of UTF-8 text. If the name is longer than 63 bytes it will be automatically truncated to a legal length.

Type

The service type followed by the protocol, separated by a dot (e.g. "_ftp._tcp"). The service type must be an underscore, followed by 1-14 characters, which may be letters, digits, or hyphens. The transport protocol must be "_tcp" or "_udp". New service types should be registered at <http://www.dns-sd.org/ServiceTypes.html>.

"_test._tcp"

Domain

If non-empty, specifies the domain on which to advertise the service. Most applications will not specify a domain, instead automatically registering in the default domain(s).

Host

If non-empty, specifies the SRV target host name. Most applications will not specify a host, instead automatically using the machine's default host name(s).

Port

The port, in network byte order, on which the service accepts connections. Pass 0 for a "placeholder" service (i.e. a service that will not be discovered by browsing, but will cause a name conflict if another client tries to register that same name). Most clients will not use placeholder services.

1234

Result Returns OK or error.

Description

This service is discovered via Bonjour.Browse function.

Examples

Register test service:

```
MBS( "Bonjour.Register"; "Test"; "_test._tcp"; ""; ""; 1234 )
```

See also

- 46.1 Bonjour.Browse

46.4 Bonjour.RegisteredName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
46 Bonjour	8.4	Yes	Yes	Yes	No	Yes

MBS("Bonjour.RegisteredName")

Result Returns service name or error.

Description

Returns the full name of the service registered currently.

Created 31st July 2018, last changed 31st July 2018.

Chapter 47

Calendar

Functions for the Calendar database on Mac OS X. (iCal)

You may have events or todo items in your FileMaker database. Our plugin can help you sync them into the calendar database on Mac, e.g. create events and reminders into specific calendars. If one Mac has a calendar subscribed for each member of staff and those sync via iCloud/Google/Exchange to their mobile phones, your solution can push events or reminders to your staff on one central routine.

The calendar functions work on Mac OS X for 32 and 64-bit applications. But they are deprecated by Apple and you should move to Events functions for newer projects. Please do not mix Calendar and Events calls as they use different IDs.

On Server you can only use calendar functions if you got a calendar for the user account where the server runs. Normally the server user account has no calendars.

Use this functions to sync events to iCal/Calendar app.

47.1 Calendar.Alarm.Duplicate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.Duplicate"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns alarm reference text or error.

Description

Please make a copy whenever you take an alarm from one event to add it to another event.

See also

- 47.22 Calendar.Calendar.Duplicate 1251
- 47.36 Calendar.Item.Duplicate 1268

Created 18th August 2014, last changed 18th August 2014.

47.2 Calendar.Alarm.GetAbsoluteTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.GetAbsoluteTrigger"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns value or error.

Description

The time that an alarm goes off is referred to as the trigger. Alarms have either a relative trigger, which means the alarm fires a certain number of seconds before an alarm occurs, or an absolute trigger, which specifies the exact time the alarm will trigger off. #

See also

- [47.7 Calendar.Alarm.GetRelativeTrigger](#) 1236
- [47.10 Calendar.Alarm.SetAbsoluteTrigger](#) 1239
- [47.15 Calendar.Alarm.SetRelativeTrigger](#) 1244

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.3 Calendar.Alarm.GetAcknowledged

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.GetAcknowledged"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns boolean value or error.

Description

See also

- 47.11 Calendar.Alarm.SetAcknowledged

1240

Created 18th August 2014, last changed 18th August 2014.

47.4 Calendar.Alarm.GetAction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.GetAction"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns action name or error.

Description

Action can be: Display, Email, Procedure or Sound.

See also

- [47.8 Calendar.Alarm.GetSound](#) 1237
- [47.9 Calendar.Alarm.GetURL](#) 1238
- [47.12 Calendar.Alarm.SetAction](#) 1241
- [47.50 Calendar.Item.GetLocation](#) 1282

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.5 Calendar.Alarm.GetEmailAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.GetEmailAddress"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns email or error.

Description

See also

- [47.13 Calendar.Alarm.SetEmailAddress](#) 1242
- [76.3 Events.Alarm.GetEmailAddress](#) 3508
- [76.10 Events.Alarm.SetEmailAddress](#) 3515

Created 18th August 2014, last changed 18th August 2014.

47.6 Calendar.Alarm.GetRelatedTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.GetRelatedTo"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns text or error.

Description

See also

- 47.14 Calendar.Alarm.SetRelatedTo

1243

Created 18th August 2014, last changed 18th August 2014.

47.7 Calendar.Alarm.GetRelativeTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.GetRelativeTrigger"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns value or error.

Description

Value is in seconds relative to parent calendar item.

The time that an alarm goes off is referred to as the trigger. Alarms have either a relative trigger, which means the alarm fires a certain number of seconds before an alarm occurs, or an absolute trigger, which specifies the exact time the alarm will trigger off.

See also

- 47.2 Calendar.Alarm.GetAbsoluteTrigger 1231
- 47.10 Calendar.Alarm.SetAbsoluteTrigger 1239
- 47.15 Calendar.Alarm.SetRelativeTrigger 1244

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.8 Calendar.Alarm.GetSound

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.GetSound"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns sound name or error.

Description

See also

- [47.4 Calendar.Alarm.GetAction](#) 1233
- [47.9 Calendar.Alarm.GetURL](#) 1238
- [47.16 Calendar.Alarm.SetSound](#) 1245
- [47.17 Calendar.Alarm.SetURL](#) 1246
- [76.6 Events.Alarm.GetSound](#) 3511

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.9 Calendar.Alarm.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.GetURL"; alarmRef)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

Result Returns URL or error.

Description

See also

- [47.4 Calendar.Alarm.GetAction](#) 1233
- [47.8 Calendar.Alarm.GetSound](#) 1237
- [47.16 Calendar.Alarm.SetSound](#) 1245
- [47.17 Calendar.Alarm.SetURL](#) 1246
- [47.56 Calendar.Item.GetURL](#) 1289
- [47.73 Calendar.Item.SetURL](#) 1310

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.10 Calendar.Alarm.SetAbsoluteTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.SetAbsoluteTrigger"; alarmRef; timestamp)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

timestamp

The new date and time for this alarm.

Get(HostDateTime)+30

Result Returns OK or error.

Description

Setting an absoluteTrigger will also set the relativeTrigger to undefined.

See also

- 47.2 Calendar.Alarm.GetAbsoluteTrigger 1231
- 47.7 Calendar.Alarm.GetRelativeTrigger 1236
- 47.15 Calendar.Alarm.SetRelativeTrigger 1244

Created 18th August 2014, last changed 18th August 2014.

47.11 Calendar.Alarm.SetAcknowledged

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.SetAcknowledged"; alarmRef; value)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

value

The new boolean value. Can be 0 or 1.

1

Result Returns OK or error.

Description

See also

- 47.3 Calendar.Alarm.GetAcknowledged

1232

Created 18th August 2014, last changed 18th August 2014.

47.12 Calendar.Alarm.SetAction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.SetAction"; alarmRef; action)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

action

The new action command.

"Display"

Result Returns OK or error.

Description

Action can be: Display, Email, Procedure or Sound.

See also

- 47.4 Calendar.Alarm.GetAction 1233
- 47.16 Calendar.Alarm.SetSound 1245
- 47.17 Calendar.Alarm.SetURL 1246
- 47.68 Calendar.Item.SetLocation 1303

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.12.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32

Created 18th August 2014, last changed 13th September 2015.

47.13 Calendar.Alarm.SetEmailAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.SetEmailAddress"; alarmRef; email)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

email

The new email address a text.

"test@monkeybreadsoftware.de"

Result Returns OK or error.

Description

Setting an emailAddress will also set the action to Email as well as set the sound and URL to "".

See also

- 47.5 Calendar.Alarm.GetEmailAddress 1234
- 76.3 Events.Alarm.GetEmailAddress 3508
- 76.10 Events.Alarm.SetEmailAddress 3515

Created 18th August 2014, last changed 18th August 2014.

47.14 Calendar.Alarm.SetRelatedTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.SetRelatedTo"; alarmRef; value)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

value

The new text for the relatedTo field.

””

Result Returns OK or error.

Description

See also

- 47.6 Calendar.Alarm.GetRelatedTo

1235

Created 18th August 2014, last changed 18th August 2014.

47.15 Calendar.Alarm.SetRelativeTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.SetRelativeTrigger"; alarmRef; TimeOffset)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

TimeOffset

The relative time offset in seconds.

-15*60

Result Returns OK or error.

Description

Setting a relativeTrigger will also set the absoluteTrigger to undefined.

Value is in seconds relative to parent calendar item.

See also

- 47.2 Calendar.Alarm.GetAbsoluteTrigger 1231
- 47.7 Calendar.Alarm.GetRelativeTrigger 1236
- 47.10 Calendar.Alarm.SetAbsoluteTrigger 1239

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.15.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33

Created 18th August 2014, last changed 13th September 2015.

47.16 Calendar.Alarm.SetSound

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.SetSound"; alarmRef; soundName)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

soundName

The new sound name.

"Submarine"

Result Returns OK or error.

Description

Setting a sound will also set the action to Sound as well as set the emailAddress and URL to nil.

Expects the name of a system alert.

Check this folders to find possible sound names:

- ~/Library/Sounds
- /Library/Sounds
- /Network/Library/Sounds
- /System/Library/Sounds

See also

- [47.8 Calendar.Alarm.GetSound](#) 1237
- [47.9 Calendar.Alarm.GetURL](#) 1238
- [47.12 Calendar.Alarm.SetAction](#) 1241
- [47.17 Calendar.Alarm.SetURL](#) 1246
- [76.13 Events.Alarm.SetSound](#) 3518

Example Databases

- [Mac only/Calendar/Calendar Test](#)

Created 18th August 2014, last changed 18th August 2014.

47.17 Calendar.Alarm.SetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.SetURL"; alarmRef; URL)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

URL

The new URL for the alarm.

\$URL

Result Returns OK or error.

Description

Setting a URL will also set the action to Procedure as well as set the emailAddress and sound to nil. The URL must be a file URL.

See also

- 47.8 Calendar.Alarm.GetSound 1237
- 47.9 Calendar.Alarm.GetURL 1238
- 47.12 Calendar.Alarm.SetAction 1241
- 47.16 Calendar.Alarm.SetSound 1245
- 47.56 Calendar.Item.GetURL 1289
- 47.73 Calendar.Item.SetURL 1310

Created 18th August 2014, last changed 18th August 2014.

47.18 Calendar.Alarm.TriggerDateRelativeTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Alarm.TriggerDateRelativeTo"; alarmRef; date)

Parameters

alarmRef

The reference to the calendar alarm.

\$alarmRef

date

The reference timestamp.

Get(HostTimeStamp)

Result Returns timestamp value.

Description

See also

- 76.16 Events.Alarm.TriggerDateRelativeTo

3523

Created 18th August 2014, last changed 18th August 2014.

47.19 Calendar.Attendee.GetAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Attendee.GetAddress"; attendeeRef)

Parameters

attendeeRef

The reference to the calendar attendee.

\$attendeeRef

Result Returns URL or error.

Description

See also

- [47.21 Calendar.Attendee.GetStatus](#) 1250

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.20 Calendar.Attendee.GetCommonName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Attendee.GetCommonName"; attendeeRef)

Parameters

attendeeRef

The reference to the calendar attendee.

\$attendeeRef

Result Returns name or error.

Description

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.21 Calendar.Attendee.GetStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Attendee.GetStatus"; attendeeRef)

Parameters

attendeeRef

The reference to the calendar attendee.

\$attendeeRef

Result Returns status or error.

Description

Value can be NeedsAction, Accepted, Declined or Tentative.

For 64-bit also Pending, Delegated, Completed, InProcess or Unknown.

See also

- 47.19 Calendar.Attendee.GetAddress

1248

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th November 2015.

47.22 Calendar.Calendar.Duplicate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.Duplicate"; calendarRef)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Result Returns ID of new calendar.

Description

See also

- 47.1 Calendar.Alarm.Duplicate 1229
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.28 Calendar.Calendar.IsEditable 1259
- 47.31 Calendar.Calendar.SetTitle 1262
- 76.21 Events.Calendar.Duplicate 3529

Created 18th August 2014, last changed 18th August 2014.

47.23 Calendar.Calendar.GetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.GetColor"; calendarRef { ; ReturnAsNumbers })

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

ReturnAsNumbers

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

Pass 1 to return color as list of red, green and blue, e.g. "123§234§56" Pass 0 (default) for return as hex value, e.g. "7788FF".

0

Result Returns color or error.

Description

Color is returned as hex numbers like "8295AF".

Examples

Check color of calendar by ID:

MBS("Calendar.Calendar.GetColor"; "B560017B-E414-4CD9-B3D1-3D6E7717D714")

Get color for calendar by name:

MBS("Calendar.Calendar.GetColor"; "Public")

See also

- 47.24 Calendar.Calendar.GetNotes 1254
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.26 Calendar.Calendar.GetType 1257
- 47.27 Calendar.Calendar.GetUID 1258
- 47.29 Calendar.Calendar.SetColor 1260
- 47.30 Calendar.Calendar.SetNotes 1261
- 47.31 Calendar.Calendar.SetTitle 1262
- 76.22 Events.Calendar.GetColor 3530
- 76.27 Events.Calendar.SetColor 3536

47.23.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin, version 8.2pr2](#)

Created 18th August 2014, last changed 13th June 2018.

47.24 Calendar.Calendar.GetNotes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.GetNotes"; calendarRef)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Result Returns notes or error.

Description

Examples

Query notes of first calendar:

```
$list = MBS( "Calendar.Calendars" )
$calendarRef = GetValue( $list ; 1 )
$title = MBS( "Calendar.Calendar.GetNotes"; $calendarRef )
```

Get notes for calendar by ID:

```
MBS( "Calendar.Calendar.GetNotes"; "B560017B-E414-4CD9-B3D1-3D6E7717D714" )
```

Get notes for calendar by name:

```
MBS( "Calendar.Calendar.GetNotes"; "Public" )
```

See also

- 47.23 Calendar.Calendar.GetColor 1252
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.26 Calendar.Calendar.GetType 1257
- 47.27 Calendar.Calendar.GetUID 1258
- 47.29 Calendar.Calendar.SetColor 1260
- 47.30 Calendar.Calendar.SetNotes 1261
- 47.31 Calendar.Calendar.SetTitle 1262
- 47.32 Calendar.Calendars 1263

Created 18th August 2014, last changed 12nd February 2016.

47.25 Calendar.Calendar.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.GetTitle"; calendarRef)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Result Returns title or error.

Description

Examples

Queries name of first calendar:

```
$list = MBS( "Calendar.Calendars" )
$calendarRef = GetValue( $list ; 1 )
$title = MBS( "Calendar.Calendar.GetTitle"; $calendarRef )
```

Get title for calendar by ID:

```
MBS( "Calendar.Calendar.GetTitle"; "B560017B-E414-4CD9-B3D1-3D6E7717D714" )
```

See also

- 47.23 Calendar.Calendar.GetColor 1252
- 47.24 Calendar.Calendar.GetNotes 1254
- 47.26 Calendar.Calendar.GetType 1257
- 47.27 Calendar.Calendar.GetUID 1258
- 47.29 Calendar.Calendar.SetColor 1260
- 47.30 Calendar.Calendar.SetNotes 1261
- 47.31 Calendar.Calendar.SetTitle 1262
- 47.32 Calendar.Calendars 1263
- 76.24 Events.Calendar.GetTitle 3533
- 76.29 Events.Calendar.SetTitle 3538

Example Databases

- [Mac only/Calendar/Calendar Changes](#)
- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)
- [Mac only/Calendar/Reminders](#)

47.25.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 32

Created 18th August 2014, last changed 12nd February 2016.

47.26 Calendar.Calendar.GetType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.GetType"; calendarRef)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Result Returns type or error.

Description

Can be Local, CalDAV, Exchange, Birthday, Subscription or IMAP.

Examples

Check status of calendar named "Privat":

```
MBS( "Calendar.Calendar.GetType"; "Privat" )
```

Check status of calendar with ID:

```
MBS( "Calendar.Calendar.GetType"; "B560017B-E414-4CD9-B3D1-3D6E7717D714" )
```

See also

- 47.23 Calendar.Calendar.GetColor 1252
- 47.24 Calendar.Calendar.GetNotes 1254
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.27 Calendar.Calendar.GetUID 1258
- 47.29 Calendar.Calendar.SetColor 1260
- 47.30 Calendar.Calendar.SetNotes 1261
- 47.31 Calendar.Calendar.SetTitle 1262
- 76.25 Events.Calendar.GetType 3534

Created 18th August 2014, last changed 12nd February 2016.

47.27 Calendar.Calendar.GetUID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.GetUID"; calendarRef)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Result Returns ID as text or error.

Description

This is useful to know the unique id of a new calendar after saving it.

Examples

Get UID for calendar by name:

```
MBS( "Calendar.Calendar.GetUID"; "Firma")
```

See also

- [47.23 Calendar.Calendar.GetColor](#) 1252
- [47.24 Calendar.Calendar.GetNotes](#) 1254
- [47.25 Calendar.Calendar.GetTitle](#) 1255
- [47.26 Calendar.Calendar.GetType](#) 1257
- [47.29 Calendar.Calendar.SetColor](#) 1260
- [47.30 Calendar.Calendar.SetNotes](#) 1261
- [47.31 Calendar.Calendar.SetTitle](#) 1262

Example Databases

- [Mac only/Calendar/Calendar Test](#)

Created 18th August 2014, last changed 22nd May 2016.

47.28 Calendar.Calendar.IsEditable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.IsEditable"; calendarRef)

Parameters**calendarRef**

The id of the calendar to query.

\$calendarRef

Result Return value or error.

Description

Returns 1 if calendar is editable or zero if not.

Examples

Check editable state by ID:

MBS("Calendar.Calendar.IsEditable"; "B560017B-E414-4CD9-B3D1-3D6E7717D714")

See also

- 47.22 Calendar.Calendar.Duplicate 1251
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.31 Calendar.Calendar.SetTitle 1262

Created 18th August 2014, last changed 12nd February 2016.

47.29 Calendar.Calendar.SetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.SetColor"; calendarRef; Color)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Color

The color to use. Can be a color name or hex notation like in HTML.

"red"

Result Returns OK or error message.

Description

Examples

Sets calendar to red:

MBS("Calendar.Calendar.SetColor"; \$CalendarID; "# FF0000")

See also

- 47.23 Calendar.Calendar.GetColor 1252
- 47.24 Calendar.Calendar.GetNotes 1254
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.26 Calendar.Calendar.GetType 1257
- 47.27 Calendar.Calendar.GetUID 1258
- 47.30 Calendar.Calendar.SetNotes 1261
- 47.31 Calendar.Calendar.SetTitle 1262
- 47.92 Calendar.SaveCalendar 1333
- 76.22 Events.Calendar.GetColor 3530
- 76.27 Events.Calendar.SetColor 3536

Example Databases

- [Mac only/Calendar/Calendar Test](#)

Created 18th August 2014, last changed 18th August 2014.

47.30 Calendar.Calendar.SetNotes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.SetNotes"; calendarRef; Text)

Parameters**calendarRef**

The id of the calendar to query.

\$calendarRef

Text

The new text.

"Hello World"

Result Returns OK or error message.

Description**See also**

- 47.23 Calendar.Calendar.GetColor 1252
- 47.24 Calendar.Calendar.GetNotes 1254
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.26 Calendar.Calendar.GetType 1257
- 47.27 Calendar.Calendar.GetUID 1258
- 47.29 Calendar.Calendar.SetColor 1260
- 47.31 Calendar.Calendar.SetTitle 1262
- 47.92 Calendar.SaveCalendar 1333

Example Databases

- [Mac only/Calendar/Calendar Test](#)

Created 18th August 2014, last changed 18th August 2014.

47.31 Calendar.Calendar.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendar.SetTitle"; calendarRef; Text)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Text

The new title.

"Birthdays"

Result Returns OK or error message.

Description

See also

- 47.23 Calendar.Calendar.GetColor 1252
- 47.24 Calendar.Calendar.GetNotes 1254
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.27 Calendar.Calendar.GetUID 1258
- 47.28 Calendar.Calendar.IsEditable 1259
- 47.29 Calendar.Calendar.SetColor 1260
- 47.30 Calendar.Calendar.SetNotes 1261
- 47.92 Calendar.SaveCalendar 1333
- 76.24 Events.Calendar.GetTitle 3533
- 76.29 Events.Calendar.SetTitle 3538

Example Databases

- [Mac only/Calendar/Calendar Test](#)

Created 18th August 2014, last changed 18th August 2014.

47.32 Calendar.Calendars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Calendars")

Result Returns list of calendar ids.

Description

If you get no calendars, please check in system privacy preferences whether FileMaker does have permissions to access the calendar at all.

See also

- 47.24 Calendar.Calendar.GetNotes 1254
- 47.25 Calendar.Calendar.GetTitle 1255
- 47.75 Calendar.NewCalendar 1312
- 47.92 Calendar.SaveCalendar 1333

47.32.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 32

Created 18th August 2014, last changed 30th August 2015.

47.33 Calendar.Events

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

```
MBS( "Calendar.Events"; startDate; endDate { ; calendarRef } )
```

Parameters

startDate

The start date time stamp.

\$startDate

endDate

The end time stamp. If you want to get events for one day, please pass startDate with that date and time 00:00:00 and for endDate the same date with endDate 23:59:59.

\$endDate

calendarRef

Optional

A calendar identifier or name to search only this calendar. If no calendar is specified, we check all calendars.

\$calendarRef

Result Returns list of event identifiers or error.

Description

If you pass calendar, only this calendar is searched. Else the specific calendar is searched.

If you get no events, please check in system privacy preferences whether FileMaker does have permissions to access the calendars at all.

The system limits results to around 4 years, so if you need to query bigger time spans, please use several calls.

Examples

Queries events:

```
MBS( "Calendar.Events"; myDatabase::StartDate; myDatabase::EndDate )
```

See also

- [47.76 Calendar.NewEvent](#)

1313

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)

47.33.1 **Blog Entries**

- [Import Calendar Items into FileMaker](#)

Created 18th August 2014, last changed 11st October 2019.

47.34 Calendar.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	9.2	Yes	No	Yes, macOS only	No	No

MBS("Calendar.Initialize")

Result Returns OK or error.

Description

This is done usually when you call first function using Calendar.
But here you can explicitly initialize it in your start script.

47.34.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr8](#)

Created 16th May 2019, last changed 16th May 2019.

47.35 Calendar.Item.AddAlarm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Item.AddAlarm"; itemRef; alarmRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

alarmRef

The reference to the calendar alarm.
\$alarmRef

Result Returns OK or error.

Description

See also

- [47.37 Calendar.Item.GetAlarms](#) 1269
- [47.57 Calendar.Item.HasAlarm](#) 1290
- [47.61 Calendar.Item.RemoveAlarm](#) 1294

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.35.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33

Created 18th August 2014, last changed 18th August 2014.

47.36 Calendar.Item.Duplicate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.Duplicate"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Result Returns ID of new event or reminder.

Description

See also

- 47.1 Calendar.Alarm.Duplicate 1229
- 76.67 Events.Item.Duplicate 3580

Created 18th August 2014, last changed 18th August 2014.

47.37 Calendar.Item.GetAlarms

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Item.GetAlarms"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.

\$eventRef

Result Returns list of alarm IDs or error.

Description

Seems like there often is an alarm registered but with Action "NONE". You can ignore it.

See also

- [47.35 Calendar.Item.AddAlarm](#) 1267
- [47.38 Calendar.Item.GetAllDay](#) 1270
- [47.51 Calendar.Item.GetNotes](#) 1283
- [47.54 Calendar.Item.GetTitle](#) 1286
- [47.57 Calendar.Item.HasAlarm](#) 1290
- [47.59 Calendar.Item.NextAlarmDate](#) 1292
- [47.61 Calendar.Item.RemoveAlarm](#) 1294
- [47.62 Calendar.Item.SetAllDay](#) 1295
- [47.69 Calendar.Item.SetNotes](#) 1304

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.38 Calendar.Item.GetAllDay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetAllDay"; eventRef)

Parameters

eventRef

The reference to the event.

\$eventRef

Result Returns setting or error.

Description

Value is 1 for all day events or zero otherwise.

See also

- [47.37 Calendar.Item.GetAlarms](#) 1269
- [47.44 Calendar.Item.GetCalendar](#) 1276
- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.49 Calendar.Item.GetEndDate](#) 1281
- [47.51 Calendar.Item.GetNotes](#) 1283
- [47.54 Calendar.Item.GetTitle](#) 1286
- [47.55 Calendar.Item.GetUID](#) 1287
- [47.62 Calendar.Item.SetAllDay](#) 1295
- [47.66 Calendar.Item.SetDueDate](#) 1301
- [47.67 Calendar.Item.SetEndDate](#) 1302

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)

Created 18th August 2014, last changed 18th August 2014.

47.39 Calendar.Item.GetAttendeeCommonName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetAttendeeCommonName"; eventRef; index)

Parameters

eventRef

The reference to the event.

\$eventRef

index

The index of the attendee.

0

Result Returns name as text or error.

Description

Index is from zero to Calendar.Item.GetAttendeeCount-1.

See also

- [47.40 Calendar.Item.GetAttendeeCount](#)

1272

47.39.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 18th August 2014, last changed 18th August 2014.

47.40 Calendar.Item.GetAttendeeCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetAttendeeCount"; eventRef)

Parameters

eventRef

The reference to the event.

\$eventRef

Result Returns number or error.

Description

See also

- 47.39 Calendar.Item.GetAttendeeCommonName 1271
- 47.43 Calendar.Item.GetAttendees 1275
- 47.41 Calendar.Item.GetAttendeeStatus 1273
- 47.42 Calendar.Item.GetAttendeeURL 1274

Created 18th August 2014, last changed 18th August 2014.

47.41 Calendar.Item.GetAttendeeStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetAttendeeStatus"; eventRef; index)

Parameters

eventRef

The reference to the event.

\$eventRef

index

The index of the attendee.

0

Result Returns status text or error.

Description

Index is from zero to Calendar.Item.GetAttendeeCount-1.

Status can be NeedsAction, Accepted, Declined or Tentative.

See also

- [47.40 Calendar.Item.GetAttendeeCount](#) 1272
- [47.43 Calendar.Item.GetAttendees](#) 1275
- [47.42 Calendar.Item.GetAttendeeURL](#) 1274

47.41.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 18th August 2014, last changed 18th August 2014.

47.42 Calendar.Item.GetAttendeeURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetAttendeeURL"; eventRef; index)

Parameters

eventRef

The reference to the event.

\$eventRef

index

The index of the attendee.

0

Result Returns URL text or error.

Description

Index is from zero to Calendar.Item.GetAttendeeCount-1.

See also

- [47.40 Calendar.Item.GetAttendeeCount](#) 1272
- [47.43 Calendar.Item.GetAttendees](#) 1275
- [47.41 Calendar.Item.GetAttendeeStatus](#) 1273

47.42.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 18th August 2014, last changed 18th August 2014.

47.43 Calendar.Item.GetAttendees

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Item.GetAttendees"; eventRef)

Parameters

eventRef

The reference to the calendar event.

\$eventRef

Result Returns list of attendee IDs or error.

Description

There is no API from Apple to modify attendees.

See also

- 47.40 Calendar.Item.GetAttendeeCount 1272
- 47.41 Calendar.Item.GetAttendeeStatus 1273
- 47.42 Calendar.Item.GetAttendeeURL 1274
- 47.44 Calendar.Item.GetCalendar 1276
- 47.47 Calendar.Item.GetDateStamp 1279
- 47.48 Calendar.Item.GetDueDate 1280
- 47.51 Calendar.Item.GetNotes 1283
- 47.63 Calendar.Item.SetCalendar 1297

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.44 Calendar.Item.GetCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetCalendar"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Result Returns id as text or error.

Description

See also

- [47.38 Calendar.Item.GetAllDay](#) 1270
- [47.43 Calendar.Item.GetAttendees](#) 1275
- [47.45 Calendar.Item.GetCompleted](#) 1277
- [47.47 Calendar.Item.GetDateStamp](#) 1279
- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.49 Calendar.Item.GetEndDate](#) 1281
- [47.63 Calendar.Item.SetCalendar](#) 1297
- [47.89 Calendar.RemoveCalendar](#) 1330
- [76.68 Events.Item.GetCalendar](#) 3581

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)
- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.45 Calendar.Item.GetCompleted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetCompleted"; reminderRef)

Parameters

reminderRef

The reference to the reminder.

\$reminderRef

Result Returns current setting or error.

Description

See also

- [47.44 Calendar.Item.GetCalendar](#) 1276
- [47.46 Calendar.Item.GetCompletionDate](#) 1278
- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.49 Calendar.Item.GetEndDate](#) 1281
- [47.51 Calendar.Item.GetNotes](#) 1283
- [47.64 Calendar.Item.SetCompleted](#) 1299
- [47.77 Calendar.NewReminder](#) 1315
- [47.94 Calendar.SaveReminder](#) 1336

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.46 Calendar.Item.GetCompletionDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetCompletionDate"; reminderRef)

Parameters

reminderRef

The reference to the reminder.

\$reminderRef

Result Returns date or error.

Description

See also

- 47.45 Calendar.Item.GetCompleted 1277
- 47.65 Calendar.Item.SetCompletionDate 1300

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.47 Calendar.Item.GetDateStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetDateStamp"; eventRef)

Parameters

eventRef

The reference to the event.

\$eventRef

Result Returns date stamp or error.

Description

See also

- [47.43 Calendar.Item.GetAttendees](#) 1275
- [47.44 Calendar.Item.GetCalendar](#) 1276
- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.53 Calendar.Item.GetStartDate](#) 1285
- [47.63 Calendar.Item.SetCalendar](#) 1297
- [47.66 Calendar.Item.SetDueDate](#) 1301
- [47.77 Calendar.NewReminder](#) 1315
- [47.94 Calendar.SaveReminder](#) 1336

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.48 Calendar.Item.GetDueDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetDueDate"; reminderRef)

Parameters

reminderRef

The reference to the reminder.

\$reminderRef

Result Returns date or error.

Description

See also

- 47.49 Calendar.Item.GetEndDate 1281
- 47.51 Calendar.Item.GetNotes 1283
- 47.52 Calendar.Item.GetPriority 1284
- 47.53 Calendar.Item.GetStartDate 1285
- 47.54 Calendar.Item.GetTitle 1286
- 47.59 Calendar.Item.NextAlarmDate 1292
- 47.62 Calendar.Item.SetAllDay 1295
- 47.66 Calendar.Item.SetDueDate 1301
- 47.67 Calendar.Item.SetEndDate 1302
- 47.71 Calendar.Item.SetStartDate 1307

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.49 Calendar.Item.GetEndDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetEndDate"; eventRef)

Parameters

eventRef

The reference to the event.

\$eventRef

Result Returns date or error.

Description

See also

- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.51 Calendar.Item.GetNotes](#) 1283
- [47.52 Calendar.Item.GetPriority](#) 1284
- [47.53 Calendar.Item.GetStartDate](#) 1285
- [47.54 Calendar.Item.GetTitle](#) 1286
- [47.59 Calendar.Item.NextAlarmDate](#) 1292
- [47.62 Calendar.Item.SetAllDay](#) 1295
- [47.66 Calendar.Item.SetDueDate](#) 1301
- [47.67 Calendar.Item.SetEndDate](#) 1302
- [47.71 Calendar.Item.SetStartDate](#) 1307

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)

Created 18th August 2014, last changed 18th August 2014.

47.50 Calendar.Item.GetLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetLocation"; eventRef)

Parameters

eventRef

The reference to the event.

\$eventRef

Result Returns location of the event.

Description

See also

- [47.4 Calendar.Alarm.GetAction](#) 1233
- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.49 Calendar.Item.GetEndDate](#) 1281
- [47.51 Calendar.Item.GetNotes](#) 1283
- [47.52 Calendar.Item.GetPriority](#) 1284
- [47.68 Calendar.Item.SetLocation](#) 1303
- [76.69 Events.Item.GetLocation](#) 3582

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)

47.50.1 Blog Entries

- [Import Calendar Items into FileMaker](#)

Created 18th August 2014, last changed 18th August 2014.

47.51 Calendar.Item.GetNotes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetNotes"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Result Returns notes text or error.

Description

See also

- [47.43 Calendar.Item.GetAttendees](#) 1275
- [47.45 Calendar.Item.GetCompleted](#) 1277
- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.49 Calendar.Item.GetEndDate](#) 1281
- [47.54 Calendar.Item.GetTitle](#) 1286
- [47.55 Calendar.Item.GetUID](#) 1287
- [47.56 Calendar.Item.GetURL](#) 1289
- [47.69 Calendar.Item.SetNotes](#) 1304
- [47.72 Calendar.Item.SetTitle](#) 1308
- [47.77 Calendar.NewReminder](#) 1315

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.52 Calendar.Item.GetPriority

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetPriority"; reminderRef)

Parameters

reminderRef

The reference to the reminder.

\$reminderRef

Result Returns value or error.

Description

See also

- 47.48 Calendar.Item.GetDueDate 1280
- 47.49 Calendar.Item.GetEndDate 1281
- 47.50 Calendar.Item.GetLocation 1282
- 47.70 Calendar.Item.SetPriority 1306

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.53 Calendar.Item.GetStartDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetStartDate"; eventRef)

Parameters

eventRef

The reference to the event.

\$eventRef

Result Returns date or error.

Description

See also

- [47.47 Calendar.Item.GetDateStamp](#) 1279
- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.49 Calendar.Item.GetEndDate](#) 1281
- [47.59 Calendar.Item.NextAlarmDate](#) 1292
- [47.66 Calendar.Item.SetDueDate](#) 1301
- [47.67 Calendar.Item.SetEndDate](#) 1302
- [47.71 Calendar.Item.SetStartDate](#) 1307

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)

47.53.1 Blog Entries

- [Import Calendar Items into FileMaker](#)

Created 18th August 2014, last changed 18th August 2014.

47.54 Calendar.Item.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetTitle"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Result Returns title or error.

Description

See also

- [47.37 Calendar.Item.GetAlarms](#) 1269
- [47.38 Calendar.Item.GetAllDay](#) 1270
- [47.48 Calendar.Item.GetDueDate](#) 1280
- [47.49 Calendar.Item.GetEndDate](#) 1281
- [47.51 Calendar.Item.GetNotes](#) 1283
- [47.55 Calendar.Item.GetUID](#) 1287
- [47.56 Calendar.Item.GetURL](#) 1289
- [47.72 Calendar.Item.SetTitle](#) 1308
- [47.77 Calendar.NewReminder](#) 1315
- [47.94 Calendar.SaveReminder](#) 1336

Example Databases

- [Mac only/Calendar/Calendar Changes](#)
- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)
- [Mac only/Calendar/Reminders](#)

47.54.1 Blog Entries

- [Import Calendar Items into FileMaker](#)

Created 18th August 2014, last changed 18th August 2014.

47.55 Calendar.Item.GetUID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetUID"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Result Returns id as text or error.

Description

See also

- [47.38 Calendar.Item.GetAllDay](#) 1270
- [47.51 Calendar.Item.GetNotes](#) 1283
- [47.54 Calendar.Item.GetTitle](#) 1286
- [47.56 Calendar.Item.GetURL](#) 1289
- [47.73 Calendar.Item.SetURL](#) 1310
- [47.76 Calendar.NewEvent](#) 1313
- [47.77 Calendar.NewReminder](#) 1315
- [47.94 Calendar.SaveReminder](#) 1336

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)
- [Mac only/Calendar/Calendar Test](#)
- [Mac only/Calendar/Reminders](#)

47.55.1 Blog Entries

- [Import Calendar Items into FileMaker](#)

47.55.2 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32
- Ausgabe 1/2014, Seite 31

Created 18th August 2014, last changed 18th August 2014.

47.56 Calendar.Item.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.GetURL"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Result Returns URL or error.

Description

See also

- [47.9 Calendar.Alarm.GetURL](#) 1238
- [47.17 Calendar.Alarm.SetURL](#) 1246
- [47.51 Calendar.Item.GetNotes](#) 1283
- [47.54 Calendar.Item.GetTitle](#) 1286
- [47.55 Calendar.Item.GetUID](#) 1287
- [47.73 Calendar.Item.SetURL](#) 1310

Example Databases

- [Mac only/Calendar/Calendar Events](#)
- [Mac only/Calendar/Calendar Import](#)
- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.57 Calendar.Item.HasAlarm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.HasAlarm"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Result Returns 0, 1 or error.

Description

See also

- 47.35 Calendar.Item.AddAlarm 1267
- 47.37 Calendar.Item.GetAlarms 1269
- 47.61 Calendar.Item.RemoveAlarm 1294

Created 18th August 2014, last changed 18th August 2014.

47.58 Calendar.Item.IsDetached

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.IsDetached"; eventRef)

Parameters

eventRef

The reference to the event.

\$eventRef

Result Returns status or error.

Description

If this event is an instance of a repeating event, and an attribute of this event has been changed to from the default value generated by the repeating event, `isDetached` will return 1. If the event is unchanged from its default state, or is not a repeating event, `isDetached` returns 0.

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.59 Calendar.Item.NextAlarmDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.NextAlarmDate"; itemRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Result Returns date or error.

Description

See also

- 47.37 Calendar.Item.GetAlarms 1269
- 47.48 Calendar.Item.GetDueDate 1280
- 47.49 Calendar.Item.GetEndDate 1281
- 47.53 Calendar.Item.GetStartDate 1285
- 47.66 Calendar.Item.SetDueDate 1301
- 47.67 Calendar.Item.SetEndDate 1302
- 47.71 Calendar.Item.SetStartDate 1307

Created 18th August 2014, last changed 18th August 2014.

47.60 Calendar.Item.Occurrence

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.Occurrence"; eventRef)

Parameters

eventRef

The reference to the event.

\$eventRef

Result Returns date or error.

Description

Since all instances of a repeating event have the same UID, we need another way to differentiate between those events. This method returns the date on which this event was originally scheduled to occur. This value will remain the same even if the event has been detached and its start date has changed. For events not part of a repeating pattern, this method will return the same value as startDate.

Example Databases

- [Mac only/Calendar/Calendar Events](#)

Created 18th August 2014, last changed 18th August 2014.

47.61 Calendar.Item.RemoveAlarm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Item.RemoveAlarm"; itemRef; alarmRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

alarmRef

The reference to the calendar alarm.
\$alarmRef

Result Returns OK or error.

Description

Please query list of alarms first with Calendar.Item.GetAlarms function.

See also

- 47.35 Calendar.Item.AddAlarm 1267
- 47.37 Calendar.Item.GetAlarms 1269
- 47.57 Calendar.Item.HasAlarm 1290
- 76.79 Events.Item.RemoveAlarm 3592

Created 18th August 2014, last changed 18th August 2014.

47.62 Calendar.Item.SetAllDay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetAllDay"; eventRef; value)

Parameters**eventRef**

The reference to the calendar item. Can be reference to event or reminder.

\$eventRef

value

The new setting. Pass 1 for all day or zero otherwise.

1

Result Returns OK or error.

Description

Pass 1 for all day or zero otherwise.

See also

- 47.37 Calendar.Item.GetAlarms 1269
- 47.38 Calendar.Item.GetAllDay 1270
- 47.48 Calendar.Item.GetDueDate 1280
- 47.49 Calendar.Item.GetEndDate 1281
- 47.63 Calendar.Item.SetCalendar 1297
- 47.66 Calendar.Item.SetDueDate 1301
- 47.69 Calendar.Item.SetNotes 1304
- 47.72 Calendar.Item.SetTitle 1308
- 47.76 Calendar.NewEvent 1313
- 47.93 Calendar.SaveEvent 1334

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.62.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32
- Ausgabe 1/2014, Seite 31

Created 18th August 2014, last changed 18th August 2014.

47.63 Calendar.Item.SetCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetCalendar"; itemRef; calendarRef)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

calendarRef

The id of the calendar to query.
\$calendarRef

Result Returns OK or error.

Description

Examples

Create a new reminder:

```
$id = MBS("Calendar.NewReminder")
$r = MBS( "Calendar.Item.SetDueDate"; $id; Get(CurrentHostTimeStamp) )
$r = MBS( "Calendar.Item.SetTitle"; $id; "Test" )
$r = MBS( "Calendar.Item.SetCalendar"; $id; "Erinnerungen" )
$r = MBS( "Calendar.SaveReminder"; $id )
```

Create new event:

```
Set Variable [ $c; Value:MBS("Calendar.NewEvent") ]
# set title and other variables
Set Variable [ $r; Value:MBS("Calendar.Item.SetTitle"; $c; CalendarTest::ItemTitle) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetStartDate"; $c; CalendarTest::ItemStartDate) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetEndDate"; $c; CalendarTest::ItemEndDate) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetAllDay"; $c; CalendarTest::ItemAllDay) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCalendar"; $c; CalendarTest::CalendarUID) ]
# save event
Set Variable [ $r; Value:MBS("Calendar.SaveEvent"; $c ) ]
```

See also

- 47.43 Calendar.Item.GetAttendees 1275
- 47.66 Calendar.Item.SetDueDate 1301
- 47.67 Calendar.Item.SetEndDate 1302

- 47.71 Calendar.Item.SetStartDate 1307
- 47.72 Calendar.Item.SetTitle 1308
- 47.76 Calendar.NewEvent 1313
- 47.77 Calendar.NewReminder 1315
- 47.89 Calendar.RemoveCalendar 1330
- 47.94 Calendar.SaveReminder 1336
- 76.81 Events.Item.SetCalendar 3594

Example Databases

- [Mac only/Calendar/Calendar Test](#)
- [Mac only/Calendar/Reminders](#)

47.63.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr11](#)

47.63.2 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32
- Ausgabe 1/2014, Seite 31

Created 18th August 2014, last changed 31st October 2015.

47.64 Calendar.Item.SetCompleted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetCompleted"; reminderRef; value)

Parameters

reminderRef

The reference to the reminder.

\$reminderRef

value

The new setting. Pass 1 to mark as completed and 0 to mark as uncompleted.

1

Result Returns OK or error.

Description

Setting the flag to 1 also sets completion date to current timestamp.

Setting this flag to 0 will set the date to be undefined.

See also

- 47.45 Calendar.Item.GetCompleted 1277
- 47.63 Calendar.Item.SetCalendar 1297
- 47.65 Calendar.Item.SetCompletionDate 1300
- 47.66 Calendar.Item.SetDueDate 1301
- 47.67 Calendar.Item.SetEndDate 1302
- 47.69 Calendar.Item.SetNotes 1304
- 47.77 Calendar.NewReminder 1315
- 47.94 Calendar.SaveReminder 1336

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.65 Calendar.Item.SetCompletionDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetCompletionDate"; reminderRef; Date)

Parameters

reminderRef

The reference to the reminder.

\$reminderRef

Date

The new timestamp for the completion date.

\$date

Result Returns OK or error.

Description

Setting the date also sets the Completed flag to 1.

See also

- 47.46 Calendar.Item.GetCompletionDate 1278
- 47.64 Calendar.Item.SetCompleted 1299

Created 18th August 2014, last changed 18th August 2014.

47.66 Calendar.Item.SetDueDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetDueDate"; reminderRef; date)

Parameters

reminderRef

The reference to the reminder.

\$reminderRef

date

The new due date.

Get(CurrentTimestamp)

Result Returns OK or error.

Description

There is a bug in OS X which prevents the saving of the time portion of the due date. You can move to Events.Reminder.SetDueDate function to workaroud this.

See also

- 47.48 Calendar.Item.GetDueDate 1280
- 47.63 Calendar.Item.SetCalendar 1297
- 47.64 Calendar.Item.SetCompleted 1299
- 47.67 Calendar.Item.SetEndDate 1302
- 47.69 Calendar.Item.SetNotes 1304
- 47.71 Calendar.Item.SetStartDate 1307
- 47.72 Calendar.Item.SetTitle 1308
- 47.77 Calendar.NewReminder 1315
- 47.93 Calendar.SaveEvent 1334
- 47.94 Calendar.SaveReminder 1336

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 10th March 2016.

47.67 Calendar.Item.SetEndDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetEndDate"; eventRef; timestamp)

Parameters

eventRef

The reference to the event.
\$eventRef

timestamp

The new end date/time.
Get(CurrentTimestamp)

Result Returns OK or error.

Description

See also

- 47.49 Calendar.Item.GetEndDate 1281
- 47.63 Calendar.Item.SetCalendar 1297
- 47.64 Calendar.Item.SetCompleted 1299
- 47.66 Calendar.Item.SetDueDate 1301
- 47.68 Calendar.Item.SetLocation 1303
- 47.70 Calendar.Item.SetPriority 1306
- 47.71 Calendar.Item.SetStartDate 1307
- 47.72 Calendar.Item.SetTitle 1308
- 47.76 Calendar.NewEvent 1313
- 47.93 Calendar.SaveEvent 1334

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.67.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32

Created 18th August 2014, last changed 18th August 2014.

47.68 Calendar.Item.SetLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetLocation"; eventRef; text)

Parameters**eventRef**

The reference to the event.

\$eventRef

text

The new location text.

"Hamburg"

Result Returns OK or error.

Description**See also**

- 47.12 Calendar.Alarm.SetAction 1241
- 47.50 Calendar.Item.GetLocation 1282
- 47.66 Calendar.Item.SetDueDate 1301
- 47.67 Calendar.Item.SetEndDate 1302
- 47.69 Calendar.Item.SetNotes 1304
- 47.70 Calendar.Item.SetPriority 1306
- 47.76 Calendar.NewEvent 1313
- 47.93 Calendar.SaveEvent 1334
- 76.82 Events.Item.SetLocation 3596

Example Databases

- [Mac only/Calendar/Calendar Test](#)

Created 18th August 2014, last changed 18th August 2014.

47.69 Calendar.Item.SetNotes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetNotes"; itemRef; Notes)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

Notes

The new notes text.
"Hello World"

Result Returns OK or error.

Description

See also

- [47.37 Calendar.Item.GetAlarms](#) 1269
- [47.62 Calendar.Item.SetAllDay](#) 1295
- [47.64 Calendar.Item.SetCompleted](#) 1299
- [47.66 Calendar.Item.SetDueDate](#) 1301
- [47.72 Calendar.Item.SetTitle](#) 1308
- [47.73 Calendar.Item.SetURL](#) 1310
- [47.76 Calendar.NewEvent](#) 1313
- [47.77 Calendar.NewReminder](#) 1315
- [47.93 Calendar.SaveEvent](#) 1334
- [47.94 Calendar.SaveReminder](#) 1336

Example Databases

- [Mac only/Calendar/Calendar Test](#)
- [Mac only/Calendar/Reminders](#)

47.69.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32
- Ausgabe 1/2014, Seite 31

Created 18th August 2014, last changed 18th August 2014.

47.70 Calendar.Item.SetPriority

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetPriority"; reminderRef; value)

Parameters

reminderRef

The reference to the reminder.

\$reminderRef

value

The new priority level.

Result Returns error or OK.

Description

The iCalendar specification allows priority to be specified with an integer in the range of 0-9, with 0 representing an undefined priority, 1 the highest priority, and 9 the lowest priority. When a user sets the priority to high, medium or low in iCal saves the priority as 1, 5, or 9 respectively. Clients are encouraged to use these values when setting a task's priority, but it is possible to specify any integer value from 0 to 9. In iCal, a task with a priority in the range of 1-4 will show up as high priority, a task with a priority of 5 will be displayed as having medium priority, and 6-9 will be displayed as having a low priority.

See also

- 47.52 Calendar.Item.GetPriority 1284
- 47.66 Calendar.Item.SetDueDate 1301
- 47.67 Calendar.Item.SetEndDate 1302
- 47.68 Calendar.Item.SetLocation 1303
- 47.77 Calendar.NewReminder 1315
- 47.94 Calendar.SaveReminder 1336

Created 18th August 2014, last changed 18th August 2014.

47.71 Calendar.Item.SetStartDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetStartDate"; eventRef; timestamp)

Parameters

eventRef

The reference to the event.

\$eventRef

timestamp

The new start date/time.

Get(CurrentTimestamp)

Result Returns OK or error.

Description

See also

- 47.48 Calendar.Item.GetDueDate 1280
- 47.49 Calendar.Item.GetEndDate 1281
- 47.53 Calendar.Item.GetStartDate 1285
- 47.59 Calendar.Item.NextAlarmDate 1292
- 47.63 Calendar.Item.SetCalendar 1297
- 47.66 Calendar.Item.SetDueDate 1301
- 47.67 Calendar.Item.SetEndDate 1302
- 47.76 Calendar.NewEvent 1313
- 47.93 Calendar.SaveEvent 1334

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.71.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32
- Ausgabe 1/2014, Seite 31

Created 18th August 2014, last changed 18th August 2014.

47.72 Calendar.Item.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetTitle"; itemRef; title)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.
\$eventRef

title

The new title for the calendar item.
"Hello"

Result Returns OK or error.

Description

See also

- 47.51 Calendar.Item.GetNotes 1283
- 47.54 Calendar.Item.GetTitle 1286
- 47.66 Calendar.Item.SetDueDate 1301
- 47.67 Calendar.Item.SetEndDate 1302
- 47.69 Calendar.Item.SetNotes 1304
- 47.73 Calendar.Item.SetURL 1310
- 47.76 Calendar.NewEvent 1313
- 47.77 Calendar.NewReminder 1315
- 47.93 Calendar.SaveEvent 1334
- 47.94 Calendar.SaveReminder 1336

Example Databases

- [Mac only/Calendar/Calendar Test](#)
- [Mac only/Calendar/Reminders](#)

47.72.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32
- Ausgabe 1/2014, Seite 31

Created 18th August 2014, last changed 18th August 2014.

47.73 Calendar.Item.SetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Item.SetURL"; itemRef; URL)

Parameters

itemRef

The reference to the calendar item. Can be reference to event or reminder.

\$eventRef

URL

The new URL to store.

"http://www.mbsplugins.de"

Result Returns OK or error.

Description

See also

- 47.9 Calendar.Alarm.GetURL 1238
- 47.17 Calendar.Alarm.SetURL 1246
- 47.55 Calendar.Item.GetUID 1287
- 47.56 Calendar.Item.GetURL 1289
- 47.69 Calendar.Item.SetNotes 1304
- 47.72 Calendar.Item.SetTitle 1308
- 47.76 Calendar.NewEvent 1313
- 47.93 Calendar.SaveEvent 1334

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.73.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32

Created 18th August 2014, last changed 18th August 2014.

47.74 Calendar.NewAlarm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.NewAlarm")

Result Returns ID of new alarm.

Description

Calendar item reference numbers are starting at 27000 and counting up for each new item.

See also

- 47.76 Calendar.NewEvent

1313

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.74.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32

Created 18th August 2014, last changed 9th January 2015.

47.75 Calendar.NewCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.NewCalendar")

Result Returns ID of new calendar.

Description

Calendar item reference numbers are starting at 27000 and counting up for each new item.

See also

- [47.32 Calendar.Calendars](#) 1263
- [47.77 Calendar.NewReminder](#) 1315
- [47.89 Calendar.RemoveCalendar](#) 1330
- [47.92 Calendar.SaveCalendar](#) 1333

Example Databases

- [Mac only/Calendar/Calendar Test](#)

Created 18th August 2014, last changed 9th January 2015.

47.76 Calendar.NewEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.NewEvent")

Result Returns ID of new event.

Description

Calendar item reference numbers are starting at 27000 and counting up for each new item.

Or the plugin returns you the UUID for the event.

Examples

Create an event:

```
# new event
Set Variable [ $c; Value:MBS("Calendar.NewEvent") ]
# set title and other variables
Set Variable [ $r; Value:MBS("Calendar.Item.SetTitle"; $c; CalendarTest::ItemTitle) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetNotes"; $c; CalendarTest::ItemNotes) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetURL"; $c; CalendarTest::ItemURL) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetLocation"; $c;CalendarTest::ItemLocation) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetStartDate"; $c; CalendarTest::ItemStartDate) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetEndDate"; $c; CalendarTest::ItemEndDate) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetAllDay"; $c;CalendarTest::ItemAllDay) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCalendar"; $c; CalendarTest::CalendarUID) ]
# save event
Set Variable [ $r; Value:MBS("Calendar.SaveEvent"; $c ) ]
# store id for later reference
Set Field [ CalendarTest::ItemUID; MBS("Calendar.Item.GetUID"; $c) ]
```

See also

- 47.55 Calendar.Item.GetUID 1287
- 47.62 Calendar.Item.SetAllDay 1295
- 47.63 Calendar.Item.SetCalendar 1297
- 47.67 Calendar.Item.SetEndDate 1302
- 47.68 Calendar.Item.SetLocation 1303
- 47.71 Calendar.Item.SetStartDate 1307
- 47.72 Calendar.Item.SetTitle 1308
- 47.73 Calendar.Item.SetURL 1310
- 47.90 Calendar.RemoveEvent 1331

- 47.93 Calendar.SaveEvent

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.76.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 32

Created 18th August 2014, last changed 10th August 2016.

47.77 Calendar.NewReminder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.NewReminder")

Result Returns ID of new reminder.

Description

Calendar item reference numbers are starting at 27000 and counting up for each new item. Or the plugin returns you the UUID for the event.

Examples

Synchronize Todos with Reminders:

```
# Sync Todos as Reminders from FileMaker to Mac Reminder app
# And sync back changes
#
# Please adjust to your fields and your special use case!
# You can optimize to only update fields on each side if changed
#

Go to Record/Request/Page [ First ]
Loop
# Check if we have an ID for this todo already
If [ Todos::SyncUID = "" ]
Set Variable [ $c; Value:Todos::SyncUID ]
# Query last modification date
Set Variable [ $completed; Value:MBS( "Calendar.Item.GetCompleted"; Todos::SyncUID ) ]
Set Variable [ $datum; Value:MBS( "Calendar.Item.GetDateStamp"; Todos::SyncUID ) ]
If [ MBS("isError") ]
# Reminder was deleted, so we recreate
Set Field [ Todos::SyncUID; "" ]
Commit Records/Requests [ No dialog ]
Else
# Update
If [ $datum >Todos::Last_Change ]
#
# Reminder ->FM
#
# Sync note field
Set Variable [ $notes; Value:MBS( "Calendar.Item.GetNotes"; Todos::SyncUID ) ]
If [ Todos::To Do Main Text = $notes ]
# Special: If note starts with # then move number to duration field
If [ Left ( Trim ( $notes ; 1 ) = "# " ]
Set Variable [ $duration; Value:GetAsNumber ( LeftWords ( $notes ; 1 ) ) ]
Set Field [ Todos::To Do Completion Time in Minutes; $duration ]
```

```

Commit Records/Requests [ No dialog ]
Else
Set Field [ ToDos::To Do Main Text; $notes ]
Commit Records/Requests [ No dialog ]
End If
End If
# Sync title if changed
Set Variable [ $title; Value:MBS( "Calendar.Item.GetTitle"; ToDos::SyncUID ) ]
If [ ToDos::To Do Headline $title ]
Set Field [ ToDos::To Do Headline; $title ]
Commit Records/Requests [ No dialog ]
End If
# Sync completed flag if changed
If [ $completed=1 ]
If [ ToDos::flag To Do Completed "X" ]
Set Field [ ToDos::flag To Do Completed; "X" ]
Commit Records/Requests [ No dialog ]
End If
Else If [ $completed=0 ]
If [ ToDos::flag To Do Completed "" ]
Set Field [ ToDos::flag To Do Completed; "" ]
Commit Records/Requests [ No dialog ]
End If
End If
Else
#
# FM ->Reminder
#
# overwrite all values
Set Variable [ $r; Value:MBS("Calendar.Item.SetTitle"; $c; ToDos::To Do Headline) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetNotes"; $c; ToDos::To Do Main Text) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetDueDate"; $c; ToDos::To Do Deadline) ]
If [ ToDos::flag To Do Completed = "X" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCompleted"; $c; 1) ]
End If
If [ ToDos::flag To Do Completed = "" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCompleted"; $c; 0) ]
End If
If [ ToDos::To Do Priority="1 Jetzt" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;1) ]
End If
If [ ToDos::To Do Priority="2 Sofort" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;5) ]
End If
If [ ToDos::To Do Priority="4 Hat Zeit" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;9) ]
End If
Set Variable [ $r; Value:MBS("Calendar.SaveReminder"; $c ) ]

```



```

End If
End If
End If
If [ ToDos::SyncUID = "" ]
# Create new reminder
#
# Which calendar? (Reminder List)
Set Variable [ $CalendarName; Value:"" ]
If [ ToDos::To Do By="PF" ]
Set Variable [ $CalendarName; Value:"ToDo PF" ]
Else If [ ToDos::To Do By = "GK" ]
Set Variable [ $CalendarName; Value:"ToDo GK" ]
End If
If [ $CalendarName "" ]
Set Variable [ $c; Value:MBS("Calendar.NewReminder") ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetTitle"; $c; ToDos::To Do Headline) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetNotes"; $c; ToDos::To Do Main Text) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCalendar"; $c;$CalendarName) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetDueDate"; $c; ToDos::To Do Deadline ) ]
If [ ToDos::To Do Priority="1 Jetzt" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;1 ) ]
End If
If [ ToDos::To Do Priority="2 Sofort" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;5 ) ]
End If
If [ ToDos::To Do Priority="4 Hat Zeit" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;9 ) ]
End If
If [ ToDos::flag To Do Completed = "X" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCompleted"; $c; 1) ]
End If
If [ ToDos::flag To Do Completed = "" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCompleted"; $c; 0) ]
End If
Set Variable [ $r; Value:MBS("Calendar.SaveReminder"; $c ) ]
# store id for update later
Set Field [ ToDos::SyncUID; MBS("Calendar.Item.GetUID"; $c) ]
Commit Records/Requests [ No dialog ]
End If
End If
Go to Record/Request/Page [ Next; Exit after last ]
End Loop

```

See also

- 47.54 Calendar.Item.GetTitle 1286
- 47.55 Calendar.Item.GetUID 1287

- 47.64 Calendar.Item.SetCompleted 1299
- 47.66 Calendar.Item.SetDueDate 1301
- 47.69 Calendar.Item.SetNotes 1304
- 47.72 Calendar.Item.SetTitle 1308
- 47.91 Calendar.RemoveReminder 1332
- 47.93 Calendar.SaveEvent 1334
- 47.94 Calendar.SaveReminder 1336
- 124.6 IsError 6266

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 22nd September 2016.

47.78 Calendar.Notification.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.Clear")

Result Returns OK.

Description

Examples

Clears script

MBS("Calendar.Notification.Clear")

See also

- 47.79 Calendar.Notification.Evaluate 1320
- 47.87 Calendar.Notification.GetWhat 1328
- 47.88 Calendar.Notification.Set 1329

Created 18th August 2014, last changed 18th August 2014.

47.79 Calendar.Notification.Evaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	6.2	Yes	No	No	No	No

MBS("Calendar.Notification.Evaluate"; Expression)

Parameters

Expression

The expression to evaluate.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

This expression is evaluated whenever something in the calendar database changed.

See also

- 47.78 Calendar.Notification.Clear 1319
- 47.87 Calendar.Notification.GetWhat 1328
- 47.88 Calendar.Notification.Set 1329

47.79.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 29th March 2016.

47.80 Calendar.Notification.GetChangedExternally

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.GetChangedExternally")

Result Returns 1 or 0.

Description

If this function returns zero, the change was made by your own FileMaker solution.

This property is not always set by the OS for all changes, especially with some sync services.

See also

- 33.10 Addressbook.Notification.GetChangedExternally

810

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 12nd January 2015.

47.81 Calendar.Notification.GetDeletedRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.GetDeletedRecords")

Result Returns list of record IDs.

Description

Only valid in a notification script.

Please note that the plugin may not be able to provide information for deleted record contents.

Values in this list are IDs of calendars, events, or reminders, depending on the notification (See Calendar.Notification.GetWhat). If all three lists (updatedRecords, DeletedRecords, InsertedRecords) are empty, that indicates everything has changed, and the client should refresh the calendar, event, and reminder information currently being used. Since this tends to be an expensive and inconvenient operation, it will only occur under unusual circumstances, such as when restoring from backup.

See also

- 33.11 Addressbook.Notification.GetDeletedRecords 811
- 47.82 Calendar.Notification.GetInsertedRecords 1323
- 47.85 Calendar.Notification.GetUpdatedRecords 1326
- 47.87 Calendar.Notification.GetWhat 1328

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 18th August 2014.

47.82 Calendar.Notification.GetInsertedRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.GetInsertedRecords")

Result Returns list of record IDs.

Description

Only valid in a notification script.

Values in this list are IDs of calendars, events, or reminders, depending on the notification (See Calendar.Notification.GetWhat). If all three lists (updatedRecords, DeletedRecords, InsertedRecords) are empty, that indicates everything has changed, and the client should refresh the calendar, event, and reminder information currently being used. Since this tends to be an expensive and inconvenient operation, it will only occur under unusual circumstances, such as when restoring from backup.

See also

- [33.12 Addressbook.Notification.GetInsertedRecords](#) 812
- [47.81 Calendar.Notification.GetDeletedRecords](#) 1322
- [47.85 Calendar.Notification.GetUpdatedRecords](#) 1326
- [47.87 Calendar.Notification.GetWhat](#) 1328

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 18th August 2014.

47.83 Calendar.Notification.GetProcessID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.GetProcessID")

Result Returns proces identifier.

Description

In a notification script you can use this function to learn who made the change for external changes. For notifications caused by your own solution, this value may be undefined.

See also

- 33.13 Addressbook.Notification.GetProcessID 813
- 47.84 Calendar.Notification.GetProcessName 1325
- 47.86 Calendar.Notification.GetUserUID 1327

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 18th August 2014.

47.84 Calendar.Notification.GetProcessName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.GetProcessName")

Result Returns process name.

Description

In a notification script you can use this function to learn who made the change for external changes. For notifications caused by your own solution, this value may be undefined.

See also

- 33.14 Addressbook.Notification.GetProcessName 814
- 47.83 Calendar.Notification.GetProcessID 1324

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 18th August 2014.

47.85 Calendar.Notification.GetUpdatedRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.GetUpdatedRecords")

Result Returns list of record IDs.

Description

Only valid in a notification script.

Values in this list are IDs of calendars, events, or reminders, depending on the notification (See Calendar.Notification.GetWhat). If all three lists (updatedRecords, DeletedRecords, InsertedRecords) are empty, that indicates everything has changed, and the client should refresh the calendar, event, and reminder information currently being used. Since this tends to be an expensive and inconvenient operation, it will only occur under unusual circumstances, such as when restoring from backup.

See also

- 33.15 Addressbook.Notification.GetUpdatedRecords 815
- 47.81 Calendar.Notification.GetDeletedRecords 1322
- 47.82 Calendar.Notification.GetInsertedRecords 1323
- 47.87 Calendar.Notification.GetWhat 1328

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 18th August 2014.

47.86 Calendar.Notification.GetUserUID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.GetUserUID")

Result Returns user ID as number.

Description

In a notification script you can use this function to learn who made the change for external changes. For notifications caused by your own solution, this value may be undefined.

See also

- 47.83 Calendar.Notification.GetProcessID 1324
- 47.87 Calendar.Notification.GetWhat 1328

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 18th August 2014.

47.87 Calendar.Notification.GetWhat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.GetWhat")

Result Returns text or error.

Description

Can be "Calendars", "Reminders" or "Events".

In a notification script you can use this function to learn what changed and what IDs the functions Calendar.Notification.GetUpdatedRecords, Calendar.Notification.GetDeletedRecords and Calendar.Notification.GetInsertedRecords return.

See also

- 47.78 Calendar.Notification.Clear 1319
- 47.79 Calendar.Notification.Evaluate 1320
- 47.81 Calendar.Notification.GetDeletedRecords 1322
- 47.82 Calendar.Notification.GetInsertedRecords 1323
- 47.85 Calendar.Notification.GetUpdatedRecords 1326
- 47.86 Calendar.Notification.GetUserUID 1327
- 47.88 Calendar.Notification.Set 1329

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 18th August 2014.

47.88 Calendar.Notification.Set

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.5	Yes	No	No	No	No

MBS("Calendar.Notification.Set"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK on success.

Description

This script is called whenever something in the calendar database changed.

It can be useful to just call this function without a script name just to have the plugin watch for changes in calendar and clear it's cache.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Installs notification script:

MBS("Calendar.Notification.Set"; "test.fp7"; "MyScript")

See also

- [47.78 Calendar.Notification.Clear](#) 1319
- [47.79 Calendar.Notification.Evaluate](#) 1320
- [47.87 Calendar.Notification.GetWhat](#) 1328

Example Databases

- [Mac only/Calendar/Calendar Changes](#)

Created 18th August 2014, last changed 7th November 2016.

47.89 Calendar.RemoveCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.RemoveCalendar"; calendarRef)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Result Returns OK or error.

Description

See also

- 47.44 Calendar.Item.GetCalendar 1276
- 47.63 Calendar.Item.SetCalendar 1297
- 47.75 Calendar.NewCalendar 1312
- 47.91 Calendar.RemoveReminder 1332
- 47.92 Calendar.SaveCalendar 1333
- 76.149 Events.RemoveCalendar 3677

Created 18th August 2014, last changed 18th August 2014.

47.90 Calendar.RemoveEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.RemoveEvent"; eventRef)

Parameters

eventRef

The id of the event to query.

\$eventRef

Result Returns OK or error.

Description

See also

- 47.76 Calendar.NewEvent 1313
- 47.93 Calendar.SaveEvent 1334
- 47.95 Calendar.SelectEvent 1340

47.90.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33

Created 18th August 2014, last changed 18th August 2014.

47.91 Calendar.RemoveReminder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.RemoveReminder"; reminderRef)

Parameters

reminderRef

The id of the reminder to query.

\$reminderRef

Result Returns OK or error.

Description

See also

- [47.77 Calendar.NewReminder](#) 1315
- [47.89 Calendar.RemoveCalendar](#) 1330
- [47.94 Calendar.SaveReminder](#) 1336
- [76.151 Events.RemoveReminder](#) 3679

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 18th August 2014.

47.92 Calendar.SaveCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.SaveCalendar"; calendarRef)

Parameters

calendarRef

The id of the calendar to query.

\$calendarRef

Result Returns OK or error.

Description

Examples

Create a new calendar:

```
$c = MBS("Calendar.NewCalendar")
```

```
$r = MBS("Calendar.Calendar.SetTitle"; $c; CalendarTest::Title)
```

```
$r = MBS("Calendar.Calendar.SetNotes"; $c; CalendarTest::Notes)
```

```
$r = MBS("Calendar.Calendar.SetColor"; $c; CalendarTest::Color)
```

```
$r = MBS("Calendar.SaveCalendar"; $c )
```

See also

- [47.29 Calendar.Calendar.SetColor](#) 1260
- [47.30 Calendar.Calendar.SetNotes](#) 1261
- [47.31 Calendar.Calendar.SetTitle](#) 1262
- [47.32 Calendar.Calendars](#) 1263
- [47.75 Calendar.NewCalendar](#) 1312
- [47.89 Calendar.RemoveCalendar](#) 1330
- [47.94 Calendar.SaveReminder](#) 1336

Example Databases

- [Mac only/Calendar/Calendar Test](#)

Created 18th August 2014, last changed 18th August 2014.

47.93 Calendar.SaveEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.SaveEvent"; eventRef)

Parameters

eventRef

The id of the event to query.

\$eventRef

Result Returns OK or error.

Description

Examples

Creates new event:

```
$c = MBS("Calendar.NewEvent");
$r = MBS("Calendar.Item.SetTitle"; $c; CalendarTest::ItemTitle)
$r = MBS("Calendar.Item.SetNotes"; $c; CalendarTest::ItemNotes)
$r = MBS("Calendar.Item.SetURL"; $c; CalendarTest::ItemURL)
$r = MBS("Calendar.Item.SetLocation"; $c; CalendarTest::ItemLocation)
$r = MBS("Calendar.Item.SetStartDate"; $c; CalendarTest::ItemStartDate)
$r = MBS("Calendar.Item.SetEndDate"; $c; CalendarTest::ItemEndDate)
$r = MBS("Calendar.Item.SetAllDay"; $c; CalendarTest::ItemAllDay)
$r = MBS("Calendar.Item.SetCalendar"; $c; CalendarTest::CalendarUID)
$r = MBS("Calendar.SaveEvent"; $c )
```

Create a new reminder:

```
$id = MBS("Calendar.NewReminder")
$r = MBS( "Calendar.Item.SetDueDate"; $id; Get(CurrentHostTimeStamp) )
$r = MBS( "Calendar.Item.SetTitle"; $id; "Test" )
$r = MBS( "Calendar.Item.SetCalendar"; $id; "Erinnerungen" )
$r = MBS( "Calendar.SaveReminder"; $id )
```

See also

- 47.63 Calendar.Item.SetCalendar 1297
- 47.67 Calendar.Item.SetEndDate 1302
- 47.68 Calendar.Item.SetLocation 1303
- 47.71 Calendar.Item.SetStartDate 1307
- 47.73 Calendar.Item.SetURL 1310

47.93. CALENDAR.SAVEEVENT	1335
• 47.76 Calendar.NewEvent	1313
• 47.77 Calendar.NewReminder	1315
• 47.90 Calendar.RemoveEvent	1331
• 47.94 Calendar.SaveReminder	1336
• 47.95 Calendar.SelectEvent	1340

Example Databases

- [Mac only/Calendar/Calendar Test](#)

47.93.1 FileMaker Magazin

- Ausgabe 1/2014, Seite 33
- Ausgabe 1/2014, Seite 32

Created 18th August 2014, last changed 18th August 2014.

47.94 Calendar.SaveReminder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.SaveReminder"; reminderRef)

Parameters

reminderRef

The id of the reminder to query.

\$reminderRef

Result Returns OK or error.

Description

Examples

Synchronize Todos with Reminders:

```
# Sync Todos as Reminders from FileMaker to Mac Reminder app
# And sync back changes
#
# Please adjust to your fields and your special use case!
# You can optimize to only update fields on each side if changed
#

Go to Record/Request/Page [ First ]
Loop
# Check if we have an ID for this todo already
If [ Todos::SyncUID = "" ]
Set Variable [ $c; Value:Todos::SyncUID ]
# Query last modification date
Set Variable [ $completed; Value:MBS( "Calendar.Item.GetCompleted"; Todos::SyncUID ) ]
Set Variable [ $datum; Value:MBS( "Calendar.Item.GetDateStamp"; Todos::SyncUID ) ]
If [ MBS("isError") ]
# Reminder was deleted, so we recreate
Set Field [ Todos::SyncUID; "" ]
Commit Records/Requests [ No dialog ]
Else
# Update
If [ $datum > Todos::Last_Change ]
#
# Reminder ->FM
#
# Sync note field
Set Variable [ $notes; Value:MBS( "Calendar.Item.GetNotes"; Todos::SyncUID ) ]
If [ Todos::To Do Main Text = $notes ]
# Special: If note starts with # then move number to duration field
```

```

If [ Left ( Trim ( $notes ); 1 ) = "# " ]
Set Variable [ $duration; Value:GetAsNumber ( LeftWords ( $notes ; 1 ) ) ]
Set Field [ Todos::To Do Completion Time in Minutes; $duration ]
Commit Records/Requests [ No dialog ]
Else
Set Field [ Todos::To Do Main Text; $notes ]
Commit Records/Requests [ No dialog ]
End If
End If
# Sync title if changed
Set Variable [ $title; Value:MBS( "Calendar.Item.GetTitle"; Todos::SyncUID ) ]
If [ Todos::To Do Headline $title ]
Set Field [ Todos::To Do Headline; $title ]
Commit Records/Requests [ No dialog ]
End If
# Sync completed flag if changed
If [ $completed=1 ]
If [ Todos::flag To Do Completed "X" ]
Set Field [ Todos::flag To Do Completed; "X" ]
Commit Records/Requests [ No dialog ]
End If
Else If [ $completed=0 ]
If [ Todos::flag To Do Completed "" ]
Set Field [ Todos::flag To Do Completed; "" ]
Commit Records/Requests [ No dialog ]
End If
End If
Else
#
# FM ->Reminder
#
# overwrite all values
Set Variable [ $r; Value:MBS("Calendar.Item.SetTitle"; $c; Todos::To Do Headline) ]
Set Variable [ $n; Value:MBS("Calendar.Item.SetNotes"; $c; Todos::To Do Main Text) ]
Set Variable [ $d; Value:MBS("Calendar.Item.SetDueDate"; $c; Todos::To Do Deadline ) ]
If [ Todos::flag To Do Completed = "X" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCompleted"; $c; 1) ]
End If
If [ Todos::flag To Do Completed = "" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCompleted"; $c; 0) ]
End If
If [ Todos::To Do Priority="1 Jetzt" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;1) ]
End If
If [ Todos::To Do Priority="2 Sofort" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;5) ]
End If
If [ Todos::To Do Priority="4 Hat Zeit" ]

```

```

Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;9 ) ]
End If
Set Variable [ $r; Value:MBS("Calendar.SaveReminder"; $c ) ]
End If
End If
End If
If [ ToDos::SyncUID = "" ]
# Create new reminder
#
# Which calendar? (Reminder List)
Set Variable [ $CalenderName; Value:"" ]
If [ ToDos::To Do By="PF" ]
Set Variable [ $CalenderName; Value:"ToDo PF" ]
Else If [ ToDos::To Do By = "GK" ]
Set Variable [ $CalenderName; Value:"ToDo GK" ]
End If
If [ $CalenderName = "" ]
Set Variable [ $c; Value:MBS("Calendar.NewReminder") ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetTitle"; $c; ToDos::To Do Headline) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetNotes"; $c; ToDos::To Do Main Text) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCalendar"; $c;$CalenderName) ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetDueDate"; $c; ToDos::To Do Deadline ) ]
If [ ToDos::To Do Priority="1 Jetzt" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;1 ) ]
End If
If [ ToDos::To Do Priority="2 Sofort" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;5 ) ]
End If
If [ ToDos::To Do Priority="4 Hat Zeit" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetPriority"; $c;9 ) ]
End If
If [ ToDos::flag To Do Completed = "X" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCompleted"; $c; 1) ]
End If
If [ ToDos::flag To Do Completed = "" ]
Set Variable [ $r; Value:MBS("Calendar.Item.SetCompleted"; $c; 0) ]
End If
Set Variable [ $r; Value:MBS("Calendar.SaveReminder"; $c ) ]
# store id for update later
Set Field [ ToDos::SyncUID; MBS("Calendar.Item.GetUID"; $c) ]
Commit Records/Requests [ No dialog ]
End If
End If
Go to Record/Request/Page [ Next; Exit after last ]
End Loop

```

See also

47.94. <i>CALENDAR.SAVEREMINDER</i>	1339
• 47.47 Calendar.Item.GetDateStamp	1279
• 47.51 Calendar.Item.GetNotes	1283
• 47.63 Calendar.Item.SetCalendar	1297
• 47.66 Calendar.Item.SetDueDate	1301
• 47.69 Calendar.Item.SetNotes	1304
• 47.70 Calendar.Item.SetPriority	1306
• 47.77 Calendar.NewReminder	1315
• 47.91 Calendar.RemoveReminder	1332
• 47.92 Calendar.SaveCalendar	1333
• 124.6 IsError	6266

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 22nd September 2016.

47.95 Calendar.SelectEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.SelectEvent"; EventRef; OccuranceDate)

Parameters**EventRef**

The reference to the event.

\$EventRef

OccuranceDate

The occurrence date.

\$OccuranceDate

Result Returns new temporary event ID or error.

Description

This will select an event and return a new reference which you can use for other editing functions to work on an event.

Some events have several occurrence dates, but same unique IDs.

See also

- 47.76 Calendar.NewEvent 1313
- 47.90 Calendar.RemoveEvent 1331
- 47.93 Calendar.SaveEvent 1334

Created 18th August 2014, last changed 18th August 2014.

47.96 Calendar.Tasks

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.Tasks" { ; calendarRef })

Parameters

calendarRef

Optional

A calendar identifier or name to search only this calendar.

\$calendarRef

Result Returns list of task/reminder identifiers or error.

Description

If you pass calendar, only this calendar is searched. Else all calendars are searched.

Examples

Queries tasks:

MBS("Calendar.Tasks")

See also

- [47.97 Calendar.TasksCompletedSince](#)

1342

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 11st October 2019.

47.97 Calendar.TasksCompletedSince

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.TasksCompletedSince"; completedSince { ; calendarRef })

Parameters

completedSince

The date where we search tasks after.

\$completedSince

calendarRef

Optional

A calendar identifier or name to search only this calendar.

\$calendarRef

Result Returns list of task/reminder identifiers or error.

Description

If you pass calendar, only this calendar is searched. Else all calendars are searched.

Examples

Queries tasks:

MBS("Calendar.TasksCompletedSince"; \$completedSince)

See also

- [47.96 Calendar.Tasks](#)

1341

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 11st October 2019.

47.98 Calendar.UncompletedTasks

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.UncompletedTasks" { ; calendarRef })

Parameters

calendarRef

Optional

Optional, a calendar identifier or name to search only this calendar.

\$calendarRef

Result Returns list of task/reminder identifiers or error.

Description

If you pass calendar, only this calendar is searched. Else all calendars are searched.

Examples

Queries tasks:

MBS("Calendar.UncompletedTasks")

See also

- [47.99 Calendar.UncompletedTasksDueBefore](#)

1344

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 11st October 2019.

47.99 Calendar.UncompletedTasksDueBefore

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
47 Calendar	3.4	Yes	No	No	No	No

MBS("Calendar.UncompletedTasksDueBefore"; dueDate { ; calendarRef })

Parameters

dueDate

The date where we search tasks before.

\$dueDate

calendarRef

Optional

Optional, a calendar identifier or name to search only this calendar.

\$calendarRef

Result Returns list of task/reminder identifiers or error.

Description

If you pass calendar, only this calendar is searched. Else all calendars are searched.

Examples

Queries tasks:

```
MBS( "Calendar.UncompletedTasksDueBefore"; $dueDate )
```

See also

- 47.98 Calendar.UncompletedTasks

1343

Example Databases

- [Mac only/Calendar/Reminders](#)

Created 18th August 2014, last changed 11st October 2019.

Chapter 48

Certificates

X509 Certificates and PKCS12 file handling.

48.1 PKCS12.CA

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKCS12.CA"; PKCS12 Reference; Index)

Parameters

PKCS12 Reference

The reference to the PKCS12.

\$pkcs12

Index

The index of the certificate to get. From 0 to PKCS12.CACount-1.

0

Result Returns X509 reference number or error.

Description

A PKCS12 file may contain more than one certificate.

Examples

Query certificates:

```
Set Variable [ $p12; Value:MBS( "PKCS12.ReadFromContainer"; test::Container; "Geslo123# " ) ]
```

```
If [ MBS("IsError") ]
```

```
Show Custom Dialog [ "Error"; $p12 ]
```

```
Else
```

```
Set Variable [ $count; Value:MBS( "PKCS12.CACount"; $p12 ) ]
```

```
Set Variable [ $index; Value:0 ]
Loop
Set Variable [ $cert; Value:MBS( "PKCS12.CA"; $p12; $index ) ]
Show Custom Dialog [ "Certificate"; MBS( "X509.Description"; $cert ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
# next
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index >= $count ]
End Loop
Set Variable [ $r; Value:MBS( "PKCS12.Release"; $p12 ) ]
End If
```

See also

- 124.6 IsError 6266
- 48.2 PKCS12.CACount 1347
- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352
- 48.7 PKCS12.Release 1354
- 48.22 X509.Description 1369
- 48.29 X509.Release 1376

Created 23th December 2016, last changed 23th December 2016.

48.2 PKCS12.CACount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKCS12.CACount"; PKCS12 Reference)

Parameters

PKCS12 Reference

The reference to the PKCS12.

\$pkcs12

Result Returns OK or error.

Description

Examples

Get count:

Set Variable [\$count; Value:MBS("PKCS12.CACount"; \$p12)]

See also

- 48.1 PKCS12.CA 1345
- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352

Created 23th December 2016, last changed 23th December 2016.

48.3 PKCS12.Cert

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKCS12.Cert"; PKCS12 Reference)

Parameters

PKCS12 Reference

The reference to the PKCS12.

\$pkcs12

Result Returns X509 reference number or error.

Description

Examples

Get certificate:

Set Variable [\$cert; Value:MBS("PKCS12.Cert"; \$p12)]

See also

- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352

Created 23th December 2016, last changed 23th December 2016.

48.4 PKCS12.PKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKCS12.PKey"; PKCS12 Reference)

Parameters

PKCS12 Reference

The reference to the PKCS12.

\$pkcs12

Result Returns PKey reference number or error.

Description

Examples

Get private key:

Set Variable [\$pkey; Value:MBS("PKCS12.PKey"; \$p12)]

See also

- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352

Created 23th December 2016, last changed 23th December 2016.

48.5 PKCS12.ReadFromContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKCS12.ReadFromContainer"; Container { ; Password })

Parameters

Container

The container with the certificate file.

Password

Optional

The password for the p12 file.

"Hello"

Result Returns PKCS12 reference number or error.

Description

Please call PKCS12.Release later to release memory.

Examples

Read PKCS12 from container and shows details:

```
Set Variable [ $p12; Value:MBS( "PKCS12. ReadFromContainer"; MyTable::MyContainerField; "test" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $p12 ]
Else
Set Variable [ $cert; Value:MBS( "PKCS12.Cert"; $p12 ) ]
Set Variable [ $pkey; Value:MBS( "PKCS12.PKey"; $p12 ) ]
Set Variable [ $CACount; Value:MBS( "PKCS12.CACount"; $p12 ) ]
Show Custom Dialog [ "Certificate"; MBS( "X509.Description"; $cert ) ]
Show Custom Dialog [ "Private Key"; MBS( "PKey.DescriptionPrivateKey"; $pkey ) ]
Set Variable [ $r; Value:MBS( "PKey.Release"; $pkey ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
Set Variable [ $r; Value:MBS( "PKCS12.Release"; $p12 ) ]
End If
```

See also

- 48.1 PKCS12.CA 1345
- 48.2 PKCS12.CACount 1347
- 48.3 PKCS12.Cert 1348
- 48.4 PKCS12.PKey 1349
- 48.7 PKCS12.Release 1354

48.5. <i>PKCS12.READFROMCONTAINER</i>	1351
• 48.16 PKey.DescriptionPrivateKey	1363
• 48.20 PKey.Release	1367
• 48.22 X509.Description	1369
• 48.27 X509.ReadFromContainer	1374
• 48.29 X509.Release	1376

Created 23th December 2016, last changed 6th March 2019.

48.6 PKCS12.ReadFromFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKCS12.ReadFromFile"; Path; Password)

Parameters

Path

The native file path to the PEM file.

"/Users/cs/Desktop/test.pem"

Password

The password for the p12 file.

"Hello"

Result Returns PKCS12 reference number or error.

Description

Please call PKCS12.Release later to release memory.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read PKCS12 file and shows details:

```
Set Variable [ $p12; Value:MBS( "PKCS12.ReadFromFile"; "/Users/cs/Desktop/test.p12"; "test" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $p12 ]
Else
Set Variable [ $cert; Value:MBS( "PKCS12.Cert"; $p12 ) ]
Set Variable [ $pkey; Value:MBS( "PKCS12.PKey"; $p12 ) ]
Set Variable [ $CACount; Value:MBS( "PKCS12.CACount"; $p12 ) ]
Show Custom Dialog [ "Certificate"; MBS( "X509.Description"; $cert ) ]
Show Custom Dialog [ "Private Key"; MBS( "PKey.DescriptionPrivateKey"; $pkey ) ]
Set Variable [ $r; Value:MBS( "PKey.Release"; $pkey ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
Set Variable [ $r; Value:MBS( "PKCS12.Release"; $p12 ) ]
End If
```

See also

- 124.6 IsError 6266
- 121.2 Path.FileMakerPathToNativePath 6139

48.6. <i>PKCS12.READFROMFILE</i>	1353
• 48.1 PKCS12.CA	1345
• 48.2 PKCS12.CACount	1347
• 48.3 PKCS12.Cert	1348
• 48.4 PKCS12.PKey	1349
• 48.7 PKCS12.Release	1354
• 48.16 PKey.DescriptionPrivateKey	1363
• 48.20 PKey.Release	1367
• 48.22 X509.Description	1369

Created 23th December 2016, last changed 6th March 2019.

48.7 PKCS12.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKCS12.Release"; PKCS12 Reference)

Parameters

PKCS12 Reference

The reference to the PKCS12.
\$pkcs12

Result Returns OK or error.

Description

See also

- 48.1 PKCS12.CA 1345
- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352
- 48.8 PKCS12.ShowDialog 1355
- 48.11 PKCS7.Release 1358

Created 23th December 2016, last changed 23th December 2016.

48.8 PKCS12.ShowDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.2	Yes	No	No	No	No

MBS("PKCS12.ShowDialog"; PKCS12 Reference)

Parameters

PKCS12 Reference

The reference to the PKCS12.

\$pkcs12

Result Returns OK or error.

Description

Displays the content of the certificate and the chain in the standard dialog to user.

Examples

Show certificate:

```
Set Variable [ $p ; Value: MBS( "PKCS12.ReadFromFile"; "/Users/cs/Desktop/test_cert.pfx"; "123456" )
]
Set Variable [ $r ; Value: MBS( "PKCS12.ShowDialog"; $p ) ]
Set Variable [ $r ; Value: MBS( "PKCS12.Release"; $p ) ]
```

See also

- 48.6 PKCS12.ReadFromFile 1352
- 48.7 PKCS12.Release 1354

Created 30th April 2019, last changed 30th April 2019.

48.9 PKCS7.ReadFromContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.1	Yes	Yes	Yes	Yes	Yes

MBS("PKCS7.ReadFromContainer"; Container)

Parameters

Container

The container with the certificate file.

Result Returns PKCS7 reference number or error.

Description

Please call PKCS7.Release later to release memory.

See also

- 48.5 PKCS12.ReadFromContainer 1350
- 48.11 PKCS7.Release 1358
- 48.27 X509.ReadFromContainer 1374

Created 6th March 2019, last changed 6th March 2019.

48.10 PKCS7.ReadFromFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.1	Yes	Yes	Yes	Yes	Yes

MBS("PKCS7.ReadFromFile"; Path)

Parameters**Path**

The native file path to the PKCS# 7 file.

"/Users/cs/Desktop/test.pem"

Result Returns PKCS7 reference number or error.

Description

Please call PKCS7.Release later to release memory.

See also

- 48.6 PKCS12.ReadFromFile 1352
- 48.11 PKCS7.Release 1358
- 48.12 PKCS7.SignedDataCert 1359
- 48.13 PKCS7.SignedDataCertCount 1360
- 48.14 PKCS7.SignedDataContent 1361
- 48.28 X509.ReadFromFile 1375

Created 6th March 2019, last changed 6th March 2019.

48.11 PKCS7.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.1	Yes	Yes	Yes	Yes	Yes

MBS("PKCS7.Release"; PKCS7 Reference)

Parameters

PKCS7 Reference

The reference to the PKCS# 7.

\$pkcs7

Result Returns OK or error.

Description

See also

- 48.7 PKCS12.Release 1354
- 48.9 PKCS7.ReadFromContainer 1356
- 48.10 PKCS7.ReadFromFile 1357
- 48.12 PKCS7.SignedDataCert 1359
- 48.13 PKCS7.SignedDataCertCount 1360
- 48.14 PKCS7.SignedDataContent 1361
- 48.20 PKey.Release 1367

Created 6th March 2019, last changed 6th March 2019.

48.12 PKCS7.SignedDataCert

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.1	Yes	Yes	Yes	Yes	Yes

MBS("PKCS7.SignedDataCert"; PKCS7 Reference)

Parameters

PKCS7 Reference

The reference to the PKCS# 7.

\$pkcs7

Result Returns X509 reference number or error.

Description

Examples

Show certificate used to sign:

```
Set Variable [ $pkcs7 ; Value: MBS( "PKCS7.ReadFromFile"; "/Users/cs/Desktop/IT12345.xml.p7m" ) ]
```

```
Set Variable [ $x509 ; Value: MBS( "PKCS7.SignedDataCert"; $pkcs7; 0 ) ]
```

```
Show Custom Dialog [ "Content" ; MBS( "X509.Description"; $x509 ) ]
```

```
Set Variable [ $x509 ; Value: MBS( "X509.Release"; $x509 ) ]
```

```
Set Variable [ $r ; Value: MBS( "PKCS7.Release"; $pkcs7 ) ]
```

See also

- 48.10 PKCS7.ReadFromFile 1357
- 48.11 PKCS7.Release 1358
- 48.13 PKCS7.SignedDataCertCount 1360
- 48.14 PKCS7.SignedDataContent 1361
- 48.22 X509.Description 1369
- 48.29 X509.Release 1376

Created 6th March 2019, last changed 6th March 2019.

48.13 PKCS7.SignedDataCertCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.1	Yes	Yes	Yes	Yes	Yes

MBS("PKCS7.SignedDataCertCount"; PKCS7 Reference)

Parameters

PKCS7 Reference

The reference to the PKCS# 7.

\$pkcs7

Result Returns number or error.

Description

Examples

Show number of certificates:

```
Set Variable [ $pkcs7 ; Value: MBS( "PKCS7.ReadFromFile"; "/Users/cs/Desktop/IT12345.xml.p7m" ) ]
```

```
Show Custom Dialog [ "Content" ; MBS( "PKCS7.SignedDataCertCount"; $pkcs7 ) ]
```

```
Set Variable [ $r ; Value: MBS( "PKCS7.Release"; $pkcs7 ) ]
```

See also

- 48.10 PKCS7.ReadFromFile 1357
- 48.11 PKCS7.Release 1358
- 48.12 PKCS7.SignedDataCert 1359
- 48.14 PKCS7.SignedDataContent 1361

Created 6th March 2019, last changed 6th March 2019.

48.14 PKCS7.SignedDataContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.1	Yes	Yes	Yes	Yes	Yes

MBS("PKCS7.SignedDataContent"; PKCS7 Reference { ; Encoding })

Parameters

PKCS7 Reference

The reference to the PKCS# 7.

\$pkcs7

Encoding

Optional

The text encoding for result. Default is native. Can be hex or base64 for binary data.

"UTF8"

Result Returns text or error.

Description

In Italy digitally signed e-invoices in CADES format include an embedded XML payload in a signed P7M file.

Examples

Read XML embedded in p7m file:

```
Set Variable [ $pkcs7 ; Value: MBS( "PKCS7.ReadFromFile"; "/Users/cs/Desktop/IT12345.xml.p7m" ) ]
Show Custom Dialog [ "Content" ; MBS( "PKCS7.SignedDataContent"; $pkcs7; "UTF-8" ) ]
Set Variable [ $r ; Value: MBS( "PKCS7.Release"; $pkcs7 ) ]
```

See also

- 48.10 PKCS7.ReadFromFile 1357
- 48.11 PKCS7.Release 1358
- 48.12 PKCS7.SignedDataCert 1359
- 48.13 PKCS7.SignedDataCertCount 1360

Created 6th March 2019, last changed 21st July 2019.

48.15 PKey.Bits

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKey.Bits"; PKeyRef)

Parameters

PKeyRef

The reference to the private key.

\$pkey

Result Returns bits count or error.

Description

Created 23th December 2016, last changed 23th December 2016.

48.16 PKey.DescriptionPrivateKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKey.DescriptionPrivateKey"; PKeyRef)

Parameters**PKeyRef**

The reference to the private key.

\$pkey

Result Returns text or error.

Description

This is only for human to read.

See also

- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352
- 48.17 PKey.DescriptionPublicKey 1364

Created 23th December 2016, last changed 23th December 2016.

48.17 PKey.DescriptionPublicKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKey.DescriptionPublicKey"; PKeyRef)

Parameters

PKeyRef

The reference to the private key.

\$pkey

Result Returns text or error.

Description

This is only for human to read.

See also

- 48.16 PKey.DescriptionPrivateKey

1363

Created 23th December 2016, last changed 23th December 2016.

48.18 PKey.GetPrivateKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKey.GetPrivateKey"; PKeyRef)

Parameters

PKeyRef

The reference to the private key.

\$pkey

Result Returns text or error.

Description

See also

- 149.7 ECKey.ReadPrivateKey

7069

48.18.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr2](#)

Created 23th December 2016, last changed 23th December 2016.

48.19 PKey.GetPublicKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKey.GetPublicKey"; PKeyRef)

Parameters

PKeyRef

The reference to the private key.

\$pkey

Result Returns text or error.

Description

See also

- 149.8 ECKey.ReadPublicKey 7070
- 149.14 RSA.GetPublicKey 7077

Created 23th December 2016, last changed 23th December 2016.

48.20 PKey.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKey.Release"; PKeyRef)

Parameters**PKeyRef**

The reference to the private key.

\$pkey

Result Returns OK or error.

Description**See also**

- 149.9 ECKey.Release 7071
- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352
- 48.11 PKCS7.Release 1358

Created 23th December 2016, last changed 25th December 2016.

48.21 PKey.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("PKey.Type"; PKeyRef)

Parameters

PKeyRef

The reference to the private key.

\$pkey

Result Returns text or error.

Description

Can be DH, DSA, RSA or EC.

Created 23th December 2016, last changed 23th December 2016.

48.22 X509.Description

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.Description"; X509Ref)

Parameters

X509Ref

The reference to the X509 certificate.

\$cert

Result Returns text or error.

Description

This is only for human to read.

Examples

Shows description of certificate:

```
Set Variable [ $cert; Value:MBS( "X509.Read"; test::Cert ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $cert ]
Else
Show Custom Dialog [ "Description"; MBS( "X509.Description"; $cert ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
End If
```

See also

- 124.6 IsError 6266
- 48.1 PKCS12.CA 1345
- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352
- 48.12 PKCS7.SignedDataCert 1359
- 48.26 X509.Read 1373
- 48.29 X509.Release 1376
- 48.30 X509.SerialNumber 1377

Created 23th December 2016, last changed 23th December 2016.

48.23 X509.Duplicate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.Duplicate"; X509Ref)

Parameters

X509Ref

The reference to the X509 certificate.

\$cert

Result Returns reference number or error.

Description

Please call later X509.Release to free the memory.

See also

- 48.29 X509.Release

1376

Created 23th December 2016, last changed 23th December 2016.

48.24 X509.IssuerName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.IssuerName"; X509Ref)

Parameters**X509Ref**

The reference to the X509 certificate.

\$cert

Result Returns text or error.

Description

Returns a list of key=value entries.

Examples

Shows issuer name:

```
Set Variable [ $cert; Value:MBS( "X509.Read"; test::Cert ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $cert ]
Else
Show Custom Dialog [ "IssuerName"; MBS( "X509.IssuerName"; $cert ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
End If
```

See also

- 124.6 IsError 6266
- 48.26 X509.Read 1373
- 48.29 X509.Release 1376

Created 23th December 2016, last changed 23th December 2016.

48.25 X509.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.Name"; X509Ref)

Parameters**X509Ref**

The reference to the X509 certificate.

\$cert

Result Returns text or error.

Description**See also**

- 48.26 X509.Read 1373
- 48.27 X509.ReadFromContainer 1374
- 48.28 X509.ReadFromFile 1375

Created 23th December 2016, last changed 23th December 2016.

48.26 X509.Read

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.Read"; Text)

Parameters

Text

The certificate in PEM format as text.

Result Returns X509 reference number or error.

Description

See also X509.ReadFromContainer for reading from container and X509.ReadFromFile to read from file on disk.

Examples

Reads a certificate and shows name:

```
Set Variable [ $cert; Value:MBS( "X509.Read"; test::Cert ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $cert ]
Else
Show Custom Dialog [ "Name"; MBS( "X509.Name"; $cert ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
End If
```

See also

- 124.6 IsError 6266
- 48.22 X509.Description 1369
- 48.24 X509.IssuerName 1371
- 48.25 X509.Name 1372
- 48.27 X509.ReadFromContainer 1374
- 48.28 X509.ReadFromFile 1375
- 48.29 X509.Release 1376
- 48.30 X509.SerialNumber 1377
- 48.31 X509.ShowDialog 1378
- 48.32 X509.SubjectName 1379

Created 23th December 2016, last changed 4th April 2017.

48.27 X509.ReadFromContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.ReadFromContainer"; Container)

Parameters

Container

The container with the certificate file.

Result Returns X509 reference number or error.

Description

Examples

Reads a certificate and shows name:

```
Set Variable [ $cert; Value:MBS( "X509.ReadFromContainer";test::Container ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $cert ]
Else
Show Custom Dialog [ "Name"; MBS( "X509.Name"; $cert ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
End If
```

See also

- 124.6 IsError 6266
- 48.5 PKCS12.ReadFromContainer 1350
- 48.9 PKCS7.ReadFromContainer 1356
- 48.25 X509.Name 1372
- 48.26 X509.Read 1373
- 48.29 X509.Release 1376

Created 23th December 2016, last changed 23th December 2016.

48.28 X509.ReadFromFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.ReadFromFile"; Path)

Parameters

Path

The native file path to the PEM file.

"/Users/cs/Desktop/test.pem"

Result Returns X509 reference number or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Reads a certificate and shows name:

```
Set Variable [ $cert; Value:MBS( "X509.ReadFromFile"; "/Users/cs/Desktop/test.pem" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $cert ]
Else
Show Custom Dialog [ "Name"; MBS( "X509.Name"; $cert ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
End If
```

See also

- 124.6 IsError 6266
- 121.2 Path.FileMakerPathToNativePath 6139
- 48.10 PKCS7.ReadFromFile 1357
- 48.25 X509.Name 1372
- 48.26 X509.Read 1373
- 48.29 X509.Release 1376
- 48.30 X509.SerialNumber 1377

Created 23th December 2016, last changed 23th December 2016.

48.29 X509.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.Release"; X509Ref)

Parameters**X509Ref**

The reference to the X509 certificate.

\$cert

Result Returns OK or error.

Description**See also**

- 48.1 PKCS12.CA 1345
- 48.5 PKCS12.ReadFromContainer 1350
- 48.6 PKCS12.ReadFromFile 1352
- 48.22 X509.Description 1369
- 48.23 X509.Duplicate 1370
- 48.28 X509.ReadFromFile 1375
- 48.30 X509.SerialNumber 1377
- 48.31 X509.ShowDialog 1378
- 48.32 X509.SubjectName 1379
- 191.29 XML.Release 9299

Created 23th December 2016, last changed 23th December 2016.

48.30 X509.SerialNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.SerialNumber"; X509Ref)

Parameters**X509Ref**

The reference to the X509 certificate.

\$cert

Result Returns text or error.

Description**Examples**

Shows the serial number:

```
Show Custom Dialog [ "Serial Number"; MBS( "X509.SerialNumber"; $cert ) ]
```

Shows serial and description:

```
Set Variable [ $cert; Value:MBS( "X509.ReadFromFile"; "/Users/cs/Desktop/test.pem" ) ]
```

```
Show Custom Dialog [ "Serial"; MBS( "X509.SerialNumber"; $cert ) ]
```

```
Show Custom Dialog [ "Description"; MBS( "X509.Description"; $cert ) ]
```

```
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
```

See also

- 48.22 X509.Description 1369
- 48.26 X509.Read 1373
- 48.28 X509.ReadFromFile 1375
- 48.29 X509.Release 1376

Created 23th December 2016, last changed 14th March 2017.

48.31 X509.ShowDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.2	Yes	No	No	No	No

MBS("X509.ShowDialog"; X509Ref)

Parameters

X509Ref

The reference to the X509 certificate.

\$cert

Result Returns OK or error.

Description

Displays the content of the certificate in the standard dialog to user.

Examples

Show certificate:

```
Set Variable [ $cert ; Value: MBS( "X509.Read"; Zertifikat::Certificate Text ) ]
```

```
Set Variable [ $serial ; Value: MBS( "X509.ShowDialog"; $cert ) ]
```

```
Set Variable [ $r ; Value: MBS( "X509.Release"; $cert ) ]
```

See also

- 48.26 X509.Read 1373
- 48.29 X509.Release 1376

Created 30th April 2019, last changed 23th August 2019.

48.32 X509.SubjectName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.SubjectName"; X509Ref)

Parameters**X509Ref**

The reference to the X509 certificate.

\$cert

Result Returns text or error.

Description

Returns a list of key=value entries.

Examples

Shows subject name:

```
Set Variable [ $cert; Value:MBS( "X509.Read"; test::Cert ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $cert ]
Else
Show Custom Dialog [ "SubjectName"; MBS( "X509.SubjectName"; $cert ) ]
Set Variable [ $r; Value:MBS( "X509.Release"; $cert ) ]
End If
```

See also

- 124.6 IsError 6266
- 48.26 X509.Read 1373
- 48.29 X509.Release 1376

Created 23th December 2016, last changed 23th December 2016.

48.33 X509.Version

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	7.0	Yes	Yes	Yes	Yes	Yes

MBS("X509.Version"; X509Ref)

Parameters

X509Ref

The reference to the X509 certificate.

\$cert

Result Returns OK or error.

Description

Currently usually 2 for version 3.

Examples

Shows version:

```
Show Custom Dialog [ "Version"; MBS( "X509.Version"; $cert ) ]
```

See also

- 124.62 Version

6338

Created 23th December 2016, last changed 23th December 2016.

48.34 X509.Write

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
48 Certificates	9.1	Yes	Yes	Yes	Yes	Yes

MBS("X509.Write"; X509Ref { ; Binary })

Parameters**X509Ref**

The reference to the X509 certificate.

\$cert

Binary

Optional

Whether to return binary representation (DER format) instead of text (PEM format). Default is PEM.

0

Result Returns text or error.

Description

Provides either PEM file as text or DER file base64 encoded.

Created 22nd February 2019, last changed 25th February 2019.

Chapter 49

CGImageSource

Mac OS X Image loading functions to query metadata and thumbnails.

Can be used to get thumbnails from images or to query EXIF, IPTC or GPS metadata from images.

49.1 CGImageSource.ClearProperties

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.ClearProperties"; Ref)

Parameters

Ref

The image source reference number returned by CGImageSource.CreateWithData, CGImageSource.CreateWithPath or CGImageSource.CreateWithURL
\$ref

Result Returns OK or error.

Description

Allows you to save image with empty properties, so no EXIF/IPTC data is stored.

See also

- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389
- 49.8 CGImageSource.HasProperty 1393

- 49.11 CGImageSource.Properties 1398
- 49.14 CGImageSource.SetProperty 1405

49.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr6](#)

Created 5th September 2019, last changed 5th September 2019.

49.2 CGImageSource.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.Count"; Ref)

Parameters

Ref

The image source reference number returned by `CGImageSource.CreateWithData`, `CGImageSource.CreateWithPath` or `CGImageSource.CreateWithURL`

\$ref

Result Returns number of images or error message.

Description

Examples

Query count:

MBS("CGImageSource.Count"; \$ref)

See also

- 49.4 `CGImageSource.CreateWithPath` 1387
- 49.5 `CGImageSource.CreateWithURL` 1389
- 49.6 `CGImageSource.Export` 1390
- 49.8 `CGImageSource.HasProperty` 1393
- 49.9 `CGImageSource.ImageAtIndex` 1394
- 49.12 `CGImageSource.Property` 1401
- 49.14 `CGImageSource.SetProperty` 1405
- 49.15 `CGImageSource.Status` 1407
- 49.18 `CGImageSource.ThumbnailAtIndex` 1411
- 49.19 `CGImageSource.Type` 1413

Created 18th August 2014, last changed 18th August 2014.

49.3 CGImageSource.CreateWithData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.CreateWithData"; data)

Parameters

data

A value from a Container Field.

Result Returns the reference number for this image source or error message.

Description

Don't forget to call CGImageSource.Release later to release the reference number.

Examples

Convert image from one container and output to other:

```
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithData"; test::input ) ]
Set Field [ test::output ; MBS( "CGImageSource.ImageAtIndex"; $img; 0; "PNG" ) ]
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $img ) ]
```

See also

- 49.4 CGImageSource.CreateWithPath 1387
- 49.6 CGImageSource.Export 1390
- 49.7 CGImageSource.FileName 1392
- 49.8 CGImageSource.HasProperty 1393
- 49.9 CGImageSource.ImageAtIndex 1394
- 49.10 CGImageSource.Keys 1396
- 49.11 CGImageSource.Properties 1398
- 49.12 CGImageSource.Property 1401
- 49.13 CGImageSource.Release 1403
- 49.19 CGImageSource.Type 1413

Example Databases

- [Mac and iOS/CGImageSource](#)

Created 18th August 2014, last changed 5th January 2018.

49.4 CGImageSource.CreateWithPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.CreateWithPath"; Path)

Parameters

Path

The platform specific native file path.

"/test.jpg"

Result Returns the reference number for this image source or error message.

Description

Don't forget to call CGImageSource.Release later to release the reference number.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Load image and show it:

```
Set Variable [ $path ; Value: "/Users/cs/Pictures/IMG_3625.jpg" ]
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithPath"; $path ) ]
Set Field [ test::output ; MBS( "CGImageSource.ImageAtIndex"; $img; 0 ) ]
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $img ) ]
```

Read HEIC image:

```
Set Variable [ $path ; Value: "/Users/cs/Desktop/IMG_3552.HEIC" ]
Set Variable [ $ImageSource ; Value: MBS( "CGImageSource.CreateWithPath"; $path ) ]
If [ MBS("IsError") = 0 ]
# you can get metadata as JSON to check later...
Set Variable [ $$MetaData ; Value: MBS( "CGImageSource.Properties"; $ImageSource ) ]
Set Variable [ $$ImageMetaData ; Value: MBS( "CGImageSource.Properties"; $ImageSource; 0 ) ]
# get image to show
Set Variable [ $image ; Value: MBS( "CGImageSource.ImageAtIndex"; $ImageSource; 0; "PNG"; "image.png" ) ]
If [ MBS("IsError") = 0 ]
Set Field [ Untitled::image ; $image ]
End If
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $ImageSource ) ]
End If
```

See also

- 49.1 CGImageSource.ClearProperties 1383
- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.5 CGImageSource.CreateWithURL 1389
- 49.6 CGImageSource.Export 1390
- 49.9 CGImageSource.ImageAtIndex 1394
- 49.11 CGImageSource.Properties 1398
- 49.12 CGImageSource.Property 1401
- 49.14 CGImageSource.SetProperty 1405
- 124.6 IsError 6266

49.4.1 Blog Entries

- [Read HEIC or HEIF image files in FileMaker](#)

Created 18th August 2014, last changed 27th January 2020.

49.5 CGImageSource.CreateWithURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.CreateWithURL"; URL)

Parameters

URL

The URL to the file.

\$URL

Result Returns the reference number for this image source or error message.

Description

Don't forget to call CGImageSource.Release later to release the reference number.

CoreGraphics Image Source reference numbers are starting at 25000 and counting up for each new image source.

Examples

Loads image and shows it:

```
Set Variable [ $url ; Value: "http://www.monkeybreadsoftware.de/images/fmplugin16.png" ]
```

```
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithURL"; $url ) ]
```

```
Set Field [ test::output ; MBS( "CGImageSource.ImageAtIndex"; $img; 0 ) ]
```

```
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $img ) ]
```

See also

- 49.1 CGImageSource.ClearProperties 1383
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.6 CGImageSource.Export 1390
- 49.8 CGImageSource.HasProperty 1393
- 49.9 CGImageSource.ImageAtIndex 1394
- 49.11 CGImageSource.Properties 1398
- 49.14 CGImageSource.SetProperty 1405
- 49.15 CGImageSource.Status 1407
- 49.18 CGImageSource.ThumbnailAtIndex 1411

Created 18th August 2014, last changed 5th January 2018.

49.6 CGImageSource.Export

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.Export"; Ref; FileName)

Parameters

Ref

The image source reference number returned by CGImageSource.CreateWithData, CGImageSource.CreateWithPath or CGImageSource.CreateWithURL

\$ref

FileName

The file name to use. If empty, we use the name of the loaded image. Falls back to export.jpg if no name is provided. Image destination is defined by file type from file name.

"test.jpg"

Result Returns container value or error.

Description

Uses the image compression based on the file name used.

If possible, we move through data without recompressing image.

Use Container.WriteFile to write the image to a disk file.

Examples

Changes some metadata and exports image:

```
Set Variable [ $ref ; Value: MBS("CGImageSource.CreateWithData"; CGImageSource::ImageFile) ]
Set Variable [ $keys ; Value: MBS( "CGImageSource.SetProperty"; $ref; 0; " { IPTC } .Keywords";
"House,Garden" ) ]
Set Variable [ $keys ; Value: MBS( "CGImageSource.SetProperty"; $ref; 0; " { IPTC } .Caption/Abstract";
"House with garden" ) ]
Set Variable [ $keys ; Value: MBS( "CGImageSource.SetProperty"; $ref; 0; " { TIFF } .ImageDescription";
"House with garden" ) ]
Set Variable [ $Image ; Value: MBS("CGImageSource.Export"; $ref) ]
Set Field [ CGImageSource::output ; $image ]
Set Variable [ $r ; Value: MBS("CGImageSource.Release"; $ref) ]
```

See also

- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389

<i>49.6. CGIMAGESOURCE.EXPORT</i>	1391
• 49.12 CGImageSource.Property	1401
• 49.13 CGImageSource.Release	1403
• 49.14 CGImageSource.SetProperty	1405
• 49.19 CGImageSource.Type	1413
• 55.35 Container.WriteFile	1658

49.6.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)

Created 30th August 2019, last changed 12nd September 2019.

49.7 CGImageSource.FileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.FileName")

Result Returns text or error.

Description

Examples

Queries filename:

```
Set Variable [ $ref ; Value: MBS("CGImageSource.CreateWithData"; CGImageSource::ImageFile) ]
Show Custom Dialog [ "filename" ; MBS( "CGImageSource.FileName"; $ref ) ]
Set Variable [ $r ; Value: MBS("CGImageSource.Release"; $ref) ]
```

See also

- [49.3 CGImageSource.CreateWithData](#) 1386
- [49.13 CGImageSource.Release](#) 1403

49.7.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)

Created 30th August 2019, last changed 30th August 2019.

49.8 CGImageSource.HasProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.HasProperty"; Ref; Index; Key)

Parameters

Ref

The image source reference number returned by CGImageSource.CreateWithData, CGImageSource.CreateWithPath or CGImageSource.CreateWithURL

\$ref

Index

The index of the image to query. -1 for global properties. Else a number from 0 to CGImageSource.Count-1.
0

Key

The property name to query.
"PixelWidth"

Result Returns 1, 0 or error.

Description

Returns 1 if property is found.

See also

- 49.1 CGImageSource.ClearProperties 1383
- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389
- 49.11 CGImageSource.Properties 1398
- 49.12 CGImageSource.Property 1401
- 49.14 CGImageSource.SetProperty 1405

49.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)

Created 30th August 2019, last changed 28th November 2019.

49.9 CGImageSource.ImageAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.ImageAtIndex"; Ref; Index { ; ImageType; Filename })

Parameters

Ref

The image source reference number returned by `CGImageSource.CreateWithData`, `CGImageSource.CreateWithPath` or `CGImageSource.CreateWithURL`

\$ref

Index

The index of the image to query. -1 for global properties. Else a number from 0 to `CGImageSource.Count-1`.

0

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.
"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.
"test.jpg"

Result Returns image or error message.

Description

This function can be used to query previews of various image formats including RAW images. (everything Preview app can also open)

Examples

Convert image from one container and output to other:

```
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithData"; test::input ) ]
Set Field [ test::output ; MBS( "CGImageSource.ImageAtIndex"; $img; 0; "PNG" ) ]
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $img ) ]
```

Read HEIC image:

```
Set Variable [ $path ; Value: "/Users/cs/Desktop/IMG_3552.HEIC" ]
Set Variable [ $ImageSource ; Value: MBS( "CGImageSource.CreateWithPath"; $path ) ]
If [ MBS("IsError") = 0 ]
# you can get metadata as JSON to check later...
Set Variable [ $$MetaData ; Value: MBS( "CGImageSource.Properties"; $ImageSource ) ]
Set Variable [ $$ImageMetaData ; Value: MBS( "CGImageSource.Properties"; $ImageSource; 0 ) ]
# get image to show
```

49.9. *CGIMAGESOURCE.IMAGEATINDEX*

1395

```
Set Variable [ $image ; Value: MBS( "CGImageSource.ImageAtIndex"; $ImageSource; 0; "PNG"; "image.png" ) ]
If [ MBS("IsError") = 0 ]
Set Field [ Untitled::image ; $image ]
End If
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $ImageSource ) ]
End If
```

See also

- 49.2 *CGImageSource.Count* 1385
- 49.3 *CGImageSource.CreateWithData* 1386
- 49.4 *CGImageSource.CreateWithPath* 1387
- 49.5 *CGImageSource.CreateWithURL* 1389
- 49.11 *CGImageSource.Properties* 1398
- 49.13 *CGImageSource.Release* 1403
- 49.18 *CGImageSource.ThumbnailAtIndex* 1411
- 124.6 *IsError* 6266

49.9.1 Blog Entries

- [Read HEIC or HEIF image files in FileMaker](#)
- [MBS Filemaker Plugin, version 4.3pr2](#)

Created 18th August 2014, last changed 20th August 2019.

49.10 CGImageSource.Keys

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.Keys"; Ref; Index)

Parameters

Ref

The image source reference number returned by `CGImageSource.CreateWithData`, `CGImageSource.CreateWithPath` or `CGImageSource.CreateWithURL`

\$ref

Index

The index of the image to query. -1 for global properties. Else a number from 0 to `CGImageSource.Count-1`.
0

Result Returns the list of keys or error message.

Description

The list of keys varies depending on which image format is used and whether EXIF, IPTC or XMP metadata is available.

e.g. keys for a JPEG image:

```
{ TIFF } .Software, { TIFF } .Orientation, { TIFF } .DateTime, { TIFF } .Artist, { TIFF } .Make, {
TIFF } .Model, Depth, { IPTC } .Byline, { IPTC } .SpecialInstructions, { IPTC } .DigitalCreationDate,
{ IPTC } .DigitalCreationTime, { IPTC } .DateCreated, { IPTC } .TimeCreated, { IPTC } .StarRating,
PixelHeight, { Exif } .ExifVersion, { Exif } .Flash, { Exif } .CameraOwnerName, { Exif } .LensModel,
{ Exif } .RecommendedExposureIndex, { Exif } .SubsecTimeOriginal, { Exif } .ExposureMode, { Exif }
.LensSpecification, { Exif } .LensSerialNumber, { Exif } .FNumber, { Exif } .PixelYDimension, { Exif
} .ApertureValue, { Exif } .FocalPlaneXResolution, { Exif } .MeteringMode, { Exif } .FocalPlaneResolu-
tionUnit, { Exif } .ISOSpeedRatings, { Exif } .ExposureBiasValue, { Exif } .ShutterSpeedValue, { Exif }
.SceneCaptureType, { Exif } .MaxApertureValue, { Exif } .CustomRendered, { Exif } .FocalLength, { Exif }
.FocalPlaneYResolution, { Exif } .DateTimeOriginal, { Exif } .FlashPixVersion, { Exif } .SubsecTime, { Exif
} .ColorSpace, { Exif } .PixelXDimension, { Exif } .SubsecTimeDigitized, { Exif } .SensitivityType, { Exif
} .DateTimeDigitized, { Exif } .BodySerialNumber, { Exif } .ComponentsConfiguration, { Exif } .White-
Balance, { Exif } .ExposureTime, { Exif } .ExposureProgram, { JFIF } .DensityUnit, { JFIF } .YDensity,
{ JFIF } .JFIFVersion, { JFIF } .XDensity, ProfileName, DPIWidth, { ExifAux } .LensID, { ExifAux }
.SerialNumber, { ExifAux } .FlashCompensation, { ExifAux } .LensInfo, { ExifAux } .LensSerialNumber, {
ExifAux } .LensModel, { ExifAux } .Firmware, DPIHeight, ColorModel, Orientation and PixelWidth.
```

Examples

Queries keys for an image:

```
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithData"; test::input ) ]
Show Custom Dialog [ "Keys" ; MBS( "CGImageSource.Keys"; $img; 0 ) ]
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $img ) ]
```


49.10. *CGIMAGESOURCE.KEYS* 1397

See also

- 49.2 *CGImageSource.Count* 1385
- 49.3 *CGImageSource.CreateWithData* 1386
- 49.4 *CGImageSource.CreateWithPath* 1387
- 49.5 *CGImageSource.CreateWithURL* 1389
- 49.12 *CGImageSource.Property* 1401
- 49.13 *CGImageSource.Release* 1403
- 49.15 *CGImageSource.Status* 1407
- 49.19 *CGImageSource.Type* 1413

Example Databases

- [Mac and iOS/CGImageSource](#)

49.10.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr4](#)

Created 18th August 2014, last changed 5th January 2018.

49.11 CGImageSource.Properties

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	8.3	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.Properties"; Ref { ; Index })

Parameters

Ref

The image source reference number returned by `CGImageSource.CreateWithData`, `CGImageSource.CreateWithPath` or `CGImageSource.CreateWithURL`

\$ref

Index

Optional

The index of the image to query. -1 for global properties. Else a number from 0 to `CGImageSource.Count-1`.

0

Result Returns OK or error.

Description

Examples

Query properties for first image:

```
MBS("CGImageSource.Properties"; $ref; 0)
```

```
Example result: {
  " { TIFF } " : {
    "ResolutionUnit" : 2,
    "Software" : "QuickTime 7.5.5",
    "DateTime" : "2008:10:19 13:29:12",
    "XResolution" : 72,
    "ImageDescription" : "Digital StillCamera",
    "Orientation" : 1,
    "YResolution" : 72,
    "Model" : "DC-8300",
    "Make" : "Traveler"
  },
  " { IPTC } " : {
    "DigitalCreationTime" : "142931",
    "DigitalCreationDate" : "20081015",
    "TimeCreated" : "142931",
    "DateCreated" : "20081015",
    "Caption\|Abstract" : "Digital StillCamera"
  },
  " { Exif } " : {
    "DateTimeOriginal" : "2008:10:15 14:29:31",
    "ComponentsConfiguration" : [
```

```
1,
2,
3,
0
],
"MaxApertureValue" : 3.1,
"DigitalZoomRatio" : 1,
"ExposureBiasValue" : 0,
"Saturation" : 0,
"FNumber" : 4.8,
"SceneCaptureType" : 0,
"ShutterSpeedValue" : 6.67,
"SubjectDistRange" : 0,
"ApertureValue" : 4.5,
"FileSource" : 3,
"Sharpness" : 0,
"ColorSpace" : 1,
"Contrast" : 0,
"PixelYDimension" : 267,
"WhiteBalance" : 0,
"LightSource" : 0,
"FlashPixVersion" : [
1,
0
],
"DateTimeDigitized" : "2008:10:15 14:29:31",
"ISOSpeedRatings" : [
50
],
"ExposureMode" : 0,
"PixelXDimension" : 200,
"ExifVersion" : [
2,
2
],
"CustomRendered" : 0,
"ExposureProgram" : 2,
"Flash" : 0,
"ExposureTime" : 0.01,
"FocalLenIn35mmFilm" : 68,
"MeteringMode" : 2
},
"PixelHeight" : 267,
"PixelWidth" : 200,
" { JFIF } " : {
"XDensity" : 72,
"YDensity" : 72,
"IsProgressive" : true,
```

```
"JFIFVersion" : [  
1,  
0,  
1  
],  
"DensityUnit" : 1  
},  
"ProfileName" : "sRGB IEC61966-2.1",  
"DPIWidth" : 72,  
"DPIHeight" : 72,  
"ColorModel" : "RGB",  
"Orientation" : 1,  
"Depth" : 8  
}
```

See also

- [49.1 CGImageSource.ClearProperties](#) 1383
- [49.2 CGImageSource.Count](#) 1385
- [49.3 CGImageSource.CreateWithData](#) 1386
- [49.4 CGImageSource.CreateWithPath](#) 1387
- [49.5 CGImageSource.CreateWithURL](#) 1389
- [49.8 CGImageSource.HasProperty](#) 1393
- [49.9 CGImageSource.ImageAtIndex](#) 1394
- [49.12 CGImageSource.Property](#) 1401
- [49.14 CGImageSource.SetProperty](#) 1405

49.11.1 Blog Entries

- [Read HEIC or HEIF image files in FileMaker](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 6th June 2018, last changed 6th June 2018.

49.12 CGImageSource.Property

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.Property"; Ref; Index; Key)

Parameters

Ref

The image source reference number returned by `CGImageSource.CreateWithData`, `CGImageSource.CreateWithPath` or `CGImageSource.CreateWithURL`

\$ref

Index

The index of the image to query. -1 for global properties. Else a number from 0 to `CGImageSource.Count-1`.
0

Key

The property name to query.

"PixelWidth"

Result Returns the value or error message.

Description

See `CGImageSource.Keys` for a list of available properties.

Keys include (list not complete):

FileSize, { Exif } .ExposureTime, { Exif } .SubjectDistRange, { Exif } .MaxApertureValue, { Exif } .Flash, { Exif } .ColorSpace, { Exif } .ExifVersion, { Exif } .FocalLenIn35mmFilm, { Exif } .SceneCaptureType, { Exif } .ShutterSpeedValue, { Exif } .FNumber, { Exif } .LightSource, { Exif } .FileSource, { Exif } .Saturation, { Exif } .PixelYDimension, { Exif } .Sharpness, { Exif } .ApertureValue, { Exif } .Contrast, { Exif } .PixelXDimension, { Exif } .CustomRendered, { Exif } .WhiteBalance, { Exif } .DateTimeDigitized, { Exif } .ExposureProgram, { Exif } .ISOSpeedRatings, { Exif } .DateTimeOriginal, { Exif } .MeteringMode, { Exif } .FlashPixVersion, { Exif } .ComponentsConfiguration, { Exif } .ExposureMode, { Exif } .DigitalZoomRatio, { Exif } .ExposureBiasValue, ColorModel, Orientation, DPIHeight, PixelWidth, { IPTC } .Caption/Abstract, { IPTC } .TimeCreated, { IPTC } .DateCreated, { IPTC } .DigitalCreationDate, { IPTC } .DigitalCreationTime, PixelHeight, ProfileName, Depth, { TIFF } .Model, { TIFF } .ResolutionUnit, { TIFF } .YResolution, { TIFF } .XResolution, { TIFF } .Orientation, { TIFF } .ImageDescription, { TIFF } .Software, { TIFF } .DateTime, { TIFF } .Make, { JFIF } .DensityUnit, { JFIF } .IsProgressive, { JFIF } .YDensity, { JFIF } .JFIFVersion, { JFIF } .XDensity, DPIWidth.

Version 10.0 and newer may return arrays and dictionaries as JSON.

Examples

Query Image dimensions in pixel :

```
MBS( "CGImageSource.Property"; $ref; 0; "PixelWidth") & " x " & MBS( "CGImageSource.Property";
$ref; 0; "PixelHeight")
```

Query Image resolution in dpi:

```
MBS( "CGImageSource.Property"; $ref; 0; "DPIWidth") & " x " & MBS( "CGImageSource.Property"; $ref;
0; "DPIHeight")
```

Query GPS of first image:

```
Set Variable [ $img ; Value: MBS("CGImageSource.CreateWithData"; CGImageSource::ImageFile) ]
Set Variable [ $lat ; Value: MBS("CGImageSource.Property"; $img; 0; " { GPS } .Latitude") ]
Set Variable [ $long ; Value: MBS("CGImageSource.Property"; $img; 0; " { GPS } .Longitude") ]
Show Custom Dialog [ "GPS" ; $lat & " / " & $long ]
Set Variable [ $r ; Value: MBS("CGImageSource.Release"; $img) ]
```

See also

- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389
- 49.6 CGImageSource.Export 1390
- 49.8 CGImageSource.HasProperty 1393
- 49.10 CGImageSource.Keys 1396
- 49.11 CGImageSource.Properties 1398
- 49.13 CGImageSource.Release 1403
- 49.14 CGImageSource.SetProperty 1405

Example Databases

- [Mac and iOS/CGImageSource](#)

49.12.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr8](#)

Created 18th August 2014, last changed 10th January 2020.

49.13 CGImageSource.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.Release"; Ref)

Parameters

Ref

The image source reference number returned by `CGImageSource.CreateWithData`, `CGImageSource.CreateWithPath` or `CGImageSource.CreateWithURL`

\$ref

Result Returns OK or error message.

Description

Examples

Convert image from one container and output to other:

```
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithData"; test::input ) ]
Set Field [ test::output ; MBS( "CGImageSource.ImageAtIndex"; $img; 0; "PNG" ) ]
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $img ) ]
```

See also

- 49.3 `CGImageSource.CreateWithData` 1386
- 49.4 `CGImageSource.CreateWithPath` 1387
- 49.5 `CGImageSource.CreateWithURL` 1389
- 49.7 `CGImageSource.FileName` 1392
- 49.9 `CGImageSource.ImageAtIndex` 1394
- 49.10 `CGImageSource.Keys` 1396
- 49.12 `CGImageSource.Property` 1401
- 49.15 `CGImageSource.Status` 1407
- 49.18 `CGImageSource.ThumbnailAtIndex` 1411
- 49.19 `CGImageSource.Type` 1413

Example Databases

- [Mac and iOS/CGImageSource](#)

49.13.1 Blog Entries

- [Read HEIC or HEIF image files in FileMaker](#)

Created 18th August 2014, last changed 5th January 2018.

49.14 CGImageSource.SetProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.SetProperty"; Ref; Index; Key; Value)

Parameters

Ref

The image source reference number returned by CGImageSource.CreateWithData, CGImageSource.CreateWithPath or CGImageSource.CreateWithURL

\$ref

Index

The index of the image to query. -1 for global properties. Else a number from 0 to CGImageSource.Count-1.
0

Key

The property name to query.

"PixelWidth"

Value

The value to use. Can be text, timestamp, boolean or number.

"Hello"

Result Returns OK or error.

Description

You may need to use CGImageSource.Export to actually write an image with new metadata.

See also

- 49.1 CGImageSource.ClearProperties 1383
- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389
- 49.6 CGImageSource.Export 1390
- 49.8 CGImageSource.HasProperty 1393
- 49.11 CGImageSource.Properties 1398
- 49.12 CGImageSource.Property 1401

49.14.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)

Created 30th August 2019, last changed 30th August 2019.

49.15 CGImageSource.Status

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.Status"; Ref { ; Index })

Parameters

Ref

The image source reference number returned by `CGImageSource.CreateWithData`, `CGImageSource.CreateWithPath` or `CGImageSource.CreateWithURL`

\$ref

Index

Optional

The index of the image to query. -1 for global properties. Else a number from 0 to `CGImageSource.Count-1`.
0

Result Returns status number or error message.

Description

Possible status values:

<code>kCGImageStatusUnexpectedEOF</code>	-5	The end of the file was encountered unexpectedly.
<code>kCGImageStatusInvalidData</code>	-4	The data is not valid.
<code>kCGImageStatusUnknownType</code>	-3	The image is an unknown type.
<code>kCGImageStatusReadingHeader</code>	-2	In the process of reading the header.
<code>kCGImageStatusIncomplete</code>	-1	The operation is not complete
<code>kCGImageStatusComplete</code>	0	The operation is complete.

Examples

Checks status:

```
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithData"; test::input ) ]
Show Custom Dialog [ "Status" ; MBS( "CGImageSource.Status"; $img; 0 ) ]
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $img ) ]
```

See also

- 49.2 `CGImageSource.Count` 1385
- 49.3 `CGImageSource.CreateWithData` 1386
- 49.4 `CGImageSource.CreateWithPath` 1387
- 49.5 `CGImageSource.CreateWithURL` 1389

- 49.10 CGImageSource.Keys 1396
- 49.13 CGImageSource.Release 1403

Created 18th August 2014, last changed 5th January 2018.

49.16 CGImageSource.SupportedExportTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.SupportedExportTypes")

Result Returns OK or error.

Description

With Mac OS X 10.15, this list is:

public.jpeg, public.png, com.compuserve.gif, public.tiff, public.jpeg-2000, com.apple.atx, org.khronos.ktx, org.khronos.astc, public.heic, com.microsoft.ico, com.microsoft.bmp, com.apple.icns, com.adobe.photoshop-image, com.adobe.pdf, com.truevision.tga-image, com.ilm.openexr-image, public.pbm, public.pvr

See also

- [49.17 CGImageSource.SupportedTypes](#)

1410

49.16.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)

Created 30th August 2019, last changed 30th August 2019.

49.17 CGImageSource.SupportedTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.SupportedTypes")

Result Returns type list.

Description

With Mac OS X 10.15, this list is:

public.jpeg, public.png, com.compuserve.gif, com.canon.tif-raw-image, com.adobe.raw-image, com.dxo.raw-image, com.canon.cr2-raw-image, com.canon.cr3-raw-image, com.leafamerica.raw-image, com.hasselblad.fff-raw-image, com.hasselblad.3fr-raw-image, com.nikon.raw-image, com.nikon.nrw-raw-image, com.pentax.raw-image, com.samsung.raw-image, com.sony.raw-image, com.sony.sr2-raw-image, com.sony.arw-raw-image, com.epson.raw-image, com.kodak.raw-image, public.tiff, public.jpeg-2000, com.apple.atx, org.khronos.astc, org.khronos.ktx, public.avci, public.heic, public.heif, com.canon.crw-raw-image, com.fuji.raw-image, com.panasonic.raw-image, com.panasonic.rw2-raw-image, com.leica.raw-image, com.leica.rwl-raw-image, com.konicaminolta.raw-image, com.olympus.sr-raw-image, com.olympus.or-raw-image, com.olympus.raw-image, com.phaseone.raw-image, com.microsoft.ico, com.microsoft.bmp, com.apple.icns, com.adobe.photoshop-image, com.microsoft.cur, com.truevision.tga-image, com.ilm.openexr-image, com.sgi.sgi-image, public.radiance, public.pbm, public.mpo-image, public.pvr, com.microsoft.dds

Examples

Show supported types:

Show Custom Dialog ["Types" ; MBS("CGImageSource.SupportedTypes")]

See also

- 49.16 CGImageSource.SupportedExportTypes 1409

Created 18th August 2014, last changed 30th August 2019.

49.18 CGImageSource.ThumbnailAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.ThumbnailAtIndex"; Ref; Index { ; ImageType; Filename })

Parameters

Ref

The image source reference number returned by CGImageSource.CreateWithData, CGImageSource.CreateWithPath or CGImageSource.CreateWithURL

\$ref

Index

The index of the image to query. -1 for global properties. Else a number from 0 to CGImageSource.Count-1.
0

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.
"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.
"test.jpg"

Result Returns image or error message.

Description

If the image source is a PDF, this function creates a 72 dpi image of the PDF page specified by the index that you pass.

Maximum thumbnail size is 512 pixel.

This function can be used to query previews of various image formats including RAW images. (everything Preview app can also open)

Examples

Create a thumbnail:

```
Set Variable [ $ref; Value:MBS("CGImageSource.CreateWithData"; MyTable::ImageFile) ]
Set Variable [ $image; Value:MBS("CGImageSource.ThumbnailAtIndex"; $ref; 0; "JPEG"; "thumbnail.jpg") ]
Set Variable [ $r; Value:MBS("CGImageSource.Release"; $ref) ]
```

Create thumbnail from a file on disk:

```
Set Variable [ $path ; Value: "/Users/cs/Pictures/IMG_3625.jpg" ]
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithPath"; $path ) ]
Set Field [ test::output ; MBS( "CGImageSource.ThumbnailAtIndex"; $img; 0; "JPEG"; "thumbnail.jpg" ) ]
```

Set Variable [\$r ; Value: MBS("CGImageSource.Release"; \$img)]

See also

- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389
- 49.9 CGImageSource.ImageAtIndex 1394
- 49.13 CGImageSource.Release 1403

49.18.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr2](#)

Created 18th August 2014, last changed 27th January 2020.

49.19 CGImageSource.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
49 CGImageSource	3.4	Yes	No	Yes, macOS only	No	Yes

MBS("CGImageSource.Type"; Ref)

Parameters

Ref

The image source reference number returned by CGImageSource.CreateWithData, CGImageSource.CreateWithPath or CGImageSource.CreateWithURL
\$ref

Result Returns type string or error message.

Description

e.g. "public.jpeg" for a jpeg image.

Examples

Query type:

```
MBS( "CGImageSource.Type"; $ref )
```

Load image from container and query type:

```
Set Variable [ $img ; Value: MBS( "CGImageSource.CreateWithData"; test::input ) ]
Show Custom Dialog [ "Type" ; MBS( "CGImageSource.Type"; $img ) ]
Set Variable [ $r ; Value: MBS( "CGImageSource.Release"; $img ) ]
```

See also

- 49.2 CGImageSource.Count 1385
- 49.3 CGImageSource.CreateWithData 1386
- 49.4 CGImageSource.CreateWithPath 1387
- 49.5 CGImageSource.CreateWithURL 1389
- 49.6 CGImageSource.Export 1390
- 49.10 CGImageSource.Keys 1396
- 49.13 CGImageSource.Release 1403

Created 18th August 2014, last changed 5th January 2018.

Chapter 50

CLGeocoder

Functions for geo coordinate lookup.

You can lookup your clients addresses, store the coordinates and later find records close to a given address.

50.1 CLGeocoder.Cancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.Cancel"; Geocoder)

Parameters

Geocoder

The reference number of the geocoder instance.

\$Geocoder

Result Returns OK or error.

Description

You can use this method to cancel a pending request and free up the resources associated with that request.

Canceling a pending request causes the completion handler block to be called.

If the request is not pending, because it has already returned or has not yet begun, this method does nothing.

See also

- 50.2 CLGeocoder.Cancelled 1417
- 50.3 CLGeocoder.Close 1418
- 50.4 CLGeocoder.Distance 1419
- 50.5 CLGeocoder.Done 1421

50.2 CLGeocoder.Cancelled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.Cancelled"; Geocoder)

Parameters

Geocoder

The reference to the geocoder

\$Geocoder

Result Returns 0, 1 or error.

Description

See also

- 50.1 CLGeocoder.Cancel

1415

Created 18th August 2014, last changed 18th August 2014.

50.3 CLGeocoder.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.Close"; Geocoder)

Parameters

Geocoder

The reference number of the geocoder instance.

\$Geocoder

Result Returns OK or error.

Description

Call this to close the request.

See also

- [50.1 CLGeocoder.Cancel](#) 1415
- [50.5 CLGeocoder.Done](#) 1421
- [50.8 CLGeocoder.GeocodeAddressString](#) 1424
- [50.9 CLGeocoder.JSON](#) 1426
- [50.12 CLGeocoder.ReverseGeocodeLocation](#) 1432

Example Databases

- [Mac and iOS/CoreLocation/Address Mapping](#)
- [Mac and iOS/CoreLocation/CLGeocoder](#)

50.3.1 Blog Entries

- [Core Location Geocoder with JSON](#)

Created 18th August 2014, last changed 18th August 2014.

50.4 CLGeocoder.Distance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	6.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.Distance"; latitude1; longitude1; latitude2; longitude2)

Parameters

latitude1

The latitude value for the geo coordinate.
51.50939

longitude1

The latitude value for the geo coordinate.
-0.11832

latitude2

The latitude value for the geo coordinate.
52.518611

longitude2

The latitude value for the geo coordinate.
13.408333

Result Returns OK or error.

Description

This method measures the distance between the two locations by tracing a line between them that follows the curvature of the Earth. The resulting arc is a smooth curve and does not take into account specific altitude changes between the two locations.

Examples

Returns distance between London and Berlin:

MBS("CLGeocoder.Distance"; 51.50939; -0.11832; 52.518611; 13.408333)

See also

- 50.1 CLGeocoder.Cancel

1415

Example Databases

- [Mac and iOS/CoreLocation/Address Mapping](#)

50.4.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)

50.5 CLGeocoder.Done

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.Done"; Geocoder)

Parameters

Geocoder

The reference number of the geocoder instance.

\$Geocoder

Result Returns 0, 1 or error.

Description

You can use CLGeocoder.Error to see if an error happened.

Or use CLGeocoder.PlacemarkCount to find out how many placemarks were found.

See also

- [50.1 CLGeocoder.Cancel](#) 1415
- [50.3 CLGeocoder.Close](#) 1418
- [50.6 CLGeocoder.Error](#) 1422
- [50.9 CLGeocoder.JSON](#) 1426
- [50.10 CLGeocoder.PlacemarkCount](#) 1428

Example Databases

- [Mac and iOS/CoreLocation/Address Mapping](#)
- [Mac and iOS/CoreLocation/CLGeocoder](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 18th August 2014, last changed 18th August 2014.

50.6 CLGeocoder.Error

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.Error"; Geocoder)

Parameters

Geocoder

The reference number of the geocoder instance.

\$Geocoder

Result Returns 0, 1 or error.

Description

Returns 1 if an error occurred. You can use CLGeocoder.ErrorMessage to get the error message.

Examples

Checks error and shows message:

```
If [ MBS( "CLGeocoder.Error"; $g ) ]
  Display Dialog [ "Error"; MBS( "CLGeocoder.ErrorMessage"; $g ) ]
End If
```

See also

- [50.5 CLGeocoder.Done](#) 1421
- [50.7 CLGeocoder.ErrorMessage](#) 1423

Example Databases

- [Mac and iOS/CoreLocation/Address Mapping](#)
- [Mac and iOS/CoreLocation/CLGeocoder](#)

Created 18th August 2014, last changed 18th August 2014.

50.7 CLGeocoder.ErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.ErrorMessage"; Geocoder)

Parameters

Geocoder

The reference number of the geocoder instance.

\$Geocoder

Result Returns text or error.

Description

Examples

Checks error and shows message:

```
If [ MBS( "CLGeocoder.Error"; $g ) ]
Display Dialog [ "Error"; MBS( "CLGeocoder.ErrorMessage"; $g ) ]
End If
```

See also

- 50.6 CLGeocoder.Error

1422

Example Databases

- [Mac and iOS/CoreLocation/Address Mapping](#)
- [Mac and iOS/CoreLocation/CLGeocoder](#)

Created 18th August 2014, last changed 18th August 2014.

50.8 CLGeocoder.GeocodeAddressString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

```
MBS( "CLGeocoder.GeocodeAddressString"; Address { ; wait } )
```

Parameters

Address

A string describing the location you want to look up. For example, you could specify the string "1 Infinite Loop, Cupertino, CA" to locate Apple headquarters. "Andernach, Germany"

wait

Optional

Available in MBS FileMaker Plugin 10.1 or newer.

Pass 1 to wait for geocoder to have a result. Pass 0 to not wait and check later if geocoder is done.

1

Result Returns reference number or error.

Description

This method submits the specified location data to the geocoding server asynchronously and returns. Your completion handler block will be executed on the main thread. After initiating a forward-geocoding request, do not attempt to initiate another forward- or reverse-geocoding request.

Geocoding requests are rate-limited for each app, so making too many requests in a short period of time may cause some of the requests to fail. When the maximum rate is exceeded, the geocoder passes an error back.

You need to use CLGeocoder.Close later to free the geocoder.

Examples

Geocodes an address:

```
$r = MBS("CLGeocoder.GeocodeAddressString"; CLGeocoder::AddressString)
```

Query in one let statement and return JSON or error:

```
Let ( [
  Address = "Berlin, Germany";
  // run query and wait a bit
  g = MBS( "CLGeocoder.GeocodeAddressString"; Address; 1 );
  e = MBS("IsError");
  // query JSON if we got something
  r = If (e = 0; MBS( "CLGeocoder.JSON"; g ); g);
  // free resources
  f = If (e = 0; MBS( "CLGeocoder.Close"; g ); 0)
]; r )
```

50.8. *CLGEOCODER.GEOCODEADDRESSSTRING* 1425

See also

- 50.3 CLGeocoder.Close 1418
- 50.9 CLGeocoder.JSON 1426
- 124.6 IsError 6266

Example Databases

- [Mac and iOS/CoreLocation/Address Mapping](#)
- [Mac and iOS/CoreLocation/CLGeocoder](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

50.8.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr4](#)
- [Core Location Geocoder with JSON](#)

Created 18th August 2014, last changed 12nd February 2020.

50.9 CLGeocoder.JSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	10.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.JSON"; Geocoder)

Parameters

Geocoder

The reference number of the geocoder instance.

\$Geocoder

Result Returns JSON or error.

Description

This includes status variables, the error dictionary with details in case of error and the array of place marks with details for a place mark including location, address text and time zone for the location.

Examples

Query in one let statement and return JSON or error:

```
Let ( [
Address = "Berlin, Germany";
// run query and wait a bit
g = MBS( "CLGeocoder.GeocodeAddressString"; Address; 1 );
e = MBS("IsError");
// query JSON if we got something
r = If ( e = 0; MBS( "CLGeocoder.JSON"; g ); g );
// free resources
f = If ( e = 0; MBS( "CLGeocoder.Close"; g ); 0 )
]; r )
```

Run query and get back JSON or error:

```
Let ( [
latitude = 52.517631899999998;
longitude = 13.4096574;
// run query and wait a bit
g = MBS( "CLGeocoder.ReverseGeocodeLocation"; latitude; longitude; 1 );
e = MBS("IsError");
// query JSON if we got something
r = If ( e = 0; MBS( "CLGeocoder.JSON"; g ); g );
// free resources
f = If ( e = 0; MBS( "CLGeocoder.Close"; g ); 0 )
]; r )
```

See also

<i>50.9. CLGEOCODER.JSON</i>	1427
• 50.3 CLGeocoder.Close	1418
• 50.5 CLGeocoder.Done	1421
• 50.8 CLGeocoder.GeocodeAddressString	1424
• 50.12 CLGeocoder.ReverseGeocodeLocation	1432
• 124.6 IsError	6266

Example Databases

- [Mac and iOS/CoreLocation/CLGeocoder](#)

50.9.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr4](#)
- [Core Location Geocoder with JSON](#)

Created 12nd February 2020, last changed 12nd February 2020.

50.10 CLGeocoder.PlacemarkCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.PlacemarkCount"; Geocoder)

Parameters

Geocoder

The reference number of the geocoder instance.

\$Geocoder

Result Returns count or error.

Description

Examples

Queries placemark count:

MBS("CLGeocoder.PlacemarkCount"; \$g)

See also

- 50.5 CLGeocoder.Done 1421
- 50.11 CLGeocoder.PlacemarkValue 1429

Example Databases

- [Mac and iOS/CoreLocation/CLGeocoder](#)

Created 18th August 2014, last changed 18th August 2014.

50.11 CLGeocoder.PlacemarkValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.PlacemarkValue"; Geocoder; Index; Selector; otherLatitude; otherLongitude)

Parameters

Geocoder

The reference number of the geocoder instance.

\$Geocoder

Index

The index of the placemark. From 0 to CLGeocoder.PlacemarkCount-1.

0

Selector

Which property to return.

"Name"

otherLatitude

For distance calculation the latitude of the other place.

\$lat

otherLongitude

For distance calculation the longitude of the other place.

\$lon

Result Returns value or error.

Description

Possible values for selector:

Examples

Query name of the first placemark:

```
$name = MBS("CLGeocoder.PlacemarkValue"; $g; 0; "name")
```

Queries the coordinates of the placemark:

```
$latitude = MBS("CLGeocoder.PlacemarkValue"; $g; 0; "location.latitude")
```

```
$longitude = MBS("CLGeocoder.PlacemarkValue"; $g; 0; "location.longitude")
```

Queries distance to New York:

```
$distance = MBS("CLGeocoder.PlacemarkValue"; $g; 0; "distance"; 40,712778; -74,005833)
```

See also

- 50.10 CLGeocoder.PlacemarkCount 1428

Example Databases

- [Mac and iOS/CoreLocation/Address Mapping](#)
- [Mac and iOS/CoreLocation/CLGeocoder](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

50.11.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 18th August 2014, last changed 18th August 2014.

name	The name of the placemark.
thoroughfare	The street address associated with the placemark. The street address contains the street name. For example, if the placemark location is Apple's headquarters, the value for this property would be the string "Infinite Loop".
subThoroughfare	Additional street-level information for the placemark. Subthroughfares provide information such as the street number for the location. For example, if the placemark location is Apple's headquarters (1 Infinite Loop), the value for this property would be the string "1".
locality	The city associated with the placemark. If the placemark location is Apple's headquarters, for example, the value for this property would be the string "Cupertino".
subLocality	Additional city-level information for the placemark. This property contains additional information, such as the name of the neighborhood or landmark associated with the placemark. It might also refer to a common name that is associated with the location.
administrativeArea	The state or province associated with the placemark. The string in this property can be either the spelled out name of the administrative area or its designated abbreviation, if one exists. If the placemark location is Apple's headquarters, for example, the value for this property would be the string "CA" or "California".
subAdministrativeArea	Additional administrative area information for the placemark. Subadministrative areas typically correspond to counties or other regions that are then organized into a larger administrative area or state. For example, if the placemark location is Apple's headquarters, the value for this property would be the string "Santa Clara", which is the county in California that contains the city of Cupertino.
postalCode	The postal code associated with the placemark. If the placemark location is Apple's headquarters, for example, the value for this property would be the string "95014".
ISOcountryCode	The abbreviated country name. This string is the standard abbreviation used to refer to the country. For example, if the placemark location is Apple's headquarters, the value for this property would be the string "US".
country	The name of the country associated with the placemark. If the placemark location is Apple's headquarters, for example, the value for this property would be the string "United States".
inlandWater	The name of the inland water body associated with the placemark. For coordinates that lie over an inland body of water, this property contains the name of that water body—the name of a lake, stream, river, or other waterway.
ocean	The name of the ocean associated with the placemark. For coordinates that lie over an ocean, this property contains the name of the ocean.
areasOfInterest	The relevant areas of interest associated with the placemark. Examples of an area of interest are the name of a military base or large national park or an attraction such as Eiffel Tower, Disneyland, or Golden Gate Park. This is a list of several texts.
region.radius	The radius of the geographic region associated with the placemark.
region.center.latitude	The latitude of the geographic region associated with the placemark.
region.center.longitude	The longitude of the geographic region associated with the placemark.
region.identifier	The identifier of the geographic region associated with the placemark.
address	The formatted address.
location.horizontalAccuracy	The horizontal accuracy of the location.
location.verticalAccuracy	The vertical accuracy of the location.
location.altitude	The altitude of the location.
location.timestamp	The timestamp of the location.
location.description	The description text of the location.
location.latitude	The latitude of the location.
location.longitude	The longitude of the location.
distance	Calculates the distance to another location. Please provide the other place with additional parameters. Returns value in meters.

50.12 CLGeocoder.ReverseGeocodeLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
50 CLGeocoder	4.1	Yes	No	Yes, macOS only	No	Yes

MBS("CLGeocoder.ReverseGeocodeLocation"; latitude; longitude { ; wait })

Parameters

latitude

The latitude of the coordinate.

longitude

The longitude of the coordinate.

wait

Optional

Available in MBS FileMaker Plugin 10.1 or newer.

Pass 1 to wait for geocoder to have a result. Pass 0 to not wait and check later if geocoder is done.

1

Result Returns reference number or error.

Description

This method submits the specified location data to the geocoding server asynchronously and returns. Your completion handler block will be executed on the main thread. After initiating a reverse-geocoding request, do not attempt to initiate another reverse- or forward-geocoding request.

Geocoding requests are rate-limited for each app, so making too many requests in a short period of time may cause some of the requests to fail. When the maximum rate is exceeded, the geocoder passes an error back.

You need to use CLGeocoder.Close later to free the geocoder.

CoreLocation Geocoder reference numbers are starting at 24000 and counting up for each new geocoder.

Examples

Reverse geocode location:

```
MBS("CLGeocoder.ReverseGeocodeLocation"; CLGeocoder::Latitude; CLGeocoder::Longitude)
```

Run query and get back JSON or error:

```
Let ( [
latitude = 52.517631899999998;
longitude = 13.4096574;
// run query and wait a bit
g = MBS( "CLGeocoder.ReverseGeocodeLocation"; latitude; longitude; 1 );
e = MBS("IsError");
// query JSON if we got something
r = If (e = 0; MBS( "CLGeocoder.JSON"; g ); g);
// free resources
f = If (e = 0; MBS( "CLGeocoder.Close"; g ); 0)
```

50.12. *CLGEOCODER.REVERSEGEOCODELOCATION* 1433
]; r)

See also

- 50.3 CLGeocoder.Close 1418
- 50.9 CLGeocoder.JSON 1426
- 124.6 IsError 6266

Example Databases

- [Mac and iOS/CoreLocation/CLGeocoder](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

50.12.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr4](#)
- [Core Location Geocoder with JSON](#)

Created 18th August 2014, last changed 12nd February 2020.

Chapter 51

Clipboard

Get and set clipboard text.

51.1 Clipboard.DetectFileMakerDataType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	10.1	Yes	Yes	Yes	No	No

MBS("Clipboard.DetectFileMakerDataType"; XML Text)

Parameters

XML Text

The xml text to put on the clipboard.

\$text

Result Returns text or error.

Description

Returns the type as text: ValueList, Script, ScriptStep, Layout, CustomFunction, Table, Field or Layout12.

51.1.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 21st February 2020, last changed 21st February 2020.

51.2 Clipboard.GetData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	4.4	Yes	Yes	No	No	Yes

MBS("Clipboard.GetData"; ClipboardType; ResultType { ; Param1; Param2 })

Parameters

ClipboardType

The clipboard type to query. On Windows can also be a number.

"com.apple.icns"

ResultType

How to return the data. Can be "hex" for hex encoded, "base64" for base 64 encoded, "text" for trying to read data as text, "file" for a container value containing a file or "image" for reading data as image.

"image"

Param1

Optional

For ResultType "file" the filename of the container value. For ResultType "image" the image type. Can be PNG, JPEG, GIF or BMP.

"JPEG"

Param2

Optional

For ResultType "image", the file name of the image in the container value.

"image.jpg"

Result Returns OK or error.

Description

We look at the clipboard for a matching item with given type and return it in the format type you request.

For server this will query the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

Examples

Queries icon from clipboard:

```
MBS("Clipboard.GetData"; "com.apple.icns"; "image")
```

See also

- 51.4 Clipboard.GetFiles 1440
- 51.9 Clipboard.GetText 1445
- 51.10 Clipboard.GetTypes 1447
- 51.17 Clipboard.SetText 1458

51.2.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr1](#)

Created 20th September 2014, last changed 3th June 2015.

51.3 Clipboard.GetFileMakerData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	4.0	Yes	Yes	No	No	No

MBS("Clipboard.GetFileMakerData"; Type)

Parameters

Type

What element type to query. Can be "auto" for version 10.1 for automatic type selection.
"Layout"

Result Returns text or error.

Description

The result is a XML text which you can store for later.

The type can be ValueList, Script, ScriptStep, Layout, CustomFunction, Table, Field or Layout12.

Pass auto as type in version 10.1 or newer to let the plugin look for all types and return the data found.

For server this will query the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

Added type ValueList for FileMaker 16.

For custom menus in FileMaker 17, please use Clipboard.GetText function.

Warning: Some settings in script step for import, export or printer setup may not be preserved in copied content!

See also

- 51.9 Clipboard.GetText 1445
- 51.11 Clipboard.SetFileMakerData 1448
- 159.1 SyntaxColoring.AddContextMenuCommand 7553

Example Databases

- [Third Party/FileMaker Snippet Storage](#)
- [XML/XML Colored](#)

51.3.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [Define hot keys for functions in the FileMaker development](#)

- [Add a search and replace command for FileMaker Script Workspace](#)
- [Custom context menu commands for FileMaker ScriptWorkspace](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS Filemaker Plugin, version 4.0pr2](#)
- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 21st February 2020.

51.4 Clipboard.GetFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	5.1	Yes	Yes	No	No	Yes

MBS("Clipboard.GetFiles")

Result Returns list or error.

Description

If you copy files in Finder or Explorer, you can use this plugin function to get a list of files. Returns native file paths, so you may need Path.NativePathToFileMakerPath function.

For server this will query the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

Examples

Query list of files:

MBS("Clipboard.GetFiles")

See also

- 51.2 Clipboard.GetData 1436
- 51.9 Clipboard.GetText 1445
- 51.10 Clipboard.GetTypes 1447
- 51.12 Clipboard.SetFiles 1450
- 121.7 Path.NativePathToFileMakerPath 6147

51.4.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 23th April 2015, last changed 29th April 2016.

51.5 Clipboard.GetHTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	6.0	Yes	Yes	No	No	Yes

MBS("Clipboard.GetHTMLText" { ; Encoding })

Parameters

Encoding

Optional

The text encoding for result. Default is Windows ANSI.

UTF8

Result Returns html text or error.

Description

For server this will query the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

For Mac OS X, if a webarchive is on the clipboard, the plugin will pick data from that webarchive. Safari puts a Webarchive on the clipboard if you do a copy to the clipboard. If text encoding is UTF-8, the plugin will automatically use this encoding as default unless you overwrite it.

See also

- [51.7 Clipboard.GetRTFText](#) 1443
- [51.8 Clipboard.GetStyledText](#) 1444
- [51.9 Clipboard.GetText](#) 1445
- [51.13 Clipboard.SetHTMLText](#) 1452
- [51.15 Clipboard.SetRTFText](#) 1455
- [51.17 Clipboard.SetText](#) 1458

Example Databases

- [Clipboard/Clipboard](#)

51.5.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr7](#)
- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 7th January 2016, last changed 27th January 2016.

51.6 Clipboard.GetPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	6.3	Yes	Yes	No	No	Yes

MBS("Clipboard.GetPicture" { ; ImageType; Filename })

Parameters

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

You can store image in a container field for example.

See also

- 51.14 Clipboard.SetPicture

1454

51.6.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr3](#)
- [MBS FileMaker Plugin, version 6.3pr5](#)

Created 3th July 2016, last changed 17th June 2018.

51.7 Clipboard.GetRTFText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	5.0	Yes	Yes	No	No	Yes

MBS("Clipboard.GetRTFText" { ; Encoding })

Parameters

Encoding

Optional

The text encoding for result. Default is Windows ANSI.

UTF8

Result Returns text or error.

Description

For server this will query the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

See also

- [51.5 Clipboard.GetHTMLText](#) 1441
- [51.9 Clipboard.GetText](#) 1445
- [51.10 Clipboard.GetTypes](#) 1447
- [51.13 Clipboard.SetHTMLText](#) 1452
- [51.15 Clipboard.SetRTFText](#) 1455
- [51.17 Clipboard.SetText](#) 1458

Example Databases

- [Clipboard/Clipboard](#)

Created 17th November 2014, last changed 12nd November 2015.

51.8 Clipboard.GetStyledText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	5.0	Yes	No	No	No	Yes

MBS("Clipboard.GetStyledText")

Result Returns text or error.

Description

For server this will query the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

See also

- 51.5 Clipboard.GetHTMLText 1441
- 51.16 Clipboard.SetStyledText 1457
- 180.37 WebView.Copy 8324

Example Databases

- [Clipboard/Clipboard](#)
- [WebViewer/WebView Copy and Paste](#)

51.8.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)

Created 17th November 2014, last changed 3th June 2015.

51.9 Clipboard.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	2.6	Yes	Yes	No	No	Yes

MBS("Clipboard.GetText" { ; type })

Parameters

type

Optional

The data type. By default NSStringPboardType, but can be other Mac types. Mac only.

””

Result The text from the clipboard. Empty if no text is there.

Description

Examples for type parameter: public.utf8-plain-text, CorePasteboardFlavorType 0x54455854, public.rtf,CorePasteboardFlavorType 0x75747874.

For server this will query the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

Examples

Get text from clipboard:

```
MBS("Clipboard.GetText")
```

Query addressbook data from Contacts app:

```
MBS("Clipboard.GetText"; "ABPeopleDictPboardType")
```

Get design from clipboard after copying it in FileMaker:

```
MBS("Clipboard.GetText"; "dyn.agk8u")
```

See also

- 51.2 Clipboard.GetData 1436
- 51.3 Clipboard.GetFileMakerData 1438
- 51.4 Clipboard.GetFiles 1440
- 51.5 Clipboard.GetHTMLText 1441
- 51.7 Clipboard.GetRTFText 1443
- 51.10 Clipboard.GetTypes 1447

- 51.13 Clipboard.SetHTMLText 1452
- 51.15 Clipboard.SetRTFText 1455
- 51.17 Clipboard.SetText 1458

Example Databases

- [Clipboard/Clipboard](#)
- [Third Party/FileMaker Snippet Storage](#)
- [WebViewer/WebView Copy and Paste](#)
- [XML/XML Colored](#)

51.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr3](#)
- [MBS FileMaker Plugin, version 8.2pr6](#)
- [MBS Filemaker Plugin, version 4.2pr11](#)
- [MBS Filemaker Plugin, version 2.6pr7](#)

Created 18th August 2014, last changed 24th February 2020.

51.10 Clipboard.GetTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	4.0	Yes	Yes	No	No	Yes

MBS("Clipboard.GetTypes")

Result Returns list or error.

Description

The plugin currently only get/set unicode text using Clipboard.GetText/Clipboard.SetText. If you need additional data types supported, please contact us.

For server this will query the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

Examples

Query list of types:

MBS("Clipboard.GetTypes")

See also

- 51.2 Clipboard.GetData 1436
- 51.4 Clipboard.GetFiles 1440
- 51.7 Clipboard.GetRTFText 1443
- 51.9 Clipboard.GetText 1445
- 51.12 Clipboard.SetFiles 1450
- 51.17 Clipboard.SetText 1458

51.10.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 21st October 2017.

51.11 Clipboard.SetFileMakerData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	4.0	Yes	Yes	No	No	No

MBS("Clipboard.SetFileMakerData"; Type; Text)

Parameters

Type

What element type to set. Can be "auto" for version 10.1 for automatic type selection.
"Layout"

Text

The text to put on the clipboard.
\$text

Result Returns OK or error.

Description

Be sure to put the correct xml on the clipboard to avoid FileMaker being confused.
The type can be ValueList, Script, ScriptStep, Layout, CustomFunction, Table, Field or Layout12.
Pass auto as type in version 10.1 or newer to let the plugin look at the xml to decide on type.

For server this will modify the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

Added type ValueList for FileMaker 16.
For custom menus in FileMaker 17, please use Clipboard.SetText function.

Examples

Put xml back on clipboard:

```
Set Variable [ $r; Value: MBS( "Clipboard.SetFileMakerData"; "auto"; $xml ) ]
```

See also

- 51.3 Clipboard.GetFileMakerData 1438
- 51.17 Clipboard.SetText 1458
- 88.13 HotKey.Register 4843
- 159.1 SyntaxColoring.AddContextMenuCommand 7553

Example Databases

- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Create Sort Script](#)

51.11.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [Insert snippet for FileMaker on Windows](#)
- [Add a search and replace command for FileMaker Script Workspace](#)
- [Custom context menu commands for FileMaker ScriptWorkspace](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS Filemaker Plugin, version 4.0pr2](#)
- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 21st February 2020.

51.12 Clipboard.SetFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	5.1	Yes	Yes	No	No	Yes

MBS("Clipboard.SetFiles"; Paths)

Parameters

Paths

The list of file paths.

"C:\Users\Christian\Desktop\Jaguar Aqua Graphite.jpg"

Result Returns OK or error.

Description

For server this will modify the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Put a file path to clipboard on Windows:

```
MBS("Clipboard.SetFiles"; "C:\Users\Christian\Desktop\test.fmp12")
```

Put two file paths on clipboard on Windows:

```
MBS("Clipboard.SetFiles"; "C:\Users\Christian\Desktop\test.fmp12&C:\Users\Christian\Desktop\Jaguar Aqua Graphite.jpg")
```

Put a file path on clipboard on Mac:

```
MBS("Clipboard.SetFiles"; "/Users/cs/Desktop/todo.rtf")
```

See also

- 51.4 Clipboard.GetFiles 1440
- 51.10 Clipboard.GetTypes 1447
- 51.17 Clipboard.SetText 1458
- 121.2 Path.FileMakerPathToNativePath 6139

51.12.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 23th April 2015, last changed 3th June 2015.

51.13 Clipboard.SetHTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	6.0	Yes	Yes	No	No	Yes

```
MBS( "Clipboard.SetHTMLText"; HTMLText { ; Encoding } )
```

Parameters

HTMLText

The html data to put in clipboard.

```
"<p>Hello</p>" \f0\b\fs28 \cf0 Hello World }
```

Encoding

Optional

The text encoding for text parameter. Default is Windows ANSI.

UTF8

Result Returns OK or error.

Description

For server this will modify the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

On Windows you may want to use Text.ReplaceNewline first to convert line endings. FileMaker on Windows uses Mac line endings internally.

Examples

Put some HTML on clipboard:

```
MBS( "Clipboard.SetHTMLText"; "<b>Hello</b>"; "UTF8")
```

See also

- 51.5 Clipboard.GetHTMLText 1441
- 51.7 Clipboard.GetRTFText 1443
- 51.9 Clipboard.GetText 1445
- 51.15 Clipboard.SetRTFText 1455
- 51.16 Clipboard.SetStyledText 1457
- 51.17 Clipboard.SetText 1458
- 164.59 Text.ReplaceNewline 7857

Example Databases

- [Clipboard/Clipboard](#)

51.13.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 7th January 2016, last changed 26th December 2019.

51.14 Clipboard.SetPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	6.3	Yes	Yes	No	No	Yes

MBS("Clipboard.SetPicture"; Image)

Parameters

Image

The container with image. Can be in various formats including JPEG, PNG, TIFF and BMP.
MyTable::myContainer

Result Returns OK or error.

Description

Examples

Put image on clipboard:

```
MBS( "Clipboard.SetPicture";  
MBS( "Container.ReadFile"; "/Users/cs/Pictures/IMG_3625.jpg"; "auto" ) )
```

See also

- 51.6 Clipboard.GetPicture 1442
- 55.28 Container.ReadFile 1645

51.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr5](#)

Created 3th July 2016, last changed 26th December 2019.

51.15 Clipboard.SetRTFText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	5.0	Yes	Yes	No	No	Yes

MBS("Clipboard.SetRTFText"; RTFText { ; Encoding })

Parameters

RTFText

The RTF data to put in clipboard.

```
" { \rtf1\ansi\ansicpg1252\cocoartf1265\cocoasubrtf210 \cocoascreenfonts1 { \fonttbl\f0\fswiss\fcharset0
Helvetica; } { \colortbl;\red255\green255\blue255; } \pard\tx560\tx1120\tx1680\tx2240\tx2800\tx3360\tx3920\tx4480\tx5040\tx5600\tx6160\tx6720\pardirnatural
```

```
\f0\b\fs28 \cf0 Hello World } "
```

Encoding

Optional

The text encoding for text parameter. Default is Windows ANSI.

UTF8

Result Returns OK or error.

Description

See also Text.TextToRTF to convert formatted text to RTF.

For server this will modify the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

On Windows you may want to use Text.ReplaceNewline first to convert line endings. FileMaker on Windows uses Mac line endings internally.

Examples

Put text on clipboard:

```
MBS( "Clipboard.SetRTFText"; " { \rtf1\ansi\ansicpg1252\cocoartf1265\cocoasubrtf210
\cocoascreenfonts1 { \fonttbl\f0\fswiss\fcharset0 Helvetica; }
{ \colortbl;\red255\green255\blue255; }
\pard\tx560\tx1120\tx1680\tx2240\tx2800\tx3360\tx3920\tx4480\tx5040\tx5600\tx6160\tx6720\pardirnatural
\f0\b\fs28 \cf0 Hello World } "; "UTF8" )
```

See also

- 51.5 Clipboard.GetHTMLText 1441
- 51.7 Clipboard.GetRTFText 1443

- 51.9 Clipboard.GetText 1445
- 51.13 Clipboard.SetHTMLText 1452
- 51.16 Clipboard.SetStyledText 1457
- 51.17 Clipboard.SetText 1458
- 164.59 Text.ReplaceNewline 7857
- 164.65 Text.TextToRTF 7867

Example Databases

- [Clipboard/Clipboard](#)

Created 17th November 2014, last changed 26th December 2019.

51.16 Clipboard.SetStyledText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	5.0	Yes	No	No	No	Yes

MBS("Clipboard.SetStyledText"; Text)

Parameters

Text

The styled text to put in clipboard.

"Hello World"

Result Returns OK or error.

Description

This is direct way for styled text without converting in-between to RTF.

For Windows or cross platform solutions you can combine `Text.TextToRTF` and `Clipboard.SetRTFText`.

For server this will modify the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

Examples

Put red text on the clipboard:

```
MBS( "Clipboard.SetStyledText"; TextColor ( "Hello World" ; RGB ( 65535 ; 0 ; 0 ) ) )
```

See also

- 51.8 `Clipboard.GetStyledText` 1444
- 51.13 `Clipboard.SetHTMLText` 1452
- 51.15 `Clipboard.SetRTFText` 1455
- 164.65 `Text.TextToRTF` 7867

Example Databases

- [Clipboard/Clipboard](#)

Created 17th November 2014, last changed 26th December 2019.

51.17 Clipboard.SetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
51 Clipboard	2.6	Yes	Yes	No	No	Yes

```
MBS( "Clipboard.SetText"; text { ; type } )
```

Parameters

text

The new txt for the clipboard.

"Hello World"

type

Optional

The data type. By default NSStringPboardType, but can be other Mac types.

""

Result Returns "OK" or error message.

Description

For server this will modify the clipboard of the user account running the server app on the server computer and not the clipboard of any client.

On Windows you may want to use Text.ReplaceNewline first to convert line endings. FileMaker on Windows uses Mac line endings internally.

If called on WebDirect, the plugin puts text on the clipboard for the server, not for the client! So the functions are of no use on server.

Examples

Sets text:

```
MBS( "Clipboard.SetText"; "Hello World" )
```

See also

- 51.2 Clipboard.GetData 1436
- 51.5 Clipboard.GetHTMLText 1441
- 51.7 Clipboard.GetRTFText 1443
- 51.9 Clipboard.GetText 1445
- 51.10 Clipboard.GetTypes 1447
- 51.11 Clipboard.SetFileMakerData 1448
- 51.12 Clipboard.SetFiles 1450

<i>51.17. CLIPBOARD.SETTEXT</i>	1459
• 51.13 Clipboard.SetHTMLText	1452
• 51.15 Clipboard.SetRTFText	1455
• 164.59 Text.ReplaceNewline	7857

Example Databases

- [Clipboard/Clipboard](#)

51.17.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr6](#)
- [MBS Filemaker Plugin, version 4.2pr11](#)
- [MBS Filemaker Plugin, version 2.6pr7](#)

51.17.2 FileMaker Magazin

- Ausgabe 3/2017, Seite 15
- Ausgabe 3/2017, Seite 14

Created 18th August 2014, last changed 25th August 2018.

Chapter 52

ColorPanel

Functions for Color Panels

On Windows, can show only a dialog. For MacOS, we can show color palette.

52.1 ColorPanel.Choose

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	No	Yes	No	No	No

MBS("ColorPanel.Choose"; Color)

Parameters

Color

The color to prefill.

Result Returns color, Cancel or error.

Description

If you pass a color, it's preselected.

Versions until 8.5 return OK when cancel was selected. This was corrected for 9.0.
Windows may not select the given color if it doesn't like to.

Examples

Choose color:

```
MBS( "ColorPanel.Choose"; "# FF0000")
```

See also

- 52.9 ColorPanel.Show

Example Databases

- [Color Panel](#)

52.1.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr1](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 13th June 2018, last changed 1st January 2019.

52.2 ColorPanel.GetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	Yes	No	No	No	No

MBS("ColorPanel.GetColor" { ; ReturnAsNumbers })

Parameters

ReturnAsNumbers

Optional

Pass 1 to return color as list of red, green and blue, e.g. "123§234§56" Pass 0 (default) for return as hex value, e.g. "7788FF".

0

Result Returns color or error.

Description

Returns color as hex values, e.g. FF0000 for red.

Examples

Query color:

```
Set Variable [ $c ; Value: MBS( "ColorPanel.GetColor" ) ]
If [ MBS("IsError") = 0 ]
Set Field [ Color Panel::Color ; "# " & $c ]
End If
```

See also

- [52.6 ColorPanel.SetColor](#) 1467
- [52.7 ColorPanel.SetColorChangedEvaluate](#) 1468
- [124.6 IsError](#) 6266

Example Databases

- [Color Panel](#)

52.2.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)

Created 13th June 2018, last changed 13th June 2018.

52.3 ColorPanel.GetColorChangedEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	Yes	No	No	No	No

MBS("ColorPanel.GetColorChangedEvaluate")

Result Returns expression or error.

Description

See also

- 52.4 ColorPanel.GetColorChangedScript 1465
- 52.7 ColorPanel.SetColorChangedEvaluate 1468
- 52.8 ColorPanel.SetColorChangedScript 1469

Created 13th June 2018, last changed 13th June 2018.

52.4 ColorPanel.GetColorChangedScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	Yes	No	No	No	No

MBS("ColorPanel.GetColorChangedScript")

Result Returns script name or error.

Description

See also

- [52.3 ColorPanel.GetColorChangedEvaluate](#) 1464
- [52.7 ColorPanel.SetColorChangedEvaluate](#) 1468
- [52.8 ColorPanel.SetColorChangedScript](#) 1469

Created 13th June 2018, last changed 13th June 2018.

52.5 ColorPanel.Hide

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	Yes	No	No	No	No

MBS("ColorPanel.Hide")

Result Returns OK or error.

Description

Examples

Hide panel:

```
Set Variable [ $c ; Value: MBS( "ColorPanel.Hide" ) ]
```

Show panel:

```
Set Variable [ $c ; Value: MBS( "ColorPanel.Show" ) ]
```

See also

- [52.9 ColorPanel.Show](#)

1471

Example Databases

- [Color Panel](#)

Created 13th June 2018, last changed 13th June 2018.

52.6 ColorPanel.SetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	Yes	No	No	No	No

MBS("ColorPanel.SetColor"; color)

Parameters

color

A color value. This can be a common color name or color in hex notation: # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"# FF0000"

Result Returns OK or error.

Description

Examples

Set red:

MBS("ColorPanel.SetColor"; "# FF0000")

See also

- [52.2 ColorPanel.GetColor](#) 1463
- [52.8 ColorPanel.SetColorChangedScript](#) 1469
- [52.9 ColorPanel.Show](#) 1471

Example Databases

- [Color Panel](#)

Created 13th June 2018, last changed 19th September 2019.

52.7 ColorPanel.SetColorChangedEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	Yes	No	No	No	No

MBS("ColorPanel.SetColorChangedEvaluate")

Result Returns OK or error.

Description

The plugin can evaluate this expression to set variables, call plugin functions to trigger other things. Use ColorPanel.GetColor to query new color.

See also

- 52.2 ColorPanel.GetColor 1463
- 52.3 ColorPanel.GetColorChangedEvaluate 1464
- 52.4 ColorPanel.GetColorChangedScript 1465
- 52.8 ColorPanel.SetColorChangedScript 1469

Created 13th June 2018, last changed 13th June 2018.

52.8 ColorPanel.SetColorChangedScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	Yes	No	No	No	No

MBS("ColorPanel.SetColorChangedScript"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

Script parameter to pass.

Result Returns OK or error.

Description

You may need to clear this to disable the plugin from triggering script while in layout mode until version 8.4, where we don't call trigger in layout mode.

Examples

Set color changed script trigger:

```
Set Variable [ $r ; Value: MBS( "ColorPanel.SetColorChangedScript"; Get(Filename); "ColorChanged" ) ]
```

Clear script trigger:

```
MBS( "ColorPanel.SetColorChangedScript"; ""; "" )
```

See also

- 52.3 ColorPanel.GetColorChangedEvaluate 1464
- 52.4 ColorPanel.GetColorChangedScript 1465
- 52.6 ColorPanel.SetColor 1467
- 52.7 ColorPanel.SetColorChangedEvaluate 1468
- 52.9 ColorPanel.Show 1471

Example Databases

- [Color Panel](#)

Created 13th June 2018, last changed 10th September 2018.

52.9 ColorPanel.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
52 ColorPanel	8.3	Yes	No	No	No	No

MBS("ColorPanel.Show")

Result Returns OK or error.

Description

Examples

Show panel and optionally load a color:

```
Set Variable [ $r ; Value: MBS( "ColorPanel.SetColorChangedScript"; Get(FileName); "ColorChanged" ) ]
If [ Length ( Color Panel::Color ) >0 ]
Set Variable [ $r ; Value: MBS( "ColorPanel.SetColor"; Color Panel::Color ) ]
End If
Set Variable [ $r ; Value: MBS( "ColorPanel.Show" ) ]
```

See also

- [52.1 ColorPanel.Choose](#) 1461
- [52.5 ColorPanel.Hide](#) 1466
- [52.6 ColorPanel.SetColor](#) 1467
- [52.8 ColorPanel.SetColorChangedScript](#) 1469

Example Databases

- [Color Panel](#)

Created 13th June 2018, last changed 26th December 2019.

Chapter 53

Compression

Functions to handle Zip and gzip files.

Please use Archive functions for newer projects.

53.1 GZipFile.Compress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	4.2	Yes	Yes	Yes	Yes	Yes

MBS("GZipFile.Compress"; InputPath; OutputPath)

Parameters

InputPath

The native path to the input file.

"C:\test.txt"

OutputPath

The native path to the input file.

"C:\test.gz"

Result Returns OK or error.

Description

This function uses gzip file format, so please use file extension .gz. Maximum compression is used.

As this function processes file in chunks it should work fine with huge files.

In case of an error like a full hard disk, you need to manually delete the half written output file.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Compress a file:

```
MBS( "GZipFile.Compress"; "C:\test.txt"; "C:\test.gz" )
```

See also

- 53.2 GZipFile.Decompress 1475
- 121.2 Path.FileMakerPathToNativePath 6139

Created 18th August 2014, last changed 5th September 2014.

53.2 GZipFile.Decompress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	4.2	Yes	Yes	Yes	Yes	Yes

MBS("GZipFile.Decompress"; InputPath; OutputPath)

Parameters

InputPath

The native path to the input file.

"C:\test.gz"

OutputPath

The native path to the input file.

"C:\test.txt"

Result Returns OK or error.

Description

This function uses gzip file format, so please use file extension .gz.

As this function processes file in chunks it should work fine with huge files.

In case of an error like a full hard disk, you need to manually delete the half written output file.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Uncompress a file:

MBS("GZipFile.Decompress"; "C:\test.gz"; "C:\test.txt")

See also

- 53.1 GZipFile.Compress 1473
- 121.2 Path.FileMakerPathToNativePath 6139

Created 18th August 2014, last changed 5th September 2014.

53.3 UnZipFile.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.Close")

Result Returns OK or error.

Description

Examples

Close file

MBS("UnZipFile.Close")

See also

- [53.4 UnZipFile.ExtractFiles](#) 1477
- [53.34 ZipFile.Close](#) 1510

Example Databases

- [Zip/Show Zip File Content](#)

53.3.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 33
- Ausgabe 6/2013, Seite 31

Created 18th August 2014, last changed 18th August 2014.

53.4 UnZipFile.ExtractFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	6.0	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ExtractFiles"; destFolder { ; ExtractWithoutPath; Overwrite })

Parameters

destFolder

The native path to the destination folder. Please make sure this folder exists.

"/Users/cs/Desktop/test"

ExtractWithoutPath

Optional

If 1, all files are put in one folder and no subfolders are created.

0

Overwrite

Optional

Pass 1 to allow files to be overwritten. Default is 0 to not overwrite.

Result Returns OK or error.

Description

Please use UnZipFile.OpenContainer and UnZipFile.OpenFile to open the archive first.

This function does not restore file permissions or other metadata. And it may not work with non ASCII characters.

If you need more control over files being extracted, stored or error checking, please check example database coming with plugin.

Deprecated. Please use Archive.Extraxct for new projects.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Opens archive and expands files:

```
Set Variable [ $r; Value:MBS( "UnZipFile.OpenFile"; "/Users/cs/Desktop/test.zip" ) ]
If [ $r = "OK" ]
Set Variable [ $r; Value:MBS( "UnZipFile.ExtractFiles"; "/Users/cs/Desktop/test"; 0 ) ]
Set Variable [ $r; Value:MBS( "UnZipFile.Close" ) ]
End If
```

Expand files on Windows:

```
Set Variable [ $r; Value:MBS( "UnZipFile.OpenFile"; "C:\Users\Christian\Desktop\DebugView.zip" ) ]  
If [ $r = "OK" ]  
Set Variable [ $r; Value:MBS( "UnZipFile.ExtractFiles"; "C:\Users\Christian\Desktop\test"; 0 ) ]  
Set Variable [ $r; Value:MBS( "UnZipFile.Close" ) ]  
End If
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 53.3 UnZipFile.Close 1476
- 53.23 UnZipFile.OpenContainer 1498
- 53.24 UnZipFile.OpenFile 1499
- 53.34 ZipFile.Close 1510
- 53.37 ZipFile.Open 1515

53.4.1 Blog Entries

- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.0pr7](#)

53.4.2 FileMaker Magazin

- Ausgabe 1/2016, Seite 32

Created 16th January 2016, last changed 12nd February 2019.

53.5 UnZipFile.GlobalComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.GlobalComment" { ; Encoding })

Parameters

Encoding

Optional

The text encoding for result. Default is native.

UTF8

Result Returns text or error.

Description

Examples

Query the global comment:

MBS("UnZipFile.GlobalComment")

See also

- [53.7 UnZipFile.ItemComment](#)

1481

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 12nd November 2015.

53.6 UnZipFile.ItemCRC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemCRC"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.
\$index

Result Returns checksum number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.11 UnZipFile.ItemDate](#) 1485
- [53.14 UnZipFile.ItemFlag](#) 1488
- [53.16 UnZipFile.ItemName](#) 1491

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.7 UnZipFile.ItemComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemComment"; Index { ; Encoding })

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Encoding

Optional

The text encoding for result. Default is native.

"UTF8"

Result Returns comment as text or error.

Description

See also

- [53.5 UnZipFile.GlobalComment](#) 1479
- [53.10 UnZipFile.ItemCount](#) 1484
- [53.16 UnZipFile.ItemName](#) 1491

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 12nd November 2015.

53.8 UnZipFile.ItemCompressedSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemCompressedSize"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns size as number or error.

Description

Examples

Queries sizes:

```
$UncompressedSize = MBS( "UnZipFile.ItemUncompressedSize"; 0 )
```

```
$CompressedSize = MBS( "UnZipFile.ItemCompressedSize"; 0 )
```

```
$PercentSaved = ($UncompressedSize - $CompressedSize) / $UncompressedSize
```

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.20 UnZipFile.ItemUncompressedSize](#) 1495

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.9 UnZipFile.ItemCompressionMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemCompressionMethod"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns number or error.

Description

Can be 0 for no compression and 1 for deflate compression.

Any other value is not supported by the plugin.

See also

- [53.10 UnZipFile.ItemCount](#)

1484

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.10 UnZipFile.ItemCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemCount")

Result Returns number or error.

Description

Examples

Queries the number of files:

```
$count = MBS( "UnZipFile.ItemCount" )
```

See also

- [53.7 UnZipFile.ItemComment](#) 1481
- [53.11 UnZipFile.ItemDate](#) 1485
- [53.18 UnZipFile.ItemSizeFileExtra](#) 1493
- [53.19 UnZipFile.ItemSizeFileName](#) 1494
- [53.20 UnZipFile.ItemUncompressedSize](#) 1495
- [53.21 UnZipFile.ItemVersion](#) 1496
- [53.22 UnZipFile.ItemVersionNeeded](#) 1497
- [53.28 UnZipFile.ReadAsJPEGContainer](#) 1504
- [53.29 UnZipFile.ReadAsPNGContainer](#) 1505
- [53.30 UnZipFile.ReadAsText](#) 1506

Example Databases

- [Zip/Show Zip File Content](#)

53.10.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 32
- Ausgabe 6/2013, Seite 31

Created 18th August 2014, last changed 18th August 2014.

53.11 UnZipFile.ItemDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemDate"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns date or error.

Description

Examples

Queries date of 5th item:

MBS("UnZipFile.ItemDate"; 4)

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.6 UnZipFile.ItemCRC](#) 1480
- [53.14 UnZipFile.ItemFlag](#) 1488
- [53.16 UnZipFile.ItemName](#) 1491

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.12 UnZipFile.ItemDiskNumberStart

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemDiskNumberStart"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.
\$index

Result Returns number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.13 UnZipFile.ItemExternalFileAttributes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemExternalFileAttributes"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.15 UnZipFile.ItemInternalFileAttributes](#) 1490

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.14 UnZipFile.ItemFlag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemFlag"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns number or error.

Description

The flag is a bit field with various values.

Last bit of the flag is encryption state: value is 1 (odd) for encrypted and 0 (even) for unencrypted value.

The bit values 2 and 4 define compression level between 0 to 9.

Flag Value	Encryption	Compression Level
0	no	6
1	yes	6
2	no	9
3	yes	9
4	no	2
5	yes	2
6	no	1
7	yes	1

Examples

Check compressed state:

```
Set Variable [ $compressed; Value: MBS( "Math.BitwiseAND"; MBS( "UnZipFile.ItemFlag"; Index ); 1 ) = 1 ]
```

See also

- 108.1 Math.BitwiseAND 5753
- 53.10 UnZipFile.ItemCount 1484
- 53.6 UnZipFile.ItemCRC 1480
- 53.11 UnZipFile.ItemDate 1485
- 53.16 UnZipFile.ItemName 1491

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 31st August 2017.

53.15 UnZipFile.ItemInternalFileAttributes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemInternalFileAttributes"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.13 UnZipFile.ItemExternalFileAttributes](#) 1487

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.16 UnZipFile.ItemName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemName"; Index { ; Encoding })

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.
\$index

Encoding

Optional
The text encoding for result. Default is native.
"UTF8"

Result Returns name or error.

Description

Can include folder names and slash as separator.

See also

- [53.7 UnZipFile.ItemComment](#) 1481
- [53.10 UnZipFile.ItemCount](#) 1484
- [53.6 UnZipFile.ItemCRC](#) 1480
- [53.11 UnZipFile.ItemDate](#) 1485
- [53.14 UnZipFile.ItemFlag](#) 1488

Example Databases

- [Zip/Show Zip File Content](#)

53.16.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 32
- Ausgabe 6/2013, Seite 31

Created 18th August 2014, last changed 12nd November 2015.

53.17 UnZipFile.ItemSizeFileComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemSizeFileComment"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.
\$index

Result Returns number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.18 UnZipFile.ItemSizeFileExtra](#) 1493
- [53.19 UnZipFile.ItemSizeFileName](#) 1494

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.18 UnZipFile.ItemSizeFileExtra

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemSizeFileExtra"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.17 UnZipFile.ItemSizeFileComment](#) 1492
- [53.19 UnZipFile.ItemSizeFileName](#) 1494

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.19 UnZipFile.ItemSizeFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemSizeFileName"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.17 UnZipFile.ItemSizeFileComment](#) 1492
- [53.18 UnZipFile.ItemSizeFileExtra](#) 1493

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.20 UnZipFile.ItemUncompressedSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemUncompressedSize"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns size as number or error.

Description

Examples

Queries sizes:

```
$UncompressedSize = MBS( "UnZipFile.ItemUncompressedSize"; 0 )
```

```
$CompressedSize = MBS( "UnZipFile.ItemCompressedSize"; 0 )
```

```
$PercentSaved = ($UncompressedSize - $CompressedSize) / $UncompressedSize
```

See also

- [53.8 UnZipFile.ItemCompressedSize](#) 1482
- [53.10 UnZipFile.ItemCount](#) 1484

Example Databases

- [Zip/Show Zip File Content](#)

53.20.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 33
- Ausgabe 6/2013, Seite 32

Created 18th August 2014, last changed 18th August 2014.

53.21 UnZipFile.ItemVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemVersion"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.22 UnZipFile.ItemVersionNeeded](#) 1497

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.22 UnZipFile.ItemVersionNeeded

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ItemVersionNeeded"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns number or error.

Description

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.21 UnZipFile.ItemVersion](#) 1496

Example Databases

- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th August 2014.

53.23 UnZipFile.OpenContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.OpenContainer"; Container)

Parameters

Container

The container value with the zip archive file inside.

\$path

Result Returns OK on success.

Description

The plugin reads the directory so you can use UnZipFile.ItemCount function to learn the number of items.

Deprecated. Please use Archive.Compress for new projects.

See also

- 36.1 Archive.Compress 943
- 53.4 UnZipFile.ExtractFiles 1477
- 53.10 UnZipFile.ItemCount 1484
- 189.12 WordFile.OpenContainer 8826

53.23.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

53.23.2 FileMaker Magazin

- Ausgabe 6/2013, Seite 32
- Ausgabe 6/2013, Seite 31

Created 18th August 2014, last changed 7th October 2019.

53.24 UnZipFile.OpenFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.OpenFile"; Path)

Parameters

Path

Native file path.

\$path

Result Returns OK or error.

Description

The plugin reads the directory so you can use UnZipFile.ItemCount function to learn the number of items.

Deprecated. Please use Archive.Compress for new projects.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Open archive on Windows:

```
MBS( "UnZipFile.OpenFile"; "c:\folder\test.zip" )
```

Open Archive and expand:

```
MBS( "UnZipFile.OpenFile"; "C:\Users\Christian\Desktop\MBSFMPlugins153.zip")
```

```
MBS( "UnZipFile.ExtractFiles"; "C:\Users\Christian\Desktop\test")
```

See also

- 36.1 Archive.Compress 943
- 121.2 Path.FileMakerPathToNativePath 6139
- 53.4 UnZipFile.ExtractFiles 1477
- 53.10 UnZipFile.ItemCount 1484
- 189.13 WordFile.OpenFile 8828
- 53.37 ZipFile.Open 1515

Example Databases

- [Zip/Show Zip File Content](#)

53.24.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 31

Created 18th August 2014, last changed 7th October 2019.

53.25 UnZipFile.ReadAsFileContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ReadAsFileContainer"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns container value or error.

Description

If you want to decrypt an encrypted file, please use UnZipFile.UsePassword before calling this function.

Examples

Read file:

```
$r = MBS( "UnZipFile.ReadAsFileContainer"; $Index )
```

See also

- 53.10 UnZipFile.ItemCount 1484
- 53.26 UnZipFile.ReadAsGIFContainer 1502
- 53.28 UnZipFile.ReadAsJPEGContainer 1504
- 53.29 UnZipFile.ReadAsPNGContainer 1505
- 53.32 UnZipFile.UsePassword 1508
- 53.39 ZipFile.UsePassword 1518

53.25.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 32

Created 18th August 2014, last changed 26th February 2015.

53.26 UnZipFile.ReadAsGIFContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ReadAsGIFContainer"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns container value or error.

Description

If you want to decrypt an encrypted file, please use UnZipFile.UsePassword before calling this function.

Examples

Read file:

```
$r = MBS( "UnZipFile.ReadAsGIFContainer"; $Index )
```

See also

- 53.10 UnZipFile.ItemCount 1484
- 53.25 UnZipFile.ReadAsFileContainer 1501
- 53.28 UnZipFile.ReadAsJPEGContainer 1504
- 53.29 UnZipFile.ReadAsPNGContainer 1505
- 53.32 UnZipFile.UsePassword 1508
- 53.39 ZipFile.UsePassword 1518

Created 18th August 2014, last changed 26th February 2015.

53.27 UnZipFile.ReadAsHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ReadAsHex"; Index)

Parameters**Index**

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns text value or error.

Description

If you want to decrypt an encrypted file, please use UnZipFile.UsePassword before calling this function.

See also

- 53.10 UnZipFile.ItemCount 1484
- 53.30 UnZipFile.ReadAsText 1506
- 53.32 UnZipFile.UsePassword 1508
- 53.39 ZipFile.UsePassword 1518

Created 18th August 2014, last changed 26th February 2015.

53.28 UnZipFile.ReadAsJPEGContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ReadAsJPEGContainer"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns container value or error.

Description

If you want to decrypt an encrypted file, please use UnZipFile.UsePassword before calling this function.

Examples

Read file:

```
$r = MBS( "UnZipFile.ReadAsJPEGContainer"; $Index )
```

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.25 UnZipFile.ReadAsFileContainer](#) 1501
- [53.26 UnZipFile.ReadAsGIFContainer](#) 1502
- [53.29 UnZipFile.ReadAsPNGContainer](#) 1505
- [53.32 UnZipFile.UsePassword](#) 1508
- [53.39 ZipFile.UsePassword](#) 1518

Example Databases

- [Zip/Show Zip File Content](#)

53.28.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 32

Created 18th August 2014, last changed 26th February 2015.

53.29 UnZipFile.ReadAsPNGContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ReadAsPNGContainer"; Index)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Result Returns container value or error.

Description

If you want to decrypt an encrypted file, please use UnZipFile.UsePassword before calling this function.

Examples

Read file:

```
$r = MBS( "UnZipFile.ReadAsPNGContainer"; $Index )
```

See also

- 53.10 UnZipFile.ItemCount 1484
- 53.25 UnZipFile.ReadAsFileContainer 1501
- 53.26 UnZipFile.ReadAsGIFContainer 1502
- 53.28 UnZipFile.ReadAsJPEGContainer 1504
- 53.32 UnZipFile.UsePassword 1508
- 53.39 ZipFile.UsePassword 1518

53.29.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 32

Created 18th August 2014, last changed 26th February 2015.

53.30 UnZipFile.ReadAsText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ReadAsText"; Index { ; Encoding })

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF8"

Result Returns text value or error.

Description

If you want to decrypt an encrypted file, please use UnZipFile.UsePassword before calling this function.

Examples

Read text in variable:

```
$text = MBS( "UnZipFile.ReadAsText"; $Index )
```

See also

- [53.10 UnZipFile.ItemCount](#) 1484
- [53.27 UnZipFile.ReadAsHex](#) 1503
- [53.32 UnZipFile.UsePassword](#) 1508
- [53.39 ZipFile.UsePassword](#) 1518

Example Databases

- [Zip/Show Zip File Content](#)

53.30.1 FileMaker Magazin

- Ausgabe 6/2013, Seite 32

Created 18th August 2014, last changed 12nd November 2015.

53.31 UnZipFile.ReadToFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.ReadToFile"; Index; Path)

Parameters

Index

Index of the item from 0 to UnZipFile.ItemCount-1.

\$index

Path

The native file path to the file to write from the archive.

\$path

Result Returns OK on success.

Description

If you want to decrypt an encrypted file, please use UnZipFile.UsePassword before calling this function.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [53.10 UnZipFile.ItemCount](#) 1484
- [53.32 UnZipFile.UsePassword](#) 1508
- [53.39 ZipFile.UsePassword](#) 1518

Example Databases

- [Zip/Show Zip File Content](#)

53.31.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)
- [MBS Filemaker Plugin, version 4.2pr1](#)

Created 18th August 2014, last changed 26th February 2015.

53.32 UnZipFile.UsePassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	5.1	Yes	Yes	Yes	No	Yes

MBS("UnZipFile.UsePassword"; Password { ; Encoding })

Parameters

Password

The password text.

"pass123"

Encoding

Optional

The text encoding for password parameter. Default is native.

"native"

Result Returns OK or error.

Description

The password is needed to open encrypted files in archive.

Each item in archive could have its own password, but normally all have the same.

See also

- [53.25 UnZipFile.ReadAsFileContainer](#) 1501
- [53.26 UnZipFile.ReadAsGIFContainer](#) 1502
- [53.27 UnZipFile.ReadAsHex](#) 1503
- [53.28 UnZipFile.ReadAsJPEGContainer](#) 1504
- [53.29 UnZipFile.ReadAsPNGContainer](#) 1505
- [53.30 UnZipFile.ReadAsText](#) 1506
- [53.31 UnZipFile.ReadToFile](#) 1507
- [53.39 ZipFile.UsePassword](#) 1518

Example Databases

- [Zip/Show Zip File Content](#)

53.32.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 26th February 2015, last changed 12nd November 2015.

53.33 ZipFile.CRCFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	4.3	Yes	Yes	Yes	No	Yes

MBS("ZipFile.CRCFile"; Path)

Parameters

Path

Native file path.

\$path

Result Returns CRC as number.

Description

This is same CRC as used in zip files.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Calculate CRC of a file:

```
MBS( "ZipFile.CRCFile"; "C:\test.txt" )
```

See also

- 121.2 Path.FileMakerPathToNativePath

6139

53.33.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 22nd January 2015.

53.34 ZipFile.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("ZipFile.Close" { ; Comment })

Parameters

Comment

Optional

The comment to include in the form

Result Returns OK or error.

Description

Examples

Close the archive with comment:

```
MBS( "ZipFile.Close"; "Archive created using MBS Plugin" )
```

See also

- [53.3 UnZipFile.Close](#) 1476
- [53.4 UnZipFile.ExtractFiles](#) 1477

Example Databases

- [Zip/ZipFile](#)

53.34.1 FileMaker Magazin

- Ausgabe 5/2013, Seite 22

Created 18th August 2014, last changed 5th July 2015.

53.35 ZipFile.CompressFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	6.0	Yes	Yes	Yes	No	Yes

MBS("ZipFile.CompressFiles"; SourceFolder; ZipFilePath; FileList; Overwrite; CompressionLevel)

Parameters

SourceFolder

The native file path to the source folder for files to compress.

"/Users/cs/Desktop/test"

ZipFilePath

The native file path to the zip archive.

"/Users/cs/Desktop/test.zip"

FileList

The list of relative file names to compress. Please only ASCII file names.

"image1.jpg\$image2.jpg"

Overwrite

Whether to overwrite the zip archive. Pass 0 to not overwrite an existing file. Pass 1 to overwrite. Pass 2 to append to a zip file.

1

CompressionLevel

The compress level from 0 (no compression) to 9 (max compression). Default is 9.

9

Result Returns OK or error.

Description

This is a simple function to compress a couple of files.

It does not preserve file permissions on Mac/Linux or other metadata.

And it may not work with non ASCII characters. We use UTF-8 on Mac/Linux/iOS, but there is no guarantee that this will work.

If you need more control over files being added, compression or error checking, please use example projects coming with plugin which use our other zip functions. Or use the shell functions and the zip command line tool.

Deprecated. Please use Archive.Compress for new projects.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Compresses some image files:

```
# first get list of file names in folder:
Set Variable [ $list; Value:MBS( "Files.List"; "/Users/cs/Pictures/TestFiles" ) ]
# now compress them:
Set Variable [ $r; Value:MBS( "ZipFile.CompressFiles"; "/Users/cs/Pictures/TestFiles"; "/Users/cs/Desktop/test.zip"; $list; 0; 9 ) ]
```

Compress some images on Windows:

```
MBS( "ZipFile.CompressFiles"; "C:\Users\Administrator\Documents"; "C:\Users\Administrator\Desktop\test.zip";
"MBSLogo100.png$test.png$other.jpg"; 0; 9 )
```

Zip a file on Mac:

```
MBS( "ZipFile.CompressFiles"; "/Users/cs/Desktop"; "/Users/cs/Desktop/Kontakte.zip"; "Kontakte.fmp12";
1; 9 )
```

See also

- [36.1 Archive.Compress](#) 943
- [78.37 Files.List](#) 3828
- [121.2 Path.FileMakerPathToNativePath](#) 6139

53.35.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr4](#)
- [MBS FileMaker Plugin, version 6.1pr2](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.0pr7](#)

Created 16th January 2016, last changed 12nd February 2019.

53.36 ZipFile.CreateFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("ZipFile.CreateFile"; filename; date { ; Comment; Encoding; zip64 })

Parameters

filename

The filename to use. Can include path information with slashes as delimiter.
"myfolder/test.txt"

date

The file date to use.
Get(CurrentTimestamp)

Comment

Optional
The file comment.
"My first file."

Encoding

Optional
The text encoding for the comment parameter. Default is UTF-8.
UTF8

zip64

Optional
Pass 1 to enable 64-bit zip file. Default is 0 for 32-bit zip file.
0

Result Return OK or error.

Description

Use this method before writing data to the file using ZipFile.WriteContainer or ZipFile.WriteTextFile. Before creating files in archive, you need to open it using ZipFile.Open. If you want to encrypt file, please use ZipFile.UsePassword before calling this function.

Deprecated. Please use Archive.Compress for new projects.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Creates a file:

```
MBS( "ZipFile.CreateFile"; "test.txt"; $date )
```

See also

- [36.1 Archive.Compress](#) 943
- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [53.37 ZipFile.Open](#) 1515
- [53.39 ZipFile.UsePassword](#) 1518
- [53.40 ZipFile.WriteContainer](#) 1520
- [53.41 ZipFile.WriteFile](#) 1521
- [53.42 ZipFile.WriteHex](#) 1523
- [53.43 ZipFile.WriteText](#) 1524

Example Databases

- [Zip/ZipFile](#)

53.36.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr6](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS Filemaker Plugin, version 4.5pr2](#)
- [MBS Filemaker Plugin, version 4.4pr4](#)
- [MBS Filemaker Plugin, version 4.3pr2](#)

53.36.2 FileMaker Magazin

- [Ausgabe 5/2013, Seite 22](#)
- [Ausgabe 5/2013, Seite 21](#)

Created 18th August 2014, last changed 7th October 2019.

53.37 ZipFile.Open

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("ZipFile.Open"; Path { ; Mode })

Parameters

Path

Native file path.

\$path

Mode

Optional

The appending mode: 0 to create a new archive (default), 1 create on file end, 2 append to existing archive.

0

Result Returns OK or error.

Description

Deprecated. Please use Archive.Compress for new projects.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Create new archive:

```
MBS( "ZipFile.Open"; "c:\folder\test.zip"; 0 )
```

See also

- [36.1 Archive.Compress](#) 943
- [124.6 IsError](#) 6266
- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [53.4 UnZipFile.ExtractFiles](#) 1477
- [53.24 UnZipFile.OpenFile](#) 1499
- [53.36 ZipFile.CreateFile](#) 1513

Example Databases

- [Zip/ZipFile](#)

53.37.1 FileMaker Magazin

- Ausgabe 5/2013, Seite 21

Created 18th August 2014, last changed 7th October 2019.

53.38 ZipFile.SetCompressionLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("ZipFile.SetCompressionLevel"; Method; Level)

Parameters

Method

The compression method to use. Can be 0 for no compression and 1 for deflate compression.

1

Level

The compression level from 0 (fastest) to 9 (maximum).

9

Result Returns OK or error message.

Description

By default the plugin uses maximum compression level.

Examples

Set default settings:

MBS("ZipFile.SetCompressionLevel"; 1; 9)

See also

- [70.136 DynaPDF.GetCompressionLevel](#) 2766
- [70.355 DynaPDF.SetCompressionLevel](#) 3109

53.38.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr9](#)

Created 18th August 2014, last changed 17th January 2018.

53.39 ZipFile.UsePassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	5.1	Yes	Yes	Yes	No	Yes

MBS("ZipFile.UsePassword"; Password { ; Encoding })

Parameters

Password

The password text.

"pass123"

Encoding

Optional

The text encoding for Password parameter. Default is native.

"native"

Result Returns OK or error.

Description

The password is needed to create encrypted files in archive.

Each item in archive could have its own password, but normally all have the same.

Examples

Set password:

```
MBS( "ZipFile.UsePassword"; "Hello" )
```

See also

- [53.25 UnZipFile.ReadAsFileContainer](#) 1501
- [53.26 UnZipFile.ReadAsGIFContainer](#) 1502
- [53.27 UnZipFile.ReadAsHex](#) 1503
- [53.28 UnZipFile.ReadAsJPEGContainer](#) 1504
- [53.29 UnZipFile.ReadAsPNGContainer](#) 1505
- [53.30 UnZipFile.ReadAsText](#) 1506
- [53.31 UnZipFile.ReadToFile](#) 1507
- [53.32 UnZipFile.UsePassword](#) 1508
- [53.36 ZipFile.CreateFile](#) 1513

Example Databases

- [Zip/ZipFile](#)

53.39.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 26th February 2015, last changed 24th February 2016.

53.40 ZipFile.WriteContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("ZipFile.WriteContainer"; Container)

Parameters

Container

The container to pick the data.

\$container

Result Returns OK or error.

Description

Examples

Creates a text file:

```
MBS( "ZipFile.CreateFile"; "test.jpg"; $date )
```

```
MBS( "ZipFile.WriteContainer"; $container )
```

See also

- [44.17 BinaryFile.WriteContainer](#) 1193
- [53.36 ZipFile.CreateFile](#) 1513

Example Databases

- [Zip/ZipFile](#)

53.40.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

53.40.2 FileMaker Magazin

- Ausgabe 5/2013, Seite 22
- Ausgabe 5/2013, Seite 21

Created 18th August 2014, last changed 18th August 2014.

53.41 ZipFile.WriteFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("ZipFile.WriteFile"; Path)

Parameters

Path

The native file path to the file to read and put into the archive.

\$path

Result Returns OK on success.

Description

Please use ZipFile.CreateFile first to create a new file before writing to it.

This works with all types of files.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Creates a file:

```
MBS( "ZipFile.CreateFile"; "test.txt"; $date )
```

```
MBS( "ZipFile.WriteFile"; "/tmp/test.txt" )
```

See also

- [78.62 Files.WriteFile](#) 3871
- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [189.25 WordFile.WriteFile](#) 8846
- [53.36 ZipFile.CreateFile](#) 1513
- [53.42 ZipFile.WriteHex](#) 1523
- [53.43 ZipFile.WriteText](#) 1524

53.41.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr1](#)

53.41.2 FileMaker Magazin

- Ausgabe 5/2013, Seite 22

Created 18th August 2014, last changed 20th April 2017.

53.42 ZipFile.WriteHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

MBS("ZipFile.WriteHex"; text)

Parameters

text

The text to write.

"48656C6C6F20576F726C64"

Result Returns "OK" on success.

Description

The data is encoded as hex string, so you can pass any byte values as a text. The hex string is decoded before writing.

Please use ZipFile.CreateFile first to create a new file before writing to it.

Examples

Creates a text file:

MBS("ZipFile.CreateFile"; "test.txt"; \$date)

MBS("ZipFile.WriteHex"; "48656C6C6F20576F726C64")

See also

- [53.36 ZipFile.CreateFile](#) 1513
- [53.41 ZipFile.WriteFile](#) 1521
- [53.43 ZipFile.WriteText](#) 1524

Example Databases

- [Zip/ZipFile](#)

Created 18th August 2014, last changed 18th August 2014.

53.43 ZipFile.WriteText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
53 Compression	3.4	Yes	Yes	Yes	No	Yes

```
MBS( "ZipFile.WriteText"; text { ; Encoding } )
```

Parameters

text

The text to write.

```
"Hello World"
```

Encoding

Optional

The text encoding for text parameter. Default is native.

```
UTF8
```

Result Returns "OK" on success.

Description

This is a way to easily add a text file to a zip archive.

Please use ZipFile.CreateFile first to create a new file before writing to it.

In version 5.0 of the plugin, the parameters are changed and we got an extra unused parameter between function name and text. This was corrected in 5.1pr3.

Examples

Creates a text file:

```
MBS( "ZipFile.CreateFile"; "test.txt"; $date )
MBS( "ZipFile.WriteTextFile"; "Hello World" )
```

See also

- [44.21 BinaryFile.WriteText](#) 1199
- [53.36 ZipFile.CreateFile](#) 1513
- [53.41 ZipFile.WriteFile](#) 1521
- [53.42 ZipFile.WriteHex](#) 1523

Example Databases

- [Zip/ZipFile](#)

53.43.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr3](#)

53.43.2 FileMaker Magazin

- Ausgabe 5/2013, Seite 22

Created 18th August 2014, last changed 12nd November 2015.

Chapter 54

Contacts

The newer Apple API for Addressbook access

For 64-bit MacOS and iOS to work with addressbook and multiple accounts.

54.1 CNContact.AddEmailAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddEmailAddress"; ContactIdentifier; Email { ; Label })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Email

The email address.

"test@test.test"

Label

Optional

The label to use. For your convenience we translate iCloud, Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

Result Returns OK or error.

Description

This is a convenience function to add just one email with a given label to the contact.

Please call CNContactStore.UpdateContact later to store the values.

See also

- 54.5 CNContact.AddPostalAddress 1532
- 54.10 CNContact.AddURLAddress 1539
- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.58 CNContactStore.UpdateContact 1601

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 2nd August 2018.

54.2 CNContact.AddInstantMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddInstantMessage"; ContactIdentifier; Name; Service { ; Label })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Name

The name of the account.

"Test"

Service

The service for this account. We translate AIM, Facebook, GaduGadu, GoogleTalk, ICQ, Jabber, MSN, QQ, Skype and Yahoo to the right constant for you.

"Facebook"

Label

Optional

The label to use. For your convenience we translate Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

Result Returns OK or error.

Description

This is a convenience function to add just one instant message account with a given label to the contact.

Please call CNContactStore.UpdateContact later to store the values.

See also

- 54.3 CNContact.AddInstantMessageJSON 1530
- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.58 CNContactStore.UpdateContact 1601

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 4th August 2018.

54.3 CNContact.AddInstantMessageJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddInstantMessageJSON"; ContactIdentifier; Label; JSON)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Label

The label to use. For your convenience we translate Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

JSON

The JSON with details

Result Returns OK or error.

Description

This is a convenience function to add just one instant message account with a given label to the contact.

Please call CNContactStore.UpdateContact later to store the values.

The JSON object may contain the keys service and username.

Service can be AIM, Facebook, GaduGadu, GoogleTalk, ICQ, Jabber, MSN, QQ, Skype or Yahoo.

See also

- 54.2 CNContact.AddInstantMessage 1529
- 54.58 CNContactStore.UpdateContact 1601

Created 1st August 2018, last changed 4th August 2018.

54.4 CNContact.AddPhoneNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddPhoneNumber"; ContactIdentifier; PhoneNumber { ; Label })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

PhoneNumber

The phone number.

"+49123456"

Label

Optional

The label to use. For your convenience we translate Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

Result Returns OK or error.

Description

This is a convenience function to add just one phone number with a given label to the contact.

Please call CNContactStore.UpdateContact later to store the values.

See also

- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.58 CNContactStore.UpdateContact 1601

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 2nd August 2018.

54.5 CNContact.AddPostalAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddPostalAddress"; ContactIdentifier { ; Label; Street; City; State; postalCode; country; ISOCountryCode; subLocality; subAdministrativeArea })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Label

Optional

The label to use. For your convenience we translate Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

Street

Optional

The street name with house number.

"Teststreet 123"

City

Optional

The city name.

"Greatcity"

State

Optional

The name of the state.

"TX"

postalCode

Optional

The postal code.

"12345"

country

Optional

The name of the country.

"USA"

ISOCountryCode

Optional

The ISO country code.

"US"

subLocality

54.5. *CNCONTACT.ADDPOSTALADDRESS*

1533

Optional

The sub locality. Only used on MacOS 10.12.4 or iOS 10.3 and newer.

subAdministrativeArea

Optional

The sub administrative area. Only used on MacOS 10.12.4 or iOS 10.3 and newer.

Result Returns OK or error.

Description

This is a convenience function to add just one postal address account with a given label to the contact. Please call `CNContactStore.UpdateContact` later to store the values.

See also

- 54.1 `CNContact.AddEmailAddress` 1527
- 54.6 `CNContact.AddPostalAddressJSON` 1534
- 54.10 `CNContact.AddURLAddress` 1539
- 54.26 `CNContactStore.AddContact` 1562
- 54.50 `CNContactStore.NewContact` 1590
- 54.58 `CNContactStore.UpdateContact` 1601

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 3th August 2018.

54.6 CNContact.AddPostalAddressJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddPostalAddressJSON"; ContactIdentifier; Label; JSON)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Label

The label to use. For your convenience we translate Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

JSON

The block of JSON.

Result Returns OK or error.

Description

This is a convenience function to add just one postal address account with a given label to the contact. Please call CNContactStore.UpdateContact later to store the values.

The JSON should be an object with a few of the following keys: street, city, state, postalCode, country and ISOCountryCode. For MacOS 10.12.4 or iOS 10.3, you can set subLocality and subAdministrativeArea, too.

See also

- 54.5 CNContact.AddPostalAddress 1532
- 54.58 CNContactStore.UpdateContact 1601

Created 1st August 2018, last changed 3th August 2018.

54.7 CNContact.AddRelation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddRelation"; ContactIdentifier; Name; Label)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Name

The name to use.

"Christian Schmitz"

Label

The label to use. For your convenience we translate Assistant, Brother, Child, Daughter, Father, Friend, Manager, Mother, Parent, Partner, Sister, Son and Spouse to the right values, so they get localized in display. Default label is Other.

"Dad"

Result Returns OK or error.

Description

This is a convenience function to add just one relation with a given label to the contact.

Please call CNContactStore.UpdateContact later to store the values.

See also

- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.58 CNContactStore.UpdateContact 1601

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 2nd August 2018.

54.8 CNContact.AddSocialProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddSocialProfile"; ContactIdentifier; Label; URLString; Username; UserIdentifier; Service)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Label

The label to use. For your convenience we translate Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

URLString

The URL of the service.

"http://twitter.com/MBSPugins"

Username

The user name.

"MBSPugins"

UserIdentifier

The user identifier.

""

Service

The service name. For your convenience we accept here Facebook, Flickr, LinkedIn, MySpace, SinaWeibo, TencentWeibo, Twitter, Yelp and GameCenter to the correct constant.

"Twitter"

Result Returns OK or error.

Description

This is a convenience function to add just one social profile with a given label to the contact. Please call CNContactStore.UpdateContact later to store the values.

See also

- 54.9 CNContact.AddSocialProfileJSON 1538
- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.58 CNContactStore.UpdateContact 1601

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 3th August 2018.

54.9 CNContact.AddSocialProfileJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddSocialProfileJSON"; ContactIdentifier; Label; JSON)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Label

The label to use. For your convenience we translate Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

JSON

The JSON with the object containing the fields urlString, username, userIdentifier and service.

Result Returns OK or error.

Description

This is a convenience function to add just one social profile with a given label to the contact. Please call CNContactStore.UpdateContact later to store the values.

See also

- 54.8 CNContact.AddSocialProfile 1536
- 54.58 CNContactStore.UpdateContact 1601

Created 1st August 2018, last changed 2nd August 2018.

54.10 CNContact.AddURLAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.AddURLAddress"; ContactIdentifier; URL { ; Label })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

URL

The URL address.

"http://www.mbsplugins.com"

Label

Optional

The label to use. For your convenience we translate Homepage, Work, Home and Other to the right values, so they get localized in display. Default label is Other.

"Work"

Result Returns OK or error.

Description

This is a convenience function to add just one URL with a given label to the contact.

Please call CNContactStore.UpdateContact later to store the values.

See also

- 54.1 CNContact.AddEmailAddress 1527
- 54.5 CNContact.AddPostalAddress 1532
- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.58 CNContactStore.UpdateContact 1601

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 2nd August 2018.

54.11 CNContact.DeleteValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	10.1	Yes	No	No	No	Yes

MBS("CNContact.DeleteValue"; ContactIdentifier; Selector { ; Identifier })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Selector

Which value to set.

"givenName"

Identifier

Optional

Identifier or label to delete only one entry in a list. Pass empty text to delete all.

Result Returns OK or error.

Description

Selector can be birthday, contactRelations, dates, departmentName, emailAddresses, familyName, givenName, imageData, imageDataAvailable, instantMessageAddresses, jobTitle, middleName, namePrefix, nameSuffix, nickname, nonGregorianBirthday, organizationName, phoneNumbers, phoneticFamilyName, phoneticGivenName, phoneticMiddleName, phoneticOrganizationName, postalAddresses, previousFamilyName, socialProfiles, thumbnailImageData, note, type, ImageData and thumbnailImageData or urlAddresses.

PhoneNumbers, emailAddresses, postalAddresses, urlAddresses, contactRelations, socialProfiles, instantMessageAddresses and dates can specify a label/identifier to delete only one entry.

Examples

Delete home address:

```
MBS( "CNContact.DeleteValue"; $contactID; "postalAddresses"; "home")
```

Delete all emails:

```
MBS( "CNContact.DeleteValue"; $contactID; "emailAddresses"; "")
```

Delete job title:

```
MBS( "CNContact.DeleteValue"; $contactID; "jobTitle")
```

See also

54.11. *CNCONTACT.DELETEVALUE*

1541

- 54.17 CNContact.SetValue

1548

54.11.1 **Blog Entries**

- [MBS FileMaker Plugin, version 10.1pr6](#)

Created 2nd March 2020, last changed 2nd March 2020.

54.12 CNContact.EditInAddressbook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContact.EditInAddressbook"; ContactIdentifier)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns OK or error.

Description

See also

- 54.19 CNContact.ShowInAddressbook

1552

Created 3th August 2018, last changed 3th August 2018.

54.13 CNContact.IsUnifiedWithContact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.5	Yes	No	No	No	Yes

MBS("CNContact.IsUnifiedWithContact"; ContactIdentifier; OtherContactIdentifier)

Parameters

ContactIdentifier

The contact identifier.

"9B6315CA-5331-44A6-96D0-16F315BA9AEB"

OtherContactIdentifier

The second contact identifier.

"F73B1D68-984A-434E-B3DE-1E92549C89B0:ABPerson"

Result Returns 1, 0 or error.

Description

Returns 1 if the receiver was fetched as a unified contact and includes the contact having contactIdentifier in its unification, else 0.

Examples

Check if a contact belongs to another:

```
MBS( "CNContact.IsUnifiedWithContact"; "9B6315CA-5331-44A6-96D0-16F315BA9AEB"; "F73B1D68-984A-434E-B3DE-1E92549C89B0:ABPerson" )
```

See also

- 54.20 CNContact.UnifiedContacts

1553

54.13.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)

Created 25th September 2018, last changed 25th September 2018.

54.14 CNContact.JSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.JSON"; ContactIdentifier { ; SkipImage })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

SkipImage

Optional

Available in MBS FileMaker Plugin 8.5 or newer.

If you pass 1, we skip the images. Default is 0 to include images.

1

Result Returns JSON or error.

Description

If the application is not properly code signed with entitlements, you may only get limited data like no phone numbers.

Examples

Query your JSON:

```
MBS( "CNContact.JSON"; MBS( "CNContactStore.UnifiedMeContact" ) )
```

Get formatted and colored JSON:

```
Set Variable [ $json ; Value: MBS( "CNContact.JSON"; MBS( "CNContactStore.UnifiedMeContact" ) ) ]
```

```
Set Variable [ $json ; Value: MBS("JSON.Colorize"; MBS( "JSON.Format"; $json ) ) ]
```

```
Set Field [ Contacts::Result ; $json ]
```

See also

- 54.16 CNContact.Name 1547
- 54.18 CNContact.Show 1550
- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.57 CNContactStore.UnifiedMeContact 1599
- 100.15 JSON.Colorize 5261
- 100.39 JSON.Format 5295

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

54.14.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)

Created 1st August 2018, last changed 25th September 2018.

54.15 CNContact.MailingAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.MailingAddress"; ContactIdentifier)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns text or error.

Description

Combine the postal address components into a multi-line mailing address.

Examples

Get your mailing address:

MBS("CNContact.MailingAddress"; MBS("CNContactStore.UnifiedMeContact"))

Example result: Eckertshohl 22

56645 Nickenich

Deutschland

See also

- 54.57 CNContactStore.UnifiedMeContact

1599

Created 1st August 2018, last changed 2nd August 2018.

54.16 CNContact.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.Name"; ContactIdentifier)

Parameters**ContactIdentifier**

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns name or error.

Description**Examples**

Query your name:

MBS("CNContact.Name"; MBS("CNContactStore.UnifiedMeContact"))

Query name of first contact found with given name:

MBS("CNContact.Name"; GetValue (MBS("CNContactStore.ContactsMatchingName"; "Joe Miller"); 1))

See also

- 54.14 CNContact.JSON 1544
- 54.18 CNContact.Show 1550
- 54.21 CNContact.Value 1554
- 54.32 CNContactStore.Contacts 1570
- 54.35 CNContactStore.ContactsMatchingName 1573
- 54.57 CNContactStore.UnifiedMeContact 1599
- 54.59 CNContainer.Name 1602

Created 1st August 2018, last changed 21st September 2018.

54.17 CNContact.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.SetValue"; ContactIdentifier; Selector; Value)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Selector

Which value to set.

"givenName"

Value

The value to set.

"Test"

Result Returns OK or error.

Description

Selector can be birthday, contactRelations, dates, departmentName, emailAddresses, familyName, givenName, imageData, imageDataAvailable, instantMessageAddresses, jobTitle, middleName, namePrefix, nameSuffix, nickname, nonGregorianBirthday, organizationName, phoneNumbers, phoneticFamilyName, phoneticGivenName, phoneticMiddleName, phoneticOrganizationName, postalAddresses, previousFamilyName, socialProfiles, thumbnailImageData, note, type or urlAddresses.

ImageData and thumbnailImageData are passed as containers.

PhoneNumbers, emailAddresses, postalAddresses, urlAddresses, contactRelations, socialProfiles, instantMessageAddresses, dates, birthday and nonGregorianBirthday are passed as JSON.

Examples

Set given name fo ra contact:

```
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "givenName"; "Joe" ) ]
```

Clear email for contact:

```
// first set email list to empty JSON array:
```

```
MBS( "CNContact.SetValue"; "BD2307E5-92F6-4A8F-946D-C4804615C18B:ABPerson"; "emailAddresses";  
" [ ] )" &
```

```
// and save
```

```
MBS( "CNContactStore.UpdateContact"; "BD2307E5-92F6-4A8F-946D-C4804615C18B:ABPerson" )
```

Set email list with two emails:

```
// set email address list:
```

```
MBS( "CNContact.Value"; "BD2307E5-92F6-4A8F-946D-C4804615C18B:ABPerson"; "emailAddresses"; " [
```


54.17. CNCONTACT.SETVALUE

1549

```
{ \"label\" : \"_!<Home>!$_\", \"value\" : \"home@test.de\" }, { \"label\" : \"My Label\", \"value\" : \"private@test.de\" } ] ) &
// and save
MBS( \"CNContactStore.UpdateContact\"; \"BD2307E5-92F6-4A8F-946D-C4804615C18B:ABPerson\" )
```

See also

- 54.11 CNContact.DeleteValue 1540
- 54.21 CNContact.Value 1554
- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.58 CNContactStore.UpdateContact 1601

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

54.17.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr4](#)

Created 1st August 2018, last changed 1st March 2020.

54.18 CNContact.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	10.1	No	No	No	No	Yes

MBS("CNContact.Show"; ContactIdentifier)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns OK or error.

Description

Shows Cancel and Edit buttons to work on the contact.

Does currently not work on MacOS due to bugs in Apple frameworks.

Examples

Show contact:

```
# show a contact by ID (iOS only currently)
Set Variable [ $r ; Value: MBS( "CNContact.Show"; Placeholder::ContactID ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to show contact" ; $r ]
End If
```

See also

- [54.14 CNContact.JSON](#) 1544
- [54.16 CNContact.Name](#) 1547
- [54.19 CNContact.ShowInAddressbook](#) 1552
- [124.6 IsError](#) 6266

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)

54.18.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr2](#)
- [Contact picker and viewer for FileMaker](#)

54.18. *CNCONTACT.SHOW*

1551

Created 31st January 2020, last changed 8th February 2020.

54.19 CNContact.ShowInAddressbook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContact.ShowInAddressbook"; ContactIdentifier)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns OK or error.

Description

Examples

Show owner in addressbook:

MBS("CNContact.ShowInAddressbook"; MBS("CNContactStore.UnifiedMeContact"))

See also

- 54.12 CNContact.EditInAddressbook 1542
- 54.18 CNContact.Show 1550
- 54.57 CNContactStore.UnifiedMeContact 1599

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 3th August 2018, last changed 3th August 2018.

54.20 CNContact.UnifiedContacts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.5	Yes	No	No	No	Yes

MBS("CNContact.UnifiedContacts"; ContactIdentifier)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns OK or error.

Description

Examples

Find contacts an unified contact is based off:

MBS("CNContact.UnifiedContacts"; "9B6315CA-5331-44A6-96D0-16F315BA9AEB")

Example result: F73B1D68-984A-434E-B3DE-1E92549C89B0:ABPerson
C4BC32A1-7776-4C32-B480-3015327BB42C:ABPerson

See also

- 54.13 CNContact.IsUnifiedWithContact

1543

54.20.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)

Created 25th September 2018, last changed 26th September 2018.

54.21 CNContact.Value

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContact.Value"; ContactIdentifier; Selector { ; ImageType; FileName })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Selector

Which value to return.

"nickname"

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

FileName

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns value or error.

Description

Selector can be birthday, contactRelations, dates, departmentName, emailAddresses, familyName, givenName, imageData, imageDataAvailable, instantMessageAddresses, jobTitle, middleName, namePrefix, nameSuffix, nickname, nonGregorianBirthday, organizationName, phoneNumbers, phoneticFamilyName, phoneticGivenName, phoneticMiddleName, phoneticOrganizationName, postalAddresses, previousFamilyName, socialProfiles, thumbnailImageData, note, type or urlAddresses.

ImageData and thumbnailImageData are returned as container and you can pass in ImageType and FileName to use.

PhoneNumbers, emailAddresses, postalAddresses, urlAddresses, contactRelations, socialProfiles, instantMessageAddresses, dates, birthday and nonGregorianBirthday are returned as JSON.

Examples

Get my phone numbers:

MBS("CNContact.Value"; MBS("CNContactStore.UnifiedMeContact"); "phonenumbers")

Example result: [

```
{
  "identifier" : "7AA474C5-CB5B-406F-9C19-077E14E8F48B",
  "label" : "__$!<Mobile>!$_",
  "value" : "+49 1234 56789"
```

```

    },
    {
      "identifier" : "96F71635-B932-49C5-ABA6-905528A152D0",
      "label" : "_$!<Work>!$_",
      "value" : "+49 1234 56789"
    }
  ]

```

Get my social profiles:

```
MBS("CNContact.Value"; MBS("CNContactStore.UnifiedMeContact"); "socialprofiles")
```

Example result: [

```

{
  "identifier" : "DC992125-7999-4C52-ADF6-D544BC3ADA04",
  "label" : "Twitter",
  "value" : {
    "username" : "MBSPlugins",
    "userIdentifier" : null,
    "service" : "Twitter",
    "urlString" : "http://twitter.com/MBSPlugins"
  }
},
{
  "identifier" : "4D26EDF7-EE68-4125-AAF1-C79C5D4A66AA",
  "label" : "Facebook",
  "value" : {
    "username" : "MonkeybreadSoftware",
    "userIdentifier" : null,
    "service" : "Facebook",
    "urlString" : "http://facebook.com/MonkeybreadSoftware"
  }
}
]

```

Get image of contact as container value:

```
MBS( "CNContact.Value"; $contact; "imageData")
```

Query email addresses:

```
MBS( "CNContact.Value"; "BD2307E5-92F6-4A8F-946D-C4804615C18B:ABPerson"; "emailAddresses")
```

See also

- 54.16 CNContact.Name 1547
- 54.17 CNContact.SetValue 1548
- 54.57 CNContactStore.UnifiedMeContact 1599

54.21.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr4](#)

Created 1st August 2018, last changed 1st March 2020.

54.22 CNContactPicker.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	10.1	Yes	No	No	No	Yes

MBS("CNContactPicker.Close")

Result Returns OK or error.

Description

See also

- 54.23 CNContactPicker.Current 1558
- 54.25 CNContactPicker.Show 1560

Created 31st January 2020, last changed 31st January 2020.

54.23 CNContactPicker.Current

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	10.1	Yes	No	No	No	Yes

MBS("CNContactPicker.Current")

Result Returns contact identifier or error.

Description

Can be called in trigger script to query current contact selected.
For multiple selection mode, this returns list of contacts.

See also

- 54.22 CNContactPicker.Close 1557
- 54.25 CNContactPicker.Show 1560

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)

Created 31st January 2020, last changed 4th February 2020.

54.24 CNContactPicker.SetTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	10.1	Yes	No	No	No	Yes

MBS("CNContactPicker.SetTrigger"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK or error.

Description

This script is called when a contact is selected.

See also

- 54.25 CNContactPicker.Show

1560

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)

Created 31st January 2020, last changed 31st January 2020.

54.25 CNContactPicker.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	10.1	Yes	No	No	No	Yes

MBS("CNContactPicker.Show" { ; Multi or Window; Position })

Parameters

Multi or Window

Optional

For iOS: Whether to allow multiple selection. Pass 1 for multiple or 0 for single selection. Default is single selection.

For MacOS: the window reference name/number.

0

Position

Optional

Where to position the popover. Can be "left" for left of the FileMaker window. Can be "right" for right side. Can be "mouse" to place where mouse is, e.g. when using with button. Can be "toolbar" to center on window hanging from toolbar.

"mouse"

Result Returns OK or error.

Description

Use CNContactPicker.Current later to get the result.

Examples

Show picker:

```
# use picker sheet/popover to select contact
Set Variable [ $r ; Value: MBS( "CNContactPicker.SetTrigger"; Get(FileName); "Picked" ) ]
Set Variable [ $r ; Value: MBS( "CNContactPicker.Show" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to show picker" ; $r ]
End If
```

Show at mouse position in front window:

```
MBS( "CNContactPicker.Show"; 0; "mouse" )
```

See also

- 54.22 CNContactPicker.Close 1557
- 54.23 CNContactPicker.Current 1558
- 54.24 CNContactPicker.SetTrigger 1559

54.25. *CNCONTACTPICKER.SHOW*

1561

- 124.6 IsError

6266

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)

54.25.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr3](#)
- [MBS FileMaker Plugin, version 10.1pr2](#)
- [Contact picker and viewer for FileMaker](#)

Created 31st January 2020, last changed 4th February 2020.

54.26 CNContactStore.AddContact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.AddContact"; ContactIdentifier { ; ContainerIdentifier })

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

ContainerIdentifier

Optional

The identifier for the container.

"9892A5CC-964E-497A-B877-A47619F7493C:ABAccount"

Result Returns OK or error.

Description

Optionally pass in container identifier to specify which account to use.

Examples

Create a contact:

```
#
Set Variable [ $contactID ; Value: MBS( "CNContactStore.NewContact" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "givenName"; "Joe" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "familyName"; "Miller" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "jobTitle"; "Family Manager" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "organization"; "Family" ) ]
#
#
Set Variable [ $image ; Value: MBS( "Container.ReadFile"; "/Library/Desktop Pictures/Lion.jpg" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "imageData"; $image ) ]
#
Set Variable [ $r ; Value: MBS( "CNContact.AddEmailAddress"; $contactID; "test@test.test"; "Work" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddInstantMessage"; $contactID; "instantTest"; "Facebook";
"Work" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddURLAddress"; $contactID; "http://www.monkeybread-
software.com/"; "Homepage" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddSocialProfile"; $contactID; "Home"; "http://www.face-
book.com"; "testSocial"; "" ; "Facebook" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddRelation"; $contactID; "Jane Miller"; "Sister" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddPhoneNumber"; $contactID; "123 456 789"; "iPhone" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddPostalAddress"; $contactID; "Home"; "Main Street 123";
"New City"; "NS"; "12345"; "USA"; "US" ) ]
#
Set Variable [ $contactID ; Value: MBS( "CNContactStore.AddContact"; $contactID ) ]
```

54.26. *CNCONTACTSTORE.ADDCONTACT* 1563

```
If [ MBS("IsError") ]  
Show Custom Dialog [ "Failed to create a contact" ; $r ]  
Else  
Set Field [ Contacts::ContactID ; $contactID ]  
Set Variable [ $json ; Value: MBS( "CNContact.JSON"; $contactID) ]  
Set Variable [ $json ; Value: MBS("JSON.Colorize"; MBS( "JSON.Format"; $json) ) ]  
Set Field [ Contacts::Result ; $json ]  
End If
```

See also

- 54.5 CNContact.AddPostalAddress 1532
- 54.8 CNContact.AddSocialProfile 1536
- 54.10 CNContact.AddURLAddress 1539
- 54.14 CNContact.JSON 1544
- 54.17 CNContact.SetValue 1548
- 54.50 CNContactStore.NewContact 1590
- 54.58 CNContactStore.UpdateContact 1601
- 124.6 IsError 6266
- 100.15 JSON.Colorize 5261
- 100.39 JSON.Format 5295

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 6th August 2018.

54.27 CNContactStore.AddGroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.AddGroup"; Name { ; ContainerIdentifier })

Parameters

Name

The new group name.
"Test"

ContainerIdentifier

Optional
The identifier for the container.
"9892A5CC-964E-497A-B877-A47619F7493C:ABAccount"

Result Returns OK or error.

Description

Optionally pass in container identifier to specify which account to use.

Examples

Create a group:

```
Set Variable [ $r ; Value: MBS( "CNContactStore.AddGroup"; "Test Group" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create a group" ; $r ]
Else
Set Field [ Contacts::GroupID ; $r ]
End If
```

See also

- 54.28 CNContactStore.AddMember 1566
- 54.29 CNContactStore.AddSubgroup 1567
- 54.44 CNContactStore.DeleteGroup 1582
- 54.46 CNContactStore.Groups 1585
- 54.53 CNContactStore.RenameGroup 1594
- 54.56 CNContactStore.Subgroups 1598
- 124.6 IsError 6266

Example Databases

54.27. *CNCONTACTSTORE.ADDGROUP*

1565

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 6th August 2018.

54.28 CNContactStore.AddMember

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.AddMember"; GroupIdentifier; ContactIdentifier)

Parameters

GroupIdentifier

The group to add the member to. Can be identifier or group name.
"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

ContactIdentifier

The new member to add to the group.
"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns OK or error.

Description

See also

- 54.26 CNContactStore.AddContact 1562
- 54.27 CNContactStore.AddGroup 1564
- 54.29 CNContactStore.AddSubgroup 1567
- 54.51 CNContactStore.RemoveMember 1592

Created 1st August 2018, last changed 30th August 2018.

54.29 CNContactStore.AddSubgroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContactStore.AddSubgroup"; GroupIdentifier; GroupIdentifier)

Parameters

GroupIdentifier

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

GroupIdentifier

The sub group identifier. Can be identifier or group name.

"62D07651-4F83-47D0-99F8-A72EAECBD8B7:ABGroup"

Result Returns OK or error.

Description

See also

- 54.27 CNContactStore.AddGroup 1564
- 54.28 CNContactStore.AddMember 1566
- 54.44 CNContactStore.DeleteGroup 1582
- 54.52 CNContactStore.RemoveSubgroup 1593
- 54.53 CNContactStore.RenameGroup 1594
- 54.56 CNContactStore.Subgroups 1598

Created 1st August 2018, last changed 30th August 2018.

54.30 CNContactStore.AuthorizationError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.AuthorizationError")

Result Returns text or error.

Description

Set by CNContactStore.RequestAccesss in case of errors.

See also

- [54.31 CNContactStore.AuthorizationStatus](#) 1569
- [54.54 CNContactStore.RequestAccesss](#) 1595

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)
- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 2nd August 2018.

54.31 CNContactStore.AuthorizationStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.AuthorizationStatus")

Result Returns status or error.

Description

Can be NotDetermined, Restricted, Denied or Authorized.

Examples

Check status:

```
Show Custom Dialog [ "r" ; MBS( "CNContactStore.AuthorizationStatus" ) ]
```

See also

- [54.30 CNContactStore.AuthorizationError](#) 1568
- [54.54 CNContactStore.RequestAccess](#) 1595

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)
- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 6th August 2018.

54.32 CNContactStore.Contacts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.5	Yes	No	No	No	Yes

MBS("CNContactStore.Contacts" { ; unifyResults })

Parameters

unifyResults

Optional

Whether to unify results. 1 to unify contacts and 0 to return all individual contacts. Default is 1.

1

Result Returns list of contact identifiers or error.

Description

You get the list unified, so contacts in several accounts are merged.

Or you get list of all contacts with those merged which appear in multiple accounts.

Seems like Addressbook.people and CNContactStore.Contacts with unifyResults = 0 is the same list.

See also

- 33.55 Addressbook.people 867
- 54.16 CNContact.Name 1547
- 54.26 CNContactStore.AddContact 1562
- 54.35 CNContactStore.ContactsMatchingName 1573
- 54.39 CNContactStore.Containers 1577
- 54.40 CNContactStore.Country 1578
- 54.50 CNContactStore.NewContact 1590

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)

54.32.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin, version 10.1pr2](#)
- [MBS FileMaker Plugin, version 8.5pr1](#)

Created 25th September 2018, last changed 25th September 2018.

54.33 CNContactStore.ContactsInContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.ContactsInContainer"; ContainerIdentifier)

Parameters

ContainerIdentifier

The identifier for the container.

"9892A5CC-964E-497A-B877-A47619F7493C:ABAccount"

Result Returns list or error.

Description

Returns list of contact identifiers.

See also

- 54.49 CNContactStore.GroupsInContainer

1589

Created 1st August 2018, last changed 2nd August 2018.

54.34 CNContactStore.ContactsInGroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.ContactsInGroup"; GroupIdentifier)

Parameters

GroupIdentifier

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

Result Returns list or error.

Description

Returns list of contact identifiers.

This will use unified contacts, so data is merged from several sources.

See also

- [54.36 CNContactStore.ContactsWithData](#) 1574
- [54.38 CNContactStore.ContainerForGroup](#) 1576

54.34.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin, version 10.1pr2](#)

Created 1st August 2018, last changed 10th September 2018.

54.35 CNContactStore.ContactsMatchingName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.ContactsMatchingName"; Name)

Parameters**Name**

The name to match against.

"Joe Miller"

Result Returns list or error.

Description

Returns list of contact identifiers.

This will use unified contacts, so data is merged from several sources.

Examples

Query name of first contact found with given name:

```
MBS("CNContact.Name"; GetValue ( MBS( "CNContactStore.ContactsMatchingName"; "Joe Miller" ); 1))
```

See also

- [54.16 CNContact.Name](#) 1547
- [54.32 CNContactStore.Contacts](#) 1570
- [54.36 CNContactStore.ContactsWithData](#) 1574

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)

54.35.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin, version 10.1pr2](#)

Created 1st August 2018, last changed 21st September 2018.

54.36 CNContactStore.ContactsWithData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.ContactsWithData"; ContactIdentifiers)

Parameters

ContactIdentifiers

The list of contact identifiers.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns text or error.

Description

This converts between a contact and its vCard representation.

See also

- 54.34 CNContactStore.ContactsInGroup 1572
- 54.35 CNContactStore.ContactsMatchingName 1573

Created 1st August 2018, last changed 2nd August 2018.

54.37 CNContactStore.ContainerForContact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.ContainerForContact"; ContactIdentifier)

Parameters**ContactIdentifier**

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns container identifier or error.

Description**See also**

- 54.38 CNContactStore.ContainerForGroup 1576
- 54.48 CNContactStore.GroupsForContact 1588
- 54.57 CNContactStore.UnifiedMeContact 1599

Created 1st August 2018, last changed 2nd August 2018.

54.38 CNContactStore.ContainerForGroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.ContainerForGroup"; GroupIdentifier)

Parameters

GroupIdentifier

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

Result Returns container identifier or error.

Description

Examples

Query container for a group:

MBS("CNContactStore.ContainerForGroup"; "F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup")

See also

- [54.34 CNContactStore.ContactsInGroup](#) 1572
- [54.37 CNContactStore.ContainerForContact](#) 1575

54.38.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)

Created 1st August 2018, last changed 30th August 2018.

54.39 CNContactStore.Containers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.Containers")

Result Returns list or error.

Description

This should return list of accounts for contacts.

Examples

Query all accounts:

MBS("CNContactStore.Containers")

Example result: 9892A5CC-964E-497A-B877-A47619F7493C:ABAccount
_local

See also

- [54.32 CNContactStore.Contacts](#) 1570
- [54.40 CNContactStore.Country](#) 1578

54.39.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr3](#)

Created 15th August 2018, last changed 16th August 2018.

54.40 CNContactStore.Country

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.Country")

Result Returns text or error.

Description

e.g. "de" for Germany.

See also

- 54.32 CNContactStore.Contacts 1570
- 54.39 CNContactStore.Containers 1577
- 54.46 CNContactStore.Groups 1585

Created 1st August 2018, last changed 2nd August 2018.

54.41 CNContactStore.DataWithContacts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.DataWithContacts"; Data)

Parameters**Data**

The vcard data as text.

Result Returns contact identifiers or error.

Description

Contacts are serialized as vCards and you can write that text to a vcard file. This converts between a contact and its vCard representation.

This will use unified contacts, so data is merged from several sources.

See also

- 54.43 CNContactStore.DeleteContact 1581
- 54.58 CNContactStore.UpdateContact 1601

Created 1st August 2018, last changed 10th September 2018.

54.42 CNContactStore.DefaultContainerIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.DefaultContainerIdentifier")

Result Returns container identifier or error.

Description

Created 1st August 2018, last changed 2nd August 2018.

54.43 CNContactStore.DeleteContact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.DeleteContact"; ContactIdentifier)

Parameters**ContactIdentifier**

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns OK or error.

Description**Examples**

Delete contact:

```

If [ Length ( Contacts::ContactID ) = 0 ]
Show Custom Dialog [ "Failed to delete a contact" ; "No ID in field" ]
Else
Set Variable [ $r ; Value: MBS( "CNContactStore.DeleteContact"; Contacts::ContactID ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to delete a contact" ; $r ]
Else
Set Field [ Contacts::ContactID ; "" ]
End If
End If

```

See also

- [54.26 CNContactStore.AddContact](#) 1562
- [54.41 CNContactStore.DataWithContacts](#) 1579
- [54.44 CNContactStore.DeleteGroup](#) 1582
- [54.50 CNContactStore.NewContact](#) 1590
- [54.57 CNContactStore.UnifiedMeContact](#) 1599
- [54.58 CNContactStore.UpdateContact](#) 1601
- [124.6 IsError](#) 6266

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 6th August 2018.

54.44 CNContactStore.DeleteGroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.DeleteGroup"; GroupIdentifier)

Parameters

GroupIdentifier

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

Result Returns OK or error.

Description

Examples

Delete group:

```

If [ Length ( Contacts::GroupID ) = 0 ]
Show Custom Dialog [ "Failed to delete a group" ; "No ID in field" ]
Else
Set Variable [ $r ; Value: MBS( "CNContactStore.DeleteGroup"; Contacts::GroupID ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to delete a group" ; $r ]
Else
Set Field [ Contacts::GroupID ; "" ]
End If
End If

```

See also

- 54.27 CNContactStore.AddGroup 1564
- 54.29 CNContactStore.AddSubgroup 1567
- 54.43 CNContactStore.DeleteContact 1581
- 54.53 CNContactStore.RenameGroup 1594
- 124.6 IsError 6266

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 30th August 2018.

54.45 CNContactStore.GroupHierarchy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.5	Yes	No	No	No	Yes

MBS("CNContactStore.GroupHierarchy")

Result Returns JSON or error.

Description

This is a convenience method to give you data for all groups with all subgroups and members in one call.

Examples

Query group hierarchie:

```
MBS("CNContactStore.GroupHierarchy")
```

```
Example result: {
  "62D07651-4F83-47D0-99F8-A72EAECBD8B7:ABGroup" : {
    "subgroups" : [
      "A0A7844B-1E8E-4ECF-8B81-273CB06B282D:ABGroup"
    ],
    "contacts" : [
      "4A2B7E15-BF77-416F-824E-0360FC4B196B:ABPerson",
      "A0C31D4D-E573-432B-A8E4-016919E46A3A:ABPerson",
      "1DC6166E-131E-449B-8BBC-DA689316D02A:ABPerson"
    ],
    "identifier" : "62D07651-4F83-47D0-99F8-A72EAECBD8B7:ABGroup",
    "name" : "Big Group"
  },
  "A0A7844B-1E8E-4ECF-8B81-273CB06B282D:ABGroup" : {
    "parent" : "62D07651-4F83-47D0-99F8-A72EAECBD8B7:ABGroup",
    "subgroups" : [
    ],
    "contacts" : [
      "4A2B7E15-BF77-416F-824E-0360FC4B196B:ABPerson",
      "3495273B-715E-4258-9946-B0FC487211C5:ABPerson",
      "773E1A42-ABCD-4CCF-88DE-E9C64BEE6D33:ABPerson",
      "05DC9067-7FEE-4146-8CD9-6F88E7053307:ABPerson"
    ],
    "identifier" : "A0A7844B-1E8E-4ECF-8B81-273CB06B282D:ABGroup",
    "name" : "Test Group"
  }
}
```

See also

- 54.47 CNContactStore.GroupsByName

54.45.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)

Created 26th September 2018, last changed 26th September 2018.

54.46 CNContactStore.Groups

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.Groups")

Result Returns list or error.

Description

You get back a list with the group identifiers.

Examples

Show groups with IDs and names in field:

```

Set Variable [ $groups ; Value: MBS( "CNContactStore.Groups" ) ]
Set Variable [ $count ; Value: ValueCount ( $groups ) ]
If [ $count >0 ]
Set Variable [ $index ; Value: 1 ]
Set Variable [ $text ; Value: "" ]
Loop
#
Set Variable [ $groupID ; Value: GetValue($groups; $index) ]
Set Variable [ $groupName ; Value: MBS( "CNGroup.Name"; $groupID ) ]
Set Variable [ $text ; Value: $text & $GroupName & " " & $groupID ]
#
# next
Set Variable [ $index ; Value: $index + 1 ]
Exit Loop If [ $index >$count ]
Set Variable [ $text ; Value: $text & $ ]
End Loop
End If
Set Field [ Contacts::Result ; $text ]

```

See also

- 54.27 CNContactStore.AddGroup 1564
- 54.40 CNContactStore.Country 1578
- 54.47 CNContactStore.GroupsByName 1587
- 54.48 CNContactStore.GroupsForContact 1588
- 54.54 CNContactStore.RequestAccesss 1595
- 54.56 CNContactStore.Subgroups 1598
- 54.61 CNGroup.Name 1604

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)
- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 6th August 2018.

54.47 CNContactStore.GroupsByName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContactStore.GroupsByName"; Name)

Parameters

Name

The group name.
"Friends"

Result Returns list of group identifiers or error.

Description

Returns empty list if nothing found.
Comparison is localized case insensitive.

Examples

Query a group:

MBS("CNContactStore.GroupsByName"; "Zeitungen")

See also

- [54.45 CNContactStore.GroupHierarchy](#) 1583
- [54.46 CNContactStore.Groups](#) 1585

54.47.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr5](#)

Created 22nd August 2018, last changed 27th January 2020.

54.48 CNContactStore.GroupsForContact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContactStore.GroupsForContact"; ContactIdentifier)

Parameters

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns list of group identifiers or error.

Description

Examples

Search groups for a contact:

MBS("CNContactStore.GroupsForContact"; "185E03A8-D1B8-4C9A-8183-D0B63FF7569C:ABPerson")

See also

- 54.37 CNContactStore.ContainerForContact 1575
- 54.46 CNContactStore.Groups 1585
- 54.49 CNContactStore.GroupsInContainer 1589
- 54.57 CNContactStore.UnifiedMeContact 1599
- 54.58 CNContactStore.UpdateContact 1601

54.48.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr5](#)

Created 22nd August 2018, last changed 27th January 2020.

54.49 CNContactStore.GroupsInContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContactStore.GroupsInContainer"; ContainerIdentifier)

Parameters**ContainerIdentifier**

The identifier for the container.

"9892A5CC-964E-497A-B877-A47619F7493C:ABAccount"

Result Returns list or error.

Description

This function allows you to query groups in a certain account.

Returns list of group identifiers.

See also

- 54.33 CNContactStore.ContactsInContainer 1571
- 54.48 CNContactStore.GroupsForContact 1588

Created 1st August 2018, last changed 27th January 2020.

54.50 CNContactStore.NewContact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.NewContact")

Result Returns contact identifier or error.

Description

Please use later CNContactStore.AddContact to store changes.

Examples

Create a contact:

```

Set Variable [ $contactID ; Value: MBS( "CNContactStore.NewContact" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "givenName"; "Joe" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "familyName"; "Miller" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "jobTitle"; "Family Manager" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "organization"; "Family" ) ]
#
#
Set Variable [ $image ; Value: MBS( "Container.ReadFile"; "/Library/Desktop Pictures/Lion.jpg" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.SetValue"; $contactID; "imageData"; $image ) ]
#
Set Variable [ $r ; Value: MBS( "CNContact.AddEmailAddress"; $contactID; "test@test.test"; "Work" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddInstantMessage"; $contactID; "instantTest"; "Facebook";
"Work" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddURLAddress"; $contactID; "http://www.monkeybread-
software.com/"; "Homepage" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddSocialProfile"; $contactID; "Home"; "http://www.face-
book.com"; "testSocial"; ""; "Facebook" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddRelation"; $contactID; "Jane Miller"; "Sister" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddPhoneNumber"; $contactID; "123 456 789"; "iPhone" ) ]
Set Variable [ $r ; Value: MBS( "CNContact.AddPostalAddress"; $contactID; "Home"; "Main Street 123";
"New City"; "NS"; "12345"; "USA"; "US" ) ]
#
Set Variable [ $contactID ; Value: MBS( "CNContactStore.AddContact"; $contactID ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create a contact" ; $r ]
Else
Set Field [ Contacts::ContactID ; $contactID ]
Set Variable [ $json ; Value: MBS( "CNContact.JSON"; $contactID ) ]
Set Variable [ $json ; Value: MBS("JSON.Colorize"; MBS( "JSON.Format"; $json ) ) ]
Set Field [ Contacts::Result ; $json ]
End If

```

See also

<i>54.50. CNCONTACTSTORE.NEWCONTACT</i>	1591
• 54.7 CNContact.AddRelation	1535
• 54.8 CNContact.AddSocialProfile	1536
• 54.14 CNContact.JSON	1544
• 54.17 CNContact.SetValue	1548
• 54.32 CNContactStore.Contacts	1570
• 54.43 CNContactStore.DeleteContact	1581
• 54.58 CNContactStore.UpdateContact	1601
• 55.28 Container.ReadFile	1645
• 124.6 IsError	6266
• 100.15 JSON.Colorize	5261

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 2nd August 2018, last changed 6th August 2018.

54.51 CNContactStore.RemoveMember

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.RemoveMember"; GroupIdentifier; ContactIdentifier)

Parameters

GroupIdentifier

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

ContactIdentifier

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns OK or error.

Description

See also

- 54.28 CNContactStore.AddMember 1566
- 54.52 CNContactStore.RemoveSubgroup 1593

Created 1st August 2018, last changed 30th August 2018.

54.52 CNContactStore.RemoveSubgroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContactStore.RemoveSubgroup"; GroupIdentifier; GroupIdentifier)

Parameters**GroupIdentifier**

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

GroupIdentifier

The sub group identifier. Can be identifier or group name.

"62D07651-4F83-47D0-99F8-A72EAECBD8B7:ABGroup"

Result Returns OK or error.

Description**See also**

- 54.29 CNContactStore.AddSubgroup 1567
- 54.51 CNContactStore.RemoveMember 1592
- 54.53 CNContactStore.RenameGroup 1594
- 54.56 CNContactStore.Subgroups 1598

Created 1st August 2018, last changed 27th January 2020.

54.53 CNContactStore.RenameGroup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.RenameGroup"; GroupIdentifier; Name)

Parameters

GroupIdentifier

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

Name

The new name.

"Test"

Result Returns OK or error.

Description

See also

- 54.27 CNContactStore.AddGroup 1564
- 54.29 CNContactStore.AddSubgroup 1567
- 54.44 CNContactStore.DeleteGroup 1582
- 54.52 CNContactStore.RemoveSubgroup 1593

Created 1st August 2018, last changed 30th August 2018.

54.54 CNContactStore.RequestAccess

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.RequestAccess" { ; Wait })

Parameters

Wait

Optional

Available in MBS FileMaker Plugin 10.1 or newer.

Pass 1 to wait for user to decide or 0 to return immediately. Default is 0.

1

Result Returns OK or error.

Description

Users are able to grant or deny access to contact data on a per-application basis. To request access to contact data, call CNContactStore.RequestAccess function. This will not block the application while the user is being asked to grant or deny access. The user will only be prompted the first time access is requested; any subsequent ContactStore calls will use the existing permissions.

Later you can use CNContactStore.AuthorizationStatus to check status or CNContactStore.AuthorizationError to learn why you didn't get permissions.

The application needs to be code signed with entitlements with com.apple.security.personal-information.addressbook identifier. See also my idea here:

<https://community.filemaker.com/ideas/3240>

Examples

Request access:

```
Set Variable [ $r; Value: MBS( "CNContactStore.RequestAccess" ) ]
```

Request authorization with some error checking:

```
Set Variable [ $r ; Value: MBS( "CNContactStore.RequestAccess" ) ]
```

```
Pause/Resume Script [ Duration (seconds): 1 ]
```

```
Set Variable [ $r ; Value: MBS( "CNContactStore.AuthorizationError" ) ]
```

```
If [ Length($r) >0 ]
```

```
Show Custom Dialog [ "Error" ; $r ]
```

```
End If
```

```
Set Variable [ $groups ; Value: MBS( "CNContactStore.Groups" ) ]
```

```
If [ Length ( $groups ) = 0 ]
```

```
Show Custom Dialog [ "Possible Problem" ; "Either you have no groups or you did not code sign the app?"
```

```
]
```

```
End If
```

See also

- 54.30 `CNContactStore.AuthorizationError` 1568
- 54.31 `CNContactStore.AuthorizationStatus` 1569
- 54.46 `CNContactStore.Groups` 1585

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)
- [Mac and iOS/Contacts/Contacts](#)

54.54.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 1st August 2018, last changed 16th February 2020.

54.55 CNContactStore.SetChangeScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.SetChangeScript"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

The parameter to pass.

Result Returns OK or error.

Description

Examples

Set Trigger:

```
Set Variable [ $r ; Value: MBS( "CNContactStore.SetChangeScript"; Get(Filename); "Trigger" ) ]
```

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 6th August 2018.

54.56 CNContactStore.Subgroups

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContactStore.Subgroups"; GroupIdentifier)

Parameters

GroupIdentifier

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

Result Returns list of group identifiers or error.

Description

See also

- 54.27 CNContactStore.AddGroup 1564
- 54.29 CNContactStore.AddSubgroup 1567
- 54.46 CNContactStore.Groups 1585
- 54.52 CNContactStore.RemoveSubgroup 1593

Created 1st August 2018, last changed 27th January 2020.

54.57 CNContactStore.UnifiedMeContact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	No

MBS("CNContactStore.UnifiedMeContact")

Result Returns contact identifier or error.

Description

This will use unified contacts, so data is merged from several sources.

Examples

Get yourself as JSON:

```
MBS( "CNContact.JSON"; MBS( "CNContactStore.UnifiedMeContact" ) )
```

Get formatted and colored JSON:

```
Set Variable [ $json ; Value: MBS( "CNContact.JSON"; MBS( "CNContactStore.UnifiedMeContact" ) ) ]
```

```
Set Variable [ $json ; Value: MBS( "JSON.Colorize"; MBS( "JSON.Format"; $json ) ) ]
```

```
Set Field [ Contacts::Result ; $json ]
```

See also

- 54.14 CNContact.JSON 1544
- 54.15 CNContact.MailingAddress 1546
- 54.16 CNContact.Name 1547
- 54.19 CNContact.ShowInAddressbook 1552
- 54.21 CNContact.Value 1554
- 54.37 CNContactStore.ContainerForContact 1575
- 54.43 CNContactStore.DeleteContact 1581
- 54.48 CNContactStore.GroupsForContact 1588
- 100.15 JSON.Colorize 5261
- 100.39 JSON.Format 5295

Example Databases

- [Mac and iOS/Contacts/Contacts Dialogs](#)
- [Mac and iOS/Contacts/Contacts](#)

54.57.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin, version 10.1pr2](#)

Created 1st August 2018, last changed 27th January 2020.

54.58 CNContactStore.UpdateContact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContactStore.UpdateContact"; ContactIdentifier)

Parameters**ContactIdentifier**

The contact identifier.

"46B1E34D-58F9-4B6B-A80D-0F71ABB87A0E"

Result Returns contact identifier or error.

Description

After you set values with `CNContact.SetValue`, you can make changes permanent here.

See also

- 54.3 `CNContact.AddInstantMessageJSON` 1530
- 54.4 `CNContact.AddPhoneNumber` 1531
- 54.7 `CNContact.AddRelation` 1535
- 54.8 `CNContact.AddSocialProfile` 1536
- 54.9 `CNContact.AddSocialProfileJSON` 1538
- 54.10 `CNContact.AddURLAddress` 1539
- 54.17 `CNContact.SetValue` 1548
- 54.26 `CNContactStore.AddContact` 1562
- 54.41 `CNContactStore.DataWithContacts` 1579
- 54.50 `CNContactStore.NewContact` 1590

Created 1st August 2018, last changed 2nd August 2018.

54.59 CNContainer.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContainer.Name"; ContainerIdentifier)

Parameters

ContainerIdentifier

The identifier for the container.

"9892A5CC-964E-497A-B877-A47619F7493C:ABAccount"

Result Returns name or error.

Description

The container is the source of contacts, e.g. an account on iCloud.

See also

- 54.16 CNContact.Name 1547
- 54.60 CNContainer.Type 1603

Created 1st August 2018, last changed 2nd August 2018.

54.60 CNContainer.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNContainer.Type"; ContainerIdentifier)

Parameters**ContainerIdentifier**

The identifier for the container.

"9892A5CC-964E-497A-B877-A47619F7493C:ABAccount"

Result Returns type or error.

Description

Type can be Unassigned, Local, Exchange or CardDAV.

See also

- 54.59 CNContainer.Name

1602

Created 1st August 2018, last changed 2nd August 2018.

54.61 CNGroup.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
54 Contacts	8.4	Yes	No	No	No	Yes

MBS("CNGroup.Name"; GroupIdentifier)

Parameters

GroupIdentifier

The group identifier. Can be identifier or group name.

"F527BF7C-6426-4D48-86CA-CB5E57743FFE:ABGroup"

Result Returns text or error.

Description

See also

- 54.46 CNContactStore.Groups

1585

Example Databases

- [Mac and iOS/Contacts/Contacts](#)

Created 1st August 2018, last changed 30th August 2018.

Chapter 55

Container

Functions to work on containers.

55.1 Container.Compress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.Compress"; ContainerValue)

Parameters

ContainerValue

The container value to compress.

Result Returns container value or error.

Description

Compression is not recommended for file formats which are normally compressed already. This includes PDF, various image formats like PNG and JPEG, video and audio files as well as zip archives. Compression works very well for text files.

It is recommended to check with `Container.GetTotalSize` to see if compressed data is smaller. If you compress an already compressed container, the result may be bigger due to the archive header.

Compressed containers can be detected by looking if the type list returned by `Container.GetTypes` contains an item named `ZLIB`. You can use `Container.GetTypeSize` to query the size of compressed data alone.

Not recommended for bigger file sizes. Compression may take long enough that user doesn't like to wait. e.g. 20 seconds for 300 MB.

Examples

Compress container:

```
Set Field [ Container Compression::Compressed; MBS("Container.Compress"; Container Compression::Some-Container) ]
```

See also

- 55.4 Container.Decompress 1610
- 55.21 Container.GetTotalSize 1635
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 55.23 Container.GetTypeSize 1638
- 55.26 Container.IsCompressed 1643

Example Databases

- [Containers/Container Compression](#)

55.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)
- [MBS FileMaker Plugin, version 5.3pr4](#)
- [Compressed Containers](#)

Created 15th September 2015, last changed 21st September 2015.

55.2 Container.DecodeFromBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	4.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.DecodeFromBase64"; type; text { ; filename; DontRenderPreview })

Parameters

type

The type to return. Can be JPEG, TIFF, GIF, PNG, PDF or File.

"JPEG"

text

The text to process.

filename

Optional

If filter is container, this defines the file name to use.

"test.txt"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container. (only for returning PDF)

0

Result Returns container or error.

Description

See also Container.GetBase64.

If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

From PDF in Base64 to a PNG in Base64:

```
# decode some PDF in base64 text
Set Variable [ $PDFData; Value:MBS( "Container.DecodeFromBase64"; "PDF"; PDF_ToPNG::base64_PDF;
"test.pdf" ) ]
# render first page to a picture in PNG format
Set Variable [ $PNGData; Value:MBS( "PDFKit.GetPDFPageImage"; $PDFData; 0; "PNG"; "test.png";
150; 1; 0 ) ]
# encode PNG as Base64
Set Variable [ $EncodedPNG; Value:MBS( "Container.GetBase64"; $PNGData; "PNGf" ) ]
# store text in a field
Set Field [ PDF_ToPNG::Convert_text; $EncodedPNG ]
```

See also

- 55.3 Container.DecodeFromHex 1609
- 55.8 Container.GetBase64 1617
- 122.15 PDFKit.GetPDFPageImage 6177

Example Databases

- [DynaPDF/List XFA Fields](#)

55.2.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 4.4pr10](#)

Created 6th November 2014, last changed 17th August 2018.

55.3 Container.DecodeFromHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	6.5	Yes	Yes	Yes	Yes	Yes

MBS("Container.DecodeFromHex"; type; text { ; filename; DontRenderPreview })

Parameters

type

The type to return. Can be JPEG, TIFF, GIF, PNG, PDF or File.

"JPEG"

text

The text to process.

filename

Optional

If filter is container, this defines the file name to use.

"test.txt"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container. (only for returning PDF)

0

Result Returns container or error.

Description

If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

See also

- 55.2 Container.DecodeFromBase64 1607
- 164.32 Text.EncodeToHex 7819

55.3.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 30th November 2016, last changed 17th August 2018.

55.4 Container.Decompress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.Decompress"; ContainerValue)

Parameters

ContainerValue

The container value to decompress.

Result Returns container value or error.

Description

If you pass a compressed container value, this function will decompress it and return the container value with uncompressed data.

Compressed containers can be detected by looking if the type list returned by `Container.GetTypes` contains an item named ZLIB. You can use `Container.GetTypeSize` to query the size of compressed data alone.

Examples

Decompress container:

```
Set Field [ Container Compression::Decompressed; MBS("Container.Decompress"; Container Compression::Compressed) ]
```

See also

- [55.1 Container.Compress](#) 1605
- [55.22 Container.GetType](#) 1636
- [55.24 Container.GetTypes](#) 1640
- [55.23 Container.GetTypeSize](#) 1638
- [55.26 Container.IsCompressed](#) 1643

Example Databases

- [Containers/Container Compression](#)

55.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)
- [MBS FileMaker Plugin, version 5.3pr4](#)

- [Compressed Containers](#)

Created 15th September 2015, last changed 15th September 2015.

55.5 Container.Deserialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Container.Deserialize"; Text)

Parameters

Text

The serialized data as text.

Result Returns container value or error.

Description

Examples

Serialize to a text field and deseralize back:

```
Set Field [ myTable::TextField ; MBS("Container.Serialize"; myTable::FirstContainerField) ]
Set Field [ myTable::OtherContainerField ; MBS("Container.Deserialize"; myTable::TextField) ]
```

See also

- [55.21 Container.GetTotalSize](#) 1635
- [55.33 Container.Serialize](#) 1655

55.5.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 6th July 2015, last changed 6th July 2015.

55.6 Container.Export

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.6	Yes	Yes	Yes	Yes	Yes

MBS("Container.Export"; Container; Index or Type; FilePath)

Parameters

Container

The container where the data is stored.

Index or Type

Specify a type (like "JPEG", "PDF ", "GIF" or "PICT") or the index "JPEG"

FilePath

Absolute path to store file.

Result Returns "OK" on success or error message.

Description

For example you can write out from a TIFF image stored in the database the TIFF data itself or the preview JPEG.

Please note that types are always 4 characters long, "PDF " has a space on the end.

Some of the allowed types include "TIFF", "PDF ", "PNG", "GIF", "BMP", "EPS ", "PICT", "M4V", "WAV ", "M4A ", "MOV ", "AVI ", "AU ", "MP3 ", "MPEG", "MPG4", "AIFF", "8BPS", "FILE", "MAIN", "JPEG" and maybe some more.

To convert image formats, please review GraphicsMagick functions like `GImage.NewFromContainer` and `GImage.WriteToPNGContainer`.

To convert PDF to PNG, check functions like `PDFKit.GetPDFPageImage`, `DynaPDF.GeneratePreview` or `DynaPDF.RenderPage`.

This function is only for internal containers. Please use `Container.WriteFile` for all containers.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Export JPEG file:

```
MBS("Container.Export"; Files::data; "JPEG"; GetAsText(Files::data)+".jpg")
```

Export all streams in container to individual files:

```
Set Variable [ $container; Value:Test::Image ]
```

```

# where to save
Set Variable [ $DesktopFolder; Value:MBS("Folders.UserDesktop") ]
# loop over streams in container
Set Variable [ $count; Value:MBS( "Container.GetCount"; $container ) ]
Set Variable [ $index; Value:0 ]
Loop
# query the type of stream with given index
Set Variable [ $type; Value:MBS( "Container.GetType"; $container; $index ) ]
# write it to a file
Set Variable [ $path; Value:$DesktopFolder & "/" & $type ]
Set Variable [ $r; Value:MBS( "Container.Export"; $container; $index; $path ) ]
# next
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $count = $index ]
End Loop

```

Export a container to desktop:

```

# get path stored in the container field
Set Variable [ $ContainerPath ; Value: GetAsText ( Contacts::Photo Container ) ]
# get the file name portion
Set Variable [ $ContainerName ; Value: MBS( "Path.LastPathComponent"; $ContainerPath ) ]
# take a folder on the computer, e.g. desktop
Set Variable [ $DesktopFolder ; Value: MBS( "Folders.UserDesktop" ) ]
# build path with file name on that folder
Set Variable [ $FilePath ; Value: MBS( "Path.AddPathComponent"; $DesktopFolder; $ContainerName ) ]
# and export the content of container to that path
Set Variable [ $r ; Value: MBS( "Container.WriteFile"; Contacts::Photo Container; $FilePath ) ]

```

See also

- 55.22 Container.GetType 1636
- 55.35 Container.WriteFile 1658
- 70.116 DynaPDF.GeneratePreview 2740
- 81.8 Folders.UserDesktop 4177
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.340 GImage.WriteToPNGContainer 4777
- 121.1 Path.AddPathComponent 6135
- 121.5 Path.LastPathComponent 6144
- 122.15 PDFKit.GetPDFPageImage 6177

Example Databases

- [Mac only/Slideshow Example](#)

55.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr7](#)
- [Filemaker: Export Text to File](#)

Created 18th August 2014, last changed 22nd November 2019.

55.7 Container.ExtractStream

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.ExtractStream"; Container; InputType { ; NewName; OutputType })

Parameters

Container

The container value to modify.

\$data

InputType

The input type.

"JPEG"

NewName

Optional

The new file name to use.

"test.psd"

OutputType

Optional

The output type.

"FILE"

Result Returns modified container value.

Description

See Container.GetTypes to figure out what stream types a container value has.

Examples

Extract a Photoshop image and package it like a file import:

```
MBS("Container.ExtractStream"; Test::InputContainer; "8BPS"; "test.psd"; "FILE")
```

See also

- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 55.32 Container.RenameStream 1654

55.7.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

55.8 Container.GetBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetBase64"; Container; Name or Index)

Parameters

Container

The container field or value to inspect.

MyTable::MyContainerField

Name or Index

either the name of the Type or it's index

0

Result Returns data or error.

Description

You must tell the plug-in which of the types in the container field you want to use. You can use either it's name (JPEG, TIFF, PNGf etc) or it's index. The index is from 0 to the count of types -1 You can use Container.GetCount to return the count of types in the container.

You can pass index zero and get data form references file in case container is a file reference.

See also Container.DecodeFromBase64.

Examples

Get PNG image in Container as Base64:

```
MBS( "Container.GetBase64"; MyTable::MyContainerField; "PNGf" )
```

Get JPEG image in Container as Base64:

```
MBS( "Container.GetBase64"; MyTable::MyContainerField; "JPEG" )
```

From PDF in Base64 to a PNG in Base64:

```
# decode some PDF in base64 text
Set Variable [ $PDFData; Value:MBS( "Container.DecodeFromBase64"; "PDF"; PDF_ToPNG::base64_PDF;
"test.pdf" ) ]
# render first page to a picture in PNG format
Set Variable [ $PNGData; Value:MBS( "PDFKit.GetPDFPageImage"; $PDFData; 0; "PNG"; "test.png";
150; 1; 0 ) ]
# encode PNG as Base64
Set Variable [ $EncodedPNG; Value:MBS( "Container.GetBase64"; $PNGData; "PNGf" ) ]
# store text in a field
Set Field [ PDF_ToPNG::Convert_text; $EncodedPNG ]
```

See also

- 55.2 Container.DecodeFromBase64 1607
- 55.9 Container.GetCount 1619
- 55.17 Container.GetName 1628
- 55.19 Container.GetSize 1631
- 55.20 Container.GetText 1633
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 122.15 PDFKit.GetPDFPageImage 6177

Example Databases

- [Containers/Containers](#)

55.8.1 Blog Entries

- [Custom Filemaker Function: MBS_HTML_EncodeImage_JPG](#)

Created 18th August 2014, last changed 20th May 2019.

55.9 Container.GetCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetCount"; Container)

Parameters

Container

The container field or variable containing container value.

Description

A container contains several data parts, each with an unique type. This returns the number of types in a container.

Examples

Export all streams in container to individual files:

```
Set Variable [ $container; Value:Test::Image ]
# where to save
Set Variable [ $DesktopFolder; Value:MBS("Folders.UserDesktop") ]
# loop over streams in container
Set Variable [ $count; Value:MBS( "Container.GetCount"; $container ) ]
Set Variable [ $index; Value:0 ]
Loop
# query the type of stream with given index
Set Variable [ $type; Value:MBS( "Container.GetType"; $container; $index ) ]
# write it to a file
Set Variable [ $path; Value:$DesktopFolder & "/" & $type ]
Set Variable [ $r; Value:MBS( "Container.Export"; $container; $index; $path ) ]
# next
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $count = $index ]
End Loop
```

See also

- 55.6 Container.Export 1613
- 55.8 Container.GetBase64 1617
- 55.11 Container.GetHeight 1622
- 55.12 Container.GetHex 1623
- 55.17 Container.GetName 1628
- 55.19 Container.GetSize 1631

- 55.20 Container.GetText 1633
- 55.22 Container.GetType 1636
- 55.25 Container.GetWidth 1642
- 81.8 Folders.UserDesktop 4177

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)

Created 18th August 2014, last changed 6th November 2018.

55.10 Container.GetDataURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetDataURL"; container)

Parameters

container

The container field or value to inspect.

Result Returns Container or error.

Description

This is very useful for displaying images in web pages. The function tries to make data urls from the images in the container field in the following order: Tiff, PNG, PDF, GIF, JPEG Unfortunately, FileMaker on Windows XP doesn't display image urls very well since it is based on Internet Explorer which doesn't like Image URLs.

In plugin version this also works for referenced JPEG images.

Example Databases

- [Containers/Containers](#)

55.10.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 21st October 2017.

55.11 Container.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetHeight"; Container)

Parameters

Container

The container field or value to inspect.

Description

This is based on the metadata in the container (SIZE part) stored by FileMaker and not based on the actual content of the container.

Examples

Get the Height

MBS("Container.GetWidth" ; ContainerField)

See also

- 55.9 Container.GetCount 1619
- 55.12 Container.GetHex 1623
- 55.13 Container.GetJPEGHeight 1624
- 55.19 Container.GetSize 1631
- 55.20 Container.GetText 1633
- 55.25 Container.GetWidth 1642

Example Databases

- [Containers/Containers](#)

Created 18th August 2014, last changed 20th May 2019.

55.12 Container.GetHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	6.5	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetHex"; Container; Name or Index)

Parameters

Container

The container field or value to inspect.

MyTable::MyContainerField

Name or Index

either the name of the Type or it's index

0

Result Returns data or error.

Description

You must tell the plug-in which of the types in the container field you want to use. You can use either it's name (JPEG, TIFF, PNGf etc) or it's index. The index is from 0 to the count of types -1 You can use Container.GetCount to return the count of types in the container.

You can pass index zero and get data form references file in case container is a file reference.

See also

- 55.9 Container.GetCount 1619
- 55.11 Container.GetHeight 1622
- 55.17 Container.GetName 1628
- 55.19 Container.GetSize 1631
- 55.20 Container.GetText 1633
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 164.32 Text.EncodeToHex 7819

55.12.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 30th November 2016, last changed 20th May 2019.

55.13 Container.GetJPEGHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetJPEGHeight"; Container)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Container

The container field or value to inspect.

Description

The height is in pixels. FileMaker always stores a copy of every image as a JPEG (unless it is already a JPEG). This function is targeting that JPEG.

Examples

Get the height of the JPEG image

MBS("Container.GetJPEGHeight" ; ContainerField)

See also

- 55.11 Container.GetHeight 1622
- 55.14 Container.GetJPEGHeightResolution 1625
- 55.15 Container.GetJPEGWidth 1626

55.13.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr7](#)

Created 18th August 2014, last changed 20th May 2019.

55.14 Container.GetJPEGHeightResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetJPEGHeightResolution"; Container)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Container

The container field or value to inspect.

Description

FileMaker always stores a copy of every image as a JPEG (unless it is already a JPEG). This function is targeting that JPEG.

Examples

Get Height Resolution

MBS("Container.GetJPEGHeightResolution" ; ContainerField)

See also

- [55.13 Container.GetJPEGHeight](#) 1624
- [55.16 Container.GetJPEGWidthResolution](#) 1627

55.14.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr7](#)

Created 18th August 2014, last changed 20th May 2019.

55.15 Container.GetJPEGWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetJPEGWidth"; Container)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Container

The container field or value to inspect.

Description

The Width is in pixels. FileMaker always stores a copy of every image as a JPEG (unless it is already a JPEG). This function is targeting that JPEG.

Examples

Get Width

MBS("Container.GetJPEGWidth" ; ContainerField)

See also

- [55.13 Container.GetJPEGHeight](#) 1624
- [55.16 Container.GetJPEGWidthResolution](#) 1627
- [55.25 Container.GetWidth](#) 1642

55.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr7](#)

Created 18th August 2014, last changed 20th May 2019.

55.16 Container.GetJPEGWidthResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetJPEGWidthResolution"; Container)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Container

The container field or value to inspect.

Description

FileMaker always stores a copy of every image as a JPEG (unless it is already a JPEG). This function is targeting that JPEG.

Examples

Get width resolution

MBS("Container.GetJPEGWidthResolution" ; ContainerField)

See also

- [55.14 Container.GetJPEGHeightResolution](#) 1625
- [55.15 Container.GetJPEGWidth](#) 1626

55.16.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr7](#)

Created 18th August 2014, last changed 20th May 2019.

55.17 Container.GetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetName"; Container)

Parameters

Container

The container field or value to inspect.

Result Returns the path list or error.

Description

This is not the same as reading container as text.

The result may be a file path, several file paths, a file name or nothing.

See also

- 55.8 Container.GetBase64 1617
- 55.9 Container.GetCount 1619
- 55.12 Container.GetHex 1623
- 55.19 Container.GetSize 1631
- 55.20 Container.GetText 1633
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 55.25 Container.GetWidth 1642
- 55.31 Container.Rename 1652
- 190.16 XL.Book.GetPicture 8873

55.17.1 Blog Entries

- [Tracing MBS Filemaker Plugin](#)
- [MBS Filemaker Plugin, version 3.0pr7](#)

Created 18th August 2014, last changed 20th May 2019.

55.18 Container.GetResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	4.2	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetResolution"; Container { ; Selector })

Parameters

Container

The container field or value to inspect.

MyTable::MyContainerField

Selector

Optional

Optional, if you pass "x" or "y" only the requested value is returned.

"x"

Result Returns value or error.

Description

This does not look into the image resolution of an image, but just in the metadata FileMaker stored there when importing the image. FileMaker stores resolution in "DPI " part in the container.

If selector x or y are passed, we return just the DPI value in x or y direction. If no selector is passed, we return list with both values. First entry is x, second y.

Examples

Query resolution:

MBS("Container.GetResolution"; MyTable::MyContainerField)

Example result: "300

300"

Query X resolution:

MBS("Container.GetResolution"; MyTable::MyContainerField; "x")

Example result: 300

Query Y resolution:

MBS("Container.GetResolution"; MyTable::MyContainerField; "y")

Example result: 300

55.18.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr3](#)

55.19 Container.GetSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetSize"; Container; Type)

Parameters

Container

The container field or value to inspect.

Type

Name or index

Description

A container contains several data parts with data and this function queries size in bytes of one of them. You must pass either the name of the type you wish to get or its index. Index start at 0.

See Container.GetTotalSize to query size of all data in a container.

Examples

Query size of container with PNG:

```
MBS("Container.GetSize"; Images::Image; "PNGf")
```

See also

- 55.12 Container.GetHex 1623
- 55.20 Container.GetText 1633
- 55.21 Container.GetTotalSize 1635
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 55.23 Container.GetTypeSize 1638
- 55.25 Container.GetWidth 1642
- 55.33 Container.Serialize 1655
- 70.295 DynaPDF.Optimize 2995
- 70.408 DynaPDF.SetOrientationEx 3192

Example Databases

- [DynaPDF/Optimize PDF](#)

- [GraphicsMagick/Reduce Image](#)
- [Mac and iOS/PDFKit/Compress PDF](#)

55.19.1 Blog Entries

- [Custom function to optimize PDF in FileMaker via DynaPDF](#)

Created 18th August 2014, last changed 6th November 2018.

55.20 Container.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	7.2	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetText"; Container; Name or Index { ; Encoding })

Parameters

Container

The container field or value to inspect.

MyTable::MyContainerField

Name or Index

either the name of the Type or it's index

0

Encoding

Optional

The text encoding for result. Default is native.

UTF8

Result Returns text or error.

Description

You must tell the plug-in which of the types in the container field you want to use. You can use either it's name (JPEG, TIFF, PNGf etc) or it's index. The index is from 0 to the count of types -1 You can use Container.GetCount to return the count of types in the container.

You can pass index zero and get data form references file in case container is a file reference.

Examples

Show main item in container:

```
Show Custom Dialog [ "Main item"; MBS("Container.GetText"; test::Test; "MAIN") ]
```

Query text of XML file in a container:

```
Set Variable [ $text ; Value: MBS( "Container.GetText"; test::test; "FILE"; "UTF-8") ]
```

See also

- 55.8 Container.GetBase64 1617
- 55.9 Container.GetCount 1619
- 55.11 Container.GetHeight 1622
- 55.12 Container.GetHex 1623
- 55.17 Container.GetName 1628

- 55.19 Container.GetSize 1631
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 55.25 Container.GetWidth 1642

55.20.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 24th March 2017, last changed 20th May 2019.

55.21 Container.GetTotalSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetTotalSize"; Container)

Parameters

Container

The container field or value to inspect.

Description

A file is typically broken up into several object types when stored in a container field. This function returns the total size of all those objects.

Examples

Get Total Size

MBS("Container.GetTotalSize" ; ContainerField)

See also

- [55.1 Container.Compress](#) 1605
- [55.5 Container.Deserialize](#) 1612
- [55.19 Container.GetSize](#) 1631
- [55.23 Container.GetTypeSize](#) 1638

Example Databases

- [Containers/Container Compression](#)
- [Containers/Containers](#)

55.21.1 Blog Entries

- [Compressed Containers](#)
- [MBS Filemaker Plugin, version 3.0pr2](#)

Created 18th August 2014, last changed 20th May 2019.

55.22 Container.GetType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetType"; Container; index)

Parameters

Container

The container field or value to inspect.

\$container

index

The index of the the item to query in the container.

0

Description

A container contains several data parts, each with an unique type. Types are 4 character long and some types like "PDF " have an extra space.

See Container.GetTypes to query list of all types in a container.

Examples

Export all streams in container to individual files:

```
Set Variable [ $container; Value:Test::Image ]
# where to save
Set Variable [ $DesktopFolder; Value:MBS("Folders.UserDesktop") ]
# loop over streams in container
Set Variable [ $count; Value:MBS( "Container.GetCount"; $container ) ]
Set Variable [ $index; Value:0 ]
Loop
# query the type of stream with given index
Set Variable [ $type; Value:MBS( "Container.GetType"; $container; $index ) ]
# write it to a file
Set Variable [ $path; Value:$DesktopFolder & "/" & $type ]
Set Variable [ $r; Value:MBS( "Container.Export"; $container; $index; $path ) ]
# next
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $count = $index ]
End Loop
```

See also

- 55.9 Container.GetCount 1619
- 55.12 Container.GetHex 1623

55.22. CONTAINER.GETTYPE	1637
• 55.19 Container.GetSize	1631
• 55.24 Container.GetTypes	1640
• 55.23 Container.GetTypeSize	1638
• 55.25 Container.GetWidth	1642
• 55.30 Container.Remove	1650
• 55.32 Container.RenameStream	1654
• 70.116 DynaPDF.GeneratePreview	2740
• 81.8 Folders.UserDesktop	4177

55.22.1 Blog Entries

- [MBS Filemaker Plugin 2.1 prerelease 2](#)

Created 18th August 2014, last changed 6th November 2018.

55.23 Container.GetTypeSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetTypeSize"; Container; Type)

Parameters

Container

The container field or value to inspect.

\$container

Type

The type code for the type to check. e.g. "JPEG" for a jpeg image.

"JPEG"

Description

For referenced files, this function will just return the size of the referenced file independent of the type.

See Container.GetTotalSize to query size of all data in a container.

Examples

Get size of PNG image

```
MBS( "Container.GetTypeSize" ; ContainerField; "PNGf" )
```

Get the size of a JPEG image

```
MBS( "Container.GetTypeSize" ; ContainerField; "JPEG" )
```

Get the size of a TIFF image

```
MBS( "Container.GetTypeSize" ; ContainerField; "TIFF" )
```

See also

- 55.1 Container.Compress 1605
- 55.4 Container.Decompress 1610
- 55.19 Container.GetSize 1631
- 55.21 Container.GetTotalSize 1635
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 70.116 DynaPDF.GeneratePreview 2740

Example Databases

- [Containers/Containers](#)

55.23.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)
- [MBS Filemaker Plugin, version 3.5pr10](#)
- [MBS Filemaker Plugin, version 3.0pr2](#)

Created 18th August 2014, last changed 6th November 2018.

55.24 Container.GetTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetTypes"; Container)

Parameters

Container

The container field or value to inspect.

Result Returns types or error.

Description

FileMaker stores a copy of the image in the container field as a JPEG if the image is not already of that type. That is why you will always see JPEG in the list of Types, even if the image in question is a PNG. This function will have "FILE" in the list of types if the image has File inserted into it.

Some of the allowed types include "TIFF", "PDF ", "PNGf", "GIFf", "BMPf", "EPS ", "PICT", "FILE" and "JPEG".

"ZLIB" is the type used by compressed containers.

This function does not work for unencrypted external containers.

Examples

Get Types

MBS("Container.GetTypes" ; ContainerField)

See also

- 55.7 Container.ExtractStream 1616
- 55.8 Container.GetBase64 1617
- 55.12 Container.GetHex 1623
- 55.19 Container.GetSize 1631
- 55.22 Container.GetType 1636
- 55.25 Container.GetWidth 1642
- 55.32 Container.RenameStream 1654
- 70.116 DynaPDF.GeneratePreview 2740
- 122.7 PDFKit.GeneratePreview 6164
- 190.16 XL.Book.GetPicture 8873

Example Databases

- [Containers/Archive Container](#)
- [Containers/Container Remove Test](#)
- [Containers/Containers](#)
- [DynaPDF/Generate Previews](#)
- [DynaPDF/Optimize PDF](#)

55.24.1 Blog Entries

- [FileMaker and PDF Containers](#)
- [Compressed Containers](#)
- [Filemaker: Export Text to File](#)
- [MBS Filemaker Plugin 2.1 prerelease 2](#)

Created 18th August 2014, last changed 20th May 2019.

55.25 Container.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	1.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.GetWidth"; Container)

Parameters

Container

The container field or value to inspect.

Description

This is based on the metadata in the container (SIZE part) stored by FileMaker and not based on the actual content of the container.

Examples

Get the width

MBS("Container.GetWidth" ; ContainerField)

See also

- 55.9 Container.GetCount 1619
- 55.11 Container.GetHeight 1622
- 55.15 Container.GetJPEGWidth 1626
- 55.17 Container.GetName 1628
- 55.19 Container.GetSize 1631
- 55.20 Container.GetText 1633
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640

Example Databases

- [Containers/Containers](#)

Created 18th August 2014, last changed 20th May 2019.

55.26 Container.IsCompressed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	7.5	Yes	Yes	Yes	Yes	Yes

MBS("Container.IsCompressed"; Container)

Parameters

Container

The container field or value to inspect.

Result Returns 1, 0 or error.

Description

Returns 1 if compressed and 0 if not.

See also

- 55.1 Container.Compress 1605
- 55.4 Container.Decompress 1610

55.26.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 21st October 2017, last changed 20th May 2019.

55.27 Container.ReadArchive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	4.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.ReadArchive"; Path)

Parameters

Path

Native path to the archive file to use.

"C:\Benutzer\Christian\Desktop\test.txt"

Result Returns OK or error.

Description

Please use Container.WriteArchive to create the archive. The zip file must have a special format to be read successful, so probably only archives created by Container.WriteArchive will work.

This works for any content of a container, except for referenced container files.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Reads an archive:

```
MBS("Container.ReadArchive"; "C:\Benutzer\Christian\Desktop\test.txt")
```

Writes an archive:

```
MBS("Container.WriteArchive"; MyTable::MyContainer; "C:\Benutzer\Christian\Desktop\test.txt")
```

See also

- 55.28 Container.ReadFile 1645
- 55.34 Container.WriteArchive 1656
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [Containers/Archive Container](#)

Created 21st September 2014, last changed 21st September 2014.

55.28 Container.ReadFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	6.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "Container.ReadFile"; FilePath { ; mode; filename } )
```

Parameters

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac.

`"test.txt"`

mode

Optional

If missing or `"auto"`, the plugin will try to detect type by file name extension. If filter is `"container"`, the result is returned as a container with a FILE stream inside. The type can be specific here like PDF, JPEG, TIFF, GIF, BMP or PSD to return as image container. Or `"compressed"` to return a compressed container.

`"Auto"`

filename

Optional

If result is container, this defines the file name to use.

`"test.txt"`

Result Returns container value or error.

Description

Reads the data in the file and returns as container.

See also `Text.ReadTextFile` for reading text files with specific encoding.

For reading simple text files, please use `Text.ReadTextFile`.

See also `Files.ReadFile`, `Files.ReadJPEG`, `Files.ReadPDF`, `Files.ReadPNG`, `Text.ReadTextFile` and `RichText.ReadFile`.

This function is optimized for FM 14 and newer to stream file content when using auto mode. This allows to import up to 4 GB of data in small chunks.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read image file:

```
MBS( "Container.ReadFile"; "/Users/cs/Pictures/test.jpg"; "auto")
```

Read image file with error checking:

```
# get native path
Set Variable [ $path ; Value: "/Users/cs/Pictures/mond.jpg" ]
#
# read file
Set Variable [ $content ; Value: MBS( "Container.ReadFile"; $path) ]
#
# check for error
If [ MBS("IsError") = 0 ]
Set Field [ Contacts::Photo Container ; $content ]
Else
Show Custom Dialog [ "Failed to read file." ; $content ]
End If
```

See also

- 55.19 Container.GetSize 1631
- 55.29 Container.ReadImage 1648
- 55.35 Container.WriteFile 1658
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.75 ImageCapture.ImagePaths 5006
- 91.91 ImageCapture.SetParameter 5026
- 121.2 Path.FileMakerPathToNativePath 6139
- 181.8 WIA.Image 8505
- 181.9 WIA.ImageCount 8507
- 181.10 WIA.ImageDialog 8508

Example Databases

- [DynaPDF/PDF Library](#)
- [iOS/DocumentPicker iOS](#)
- [Mac and iOS/Contacts/Contacts](#)
- [Mac only/ImageCapture/ImageCapture Dialogs](#)
- [Mac only/ImageCapture/ImageCapture](#)
- [SQL in FileMaker/ImageGallery](#)
- [Utility functions/Trigger Script on Plugin Error](#)
- [Win Only/WIA Scan](#)

55.28.1 Blog Entries

- [Read HEIC or HEIF image files in FileMaker](#)
- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [ImageCapture functions for Mac OS X](#)
- [MBS FileMaker Plugin, version 6.4pr6](#)

Created 6th September 2016, last changed 24th January 2020.

55.29 Container.ReadImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	8.4	Yes	No	Yes, macOS only	No	No

MBS("Container.ReadImage"; Container { ; ImageType; Filename })

Parameters

Container

The container field or value to inspect.

MyTable::MyContainerField

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image container or error.

Description

This function is useful to read all the image formats supported by Apple's frameworks and convert them to a common format like JPEG or PNG.

Use this function to convert old PICT images in containers.

Works as well for HEIC and HEIF images.

Examples

Convert PICT to PNG:

```
Set Field [ Test::output ; MBS("Container.ReadImage"; Test::OldImage; "PNG"; "image.png") ]
```

Read file from disk and read as image:

```
Set Field [ Batch Emailer::Inline Graphics ; MBS("Container.ReadImage"; MBS("Container.ReadFile";  
"/Users/cs/Desktop/test.heic")) ]
```

Read HEIC file:

```
Set Variable [ $path ; Value: "/Users/cs/Desktop/IMG_3552.HEIC" ]
Set Variable [ $container ; Value: MBS( "Container.ReadFile"; $path) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $image ; Value: MBS( "Container.ReadImage"; $container; "PNG"; "image.png") ]
If [ MBS("IsError") = 0 ]
Set Field [ Untitled::image ; $image ]
End If
```

55.29. *CONTAINER.READIMAGE*

1649

End If

See also

- 55.28 Container.ReadFile 1645
- 124.6 IsError 6266

55.29.1 Blog Entries

- [Read HEIC or HEIF image files in FileMaker](#)
- [MBS FileMaker Plugin, version 8.4pr1](#)

Created 29th July 2018, last changed 20th August 2019.

55.30 Container.Remove

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	3.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.Remove"; Container; Type)

Parameters

Container

The container field or value to inspect.

Type

The type code of the stream to remove. Can be "PDF ", "JPEG" or one of the other usual types. "JPEG"

Result Returns modified container value or error.

Description

This function can be used to remove the JPEG preview from an image.

Or if you have a container with PDF and preview, you could remove the PDF to just get the preview image.

Use Container.GetTypes to learn what types are inside a container.

Examples

Renames an image to have a new file extension.

```
$jpegOnly = MBS( "Container.Remove"; $PDFContainer; "JPEG" )
```

Remove PDF from container value:

```
/* PDF produced with DynaPDF Pro will have Preview image. Removing PDF will reveal the preview: */
MBS( "Container.Remove"; FinalPDF; "PDF " )
```

See also

- [55.22 Container.GetType](#) 1636
- [55.24 Container.GetTypes](#) 1640
- [55.31 Container.Rename](#) 1652

Example Databases

- [Containers/Container Remove Test](#)
- [DynaPDF/Generate Previews](#)

55.30.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr3](#)

55.30. *CONTAINER.REMOVE*

1651

Created 18th August 2014, last changed 20th May 2019.

55.31 Container.Rename

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Container.Rename"; Container; name)

Parameters

Container

The container field or value to inspect.

name

New file name or new path list.

"test.jpg"

Result Returns modified container value or error.

Description

Does only work for normal containers, not with referenced files.

Examples

Renames an image to have a new file extension.

```
$oldname = MBS( "Container.GetName"; $container )
$newname = substitute($oldname; ".jpg"; ".png")
$newcontainer = MBS( "Container.Rename"; $container; $newname )
```

Rename external saved container:

```
# rename field container into variable
Set Variable [ $newContainer; Value:MBS( "Container.Rename"; test::file; "test.txt" ) ]
# Put new container in field
Set Field [ test::file; $newContainer ]
# write changes to disk
Commit Records/Requests [ ]
```

See also

- 55.17 Container.GetName 1628
- 55.30 Container.Remove 1650
- 55.32 Container.RenameStream 1654

Example Databases

- [Containers/Rename Container](#)

55.31.1 Blog Entries

- [Tracing MBS Filemaker Plugin](#)
- [MBS Filemaker Plugin, version 3.0pr7](#)

Created 18th August 2014, last changed 20th May 2019.

55.32 Container.RenameStream

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Container.RenameStream"; Container; InputType; OutputType)

Parameters

Container

The container field or value to inspect.

\$data

InputType

The input type.

"JPEG"

OutputType

The output type.

"FILE"

Result Returns modified container value.

Description

See Container.GetTypes to figure out what stream types a container value has.

Examples

Rename JPEG like a file import:

```
MBS("Container.RenameStream"; Test::InputContainer; "JPEG"; "FILE")
```

See also

- [55.7 Container.ExtractStream](#) 1616
- [55.22 Container.GetType](#) 1636
- [55.24 Container.GetTypes](#) 1640
- [55.31 Container.Rename](#) 1652

55.32.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 21st October 2017.

55.33 Container.Serialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Container.Serialize"; Container)

Parameters

Container

The container field or value to serialize.

Result Returns text or error.

Description

The container content is stored in a base64 encoded string which the plugin function Container.Deserialize can read.

Does not work with external containers.

Using this function allows to store a container in a text field or transmit it with Socket functions, SerialPort functions or by writing it to a file.

Examples

Serialize to a text field and deseralize back:

```
Set Field [ myTable::TextField ; MBS("Container.Serialize"; myTable::FirstContainerField) ]
```

```
Set Field [ myTable::OtherContainerField ; MBS("Container.Deserialize"; myTable::TextField) ]
```

See also

- [55.5 Container.Deserialize](#) 1612
- [55.19 Container.GetSize](#) 1631

55.33.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 6th July 2015, last changed 21st October 2017.

55.34 Container.WriteArchive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	4.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.WriteArchive"; Container; Path)

Parameters

Container

The container field or value to archive.

MyTable::MyContainer

Path

Native path to the archive file to use.

"C:\Benutzer\Christian\Desktop\test.txt"

Result Returns OK or error.

Description

This function allows you to archive whatever the container contains into a zip archive. Please use Container.ReadArchive to read back.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Reads an archive:

```
MBS("Container.ReadArchive"; "C:\Benutzer\Christian\Desktop\test.txt")
```

Writes an archive:

```
MBS("Container.WriteArchive"; MyTable::MyContainer; "C:\Benutzer\Christian\Desktop\test.txt")
```

See also

- 55.27 Container.ReadArchive 1644
- 55.35 Container.WriteFile 1658
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [Containers/Archive Container](#)

55.34.1 **Blog Entries**

- [MBS Filemaker Plugin, version 4.4pr1](#)

Created 21st September 2014, last changed 21st October 2017.

55.35 Container.WriteFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
55 Container	6.4	Yes	Yes	Yes	Yes	Yes

MBS("Container.WriteFile"; Data; FilePath)

Parameters

Data

The container field or value to save.

\$Image

FilePath

The native file path. Something like `"/Users/cs/desktop/test.jpg"` on Mac and `"C:\Programs\Data\test.jpg"` on Windows. Files without path end in the root directory on Mac.

`"test.jpg"`

Result Returns OK or error.

Description

See also `Files.WriteFile` for more options.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read a file and write it elsewhere

```
Set Variable [ $Image; Value:MBS( "Container.ReadFile"; "/Users/cs/Pictures/Test.jpg" ) ]
Set Variable [ $r; Value:MBS( "Container.WriteFile"; $Image; "/Users/cs/Desktop/target.jpg" ) ]
```

Export a container to desktop:

```
# get path stored in the container field
Set Variable [ $ContainerPath ; Value: GetAsText ( Contacts::Photo Container ) ]
# get the file name portion
Set Variable [ $ContainerName ; Value: MBS( "Path.LastPathComponent"; $ContainerPath ) ]
# take a folder on the computer, e.g. desktop
Set Variable [ $DesktopFolder ; Value: MBS( "Folders.UserDesktop" ) ]
# build path with file name on that folder
Set Variable [ $FilePath ; Value: MBS( "Path.AddPathComponent"; $DesktopFolder; $ContainerName ) ]
# and export the content of container to that path
Set Variable [ $r ; Value: MBS( "Container.WriteFile"; Contacts::Photo Container; $FilePath ) ]
```

Write a HTML file and an image file to load in web viewer:

```
Set Variable [ $folder ; Value: MBS( "Folders.UserTemporary" ) ]
```

```

Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $folder; "test.jpg" ) ]
Set Variable [ $r ; Value: MBS( "Container.WriteFile"; Images::Image; $path ) ]
#
Set Variable [ $html ; Value: "<html><body><p>Hello World</p><img src=test.jpg width=300></body></html>" ]
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $folder; "test.html" ) ]
Set Variable [ $r ; Value: MBS( "Text.WriteTextFile"; $html; $path ) ]
#
Set Variable [ $URL ; Value: MBS( "Path.FilePathToFileURL"; $Path ) ]
Set Web Viewer [ Object Name: "web" ; URL: $URL ]

```

See also

- 55.28 Container.ReadFile 1645
- 55.34 Container.WriteArchive 1656
- 81.8 Folders.UserDesktop 4177
- 81.16 Folders.UserTemporary 4187
- 106.59 MapView.Screenshot 5705
- 121.1 Path.AddPathComponent 6135
- 141.9 Screenshot 6845
- 141.10 ScreenshotRect 6847
- 164.68 Text.WriteTextFile 7871
- 182.66 Window.Screenshot 8613

Example Databases

- [CURL/Email/IMAP Email](#)
- [DynaPDF/Place Picture](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView](#)

55.35.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [Storing files for download on FileMaker Server with download URLs](#)
- [Xojo Web Apps on FileMaker Cloud Server](#)
- [MBS FileMaker Plugin, version 6.4pr6](#)

55.35.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 31
- Ausgabe 6/2018, Seite 30

Created 6th September 2016, last changed 23th February 2020.

Chapter 56

ContinuityCamera

A panel for iOS to select or take picture.

You can take a new picture via camera, record video or pick an existing picture.

56.1 ContinuityCamera.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.Clear")

Result Returns OK or error.

Description

See also

- 92.2 ContinuityCamera.Import 5034
- 92.4 ContinuityCamera.Result 5037

Created 3th April 2019, last changed 6th January 2020.

56.2 ContinuityCamera.Import

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.Import"; Type)

Parameters

Type

Pass 0 for Photo (default) or 1 for document.

0

Result Returns OK or error.

Description

Examples

Import photo:

```
Set Variable [ $r ; Value: MBS("ContinuityCamera.Import";0) ]
```

Import document:

```
Set Variable [ $r ; Value: MBS("ContinuityCamera.Import"; 1) ]
```

See also

- [92.1 ContinuityCamera.Clear](#) 5033
- [92.4 ContinuityCamera.Result](#) 5037

Example Databases

- [Mac only/ContinuityCamera](#)

56.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr2](#)
- [Continuity Camera for FileMaker](#)

56.2.2 FileMaker Magazin

- Ausgabe 6/2019, Seite 36

Created 3th April 2019, last changed 6th January 2020.

56.3 ContinuityCamera.PopupMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.PopupMenu"; mode { ; x; y; window; item; objectName })

Parameters

mode

The mode to use. Can be "mouse", "screen" or "window". Default is mouse for leaving away the parameter or passing empty text. Version 8.3 adds mode "content" to make it relative to the content part of the window, below toolbars.

"mouse"

x

Optional

The relative x coordinates for the position relative to the mouse, screen or window.

0

y

Optional

The relative y coordinates for the position relative to the mouse, screen or window.

0

window

Optional

The window reference for the showing menu relative to a window.

\$window

item

Optional

The menu item to be positioned at the specified location in the view.

\$item

objectName

Optional

The object name for mode=object.

"web"

Result Returns 1, 0 or error.

Description

Returns 1 if item was selected or 0 if not.

Example Databases

- [Mac only/ContinuityCamera](#)

56.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr3](#)

56.3.2 FileMaker Magazin

- Ausgabe 6/2019, Seite 37

Created 7th April 2019, last changed 6th January 2020.

56.4 ContinuityCamera.Result

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.Result" { ; FileName })

Parameters

FileName

Optional

File name to use.

"test.jpg"

Result Returns container value or error.

Description

The result may be PNG, PDF, JPEG or TIFF document.

Usually documents come as PDF and images as JPEG.

Examples

Write result to container field:

Set Field [ContinuityCamera::Image ; MBS("ContinuityCamera.Result")]

See also

- [92.1 ContinuityCamera.Clear](#) 5033
- [92.2 ContinuityCamera.Import](#) 5034

Example Databases

- [Mac only/ContinuityCamera](#)

56.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr2](#)
- [Continuity Camera for FileMaker](#)

56.4.2 FileMaker Magazin

- [Ausgabe 6/2019, Seite 37](#)
- [Ausgabe 6/2019, Seite 36](#)

Created 3th April 2019, last changed 6th January 2020.

56.5 ContinuityCamera.SetScriptTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.SetScriptTrigger"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

When some picture or document is available, we call the script.

Parameter to the script is currently the document type, e.g. JPEG, TIFF or PDF.

Examples

Set trigger:

```
Set Variable [ $r ; Value: MBS("ContinuityCamera.SetScriptTrigger"; Get(Filename); "ContinuityCamera-Trigger") ]
```

Example Databases

- [Mac only/ContinuityCamera](#)

56.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr2](#)
- [Continuity Camera for FileMaker](#)

56.5.2 FileMaker Magazin

- [Ausgabe 6/2019, Seite 36](#)

Created 31st March 2019, last changed 6th January 2020.

Chapter 57

CoreImage

Core Image Process on Mac

57.1 CoreImage.Detect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
57 CoreImage	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreImage.Detect"; Image; Type { ; Options })

Parameters

Image

The image to check. Pass container here with image.

Type

The type of recognizer to use. Can be Face, Rectangle, Text or QRCode.

"Face"

Options

Optional

List of options. If EyeBlink is included, facial expressions, such as blinking and closed eyes are extracted. If Smile is included, facial expressions, such as smile are extracted.

"EyeBlink\$Smile"

Result Returns JSON or error.

Description

This function can do face recognition, find text or rectangle areas and read barcodes.

Result is a JSON structure with all the results.

See also [Vision.RecognizeText](#), [Vision.DetectBarcode](#) and [Vision.ClassifyImage](#).

Type	macOS Versions	iOS Versions	Description
Face	macOS 10.7 or newer	iOS 5.0 and newer	Detects faces and eyes
Rectangle	macOS 10.10 or newer	iOS 8.0 and newer	Detects rectangles
QRCode	macOS 10.10 or newer	iOS 8.0 and newer	Detects barcodes
Text	macOS 10.11 or newer, 64-bit only	iOS 9.0 and newer	Detects text areas

See also

- [43.1 Barcode.Detect](#) 1137
- [179.1 Vision.ClassifyImage](#) 8273
- [179.2 Vision.DetectBarcode](#) 8275
- [179.4 Vision.RecognizeText](#) 8277

Example Databases

- [Mac and iOS/Machine Learning/Core Image Detection](#)

57.1.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr1](#)
- [Face detection via CoreImage in FileMaker](#)

Created 21st July 2017, last changed 19th August 2019.

Chapter 58

CoreLocation

Query location of a Mac..

58.1 CoreLocation.ClearFailHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.ClearFailHandler")

Result Returns OK or error.

Description

See also

- 58.6 CoreLocation.SetFailHandler 1674

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.2 CoreLocation.ClearUpdateLocationHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.ClearUpdateLocationHandler")

Result Returns OK or error.

Description

See also

- 58.7 CoreLocation.SetUpdateLocationEvaluate 1675
- 58.8 CoreLocation.SetUpdateLocationHandler 1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.3 CoreLocation.RegionMonitoringAvailable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	Yes	No	No	No	Yes

MBS("CoreLocation.RegionMonitoringAvailable")

Result Returns 1, 0 or error.

Description

Support for region monitoring may not be available on all devices and models. You should check the value of this property before attempting to set up any regions or initiate region monitoring.

Even if region monitoring support is present on a device, it may still be unavailable because the user disabled it for the current app or for all apps.

See also

- 58.4 CoreLocation.RegionMonitoringEnabled

1672

Created 17th February 2019, last changed 17th February 2019.

58.4 CoreLocation.RegionMonitoringEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	Yes	No	No	No	Yes

MBS("CoreLocation.RegionMonitoringEnabled")

Result Returns 1, 0 or error.

Description

In iOS, the user can enable or disable location services (including region monitoring) using the controls in Settings >Location Services.

You should check the return value of this method before starting region monitoring updates to determine whether the user currently allows location services to be used at all. If this method returns false and you start region monitoring updates anyway, the Core Location framework prompts the user to confirm asking whether location services should be reenabled.

This method does not check to see if region monitoring capabilities are actually supported by the device. Therefore, you should also check the return value of the regionMonitoringAvailable() class method before attempting to start region monitoring services.

See also

- 58.3 CoreLocation.RegionMonitoringAvailable

1671

Created 17th February 2019, last changed 17th February 2019.

58.5 CoreLocation.SetFailEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	6.2	Yes	No	No	No	Yes

MBS("CoreLocation.SetFailEvaluate"; Expression)

Parameters

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

See also

- 58.6 CoreLocation.SetFailHandler

1674

58.5.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 4th April 2018.

58.6 CoreLocation.SetFailHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	No	No	Yes

MBS("CoreLocation.SetFailHandler"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker file that contains the script
Get(FileName)

ScriptName

The name of the script to run

Result Returns OK or error.

Description

Scriptparameter is a localized error message.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers drag action handler:

```
MBS( "CoreLocation.SetFailHandler"; Get ( FileName ); "CoreLocationError"
```

See also

- 58.1 CoreLocation.ClearFailHandler 1669
- 58.5 CoreLocation.SetFailEvaluate 1673

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 9th November 2018.

58.7 CoreLocation.SetUpdateLocationEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	6.2	Yes	No	No	No	Yes

MBS("CoreLocation.SetUpdateLocationEvaluate"; Expression)

Parameters

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

You can query current location with the other location functions.

You don't need to install this evaluation to read location. You can always simply call location functions to get last known location.

See also

- 58.2 CoreLocation.ClearUpdateLocationHandler 1670
- 58.8 CoreLocation.SetUpdateLocationHandler 1676

58.7.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 4th April 2018.

58.8 CoreLocation.SetUpdateLocationHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	No	No	Yes

MBS("CoreLocation.SetUpdateLocationHandler"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script
"test.fp7"

ScriptName

The name of the script to run
"MyScript"

Result Returns OK or error.

Description

You can query current location with the other location functions.

You don't need to install this script call to read location. You can always simply call location functions to get last known location.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers drag action handler:

```
MBS( "CoreLocation.SetUpdateLocationHandler"; Get ( FileName ); "CoreLocationUpdate"
```

See also

- 58.9 CoreLocation.altitude 1678
- 58.2 CoreLocation.ClearUpdateLocationHandler 1670
- 58.11 CoreLocation.course 1680
- 58.12 CoreLocation.description 1681
- 58.20 CoreLocation.latitude 1689
- 58.22 CoreLocation.longitude 1691
- 58.7 CoreLocation.SetUpdateLocationEvaluate 1675
- 58.31 CoreLocation.speed 1700

58.8. <i>CORELOCATION.SETUPDATELOCATIONHANDLER</i>	1677
• 58.38 CoreLocation.timestamp	1707
• 58.39 CoreLocation.verticalAccuracy	1708

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 27th January 2016.

58.9 CoreLocation.altitude

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.altitude")

Result Returns altitude as number.

Description

Positive values indicate altitudes above sea level. Negative values indicate altitudes below sea level. This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

Returns zero if not location is available. See CoreLocation.hasLocation function.

See also

- 58.17 CoreLocation.hasLocation 1686
- 58.20 CoreLocation.latitude 1689
- 58.22 CoreLocation.longitude 1691
- 58.8 CoreLocation.SetUpdateLocationHandler 1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 12nd September 2019.

58.10 CoreLocation.authorizationStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	Yes	No	No	No	Yes

MBS("CoreLocation.authorizationStatus")

Result Returns status or error.

Description

The authorization status of a given app is managed by the system and determined by several factors. Apps must be explicitly authorized to use location services by the user and location services must themselves currently be enabled for the system. A request for user authorization is displayed automatically when your app first attempts to use location services.

notDetermined	The user has not yet made a choice regarding whether this app can use location services.
restricted	This app is not authorized to use location services.
denied	The user explicitly denied the use of location services for this app or location services are currently disabled in Settings.
authorizedAlways	This app is authorized to start location services at any time.
authorizedWhenInUse	This app is authorized to start most location services while running in the foreground.

Created 17th February 2019, last changed 17th February 2019.

58.11 CoreLocation.course

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.course")

Result Returns direction number.

Description

Course values are measured in degrees starting at due north and continuing clockwise around the compass. Thus, north is 0 degrees, east is 90 degrees, south is 180 degrees, and so on. Course values may not be available on all devices. A negative value indicates that the direction is invalid.

This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

See also

- 58.23 CoreLocation.purpose 1692
- 58.8 CoreLocation.SetUpdateLocationHandler 1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.12 CoreLocation.description

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.description")

Result Returns description.

Description

A string of the form "«latitude>, <longitude>» +/- <accuracy>m (speed <speed>kph / heading <heading>) @ <date-time>", where <latitude>, <longitude>, <accuracy>, <speed>, and <heading>are formatted floating point numbers and <date-time>is a formatted date string that includes date, time, and time zone information.

The returned string is intended for display purposes only.

This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

See also

- 58.17 CoreLocation.hasLocation 1686
- 58.8 CoreLocation.SetUpdateLocationHandler 1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.13 CoreLocation.desiredAccuracy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.desiredAccuracy")

Result Returns value or error.

Description

See also

- 58.27 CoreLocation.setDesiredAccuracy 1696
- 58.39 CoreLocation.verticalAccuracy 1708

Created 18th August 2014, last changed 18th August 2014.

58.14 CoreLocation.dismissHeadingCalibrationDisplay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	No	No	No	No	Yes

MBS("CoreLocation.dismissHeadingCalibrationDisplay")

Result Returns OK or error.

Description

Core Location uses the heading calibration alert to calibrate the available heading hardware as needed. The display of this view is automatic, assuming your delegate supports displaying the view at all. If the view is displayed, you can use this method to dismiss it after an appropriate amount of time to ensure that your app's user interface is not unduly disrupted.

Created 17th February 2019, last changed 17th February 2019.

58.15 CoreLocation.distanceFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.distanceFilter")

Result Returns value or error.

Description

See also

- 58.28 CoreLocation.setDistanceFilter

1697

Created 18th August 2014, last changed 18th August 2014.

58.16 CoreLocation.distanceFromLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.distanceFromLocation"; latitude; longitude)

Parameters

latitude

The latitude value for the geo coordinate.

51.50939

longitude

The latitude value for the geo coordinate.

-0.11832

Result Returns distance in meters.

Description

This method measures the distance between the two locations by tracing a line between them that follows the curvature of the Earth. The resulting arc is a smooth curve and does not take into account specific altitude changes between the two locations.

Examples

Return distance from London

MBS("CoreLocation.distanceFromLocation"; 51.50939, -0.11832)

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.17 CoreLocation.hasLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.hasLocation")

Result Returns 1 or 0 or error.

Description

You may need to call `CoreLocation.startUpdatingLocation` to start getting locations.

See also

- 58.9 `CoreLocation.altitude` 1678
- 58.12 `CoreLocation.description` 1681
- 58.20 `CoreLocation.latitude` 1689
- 58.22 `CoreLocation.longitude` 1691
- 58.25 `CoreLocation.requestLocation` 1694
- 58.34 `CoreLocation.startUpdatingLocation` 1703

58.17.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr8](#)

Created 12nd September 2019, last changed 12nd September 2019.

58.18 CoreLocation.headingAvailable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.headingAvailable")

Result Returns 1 if heading data is available; 0 if it is not.

Description

Heading data may not be available on Macs.

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.19 CoreLocation.horizontalAccuracy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.horizontalAccuracy")

Result Returns the horizontal accuracy value.

Description

The location's latitude and longitude identify the center of the circle, and this value indicates the radius of that circle. A negative value indicates that the location's latitude and longitude are invalid.

This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

See also

- 58.8 CoreLocation.SetUpdateLocationHandler 1676
- 58.39 CoreLocation.verticalAccuracy 1708

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.20 CoreLocation.latitude

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.latitude")

Result Returns latitude of geo coordinate.

Description

This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

Returns zero if not location is available. See CoreLocation.hasLocation function.

See also

- 58.9 CoreLocation.altitude 1678
- 58.17 CoreLocation.hasLocation 1686
- 58.22 CoreLocation.longitude 1691
- 58.8 CoreLocation.SetUpdateLocationHandler 1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 18th August 2014, last changed 12nd September 2019.

58.21 CoreLocation.locationServicesEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.locationServicesEnabled")

Result Returns 1 if location services are enabled or 0 if they are not.

Description

The user can enable or disable location services altogether from the Settings application by toggling the switch in Settings >General >Location Services.

You should check the return value of this method before starting location updates to determine if the user has location services enabled for the current device. If this method returns 0 and you start location updates anyway, the Core Location framework prompts the user with a confirmation panel asking whether location services should be reenabled.

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.22 CoreLocation.longitude

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.longitude")

Result Returns longitude of geo coordinate.

Description

This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

Returns zero if not location is available. See CoreLocation.hasLocation function.

See also

- 58.9 CoreLocation.altitude 1678
- 58.17 CoreLocation.hasLocation 1686
- 58.20 CoreLocation.latitude 1689
- 58.8 CoreLocation.SetUpdateLocationHandler 1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 18th August 2014, last changed 12nd September 2019.

58.23 CoreLocation.purpose

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.purpose")

Result Returns the purpose text.

Description

If the value of this property is non-nil, the system includes the string in the dialog that asks the user whether it is all right for your application to use location services. The string gives you a chance to explain the reason for why your application is using location services.

You must set the value of this property prior to calling the `CoreLocation.startUpdatingLocation` method. Because the string is ultimately displayed to the user, you should always load it from a localized strings file. Available in Mac OS X v10.7 and later.

See also

- 58.11 `CoreLocation.course` 1680
- 58.29 `CoreLocation.setPurpose` 1698
- 58.34 `CoreLocation.startUpdatingLocation` 1703

Created 18th August 2014, last changed 18th August 2014.

58.24 CoreLocation.requestAlwaysAuthorization

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	No	No	No	No	Yes

MBS("CoreLocation.requestAlwaysAuthorization")

Result Returns OK or error.

Description

When the current authorization status is notDetermined, this method runs asynchronously and prompts the user to grant permission to the app to use location services. The user prompt contains the text from the NSLocationAlwaysUsageDescription key in your app's Info.plist file, and the presence of that key is required when calling this method.

See also

<https://developer.apple.com/documentation/corelocation/cllocationmanager/1620551-requestalwaysauthorization>

See also

- 58.26 CoreLocation.requestWhenInUseAuthorization

1695

Created 17th February 2019, last changed 17th February 2019.

58.25 CoreLocation.requestLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	No	No	No	No	Yes

MBS("CoreLocation.requestLocation")

Result Returns OK or error.

Description

This method returns immediately. Calling it causes the location manager to obtain a location fix (which may take several seconds).

See also

- 58.17 CoreLocation.hasLocation

1686

Created 17th February 2019, last changed 17th February 2019.

58.26 CoreLocation.requestWhenInUseAuthorization

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	No	No	No	No	Yes

MBS("CoreLocation.requestWhenInUseAuthorization")

Result Returns OK or error.

Description

When the current authorization status is notDetermined, this method runs asynchronously and prompts the user to grant permission to the app to use location services. The user prompt contains the text from the NSLocationWhenInUseUsageDescription key in your app's Info.plist file, and the presence of that key is required when calling this method.

See also

- 58.24 CoreLocation.requestAlwaysAuthorization

1693

Created 17th February 2019, last changed 17th February 2019.

58.27 CoreLocation.setDesiredAccuracy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.setDesiredAccuracy"; Accuracy)

Parameters

Accuracy

The new value. Can be a number or the following text strings: Best, NearestTenMeters, HundredMeters, Kilometer and ThreeKilometers. Default is "best".

123

Result Returns OK or error.

Description

The receiver does its best to achieve the requested accuracy; however, the actual accuracy is not guaranteed. You should assign a value to this property that is appropriate for your usage scenario. In other words, if you need only the current location within a few kilometers, you should not specify "best" for the accuracy. Determining a location with greater accuracy requires more time and more power.

When requesting high accuracy location data, the initial event delivered by the location service may not have the accuracy you requested. The location service delivers the initial event as quickly as possible. It then continues to determine the location with the accuracy you requested and delivers additional events, as necessary, when that data is available.

See also

- 58.13 CoreLocation.desiredAccuracy 1682
- 58.39 CoreLocation.verticalAccuracy 1708

Created 18th August 2014, last changed 18th August 2014.

58.28 CoreLocation.setDistanceFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.setDistanceFilter"; value)

Parameters

value

The distance. Either a number or text "none".

123

Result Returns OK or error.

Description

This distance is measured relative to the previously delivered location. Use the value "none" to be notified of all movements.

The default value of this property is "none".

See also

- 58.15 CoreLocation.distanceFilter

1684

Created 18th August 2014, last changed 18th August 2014.

58.29 CoreLocation.setPurpose

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.setPurpose"; text)

Parameters

text

Your purpose message.

"For tracking your location."

Result Returns "OK" or error.

Description

If the value of this property is non-nil, the system includes the string in the dialog that asks the user whether it is all right for your application to use location services. The string gives you a chance to explain the reason for why your application is using location services.

You must set the value of this property prior to calling the `CoreLocation.startUpdatingLocation` method. Because the string is ultimately displayed to the user, you should always load it from a localized strings file. Available in Mac OS X v10.7 and later.

See also

- 58.23 `CoreLocation.purpose` 1692
- 58.34 `CoreLocation.startUpdatingLocation` 1703

Created 18th August 2014, last changed 18th August 2014.

58.30 CoreLocation.significantLocationChangeMonitoringAvailable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.significantLocationChangeMonitoringAvailable")

Result Returns 1 if location change monitoring is available; 0 if it is not.

Description

This method indicates whether the device is able to report updates based on significant location changes only. (Significant location change monitoring primarily involves detecting changes in the cell tower currently associated with the device.) This capability provides tremendous power savings for applications that want to track a user's approximate location and do not need highly accurate position information.

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.31 CoreLocation.speed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.speed")

Result Returns speed value.

Description

This value reflects the instantaneous speed of the device in the direction of its current heading. A negative value indicates an invalid speed. Because the actual speed can change many times between the delivery of subsequent location events, you should use this property for informational purposes only.

This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

See also

- 58.8 CoreLocation.SetUpdateLocationHandler 1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.32 CoreLocation.startMonitoringSignificantLocationChanges

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.startMonitoringSignificantLocationChanges")

Result Returns OK or error.

Description

This method initiates the delivery of location events asynchronously, returning shortly after you call it. Location events are delivered to your didUpdateLocation script. The first event to be delivered is usually the most recently cached location event (if any) but may be a newer event in some circumstances. Obtaining a current location fix may take several additional seconds, so be sure to check the timestamps on the location events in your delegate method.

Your fail script may be called if an error occurs.

See also

- 58.35 CoreLocation.stopMonitoringSignificantLocationChanges

1704

Created 18th August 2014, last changed 18th August 2014.

58.33 CoreLocation.startUpdatingHeading

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	No	No	No	No	Yes

MBS("CoreLocation.startUpdatingHeading")

Result Returns OK or error.

Description

This method returns immediately. Calling this method when the receiver is stopped causes it to obtain an initial heading and notify your delegate. After that, the receiver generates update events when the value in the headingFilter property is exceeded.

Before calling this method, you should always check the headingAvailable property to see whether heading information is supported on the current device. If heading information is not supported, calling this method has no effect and does not result in the delivery of events to your delegate.

Calling this method several times in succession does not automatically result in new events being generated. Calling stopUpdatingHeading() in between, however, does cause a new initial event to be sent the next time you call this method.

If you start this service and your app is suspended, the system stops the delivery of events until your app starts running again (either in the foreground or background). If your app is terminated, the delivery of new heading events stops altogether and must be restarted by your code when the app is relaunched.

See also

- 58.34 CoreLocation.startUpdatingLocation 1703
- 58.36 CoreLocation.stopUpdatingHeading 1705
- 58.37 CoreLocation.stopUpdatingLocation 1706

Created 17th February 2019, last changed 17th February 2019.

58.34 CoreLocation.startUpdatingLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.startUpdatingLocation")

Description

This method returns immediately. Calling this method when the receiver is stopped causes it to obtain an initial location fix (which may take several seconds) and notify your script. After that, the receiver generates update events primarily when the value in the distanceFilter property is exceeded. Updates may be delivered in other situations though. For example, the receiver may send another notification if the hardware gathers a more accurate location reading.

Calling this method several times in succession does not automatically result in new events being generated. Calling stopUpdatingLocation in between, however, does cause a new initial event to be sent the next time you call this method.

Available in Mac OS X v10.6 and later.

See also

- 58.17 CoreLocation.hasLocation 1686
- 58.23 CoreLocation.purpose 1692
- 58.29 CoreLocation.setPurpose 1698
- 58.33 CoreLocation.startUpdatingHeading 1702
- 58.36 CoreLocation.stopUpdatingHeading 1705
- 58.37 CoreLocation.stopUpdatingLocation 1706

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 18th August 2014, last changed 18th August 2014.

58.35 CoreLocation.stopMonitoringSignificantLocationChanges

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.stopMonitoringSignificantLocationChanges")

Result Returns OK or error.

Description

Use this method to stop the delivery of location events that was started using the CoreLocation.startMonitoringSignificantLocationChanges method.

See also

- 58.32 CoreLocation.startMonitoringSignificantLocationChanges 1701

Created 18th August 2014, last changed 18th August 2014.

58.36 CoreLocation.stopUpdatingHeading

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	9.1	No	No	No	No	Yes

MBS("CoreLocation.stopUpdatingHeading")

Result Returns OK or error.

Description

Call this method whenever your code no longer needs to receive heading-related events. Disabling event delivery gives the receiver the option of disabling the appropriate hardware (and thereby saving power) when no clients need location data. You can always restart the generation of heading updates by calling the startUpdatingHeading() method again.

See also

- 58.33 CoreLocation.startUpdatingHeading 1702
- 58.34 CoreLocation.startUpdatingLocation 1703
- 58.37 CoreLocation.stopUpdatingLocation 1706

Created 17th February 2019, last changed 17th February 2019.

58.37 CoreLocation.stopUpdatingLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.stopUpdatingLocation")

Result Returns "OK" or error.

Description

You should call this method whenever your code no longer needs to receive location-related events. Disabling event delivery gives the receiver the option of disabling the appropriate hardware (and thereby saving power) when no clients need location data. You can always restart the generation of location updates by calling the CoreLocation.startUpdatingLocation method again.

See also

- 58.33 CoreLocation.startUpdatingHeading 1702
- 58.34 CoreLocation.startUpdatingLocation 1703
- 58.36 CoreLocation.stopUpdatingHeading 1705

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 18th August 2014, last changed 18th August 2014.

58.38 CoreLocation.timestamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.timestamp")

Result Returns the timestamp.

Description

This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

See also

- 58.8 CoreLocation.SetUpdateLocationHandler

1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)

Created 18th August 2014, last changed 18th August 2014.

58.39 CoreLocation.verticalAccuracy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
58 CoreLocation	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("CoreLocation.verticalAccuracy")

Result Returns the vertical accuracy value.

Description

The value in the altitude property could be plus or minus the value indicated by this property. A negative value indicates that the altitude value is invalid.

Determining the vertical accuracy requires a device with GPS capabilities.

This function queries current know location. It's updated from time to time. To receive a script call when new location is available, please use CoreLocation.SetUpdateLocationHandler.

See also

- 58.13 CoreLocation.desiredAccuracy 1682
- 58.19 CoreLocation.horizontalAccuracy 1688
- 58.27 CoreLocation.setDesiredAccuracy 1696
- 58.8 CoreLocation.SetUpdateLocationHandler 1676

Example Databases

- [Mac and iOS/CoreLocation/CoreLocation](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 18th August 2014, last changed 18th August 2014.

Chapter 59

CoreML

macOS 10.13 and iOS 11 functions for machine learning.

59.1 CoreML.AddArrayParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.AddArrayParameter"; CoreMLRef; Name; Values; Type)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Name

The name of the parameter.

"test"

Values

The list with values.

"1\$3\$5"

Type

The type of array to pass. Can be Double, Float or Int32.

"Int32"

Result Returns OK or error.

Description

See also

- 59.2 CoreML.AddDoubleParameter 1711
- 59.3 CoreML.AddImageParameter 1712
- 59.4 CoreML.AddIntegerParameter 1714
- 59.5 CoreML.AddTextParameter 1715

Created 16th September 2017, last changed 16th September 2017.

59.2 CoreML.AddDoubleParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.AddDoubleParameter"; CoreMLRef; Name; Value)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Name

The name of the parameter.

"test"

Value

The value to use.

123

Result Returns OK or error.

Description

See also

- 59.1 CoreML.AddArrayParameter 1709
- 59.3 CoreML.AddImageParameter 1712
- 59.4 CoreML.AddIntegerParameter 1714
- 59.5 CoreML.AddTextParameter 1715

Created 16th September 2017, last changed 16th September 2017.

59.3 CoreML.AddImageParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.AddImageParameter"; CoreMLRef; Name; Image)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Name

The name of the parameter.

"test"

Image

A container value with image content. Can be PNG, JPEG, GIF, TIFF, BMP or various other types.

Result Returns OK or error.

Description

Please make sure that the image has the required size.

Version 8.4 automatically scales image to required size.

Examples

Add image parameter:

Set Variable [\$r ; Value: MBS("CoreML.AddImageParameter"; \$\$ML; "image"; CoreML::Input Picture)]

See also

- [59.1 CoreML.AddArrayParameter](#) 1709
- [59.2 CoreML.AddDoubleParameter](#) 1711
- [59.4 CoreML.AddIntegerParameter](#) 1714
- [59.5 CoreML.AddTextParameter](#) 1715
- [59.13 CoreML.PredictionFromFeatures](#) 1727

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Machine Learning/CoreML](#)

59.3.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr9](#)

Created 16th September 2017, last changed 16th September 2018.

59.4 CoreML.AddIntegerParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.AddIntegerParameter"; CoreMLRef; Name; Value)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Name

The name of the parameter.

"test"

Value

The value to use.

123

Result Returns OK or error.

Description

See also

- 59.1 CoreML.AddArrayParameter 1709
- 59.2 CoreML.AddDoubleParameter 1711
- 59.3 CoreML.AddImageParameter 1712
- 59.5 CoreML.AddTextParameter 1715
- 59.6 CoreML.AddUndefinedParameter 1716

Created 16th September 2017, last changed 16th September 2017.

59.5 CoreML.AddTextParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.AddTextParameter"; CoreMLRef; Name; Value)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Name

The name of the parameter.

"test"

Value

The text value to use.

"Hello"

Result Returns OK or error.

Description

See also

- 59.1 CoreML.AddArrayParameter 1709
- 59.2 CoreML.AddDoubleParameter 1711
- 59.3 CoreML.AddImageParameter 1712
- 59.4 CoreML.AddIntegerParameter 1714

Created 16th September 2017, last changed 16th September 2017.

59.6 CoreML.AddUndefinedParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.AddUndefinedParameter"; CoreMLRef; Name { ; Type })

Parameters

CoreMLRef

The reference number to the model.

\$Model

Name

The name of the parameter.

"test"

Type

Optional

Default value type to use is invalid. Can be Int64, Double, Text, Image or Array.

"Text"

Result Returns OK or error.

Description

See also

- 59.4 CoreML.AddIntegerParameter

1714

Created 16th September 2017, last changed 16th September 2017.

59.7 CoreML.Available

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.Available")

Result Returns 1, 0 or error.

Description

Should return 1 on macOS 10.13 or newer or 0 on other versions.

Examples

Check availability:

```
If [ MBS("CoreML.Available") = 1 ]
Show Custom Dialog [ "Core ML not available" ; "Please run on macOS 10.13 High Sierra" ]
Exit Script [ Text Result: "" ]
End If
```

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Machine Learning/CoreML](#)

Created 16th September 2017, last changed 16th September 2017.

59.8 CoreML.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.Clear"; CoreMLRef)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Result Returns OK or error.

Description

Examples

Clear parameters:

```
Set Variable [ $r ; Value: MBS("CoreML.Clear"; $$ML) ]
```

See also

- 59.13 CoreML.PredictionFromFeatures

1727

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Machine Learning/CoreML](#)

Created 16th September 2017, last changed 16th September 2017.

59.9 CoreML.CompileModel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.CompileModel"; Path)

Parameters

Path

The native file path to the model.

"/Users/cs/Desktop/test.mlmodel"

Result Returns OK or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Compile model when needed:

```

If [ Right ( CoreML::Model Path; 8 ) = ".mlmodel" ]
Set Variable [ $r ; Value: MBS("CoreML.CompileModel"; CoreML::Model Path) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to compile" ; $r ]
Set Variable [ $$ML ; Value: "" ]
Else
Set Field [ CoreML::Model Path ; $r ]
End If
End If

```

Compile a model:

```
MBS( "CoreML.CompileModel"; "/Users/cs/Desktop/UpdatableDrawingClassifier.mlmodel" )
```

See also

- 59.12 CoreML.OpenModel 1725
- 124.6 IsError 6266
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)

- [Mac and iOS/Machine Learning/CoreML](#)

Created 16th September 2017, last changed 16th December 2019.

59.10 CoreML.Description

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.Description"; CoreMLRef)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Result Returns JSON or error.

Description

This is returned as a JSON block.

Common keys include predictedFeatureName, predictedProbabilitiesName, metadata, inputDescriptionsByName and outputDescriptionsByName.

Added isUpdatable key in v10.0 to indicate whether model can be updated.

Includes trainingInputDescriptionsByName and parameterDescriptionsByKey For MacOS 10.15 to provide details on training input and parameters.

Examples

Query description:

```
Set Field [ CoreML::Model Description ; MBS("CoreML.Description"; $$ML) ]
```

```
Example result: {
  "predictedProbabilitiesName" : "classLabelProbs",
  "predictedFeatureName" : "classLabel",
  "inputDescriptionsByName" : {
    "image" : {
      "optional" : false,
      "type" : "Image",
      "imageConstraint" : {
        "pixelsWide" : 224,
        "pixelFormatTypeName" : "32BGRA",
        "pixelFormatType" : 1111970369,
        "pixelFormatTypeDescription" : "32 bit BGRA",
        "pixelsHigh" : 224
      },
      "name" : "image"
    }
  },
  "outputDescriptionsByName" : {
    "classLabel" : {
      "optional" : false,
```

```

"type" : "String",
"name" : "classLabel"
},
"classLabelProbs" : {
"optional" : false,
"dictionaryConstraint" : {
"keyType" : "String"
},
"type" : "Dictionary",
"name" : "classLabelProbs"
}
},
"metadata" : {
"MLModelVersionStringKey" : "",
"MLModelDescriptionKey" : "Detects the dominant objects present in an image from a set of 1000 categories such
as trees, animals, food, vehicles, person etc. The top-5 error from the original publication is 7.8% .",
"MLModelCreatorDefinedKey" : {
},
"MLModelAuthorKey" : "Original Paper: Kaiming He and Xiangyu Zhang and Shaoqing Ren and Jian Sun. Keras
Implementation: François Chollet",
"MLModelLicenseKey" : "MIT License. More information available at https://github.com/fchollet/keras/blob/master/LICENSE"
}
}

```

Load model to get description:

```

Set Variable [ $model ; Value: MBS( "CoreML.OpenModel"; "/Users/cs/Desktop/UpdatableDrawingClassifier.mlmodelc" ) ]
Set Field [ test::ModelDescription ; MBS( "CoreML.Description"; $model ) ]
Set Variable [ $r ; Value: MBS( "CoreML.Release"; $model ) ]

```

See also

- 59.12 CoreML.OpenModel 1725
- 59.14 CoreML.Release 1729
- 59.17 CoreML.Update 1732
- 149.2 ECKey.Description 7063

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Machine Learning/CoreML](#)

59.10.1 Blog Entries

- [Train machine learning models on device](#)
- [MBS FileMaker Plugin, version 9.6pr3](#)

Created 16th September 2017, last changed 16th December 2019.

59.11 CoreML.GetUsesCPUOnly

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.GetUsesCPUOnly"; CoreMLRef)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Result Returns 1, 0 or error.

Description

See also

- 59.16 CoreML.SetUsesCPUOnly

1731

Created 16th September 2017, last changed 16th September 2017.

59.12 CoreML.OpenModel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.OpenModel"; Path)

Parameters

Path

The path to the model file.

"/test.mlmodelc"

Result Returns OK or error.

Description

If the model is not compiled (*.mlmodel), you can compile it with CoreML.CompileModel. Returns error message if there is a problem.

See also Vision.ClassifyImage to use Vision framework from Apple to classify images with Apple's model.

Examples

Load Model:

```
Set Variable [ $$ML ; Value: MBS("CoreML.OpenModel"; CoreML::Model Path) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to load" ; $$ML ]
Set Variable [ $$ML ; Value: "" ]
Else
Set Field [ CoreML::Model Description ; MBS("CoreML.Description"; $$ML) ]
End If
```

See also

- [59.9 CoreML.CompileModel](#) 1719
- [59.10 CoreML.Description](#) 1721
- [124.6 IsError](#) 6266
- [179.1 Vision.ClassifyImage](#) 8273

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Machine Learning/CoreML](#)

59.12.1 Blog Entries

- [Train machine learning models on device](#)

Created 16th September 2017, last changed 17th October 2019.

59.13 CoreML.PredictionFromFeatures

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.PredictionFromFeatures"; CoreMLRef)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Result Returns JSON or error.

Description

Returns JSON with the result from the model.

The result is stored for later query result images via CoreML.ResultImage.

See also Vision.ClassifyImage to use Vision framework from Apple to classify images with Apple's model.

Examples

Run model:

```

If [ Length ( $$ML ) = 0 ]
Show Custom Dialog [ "Please load model first." ]
Exit Script [ Text Result: "" ]
End If
Set Variable [ $r ; Value: MBS("CoreML.Clear"; $$ML) ]
# The Resnet50 model we use for testing, needs a specific image size
Set Variable [ $r ; Value: MBS("CoreML.AddImageParameter"; $$ML; "image"; CoreML::Input Picture) ]
Set Variable [ $r ; Value: MBS("CoreML.PredictionFromFeatures"; $$ML) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to process" ; $r ]
Else
Set Field [ CoreML::Output ; $r ]
Show Custom Dialog [ "Result" ; MBS( "JSON.GetPathItem"; $r; "classLabel";1 ) ]
End If

```

See also

- 59.3 CoreML.AddImageParameter 1712
- 59.8 CoreML.Clear 1718
- 59.15 CoreML.ResultImage 1730
- 124.6 IsError 6266

- 100.52 JSON.GetPathItem 5314
- 179.1 Vision.ClassifyImage 8273

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Machine Learning/CoreML](#)

Created 16th September 2017, last changed 17th October 2019.

59.14 CoreML.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.Release"; CoreMLRef)

Parameters

CoreMLRef

The reference number to the model.

\$Model

Result Returns OK or error.

Description

Examples

Release model:

```
If [ $$ML >0 ]
Set Variable [ $r ; Value: MBS("CoreML.Release"; $$ML) ]
Set Variable [ $$ML ; Value: "" ]
End If
```

See also

- [59.10 CoreML.Description](#)

1721

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Machine Learning/CoreML](#)

Created 16th September 2017, last changed 16th September 2017.

59.15 CoreML.ResultImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.ResultImage"; CoreMLRef; Name { ; ImageType; Filename })

Parameters

CoreMLRef

The reference number to the model.

\$Model

Name

The name of the parameter.

"image"

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns container value or error.

Description

If the CoreML.PredictionFromFeatures returns result and there is an image included, you can query it here.

See also

- 59.13 CoreML.PredictionFromFeatures

1727

Created 16th September 2017, last changed 16th September 2017.

59.16 CoreML.SetUsesCPUOnly

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	7.4	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.SetUsesCPUOnly"; CoreMLRef; Value)

Parameters**CoreMLRef**

The reference number to the model.

\$Model

Value

The new setting. 1 = CPU only 0 = CPU and GPU (Default)

1

Result Returns OK or error.

Description

Set to 1 to disable GPU and only do processing on CPU.

Pass 0 (default) to use both.

See also

- 59.11 CoreML.GetUsesCPUOnly

1724

Created 16th September 2017, last changed 16th September 2017.

59.17 CoreML.Update

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
59 CoreML	10.0	Yes	No	Yes, macOS only	No	Yes

MBS("CoreML.Update"; InputPath; OutputPath; trainingData)

Parameters

InputPath

The input path to the model file.

"/test.mlmodel"

OutputPath

The output path to the model file.

"/output.mlmodel"

trainingData

The new training data as JSON array.

Result Returns OK or error.

Description

Update a machine learning model on a user's device. Pass in path to existing model and path for new model. Training data is a JSON array. Each entry is an object with the input and output keys. Each key has a value, either a number or text, array or image path. The image is defined with a native file path and format is automatically adjusted.

Look in CoreML.Description for the inputDescriptionsByName, outputDescriptionsByName and trainingInputDescriptionsByName. The constrains may tell you what image sizes to use.

Examples

Update a model:

```
MBS( "CoreML.Update"; "/Users/cs/Desktop/UpdatableDrawingClassifier.mlmodelc"; "/Users/cs/Desktop/UpdatableDrawingClassifier2.mlmodelc"; " [ { \"drawing\": \"/Users/cs/Desktop/mbslogo.png\", \"label\": \"car\" } ] " )
```

See also

- 59.10 CoreML.Description

1721

59.17.1 Blog Entries

- [Train machine learning models on device](#)
- [MBS FileMaker Plugin, version 9.6pr3](#)

Created 16th December 2019, last changed 16th December 2019.

Chapter 60

CUPS

Print RAW data on Mac OS X (for label printers).

You can send raw commands to label printers. Or print a file directly to a printer. For a laser printer you may also send directly PostScript or PDF data.

60.1 CUPS.CancelJob

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.CancelJob"; name; JobID)

Parameters

name

Name of the printer.

"Brother_DCP_8085DN"

JobID

The job number of the job you want to cancel. Pass -1 to cancel all jobs or 0 to cancel current job.

123

Result Returns 1 on success, 0 on failure.

Description

Examples

Cancel all jobs on this printer queue:

MBS("CUPS.CancelJob"; "Brother_DCP_8085DN"; -1)

See also

- 60.19 CUPS.LastErrorCode 1753
- 60.20 CUPS.LastErrorMessage 1754

Created 18th August 2014, last changed 18th August 2014.

60.2 CUPS.GetDefaultPrinterName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetDefaultPrinterName")

Result The name of the default printer.

Description

This function returns the default printer or class as defined by the LPDEST or PRINTER environment variables. If these environment variables are not set, the server default destination is returned.

Returns empty string if no default printer is defined.

Examples

Query default printer name:

```
$result = MBS( "CUPS.GetDefaultPrinterName" )
```

Created 18th August 2014, last changed 18th August 2014.

60.3 CUPS.GetJobCompletionTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobCompletionTime"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.
0

Result The completion time.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- [60.4 CUPS.GetJobCreationTime](#) 1737
- [60.15 CUPS.GetJobsCount](#) 1748

Example Databases

- [CUPS/List Jobs](#)

Created 18th August 2014, last changed 18th August 2014.

60.4 CUPS.GetJobCreationTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobCreationTime"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.
0

Result The creation time.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.3 CUPS.GetJobCompletionTime 1736
- 60.15 CUPS.GetJobsCount 1748

Example Databases

- [CUPS/List Jobs](#)

Created 18th August 2014, last changed 18th August 2014.

60.5 CUPS.GetJobFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobFormat"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.

0

Result The document format.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.15 CUPS.GetJobsCount

1748

Example Databases

- [CUPS/List Jobs](#)

Created 18th August 2014, last changed 18th August 2014.

60.6 CUPS.GetJobID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobID"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.

0

Result Returns job number, empty or error.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.15 CUPS.GetJobsCount

1748

Example Databases

- [CUPS/List Jobs](#)

60.6.1 FileMaker Magazin

- Ausgabe 6/2017, Seite 26

Created 18th August 2014, last changed 29th August 2017.

60.7 CUPS.GetJobIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	7.4	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobIndex"; JobID)

Parameters

JobID

The job ID.

123

Result Returns job index, empty or error.

Description

You can use this function to quickly locate a job by ID in the list of jobs.

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.15 CUPS.GetJobsCount 1748
- 60.11 CUPS.GetJobSize 1744
- 60.14 CUPS.GetJobUser 1747

60.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 29th August 2017, last changed 29th August 2017.

60.8 CUPS.GetJobPrinter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobPrinter"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.

0

Result The printer name.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.9 CUPS.GetJobPriority 1742
- 60.15 CUPS.GetJobsCount 1748

Example Databases

- [CUPS/List Jobs](#)

Created 18th August 2014, last changed 18th August 2014.

60.9 CUPS.GetJobPriority

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobPriority"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.
0

Result The job priority (1 to 100).

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.8 CUPS.GetJobPrinter 1741
- 60.15 CUPS.GetJobsCount 1748

Example Databases

- [CUPS/List Jobs](#)

Created 18th August 2014, last changed 18th August 2014.

60.10 CUPS.GetJobProcessingTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobProcessingTime"; index)

Parameters**index**

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.

0

Result The processing time.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.15 CUPS.GetJobsCount

1748

Created 18th August 2014, last changed 18th August 2014.

60.11 CUPS.GetJobSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobSize"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.

0

Result The job size in kilobytes.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.7 CUPS.GetJobIndex 1740
- 60.15 CUPS.GetJobsCount 1748
- 60.12 CUPS.GetJobState 1745
- 60.13 CUPS.GetJobTitle 1746
- 60.14 CUPS.GetJobUser 1747

Created 18th August 2014, last changed 18th August 2014.

60.12 CUPS.GetJobState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobState"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.

0

Result The job state value.

Description

Please call CUPS.GetJobsCount once before you call this function.

Value is 3 for pending, 4 for held, 5 for processing, 6 for stopped, 7 for cancelled, 8 for aborted and 9 for completed.

See also

- 60.15 CUPS.GetJobsCount 1748
- 60.11 CUPS.GetJobSize 1744
- 60.13 CUPS.GetJobTitle 1746

Example Databases

- [CUPS/List Jobs](#)

60.12.1 FileMaker Magazin

- Ausgabe 6/2017, Seite 26

Created 18th August 2014, last changed 18th August 2014.

60.13 CUPS.GetJobTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobTitle"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.
0

Result The job title.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.15 CUPS.GetJobsCount 1748
- 60.11 CUPS.GetJobSize 1744
- 60.12 CUPS.GetJobState 1745

Created 18th August 2014, last changed 18th August 2014.

60.14 CUPS.GetJobUser

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetJobUser"; index)

Parameters

index

Index in the jobs list. Value from 0 to CUPS.GetJobsCount-1.

0

Result The user name.

Description

Please call CUPS.GetJobsCount once before you call this function.

See also

- 60.7 CUPS.GetJobIndex 1740
- 60.15 CUPS.GetJobsCount 1748
- 60.11 CUPS.GetJobSize 1744

Example Databases

- [CUPS/List Jobs](#)

Created 18th August 2014, last changed 18th August 2014.

60.15 CUPS.GetJobsCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

```
MBS( "CUPS.GetJobsCount" { ; Name; OnlyMyJobs; whichJobs } )
```

Parameters

Name

Optional

Name of the printer queue to query. If no name or empty string is specified, we get all queues.

"Brother_DCP_8085DN"

OnlyMyJobs

Optional

Pass either "my" for your users jobs or "all" for all jobs.

"all"

whichJobs

Optional

Pass "active" to get only active jobs, "all" for all jobs or "complete" for completed jobs.

"complete"

Result The number of jobs found.

Description

First call this function to build job list. Than call other GetJob* functions to query values.

With indexes from 0 to count-1, you can call the other functions CUPS.GetJobState, CUPS.GetJobCompletionTime, CUPS.GetJobCreationTime, CUPS.GetJobProcessingTime, CUPS.GetJobPrinter, CUPS.GetJobID, CUPS.GetJobTitle, CUPS.GetJobPriority, CUPS.GetJobFormat, CUPS.GetJobSize and CUPS.GetJobUser.

Examples

Query all jobs:

```
MBS( "CUPS.GetJobsCount"; ""; "all"; "all" )
```

See also

- 60.3 CUPS.GetJobCompletionTime 1736
- 60.4 CUPS.GetJobCreationTime 1737
- 60.5 CUPS.GetJobFormat 1738
- 60.6 CUPS.GetJobID 1739
- 60.7 CUPS.GetJobIndex 1740
- 60.8 CUPS.GetJobPrinter 1741

<i>60.15. CUPS.GETJOBSCOUNT</i>	1749
• 60.9 CUPS.GetJobPriority	1742
• 60.10 CUPS.GetJobProcessingTime	1743
• 60.11 CUPS.GetJobSize	1744
• 60.13 CUPS.GetJobTitle	1746

60.15.1 FileMaker Magazin

- Ausgabe 6/2017, Seite 25

Created 18th August 2014, last changed 5th July 2015.

60.16 CUPS.GetPrinterCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetPrinterCount")

Result The number of printers.

Description

Please call this method before calling CUPS.GetPrinterDefault or CUPS.GetPrinterName.

Examples

Query number of printers

```
$count = MBS( "CUPS.GetPrinterCount" )
```

See also

- 60.17 CUPS.GetPrinterDefault 1751
- 60.18 CUPS.GetPrinterName 1752

Created 18th August 2014, last changed 18th August 2014.

60.17 CUPS.GetPrinterDefault

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetPrinterDefault"; index)

Parameters

index

Index of the printer. Value is between 0 and CUPS.GetPrinterCount-1.
0

Result A boolean value. True if the printer is the default printer.

Description

Examples

Get default state of 3rd printer:

MBS("CUPS.GetPrinterDefault"; 2)

See also

- 60.16 CUPS.GetPrinterCount

1750

Example Databases

- [CUPS/List Printers](#)

Created 18th August 2014, last changed 18th August 2014.

60.18 CUPS.GetPrinterName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.GetPrinterName"; index)

Parameters

index

Index of the printer. Value is between 0 and CUPS.GetPrinterCount-1.
0

Result The name of the printer.

Description

Examples

Get name of 3rd printer:

MBS("CUPS.GetPrinterName"; 2)

See also

- 60.16 CUPS.GetPrinterCount

1750

Example Databases

- [CUPS/List Printers](#)

Created 18th August 2014, last changed 18th August 2014.

60.19 CUPS.LastErrorCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.LastErrorCode")

Result Last error code.

Description

Examples

This cancels a job and queries last error code (will be 1030) and error message (something like "job 123 doesn't exist"):

```
$result = MBS( "CUPS.CancelJob"; "test"; 123 )
$message = MBS( "CUPS.LastErrorMessage" )
$errorCode = MBS( "CUPS.LastErrorCode" )
```

See also

- 60.1 CUPS.CancelJob 1733
- 60.20 CUPS.LastErrorMessage 1754

Created 18th August 2014, last changed 18th August 2014.

60.20 CUPS.LastErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.LastErrorMessage")

Result Error message text.

Description

Examples

This cancels a job and queries last error code (will be 1030) and error message (something like "job 123 doesn't exist"):

```
$result = MBS( "CUPS.CancelJob"; "test"; 123 )
$message = MBS( "CUPS.LastErrorMessage" )
$errorCode = MBS( "CUPS.LastErrorCode" )
```

See also

- 60.1 CUPS.CancelJob 1733
- 60.19 CUPS.LastErrorCode 1753

Created 18th August 2014, last changed 18th August 2014.

60.21 CUPS.PrintData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

```
MBS( "CUPS.PrintData"; Printer; Data { ; Title; Options } )
```

Parameters

Printer

The name of the printer.

```
"Brother_DCP_8085DN"
```

Data

The file data to print. You can include escapes with backslash. \n gives new line, \r gives return, \\ gives a backslash. \xx with a hex number gives that character. e.g. \41 gives an A.

```
"Hello World\nJust a test!\n"
```

Title

Optional

The title of the print job.

```
"FileMaker Printout"
```

Options

Optional

List of options. Simply add key and values as string parameters to the function call.

```
"key1"; "value1"; "key2"; "value2"
```

Result Returns job number.

Description

With \xx you can embed any character in the text.

\t gives a tab, \n a LF, \r a newline.

Examples

Print data:

```
MBS( "CUPS.PrintData"; "Brother_DCP_8085DN"; "Hello World\nJust a test!\n"; "FileMaker Printout" )
```

Print data with options:

```
MBS( "CUPS.PrintData"; "Brother_DCP_8085DN"; "Hello World\nJust a test!\n"; "FileMaker Printout";
// first option
"Scaling"; "75";
// second option
"media"; "A4" )
```

Build Data, send to printer and write a text file for debugging:

```
Set Variable [ $data; Value:"# !A1# DC REM Drucker wird aktiviert$" & "# IMSR103.87/25.00 REM
Etikettenmasse$" & "# PR5/5/ REM Druckgeschwindigkeit$" & "# HV70 REM Druckhitze$" & "# ER$"
& "$" & "$" & "$" & "$" & "# T06.5 # J18.7 # YN101/1R/33//\80# G$" ... ]
Set Variable [ $data; Value:MBS( "Text.ReplaceNewline"; $data; 3 ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $data; "/tmp/test.txt"; "Dos" ) ]
Set Variable [ $r; Value:MBS( "CUPS.PrintData"; "LabelPrinter"; $data; "Label" ) ]
```

See also

- 60.22 CUPS.PrintDataEncoding 1757
- 60.23 CUPS.PrintFile 1759
- 164.59 Text.ReplaceNewline 7857
- 164.68 Text.WriteTextFile 7871

Example Databases

- [CUPS/Print Data](#)

Created 18th August 2014, last changed 25th February 2017.

60.22 CUPS.PrintDataEncoding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	6.3	Yes	No	Yes, macOS only	No	No

MBS("CUPS.PrintDataEncoding"; Printer; Data; Encoding { ; Title; Options })

Parameters

Printer

The name of the printer.

"Brother_DCP_8085DN"

Data

The file data to print. You can include escapes with backslash. \n gives new line, \r gives return, \\ gives a backslash. \xx with a hex number gives that character. e.g. \41 gives an A.

"Hello World\nJust a test!\n"

Encoding

The text encoding for data.

"UTF-8"

Title

Optional

The title of the print job.

"FileMaker Printout"

Options

Optional

List of options. Simply add key and values as string parameters to the function call.

"key1"; "value1"; "key2"; "value2"

Result Returns OK or error.

Description

With \xx you can embed any character in the text.

\t gives a tab, \n a LF, \r a newline.

Examples

Sends some data in Windows encoding:

```
Set Variable [ $data; Value:"Hello World.§Tägliche Grüße!" ]
Set Variable [ $data; Value:MBS( "Text.ReplaceNewline"; $data; 3 ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $data; "/tmp/test.txt"; "Windows" ) ]
Set Variable [ $r; Value:MBS( "CUPS.PrintDataEncoding"; "Brother_DCP_8085DN"; $data; "Windows";
"Test Print" ) ]
```

See also

- 60.21 CUPS.PrintData

- 164.59 Text.ReplaceNewline 7857
- 164.68 Text.WriteTextFile 7871

60.22.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr4](#)

Created 20th June 2016, last changed 20th June 2016.

60.23 CUPS.PrintFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
60 CUPS	2.5	Yes	No	Yes, macOS only	No	No

MBS("CUPS.PrintFile"; Printer; Path { ; Title; Options })

Parameters

Printer

The name of the printer.

"Brother_DCP_8085DN"

Path

The file path of the file to print.

"/test/testfile.txt"

Title

Optional

The title of the print job.

"FileMaker Printout"

Options

Optional

List of options. Simply add key and values as string parameters to the function call.

"key1"; "value1"; "key2"; "value2"

Result Returns job number.

Description

Examples

Print a file:

```
MBS( "CUPS.PrintFile"; "Brother_DCP_8085DN"; "/test/testfile.txt"; "FileMaker Printout" )
```

See also

- 60.21 CUPS.PrintData

1755

60.23.1 FileMaker Magazin

- Ausgabe 6/2017, Seite 25

Created 18th August 2014, last changed 25th February 2017.

Chapter 61

CURL

Up- and Download with FTP/SFTP/FTPS/HTTP/HTTPS.

You can use CURL functions for webservice, ftp uploads, directory listing and other network tasks.

61.1 CURL.AddInputFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.7	Yes	Yes	Yes	Yes	Yes

MBS("CURL.AddInputFile"; curl; data)

Parameters

curl

The CURL session handle.

\$curl

data

The container value with the data to upload.

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations. Using SetInput* functions and AddInput* functions you can construct the input data in several function calls. This is useful if you do a multipart upload with text parts and file content mixed.

This is for adding to existing data, but for uploading only a file, you can use CURL.SetInputFile. If you have a file path, please use CURL.OpenInputFile instead.

Examples

Add container:

```
MBS( "CURL.AddInputFile"; $curl; MyTable::MyContainer )
```

See also

- [61.2 CURL.AddInputGIF](#) 1763
- [61.3 CURL.AddInputJPEG](#) 1764
- [61.4 CURL.AddInputPDF](#) 1765
- [61.5 CURL.AddInputPNG](#) 1766
- [61.6 CURL.AddInputText](#) 1768
- [61.12 CURL.CloseInputFile](#) 1777
- [61.141 CURL.OpenInputFile](#) 1951
- [61.158 CURL.SetInputFile](#) 1991

61.1.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr8](#)

Created 18th August 2014, last changed 20th April 2017.

61.2 CURL.AddInputGIF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	3.1	Yes	Yes	Yes	Yes	Yes

MBS("CURL.AddInputGIF"; curl; data)

Parameters

curl

The CURL session handle.

\$curl

data

The container value with the data to upload.

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations. Using SetInput* functions and AddInput* functions you can construct the input data in several function calls. This is useful if you do a multipart upload with text parts and file content mixed.

This is for adding to existing data, but for uploading only a file, you can use CURL.SetInputGIF.

Examples

Add GIF picture from container:

```
MBS( "CURL.AddInputGIF"; $curl; MyTable::MyContainer )
```

See also

- 61.1 CURL.AddInputFile 1761
- 61.3 CURL.AddInputJPEG 1764
- 61.4 CURL.AddInputPDF 1765
- 61.5 CURL.AddInputPNG 1766
- 61.6 CURL.AddInputText 1768
- 61.159 CURL.SetInputGIF 1994

61.2.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr8](#)

Created 18th August 2014, last changed 7th December 2016.

61.3 CURL.AddInputJPEG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.7	Yes	Yes	Yes	Yes	Yes

MBS("CURL.AddInputJPEG"; curl; data)

Parameters

curl

The CURL session handle.

\$curl

data

The container value with the data to upload.

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations. Using SetInput* functions and AddInput* functions you can construct the input data in several function calls. This is useful if you do a multipart upload with text parts and file content mixed.

This is for adding to existing data, but for uploading only a file, you can use CURL.SetInputJPEG.

Examples

Add JPEG picture from container:

```
MBS( "CURL.AddInputJPEG"; $curl; MyTable::MyContainer )
```

See also

- 61.1 CURL.AddInputFile 1761
- 61.2 CURL.AddInputGIF 1763
- 61.4 CURL.AddInputPDF 1765
- 61.5 CURL.AddInputPNG 1766
- 61.6 CURL.AddInputText 1768
- 61.160 CURL.SetInputJPEG 1996

61.3.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr8](#)

Created 18th August 2014, last changed 7th December 2016.

61.4 CURL.AddInputPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	4.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.AddInputPDF"; curl; data)

Parameters

curl

The CURL session handle.

\$curl

data

The container value with the data to upload.

\$pdfContainer

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations. Using SetInput* functions and AddInput* functions you can construct the input data in several function calls. This is useful if you do a multipart upload with text parts and file content mixed.

This is for adding to existing data, but for uploading only a file, you can use CURL.SetInputPDF.

Examples

Add PDF from container:

```
MBS( "CURL.AddInputPDF"; $curl; MyTable::MyContainer )
```

See also

- 61.1 CURL.AddInputFile 1761
- 61.2 CURL.AddInputGIF 1763
- 61.3 CURL.AddInputJPEG 1764
- 61.5 CURL.AddInputPNG 1766
- 61.6 CURL.AddInputText 1768
- 61.161 CURL.SetInputPDF 1998

61.4.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr2](#)

Created 18th August 2014, last changed 7th December 2016.

61.5 CURL.AddInputPNG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.7	Yes	Yes	Yes	Yes	Yes

MBS("CURL.AddInputPNG"; curl; data)

Parameters

curl

The CURL session handle.

\$curl

data

The container value with the data to upload.

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations. Using SetInput* functions and AddInput* functions you can construct the input data in several function calls. This is useful if you do a multipart upload with text parts and file content mixed.

This is for adding to existing data, but for uploading only a file, you can use CURL.SetInputPNG.

Examples

Add PNG picture from container:

```
MBS( "CURL.AddInputPNG"; $curl; MyTable::MyContainer )
```

See also

- [61.1 CURL.AddInputFile](#) 1761
- [61.2 CURL.AddInputGIF](#) 1763
- [61.3 CURL.AddInputJPEG](#) 1764
- [61.4 CURL.AddInputPDF](#) 1765
- [61.6 CURL.AddInputText](#) 1768
- [61.162 CURL.SetInputPNG](#) 2000

61.5.1 Blog Entries

- [MBS Filemaker Plugin, version 2.8pr8](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)

- [MBS Filemaker Plugin, version 2.7pr8](#)

Created 18th August 2014, last changed 7th December 2016.

61.6 CURL.AddInputText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.7	Yes	Yes	Yes	Yes	Yes

MBS("CURL.AddInputText"; curl; text { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

text

The text to send.

Encoding

Optional

The text encoding. Default is UTF-8 for version 10.0 or newer and native encoding before.

UTF8

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations. Please make sure you choose the text encoding the other side expects.

Using SetInput* functions and AddInput* functions you can construct the input data in several function calls. This is useful if you do a multipart upload with text parts and file content mixed.

This is for adding to existing data, but for uploading only a file, you can use CURL.SetInputText.

Examples

Add Text:

```
MBS("CURL.AddInputText"; $curl; "Hello World"; "utf8")
```

See also

- 61.1 CURL.AddInputFile 1761
- 61.2 CURL.AddInputGIF 1763
- 61.3 CURL.AddInputJPEG 1764
- 61.4 CURL.AddInputPDF 1765
- 61.5 CURL.AddInputPNG 1766
- 61.62 CURL.GetInputAsText 1854
- 61.163 CURL.SetInputText 2002

61.6.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr10](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr8](#)

Created 18th August 2014, last changed 6th December 2019.

61.7 CURL.Cancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Cancel"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns "OK" on success.

Description

Technically set a flag so the background thread will quit soon. Can take a second till transfer ends. Only useful with CURL.PerformInBackground.

Examples

Cancels a transfer running async or in background:

MBS("CURL.Cancel"; \$curl)

See also

- [61.17 CURL.ErrorCode](#) 1788
- [61.142 CURL.Perform](#) 1954
- [61.144 CURL.PerformInBackground](#) 1965

Example Databases

- [CURL/CURL Download in Background](#)
- [CURL/Download Async](#)

Created 18th August 2014, last changed 7th December 2016.

61.8 **CURL.Check**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Check")

Result Returns OK or error.

Description

You can call this on a server in a loop to have asynchronous perform call work.

Examples

Checks CURL transfers for events:

MBS("CURL.Check")

Created 12nd July 2015, last changed 12nd July 2015.

61.9 CURL.Cleanup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Cleanup"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns "OK" on success or error on failure.

Description

This function must be the last function to call for a CURL session. It is the opposite of the CURL.New function and must be called with the same handle as input that the CURL.New call returned.

This will effectively close all connections this handle has used and possibly has kept open until now. Don't call this function if you intend to transfer more files.

Any uses of the handle after this function has been called and have returned, are illegal. This kills the handle and all memory associated with it!

Please don't try to close a running transfer.

Examples

Cleanup session:

```
# for every New call
$curl = MBS( "CURL.New"
```

```
# work with $curl
```

```
# you need a cleanup call on the end
MBS( "CURL.Cleanup"; $curl )
```

Download URL to temp file:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
# this is URL to download
Set Variable [ $url; Value:"https://www.monkeybreadsoftware.com/filemaker/test.txt" ]
# get file name from URL
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $URL ) ]
# now make temp file path
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.SystemTemporary" ); $name
) ]
# set URL to download
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; $url) ]
# open destination file
Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
```



```

# run transfer
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# close destination file
Set Variable [ $r; Value:MBS("CURL.CloseOutputFile"; $curl) ]
# get debug messages
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.380 [CURL.SetOptionWildCardMatch](#) 2309
- 61.387 [CURL.SetupOAuth](#) 2324
- 81.5 [Folders.System](#) 4173
- 81.7 [Folders.SystemTemporary](#) 4175
- 85.225 [GImage.Scale](#) 4628
- 86.2 [Hash.Digest](#) 4787
- 100.65 [JSON.Parse](#) 5333
- 121.1 [Path.AddPathComponent](#) 6135
- 121.5 [Path.LastPathComponent](#) 6144
- 143.25 [SendMail.PrepareCURL](#) 6910

Example Databases

- [CURL/CURL get and put/CURLS get and put](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/FTP/CURL FTP Download all Files in Directory](#)
- [CURL/FTP/CURL FTP Download File](#)
- [CURL/FTP/CURL FTP Upload File](#)
- [CURL/FTP/CURL FTP Upload](#)
- [CURL/SFTP/CURL sFTP Operations](#)
- [CURL/SFTP/CURL sFTP Upload](#)

61.9.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Let CURL handle cookie list](#)
- [Use root certificates included with FileMaker](#)
- [Upload email to Sent folder via IMAP](#)
- [Amazon S3 Upload with Mime Type and Permissions](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Query geolocation in FileMaker via MBS Plugin and Google Maps API](#)
- [Sending emails in FileMaker with MBS Plugin](#)
- [Tip of the day: FTP File Upload](#)
- [Swiss Post Webservice to verify addresses](#)

61.9.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 20](#)
- [Ausgabe 4/2016, Seite 19](#)
- [Ausgabe 4/2016, Seite 18](#)
- [Ausgabe 5/2014, Seite 26](#)

Created 18th August 2014, last changed 29th November 2019.

61.10 **CURL.CloseDebugFile**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.CloseDebugFile"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns "OK" on success or error message.

Description

To create file for debug messages use `CURL.CreateDebugOutputFile` function.

The plugin closes files automatically when you call `CURL.Cleanup`.

Do not call this method while a transfer is running.

In case close operation itself fails, the result is a number with the native file system error code.

Examples

Close debug log file:

```
MBS("CURL.CloseDebugFile"; $curl)
```

See also

- [61.9 CURL.Cleanup](#) 1772
- [61.11 CURL.CloseHeaderFile](#) 1776
- [61.12 CURL.CloseInputFile](#) 1777
- [61.13 CURL.CloseOutputFile](#) 1778
- [61.14 CURL.CreateDebugOutputFile](#) 1780

61.10.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.4pr1](#)
- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 7th December 2016.

61.11 CURL.CloseHeaderFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.CloseHeaderFile"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns "OK" on success or error message.

Description

To create file for header messages use CURL.CreateHeaderOutputFile function.

The plugin closes files automatically when you call CURL.Cleanup.

Do not call this method while a transfer is running.

In case close operation itself fails, the result is a number with the native file system error code.

Examples

Close header file:

```
MBS("CURL.CloseHeaderFile"; $curl)
```

See also

- [61.9 CURL.Cleanup](#) 1772
- [61.10 CURL.CloseDebugFile](#) 1775
- [61.15 CURL.CreateHeaderOutputFile](#) 1782

61.11.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr1](#)
- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 7th December 2016.

61.12 **CURL.CloseInputFile**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.CloseInputFile"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns "OK" on success or error message.

Description

To open file for reading data use `CURL.OpenInputFile` function.

The plugin closes files automatically when you call `CURL.Cleanup`.

Do not call this method while a transfer is running.

In case close operation itself fails, the result is a number with the native file system error code.

Examples

Close input file:

```
MBS("CURL.CloseInputFile"; $curl)
```

See also

- [61.1 CURL.AddInputFile](#) 1761
- [61.9 CURL.Cleanup](#) 1772
- [61.10 CURL.CloseDebugFile](#) 1775
- [61.13 CURL.CloseOutputFile](#) 1778
- [61.141 CURL.OpenInputFile](#) 1951
- [61.158 CURL.SetInputFile](#) 1991

61.12.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.4pr1](#)
- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 7th December 2016.

61.13 CURL.CloseOutputFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.CloseOutputFile"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns "OK" on success or error message.

Description

To create file for data use CURL.CreateOutputFile function.

The plugin closes files automatically when you call CURL.Cleanup.

Do not call this method while a transfer is running.

In case close operation itself fails, the result is a number with the native file system error code.

Examples

Download URL to temp file:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
# this is URL to download
Set Variable [ $url; Value:"https://www.monkeybreadsoftware.com/filemaker/test.txt" ]
# get file name from URL
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $URL ) ]
# now make temp file path
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.SystemTemporary" ); $name
) ]
# set URL to download
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; $url ) ]
# open destination file
Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
# run transfer
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# close destination file
Set Variable [ $r; Value:MBS("CURL.CloseOutputFile"; $curl) ]
# get debug messages
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Close output file:

```
MBS("CURL.CloseOutputFile"; $curl)
```

61.13. *CURL.CLOSEOUTPUTFILE* 1779

See also

- 61.9 *CURL.Cleanup* 1772
- 61.10 *CURL.CloseDebugFile* 1775
- 61.16 *CURL.CreateOutputFile* 1784
- 61.44 *CURL.GetDebugAsText* 1831
- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954
- 61.370 *CURL.SetOptionURL* 2288
- 81.5 *Folders.System* 4173
- 121.1 *Path.AddPathComponent* 6135
- 121.5 *Path.LastPathComponent* 6144

61.13.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr1](#)
- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 29th November 2019.

61.14 CURL.CreateDebugOutputFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.CreateDebugOutputFile"; curl; Path)

Parameters

curl

The CURL session handle.

\$curl

Path

Native file path.

C:\Documents\Test.Txt

Result Returns "OK" on success or error message.

Description

Debug messages are written to file if you use this functions and debug messages are always collected for calling `CURL.GetDebugAsText` after the transfer. This can be useful as you can have your FileMaker solution write a copy of debug messages in temporary file. If your client has problems, you can simply read messages from last transfer. If creation of the file fails, you get an error message back, but still your transfer will probably succeed.

Do not call this method while a transfer is running.

Logging to a file is useful to read messages in case FileMaker crashes while a transfer.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Write copy of debug messages to a file into temp folder on Mac:

```
MBS( "CURL.CreateDebugOutputFile"; $curl; "/tmp/LastMessages.txt" )
```

See also

- 61.10 `CURL.CloseDebugFile` 1775
- 61.15 `CURL.CreateHeaderOutputFile` 1782
- 61.16 `CURL.CreateOutputFile` 1784
- 61.44 `CURL.GetDebugAsText` 1831
- 61.154 `CURL.SetDebugWithProgress` 1983

61.14. <i>CURL.CREATEDEBUGOUTPUTFILE</i>	1781
• 61.379 <i>CURL.SetOptionVerbose</i>	2307
• 121.2 <i>Path.FileMakerPathToNativePath</i>	6139

Example Databases

- [CURL/FTP/CURL FTP Download File](#)
- [CURL/FTP/CURL FTP Upload File](#)
- [CURL/SFTP/CURL sFTP Upload File](#)

61.14.1 Blog Entries

- [Debugging problems on FileMaker Cloud for AWS](#)
- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 15th June 2016.

61.15 CURL.CreateHeaderOutputFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.CreateHeaderOutputFile"; curl; Path)

Parameters

curl

The CURL session handle.

\$curl

Path

Native file path.

C:\Documents\Test.Txt

Result Returns "OK" on success or error message.

Description

Header messages are written to file if you use this functions and header text are always collected for calling CURL.GetHeaderAsText after the transfer. This can be useful as you can have your FileMaker solution write a copy of headers in temporary file. If your client has problems, you can simply read headers from last transfer. If creation of the file fails, you get an error message back, but still your transfer will probably succeed.

Do not call this method while a transfer is running.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Write copy of header texts to a file into temp folder on Mac:

```
MBS( "CURL.CreateHeaderOutputFile"; $curl; "/tmp/LastHeaders.txt" )
```

See also

- 61.11 CURL.CloseHeaderFile 1776
- 61.14 CURL.CreateDebugOutputFile 1780
- 61.16 CURL.CreateOutputFile 1784
- 61.59 CURL.GetHeaderAsText 1850
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [CURL/FTP/CURL FTP Download File](#)
- [CURL/FTP/CURL FTP Upload File](#)

61.15.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 5th September 2014.

61.16 CURL.CreateOutputFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.CreateOutputFile"; curl; Path)

Parameters

curl

The CURL session handle.

\$curl

Path

Native file path.

C:\Documents\Test.Txt

Result Returns "OK" on success or error message.

Description

If you set MBS("CURL.SetOptionFileOnlyMode"; \$curl; 1), the data is only written to file and not available with CURL.GetResult* functions. If creation of the file fails, you get an error message back, but still your transfer will probably succeed.

Do not call this method while a transfer is running.

Sets CURL.SetOptionFileOnlyMode to 1 for version 9.3 or later automatically.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Write data to a file on Mac in temp folder:

```
MBS( "CURL.CreateOutputFile"; $curl; "/tmp/download.dat" )
```

Write data only to file on Windows:

```
MBS( "CURL.SetOptionFileOnlyMode"; $curl; 1 )
```

```
MBS( "CURL.CreateOutputFile"; $curl; "c:\download.dat" )
```

Download URL to temp file:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
```

```
# this is URL to download
```

```
Set Variable [ $url; Value:"https://www.monkeybreadsoftware.com/filemaker/test.txt" ]
```

```
# get file name from URL
```

```
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $URL ) ]
```

```

# now make temp file path
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.SystemTemporary" ); $name
) ]
# set URL to download
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.monkeybreadsoftware.com/file-
maker/test.txt" ) ]
# open destination file
Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
# run transfer
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# close destination file
Set Variable [ $r; Value:MBS("CURL.CloseOutputFile"; $curl) ]
# get debug messages
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Download file via SFTP to file on disk:

```

Set Variable [ $curl; Value:MBS("CURL.New") ]
# set download URL, e.g. sftp://monkeybreadsoftware.net/test.jpg
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; SFTP Download::URL ) ]
# build file path on disk and open output file
Set Variable [ $name; Value:GetValue(SFTP Download::FileName; 1) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; SFTP Download::FolderPath; $name ) ]
Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
# login only via password
Set Variable [ $result; Value:MBS( "CURL.SetOptionSSHAuthTypes"; $curl; 2+8 ) ]
# set credentials
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; SFTP Download::UserName ) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; SFTP Download::Password ) ]
# run transfer
Set Field [ SFTP Download::ErrorCode; MBS("CURL.Perform"; $curl) ]
# check debug log for errors
Set Field [ SFTP Download::Debug; MBS("CURL.GetDebugAsText"; $curl) ]
# free CURL session
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Batch download a lot of files via FTP/SFTP:

```

# URL field contains ftp or sftp URL with / on end.
# FileList field contains list of files to load
# OutputPath field contains folder path on disk
#
Set Variable [ $i; Value:1 ]
Set Variable [ $max; Value:ValueCount ( SFTP Download::FileList ) ]
#
Set Variable [ $curl; Value:MBS("CURL.New") ]

```

```

#
# login only via password
Set Variable [ $result; Value:MBS( "CURL.SetOptionSSHAAuthTypes"; $curl; 2+8 ) ]
#
# set credentials
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; SFTP Download::UserName ) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; SFTP Download::Password ) ]
#
# start loop over file lists
Loop
#
Set Variable [ $name; Value:GetValue ( SFTP Download::FileList ; $i ) ]
#
# build file path on disk and open output file
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; SFTP Download::OutputPath; $name ) ]
Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
#
# set URL with file name
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; SFTP Download::URL & $name ) ]
#
# run transfer
Set Field [ SFTP Download::ERGEBNIS; MBS("CURL.Perform"; $curl) ]
#
# query debug log
Set Field [ SFTP Download::DEBUG; MBS("CURL.GetDebugAsText"; $curl) ]
#
Set Variable [ $i; Value:$i +1 ]
Exit Loop If [ $max = $i ]
#
End Loop
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.14 CURL.CreateDebugOutputFile 1780
- 61.15 CURL.CreateHeaderOutputFile 1782
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954
- 61.265 CURL.SetOptionPassword 2145
- 61.322 CURL.SetOptionSSHAAuthTypes 2223
- 61.370 CURL.SetOptionURL 2288
- 81.7 Folders.SystemTemporary 4175

61.16. <i>CURL.CREATEOUTPUTFILE</i>	1787
• 121.2 Path.FileMakerPathToNativePath	6139
• 121.5 Path.LastPathComponent	6144

Example Databases

- [CURL/CURL Download on Server](#)
- [CURL/CURL Download Picture to file](#)
- [CURL/CURL Download Text to file](#)
- [CURL/FTP/CURL FTP Download all Files in Directory](#)
- [CURL/FTP/CURL FTP Download File](#)
- [CURL/FTP/CURL FTP Upload File](#)
- [CURL/SFTP/CURL sFTP Upload File](#)

61.16.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr5](#)
- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 29th November 2019.

61.17 CURL.ErrorCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.ErrorCode"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result The last error code from CURL.

Description

Typical error codes are 6 for a wrong domain name in the URL, 67 for wrong name/password combination, 60 for missing SSL settings, 1 for an unsupported protocol.

The list of possible error codes:

Examples

On success puts download in container, else shows failed:

```
Set Variable [ $errorCode; Value:MBS("CURL.ErrorCode"; $curl) ]
Set Variable [ $httpResult; Value:MBS("CURL.GetResponseCode"; $curl) ]
Set Field [ Download Async::Result; $errorCode ]
Set Field [ Download Async::DebugMessages; MBS("CURL.GetDebugAsText"; $curl) ]
If [ $errorCode = 0 and $httpResult = 200 ]
Set Field [ Download Async::Progress; "Done" ]
Set Field [ Download Async::Output; MBS("CURL.GetResultAsContainer"; $curl) ]
Else
Set Field [ Download Async::Progress; "Failed" ]
Set Field [ Download Async::Output; "" ]
End If
```

See also

- 61.7 CURL.Cancel 1770
- 61.44 CURL.GetDebugAsText 1831
- 61.111 CURL.GetResponseCode 1905
- 61.112 CURL.GetResultAsContainer 1907
- 61.134 CURL.IsRunning 1942

<i>61.17. CURL.ERRORCODE</i>	1789
• 61.146 CURL.ReceiveData	1968
• 61.147 CURL.ReceiveText	1970
• 61.150 CURL.SendData	1975
• 61.151 CURL.SendText	1977
• 61.184 CURL.SetOptionConnectOnly	2032

Example Databases

- [CURL/CURL Certificate Pinning](#)
- [CURL/CURL Low Level Sockets](#)
- [CURL/Download Async](#)
- [CURL/Email/Batch Emailer](#)

Created 18th August 2014, last changed 6th October 2015.

Name	Number	Description
CURLE_OK	0	No error.
CURLE_UNSUPPORTED_PROTOCOL	1	Unsupported protocol.
CURLE_FAILED_INIT	2	Initialization failed or option not available.
CURLE_URL_MALFORMAT	3	URL has wrong format.
CURLE_COULDNT_RESOLVE_PROXY	5	DNS didn't return proxy IP.
CURLE_COULDNT_RESOLVE_HOST	6	DNS didn't return IP for host.
CURLE_COULDNT_CONNECT	7	Connection failed.
CURLE_FTP_WEIRD_SERVER_REPLY	8	FTP error.
CURLE_REMOTE_ACCESS_DENIED	9	A service was denied by the server due to lack of access when login fails this is not returned.
CURLE_FTP_WEIRD_PASS_REPLY	11	FTP error.
CURLE_FTP_WEIRD_PASV_REPLY	13	FTP error.
CURLE_FTP_WEIRD_227_FORMAT	14	FTP error.
CURLE_FTP_CANT_GET_HOST	15	FTP error.
CURLE_FTP_COULDNT_SET_TYPE	17	FTP set command failed.
CURLE_PARTIAL_FILE	18	Only a part of the file was downloaded.
CURLE_FTP_COULDNT_RETR_FILE	19	File not found.
CURLE_QUOTE_ERROR	21	quote command failure
CURLE_HTTP_RETURNED_ERROR	22	HTTP returned an error.
CURLE_WRITE_ERROR	23	Write error.
CURLE_UPLOAD_FAILED	25	failed upload "command"
CURLE_READ_ERROR	26	couldn't open/read from file
CURLE_OUT_OF_MEMORY	27	Out Of memory
CURLE_OPERATION_TIMEDOUT	28	the timeout time was reached
CURLE_FTP_PORT_FAILED	30	FTP PORT operation failed
CURLE_FTP_COULDNT_USE_REST	31	the REST command failed
CURLE_RANGE_ERROR	33	RANGE "command" didn't work
CURLE_HTTP_POST_ERROR	34	HTTP Post failed.
CURLE_SSL_CONNECT_ERROR	35	wrong when connecting with SSL
CURLE_BAD_DOWNLOAD_RESUME	36	couldn't resume download
CURLE_FILE_COULDNT_READ_FILE	37	Failed to read file.
CURLE_LDAP_CANNOT_BIND	38	LDAP can't connect.
CURLE_LDAP_SEARCH_FAILED	39	LDAP Search failed.
CURLE_FUNCTION_NOT_FOUND	41	Function not found.
CURLE_ABORTED_BY_CALLBACK	42	Transfer aborted with CURL.Cancel.
CURLE_BAD_FUNCTION_ARGUMENT	43	Bad parameters.
CURLE_INTERFACE_FAILED	45	CURL.OptionInterface failed
CURLE_TOO_MANY_REDIRECTS	47	catch endless re-direct loops
CURLE_UNKNOWN_TELNET_OPTION	48	User specified an unknown option
CURLE_TELNET_OPTION_SYNTAX	49	Malformed telnet option
CURLE_PEER_FAILED_VERIFICATION	51	peer's certificate or fingerprint wasn't verified fine
CURLE_GOT_NOTHING	52	when this is a specific error
CURLE_SSL_ENGINE_NOTFOUND	53	SSL crypto engine not found
CURLE_SSL_ENGINE_SETFAILED	54	can not set SSL crypto engine as default
CURLE_SEND_ERROR	55	failed sending network data
CURLE_RECV_ERROR	56	failure in receiving network data
CURLE_SSL_CERTPROBLEM	58	problem with the local certificate
CURLE_SSL_CIPHER	59	couldn't use specified cipher
CURLE_SSL_CACERT	60	problem with the CA cert (path?)
CURLE_BAD_CONTENT_ENCODING	61	Unrecognized transfer encoding
CURLE_LDAP_INVALID_URL	62	Invalid LDAP URL
CURLE_FILESIZE_EXCEEDED	63	Maximum file size exceeded
CURLE_USE_SSL_FAILED	64	Requested FTP SSL level failed
CURLE_SEND_FAIL_REWIND	65	Sending the data requires a rewind that failed
CURLE_SSL_ENGINE_INITFAILED	66	failed to initialise ENGINE
CURLE_LOGIN_DENIED	67	user, password or similar was not accepted and we failed to login
CURLE_TFTP_NOTFOUND	68	file not found on server
CURLE_TFTP_PERM	69	permission problem on server
CURLE_REMOTE_DISK_FULL	70	out of disk space on server
CURLE_TFTP_ILLEGAL	71	Illegal TFTP operation
CURLE_TFTP_UNKNOWNID	72	Unknown transfer ID
CURLE_REMOTE_FILE_EXISTS	73	File already exists
CURLE_TFTP_NOSUCHUSER	74	No such user
CURLE_CONV_FAILED	75	conversion failed
CURLE_CONV_REQD	76	caller must register conversion callbacks
CURLE_SSL_CACERT_BADFILE	77	could not load CACERT file, missing or wrong format
CURLE_REMOTE_FILE_NOT_FOUND	78	remote file not found
CURLE_SSH	79	error from the SSH layer, somewhat generic so the error message will be of interest when this has happened
CURLE_SSL_SHUTDOWN_FAILED	80	Failed to shut down the SSL connection
CURLE_AGAIN	81	socket is not ready for send/rcv, wait till it's ready and try again.
CURLE_SSL_CRL_BADFILE	82	could not load CRL file, missing or wrong format.
CURLE_SSL_ISSUER_ERROR	83	Issuer check failed.
CURLE_FTP_PRET_FAILED	84	a PRET command failed
CURLE_RTSP_CSEQ_ERROR	85	mismatch of RTSP CSeq numbers
CURLE_RTSP_SESSION_ERROR	86	mismatch of RTSP Session Identifiers

61.18 CURL.ErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.ErrorMessage"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result The last CURL error message.

Description**Examples**

Query Error Message:

```
Set Variable [ $ErrorMessage; Value:MBS( "CURL.ErrorMessage"; $curl ) ]
```

```
Show Custom Dialog [ "Transfer error"; $ErrorMessage ]
```

See also

- 61.134 CURL.IsRunning

1942

Example Databases

- [CURL/WebServices/WeatherBit.io test](#)

Created 18th August 2014, last changed 8th December 2016.

61.19 CURL.Features

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	10.1	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Features")

Result Returns JSON or error.

Description

Returns JSON with features enabled for the CURL version in use.

61.19.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr4](#)

Created 12nd February 2020, last changed 12nd February 2020.

61.20 CURL.FileInfos

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FileInfos"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns JSON or error.

Description

Requires wild card being enabled (CURL.SetOptionWildCardMatch) and an URL with a pattern, e.g. * at the end.

Only for FTP and SFTP protocols.

The JSON is an array of objects. Each object includes the following values:

As various servers return different listings, we can not always know all fields.

Some servers don't give the year, so we assume this year and last year depending on month and day.

For MBS Plugin 9.0 or newer you can alternatively run a custom request "MLSD" and then get file infos, too.

Examples

Query file list with wildcard:

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $r ; Value: MBS( "CURL.SetOptionWildCardMatch"; $curl; 1 ) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL & "*" ) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionVerbose"; $curl; 1) ]
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::listing ; MBS( "JSON.Colorize"; MBS("CURL.FileInfos"; $curl) ) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]
```

Query file list with MLSD:

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $r ; Value: MBS( "CURL.SetOptionWildCardMatch"; $curl; 1 ) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL & "*" ) ]
```

hasFileName	Whether file name is known.
hasFiletype	Whether file type is known.
hasTime	Whether time is known.
hasPerm	Whether file permissions are known.
hasUID	Whether UID is known.
hasGID	Whether GID is known.
hasSize	Whether file size is known.
hasHardLinkCount	Whether hard link count is known.
FileName	The file name.
FileType	The file type. Usually file, directory or symlink.
Time	The time as returned from server.
Perm	The permissions as returned from server.
User	The user name as returned from server.
Group	The group name as returned from server.
Target	The target file path of the symbolic link.
HardLinks	The number of hard links to this file.
Size	The file size in bytes.
UID	The user ID if known.
GID	The group ID if known.
Permissions	The file permissions as octal number as text, e.g. 755.
TimeValue	The unix time stamp.
Year	The year of the time, if available.
Month	The month of the time, if available.
Day	The day of the time, if available.
Hour	The hour of the time, if available.
Minute	The minute of the time, if available.
Second	The second of the time, if available.

```

Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionVerbose"; $curl; 1) ]
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::listing ; MBS( "JSON.Colorize"; MBS("CURL.FileInfos"; $curl)) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.9 `CURL.Cleanup` 1772
- 61.44 `CURL.GetDebugAsText` 1831
- 61.139 `CURL.New` 1947
- 61.142 `CURL.Perform` 1954

<i>61.20. CURL.FILEINFOS</i>	1795
• 61.265 CURL.SetOptionPassword	2145
• 61.370 CURL.SetOptionURL	2288
• 61.378 CURL.SetOptionUsername	2305
• 61.379 CURL.SetOptionVerbose	2307
• 61.380 CURL.SetOptionWildCardMatch	2309
• 100.15 JSON.Colorize	5261

Example Databases

- [CURL/FTP/CURL FTP Directory Listing](#)

61.20.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr5](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)

Created 16th October 2018, last changed 20th January 2020.

61.21 CURL.FormAddKeyContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormAddKeyContainer"; curl; name; filename; container)

Parameters

curl

The CURL session handle.
\$curl

name

The name of the form field.
"city"

filename

The file name for this file.
"test.txt"

container

The file content as a container value. Can be PDF, PNG, GIF, BMP, JPEG or other file content.

Result Returns "OK" or error code.

Description

This adds file form field with a given name and value.

Please call CURL.FormFinish after you added all your fields and before you call CURL.Perform.

Examples

Add file from container:

```
MBS("CURL.FormAddKeyContainer"; $curl; "Attachment"; "paris.jpg"; Test::test)
```

See also

- 61.22 CURL.FormAddKeyContainerContentType 1798
- 61.26 CURL.FormAddKeyTextContentType 1806
- 61.30 CURL.FormFinish 1813
- 61.142 CURL.Perform 1954
- 61.265 CURL.SetOptionPassword 2145

61.21.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr6](#)

61.21. *CURL.FORMADDKEYCONTAINER*

1797

Created 18th August 2014, last changed 21st August 2014.

61.22 CURL.FormAddKeyContainerContentType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormAddKeyContainerContentType"; curl; name; filename; container; ContentType)

Parameters

curl

The CURL session handle.

\$curl

name

The name of the form field.

"city"

filename

The file name for this file.

"test.txt"

container

The file content as a container value. Can be PDF, PNG, GIF, BMP, JPEG or other file content.

ContentType

The content type for this file.

"text/plain"

Result Returns "OK" or error code.

Description

This adds file form field with a given name and value.

Please call CURL.FormFinish after you added all your fields and before you call CURL.Perform.

Examples

Add file from container:

```
MBS("CURL.FormAddKeyContainerContentType"; $curl; "Attachment"; "paris.jpg"; Test::test; "image/jpeg")
```

Use netverify.com to check a driver license:

```
# Setup transfer
```

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://netverify.com/api/netverify/v2/fast-fill") ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionVerbose"; $curl; 1) ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionUserName"; $curl; "25D63FB16966473DA2416454FD468BBD") ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; "4356789038498914948018924658901622") ]
```

```

]
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "Accept: application/json"; "Expect:") ]
Set Variable [ $metadata; Value:" { \"type\": \"DRIVING_LICENSE\", \"country\": \"USA\" } " ]
Set Variable [ $r; Value:MBS("CURL.FormAddKeyValue";$curl; "metadata"; $metadata) ]
Set Variable [ $r; Value:MBS("CURL.FormAddKeyContainerContentType";$curl; "backsideImage"; "test.jpg"; Donor Docs::DocPDF; "image/jpeg") ]
Set Variable [ $r; Value:MBS("CURL.FormFinish";$curl) ]
# Run transfer
Set Field [ Donor Docs::ResultCodePost; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ Donor Docs::DebugTextPost; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Field [ Donor Docs::ResultTextPost; $result ]

```

See also

- 61.24 *CURL.FormAddKeyFileContentType* 1802
- 61.27 *CURL.FormAddKeyValue* 1808
- 61.28 *CURL.FormAddKeyValueContentType* 1810
- 61.30 *CURL.FormFinish* 1813
- 61.44 *CURL.GetDebugAsText* 1831
- 61.121 *CURL.GetResultAsText* 1926
- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954
- 61.230 *CURL.SetOptionHTTPHeader* 2098
- 61.265 *CURL.SetOptionPassword* 2145

Example Databases

- [CURL/WebServices/AdobeSign WebService](#)

61.22.1 Blog Entries

- [Using NetVerify web service with FileMaker](#)
- [MBS Filemaker Plugin, version 2.6pr6](#)

Created 18th August 2014, last changed 12nd July 2019.

61.23 CURL.FormAddKeyFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormAddKeyFile"; curl; name; Path)

Parameters

curl

The CURL session handle.

\$curl

name

The name of the form field.

"city"

Path

Native file path.

"/Users/cs/Desktop/test.txt"

Result Returns "OK" or error code.

Description

This adds a file with the given key name into the form.

Please call CURL.FormFinish after you added all your fields and before you call CURL.Perform.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Add image file to form:

```
MBS("CURL.FormAddKeyFile"; $curl; "Attachment"; "/Users/cs/desktop/Paris.jpg")
```

See also

- 61.24 CURL.FormAddKeyFileContentType 1802
- 61.25 CURL.FormAddKeyText 1804
- 61.27 CURL.FormAddKeyValue 1808
- 61.30 CURL.FormFinish 1813
- 61.142 CURL.Perform 1954
- 121.2 Path.FileMakerPathToNativePath 6139

61.23.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr6](#)

Created 18th August 2014, last changed 5th September 2014.

61.24 CURL.FormAddKeyFileContentType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormAddKeyFileContentType"; curl; name; Path; ContentType)

Parameters

curl

The CURL session handle.

\$curl

name

The name of the form field.

"city"

Path

Native file path.

"/Users/cs/Desktop/test.txt"

ContentType

The content type for this file.

"text/plain"

Result Returns "OK" or error code.

Description

This adds a file with the given key name into the form.

Please call `CURL.FormFinish` after you added all your fields and before you call `CURL.Perform`.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Add image file to form:

```
MBS("CURL.FormAddKeyFileContentType"; $curl; "Attachment"; "/Users/cs/desktop/Paris.jpg"; "image/jpeg")
```

See also

- 61.22 `CURL.FormAddKeyContainerContentType` 1798
- 61.23 `CURL.FormAddKeyFile` 1800
- 61.26 `CURL.FormAddKeyTextContentType` 1806
- 61.28 `CURL.FormAddKeyValueContentType` 1810

<i>61.24. CURL.FORMADDKEYFILECONTENTTYPE</i>	1803
• 61.30 CURL.FormFinish	1813
• 61.142 CURL.Perform	1954
• 121.2 Path.FileMakerPathToNativePath	6139

61.24.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr6](#)

Created 18th August 2014, last changed 5th September 2014.

61.25 CURL.FormAddKeyText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormAddKeyText"; curl; name; filename; text { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

name

The name of the form field.

"city"

filename

The file name for this file.

"test.txt"

text

The text for the text file.

"Hello World"

Encoding

Optional

The text encoding. Default is native.

UTF8

Result Returns "OK" or error code.

Description

This adds simply text file field with a given name and value.

Please call CURL.FormFinish after you added all your fields and before you call CURL.Perform.

Examples

Add a text file to form:

```
MBS("CURL.FormAddKeyText"; $curl; "Attachment"; "test.txt"; "Hello World"; "UTF-8")
```

See also

- 61.23 CURL.FormAddKeyFile 1800
- 61.26 CURL.FormAddKeyTextContentType 1806
- 61.27 CURL.FormAddKeyValue 1808
- 61.30 CURL.FormFinish 1813

<i>61.25. CURL.FORMADDKEYTEXT</i>	1805
• 61.55 CURL.GetFormData	1845
• 61.142 CURL.Perform	1954

61.25.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr6](#)

Created 18th August 2014, last changed 12nd November 2015.

61.26 `CURL.FormAddKeyTextContentType`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormAddKeyTextContentType"; curl; name; filename; text; Encoding; ContentType)

Parameters

curl

The CURL session handle.

\$curl

name

The name of the form field.

"city"

filename

The file name for this file.

"test.txt"

text

The text for the text file.

"Hello World"

Encoding

The text encoding. Default is native.

UTF8

ContentType

The content type for this file.

"text/plain"

Result Returns "OK" or error code.

Description

This adds text file form field with a given name and value.

Please call `CURL.FormFinish` after you added all your fields and before you call `CURL.Perform`.

Examples

Add text file:

```
MBS("CURL.FormAddKeyTextContentType"; $curl; "Attachment"; "test.txt"; "Hello World"; "UTF-8"; "text/plain")
```

Add PDF container:

```
Set Variable [ $r; Value: MBS( "CURL.FormAddKeyContainerContentType"; $curl; "file"; "document.pdf"; Test::MyContainer; "application/pdf" ) ]
```

61.26. *CURL.FORMADDKEYTEXTCONTENTTYPE* 1807
Set Variable [\$r; Value: MBS("CURL.FormFinish"; Handle)]

See also

- 61.21 *CURL.FormAddKeyContainer* 1796
- 61.22 *CURL.FormAddKeyContainerContentType* 1798
- 61.24 *CURL.FormAddKeyFileContentType* 1802
- 61.25 *CURL.FormAddKeyText* 1804
- 61.28 *CURL.FormAddKeyValueContentType* 1810
- 61.30 *CURL.FormFinish* 1813
- 61.142 *CURL.Perform* 1954

Example Databases

- [CURL/CURL Send Form](#)

61.26.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr6](#)

Created 18th August 2014, last changed 21st September 2018.

61.27 CURL.FormAddKeyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormAddKeyValue"; curl; Name; Value)

Parameters

curl

The CURL session handle.

\$curl

Name

The name of the form field.

"city"

Value

The value for the form field.

"Nickenich"

Result Returns "OK" or error code.

Description

This adds simply form field with a given name and value.

For text encoding UTF-8 is used here.

Please call CURL.FormFinish after you added all your fields and before you call CURL.Perform.

Examples

Sets city in a form

```
MBS( "CURL.FormAddKeyValue"; $curl; "City"; "Nickenich" )
```

Build form:

```
MBS( "CURL.FormAddKeyValue"; $curl; "login"; "testuser" )
```

```
MBS( "CURL.FormAddKeyValue"; $curl; "password"; "xxx" )
```

```
MBS( "CURL.FormFinish"; $curl )
```

See also

- 61.22 CURL.FormAddKeyContainerContentType 1798
- 61.23 CURL.FormAddKeyFile 1800
- 61.25 CURL.FormAddKeyText 1804
- 61.28 CURL.FormAddKeyValueContentType 1810

61.27. <i>CURL.FORMADDKEYVALUE</i>	1809
• 61.30 <i>CURL.FormFinish</i>	1813
• 61.55 <i>CURL.GetFormData</i>	1845
• 61.142 <i>CURL.Perform</i>	1954
• 61.265 <i>CURL.SetOptionPassword</i>	2145
• 61.272 <i>CURL.SetOptionPostFields</i>	2158

Example Databases

- [CURL/CURL Send Form](#)
- [CURL/WebServices/TinyURL](#)
- [Third Party/Google OAUTH 2 example](#)

61.27.1 Blog Entries

- [Using NetVerify web service with FileMaker](#)

Created 18th August 2014, last changed 12nd February 2015.

61.28 `CURL.FormAddKeyValueContentType`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormAddKeyValueContentType"; curl; name; value; contenttype)

Parameters

curl

The CURL session handle.

\$curl

name

The name of the form field.

"city"

value

The value for the form field.

"<html></html>"

contenttype

The mime content type for this field.

"text/html"

Result Returns "OK" or error code.

Description

This adds simply form field with a given name and value.

For text encoding UTF-8 is used here.

Please call `CURL.FormFinish` after you added all your fields and before you call `CURL.Perform`.

You can use `Text.FileExtensionToMimeType` to find the content type for a file extension.

Examples

Sets comment field with text file:

```
MBS("CURL.FormAddKeyValueContentType"; $curl; "Comment"; "Hello World"; "text/plain")
```

See also

- 61.22 `CURL.FormAddKeyContainerContentType` 1798
- 61.24 `CURL.FormAddKeyFileContentType` 1802
- 61.26 `CURL.FormAddKeyTextContentType` 1806
- 61.27 `CURL.FormAddKeyValue` 1808
- 61.30 `CURL.FormFinish` 1813

<i>61.28. CURL.FORMADDKEYVALUECONTENTTYPE</i>	1811
• 61.142 CURL.Perform	1954
• 164.37 Text.FileExtensionToMimeType	7828

Created 18th August 2014, last changed 2nd October 2015.

61.29 CURL.FormClear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	9.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormClear"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns OK or error.

Description

You usually don't need to call this as CURL.Perform clears form data when transfer is done.

See also

- 61.142 CURL.Perform

1954

61.29.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr3](#)

Created 12nd December 2018, last changed 12nd December 2018.

61.30 CURL.FormFinish

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.FormFinish"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns "OK" or error code.

Description

The form is assigned to the HTTPPost property.

Examples

Sets form values and finishes:

```
MBS( "CURL.FormAddKeyValue"; $curl; "login"; "testuser" )
MBS( "CURL.FormAddKeyValue"; $curl; "password"; "xxx" )
MBS( "CURL.FormFinish"; $curl )
```

Add PDF container:

```
Set Variable [ $r; Value: MBS( "CURL.FormAddKeyContainerContentType"; $curl; "file"; "document.pdf";
Test::MyContainer; "application/pdf" ) ]
Set Variable [ $r; Value: MBS( "CURL.FormFinish"; $curl ) ]
```

See also

- 61.21 CURL.FormAddKeyContainer 1796
- 61.22 CURL.FormAddKeyContainerContentType 1798
- 61.24 CURL.FormAddKeyFileContentType 1802
- 61.25 CURL.FormAddKeyText 1804
- 61.26 CURL.FormAddKeyTextContentType 1806
- 61.27 CURL.FormAddKeyValue 1808
- 61.28 CURL.FormAddKeyValueContentType 1810
- 61.55 CURL.GetFormData 1845
- 61.265 CURL.SetOptionPassword 2145

- 61.272 CURL.SetOptionPostFields

Example Databases

- [CURL/CURL Send Form](#)
- [CURL/WebServices/AdobeSign Webservice](#)
- [CURL/WebServices/TinyURL](#)
- [Third Party/Google OAUTH 2 example](#)

61.30.1 Blog Entries

- [Using NetVerify web service with FileMaker](#)

Created 18th August 2014, last changed 3th October 2019.

61.31 CURL.GetActiveSocket

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetActiveSocket"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns number or error.

Description

If the socket is no longer valid, -1 is returned. When you finish working with the socket, the `CURL.Cleanup` closes the socket and cleanup other resources associated with the handle. This is typically used in combination with `CURL.SetOptionConnectOnly`.

This option was added as a replacement for `CURL.GetLastSocket` since that one isn't working on all platforms.

See also

- 61.9 `CURL.Cleanup` 1772
- 61.64 `CURL.GetLastSocket` 1857
- 61.184 `CURL.SetOptionConnectOnly` 2032

Created 15th April 2018, last changed 15th April 2018.

61.32 CURL.GetAppConnectTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetAppConnectTime"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This time is most often very near to the PRETRANSFER time, except for cases such as HTTP pipelining where the pretransfer time can be delayed due to waits in line for the pipeline and more.

See also

- 61.39 CURL.GetConnectTime 1824

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.33 **CURL.GetBatchCurrentFileName**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetBatchCurrentFileName"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns text or error.

Description

For a batch download with wildcard match, you can query current file name to show in progress dialog.

Only available while downloading a file.

See also

- 61.34 [CURL.GetBatchCurrentFilePath](#)

1818

61.33.1 **Blog Entries**

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 19th December 2016, last changed 19th December 2016.

61.34 CURL.GetBatchCurrentFilePath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetBatchCurrentFilePath"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns text or error.

Description

For a batch download with wildcard match, you can query current file path to show in progress dialog.

Only available while downloading a file.

Returns the native path to the destination file.

See also

- 61.33 CURL.GetBatchCurrentFileName

1817

61.34.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 19th December 2016, last changed 20th December 2016.

61.35 **CURL.GetBatchDestinationPath**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetBatchDestinationPath"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns path or error.

Description

Returns the native path to the destination folder.

See also

- 61.152 [CURL.SetBatchDestinationPath](#)

1979

61.35.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 19th December 2016, last changed 20th December 2016.

61.36 CURL.GetBatchFileNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetBatchFileNames"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns list or error.

Description

While or after transfer you get query list of file names here.

See also

- 61.152 CURL.SetBatchDestinationPath 1979
- 61.380 CURL.SetOptionWildCardMatch 2309

Example Databases

- [CURL/FTP/CURL FTP Download all Files in Directory](#)

61.36.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 19th December 2016, last changed 19th December 2016.

61.37 **CURL.GetCertInfo**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetCertInfo"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns text or error.

Description

Returns a list of lists with infos.

Examples

Query certificate information for MBS website:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.monkeybreadsoftware.de/") ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionCertInfo"; $curl; 1) ]
```

```
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
```

```
Set Field [ CURL Test::Text; MBS("CURL.GetCertInfo"; $curl) ]
```

```
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- [61.9 CURL.Cleanup](#) 1772
- [61.139 CURL.New](#) 1947
- [61.142 CURL.Perform](#) 1954
- [61.183 CURL.SetOptionCertInfo](#) 2030
- [61.370 CURL.SetOptionURL](#) 2288

Example Databases

- [CURL/CURL Certificate Pinning](#)

61.37.1 **Blog Entries**

- [Using pinned certificates with our CURL plugin functions](#)

- Use root certificates included with FileMaker
- MBS FileMaker Plugin, version 7.4pr2

Created 12nd July 2015, last changed 18th February 2016.

61.38 **CURL.GetConditionUnmet**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetConditionUnmet"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

see `CURL.SetOptionTimeCondition`. Alas, if this returns a 1 you know that the reason you didn't get data in return is because it didn't fulfill the condition. You get a zero if the condition instead was met.

See also

- 61.364 `CURL.SetOptionTimeCondition` 2281

Created 18th August 2014, last changed 18th August 2014.

61.39 CURL.GetConnectTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetConnectTime"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

See also

- 61.32 CURL.GetAppConnectTime 1816
- 61.42 CURL.GetContentType 1827
- 61.108 CURL.GetRedirectTime 1901

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.40 **CURL.GetContentLengthDownload**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetContentLengthDownload"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This is the value read from the Content-Length: field. Returns -1 if the size isn't known.

See also

- 61.41 [CURL.GetContentLengthUpload](#)

1826

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.41 CURL.GetContentLengthUpload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetContentLengthUpload"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

Returns -1 if the size isn't known.

See also

- 61.40 CURL.GetContentLengthDownload

1825

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.42 **CURL.GetContentType**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetContentType"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This is the value read from the Content-Type: field. If you get an empty string, it means that the server didn't send a valid Content-Type header or that the protocol used doesn't support this.

See also

- 61.39 [CURL.GetConnectTime](#)

1824

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.43 CURL.GetCookieList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetCookieList"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

If there are no cookies (cookies for the handle have not been enabled or simply none have been received), the list is just an empty string.

Examples

Perform SOAP service with login and use cookies in second request:

```
# The URL of the service
Set Variable [ $url ; Value: "http://somedomain.com/PartnerService17.asmx" ]
# Build XML for SOAP Login request, e.g. with MBS XML functions or simply substitute()
Set Variable [ $xml ; Value: "<?xml version=\"1.0\" encoding=\"utf-8\"?><soap:Envelope xmlns:xsi=\"http://www.w3.org
instance\" xmlns:xsd=\"http://www.w3.org/2001/XMLSchema\" xmlns:soap=\"http://schemas.xmlsoap.org/soap/en-
velope/\"><soap:Body></soap:Body>..." ]
Set Field [ Curl_Test::XML ; $xml ]
# The SOAP action to use
Set Variable [ $action ; Value: "http://somedomain.com/partner/loginWithLicenceUnlockInfo" ]
#
# Setup transfer
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; $url) ]
# Put SOAP action and XML data type in the headers
Set Variable [ $result ; Value: MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml;
charset=utf-8"; "Expect: "; "SOAPAction: \"\& $action & \"") ]
# Ask CURL to manage cookies
Set Variable [ $result ; Value: MBS("CURL.SetOptionCookieFile"; $curl; "" ) ]
# Set the payload for the login transfer
Set Variable [ $result ; Value: MBS("CURL.SetOptionPostFields"; $curl; $xml) ]
# Run transfer
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
# Let's take a look on the cookie list
Set Variable [ $$cookie ; Value: MBS("CURL.GetCookieList"; $curl ) ]
Set Field [ Curl_Test::Cookie ; $$cookie ]
# Check result
Set Field [ Curl_Test::Debug ; MBS("CURL.GetDebugAsText"; $curl) ]
```



```

Set Variable [ $result ; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Field [ Curl_Test::Resultat ; $result ]
#
# Reuse same $curl for second request reusing existing cookies
#
# Make new XML for second request
Set Variable [ $npk ; Value: "103" ]
# Build XML for SOAP Login request, e.g. with MBS XML functions or simply substitute()
Set Variable [ $xml ; Value: "<soap:Envelope xmlns:xsi=\"http://www.w3.org/2001/XMLSchema-instance\"
xmlns:xsd=\"http://www.w3.org/2001/XMLSchema\" xmlns:soap=\"http://schemas.xmlsoap.org/soap/en-
velope/\"><soap:Body></soap:Body></soap:Envelope>" ]
Set Field [ Curl_Test::XML ; $xml ]
Set Variable [ $action ; Value: "http://somedomain.com/partner/queryInfo" ]
#
# Setup transfer
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; $url) ]
# Put SOAP action and XML data type in the headers
Set Variable [ $result ; Value: MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml;
charset=utf-8"; "Expect: "; "SOAPAction: \"& $action & \"") ]
# Set the payload for the second transfer
Set Variable [ $result ; Value: MBS("CURL.SetOptionPostFields"; $curl; $xml) ]
# Run transfer
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ Curl_Test::Debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Field [ Curl_Test::Resultat ; $result ]
# Finally end curl session
Set Variable [ $r ; Value: MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.9 *CURL.Cleanup* 1772
- 61.44 *CURL.GetDebugAsText* 1831
- 61.121 *CURL.GetResultAsText* 1926
- 61.139 *CURL.New* 1947
- 61.188 *CURL.SetOptionCookie* 2039
- 61.189 *CURL.SetOptionCookieFile* 2041
- 61.230 *CURL.SetOptionHTTPHeader* 2098
- 61.270 *CURL.SetOptionPost* 2153
- 61.272 *CURL.SetOptionPostFields* 2158
- 61.370 *CURL.SetOptionURL* 2288

Example Databases

- [CURL/CURL Download Picture with Info](#)

61.43.1 Blog Entries

- [Let CURL handle cookie list](#)

Created 18th August 2014, last changed 28th February 2019.

61.44 CURL.GetDebugAsText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetDebugAsText"; curl { ; Encoding; preserveLineEndings })

Parameters**curl**

The CURL session handle.

\$curl

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

preserveLineEndings

Optional

Whether to change line endings to CR for FileMaker. By default (0) we change the line endings to CR, so FileMaker has no trouble. Pass 1 to keep whatever line endings are there.

0

Result The headers as text.

Description

You are responsible for detecting decoding.

Use `CURL.SetOptionVerbose` to enable debug messages.

Plugin version 5.2 and newer replace newlines automatically for you to match what FileMaker uses (Mac line endings).

See `CURL.SetDebugWithData`, `CURL.SetDebugWithProgress` and `CURL.SetDebugWithTime` to include data/time in the debug log.

Examples

Get debug messages:

```
MBS("CURL.GetDebugAsText"; $curl)
```

See also

- 61.121 `CURL.GetResultAsText` 1926
- 61.370 `CURL.SetOptionURL` 2288
- 61.379 `CURL.SetOptionVerbose` 2307
- 61.386 `CURL.SetupAWS` 2320

- 61.387 CURL.SetupOAuth 2324
- 61.389 CURL.UseSystemCertificates 2330
- 85.225 GImage.Scale 4628
- 100.52 JSON.GetPathItem 5314
- 100.65 JSON.Parse 5333
- 143.25 SendMail.PrepareCURL 6910

Example Databases

- [CURL/CURL Certificate Pinning](#)
- [CURL/CURL Download on Server](#)
- [CURL/CURL Download Text to file](#)
- [CURL/CURL Download to Container](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/FTP/CURL FTP Upload multiple files](#)
- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/magento older](#)
- [CURL/WebServices/Sales Force Test](#)

61.44.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [MBS FileMaker Plugin, version 9.3pr6](#)
- [Debugging problems on FileMaker Cloud for AWS](#)
- [Let CURL handle cookie list](#)
- [Use root certificates included with FileMaker](#)
- [Upload email to Sent folder via IMAP](#)
- [Amazon S3 Upload with Mime Type and Permissions](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Query geolocation in FileMaker via MBS Plugin and Google Maps API](#)
- [Sending emails in FileMaker with MBS Plugin](#)

61.44.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 20
- Ausgabe 4/2016, Seite 19
- Ausgabe 4/2016, Seite 18
- Ausgabe 5/2014, Seite 26

Created 18th August 2014, last changed 16th July 2019.

61.45 CURL.GetDebugLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetDebugLength"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Length in bytes.

Description

Examples

Query length. Shows 11 for "Hello World" above:

```
MBS("CURL.GetDebugLength"; $curl)
```

See also

- 61.60 CURL.GetHeaderLength 1852
- 61.63 CURL.GetInputLength 1856
- 61.122 CURL.GetResultLength 1930

Created 18th August 2014, last changed 18th August 2014.

61.46 CURL.GetDebugWithData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetDebugWithData"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns 0, 1 or error.

Description

By default we don't include all the data in the debug log and just the messages.

Returns 1 if data is included or 0 if not.

See also

- [61.48 CURL.GetDebugWithTime](#) 1837
- [61.153 CURL.SetDebugWithData](#) 1981
- [61.155 CURL.SetDebugWithTime](#) 1985

Example Databases

- [CURL/SFTP/CURL sFTP Upload File](#)

61.46.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 14th May 2016, last changed 15th June 2016.

61.47 CURL.GetDebugWithProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.3	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetDebugWithProgress"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns 1, 0 or error.

Description

Returns 1 if enabled or 0 if disabled.

See also

- 61.154 CURL.SetDebugWithProgress

1983

61.47.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 15th June 2016, last changed 15th June 2016.

61.48 CURL.GetDebugWithTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetDebugWithTime"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns 0, 1 or error.

Description

By default this is off.

See also

- 61.46 [CURL.GetDebugWithData](#) 1835
- 61.153 [CURL.SetDebugWithData](#) 1981
- 61.155 [CURL.SetDebugWithTime](#) 1985

61.48.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 14th May 2016, last changed 15th June 2016.

61.49 CURL.GetEffectiveURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetEffectiveURL"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

Examples

Follow redirection and get effective URL:

```
# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionFollowLocation"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionMaxRedirs"; $curl; 3) ]
# RUN now
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::newURL; MBS("CURL.GetEffectiveURL"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 CURL.Cleanup 1772
- 61.44 CURL.GetDebugAsText 1831
- 61.121 CURL.GetResultAsText 1926
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954
- 61.221 CURL.SetOptionFollowLocation 2086
- 61.257 CURL.SetOptionMaxRedirs 2133

61.49. *CURL.GETEFFECTIVEURL*

1839

- 61.370 *CURL.SetOptionURL*

2288

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 24th May 2017.

61.50 CURL.GetFTPEntryPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetFTPEntryPath"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

That is the initial path libcurl ended up in when logging on to the remote FTP server. This stores a NULL as pointer if something is wrong.

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.51 CURL.GetFileTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetFileTime"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

If you get an empty result, it can be because of many reasons (unknown, the server hides it or the server doesn't support the command that tells document time etc) and the time of the document is unknown. Note that you must tell the server to collect this information before the transfer is made, by using the `CURL.SetOptionFileTime` or you will unconditionally get an empty result back.

See also

- 61.220 `CURL.SetOptionFileTime`

2085

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.52 CURL.GetFinishedEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.1	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetFinishedEvaluate"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns text or error.

Description

See also

- 61.53 CURL.GetFinishedFileName 1843
- 61.156 CURL.SetFinishedEvaluate 1987

61.52.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 6th September 2017.

61.53 **CURL.GetFinishedFileName**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetFinishedFileName"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns file name or error.

Description

See also

- 61.52 [CURL.GetFinishedEvaluate](#) 1842
- 61.54 [CURL.GetFinishedScriptName](#) 1844
- 61.156 [CURL.SetFinishedEvaluate](#) 1987

Created 12nd July 2015, last changed 12nd July 2015.

61.54 CURL.GetFinishedScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetFinishedScriptName"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns script name or error.

Description

See also

- 61.53 CURL.GetFinishedFileName 1843
- 61.157 CURL.SetFinishedScript 1989

Created 12nd July 2015, last changed 12nd July 2015.

61.55 **CURL.GetFormData**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetFormData"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns text or error.

Description

If you use functions like `CURL.FormAddKeyText`, you can check here how things would be sent.

Examples

Build form data:

```

Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "firma"; Test::firma) ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "name"; Test::name) ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "strasse"; Test::strasse) ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "plz"; Test::plz) ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "ort"; Test::ort) ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "land"; Test::land) ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "telefon"; Test::telefon) ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "email"; Test::email) ]
Set Variable [ $result ; Value: MBS("CURL.FormAddKeyValue"; $curl; "comment"; Test::comment) ]
Set Variable [ $result ; Value: MBS("CURL.FormFinish"; $curl) ]
Set Field [ Test::DebugMessages ; MBS("CURL.GetFormData"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.9 `CURL.Cleanup` 1772
- 61.25 `CURL.FormAddKeyText` 1804
- 61.27 `CURL.FormAddKeyValue` 1808
- 61.30 `CURL.FormFinish` 1813
- 61.139 `CURL.New` 1947

Example Databases

- [CURL/WebServices/AdobeSign WebService](#)

61.55.1 Blog Entries

- [MBS FileMaker Plugin 8.2 - More than 5200 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.2 - 5200 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin, version 8.2pr3](#)

Created 14th April 2018, last changed 14th April 2018.

61.56 CURL.GetHTTPAuthAvail

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetHTTPAuthAvail"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

The meaning of the bits is explained in `CURL.SetOptionHTTPAuth`.

See also

- 61.101 `CURL.GetProxyAuthAvail` 1894
- 61.228 `CURL.SetOptionHTTPAuth` 2095

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.57 CURL.GetHTTPConnectCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetHTTPConnectCode"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

See also

- 61.111 CURL.GetResponseCode 1905

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.58 **CURL.GetHTTPVersion**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetHTTPVersion"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns number or error.

Description

Created 15th April 2018, last changed 16th April 2018.

61.59 `CURL.GetHeaderAsText`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.GetHeaderAsText"; curl { ; Encoding; preserveLineEndings } )
```

Parameters

curl

The CURL session handle.

\$curl

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

preserveLineEndings

Optional

Whether to change line endings to CR for FileMaker. By default (0) we change the line endings to CR, so FileMaker has no trouble. Pass 1 to keep whatever line endings are there.

0

Result The headers as text.

Description

You are responsible for detecting decoding.

Plugin version 5.2 and newer replace newlines automatically for you to match what FileMaker uses (Mac line endings).

Examples

Get header lines:

```
MBS("CURL.GetHeaderAsText"; $curl)
```

Get file name for container from header:

```
Set Variable [ $name ; Value: "" ]
```

```
Set Variable [ $headers ; Value: MBS( "CURL.GetHeaderAsText"; $curl; "UTF-8" ) ]
```

```
Set Variable [ $headers ; Value: MBS( "List.MatchesPrefix"; $headers; "Content-Disposition: attachment; filename=" ) ]
```

```
If [ Length($headers) >0 ]
```

```
Set Variable [ $name ; Value: Middle ( $headers ; 43 ; Length($headers) ) ]
```

```
End If
```

```
Set Field [ CURL Test::File ; MBS("CURL.GetResultAsContainer"; $curl; $name) ]
```

61.59. *CURL.GETHEADERASTEXT* 1851

See also

- 61.15 *CURL.CreateHeaderOutputFile* 1782
- 61.44 *CURL.GetDebugAsText* 1831
- 61.61 *CURL.GetHeaderSize* 1853
- 61.112 *CURL.GetResultAsContainer* 1907
- 61.121 *CURL.GetResultAsText* 1926
- 61.155 *CURL.SetDebugWithTime* 1985
- 61.193 *CURL.SetOptionCustomRequest* 2048
- 103.19 *List.MatchesPrefix* 5442
- 143.25 *SendMail.PrepareCURL* 6910

Example Databases

- [CURL/Amazon S3 Download Picture](#)
- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL Download in Background](#)
- [CURL/CURL Download on Server](#)
- [CURL/CURL Download PDF and add preview with DynaPDF](#)
- [CURL/CURL Download Picture with Info](#)
- [CURL/CURL Download Picture](#)
- [CURL/CURL Download Text](#)
- [CURL/CURL Download to Container](#)
- [CURL/WebServices/Twitter OAuth](#)

61.59.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr6](#)
- [MBS FileMaker Plugin, version 5.2pr7](#)
- [MBS Filemaker Plugin, version 3.2pr3](#)

Created 18th August 2014, last changed 16th July 2019.

61.60 CURL.GetHeaderLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetHeaderLength"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Length in bytes.

Description

Examples

Query length. Shows 11 for "Hello World" above:

```
MBS("CURL.GetHeaderLength"; $curl)
```

See also

- 61.45 CURL.GetDebugLength 1834
- 61.122 CURL.GetResultLength 1930

Created 18th August 2014, last changed 18th August 2014.

61.61 CURL.GetHeaderSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetHeaderSize"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description**See also**

- 61.59 [CURL.GetHeaderAsText](#) 1850
- 61.110 [CURL.GetRequestSize](#) 1904

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.62 CURL.GetInputAsText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.8	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetInputAsText"; curl { ; Encoding; preserveLineEndings })

Parameters

curl

The CURL session handle.

\$curl

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

preserveLineEndings

Optional

Whether to change line endings to CR for FileMaker. By default (0) we change the line endings to CR, so FileMaker has no trouble. Pass 1 to keep whatever line endings are there.

0

Result The input data as text.

Description

You are responsible for detecting decoding.

Plugin version 5.2 and newer replace newlines automatically for you to match what FileMaker uses (Mac line endings).

See also

- 61.6 CURL.AddInputText 1768
- 61.44 CURL.GetDebugAsText 1831
- 61.121 CURL.GetResultAsText 1926
- 61.163 CURL.SetInputText 2002

Example Databases

- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

61.62.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr6](#)
- [Sending emails in FileMaker with MBS Plugin](#)
- [MBS FileMaker Plugin, version 5.2pr7](#)
- [MBS Filemaker Plugin, version 3.2pr3](#)
- [MBS Filemaker Plugin, version 2.8pr10](#)

Created 18th August 2014, last changed 16th July 2019.

61.63 CURL.GetInputLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.GetInputLength"; curl )
```

Parameters

curl

The CURL session handle.

\$curl

Result Length in bytes.

Description

Examples

Set Text:

```
MBS("CURL.SetInputText"; $curl; "Hello World"; "utf8")
```

Query length. Shows 11 for "Hello World" above:

```
MBS("CURL.GetInputLength"; $curl)
```

See also

- 61.45 CURL.GetDebugLength 1834
- 61.122 CURL.GetResultLength 1930
- 61.163 CURL.SetInputText 2002

Created 18th August 2014, last changed 18th August 2014.

61.64 **CURL.GetLastSocket**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetLastSocket"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns integer or error.

Description

See also

- 61.31 [CURL.GetActiveSocket](#)

1815

Created 15th April 2018, last changed 16th April 2018.

61.65 CURL.GetLocalIP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetLocalIP"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This string may be IPv6 if that's enabled.

See also

- 61.66 CURL.GetLocalPort

1859

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.66 **CURL.GetLocalPort**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetLocalPort"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

See also

- 61.65 [CURL.GetLocalIP](#)

1858

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.67 CURL.GetMultiOptionChunkLengthPenaltySize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiOptionChunkLengthPenaltySize")

Result Returns OK or error.

Description

A connection with a chunk length longer than this will not be considered for pipelining.

See also

- 61.68 CURL.GetMultiOptionContentLengthPenaltySize 1861
- 61.164 CURL.SetMultiOptionChunkLengthPenaltySize 2005
- 61.165 CURL.SetMultiOptionContentLengthPenaltySize 2006

Created 14th April 2018, last changed 14th April 2018.

61.68 **CURL.GetMultiOptionContentLengthPenaltySize**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiOptionContentLengthPenaltySize")

Result Returns OK or error.

Description

A connection with a content-length longer than this will not be considered for pipelining.

See also

- 61.67 *CURL.GetMultiOptionChunkLengthPenaltySize* 1860
- 61.164 *CURL.SetMultiOptionChunkLengthPenaltySize* 2005
- 61.165 *CURL.SetMultiOptionContentLengthPenaltySize* 2006

Created 14th April 2018, last changed 14th April 2018.

61.69 CURL.GetMultiOptionMaxConcurrentStreams

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	10.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiOptionMaxConcurrentStreams")

Result Returns number or error.

Description

See also

- 61.166 CURL.SetMultiOptionMaxConcurrentStreams 2007

61.69.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 13th November 2019, last changed 13th November 2019.

61.70 CURL.GetMultiOptionMaxConnects

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiOptionMaxConnects")

Result Returns OK or error.

Description

Maximum number of entries in the connection cache.

See also

- 61.71 *CURL.GetMultiOptionMaxHostConnections* 1864
- 61.73 *CURL.GetMultiOptionMaxTotalConnections* 1866
- 61.167 *CURL.SetMultiOptionMaxConnects* 2008
- 61.168 *CURL.SetMultiOptionMaxHostConnections* 2009
- 61.254 *CURL.SetOptionMaxConnects* 2130

Created 14th April 2018, last changed 14th April 2018.

61.71 CURL.GetMultiOptionMaxHostConnections

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiOptionMaxHostConnections")

Result Returns OK or error.

Description

Maximum number of (pipelining) connections to one host.

See also

- 61.70 CURL.GetMultiOptionMaxConnects 1863
- 61.73 CURL.GetMultiOptionMaxTotalConnections 1866
- 61.167 CURL.SetMultiOptionMaxConnects 2008
- 61.168 CURL.SetMultiOptionMaxHostConnections 2009
- 61.170 CURL.SetMultiOptionMaxTotalConnections 2011

Created 14th April 2018, last changed 14th April 2018.

61.72 CURL.GetMultiOptionMaxPipelineLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiOptionMaxPipelineLength")

Result Returns OK or error.

Description

Maximum number of requests in a pipeline.

See also

- 61.74 *CURL.GetMultiOptionPipelining* 1867
- 61.169 *CURL.SetMultiOptionMaxPipelineLength* 2010

Created 14th April 2018, last changed 14th April 2018.

61.73 CURL.GetMultiOptionMaxTotalConnections

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiOptionMaxTotalConnections")

Result Returns OK or error.

Description

Maximum number of open connections in total.

See also

- 61.70 CURL.GetMultiOptionMaxConnects 1863
- 61.71 CURL.GetMultiOptionMaxHostConnections 1864
- 61.168 CURL.SetMultiOptionMaxHostConnections 2009
- 61.170 CURL.SetMultiOptionMaxTotalConnections 2011

Created 14th April 2018, last changed 14th April 2018.

61.74 CURL.GetMultiOptionPipelining

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiOptionPipelining")

Result Returns OK or error.

Description

Is 1 to enable pipelining for this multi handle.

See also

- 61.72 *CURL.GetMultiOptionMaxPipelineLength* 1865
- 61.171 *CURL.SetMultiOptionPipelining* 2012

Created 14th April 2018, last changed 14th April 2018.

61.75 CURL.GetMultiRunningTransfers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetMultiRunningTransfers")

Result Returns OK or error.

Description

Only for asynchronous transfers with CURL.PerformAsync.

Value is -1 till initialized.

See also

- 61.140 CURL.NumberOfRunningTransfers 1950
- 61.142 CURL.Perform 1954
- 61.143 CURL.PerformAsync 1963

Created 14th April 2018, last changed 14th April 2018.

61.76 **CURL.GetNameLookupTime**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetNameLookupTime"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.77 CURL.GetNumConnects

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetNumConnects"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

Combined with CURL.SetOptionRedirectCount you are able to know how many times libcurl successfully reused existing connection(s) or not.

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.78 **CURL.GetOSErrNo**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOSErrNo"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

Note that the value is only set on failure, it is not reset upon a successful operation.

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.79 CURL.GetOptionConnectTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionConnectTo"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns list or error.

Description

See also

- 61.184 CURL.SetOptionConnectOnly 2032
- 61.186 CURL.SetOptionConnectTo 2036
- 61.254 CURL.SetOptionMaxConnects 2130

Created 16th April 2018, last changed 16th April 2018.

61.80 **CURL.GetOptionHTTP200Aliases**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionHTTP200Aliases"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns list or error.

Description

See also

- 61.227 [CURL.SetOptionHTTP200Aliases](#)

2094

Created 16th April 2018, last changed 16th April 2018.

61.81 CURL.GetOptionHTTPHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionHTTPHeader"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns list or error.

Description

Examples

Set and get headers:

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
```

```
Set Variable [ $r ; Value: MBS( "CURL.SetOptionHTTPHeader"; $curl; "Content-Type: application/json$Test: hello"; "Other: 1234" ) ]
```

```
Show Custom Dialog [ "Headers" ; MBS( "CURL.GetOptionHTTPHeader"; $curl ) ]
```

See also

- 61.85 CURL.GetOptionProxyHeader 1878
- 61.139 CURL.New 1947
- 61.235 CURL.SetOptionHeader 2106
- 61.230 CURL.SetOptionHTTPHeader 2098
- 61.233 CURL.SetOptionHTTPVersion 2104
- 61.283 CURL.SetOptionProxyHeader 2177

Created 16th April 2018, last changed 17th April 2018.

61.82 **CURL.GetOptionMailRecipients**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionMailRecipients"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns list or error.

Description

See also

- 61.252 [CURL.SetOptionMailRecipients](#)

2128

Created 16th April 2018, last changed 16th April 2018.

61.83 CURL.GetOptionPostQuote

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionPostQuote"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns list or error.

Description

See also

- 61.84 CURL.GetOptionPreQuote 1877
- 61.86 CURL.GetOptionQuote 1879
- 61.273 CURL.SetOptionPostQuote 2162
- 61.274 CURL.SetOptionPostRedir 2164
- 61.276 CURL.SetOptionPreQuote 2167
- 61.306 CURL.SetOptionQuote 2203

Created 16th April 2018, last changed 16th April 2018.

61.84 CURL.GetOptionPreQuote

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionPreQuote"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns list or error.

Description**See also**

- 61.83 *CURL.GetOptionPostQuote* 1876
- 61.86 *CURL.GetOptionQuote* 1879
- 61.87 *CURL.GetOptionResolve* 1880
- 61.273 *CURL.SetOptionPostQuote* 2162
- 61.275 *CURL.SetOptionPreProxy* 2166
- 61.276 *CURL.SetOptionPreQuote* 2167
- 61.306 *CURL.SetOptionQuote* 2203
- 61.379 *CURL.SetOptionVerbose* 2307

Created 16th April 2018, last changed 16th April 2018.

61.85 CURL.GetOptionProxyHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionProxyHeader"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns list or error.

Description

See also

- 61.81 CURL.GetOptionHTTPHeader 1874
- 61.230 CURL.SetOptionHTTPHeader 2098
- 61.280 CURL.SetOptionProxyCAInfo 2174
- 61.281 CURL.SetOptionProxyCAPath 2175
- 61.283 CURL.SetOptionProxyHeader 2177
- 61.288 CURL.SetOptionProxySSLCert 2182
- 61.291 CURL.SetOptionProxySSLKey 2185
- 61.303 CURL.SetOptionProxyType 2198
- 61.304 CURL.SetOptionProxyUsername 2200

Created 16th April 2018, last changed 16th April 2018.

61.86 CURL.GetOptionQuote

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionQuote"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns list or error.

Description**See also**

- 61.84 [CURL.GetOptionPreQuote](#) 1877
- 61.225 [CURL.SetOptionGet](#) 2091
- 61.269 [CURL.SetOptionPort](#) 2151
- 61.270 [CURL.SetOptionPost](#) 2153
- 61.273 [CURL.SetOptionPostQuote](#) 2162
- 61.276 [CURL.SetOptionPreQuote](#) 2167
- 61.278 [CURL.SetOptionProxy](#) 2171
- 61.305 [CURL.SetOptionPut](#) 2201
- 61.306 [CURL.SetOptionQuote](#) 2203
- 61.314 [CURL.SetOptionRange](#) 2213

Created 16th April 2018, last changed 17th April 2018.

61.87 CURL.GetOptionResolve

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionResolve"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns list or error.

Description

See also

- 61.84 CURL.GetOptionPreQuote 1877
- 61.86 CURL.GetOptionQuote 1879
- 61.182 CURL.SetOptionCRLFile 2028
- 61.237 CURL.SetOptionIPResolve 2108
- 61.316 CURL.SetOptionReferer 2217
- 61.318 CURL.SetOptionResolve 2219
- 61.379 CURL.SetOptionVerbose 2307

Created 16th April 2018, last changed 17th April 2018.

61.88 CURL.GetOptionTelnetOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetOptionTelnetOptions"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns list or error.

Description**See also**

- 61.236 [CURL.SetOptionHeaderOptions](#) 2107
- 61.247 [CURL.SetOptionLoginOptions](#) 2121
- 61.338 [CURL.SetOptionSSLOptions](#) 2249
- 61.363 [CURL.SetOptionTelnetOptions](#) 2280
- 61.358 [CURL.SetOptionTFTPNoOptions](#) 2275

Created 16th April 2018, last changed 17th April 2018.

61.89 CURL.GetPreTransferTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetPreTransferTime"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This includes all pre-transfer commands and negotiations that are specific to the particular protocol(s) involved. It does not involve the sending of the protocol- specific request that triggers a transfer.

See also

- 61.130 CURL.GetStartTransferTime 1938

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.90 **CURL.GetPrimaryIP**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetPrimaryIP"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This string may be IPv6 if that's enabled.

See also

- 61.91 [CURL.GetPrimaryPort](#)

1884

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.91 CURL.GetPrimaryPort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetPrimaryPort"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

See also

- 61.90 CURL.GetPrimaryIP

1883

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.92 CURL.GetProgressCurrentDownload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProgressCurrentDownload"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result The number of bytes already downloaded.

Description

Only useful with CURL.PerformInBackground.

Examples

Calculate percent uploaded

```
$percent = 100 * MBS( "CURL.GetProgressCurrentDownload"; $curl ) / MBS( "CURL.GetProgressTotal-Download"; $curl )
```

See also

- 61.93 CURL.GetProgressCurrentUpload 1886
- 61.98 CURL.GetProgressTotalDownload 1891
- 61.142 CURL.Perform 1954
- 61.143 CURL.PerformAsync 1963
- 61.144 CURL.PerformInBackground 1965

Created 18th August 2014, last changed 18th August 2014.

61.93 CURL.GetProgressCurrentUpload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProgressCurrentUpload"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result The number of bytes already uploaded.

Description

Only useful with CURL.PerformInBackground.

Examples

Calculate percent uploaded

```
$percent = 100 * MBS( "CURL.GetProgressCurrentUpload"; $curl ) / MBS( "CURL.GetProgressTotalUpload"; $curl )
```

See also

- 61.92 CURL.GetProgressCurrentDownload 1885
- 61.99 CURL.GetProgressTotalUpload 1892
- 61.142 CURL.Perform 1954
- 61.143 CURL.PerformAsync 1963
- 61.144 CURL.PerformInBackground 1965

Created 18th August 2014, last changed 18th August 2014.

61.94 **CURL.GetProgressEvaluate**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.1	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProgressEvaluate"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns text or error.

Description

See also

- 61.95 [CURL.GetProgressFileName](#) 1888
- 61.382 [CURL.SetProgressEvaluate](#) 2313

61.94.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

61.95 CURL.GetProgressFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProgressFileName"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns file name or error.

Description

See also

- 61.94 CURL.GetProgressEvaluate 1887
- 61.97 CURL.GetProgressScriptName 1890
- 61.382 CURL.SetProgressEvaluate 2313

Created 12nd July 2015, last changed 12nd July 2015.

61.96 CURL.GetProgressPercent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProgressPercent"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns number or error.

Description

This is percent of upload/download of current transfer.

Range is 0 to 100.

Examples

Update progress field in a progress script:

```
Set Variable [ $curl; Value:Get(ScriptParameter) ]
```

```
Set Variable [ $RecordID; Value:MBS("CURL.GetTag"; $curl) ]
```

```
Go to Record/Request/Page [ No dialog; $RecordID ]
```

```
Set Field [ Download Async::Progress; MBS("CURL.GetProgressPercent"; $curl) ]
```

```
Commit Records/Requests [ Skip data entry validation; No dialog ]
```

See also

- [61.131 CURL.GetTag](#) 1939
- [61.383 CURL.SetProgressScript](#) 2314

Example Databases

- [CURL/CURL Download in Background](#)
- [CURL/Download Async](#)

Created 12nd July 2015, last changed 12nd July 2015.

61.97 CURL.GetProgressScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProgressScriptName"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns script name or error.

Description

See also

- 61.95 CURL.GetProgressFileName 1888
- 61.383 CURL.SetProgressScript 2314

Created 12nd July 2015, last changed 12nd July 2015.

61.98 CURL.GetProgressTotalDownload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProgressTotalDownload"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result The number of bytes to download.

Description

Only useful with CURL.PerformInBackground.

Examples

Calculate percent uploaded

```
$percent = 100 * MBS( "CURL.GetProgressCurrentDownload"; $curl ) / MBS( "CURL.GetProgressTotal-Download"; $curl )
```

See also

- 61.92 CURL.GetProgressCurrentDownload 1885
- 61.99 CURL.GetProgressTotalUpload 1892
- 61.142 CURL.Perform 1954
- 61.143 CURL.PerformAsync 1963
- 61.144 CURL.PerformInBackground 1965

Created 18th August 2014, last changed 18th August 2014.

61.99 CURL.GetProgressTotalUpload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProgressTotalUpload"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result The number of bytes to upload.

Description

Only useful with CURL.PerformInBackground.

Examples

Calculate percent uploaded

```
$percent = 100 * MBS( "CURL.GetProgressCurrentUpload"; $curl ) / MBS( "CURL.GetProgressTotalUpload"; $curl )
```

See also

- 61.93 CURL.GetProgressCurrentUpload 1886
- 61.98 CURL.GetProgressTotalDownload 1891
- 61.142 CURL.Perform 1954
- 61.143 CURL.PerformAsync 1963
- 61.144 CURL.PerformInBackground 1965

Created 18th August 2014, last changed 18th August 2014.

61.100 **CURL.GetProtocol**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProtocol"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns number or error.

Description

See also

- 61.145 [CURL.Protocols](#)

1967

Created 15th April 2018, last changed 16th April 2018.

61.101 CURL.GetProxyAuthAvail

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProxyAuthAvail"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

The meaning of the bits is explained in CURL.SetOptionHTTPAuth.

See also

- 61.56 CURL.GetHTTPAuthAvail 1847
- 61.228 CURL.SetOptionHTTPAuth 2095

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.102 **CURL.GetProxySSLVerifyResult**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetProxySSLVerifyResult"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns number or error.

Description

See also

- 61.124 [CURL.GetSSLVerifyResult](#)

1932

Created 15th April 2018, last changed 16th April 2018.

61.103 CURL.GetRTSPCSEQRecv

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetRTSPCSEQRecv"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns number or error.

Description

Created 12nd July 2015, last changed 12nd July 2015.

61.104 **CURL.GetRTSPClientCSEQ**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetRTSPClientCSEQ"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns number or error.

Description

See also

- 61.105 *CURL.GetRTSPServerCSEQ*

1898

Created 12nd July 2015, last changed 12nd July 2015.

61.105 CURL.GetRTSPServerCSEQ

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetRTSPServerCSEQ"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns number or error.

Description**See also**

- 61.104 CURL.GetRTSPClientCSEQ

1897

Created 12nd July 2015, last changed 12nd July 2015.

61.106 **CURL.GetRTSPSessionID**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetRTSPSessionID"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns text or error.

Description

Created 12nd July 2015, last changed 12nd July 2015.

61.107 CURL.GetRedirectCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetRedirectCount"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description**See also**

- 61.108 CURL.GetRedirectTime 1901
- 61.109 CURL.GetRedirectURL 1902

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.108 CURL.GetRedirectTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetRedirectTime"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

CURL.GetRedirectTime contains the complete execution time for multiple redirections.

See also

- 61.39 CURL.GetConnectTime 1824
- 61.107 CURL.GetRedirectCount 1900
- 61.109 CURL.GetRedirectURL 1902

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.109 CURL.GetRedirectURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetRedirectURL"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This can come very handy if you think using the built-in libcurl redirect logic isn't good enough for you but you would still prefer to avoid implementing all the magic of figuring out the new URL.

Examples

Do not follow, but return redirect URL:

```
# Start new session
Set Variable [ $curl ; Value: MBS("CURL.New") ]
# Set URL to load
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
# RUN now
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::newURL ; MBS("CURL.GetRedirectURL"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 CURL.Cleanup 1772
- 61.44 CURL.GetDebugAsText 1831
- 61.107 CURL.GetRedirectCount 1900
- 61.108 CURL.GetRedirectTime 1901
- 61.121 CURL.GetResultAsText 1926
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954

<i>61.109. CURL.GETREDIRECTURL</i>	1903
• 61.221 CURL.SetOptionFollowLocation	2086
• 61.370 CURL.SetOptionURL	2288

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 24th May 2017.

61.110 CURL.GetRequestSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetRequestSize"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This is so far only for HTTP requests. Note that this may be more than one request if `CURL.SetOption-FollowLocation` is true.

See also

- 61.61 `CURL.GetHeaderSize` 1853
- 61.221 `CURL.SetOptionFollowLocation` 2086

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.111 CURL.GetResponseCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResponseCode"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

This will be zero if no server response code has been received. Note that a proxy's CONNECT response should be read with `CURL.GetHTTPConnectCode` and not this.

For HTTP this is the normal status code. e.g. 200 for OK and 404 for file not found.

Examples

On success puts download in container, else shows failed:

```
Set Variable [ $errorCode; Value:MBS("CURL.ErrorCode"; $curl) ]
Set Variable [ $httpResult; Value:MBS("CURL.GetResponseCode"; $curl) ]
Set Field [ Download Async::Result; $errorCode ]
Set Field [ Download Async::DebugMessages; MBS("CURL.GetDebugAsText"; $curl) ]
If [ $errorCode = 0 and $httpResult = 200 ]
Set Field [ Download Async::Progress; "Done" ]
Set Field [ Download Async::Output; MBS("CURL.GetResultAsContainer"; $curl) ]
Else
Set Field [ Download Async::Progress; "Failed" ]
Set Field [ Download Async::Output; "" ]
End If
```

See also

- 61.17 `CURL.ErrorCode` 1788
- 61.44 `CURL.GetDebugAsText` 1831
- 61.57 `CURL.GetHTTPConnectCode` 1848
- 61.112 `CURL.GetResultAsContainer` 1907
- 61.142 `CURL.Perform` 1954
- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.387 `CURL.SetupOAuth` 2324

- 100.52 JSON.GetPathItem 5314
- 100.65 JSON.Parse 5333

Example Databases

- [CURL/Amazon S3 Buckets](#)
- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL Check FileMaker Server](#)
- [CURL/CURL Download Picture with Info](#)
- [CURL/CURL FMS Admin API](#)
- [CURL/Download Async](#)
- [CURL/WebServices/AdobeSign Webservice](#)
- [CURL/WebServices/CURL FMS Admin API v18](#)
- [CURL/WebServices/magento older](#)
- [CURL/WebServices/Query IP and Country](#)

61.111.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Query geolocation in FileMaker via MBS Plugin and Google Maps API](#)

61.111.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 20](#)

Created 18th August 2014, last changed 12nd July 2015.

61.112 CURL.GetResultAsContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultAsContainer"; curl { ; Filename; PluginDetect })

Parameters**curl**

The CURL session handle.

\$curl

Filename

Optional

The desired file name

test.jpg

PluginDetect

Optional

If 1 the plugin will do the file type detection. If not provided or 0 and the FileMaker version is 13.0 or newer, the FileMaker engine will decide on the type.

Result Returns OK or error.

Description

The plugin will detect the type of data based on the file extension.

If no filename is provided, the plugin uses the filename from the URL.

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

Load JPEG from URL to container:

```
# start new transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set URL
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://monkeybreadsoftware.com/filemaker/images/devcon2013.jpg") ]
# run transfer
Set Variable [ $ErrorCode; Value:MBS("CURL.Perform"; $curl) ]
# get result as JPG and store in field:
Set Variable [ $Result; Value:MBS( "CURL.GetResultAsContainer"; $curl) ]
Set Field [ test::MyContainerField; $Result ]
# get debug messages:
Set Variable [ $DebugMessages; Value:MBS( "CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]
```

Download picture and scale it down:

```

Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionURL"; $curl; MIX::URL) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionFollowLocation"; $curl; 1) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionMaxRedirs"; $curl; 3) ]
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
Set Variable [ $debug ; Value: MBS("CURL.GetDebugAsText"; $curl) ]
If [ $result = "OK" ]
Set Variable [ $Image ; Value: MBS("CURL.GetResultAsContainer"; $curl) ]
Set Variable [ $ImageRef ; Value: MBS("GImage.NewFromContainer"; $image) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $r ; Value: MBS("GImage.Scale";$ImageRef; "256x256>") ]
Set Variable [ $ScaledImage ; Value: MBS("GImage.WriteToJPEGContainer"; $ImageRef) ]
If [ MBS("IsError") = 0 ]
Set Field [ MIX::Image ; $ScaledImage ]
End If
Set Variable [ $r ; Value: MBS("GImage.Release";$ImageRef) ]
End If
End If
Set Variable [ $r ; Value: MBS("CURL.Cleanup"; $curl) ]

```

Get file name for container from header:

```

Set Variable [ $name ; Value: "" ]
Set Variable [ $headers ; Value: MBS("CURL.GetHeaderAsText"; $curl; "UTF-8") ]
Set Variable [ $headers ; Value: MBS("List.MatchesPrefix"; $headers; "Content-Disposition: attachment; filename=") ]
If [ Length($headers) >0 ]
Set Variable [ $name ; Value: Middle ( $headers ; 43 ; Length($headers) ) ]
End If
Set Field [ CURL Test::File ; MBS("CURL.GetResultAsContainer"; $curl; $name) ]

```

See also

- 61.120 CURL.GetResultAsPNG 1924
- 61.139 CURL.New 1947
- 61.221 CURL.SetOptionFollowLocation 2086
- 61.257 CURL.SetOptionMaxRedirs 2133
- 61.370 CURL.SetOptionURL 2288
- 85.191 GImage.New 4580
- 85.214 GImage.Release 4612

<i>61.112. CURL.GETRESULTASCONTAINER</i>	1909
• 85.225 GImage.Scale	4628
• 124.6 IsError	6266
• 123.3 PHP.GetResultContainer	6250

Example Databases

- [CURL/CURL Download to Container](#)
- [CURL/Download Async](#)

61.112.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr6](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS FileMaker Plugin, version 6.3pr5](#)
- [MBS FileMaker Plugin, version 5.2pr4](#)

Created 15th June 2015, last changed 29th November 2019.

61.113 `CURL.GetResultAsData`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultAsData"; curl; Type { ; Filename })

Parameters

curl

The CURL session handle.

\$curl

Type

The type the new data should have for FileMaker. See container functions. Typically "PDF " for pdf files, "FILE" for normal binary files and special codes for pictures like "JPEG".

"FILE"

Filename

Optional

The desired file name

test.zip

Result A container value or empty on error.

Description

Make sure the data is in the format you tell FileMaker. FileMaker uses internally 4 letter codes to know what data is stored in containers and you need to pass a suitable type code.

Please note that types are always 4 characters long, "PDF " has a space on the end.

Version 5.2 and later can use the filename from URL if you don't provide one yourself.

See also

- 61.115 `CURL.GetResultAsEmail` 1914
- 61.116 `CURL.GetResultAsGIF` 1916
- 61.117 `CURL.GetResultAsJPEG` 1918
- 61.118 `CURL.GetResultAsMime` 1920
- 61.119 `CURL.GetResultAsPDF` 1922
- 61.120 `CURL.GetResultAsPNG` 1924
- 61.121 `CURL.GetResultAsText` 1926
- 61.122 `CURL.GetResultLength` 1930

Example Databases

- [CURL/CURL Download zip file](#)

61.113.1 **Blog Entries**

- [MBS Filemaker Plugin, version 2.5pr4](#)

Created 18th August 2014, last changed 5th July 2015.

61.114 `CURL.GetResultAsEMailList`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	9.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultAsEMailList"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns JSON or error.

Description

Returns result as JSON with details for emails.

Examples

Query email list as JSON:

```
Go to Layout [ "IMAP Postbox" (IMAP Postbox) ; Animation: None ]
# get URL
Set Variable [ $URL ; Value: "imap://imap.monkeybreadsoftware.de/INBOX" ]
# query list of emails
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionURL"; $curl; $URL) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionUserName"; $curl; IMAP Postbox::Username) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionPassword"; $curl; IMAP Postbox::Password) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUseSSL"; $curl; 3) // required ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionSSLVersion"; $curl; 6) // TLS v1.2 ]
# Set query for all emails by UID. Not all fields are needed. Only request those you need to make it quicker.
Set Variable [ $r ; Value: MBS("CURL.SetOptionCustomRequest"; $curl; "UID FETCH 1:* (FLAGS INTERNALDATE RFC822.SIZE BODY.PEEK [ HEADER.FIELDS (Message-Id DATE FROM SUBJECT TO SENDER REPLY-TO CC BCC) ] )" ) ]
# Run transfer
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
# We show results for debugging
Set Variable [ $output ; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Variable [ $debug ; Value: MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $list ; Value: MBS( "JSON.Colorize";MBS("CURL.GetResultAsEMailList"; $curl)) ]
Set Variable [ $r ; Value: MBS("CURL.Cleanup"; $curl) ]
Set Field [ IMAP Postbox::Log ; $debug ]
Set Field [ IMAP Postbox::JSON ; $list ]
```

See also

- 61.9 `CURL.Cleanup`

61.114. <i>CURL.GETRESULTASEMAILLIST</i>	1913
• 61.115 <i>CURL.GetResultAsEmail</i>	1914
• 61.121 <i>CURL.GetResultAsText</i>	1926
• 61.139 <i>CURL.New</i>	1947
• 61.142 <i>CURL.Perform</i>	1954
• 61.193 <i>CURL.SetOptionCustomRequest</i>	2048
• 61.265 <i>CURL.SetOptionPassword</i>	2145
• 61.343 <i>CURL.SetOptionSSLVersion</i>	2258
• 61.370 <i>CURL.SetOptionURL</i>	2288
• 100.15 <i>JSON.Colorize</i>	5261

Example Databases

- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)

61.114.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)
- [New MBS FileMaker Plugin 9.0](#)
- [Neues MBS FileMaker Plugin 9.0](#)
- [MBS FileMaker Plugin, version 9.0pr9](#)
- [CURL change for email download via IMAP](#)
- [MBS FileMaker Plugin, version 8.6pr5](#)

Created 21st December 2018, last changed 27th December 2018.

61.115 `CURL.GetResultAsEmail`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultAsEmail"; curl)

Parameters

`curl`

The CURL session handle.

`$curl`

Result Returns email parser reference number or error.

Description

If the content is a valid email content, the email is parsed and you get back the reference number. Please use `EmailParser.Free` to free it later and release memory.

See also

- 61.113 `CURL.GetResultAsData` 1910
- 61.114 `CURL.GetResultAsEMailList` 1912
- 61.116 `CURL.GetResultAsGIF` 1916
- 61.117 `CURL.GetResultAsJPEG` 1918
- 61.118 `CURL.GetResultAsMime` 1920
- 61.119 `CURL.GetResultAsPDF` 1922
- 61.120 `CURL.GetResultAsPNG` 1924
- 61.121 `CURL.GetResultAsText` 1926
- 61.370 `CURL.SetOptionURL` 2288
- 72.6 `EmailParser.Free` 3411

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

61.115.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS FileMaker Plugin, version 8.3pr1](#)

Created 24th September 2015, last changed 12nd December 2019.

61.116 CURL.GetResultAsGIF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	3.1	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultAsGIF"; curl { ; Filename })

Parameters**curl**

The CURL session handle.

\$curl

Filename

Optional

The desired file name.

test.gif

Result The result value which you can assign to a container field.

Description

Make sure the data is a GIF. The plugin does not verify whether result is a GIF file. But if it is one, it sets size properties so FileMaker can preview it.

Version 5.2 and later can use the filename from URL if you don't provide one yourself.

See also `CURL.GetResultAsContainer`.

Examples

Load GIF image from URL:

```
# start new transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set URL
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://monkeybreadsoftware.com/filemaker/images/dynapdf.gif") ]
# run transfer
Set Variable [ $ErrorCode; Value:MBS("CURL.Perform"; $curl) ]
# get result as GIF and store in field:
Set Variable [ $Result; Value:MBS( "CURL.GetResultAsGIF"; $curl) ]
Set Field [ test::MyContainerField; $Result ]
# get debug messages:
Set Variable [ $DebugMessages; Value:MBS( "CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.113 `CURL.GetResultAsData`

<i>61.116. CURL.GETRESULTASGIF</i>	1917
• 61.115 CURL.GetResultAsEmail	1914
• 61.117 CURL.GetResultAsJPEG	1918
• 61.118 CURL.GetResultAsMime	1920
• 61.119 CURL.GetResultAsPDF	1922
• 61.120 CURL.GetResultAsPNG	1924
• 61.121 CURL.GetResultAsText	1926
• 61.139 CURL.New	1947
• 61.142 CURL.Perform	1954
• 61.370 CURL.SetOptionURL	2288

61.116.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr8](#)

Created 18th August 2014, last changed 29th November 2019.

61.117 CURL.GetResultAsJPEG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultAsJPEG"; curl { ; Filename })

Parameters**curl**

The CURL session handle.

\$curl

Filename

Optional

The desired file name.

test.jpg

Result The result value which you can assign to a container field.

Description

Make sure the data is a JPEG. The plugin does not verify whether result is a JPEG file. But if it is one, it sets size properties so FileMaker can preview it.

Version 5.2 and later can use the filename from URL if you don't provide one yourself.

See also `CURL.GetResultAsContainer`.

Examples

Load JPEG from URL and store in container field:

```
# start new transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set URL
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://monkeybreadsoftware.com/filemaker/images/devcon2013.jpg") ]
# run transfer
Set Variable [ $ErrorCode; Value:MBS("CURL.Perform"; $curl) ]
# get result as JPG and store in field:
Set Variable [ $Result; Value:MBS( "CURL.GetResultAsJPEG"; $curl) ]
Set Field [ test::MyContainerField; $Result ]
# get debug messages:
Set Variable [ $DebugMessages; Value:MBS( "CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.44 `CURL.GetDebugAsText`

<i>61.117. CURL.GETRESULTASJPEG</i>	1919
• 61.113 CURL.GetResultAsData	1910
• 61.115 CURL.GetResultAsEmail	1914
• 61.118 CURL.GetResultAsMime	1920
• 61.119 CURL.GetResultAsPDF	1922
• 61.120 CURL.GetResultAsPNG	1924
• 61.121 CURL.GetResultAsText	1926
• 61.154 CURL.SetDebugWithProgress	1983
• 61.370 CURL.SetOptionURL	2288
• 61.386 CURL.SetupAWS	2320

Example Databases

- [CURL/Amazon S3 Download Picture](#)
- [CURL/CURL Download in Background](#)
- [CURL/CURL Download Picture with Info](#)
- [CURL/CURL Download Picture](#)
- [CURL/CURL Download with Progress](#)
- [CURL/WebViewer Download Images with CURL](#)

Created 18th August 2014, last changed 29th November 2019.

61.118 CURL.GetResultAsMime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	10.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultAsMime"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns email parser reference number or error.

Description

If you got an answer from a web service with multi part mime output, this function will parse it with our mime parser (normally used for emails) and then return you the object reference.

Please use EmailParser.Free to free it later and release memory.

Examples

Get image objects:

```
Set Variable [ $email ; Value: MBS("CURL.GetResultAsMime"; $curl) ]
Set Field [ test::Part1 ; MBS( "EmailParser.Inline"; $email; 0; "container") ]
Set Field [ test::Image ; MBS( "EmailParser.Inline"; $email; 1; "container") ]
Set Variable [ $email ; Value: MBS("EmailParser.Free"; $email) ]
```

See also

- 61.113 CURL.GetResultAsData 1910
- 61.115 CURL.GetResultAsEmail 1914
- 61.116 CURL.GetResultAsGIF 1916
- 61.117 CURL.GetResultAsJPEG 1918
- 61.119 CURL.GetResultAsPDF 1922
- 61.120 CURL.GetResultAsPNG 1924
- 61.121 CURL.GetResultAsText 1926
- 72.6 EmailParser.Free 3411
- 72.14 EmailParser.Inline 3422

61.118.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)

Created 12nd December 2019, last changed 12nd December 2019.

61.119 CURL.GetResultAsPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	4.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultAsPDF"; curl { ; Filename; DontRenderPreview })

Parameters**curl**

The CURL session handle.

\$curl

Filename

Optional

The desired file name.

test.png

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result The result value which you can assign to a container field.

Description

Make sure the data is a PDF. The plugin does not verify whether result is a PDF file. But if it is one, it sets size properties and creates a preview JPEG so FileMaker can preview it (Preview is Mac only).

For Windows you can generate preview with DynaPDF.GeneratePreview function.

Version 5.2 and later can use the filename from URL if you don't provide one yourself.

See also `CURL.GetResultAsContainer`

If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit..

Examples

Load PDF from URL and store in container:

```
# start new transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set URL
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.monkeybreadsoftware.com/file-maker/files/Installation.pdf") ]
# run transfer
Set Variable [ $ErrorCode; Value:MBS("CURL.Perform"; $curl) ]
# get result as PDF and store in field:
Set Variable [ $Result; Value:MBS( "CURL.GetResultAsPDF"; $curl) ]
Set Field [ test::MyContainerField; $Result ]
```

61.119. *CURL.GETRESULTASPDF* 1923

get debug messages:

```
Set Variable [ $DebugMessages; Value:MBS( "CURL.GetDebugAsText"; $curl) ]
```

cleanup

```
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 *CURL.Cleanup* 1772
- 61.112 *CURL.GetResultAsContainer* 1907
- 61.113 *CURL.GetResultAsData* 1910
- 61.115 *CURL.GetResultAsEmail* 1914
- 61.118 *CURL.GetResultAsMime* 1920
- 61.120 *CURL.GetResultAsPNG* 1924
- 61.121 *CURL.GetResultAsText* 1926
- 61.142 *CURL.Perform* 1954
- 61.370 *CURL.SetOptionURL* 2288
- 70.116 *DynaPDF.GeneratePreview* 2740

Example Databases

- [CURL/CURL Download PDF and add preview with DynaPDF](#)

61.119.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 4.0pr2](#)

Created 18th August 2014, last changed 29th November 2019.

61.120 `CURL.GetResultAsPNG`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.GetResultAsPNG"; curl { ; Filename } )
```

Parameters

curl

The CURL session handle.

`$curl`

Filename

Optional

The desired file name.

`test.png`

Result The result value which you can assign to a container field.

Description

Make sure the data is a PNG. The plugin does not verify whether result is a PNG file. But if it is one, it sets size properties and creates a preview JPEG so FileMaker can preview it.

Version 5.2 and later can use the filename from URL if you don't provide one yourself.

See also `CURL.GetResultAsContainer`.

Examples

Load a PNG file from URL into container:

```
# start new transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set URL
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.monkeybreadsoftware.com/file-maker/images/devcon_14_banner_horz.png") ]
# run transfer
Set Variable [ $ErrorCode; Value:MBS("CURL.Perform"; $curl) ]
# get result as PNG for field and debug messages:
Set Variable [ $Result; Value:MBS( "CURL.GetResultAsPNG"; $curl ) ]
Set Field [ test::MyContainerField; $Result ]
Set Variable [ $DebugMessages; Value:MBS( "CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 `CURL.Cleanup` 1772
- 61.44 `CURL.GetDebugAsText` 1831

<i>61.120. CURL.GETRESULTASPNG</i>	1925
• 61.112 CURL.GetResultAsContainer	1907
• 61.113 CURL.GetResultAsData	1910
• 61.116 CURL.GetResultAsGIF	1916
• 61.117 CURL.GetResultAsJPEG	1918
• 61.118 CURL.GetResultAsMime	1920
• 61.121 CURL.GetResultAsText	1926
• 61.139 CURL.New	1947
• 61.142 CURL.Perform	1954

Created 18th August 2014, last changed 29th November 2019.

61.121 CURL.GetResultAsText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.GetResultAsText"; curl { ; Encoding; preserveLineEndings } )
```

Parameters**curl**

The CURL session handle.

\$curl

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

preserveLineEndings

Optional

Whether to change line endings to CR for FileMaker. By default (0) we change the line endings to CR, so FileMaker has no trouble. Pass 1 to keep whatever line endings are there.

0

Result The result as text.

Description

You are responsible for detecting decoding.

See also `CURL.GetResultAsContainer`.

Plugin version 5.2 and newer replace newlines automatically for you to match what FileMaker uses (Mac line endings).

Examples

Query result as UTF-8 text:

```
MBS("CURL.GetResultAsText"; $curl; "UTF-8")
```

Query result as Windows Ansi encoding:

```
MBS("CURL.GetResultAsText"; $curl; "windows")
```

Get result text and convert line endings for FileMaker:

```
MBS("Text.ReplaceNewline"; MBS("CURL.GetResultAsText"; $curl);1)
```

Download some text:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Download a text from URL:

```
# start new transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set URL
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.mbsplugins.eu/") ]
# run transfer
Set Variable [ $ErrorCode; Value:MBS("CURL.Perform"; $curl) ]
# get result as text and debug messages:
Set Variable [ $TextResult; Value:MBS("CURL.GetResultAsText"; $curl) ]
Set Variable [ $DebugMessages; Value:MBS("CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]
```

Query webservice with JSON request:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "http://test.test/ws/v1/catalogo/get-modelos") ]
# pass JSON for query
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; " { \"brandId\" : \"1\", \"device\" : \"70\" } "; "UTF-8") ]
Set Field [ models::result; MBS("CURL.Perform"; $curl) ]
Set Field [ models::text; MBS("CURL.GetResultAsText"; $curl;"UTF8") ]
Set Field [ models::header; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.44 *CURL.GetDebugAsText* 1831
- 61.59 *CURL.GetHeaderAsText* 1850
- 61.62 *CURL.GetInputAsText* 1854
- 61.116 *CURL.GetResultAsGIF* 1916
- 61.117 *CURL.GetResultAsJPEG* 1918
- 61.118 *CURL.GetResultAsMime* 1920
- 61.120 *CURL.GetResultAsPNG* 1924

- 61.387 *CURL.SetupOAuth* 2324
- 100.52 *JSON.GetPathItem* 5314
- 100.65 *JSON.Parse* 5333

Example Databases

- *CURL/Amazon S3 Upload File*
- *CURL/CURL Check FileMaker Server*
- *CURL/CURL get and put/CURLS get and put*
- *CURL/CURL with certificates included with FileMaker*
- *CURL/Email/List IMAP folders*
- *CURL/FTP/CURL FTP Download all Files in Directory*
- *CURL/WebServices/Query IP and Country*
- *CURL/WebServices/Swiss Post Addresscheck V4-02-00*
- *CURL/WebServices/Twitter OAuth*
- *CURL/WebServices/WeatherBit.io test*

61.121.1 Blog Entries

- *Using Apple's Global Service Exchange web service in FileMaker*
- *MBS FileMaker Plugin, version 9.3pr6*
- *Let CURL handle cookie list*
- *Use root certificates included with FileMaker*
- *Using Apple's Global Service Exchange web service in FileMaker*
- *Query geolocation in FileMaker via MBS Plugin and Google Maps API*
- *Using NetVerify web service with FileMaker*
- *Swiss Post Webservice to verify addresses*
- *Using CURL with Rosette web service*
- *MBS FileMaker Plugin, version 5.2pr7*

61.121.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 20
- Ausgabe 4/2016, Seite 19
- Ausgabe 4/2016, Seite 18

Created 18th August 2014, last changed 16th July 2019.

61.122 CURL.GetResultLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetResultLength"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Length in bytes.

Description

Examples

Query length. Shows 11 for "Hello World" above:

MBS("CURL.GetResultLength"; \$curl)

See also

- 61.45 CURL.GetDebugLength 1834
- 61.60 CURL.GetHeaderLength 1852
- 61.63 CURL.GetInputLength 1856
- 61.113 CURL.GetResultAsData 1910

Created 18th August 2014, last changed 18th August 2014.

61.123 **CURL.GetSSLEngines**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetSSLEngines"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

Note that engines are normally implemented in separate dynamic libraries. Hence not all the returned engines may be available at run-time.

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.124 CURL.GetSSLVerifyResult

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetSSLVerifyResult"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

If enabled with CURL.SetOptionVerifyPeer.

See also

- 61.102 CURL.GetProxySSLVerifyResult 1895

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.125 **CURL.GetScheme**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetScheme"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns text or error.

Description

Created 15th April 2018, last changed 16th April 2018.

61.126 CURL.GetSizeDownload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetSizeDownload"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

The amount is only for the latest transfer and will be reset again for each new transfer.

See also

- 61.127 CURL.GetSizeUpload 1935
- 61.128 CURL.GetSpeedDownload 1936

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.127 **CURL.GetSizeUpload**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetSizeUpload"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

See also

- 61.126 [CURL.GetSizeDownload](#) 1934
- 61.129 [CURL.GetSpeedUpload](#) 1937

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.128 CURL.GetSpeedDownload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetSpeedDownload"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

Measured in bytes/second.

See also

- 61.126 CURL.GetSizeDownload 1934
- 61.129 CURL.GetSpeedUpload 1937

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.129 **CURL.GetSpeedUpload**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetSpeedUpload"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns the requested value or nothing on error.

Description

Measured in bytes/second.

See also

- 61.127 [CURL.GetSizeUpload](#) 1935
- 61.128 [CURL.GetSpeedDownload](#) 1936

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.130 `CURL.GetStartTransferTime`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetStartTransferTime"; curl)

Parameters

`curl`

The CURL session handle.

`$curl`

Result Returns the requested value or nothing on error.

Description

This includes `CURL.GetPreTransferTime` and also the time the server needs to calculate the result.

See also

- 61.89 `CURL.GetPreTransferTime` 1882

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.131 CURL.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetTag"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns text or error.

Description**Examples**

Query record ID from tag in script:

```
Set Variable [ $curl; Value:Get(ScriptParameter) ]
Set Variable [ $RecordID; Value:MBS("CURL.GetTag"; $curl) ]
```

Test tag:

```
Set Variable [ $curl; Value:MBS( "CURL.New" ) ]
# Set Tag to some value
Set Variable [ $r; Value:MBS( "CURL.SetTag"; $curl; "Hello World" ) ]
# Later read back the value
Set Variable [ $tag; Value:MBS( "CURL.GetTag"; $curl) ]
```

See also

- 61.96 [CURL.GetProgressPercent](#) 1889
- 61.139 [CURL.New](#) 1947
- 61.384 [CURL.SetTag](#) 2316

Example Databases

- [CURL/Download Async](#)
- [CURL/Email/Batch Emailer](#)

Created 12nd July 2015, last changed 11st May 2016.

61.132 `CURL.GetTotalTime`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.GetTotalTime"; curl)

Parameters

`curl`

The CURL session handle.

`$curl`

Result Returns the requested value or nothing on error.

Description

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.133 **CURL.Host**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Host")

Result The host string.

Description

This is an ascii string showing what host information that this curl was built for.

Examples

Shows host:

Show Custom Dialog ["Transfer error"; MBS("CURL.Host")]

See also

- 61.138 [CURL.List](#)

1946

Example Databases

- [CURL/CURL Version and Protocols](#)

Created 18th August 2014, last changed 8th December 2016.

61.134 CURL.IsRunning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.IsRunning"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns 1 if transfer is running or 0 if not.

Description

This is useful if you started transfer with `CURL.PerformInBackground` and you want to know whether it has finished yet or not.

When perform is done in background, use `CURL.ErrorCode` and `CURL.ErrorMessage` to query result status.

See also

- [61.17 CURL.ErrorCode](#) 1788
- [61.18 CURL.ErrorMessage](#) 1791
- [61.142 CURL.Perform](#) 1954
- [61.143 CURL.PerformAsync](#) 1963
- [61.144 CURL.PerformInBackground](#) 1965

Example Databases

- [CURL/CURL Download in Background](#)
- [CURL/Email/Batch Emailer](#)

61.134.1 Blog Entries

- [Batch sending Emails in FileMaker via MBS Plugin](#)

Created 18th August 2014, last changed 12nd November 2014.

61.135 CURL.LibIDNVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.LibIDNVersion")

Result Returns text or error.

Description**Examples**

Shows Lib IDN version used:

Show Custom Dialog ["IDN Version"; MBS("CURL.LibIDNVersion")]

See also

- 61.136 CURL.LibSSHVersion 1944
- 61.137 CURL.LibSSLVersion 1945

61.135.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr3](#)

Created 14th April 2018, last changed 14th April 2018.

61.136 CURL.LibSSHVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.LibSSHVersion")

Result Returns text or error.

Description**Examples**

Shows LibSSH version used:

Show Custom Dialog ["SSH Version"; MBS("CURL.LibSSHVersion")]

See also

- 61.135 CURL.LibIDNVersion 1943
- 61.137 CURL.LibSSLVersion 1945

61.136.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr3](#)
- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 14th April 2018, last changed 14th April 2018.

61.137 **CURL.LibSSLVersion**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.LibSSLVersion")

(old name: CURL.SSLVersion)

Result SSL version string.

Description

Examples

Shows SSL Version:

Show Custom Dialog ["SSL Version"; MBS("CURL.LibSSLVersion")]

See also

- 61.135 *CURL.LibIDNVersion* 1943
- 61.136 *CURL.LibSSHVersion* 1944

Created 18th August 2014, last changed 14th April 2018.

61.138 CURL.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.4	Yes	Yes	Yes	Yes	Yes

MBS("CURL.List")

Result Returns list or error.

Description

Returns IDs for all CURL objects in memory. If this list is growing, you may have forgotten to call `CURL.cleanup` in your scripts.

Normally after all scripts are done, this list should be empty unless there is an asynchron or background transfer still running.

See also

- [61.9 CURL.Cleanup](#) 1772
- [61.133 CURL.Host](#) 1941

61.138.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr2](#)

Created 13th October 2015, last changed 12nd February 2018.

61.139 CURL.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.New" )
```

Result A new CURL handle.

Description

This function must be the first function to call, and it returns a CURL handle that you must use as input to other CURL functions. `CURL.New` initializes curl and this call **MUST** have a corresponding call to `CURL.Cleanup` when the operation is complete. You can use one curl object for multiple transfers reusing same connection.

Result is a number greater than zero on success. Errors returned may be about low memory or too many CURL connections.

CURL reference numbers are starting at 16000 and counting up for each new session.

Examples

Initialize a CURL session and set URL:

```
$curl = MBS( "CURL.New" )
$r = MBS("CURL.SetOptionURL"; $curl; $URL)
```

Query a REST API:

```
# new session
Set Variable [ $curl; MBS( "CURL.New" ) ]
# set URL for this REST API
Set Variable [ $r; MBS("CURL.SetOptionURL"; $curl; "https://example.test/wc-api/v2/products" ) ]
# make a post with some data
Set Variable [ $r; MBS("CURL.SetOptionPost"; $curl; 1 ) ]
Set Variable [ $r; MBS("CURL.SetOptionPostFields"; $curl; " { product: { ... } } "; "UTF-8" ) ]
# set credentials
Set Variable [ $r; MBS("CURL.SetOptionUsername"; $curl; "consumer_key" ) ]
Set Variable [ $r; MBS("CURL.SetOptionPassword"; $curl; "consumer_secret" ) ]
# add header option
Set Variable [ $r; MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: application/json", "Expect:" ) ]
# disable security for this demo:
Set Variable [ $r; MBS( "CURL.SetOptionSSLVerifyHost"; $curl; 0 ) ]
Set Variable [ $r; MBS( "CURL.SetOptionSSLVerifyPeer"; $curl; 0 ) ]
# with log messages
Set Variable [ $r; MBS( "CURL.SetOptionVerbose"; $curl; 1 ) ]
# run it!
Set Variable [ $Error; MBS( "CURL.Perform"; $curl ) ]
# check debug messages
```

```

Set Variable [ $Messages; MBS("CURL.GetDebugAsText"; $curl) ]
# check result
Set Variable [ $Output; MBS("CURL.GetResultAsText"; $curl) ]
# and cleanup
Set Variable [ $r; MBS( "CURL.Cleanup"; $curl ) ]

```

Download a text from URL:

```

# start new transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set URL
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.mbsplugins.eu/") ]
# run transfer
Set Variable [ $ErrorCode; Value:MBS("CURL.Perform"; $curl) ]
# get result as text and debug messages:
Set Variable [ $TextResult; Value:MBS( "CURL.GetResultAsText"; $curl) ]
Set Variable [ $DebugMessages; Value:MBS( "CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.379 [CURL.SetOptionVerbose](#) 2307
- 61.380 [CURL.SetOptionWildCardMatch](#) 2309
- 61.383 [CURL.SetProgressScript](#) 2314
- 61.384 [CURL.SetTag](#) 2316
- 61.386 [CURL.SetupAWS](#) 2320
- 61.389 [CURL.UseSystemCertificates](#) 2330
- 81.7 [Folders.SystemTemporary](#) 4175
- 85.225 [GUIImage.Scale](#) 4628
- 124.40 [Plugin.SetFunctions](#) 6309
- 143.25 [SendMail.PrepareCURL](#) 6910

Example Databases

- [CURL/CURL Certificate Pinning](#)
- [CURL/Download Async](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Email Client](#)

- [CURL/Email/List IMAP folders](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/FTP/CURL FTP Upload multiple files](#)
- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/Twilio API Send SMS Json](#)

61.139.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Let CURL handle cookie list](#)
- [Use root certificates included with FileMaker](#)
- [URLs without UserName and Password please](#)
- [Upload email to Sent folder via IMAP](#)
- [Amazon S3 Upload with Mime Type and Permissions](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Query geolocation in FileMaker via MBS Plugin and Google Maps API](#)
- [Batch sending Emails in FileMaker via MBS Plugin](#)
- [Sending emails in FileMaker with MBS Plugin](#)

61.139.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 20](#)
- [Ausgabe 4/2016, Seite 19](#)
- [Ausgabe 4/2016, Seite 18](#)
- [Ausgabe 5/2014, Seite 26](#)

Created 18th August 2014, last changed 25th April 2016.

61.140 CURL.NumberOfRunningTransfers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.NumberOfRunningTransfers")

Result Returns number or error.

Description

Use CURL.RunningTransfers to get list of CURL handles for running transfers.

See also

- 61.75 CURL.GetMultiRunningTransfers 1868
- 61.149 CURL.RunningTransfers 1974

Created 12nd July 2015, last changed 12nd July 2015.

61.141 CURL.OpenInputFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.OpenInputFile"; curl; Path { ; Offset; Length })

Parameters**curl**

The CURL session handle.

\$curl

Path

Native file path.

"C:\Documents\Test.Txt"

Offset

Optional

Available in MBS FileMaker Plugin 8.4 or newer.

Offset where to start reading relative to file start.

1024*1024

Length

Optional

Available in MBS FileMaker Plugin 8.4 or newer.

Size of data to read from file.

1024*1024*10

Result Returns "OK" on success or error message.

Description

If you set input file, the data from CURL.SetInput* functions is ignored.

Do not call this method while a transfer is running.

If you have data in container, please check CURL.SetInputFile.

You may need to use CURL.SetOptionUpload to make it an upload for FTP/SFTP.

If you specify offset and length, we only read that part of the file in memory.

Otherwise we stream from the file on request.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Set input from file on disk:

```
Set Variable [ $result ; Value: MBS( "CURL.OpenInputFile"; $curl; "/Users/cs/Desktop/test.zip" ) ]
```

Upload file via FTP:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]

# FTP URL with destination file name:
Set Variable [ $result; Value: MBS("CURL.SetOptionURL" ; $curl ; "ftp://12.34.56.78/AZ1677ZZ.jpg") ]
Set Variable [ $result; Value: MBS("CURL.SetOptionUpload" ; $curl ; 1) ]
Set Variable [ $result; Value: MBS("CURL.SetOptionPassword" ; $curl ; "xxx" ) ]
Set Variable [ $result; Value: MBS("CURL.SetOptionUsername" ; $curl ; "yyy" ) ]

# Pick file from desktop:
Set Variable [ $Desktop; Value: MBS("Folders.UserDesktop") ]
Set Variable [ $Path; Value: MBS("Path.AddPathComponent"; $desktop; "AZ1677ZZ.jpg") ]
Set Variable [ $result; Value: MBS( "CURL.OpenInputFile" ; $curl ;$path ) ]

# Pick file from container:
// Set Variable [ $result; Value: MBS( "CURL.SetInputFile" ; $curl ; Test::ImageFileContainer ) ]

# Upload file
Set Field [ Test::PerformResult; MBS( "CURL.Perform" ; $curl ) ]
Set Field [ Test::DebugMessages; MBS( "CURL.GetDebugAsText" ; $curl ) ]
Set Variable [ $result; Value:MBS( "CURL.Cleanup" ; $curl ) ]
```

See also

- 61.1 CURL.AddInputFile 1761
- 61.12 CURL.CloseInputFile 1777
- 61.158 CURL.SetInputFile 1991
- 61.326 CURL.SetOptionSSHPrivateKeyfile 2228
- 61.374 CURL.SetOptionUpload 2299
- 61.378 CURL.SetOptionUsername 2305
- 61.386 CURL.SetupAWS 2320
- 86.2 Hash.Digest 4787
- 121.1 Path.AddPathComponent 6135
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [CURL/Amazon S3 Upload File](#)

- [CURL/FTP/CURL FTP Upload File](#)
- [CURL/FTP/CURL FTP Upload from file with Progress](#)
- [CURL/SFTP/CURL sFTP Upload File](#)

61.141.1 Blog Entries

- [Tip of the day: FTP File Upload](#)
- [MBS Filemaker Plugin, version 4.2pr1](#)
- [MBS Filemaker Plugin, version 3.3pr1](#)
- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 21st September 2018.

61.142 CURL.Perform

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Perform"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Error code. 0 means everything was ok, non-zero means an error occurred. The number may be followed by a text description.

Description

This function is called after the init and all the options are set, and will perform the transfer as described in the options. It must be called with the same handle as input as the CURL.New call returned.

You can do any amount of calls to CURL.Perform while using the same handle. If you intend to transfer more than one file, you are even encouraged to do so. CURL will then attempt to re-use the same connection for the following transfers, thus making the operations faster, less CPU intense and using less network resources. Just note that you will have to use the option functions between the invokes to set options for the following CURL.Perform.

You must never call this function simultaneously from two places using the same handle. Let the function return first before invoking it another time. If you want parallel transfers, you must use several curl handles.

While transfer is running, your FileMaker application is blocked. It's useful to show progress with using CURL.SetUpdateProgressDialog. Or you use CURL.PerformInBackground or CURL.PerformAsync to run the transfer in background.

Internal buffer for output, debug and header data is cleared before the perform.

This function returns error codes. If you get an error, please use CURL.GetDebugAsText to read the transcription of the transfer and look for error messages from server.

Typical error codes are 6 for a wrong domain name in the URL, 67 for wrong name/password combination, 60 for missing/bad SSL settings, 1 for an unsupported protocol.

In case of error 60, please decide what SSL policy you want and use our SSL options. e.g. use CURL.SetOptionSSLVerifyHost and CURL.SetOptionSSLVerifyPeer to disable SSL security or use CURL.SetOptionCAInfo to point CURL to a certificate.

No error means the data transfer was okay, but it doesn't tell you if for example a webserver reported an error. Please check `CURL.GetResponseCode` for HTTP requests to get the HTTP status code. e.g. 404 if file is not found.

The list of possible error codes:

With SFTP, you can get logged error "Upload failed: Operation failed (4/-31)" when upload uses path to folder instead of file in URL.

Examples

Query a REST API:

```
# new session
Set Variable [ $curl; MBS( "CURL.New" ) ] ]
# set URL for this REST API
Set Variable [ $r; MBS("CURL.SetOptionURL"; $curl; "https://example.test/wc-api/v2/products") ]
# make a post with some data
Set Variable [ $r; MBS("CURL.SetOptionPost"; $curl; 1) ]
Set Variable [ $r; MBS("CURL.SetOptionPostFields"; $curl; " { product: { ... } } "; "UTF-8") ]
# set credentials
Set Variable [ $r; MBS("CURL.SetOptionUsername"; $curl; "consumer_key") ]
Set Variable [ $r; MBS("CURL.SetOptionPassword"; $curl; "consumer_secret") ]
# add header option
Set Variable [ $r; MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: application/json"; "Expect:" ) ]
# disable security for this demo:
Set Variable [ $r; MBS("CURL.SetOptionSSLVerifyHost"; $curl; 0 ) ]
Set Variable [ $r; MBS("CURL.SetOptionSSLVerifyPeer"; $curl; 0 ) ]
# with log messages
Set Variable [ $r; MBS("CURL.SetOptionVerbose"; $curl; 1 ) ]
# run it!
Set Variable [ $Error; MBS( "CURL.Perform"; $curl ) ]
# check debug messages
Set Variable [ $Messages; MBS("CURL.GetDebugAsText"; $curl) ]
# check result
Set Variable [ $Output; MBS("CURL.GetResultAsText"; $curl) ]
# and cleanup
Set Variable [ $r; MBS( "CURL.Cleanup"; $curl ) ]
```

Using Rosette web service:

```
# Start new CURL transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set options like Verbose Debug Messages
Set Variable [ $result; Value:MBS("CURL.SetOptionVerbose"; $curl; 1) ]
# the url of webservice
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://api.rosette.com/rest/v1/mor-
```

```

phology/parts-of-speech") ]
# the header info for tagging, API Key comes from a global field.
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "user_key: " & RosetteAPISettings::RosetteAPIKey; "Content-Type: application/json"; "Accept: application/json" ) ]
# We want a POST transfer:
Set Variable [ $result; Value:MBS("CURL.SetOptionPost"; $curl; 1 ) ]
# Build JSON using the plugin function to properly encode a string:
Set Variable [ $request; Value:" { \"content\": " & MBS("JSON.CreateString"; TextData::TextAsInput) & " } " ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; $request) ]
# show our JSON in a field for debugging:
Set Field [ TextData::CURLInput; $request ]
# Run transfer
Set Variable [ $result; Value:MBS("CURL.Perform"; $curl) ]
# Check result and debug messages
Set Field [ TextData::CurlDebug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ TextData::CurlOutput; MBS("CURL.GetResultAsText"; $curl) ]
# Cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]

```

Download a text from URL:

```

# start new transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set URL
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.mbsplugins.eu/") ]
# run transfer
Set Variable [ $ErrorCode; Value:MBS("CURL.Perform"; $curl) ]
# get result as text and debug messages:
Set Variable [ $TextResult; Value:MBS("CURL.GetResultAsText"; $curl) ]
Set Variable [ $DebugMessages; Value:MBS("CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]

```

Charge with Stripe webservice:

```

# new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# use stripe charge API
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://api.stripe.com/v1/charges") ]
# set user name
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; "sk_test_ your id here") ]
# make a post with given content:
Set Variable [ $result; Value:MBS("CURL.SetOptionPost"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; "amount=400& currency=usd& description=Charge% 20for% 20test@example.com& source [ object ] =card& source [ number ] =4242424242424242& source [ exp_month ] =12& source [ exp_year ] =2017& source [ cvc ] =123") ]

```



```

# perform
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# now check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header; MBS("CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Download URL to temp file:

```

Set Variable [ $curl; Value:MBS("CURL.New") ]
# this is URL to download
Set Variable [ $url; Value:"https://www.monkeybreadsoftware.com/filemaker/test.txt" ]
# get file name from URL
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $URL ) ]
# now make temp file path
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.SystemTemporary" ); $name
) ]
# set URL to download
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.monkeybreadsoftware.com/file-
maker/test.txt") ]
# open destination file
Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
# run transfer
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# close destination file
Set Variable [ $r; Value:MBS("CURL.CloseOutputFile"; $curl) ]
# get debug messages
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Query IP via ipinfo.io:

```

Go to Layout [ "Table" ]
New Record/Request
# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "http://ipinfo.io") ]
# RUN now
Set Variable [ $result; Value:MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ Table::DebugLog; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ Table::Result; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
If [ $result = "OK" ]
# Check HTTP error code
Set Variable [ $response; Value:MBS("CURL.GetResponseCode"; $curl) ]

```

```

If [ $response = 200 ]
# Query values from JSON
Set Variable [ $json; Value:MBS( "JSON.Parse"; Table::Result ) ]
Set Field [ Table::IP; MBS("JSON.GetPathItem"; $json; "ip"; 1) ]
Set Field [ Table::Hostname; MBS("JSON.GetPathItem"; $json; "hostname"; 1) ]
Set Field [ Table::City; MBS("JSON.GetPathItem"; $json; "city"; 1) ]
Set Field [ Table::Region; MBS("JSON.GetPathItem"; $json; "region"; 1) ]
Set Field [ Table::Country; MBS("JSON.GetPathItem"; $json; "country"; 1) ]
Set Field [ Table::Location; MBS("JSON.GetPathItem"; $json; "loc"; 1) ]
Set Field [ Table::Company or Provider; MBS("JSON.GetPathItem"; $json; "org"; 1) ]
Set Variable [ $r; Value:MBS( "JSON.Release"; $json ) ]
End If
End If
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
Commit Records/Requests [ No dialog ]

```

Query fedex for tracking status:

```

# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.fedex.com/trackingCal/track/v1/shipments/trackingnumbers") ]
# set query content including the trackingNumber
Set Variable [ $result; Value: MBS("CURL.SetOptionPostFields"; $curl; " { \"TrackPackagesRequest\": {
  \"appType\": \"WTRK\", \"appDeviceType\": \"WTRK\", \"uniqueKey\": \"\", \"processingParameters\": {
  }, \"trackingInfoList\": [ { \"trackNumberInfo\": { \"trackingNumber\": \"\" & $trackingNumber & \"\", \"trackingQualifier\": \"\", \"trackingCarrier\": \"\" } } ] } } ) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: application/json")
]
# RUN now
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Send request to Apple's gsx webservice:

```

Set Variable [ $XMLRequest; Value:"" ]
# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# URL for web service
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://gsxapiut.apple.com:443/gsx-
ws/services/emea/asp") ]

```

```

# Mark content as XML
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml; charset=UTF-8") ]
# Pass XML content for request
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; $XMLRequest) ]
# Certificate and private key in one file
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLCert"; $curl; "/Users/cs/Keys/apple-cert+key.pem") ]
]
# Root certificates
Set Variable [ $result; Value:MBS("CURL.SetOptionCAInfo"; $curl; "/Users/cs/Keys/cacert.pem") ]
# SSL Key is in PEM Format
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLCertType"; $curl; "PEM") ]
# Password for key file
Set Variable [ $result; Value:MBS("CURL.SetOptionKeyPassword"; $curl; "xxx") ]
# SSL Verification on
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyPeer"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyHost"; $curl; 1) ]
# use TLS v1.2
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVersion"; $curl; 6) ]
# RUN now
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Upload file from OS X to IBM Mainframe:

```

Set Variable [ $debug; Value:"" ]
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; "xxx") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; "yyy") ]
Set Variable [ $result; Value:MBS("CURL.OpenInputFile"; $curl; "/Users/gene/Desktop/MY.Logfile.txt") ]
]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "ftp://192.168.1.4:21/MY.LOGFILE1" ) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionVerbose"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionTransferText"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyPeer"; $curl; 0) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyHost"; $curl; 0) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionQuote"; $curl; "site RECFM=FB LRECL=1024") ]
Set Variable [ $result; Value:MBS("CURL.Perform"; $curl) ]
Set Variable [ $debug; Value:MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Run a generic POST request for REST or SOAP web service:

```
# new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# use stripe charge API
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://someURL/service") ]
# set user name and password if needed:
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; "user name") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; "password") ]
# set some additional headers, which may include custom authorization and content types:
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "Authorization: Bearer a92eabb9-76f9-42ee-b280-bcd15cb2e9db"; "Content-Type: application/json" ) ]
# make a post with given content:
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; $json ) ]
# perform
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# now check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header; MBS("CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.386 [CURL.SetupAWS](#) 2320
- 61.389 [CURL.UseSystemCertificates](#) 2330
- 81.5 [Folders.System](#) 4173
- 81.7 [Folders.SystemTemporary](#) 4175
- 85.225 [GImage.Scale](#) 4628
- 86.2 [Hash.Digest](#) 4787
- 100.52 [JSON.GetPathItem](#) 5314
- 100.66 [JSON.Release](#) 5336
- 121.1 [Path.AddPathComponent](#) 6135
- 121.5 [Path.LastPathComponent](#) 6144

Example Databases

- [CURL/CURL Download Picture](#)
- [CURL/CURL Download Text with Textencoding](#)
- [CURL/CURL Download to Container](#)

- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email Upload](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [CURL/WebServices/Query IP and Country](#)
- [CURL/WebServices/Swiss Post Addresscheck](#)
- [CURL/WebServices/Twitter OAuth](#)
- [Third Party/Google OAUTH 2 example](#)

61.142.1 **Blog Entries**

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Let CURL handle cookie list](#)
- [MBS FileMaker Plugin, version 8.6pr5](#)
- [Use root certificates included with FileMaker](#)
- [Upload email to Sent folder via IMAP](#)
- [Amazon S3 Upload with Mime Type and Permissions](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Query geolocation in FileMaker via MBS Plugin and Google Maps API](#)
- [Sending emails in FileMaker with MBS Plugin](#)
- [Using NetVerify web service with FileMaker](#)

61.142.2 **FileMaker Magazin**

- [Ausgabe 4/2016, Seite 20](#)
- [Ausgabe 4/2016, Seite 19](#)
- [Ausgabe 5/2014, Seite 26](#)

Created 18th August 2014, last changed 30th December 2019.

Name	Number	Description
CURLE_OK	0	No error.
CURLE_UNSUPPORTED_PROTOCOL	1	Unsupported protocol.
CURLE_FAILED_INIT	2	Initialization failed or option not available.
CURLE_URL_MALFORMAT	3	URL has wrong format.
CURLE_COULDNT_RESOLVE_PROXY	5	DNS didn't return proxy IP.
CURLE_COULDNT_RESOLVE_HOST	6	DNS didn't return IP for host.
CURLE_COULDNT_CONNECT	7	Connection failed.
CURLE_FTP_WEIRD_SERVER_REPLY	8	FTP error.
CURLE_REMOTE_ACCESS_DENIED	9	A service was denied by the server due to lack of access when login fails this is not returned.
CURLE_FTP_WEIRD_PASS_REPLY	11	FTP error.
CURLE_FTP_WEIRD_PASV_REPLY	13	FTP error.
CURLE_FTP_WEIRD_227_FORMAT	14	FTP error.
CURLE_FTP_CANT_GET_HOST	15	FTP error.
CURLE_FTP_COULDNT_SET_TYPE	17	FTP set command failed.
CURLE_PARTIAL_FILE	18	Only a part of the file was downloaded.
CURLE_FTP_COULDNT_RETR_FILE	19	File not found.
CURLE_QUOTE_ERROR	21	quote command failure
CURLE_HTTP_RETURNED_ERROR	22	HTTP returned an error.
CURLE_WRITE_ERROR	23	Write error.
CURLE_UPLOAD_FAILED	25	failed upload "command"
CURLE_READ_ERROR	26	couldn't open/read from file
CURLE_OUT_OF_MEMORY	27	Out Of memory
CURLE_OPERATION_TIMEDOUT	28	the timeout time was reached
CURLE_FTP_PORT_FAILED	30	FTP PORT operation failed
CURLE_FTP_COULDNT_USE_REST	31	the REST command failed
CURLE_RANGE_ERROR	33	RANGE "command" didn't work
CURLE_HTTP_POST_ERROR	34	HTTP Post failed.
CURLE_SSL_CONNECT_ERROR	35	wrong when connecting with SSL
CURLE_BAD_DOWNLOAD_RESUME	36	couldn't resume download
CURLE_FILE_COULDNT_READ_FILE	37	Failed to read file.
CURLE_LDAP_CANNOT_BIND	38	LDAP can't connect.
CURLE_LDAP_SEARCH_FAILED	39	LDAP Search failed.
CURLE_FUNCTION_NOT_FOUND	41	Function not found.
CURLE_ABORTED_BY_CALLBACK	42	Transfer aborted with CURL.Cancel.
CURLE_BAD_FUNCTION_ARGUMENT	43	Bad parameters.
CURLE_INTERFACE_FAILED	45	CURL.OptionInterface failed
CURLE_TOO_MANY_REDIRECTS	47	catch endless re-direct loops
CURLE_UNKNOWN_TELNET_OPTION	48	User specified an unknown option
CURLE_TELNET_OPTION_SYNTAX	49	Malformed telnet option
CURLE_PEER_FAILED_VERIFICATION	51	peer's certificate or fingerprint wasn't verified fine
CURLE_GOT_NOHING	52	when this is a specific error
CURLE_SSL_ENGINE_NOTFOUND	53	SSL crypto engine not found
CURLE_SSL_ENGINE_SETFAILED	54	can not set SSL crypto engine as default
CURLE_SEND_ERROR	55	failed sending network data
CURLE_RECV_ERROR	56	failure in receiving network data
CURLE_SSL_CERTPROBLEM	58	problem with the local certificate
CURLE_SSL_CIPHER	59	couldn't use specified cipher
CURLE_SSL_CACERT	60	problem with the CA cert (path?)
CURLE_BAD_CONTENT_ENCODING	61	Unrecognized transfer encoding
CURLE_LDAP_INVALID_URL	62	Invalid LDAP URL
CURLE_FILESIZE_EXCEEDED	63	Maximum file size exceeded
CURLE_USE_SSL_FAILED	64	Requested FTP SSL level failed
CURLE_SEND_FAIL_REWIND	65	Sending the data requires a rewind that failed
CURLE_SSL_ENGINE_INITFAILED	66	failed to initialise ENGINE
CURLE_LOGIN_DENIED	67	user, password or similar was not accepted and we failed to login
CURLE_TFTP_NOTFOUND	68	file not found on server
CURLE_TFTP_PERM	69	permission problem on server
CURLE_REMOTE_DISK_FULL	70	out of disk space on server
CURLE_TFTP_ILLEGAL	71	Illegal TFTP operation
CURLE_TFTP_UNKNOWNID	72	Unknown transfer ID
CURLE_REMOTE_FILE_EXISTS	73	File already exists
CURLE_TFTP_NOSUCHUSER	74	No such user
CURLE_CONV_FAILED	75	conversion failed
CURLE_CONV_REQD	76	caller must register conversion callbacks
CURLE_SSL_CACERT_BADFILE	77	could not load CACERT file, missing or wrong format
CURLE_REMOTE_FILE_NOT_FOUND	78	remote file not found
CURLE_SSH	79	error from the SSH layer, somewhat generic so the error message will be of interest when this has happened
CURLE_SSL_SHUTDOWN_FAILED	80	Failed to shut down the SSL connection
CURLE_AGAIN	81	socket is not ready for send/rcv, wait till it's ready and try again.
CURLE_SSL_CRL_BADFILE	82	could not load CRL file, missing or wrong format.
CURLE_SSL_ISSUER_ERROR	83	Issuer check failed.
CURLE_FTP_PRET_FAILED	84	a PRET command failed
CURLE_RTSP_CSEQ_ERROR	85	mismatch of RTSP CSeq numbers
CURLE_RTSP_SESSION_ERROR	86	mismatch of RTSP Session Identifiers

61.143 CURL.PerformAsync

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	No	No	Yes

MBS("CURL.PerformAsync"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns OK or error.

Description

The query is enqueued and run by the plugin in background.

When transfer is finished, a script is triggered if you set one with `CURL.SetFinishedScript` function.

This function is called after the init and all the options are set, and will perform the transfer as described in the options. It must be called with the same handle as input as the `CURL.New` call returned.

You can do any amount of calls to `CURL.Perform` while using the same handle. If you intend to transfer more than one file, you are even encouraged to do so. `CURL` will then attempt to re-use the same connection for the following transfers, thus making the operations faster, less CPU intense and using less network resources. Just note that you will have to use the option functions between the invokes to set options for the following `CURL.Perform`.

While transfer is running, your FileMaker application is not blocked. It's useful to show progress with using `CURL.SetUpdateProgressDialog`. Be aware that transfer runs in background and you should query status with functions like `CURL.IsRunning`, `CURL.GetProgressTotalDownload`, `CURL.GetProgressTotalUpload`, `CURL.GetProgressCurrentDownload` and `CURL.GetProgressCurrentUpload`.

Internal buffer for output, debug and header data is cleared before the perform.

Examples

Start a few transfers:

Go to Record/Request/Page [First]

Loop

Set Variable [\$curl; Value:MBS("CURL.New")]

Set Variable [\$r; Value:MBS("CURL.SetFinishedScript"; \$curl; Get(FileName); "DownloadFinished")]

Set Variable [\$r; Value:MBS("CURL.SetProgressScript"; \$curl; Get(FileName); "ProgressScript")]

Set Variable [\$r; Value:MBS("CURL.SetOptionURL"; \$curl; Download Async::URL)]

Set Variable [\$r; Value:MBS("CURL.SetTag"; \$curl; Get(RecordID))]

Set Field [Download Async::Progress; 0]

Set Field [Download Async::CURL Handle; \$curl]

Set Variable [\$r; Value:MBS("CURL.PerformAsync"; \$curl)]

```

If [ MBS("IsError") ]
Show Custom Dialog [ "CURL Error"; $r ]
End If
Commit Records/Requests [ Skip data entry validation; No dialog ]
Go to Record/Request/Page [ Next; Exit after last ]
End Loop

```

See also

- 61.156 [CURL.SetFinishedEvaluate](#) 1987
- 61.164 [CURL.SetMultiOptionChunkLengthPenaltySize](#) 2005
- 61.167 [CURL.SetMultiOptionMaxConnects](#) 2008
- 61.168 [CURL.SetMultiOptionMaxHostConnections](#) 2009
- 61.169 [CURL.SetMultiOptionMaxPipelineLength](#) 2010
- 61.170 [CURL.SetMultiOptionMaxTotalConnections](#) 2011
- 61.370 [CURL.SetOptionURL](#) 2288
- 61.383 [CURL.SetProgressScript](#) 2314
- 61.385 [CURL.SetUpdateProgressDialog](#) 2318
- 124.6 [IsError](#) 6266

Example Databases

- [CURL/Download Async](#)

61.143.1 Blog Entries

- [MBS FileMaker Plugin 5.2 for OS X/Windows - More than 3200 Functions](#)

Created 12nd July 2015, last changed 26th December 2018.

61.144 CURL.PerformInBackground

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.PerformInBackground"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Error code. 0 means everything was ok, non-zero means an error occurred.

Description

This function is called after the init and all the options are set, and will perform the transfer as described in the options. It must be called with the same handle as input as the CURL.New call returned.

You can do any amount of calls to PerformInBackground while using the same handle. If you intend to transfer more than one file, you are even encouraged to do so. CURL will then attempt to re-use the same connection for the following transfers, thus making the operations faster, less CPU intense and using less network resources. Just note that you will have to use the option functions between the invokes to set options for the following CURL.Perform.

You must never call this function simultaneously from two places using the same handle. Let the transfer finish first before invoking it another time. If you want parallel transfers, you must use several curl handles.

Internal buffer for output, debug and header data is cleared before the perform.

While transfer is running, your FileMaker application is not blocked. Be aware that transfer runs in background and you should query status with functions like CURL.IsRunning, CURL.GetProgressTotalDownload, CURL.GetProgressTotalUpload, CURL.GetProgressCurrentDownload and CURL.GetProgressCurrentUpload.

See also

- 61.7 CURL.Cancel 1770
- 61.93 CURL.GetProgressCurrentUpload 1886
- 61.98 CURL.GetProgressTotalDownload 1891
- 61.99 CURL.GetProgressTotalUpload 1892
- 61.134 CURL.IsRunning 1942
- 61.139 CURL.New 1947

- 61.142 *CURL.Perform* 1954
- 61.156 *CURL.SetFinishedEvaluate* 1987
- 61.370 *CURL.SetOptionURL* 2288
- 61.385 *CURL.SetUpdateProgressDialog* 2318

Example Databases

- [CURL/CURL Download in Background](#)
- [CURL/Email/Batch Emailer](#)

61.144.1 Blog Entries

- [Batch sending Emails in FileMaker via MBS Plugin](#)

Created 18th August 2014, last changed 18th August 2014.

61.145 CURL.Protocols

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Protocols")

Result The protocols as a string with comma for separator.

Description**Examples**

Shows protocols:

Show Custom Dialog ["Protocols"; MBS("CURL.Protocols")]

See also

- 61.100 CURL.GetProtocol 1893
- 61.370 CURL.SetOptionURL 2288

Example Databases

- [CURL/CURL Version and Protocols](#)

Created 18th August 2014, last changed 8th December 2016.

61.146 **CURL.ReceiveData**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.ReceiveData"; curl; BytesToRead { ; ResultType })

Parameters**curl**

The CURL session handle.

\$curl

BytesToRead

Maximum number of bytes to read.

1000

ResultType

Optional

What type of data to return. Can be hex or base64. Default is hex.

"hex"

Result Returns OK or error.

Description

This function receives raw data from the established connection. You may use it together with `SendData` to implement custom protocols using libcurl. This functionality can be particularly useful if you use proxies and/or SSL encryption: libcurl will take care of proxy negotiation and connection set-up.

`BytesToRead` is the maximum amount of data you want to read now. The function returns the text read, which can be less than requested.

To establish the connection, set `OptionConnectOnly = true` before calling `Perform`. Note that `ReceiveData` does not work on connections that were created without this option.

The call will return `CURLE_AGAIN` if there is no data to read - the socket is used in non-blocking mode internally. When `CURLE_AGAIN` is returned, wait for data to arrive.

Wait on the socket only if `ReceiveData` returns `CURLE_AGAIN`. The reason for this is libcurl or the SSL library may internally cache some data, therefore you should call `ReceiveData` until all data is read which would include any cached data.

Furthermore if you wait on the socket and it tells you there is data to read, `ReceiveData` may return `CURLE_AGAIN` if the only data that was read was for internal SSL processing, and no other data is available.

On success, sets error code to `CURLE_OK` (0) and returns the data.
On failure, returns zero and error code is set to the appropriate error code.

The function may return `CURLE_AGAIN`. In this case, use your operating system facilities to wait until data can be read, and retry.

Reading exactly 0 bytes indicates a closed connection.

If there's no socket available to use from the previous transfer, this function returns `CURL_EUNSUPPORTED_PROTOCOL`.

Please use `CURL.ErrorCode` to query error after you used this function.

See also

- 61.17 `CURL.ErrorCode` 1788
- 61.147 `CURL.ReceiveText` 1970
- 61.184 `CURL.SetOptionConnectOnly` 2032
- 154.44 `Socket.SSL.Connect` 7241
- 154.46 `Socket.SSL.Initialize` 7243

61.146.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 27th March 2017, last changed 27th March 2017.

61.147 CURL.ReceiveText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.2	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.ReceiveText"; curl; BytesToRead { ; Encoding } )
```

Parameters

curl

The CURL session handle.

\$curl

BytesToRead

Maximum number of bytes to read.

1000

Encoding

Optional

The text encoding for result. Default is UTF-8.

"UTF8"

Result Returns OK or error.

Description

This function receives raw data from the established connection. You may use it together with `SendData` to implement custom protocols using `libcurl`. This functionality can be particularly useful if you use proxies and/or SSL encryption: `libcurl` will take care of proxy negotiation and connection set-up.

`BytesToRead` is the maximum amount of data you want to read now. The function returns the text read, which can be less than requested.

To establish the connection, set `OptionConnectOnly = true` before calling `Perform`. Note that `ReceiveData` does not work on connections that were created without this option.

The call will return `CURLE_AGAIN` if there is no data to read - the socket is used in non-blocking mode internally. When `CURLE_AGAIN` is returned, wait for data to arrive.

Wait on the socket only if `ReceiveData` returns `CURLE_AGAIN`. The reason for this is `libcurl` or the SSL library may internally cache some data, therefore you should call `ReceiveData` until all data is read which would include any cached data.

Furthermore if you wait on the socket and it tells you there is data to read, `ReceiveData` may return `CURLE_AGAIN` if the only data that was read was for internal SSL processing, and no other data is available.

On success, sets error code to `CURLE_OK` (0) and returns the text.
On failure, returns zero and error code is set to the appropriate error code.

The function may return `CURLE_AGAIN`. In this case, use your operating system facilities to wait until data can be read, and retry.

Reading exactly 0 bytes indicates a closed connection.

If there's no socket available to use from the previous transfer, this function returns `CURL_EUNSUPPORTED_PROTOCOL`.

Please use `CURL.ErrorCode` to query error after you used this function.

Examples

Loop and read text from socket:

```
Set Variable [ $received; Value:"" ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $r; Value:MBS( "CURL.ReceiveText"; $curl; 10000; "UTF-8" ) ]
Set Variable [ $errorCode; Value:MBS( "CURL.ErrorCode"; $curl ) ]
If [ GetAsNumber ( $errorCode ) = 81 ]
# wait
Else If [ GetAsNumber ( $errorCode ) = 0 ]
# got some data
Set Variable [ $received; Value:$received & $r ]
Exit Loop If [ $r = "" ]
Else
# error
Exit Loop If [ 1 ]
End If
End Loop
Set Variable [ $received2; Value:MBS( "Text.ReplaceNewline"; $received; 1 ) ]
Set Field [ CURL Low Level Sockets::Data Received; $received2 ]
```

See also

- 61.17 `CURL.ErrorCode` 1788
- 61.146 `CURL.ReceiveData` 1968
- 61.184 `CURL.SetOptionConnectOnly` 2032
- 154.44 `Socket.SSL.Connect` 7241
- 154.46 `Socket.SSL.Initialize` 7243
- 164.59 `Text.ReplaceNewline` 7857

Example Databases

- [CURL/CURL Low Level Sockets](#)

61.147.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 27th March 2017, last changed 10th April 2017.

61.148 CURL.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Reset"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns OK or error.

Description

You don't need to reset the CURL session after calling CURL.New. The new curl session has no options set which could be cleared.

See also

- 61.139 CURL.New

1947

Created 8th July 2015, last changed 7th May 2016.

61.149 CURL.RunningTransfers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.RunningTransfers")

Result Returns list or error.

Description

This list is empty if no transfer is running.
See also `CURL.NumberOfRunningTransfers` for just the count.

Examples

Shows list of running transfers:

```
Show Custom Dialog [ "Transfers in progress"; MBS( "CURL.RunningTransfers" ) ]
```

See also

- [61.140 CURL.NumberOfRunningTransfers](#) 1950

61.149.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 12nd July 2015, last changed 15th April 2018.

61.150 CURL.SendData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SendData"; curl; Data { ; DataType })

Parameters**curl**

The CURL session handle.

\$curl

Data

The data to send. Can be hex or base64 encoded text.

DataType

Optional

The data type to send. Can be Hex or Base64. Default is hex.

"hex"

Result Returns OK or error.

Description

This function sends arbitrary data over the established connection. You may use it together with Receive-Data to implement custom protocols using libcurl. This functionality can be particularly useful if you use proxies and/or SSL encryption: libcurl will take care of proxy negotiation and connection set-up.

Provide the data to send via parameter. We return the number of bytes sent.

To establish the connection, use `CURL.SetOptionConnectOnly` with value 1 before calling `CURL.Perform` function. Note that `SendData` will not work on connections that were created without this option.

The call will return empty and set error to `CURLE_AGAIN` (81) if it's not possible to send data right now - the socket is used in non-blocking mode internally. When `CURLE_AGAIN` is returned, please wait.

Furthermore if you wait on the socket and it tells you it's writable, `SendData` may return `CURLE_AGAIN` if the only data that was sent was for internal SSL processing, and no other data could be sent.

Please use `CURL.ErrorCode` to query error after you used this function.

See also

- 61.17 `CURL.ErrorCode` 1788
- 61.142 `CURL.Perform` 1954
- 61.184 `CURL.SetOptionConnectOnly` 2032

- 154.44 Socket.SSL.Connect 7241
- 154.46 Socket.SSL.Initialize 7243

61.150.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 27th March 2017, last changed 27th March 2017.

61.151 CURL.SendText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SendText"; curl; Text { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Text

The text to send.

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns OK or error.

Description

This function sends arbitrary data over the established connection. You may use it together with Receive-Data to implement custom protocols using libcurl. This functionality can be particularly useful if you use proxies and/or SSL encryption: libcurl will take care of proxy negotiation and connection set-up.

Provide the data to send via parameter. We return the number of bytes sent.

To establish the connection, use `CURL.SetOptionConnectOnly` with value 1 before calling `CURL.Perform` function. Note that `SendData` will not work on connections that were created without this option.

The call will return empty and set error to `CURLE_AGAIN` (81) if it's not possible to send data right now - the socket is used in non-blocking mode internally. When `CURLE_AGAIN` is returned, please wait.

Furthermore if you wait on the socket and it tells you it's writable, `SendData` may return `CURLE_AGAIN` if the only data that was sent was for internal SSL processing, and no other data could be sent.

Please use `CURL.ErrorCode` to query error after you used this function.

Examples

Send HTTP request:

```
Set Variable [ $request; Value:"GET / HTTP/1.1$Host: www.monkeybreadsoftware.de$$" // must end with two empty lines ]
```

```
Set Variable [ $request2; Value:MBS( "Text.ReplaceNewline"; $request; 3) ]
```

Set Variable [\$r; Value:MBS("CURL.SendText"; \$curl; \$request2; "UTF-8")]

See also

- [61.17 CURL.ErrorCode](#) 1788
- [61.142 CURL.Perform](#) 1954
- [61.184 CURL.SetOptionConnectOnly](#) 2032
- [154.44 Socket.SSL.Connect](#) 7241
- [154.46 Socket.SSL.Initialize](#) 7243
- [164.59 Text.ReplaceNewline](#) 7857

Example Databases

- [CURL/CURL Low Level Sockets](#)

61.151.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 27th March 2017, last changed 10th April 2017.

61.152 CURL.SetBatchDestinationPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetBatchDestinationPath"; curl; Path)

Parameters**curl**

The CURL session handle.

\$curl

Path

The path to destination folder.

"/Users/cs/Desktop/"

Result Returns OK or error.

Description

See also [CURL.SetOptionWildcardMatch](#).

This function requires a native path. Use [Path.FileMakerPathToNativePath](#) to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use [FileDialog](#) functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Download several files via FTP:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL with wildcard match
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
# Set folder where to put files
Set Variable [ $result; Value:MBS("CURL.SetBatchDestinationPath"; $curl; CURL Test::DestPath) ]
# credentials...
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
# enable wildcard match
Set Variable [ $result; Value:MBS("CURL.SetOptionWildcardMatch"; $curl; 1) ]
# download them all
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# check results
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ CURL Test::FileNames; MBS("CURL.GetBatchFileNames"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 CURL.Cleanup 1772
- 61.35 CURL.GetBatchDestinationPath 1819
- 61.36 CURL.GetBatchFileNames 1820
- 61.44 CURL.GetDebugAsText 1831
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954
- 61.370 CURL.SetOptionURL 2288
- 61.378 CURL.SetOptionUsername 2305
- 61.380 CURL.SetOptionWildcardMatch 2309
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [CURL/FTP/CURL FTP Download all Files in Directory](#)

61.152.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 19th December 2016, last changed 20th December 2016.

61.153 CURL.SetDebugWithData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetDebugWithData"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Pass 1 to include all data or 0 to disable.

1

Result Returns OK or error.

Description

By default we don't include all the data in the debug log and just the messages.

This must be set before you call CURL.Perform function.

Examples

Enable data in debug:

MBS("CURL.SetDebugWithData"; \$curl; 1)

See also

- 61.44 [CURL.GetDebugAsText](#) 1831
- 61.46 [CURL.GetDebugWithData](#) 1835
- 61.48 [CURL.GetDebugWithTime](#) 1837
- 61.142 [CURL.Perform](#) 1954
- 61.155 [CURL.SetDebugWithTime](#) 1985
- 61.379 [CURL.SetOptionVerbose](#) 2307
- 61.386 [CURL.SetupAWS](#) 2320
- 61.387 [CURL.SetupOAuth](#) 2324

Example Databases

- [CURL/Amazon S3 Buckets](#)

- [CURL/Amazon S3 Download Picture](#)
- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL Send Form](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [CURL/WebServices/AdobeSign Webservice](#)
- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [CURL/WebServices/Sales Force Test](#)
- [CURL/WebServices/Twitter OAuth](#)

61.153.1 Blog Entries

- [Debugging problems on FileMaker Cloud for AWS](#)
- [MBS FileMaker Plugin, version 6.5pr5](#)
- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 14th May 2016, last changed 31st August 2016.

61.154 CURL.SetDebugWithProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.3	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetDebugWithProgress"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

By default we don't include progress messages in log.

Examples

Download with debug log with full details:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.CreateDebugOutputFile"; $curl; "/tmp/curl.log") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "http://www.monkeybreadsoftware.de/images/mbs.jpg") ]
Set Variable [ $result; Value:MBS("CURL.SetDebugWithTime"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetDebugWithProgress"; $curl; 1) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::Image; MBS("CURL.GetResultAsJPEG"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 CURL.Cleanup 1772
- 61.14 CURL.CreateDebugOutputFile 1780
- 61.44 CURL.GetDebugAsText 1831
- 61.47 CURL.GetDebugWithProgress 1836
- 61.117 CURL.GetResultAsJPEG 1918
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954

- 61.155 `CURL.SetDebugWithTime` 1985
- 61.370 `CURL.SetOptionURL` 2288
- 61.379 `CURL.SetOptionVerbose` 2307

Example Databases

- [CURL/SFTP/CURL sFTP Upload File](#)

61.154.1 Blog Entries

- [Debugging problems on FileMaker Cloud for AWS](#)
- [MBS FileMaker Plugin, version 8.3pr6](#)
- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 15th June 2016, last changed 15th June 2016.

61.155 CURL.SetDebugWithTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetDebugWithTime"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Pass 1 to include times or 0 to not include them.

1

Result Returns OK or error.

Description

This allows you to monitor what happens when.

e.g. see if login takes 10 seconds instead of 0.1.

Default is off.

This must be set before you call CURL.Perform function.

Examples

Load text and log with times:

```
# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
# RUN now
Set Field [ CURL Test::Result; MBS("CURL.SetDebugWithTime"; $curl; 1) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header; MBS("CURL.GetHeaderAsText"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 CURL.Cleanup 1772
- 61.44 CURL.GetDebugAsText 1831

- 61.46 *CURL.GetDebugWithData* 1835
- 61.48 *CURL.GetDebugWithTime* 1837
- 61.59 *CURL.GetHeaderAsText* 1850
- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954
- 61.153 *CURL.SetDebugWithData* 1981
- 61.154 *CURL.SetDebugWithProgress* 1983
- 61.379 *CURL.SetOptionVerbose* 2307

Example Databases

- [CURL/SFTP/CURL sFTP Upload File](#)

61.155.1 Blog Entries

- [Debugging problems on FileMaker Cloud for AWS](#)
- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 14th May 2016, last changed 28th November 2019.

61.156 CURL.SetFinishedEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.1	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetFinishedEvaluate"; curl; Expression)

Parameters**curl**

The CURL session handle.

\$curl

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

This only runs if you use CURL.PerformAsync.

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the curl reference, so you can pass it to other functions if needed.

Examples

Sets expression to run when transfer is done:

```
Set Variable [ $result ; Value: MBS( "CURL.SetFinishedEvaluate"; $curl; "Let ( $$Done = 1 ; 1 )" ) ]
```

Free curl session when done:

```
# Start new session
```

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
```

```
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
```

```
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
```

```
Set Variable [ $result ; Value: MBS( "CURL.SetFinishedEvaluate"; $curl; "MBS(\"CURL.Cleanup\"; $$ID$$)" ) ]
```

```
# RUN now
```

```
Set Field [ CURL Test::Result ; MBS("CURL.PerformInBackground"; $curl) ]
```

See also

- 61.9 CURL.Cleanup 1772
- 61.52 CURL.GetFinishedEvaluate 1842
- 61.53 CURL.GetFinishedFileName 1843
- 61.139 CURL.New 1947

- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963
- 61.144 `CURL.PerformInBackground` 1965
- 61.370 `CURL.SetOptionURL` 2288

61.156.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS FileMaker Plugin, version 6.1pr5](#)
- [Evaluate vs. Script Trigger](#)

Created 4th March 2016, last changed 12nd November 2018.

61.157 CURL.SetFinishedScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	No	No	Yes

MBS("CURL.SetFinishedScript"; curl; Filename; ScriptName)

Parameters**curl**

The CURL session handle.

\$curl

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

This only runs if you use CURL.PerformAsync.

Does not work on server due to missing capability to trigger scripts in the plugin SDK with FileMaker Server.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Start a curl session and setup a few scripts:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
```

```
Set Variable [ $r; Value:MBS("CURL.SetFinishedScript"; $curl; Get(FileName); "DownloadFinished") ]
```

```
Set Variable [ $r; Value:MBS("CURL.SetProgressScript"; $curl; Get(FileName); "ProgressScript") ]
```

See also

- 61.54 *CURL.GetFinishedScriptName* 1844
- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954
- 61.143 *CURL.PerformAsync* 1963
- 61.383 *CURL.SetProgressScript* 2314

- 61.384 `CURL.SetTag`

Example Databases

- [CURL/Download Async](#)

Created 12nd July 2015, last changed 22nd December 2016.

61.158 CURL.SetInputFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetInputFile"; curl; data)

Parameters**curl**

The CURL session handle.

\$curl

data

The container value with the data to upload.

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations.

To use a file from disk, please use `CURL.OpenInputFile`.

You may need to use `CURL.SetOptionUpload` to make it an upload for FTP/SFTP.

Using this function is not recommended for more than a 1 GB of data. If you need more, better stream the data with `CURL.OpenInputFile` from a file.

Examples

Upload data from container to FTP Server:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "ftp://test.test/test/hello.dat") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result; Value:MBS("CURL.SetInputFile"; $curl; CURL Test::MyContainer) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Upload file from container:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
```

FTP URL with destination file name:

```
Set Variable [ $result; Value: MBS("CURL.SetOptionURL" ; $curl ; "ftp://12.34.56.78/AZ1677ZZ.jpg") ]
Set Variable [ $result; Value: MBS("CURL.SetOptionUpload" ; $curl ; 1) ]
Set Variable [ $result; Value: MBS("CURL.SetOptionPassword" ; $curl ; "xxx" ) ]
```

```

Set Variable [ $result; Value: MBS("CURL.SetOptionUsername" ; $curl ; "yyy" ) ]

# Pick file from desktop:
// Set Variable [ $Desktop; Value: MBS("Folders.UserDesktop") ]
// Set Variable [ $Path; Value: MBS("Path.AddPathComponent"; $desktop; "AZ1677ZZ.jpg") ]
// Set Variable [ $result; Value: MBS( "CURL.OpenInputFile" ; $curl ;$path ) ]

# Pick file from container:
Set Variable [ $result; Value: MBS( "CURL.SetInputFile" ; $curl ; Test::ImageFileContainer ) ]

# Upload file
Set Field [ Test::PerformResult; MBS( "CURL.Perform" ; $curl ) ]
Set Field [ Test::DebugMessages; MBS( "CURL.GetDebugAsText" ; $curl ) ]
Set Variable [ $result; Value:MBS( "CURL.Cleanup" ; $curl ) ]

Do a POST request wiht input field:

Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL & CURL Test::file-
name) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionCustomRequest"; $curl; "POST") ]
Set Variable [ $result ; Value: MBS("CURL.SetInputFile"; $curl; CURL Test::Image) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionVerbose"; $curl; 1) ]
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.1 CURL.AddInputFile 1761
- 61.141 CURL.OpenInputFile 1951
- 61.159 CURL.SetInputGIF 1994
- 61.160 CURL.SetInputJPEG 1996
- 61.161 CURL.SetInputPDF 1998
- 61.162 CURL.SetInputPNG 2000
- 61.370 CURL.SetOptionURL 2288
- 61.378 CURL.SetOptionUsername 2305
- 61.386 CURL.SetupAWS 2320

- 81.8 Folders.UserDesktop

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/Amazon S3 Upload Picture](#)
- [CURL/FTP/CURL FTP Upload multiple files](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/FTP/CURL FTP Upload](#)
- [CURL/SFTP/CURL sFTP Upload File](#)

61.158.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr6](#)
- [Amazon S3 Upload with Mime Type and Permissions](#)
- [Tip of the day: FTP File Upload](#)

Created 18th August 2014, last changed 9th July 2019.

61.159 CURL.SetInputGIF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	3.1	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetInputGIF"; curl; data)

Parameters**curl**

The CURL session handle.

\$curl

data

The container value with the data to upload.

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations.

Examples

Upload a GIF file to a FTP Server:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "ftp://test.test/test/hello.gif") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result; Value:MBS("CURL.SetInputGIF"; $curl; CURL Test::MyImage) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.2 CURL.AddInputGIF 1763
- 61.44 CURL.GetDebugAsText 1831
- 61.142 CURL.Perform 1954
- 61.158 CURL.SetInputFile 1991
- 61.161 CURL.SetInputPDF 1998
- 61.163 CURL.SetInputText 2002
- 61.265 CURL.SetOptionPassword 2145
- 61.374 CURL.SetOptionUpload 2299

<i>61.159. CURL.SETINPUTGIF</i>	1995
• 61.370 CURL.SetOptionURL	2288
• 61.378 CURL.SetOptionUsername	2305

61.159.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr8](#)

Created 18th August 2014, last changed 14th July 2016.

61.160 CURL.SetInputJPEG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetInputJPEG"; curl; data)

Parameters**curl**

The CURL session handle.

\$curl

data

The container value with the data to upload.

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations.

Examples

Upload a JPEG file to a FTP Server:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "ftp://test.test/test/hello.jpg") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result; Value:MBS("CURL.SetInputJPEG"; $curl; CURL Test::MyImage) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.3 CURL.AddInputJPEG 1764
- 61.44 CURL.GetDebugAsText 1831
- 61.139 CURL.New 1947
- 61.158 CURL.SetInputFile 1991
- 61.162 CURL.SetInputPNG 2000
- 61.163 CURL.SetInputText 2002
- 61.265 CURL.SetOptionPassword 2145
- 61.374 CURL.SetOptionUpload 2299

61.160. <i>CURL.SETINPUTJPEG</i>	1997
• 61.370 <i>CURL.SetOptionURL</i>	2288
• 61.378 <i>CURL.SetOptionUsername</i>	2305

Example Databases

- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/FTP/CURL FTP Upload](#)

Created 18th August 2014, last changed 14th July 2016.

61.161 CURL.SetInputPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	4.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetInputPDF"; curl; data)

Parameters**curl**

The CURL session handle.

\$curl

data

The container value with the data to upload.

\$pdfContainer

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations.

Examples

Upload a PDF file to a FTP Server:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "ftp://test.test/test/hello.pdf") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result; Value:MBS("CURL.SetInputPDF"; $curl; CURL Test::MyPDF) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.4 CURL.AddInputPDF 1765
- 61.44 CURL.GetDebugAsText 1831
- 61.139 CURL.New 1947
- 61.158 CURL.SetInputFile 1991
- 61.159 CURL.SetInputGIF 1994
- 61.162 CURL.SetInputPNG 2000
- 61.163 CURL.SetInputText 2002

<i>61.161. CURL.SETINPUTPDF</i>	1999
• 61.374 CURL.SetOptionUpload	2299
• 61.378 CURL.SetOptionUsername	2305
• 61.386 CURL.SetupAWS	2320

61.161.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr2](#)

Created 18th August 2014, last changed 14th July 2016.

61.162 CURL.SetInputPNG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetInputPNG"; curl; data)

Parameters

curl

The CURL session handle.

\$curl

data

The container value with the data to upload.

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations.

Examples

Upload some PNG image from container to FTP Server:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "ftp://test.test/test/hello.png") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result; Value:MBS("CURL.SetInputPNG"; $curl; CURL Test::MyImage) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.44 CURL.GetDebugAsText 1831
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954
- 61.159 CURL.SetInputGIF 1994
- 61.160 CURL.SetInputJPEG 1996
- 61.161 CURL.SetInputPDF 1998
- 61.265 CURL.SetOptionPassword 2145
- 61.374 CURL.SetOptionUpload 2299

61.162. *CURL.SETINPUTPNG*

2001

- 61.370 *CURL.SetOptionURL*

2288

- 61.378 *CURL.SetOptionUsername*

2305

Created 18th August 2014, last changed 14th July 2016.

61.163 `CURL.SetInputText`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.SetInputText"; curl; text { ; Encoding } )
```

Parameters

curl

The CURL session handle.

\$curl

text

The text to send.

Encoding

Optional

The text encoding for text parameter. Default is UTF-8 for version 10.0 or newer and native encoding before. "UTF-8"

Result Returns "OK" on success.

Description

Also sets input file length. You need to define input data for file uploads, http posts and http put operations. Please make sure you choose the text encoding the other side expects.

To avoid chunked transfer to server, you can also use `CURL.SetOptionPostFields` instead for text input.

If you set `CURL.SetOptionHTTPHeader` with `Transfer-Encoding` and/or `Expect`, you can disable chunked transfer.

For HTTP POST, please use `CURL.SetOptionPost` with 1 and `CURL.SetOptionPostFields` with your POST content using web services and other things.

Using this function is not recommended for more than a few hundred MB of text. If you need more, better stream the data with `CURL.OpenInputFile` from a file.

Examples

Set Text:

```
MBS("CURL.SetInputText"; $curl; "Hello World"; "utf8")
```

Set Text and disable Transfer Encodings and Expect header:

```
MBS("CURL.SetInputText"; $curl; "Hello World")
MBS("CURL.SetOptionHTTPHeader"; $curl; "Transfer-Encoding: "; "Expect:")
```

FTP Upload some text into a file on server:

```

Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "ftp://test.test/test/hello.txt") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result; Value:MBS("CURL.SetInputText"; $curl; "This is content to upload") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionVerbose"; $curl; 1) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Upload empty file with SFTP:

```

Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; "sftp://127.0.0.1/Users/cs/Desktop/test.txt"
) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; "secret") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; "cs") ]
Set Variable [ $result ; Value: MBS("CURL.SetInputText"; $curl; "") ]
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.62 *CURL.GetInputAsText* 1854
- 61.63 *CURL.GetInputLength* 1856
- 61.160 *CURL.SetInputJPEG* 1996
- 61.161 *CURL.SetInputPDF* 1998
- 61.162 *CURL.SetInputPNG* 2000
- 61.326 *CURL.SetOptionSSHPrivateKeyfile* 2228
- 61.327 *CURL.SetOptionSSHPublicKeyfile* 2230
- 61.374 *CURL.SetOptionUpload* 2299
- 61.370 *CURL.SetOptionURL* 2288
- 61.378 *CURL.SetOptionUsername* 2305

Example Databases

- [CURL/CURL FMS Admin API](#)

- [CURL/CURL get and put/CURLS get and put](#)
- [CURL/Email/IMAP Email Upload](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/SFTP/CURL sFTP Operations](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [CURL/SFTP/CURL sFTP Upload](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/CURL FMS Admin API v18](#)
- [CURL/WebServices/Magento2 REST API](#)

61.163.1 Blog Entries

- [Upload email to Sent folder via IMAP](#)
- [Tip of the day: FTP File Upload](#)
- [MBS Filemaker Plugin, version 3.1pr10](#)

Created 18th August 2014, last changed 6th December 2019.

61.164 CURL.SetMultiOptionChunkLengthPenaltySize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetMultiOptionChunkLengthPenaltySize"; Value)

Parameters**Value**

The new value.

Result Returns OK or error.

Description

Only for asynchronous transfers with `CURL.PerformAsync`.

A connection with a chunk length longer than this will not be considered for pipelining.

See also

- 61.67 `CURL.GetMultiOptionChunkLengthPenaltySize` 1860
- 61.68 `CURL.GetMultiOptionContentLengthPenaltySize` 1861
- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963
- 61.165 `CURL.SetMultiOptionContentLengthPenaltySize` 2006

Created 14th April 2018, last changed 14th April 2018.

61.165 `CURL.SetMultiOptionContentLengthPenaltySize`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetMultiOptionContentLengthPenaltySize"; Value)

Parameters

Value

The new value.

Result Returns OK or error.

Description

Only for asynchronous transfers with `CURL.PerformAsync`.

A connection with a content-length longer than this will not be considered for pipelining.

See also

- 61.67 `CURL.GetMultiOptionChunkLengthPenaltySize` 1860
- 61.68 `CURL.GetMultiOptionContentLengthPenaltySize` 1861
- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963
- 61.164 `CURL.SetMultiOptionChunkLengthPenaltySize` 2005

Created 14th April 2018, last changed 14th April 2018.

61.166 CURL.SetMultiOptionMaxConcurrentStreams

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	10.0	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetMultiOptionMaxConcurrentStreams"; Value)

Parameters**Value**

The new value.

Result Returns OK or error.

Description

Only for asynchronous transfers with `CURL.PerformAsync`.
Maximum number of (pipelining) connections to one host.

See also

- 61.69 `CURL.GetMultiOptionMaxConcurrentStreams` 1862
- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963

61.166.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 13th November 2019, last changed 13th November 2019.

61.167 **CURL.SetMultiOptionMaxConnects**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetMultiOptionMaxConnects"; Value)

Parameters**Value**

The new value.

Result Returns OK or error.

Description

Only for asynchronous transfers with CURL.PerformAsync.
Maximum number of entries in the connection cache.
Default is -1 for no limit.

See also

- 61.70 CURL.GetMultiOptionMaxConnects 1863
- 61.71 CURL.GetMultiOptionMaxHostConnections 1864
- 61.142 CURL.Perform 1954
- 61.143 CURL.PerformAsync 1963
- 61.168 CURL.SetMultiOptionMaxHostConnections 2009
- 61.170 CURL.SetMultiOptionMaxTotalConnections 2011
- 61.254 CURL.SetOptionMaxConnects 2130

Created 14th April 2018, last changed 14th April 2018.

61.168 CURL.SetMultiOptionMaxHostConnections

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetMultiOptionMaxHostConnections"; Value)

Parameters**Value**

The new value.

Result Returns OK or error.

Description

Only for asynchronous transfers with `CURL.PerformAsync`.
Maximum number of (pipelining) connections to one host.

See also

- 61.70 `CURL.GetMultiOptionMaxConnects` 1863
- 61.71 `CURL.GetMultiOptionMaxHostConnections` 1864
- 61.73 `CURL.GetMultiOptionMaxTotalConnections` 1866
- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963
- 61.167 `CURL.SetMultiOptionMaxConnects` 2008
- 61.170 `CURL.SetMultiOptionMaxTotalConnections` 2011

Created 14th April 2018, last changed 13th November 2019.

61.169 `CURL.SetMultiOptionMaxPipelineLength`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetMultiOptionMaxPipelineLength"; Value)

Parameters

Value

The new value.

Result Returns OK or error.

Description

Only for asynchronous transfers with `CURL.PerformAsync`.

Maximum number of requests in a pipeline.

Default is 5.

See also

- 61.72 `CURL.GetMultiOptionMaxPipelineLength` 1865
- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963
- 61.171 `CURL.SetMultiOptionPipelining` 2012

Created 14th April 2018, last changed 14th April 2018.

61.170 CURL.SetMultiOptionMaxTotalConnections

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetMultiOptionMaxTotalConnections"; Value)

Parameters**Value**

The new value.

Result Returns OK or error.

Description

Only for asynchronous transfers with `CURL.PerformAsync`.
Maximum number of open connections in total.

See also

- 61.71 `CURL.GetMultiOptionMaxHostConnections` 1864
- 61.73 `CURL.GetMultiOptionMaxTotalConnections` 1866
- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963
- 61.167 `CURL.SetMultiOptionMaxConnects` 2008
- 61.168 `CURL.SetMultiOptionMaxHostConnections` 2009

Created 14th April 2018, last changed 14th April 2018.

61.171 `CURL.SetMultiOptionPipelining`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetMultiOptionPipelining"; Value)

Parameters

Value

The new value.

Result Returns OK or error.

Description

Only for asynchronous transfers with `CURL.PerformAsync`.
Set to 1 to enable pipelining for this multi handle.

See also

- 61.74 `CURL.GetMultiOptionPipelining` 1867
- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963
- 61.169 `CURL.SetMultiOptionMaxPipelineLength` 2010

Created 14th April 2018, last changed 14th April 2018.

61.172 CURL.SetOptionAbstractUnixSocket

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionAbstractUnixSocket"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [ABSTRACT_UNIX_SOCKET](#) option in CURL manual.

Created 15th April 2018, last changed 16th April 2018.

61.173 `CURL.SetOptionAcceptEncoding`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionAcceptEncoding"; curl; Param)

Parameters

curl

The CURL session handle.

\$curl

Param

The new setting.

1

Result Returns OK or error.

Description

Sets the contents of the Accept-Encoding: header sent in a HTTP request, and enables decoding of a response when a Content-Encoding: header is received. Three encodings are supported: identity, meaning non-compressed, deflate which requests the server to compress its response using the zlib algorithm, and gzip which requests the gzip algorithm.

If a zero-length string is set like "", then an Accept-Encoding: header containing all built-in supported encodings is sent.

You can also opt to just include the Accept-Encoding: header in your request with `CURL.SetOptionHTTPHeader` but then there will be no automatic decompressing when receiving data.

This is a request, not an order; the server may or may not do it. This option must be set or else any unsolicited encoding done by the server is ignored.

Servers might respond with Content-Encoding even without getting a Accept-Encoding: in the request.

Servers might respond with a different Content-Encoding than what was asked for in the request.

The Content-Length: servers send for a compressed response is supposed to indicate the length of the compressed content so when auto decoding is enabled it may not match the sum of bytes reported by the output buffer (although, sending the length of the non-compressed content is a common server mistake).

See also [ACCEPT_ENCODING](#) option in CURL manual.

Examples

Request gzip compression:

```
MBS( "CURL.SetOptionAcceptEncoding"; $curl; "gzip" )
```

Download with compression:

```
# Start new session
Set Variable [ $curl ; Value: MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
```

61.173. *CURL.SETOPTIONACCEPTENCODING*

2015

```
Set Variable [ $result ; Value: MBS("CURL.SetOptionAcceptEncoding"; $curl; "gzip") ]
# RUN now
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 *CURL.Cleanup* 1772
- 61.44 *CURL.GetDebugAsText* 1831
- 61.121 *CURL.GetResultAsText* 1926
- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954
- 61.174 *CURL.SetOptionAcceptTimeoutMS* 2016
- 61.230 *CURL.SetOptionHTTPHeader* 2098
- 61.368 *CURL.SetOptionTransferEncoding* 2286
- 61.370 *CURL.SetOptionURL* 2288

61.173.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 27th November 2017, last changed 27th November 2017.

61.174 `CURL.SetOptionAcceptTimeoutMS`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionAcceptTimeoutMS"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Time-out accept operations (currently for FTP only) after this amount of milliseconds.

See also [ACCEPTTIMEOUT_MS](#) option in CURL manual.

See also

- 61.173 `CURL.SetOptionAcceptEncoding` 2014
- 61.185 `CURL.SetOptionConnectTimeoutMS` 2035
- 61.205 `CURL.SetOptionExpect100TimeoutMS` 2066
- 61.367 `CURL.SetOptionTimeoutMS` 2285

Created 15th April 2018, last changed 16th April 2018.

61.175 **CURL.SetOptionAddressScope**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionAddressScope"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

New scope ID.

1234

Result Returns "OK" on success.

Description

Pass a number specifying the scope_id value to use when connecting to IPv6 link-local or site-local addresses. See also [ADDRESS_SCOPE](#) option in CURL manual.

Created 18th August 2014, last changed 12nd July 2015.

61.176 CURL.SetOptionAppend

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionAppend"; curl; Value)

(old name: CURL.SetOptionFTPAppend)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to append.

1

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library to append to the remote file instead of overwrite it. This is only useful when uploading to an FTP site.

See also **APPEND** option in CURL manual.

Examples

Turns append on:

MBS("CURL.SetOptionAppend"; \$curl; 1)

Turns append off:

MBS("CURL.SetOptionAppend"; \$curl; 0)

See also

- 61.225 CURL.SetOptionGet 2091
- 61.374 CURL.SetOptionUpload 2299

Created 18th August 2014, last changed 8th December 2016.

61.177 CURL.SetOptionAutoReferer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionAutoReferer"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to automatically set referrer.

1

Result Returns "OK" on success.

Description

Pass a parameter set to 1 to enable this. When enabled, libcurl will automatically set the Referer: field in requests where it follows a Location: redirect.

See also [AUTOREFERER](#) option in CURL manual.

Examples

Turns referrer on:

MBS("CURL.SetOptionAutoReferer"; \$curl; 1)

See also

- 61.316 CURL.SetOptionReferer 2217
- 61.381 CURL.SetOptionXOAuth2Bearer 2312

Created 18th August 2014, last changed 8th December 2016.

61.178 `CURL.SetOptionBufferSize`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionBufferSize"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The buffer size.

50000

Result Returns "OK" on success.

Description

Pass a number specifying your preferred size (in bytes) for the receive buffer in libcurl. The main point of this would be that the write callback gets called more often and with smaller chunks. This is just treated as a request, not an order. You cannot be guaranteed to actually get the given size.

This buffer size is by default `CURL_MAX_WRITE_SIZE` (16kB). The maximum buffer size allowed to be set is `CURL_MAX_READ_SIZE` (512kB). The minimum buffer size allowed to be set is 1024.

For slow upload/downloads, it may be better to set buffer size to 1 MB with `CURL.SetOptionUploadBufferSize` or `CURL.SetOptionBufferSize` properties to make transfers faster. See also [BUFFERSIZE](#) option in CURL manual.

Examples

Sets buffer size:

MBS("CURL.SetOptionBufferSize"; \$curl; 1024*1024)

See also

- 61.239 `CURL.SetOptionInFileSize` 2110
- 61.255 `CURL.SetOptionMaxFileSize` 2131
- 61.343 `CURL.SetOptionSSLVersion` 2258
- 61.374 `CURL.SetOptionUpload` 2299
- 61.375 `CURL.SetOptionUploadBufferSize` 2301

Example Databases

- [CURL/SFTP/CURL sFTP Upload File](#)

Created 18th August 2014, last changed 3th October 2019.

61.179 `CURL.SetOptionCAINFO`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCAINFO"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The file path for the certificates.

"/test.pem"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a string naming a file holding one or more certificates to verify the peer with. This makes sense only when used in combination with the `CURL.SetOptionVerifyPeer` option. If `CURL.SetOptionVerifyPeer` is zero, `CURL.SetOptionCAInfo` need not even indicate an accessible file.

This option is by default set to the system path where libcurl's cacert bundle is assumed to be stored, as established at build time.

When built against NSS, this is the directory that the NSS certificate database resides in.

see also

http://www.mbsplugins.de/archive/2013-01-31/SSL_Security_with_CURL/monkeybreadsoftware_blog_archive

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

See also **CAINFO** option in CURL manual.

Examples

Enables verification and uses cacert.pem file for certificates:

```
MBS( "CURL.SetOptionCAInfo"; $curl; $cacertPath )
```

```
MBS( "CURL.SetOptionSSLVerifyHost"; $curl; 2 )
```

```
MBS( "CURL.SetOptionSSLVerifyPeer"; $curl; 1 )
```

Use FileMaker's root file in CURL:

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
#
If [ MBS("IsIOS") ]
# look for path to certificate file
Set Variable [ $path ; Value: Substitute(MBS("Folders.UserDocuments"); "/Documents"; "/Library/Application Support/FileMaker/iOS/1.0/root.pem") ]
If [ MBS("Files.FileExists"; $path) ]
# use in CURL
Set Variable [ $r ; Value: MBS( "CURL.SetOptionCAINFO"; $curl; $path) ]
Else
Show Custom Dialog [ "File not found." ; $path ]
End If
Else If [ MBS("IsMacOSX") ]
# look for path to certificate file
Set Variable [ $path ; Value: Substitute(MBS("Folders.UserDocuments"); "/Documents"; "/Library/Application Support/FileMaker/Shared/17.0/root.pem") ]
If [ MBS("Files.FileExists"; $path) ]
# use in CURL
Set Variable [ $r ; Value: MBS( "CURL.SetOptionCAINFO"; $curl; $path) ]
Else
Show Custom Dialog [ "File not found." ; $path ]
End If
Else If [ MBS("IsWindows") ]
# look for path to certificate file
Set Variable [ $path ; Value: Substitute(MBS("Folders.UserDocuments"); "\\Documents"; "\\AppData\\Local\\FileMaker\\FileMaker Pro Advanced\\17.0\\root.pem") ]
If [ MBS("Files.FileExists"; $path) ]
# use in CURL
Set Variable [ $r ; Value: MBS( "CURL.SetOptionCAINFO"; $curl; $path) ]
Else
Show Custom Dialog [ "File not found." ; $path ]
End If
Else If [ MBS("IsLinux") ]
# look for path to certificate file
Set Variable [ $path ; Value: "/FileMakerData/Extensions/OpenSSL/root.pem" ]
# use in CURL
Set Variable [ $r ; Value: MBS( "CURL.SetOptionCAINFO"; $curl; $path) ]
End If
```

See also

- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954

- 61.180 CURL.SetOptionCAPATH 2025
- 61.188 CURL.SetOptionCookie 2039
- 61.321 CURL.SetOptionSASLIR 2222
- 61.328 CURL.SetOptionSSLCert 2232
- 61.336 CURL.SetOptionSSLKey 2245
- 61.341 CURL.SetOptionSSLVerifyPeer 2254
- 124.10 IsLinux 6271
- 124.16 IsWindows 6280

Example Databases

- [CURL/CURL with certificates included with FileMaker](#)

61.179.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Use root certificates included with FileMaker](#)
- [Upload email to Sent folder via IMAP](#)
- [MBS FileMaker Plugin, version 7.6pr3](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Sending emails in FileMaker with MBS Plugin](#)

61.179.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 26](#)

Created 18th August 2014, last changed 5th November 2018.

61.180 CURL.SetOptionCAPATH

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCAPATH"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The path to certificates directory.

"/data/MyCertificates"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

Pass a string naming a directory holding multiple CA certificates to verify the peer with. The certificate directory must be prepared using the openssl c_rehash utility. This makes sense only when used in combination with the CURL.SetOptionVerifyPeer option. If CURL.SetOptionVerifyPeer is zero, CURL.SetOptionCAPATH need not even indicate an accessible path. The CURL.SetOptionCAPath function apparently does not work in Windows due to some limitation in openssl. This option is OpenSSL-specific and does nothing if libcurl is built to use GnuTLS.

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

See also [CAPATH](#) option in CURL manual.

See also

- 61.179 CURL.SetOptionCAINFO 2022
- 61.188 CURL.SetOptionCookie 2039
- 61.181 CURL.SetOptionCRLF 2027
- 61.269 CURL.SetOptionPort 2151
- 61.270 CURL.SetOptionPost 2153
- 61.305 CURL.SetOptionPut 2201

- 61.321 `CURL.SetOptionSASLIR` 2222
- 61.341 `CURL.SetOptionSSLVerifyPeer` 2254

61.180.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 12nd December 2017.

61.181 CURL.SetOptionCRLF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCRLF"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to convert newline characters.

1

Result Returns "OK" on success.

Description

If the value is set to 1 (one), libcurl converts Unix newlines to CRLF newlines on transfers. Disable this option again by setting the value to 0 (zero).

This is a legacy option of questionable use.

See also [CRLF](#) option in CURL manual.

See also

- 61.182 CURL.SetOptionCRLFFile 2028
- 61.269 CURL.SetOptionPort 2151
- 61.270 CURL.SetOptionPost 2153
- 61.278 CURL.SetOptionProxy 2171
- 61.305 CURL.SetOptionPut 2201
- 61.306 CURL.SetOptionQuote 2203
- 61.314 CURL.SetOptionRange 2213
- 61.321 CURL.SetOptionSASLIR 2222
- 61.336 CURL.SetOptionSSLKey 2245
- 61.370 CURL.SetOptionURL 2288

Created 18th August 2014, last changed 29th June 2017.

61.182 `CURL.SetOptionCRLFile`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCRLFile"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The new file path.

"C:\FileMaker\Stuff\test.pem"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a string naming a file with the concatenation of CRL (in PEM format) to use in the certificate validation that occurs during the SSL exchange.

When curl is built to use NSS or GnuTLS, there is no way to influence the use of CRL passed to help in the verification process. When libcurl is built with OpenSSL support, `X509_V_FLAG_CRL_CHECK` and `X509_V_FLAG_CRL_CHECK_ALL` are both set, requiring CRL check against all the elements of the certificate chain if a CRL file is passed.

This option makes sense only when used in combination with the `CURL.SetOptionVerifyPeer` option.

A specific error code (`CURLE_SSL_CRL_BADFILE`) is defined with the option. It is returned when the SSL exchange fails because the CRL file cannot be loaded. A failure in certificate verification due to a revocation information found in the CRL does not trigger this specific error.

See also [CRLFILE](#) option in CURL manual.

See also

- 61.181 `CURL.SetOptionCRLF` 2027
- 61.259 `CURL.SetOptionNETRCFile` 2136
- 61.313 `CURL.SetOptionRandomFile` 2212

<i>61.182. CURL.SETOPTIONCRLFILE</i>	2029
• 61.314 CURL.SetOptionRange	2213
• 61.316 CURL.SetOptionReferer	2217
• 61.318 CURL.SetOptionResolve	2219
• 61.328 CURL.SetOptionSSLCert	2232
• 61.333 CURL.SetOptionSSEngine	2242
• 61.370 CURL.SetOptionURL	2288
• 61.379 CURL.SetOptionVerbose	2307

Created 18th August 2014, last changed 29th April 2016.

61.183 `CURL.SetOptionCertInfo`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCertInfo"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to collect certificate information.

1

Result Returns "OK" on success.

Description

Pass a long set to 1 to enable libcurl's certificate chain info gatherer. With this enabled, libcurl (if built with OpenSSL) will extract lots of information and data about the certificates in the certificate chain used in the SSL connection. This data is then possible to extract after a transfer using `CURL.GetCertInfo`. See also [CERTINFO](#) option in CURL manual.

Examples

Query certificate information for MBS website:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.monkeybreadsoftware.de/") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionCertInfo"; $curl; 1) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::Text; MBS("CURL.GetCertInfo"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 `CURL.Cleanup` 1772
- 61.37 `CURL.GetCertInfo` 1821
- 61.139 `CURL.New` 1947
- 61.142 `CURL.Perform` 1954
- 61.370 `CURL.SetOptionURL` 2288
- 61.379 `CURL.SetOptionVerbose` 2307

Example Databases

- [CURL/CURL Certificate Pinning](#)
- [CURL/CURL with certificates included with FileMaker](#)

61.183.1 Blog Entries

- [Using pinned certificates with our CURL plugin functions](#)
- [Use root certificates included with FileMaker](#)

Created 18th August 2014, last changed 18th February 2016.

61.184 `CURL.SetOptionConnectOnly`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionConnectOnly"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

A 1 tells the library to perform any required proxy authentication and connection setup, but no data transfer.

Use this option to tell CURL to connect only and then send/receive data with your own protocol.

See `CURL.SendData`, `CURL.SendText`, `CURL.ReceiveText` and `CURL.ReceiveData`.

See also [CONNECT_ONLY](#) option in CURL manual.

Examples

Download website and handle protocol ourself:

```
# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result; Value:MBS("CURL.SetOptionConnectOnly"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; CURL Low Level Sockets::URL) ]
Set Variable [ $request; Value:"GET / HTTP/1.1$Host: www.monkeybreadsoftware.de$$" // must end with
two empty lines ]
Set Variable [ $request2; Value:MBS( "Text.ReplaceNewline"; $request; 3) ]
# RUN now
Set Field [ CURL Low Level Sockets::Connect Result; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Low Level Sockets::Data Received; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Low Level Sockets::Debug Messages; MBS("CURL.GetDebugAsText"; $curl) ]
If [ CURL Low Level Sockets::Connect Result = "OK" ]
Set Variable [ $r; Value:MBS( "CURL.SendText"; $curl; $request2; "UTF-8") ]
Set Field [ CURL Low Level Sockets::Data Sent; $request ]
Set Variable [ $received; Value:"" ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
```

```

Set Variable [ $r; Value:MBS( "CURL.ReceiveText"; $curl; 10000; "UTF-8" ) ]
Set Variable [ $errorCode; Value:MBS( "CURL.ErrorCode"; $curl ) ]
If [ GetAsNumber ( $errorCode ) = 81 ]
# wait
Else If [ GetAsNumber ( $errorCode ) = 0 ]
# got some data
Set Variable [ $received; Value:$received & $r ]
Exit Loop If [ $r = "" ]
Else
# error
Exit Loop If [ 1 ]
End If
End Loop
Set Variable [ $received2; Value:MBS( "Text.ReplaceNewline"; $received; 1 ) ]
Set Field [ CURL Low Level Sockets::Debug Messages; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ CURL Low Level Sockets::Data Received; $received2 ]
End If
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Check if SMB (port 445) is open on a given IP in network:

```

Let ( [
curl = MBS("CURL.New");
a = MBS( "CURL.SetOptionConnectOnly"; curl; 1 );
b = MBS( "CURL.SetOptionURL"; curl; "192.168.2.117" );
c = MBS( "CURL.SetOptionConnectionTimeout"; curl; 1 );
d = MBS( "CURL.SetOptionPort"; curl; 445 );
r = MBS( "CURL.Perform"; curl );
x = MBS( "CURL.Cleanup"; curl )
]; r )
// returns either
// OK
// or
// 28: Connection timed out after 1000 milliseconds

```

See also

- 61.79 *CURL.GetOptionConnectTo* 1872
- 61.142 *CURL.Perform* 1954
- 61.146 *CURL.ReceiveData* 1968
- 61.151 *CURL.SendText* 1977
- 61.186 *CURL.SetOptionConnectTo* 2036
- 61.202 *CURL.SetOptionDirListOnly* 2062

- 61.254 `CURL.SetOptionMaxConnects` 2130
- 61.269 `CURL.SetOptionPort` 2151
- 61.370 `CURL.SetOptionURL` 2288
- 154.44 `Socket.SSL.Connect` 7241

Example Databases

- [CURL/CURL Low Level Sockets](#)

Created 27th March 2017, last changed 2nd February 2020.

61.185 CURL.SetOptionConnectTimeoutMS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionConnectTimeoutMS"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The connection timeout time in milliseconds.

300000

Result Returns "OK" on success.

Description

Like `CURL.SetOptionConnectionTimeout` but takes the number of milliseconds instead. If libcurl is built to use the standard system name resolver, that portion of the connect will still use full-second resolution for timeouts with a minimum timeout allowed of one second.

See also [CONNECTTIMEOUT_MS](#) option in CURL manual.

See also

- 61.174 `CURL.SetOptionAcceptTimeoutMS` 2016
- 61.187 `CURL.SetOptionConnectionTimeout` 2037
- 61.205 `CURL.SetOptionExpect100TimeoutMS` 2066

Created 18th August 2014, last changed 18th August 2014.

61.186 `CURL.SetOptionConnectTo`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionConnectTo"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Sets list of host:port:connect-to-host:connect-to-port, overrides the URL's host:port (only for the network layer)

See also [CONNECT_TO](#) option in CURL manual.

See also

- 61.79 `CURL.GetOptionConnectTo` 1872
- 61.184 `CURL.SetOptionConnectOnly` 2032
- 61.254 `CURL.SetOptionMaxConnects` 2130

Created 15th April 2018, last changed 16th April 2018.

61.187 CURL.SetOptionConnectionTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionConnectionTimeout"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The connection timeout time in seconds.

300

Result Returns "OK" on success.

Description

Pass the maximum time in seconds that you allow the connection to the server to take. This only limits the connection phase, once it has connected, this option is of no more use. Set to zero to switch to the default built-in connection timeout - 300 seconds. See also the `CURL.SetOptionTimeout` option.

See also [CONNECTTIMEOUT](#) option in CURL manual.

Examples

Set timeout to 30 seconds:

```
MBS( "CURL.SetOptionConnectionTimeout"; $curl; 30 )
```

Check if SMB (port 445) is open on a given IP in network:

```
Let ( [
curl = MBS("CURL.New");
a = MBS( "CURL.SetOptionConnectOnly"; curl; 1 );
b = MBS( "CURL.SetOptionURL"; curl; "192.168.2.117" );
c = MBS( "CURL.SetOptionConnectionTimeout"; curl; 1 );
d = MBS( "CURL.SetOptionPort"; curl; 445 );
r = MBS( "CURL.Perform"; curl );
x = MBS( "CURL.Cleanup"; curl)
]; r )
// returns either
// OK
// or
// 28: Connection timed out after 1000 milliseconds
```

See also

- 61.9 CURL.Cleanup 1772
- 61.139 CURL.New 1947
- 61.184 CURL.SetOptionConnectOnly 2032
- 61.185 CURL.SetOptionConnectTimeoutMS 2035
- 61.269 CURL.SetOptionPort 2151
- 61.326 CURL.SetOptionSSHPrivateKeyfile 2228
- 61.327 CURL.SetOptionSSHPrivateKeyfile 2230
- 61.343 CURL.SetOptionSSLVersion 2258
- 61.365 CURL.SetOptionTimeOut 2282
- 61.370 CURL.SetOptionURL 2288

Example Databases

- [CURL/CURL Check FileMaker Server](#)
- [CURL/CURL FMS Admin API](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/CURL FMS Admin API v18](#)

61.187.1 Blog Entries

- [Tip of the day: FTP File Upload](#)

Created 18th August 2014, last changed 2nd February 2020.

61.188 CURL.SetOptionCookie

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCookie"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The cookie string.

""

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

Pass a cookie string. It will be used to set a cookie in the http request. The format of the string should be NAME=CONTENTS, where NAME is the cookie name and CONTENTS is what the cookie should contain.

If you need to set multiple cookies, you need to set them all using a single option and thus you need to concatenate them all in one single string. Set multiple cookies in one string like this: "name1=content1; name2=content2;" etc.

This option sets the cookie header explicitly in the outgoing request(s). If multiple requests are done due to authentication, followed redirections or similar, they will all get this cookie passed on.

Using this option multiple times will only make the latest string override the previous ones.

Cookie format is explained here:

<https://humanwhocodes.com/blog/2009/05/05/http-cookies-explained/>

See also **COOKIE** option in CURL manual.

Examples

Pass 4 cookies together:

```
MBS( "CURL.SetOptionCookie"; $curl; "ORA_WX_SESSION="32230CEE0E940BDF8157FEF3EB58E9CBD8A5699-3# 1"; ObSSOCookie=VPAEWqhsUTbSXpHB0% 3BqRDXNegpZBgeCgR1GJ3Ysou0A5% 3FyUdO0ffMSHU17fN0mg4cVonl
```

mjnakVdoYpnigAR4mAeWUMk6sLw% 3BqwSCmY1bCfxhdWcoOS4NhaifxRazpYpEywzdqQ3kRkNwRpECd-
 BrwWdcFBCo6TROhgEufbykS% 3FSYU% 3FwJT% 3FP95WgkCRMBkJBE2LSk% 3B1F2BtBjBGDa42jFR8gK7bE0ewJ%
 3B1MM6vzq93scwL9NO% 3BbCixrvJlGYL8fQWG% 3BwewaIRrf4i3lcThDQBHg% 2D% 2D; JSESSIONID=EPQSs-
 bjcnhdhPqEtvW8MQS8sQCGWta7QQQMmi8k6eiT_EcoNB_YOqL!-166722973; ObSSOCookie=ktizpHi8mrSLizEe-
 jydMivWZu% 3Bhr99% 3BVh% 3FTLFhIMRweTbStBfibTYNPa% 3FpMErio42eAQ30r1SVrTmuTLbI9Cyh3KPAqR5x%
 3BPs6rQQbRfZrpThhgSuPzZRx7NI9S9gKQYmeWAKkIRETUR9XZKuU1l7GwK4Ci0QFSwON2sU12EPvns9Y8RFN-
 WHNsdFDpNXn4qdfDvOhP8VnnYNMjvZnq% 3Fofg% 3Fxd3QfOZnL2Z86riaRz4gq5IeKolxN7iWM4% 3FI-
 cYk2nMeEx4A9iRtftPFyGEBWpxxtMG6UsE2RMhLqMpV4Lg% 2D"; "UTF-8")

See also

- 61.43 `CURL.GetCookieList` 1828
- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.190 `CURL.SetOptionCookieJar` 2044
- 61.191 `CURL.SetOptionCookieList` 2046
- 61.230 `CURL.SetOptionHTTPHeader` 2098
- 61.263 `CURL.SetOptionNoBody` 2141
- 61.270 `CURL.SetOptionPost` 2153
- 61.278 `CURL.SetOptionProxy` 2171
- 61.306 `CURL.SetOptionQuote` 2203
- 61.318 `CURL.SetOptionResolve` 2219

Created 18th August 2014, last changed 27th February 2019.

61.189 CURLOPT.SetOptionCookieFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURLOPT.SetOptionCookieFile"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The file path to the cookie file.

"/tmp/cookies.txt"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a file path for the cookie file. It should contain the name of your file holding cookie data to read. The cookie data may be in Netscape / Mozilla cookie data format or just regular HTTP-style headers dumped to a file.

Given an empty or non-existing file or by passing the empty string (""), this option will enable cookies for this curl handle, making it understand and parse received cookies and then use matching cookies in future requests.

If you use this option multiple times, you just add more files to read. Subsequent files will add more cookies.

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

See also **COOKIEFILE** option in CURL manual.

Examples

Activate cookie engine without cookie file:

```
MBS( "CURLOPT.SetOptionCookieFile"; $curl; "" )
```

Perform SOAP service with login and use cookies in second request:

```

# The URL of the service
Set Variable [ $url ; Value: "http://somedomain.com/PartnerService17.asmx" ]
# Build XML for SOAP Login request, e.g. with MBS XML functions or simply substitute()
Set Variable [ $xml ; Value: "<?xml version=\"1.0\" encoding=\"utf-8\"?><soap:Envelope xmlns:xsi=\"http://www.w3.org/2001/XMLSchema-instance\" xmlns:xsd=\"http://www.w3.org/2001/XMLSchema\" xmlns:soap=\"http://schemas.xmlsoap.org/soap/envelope/\"><soap:Body></soap:Body>..." ]
Set Field [ Curl_Test::XML ; $xml ]
# The SOAP action to use
Set Variable [ $action ; Value: "http://somedomain.com/partner/loginWithLicenceUnlockInfo" ]
#
# Setup transfer
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; $url) ]
# Put SOAP action and XML data type in the headers
Set Variable [ $result ; Value: MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml; charset=utf-8"; "Expect: "; "SOAPAction: \"\"& $action & \"\"") ]
# Ask CURL to manage cookies
Set Variable [ $result ; Value: MBS("CURL.SetOptionCookieFile"; $curl; "" ) ]
# Set the payload for the login transfer
Set Variable [ $result ; Value: MBS("CURL.SetOptionPostFields"; $curl; $xml) ]
# Run transfer
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
# Let's take a look on the cookie list
Set Variable [ $$cookie ; Value: MBS("CURL.GetCookieList"; $curl) ]
Set Field [ Curl_Test::Cookie ; $$cookie ]
# Check result
Set Field [ Curl_Test::Debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Field [ Curl_Test::Resultat ; $result ]
#
# Reuse same $curl for second request reusing existing cookies
#
# Make new XML for second request
Set Variable [ $npk ; Value: "103" ]
# Build XML for SOAP Login request, e.g. with MBS XML functions or simply substitute()
Set Variable [ $xml ; Value: "<soap:Envelope xmlns:xsi=\"http://www.w3.org/2001/XMLSchema-instance\" xmlns:xsd=\"http://www.w3.org/2001/XMLSchema\" xmlns:soap=\"http://schemas.xmlsoap.org/soap/envelope/\"><soap:Body></soap:Body></soap:Envelope>" ]
Set Field [ Curl_Test::XML ; $xml ]
Set Variable [ $action ; Value: "http://somedomain.com/partner/queryInfo" ]
#
# Setup transfer
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; $url) ]
# Put SOAP action and XML data type in the headers
Set Variable [ $result ; Value: MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml; charset=utf-8"; "Expect: "; "SOAPAction: \"\"& $action & \"\"") ]
# Set the payload for the second transfer
Set Variable [ $result ; Value: MBS("CURL.SetOptionPostFields"; $curl; $xml) ]

```

```
# Run transfer
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ Curl_Test::Debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Field [ Curl_Test::Resultat ; $result ]
# Finally end curl session
Set Variable [ $r ; Value: MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.142 *CURL.Perform* 1954
- 61.188 *CURL.SetOptionCookie* 2039
- 61.190 *CURL.SetOptionCookieJar* 2044
- 61.192 *CURL.SetOptionCookieSession* 2047
- 61.182 *CURL.SetOptionCRLFFile* 2028
- 61.230 *CURL.SetOptionHTTPHeader* 2098
- 61.239 *CURL.SetOptionInFileSize* 2110
- 61.259 *CURL.SetOptionNETRCFile* 2136
- 61.272 *CURL.SetOptionPostFields* 2158
- 61.370 *CURL.SetOptionURL* 2288

61.189.1 Blog Entries

- [Let CURL handle cookie list](#)
- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 28th February 2019.

61.190 `CURL.SetOptionCookieJar`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCookieJar"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The file path.

"/tmp/cookies.txt"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

Pass a file name as string. This will make libcurl write all internally known cookies to the specified file when `CURL.Cleanup` is called. If no cookies are known, no file will be created. Specify "-" to instead have the cookies written to stdout. Using this option also enables cookies for this session, so if you for example follow a location it will make matching cookies get sent accordingly.

If the cookie jar file can't be created or written to (when the `CURL.Cleanup` is called), libcurl will not and cannot report an error for this. Using `CURL.SetOptionVerbose` or using Debug output will get a warning to display, but that is the only visible feedback you get about this possibly lethal situation.

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

See also [COOKIEJAR](#) option in CURL manual.

Examples

Activate cookie engine without cookie file:

```
MBS( "CURL.SetOptionCookieFile"; $curl; "" )
```

See also

- 61.9 `CURL.Cleanup`

<i>61.190. CURL.SETOPTIONCOOKIEJAR</i>	2045
• 61.188 CURL.SetOptionCookie	2039
• 61.189 CURL.SetOptionCookieFile	2041
• 61.191 CURL.SetOptionCookieList	2046
• 61.274 CURL.SetOptionPostRedir	2164
• 61.379 CURL.SetOptionVerbose	2307

61.190.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 27th February 2019.

61.191 `CURL.SetOptionCookieList`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCookieList"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The cookie string.

"Set-Cookie: value = ..."

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Cookie can be either in Netscape / Mozilla format or just regular HTTP-style header (Set-Cookie: ...) format. If cURL cookie engine was not enabled it will enable its cookie engine. Passing a magic string "ALL" will erase all cookies known by cURL. Passing the special string "SESS" will only erase all session cookies known by cURL. Passing the special string "FLUSH" will write all cookies known by cURL to the file specified by `CURL.SetOptionCookieJar`.

See also [COOKIELIST](#) option in CURL manual.

See also

- 61.188 `CURL.SetOptionCookie` 2039
- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.190 `CURL.SetOptionCookieJar` 2044
- 61.192 `CURL.SetOptionCookieSession` 2047
- 61.272 `CURL.SetOptionPostFields` 2158
- 61.330 `CURL.SetOptionSSLCipherList` 2238

Created 18th August 2014, last changed 5th July 2015.

61.192 CURL.SetOptionCookieSession

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCookieSession"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether this is a new cookie session.

1

Result Returns "OK" on success.

Description

It will force libcurl to ignore all cookies it is about to load that are "session cookies" from the previous session. By default, libcurl always stores and loads all cookies, independent if they are session cookies or not. Session cookies are cookies without expiry date and they are meant to be alive and existing for this "session" only.

See also [COOKIESESSION](#) option in CURL manual.

See also

- 61.189 [CURL.SetOptionCookieFile](#) 2041
- 61.191 [CURL.SetOptionCookieList](#) 2046
- 61.296 [CURL.SetOptionProxySSLVersion](#) 2190
- 61.310 [CURL.SetOptionRTSPSessionID](#) 2209
- 61.323 [CURL.SetOptionSSHCompression](#) 2225

Created 18th August 2014, last changed 18th August 2014.

61.193 `CURL.SetOptionCustomRequest`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionCustomRequest"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The custom request string.

"PUT"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

Pass a text string as parameter. It will be used instead of GET or HEAD when doing an HTTP request, or instead of LIST or NLST when doing a FTP directory listing. This is useful for doing DELETE or other more or less obscure HTTP requests. Don't do this at will, make sure your server supports the command first.

When you change the request method by setting `CURL.SetOptionCustomRequest` to something, you don't actually change how libcurl behaves or acts in regards to the particular request method, it will only change the actual string sent in the request.

For example: if you tell libcurl to do a HEAD request, but then change the request to a "GET" with `CURL.SetOptionCustomRequest` you'll still see libcurl act as if it sent a HEAD even when it does send a GET.

To switch to a proper HEAD, use `CURL.SetOptionNoBody`, to switch to a proper POST, use `CURL.SetOptionPost` and `CURL.SetOptionPostFields`.

Restore to the internal default by setting this to "".

Many people have wrongly used this option to replace the entire request with their own, including multiple headers and POST contents. While that might work in many cases, it will cause libcurl to send invalid requests and it could possibly confuse the remote server badly. Use `CURL.SetOptionPost` and `CURL.SetOptionPostFields` to set POST data. Use `CURL.SetOptionHTTPHeader` to replace or extend the set of

headers sent by libcurl. Use `CURL.SetOptionHTTPVersion` to change HTTP version.
See also **CUSTOMREQUEST** option in CURL manual.

Examples

Sets request POST:

```
MBS( "CURL.SetOptionPost"; $curl; 1 )
```

Advanced file listing for FTP:

```
MBS( "CURL.SetOptionCustomRequest"; $curl; "MLSD" )
```

Set delete request:

```
MBS( "CURL.SetOptionCustomRequest"; $curl; "DELETE" )
```

Fetch email flags for IMAP:

```
MBS( "CURL.SetOptionCustomRequest"; $curl; "FETCH 1:* FLAGS" )
```

Sets custom request PATCH:

```
MBS( "CURL.SetOptionCustomRequest"; $curl; "PATCH" )
```

IMAP fetch all email list with MessageID included:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionCustomRequest"; $curl; "FETCH 1:* (FLAGS BODY.PEEK  
[ HEADER.FIELDS (Message-Id) ] )") ]
```

Mark email to be deleted via IMAP:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionCustomRequest"; $curl; "STORE " & $EmailID & " +FLAGS  
(\DELETED)") ]
```

Delete emails via IMAP:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionCustomRequest"; $curl; "EXPUNGE") ]
```

Delete email via POP3:

```
# Start new session  
Set Variable [ $curl; Value:MBS("CURL.New") ]  
# You can specify the message either in the URL or DELE command  
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "pop3://pop.monkeybreadsoftware.de/1")  
]
```

```

# put credentials in place
Set Variable [ $result; Value:MBS("CURL.SetOptionUserName"; $curl; "xxx@macsw.de") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; "xxx") ]
# Set the DELE command
Set Variable [ $result; Value:MBS("CURL.SetOptionCustomRequest"; $curl; "DELE") ]
# Do not perform a transfer as DELE returns no data
Set Variable [ $result; Value:MBS("CURL.SetOptionNoBody"; $curl; 1) ]
# Perform the custom request
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Set deleted flag for email with IMAP:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionCustomRequest"; $curl; "STORE 123 +Flags \\Deleted") ]
```

Query POP3 capabilities with UIDL request:

```

// This is a simple example using CURL's POP3 capabilities to list the contents of a mailbox.
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
Set Field [ CURL Test::Result ; MBS("CURL.SetOptionCustomRequest"; $curl; "UIDL") ]
Set Field [ CURL Test::Result ; MBS("CURL.SetOptionPassword"; $curl; "xxx") ]
Set Field [ CURL Test::Result ; MBS("CURL.SetOptionUsername"; $curl; "yyy") ]
# Run transfer
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header ; MBS("CURL.GetHeaderAsText"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

Query headers of first email via POP3:

```

# TOP x y
# x = ID of email, starting at 1
# y = number of lines, default all.
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
Set Field [ CURL Test::Result ; MBS("CURL.SetOptionCustomRequest"; $curl; "TOP 1 0") ]
Set Field [ CURL Test::Result ; MBS("CURL.SetOptionPassword"; $curl; "xxx") ]
Set Field [ CURL Test::Result ; MBS("CURL.SetOptionUsername"; $curl; "yyy") ]
# Run transfer

```

```

Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header ; MBS("CURL.GetHeaderAsText"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

IMAP Email moving.

```

Set Variable [ $URL ; Value: "imap://" & EmailClient::Server & "/INBOX" ]
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionURL"; $curl; $URL) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionUserName"; $curl; EmailClient::Username) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionPassword"; $curl; EmailClient::Password) ]
# Move email 1 to folder test
Set Variable [ $r ; Value: MBS("CURL.SetOptionCustomRequest"; $curl; "MOVE 1 INBOX.test") ]
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
Set Variable [ $output ; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Variable [ $debug ; Value: MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ EmailClient::ErrorLog ; $debug ]
Set Variable [ $r ; Value: MBS("CURL.Cleanup"; $curl) ]

```

Create folder via WebDAV:

```
Set Variable [ $r ; Value: MBS("CURL.SetOptionCustomRequest"; $curl; "MKCOL") ]
```

Query quota details for IMAP:

```
MBS( "CURL.SetOptionCustomRequest"; $curl; "GETQUOTA" )
```

See also

- 61.121 *CURL.GetResultAsText* 1926
- 61.142 *CURL.Perform* 1954
- 61.158 *CURL.SetInputFile* 1991
- 61.225 *CURL.SetOptionGet* 2091
- 61.233 *CURL.SetOptionHTTPVersion* 2104
- 61.263 *CURL.SetOptionNoBody* 2141
- 61.265 *CURL.SetOptionPassword* 2145
- 61.270 *CURL.SetOptionPost* 2153
- 61.370 *CURL.SetOptionURL* 2288

- 61.378 `CURL.SetOptionUsername`

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL FMS Admin API](#)
- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/FTP/CURL FTP Directory Listing](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/Magento2 REST API](#)

61.193.1 Blog Entries

- [Translate PHP script with CURL to FileMaker Script](#)

Created 18th August 2014, last changed 29th June 2019.

61.194 CURL.SetOptionDNSCacheTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionDNSCacheTimeout"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new timeout in seconds.

60

Result Returns "OK" on success.

Description

Name resolves will be kept in memory for this number of seconds. Set to zero to completely disable caching, or set to -1 to make the cached entries remain forever. By default, libcurl caches this info for 60 seconds.

The name resolve functions of various libc implementations don't re-read name server information unless explicitly told so (for example, by calling `res_init(3)`). This may cause libcurl to keep using the older server even if DHCP has updated the server info, and this may look like a DNS cache issue to the casual libcurl-app user.

See also [DNS_CACHE_TIMEOUT](#) option in CURL manual.

See also

- 61.199 [CURL.SetOptionDNSShuffleAddresses](#)

2058

Created 18th August 2014, last changed 18th August 2014.

61.195 CURL.SetOptionDNSInterface

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionDNSInterface"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The new interface name.

"en0"

Result Returns OK or error.

Description

This must be an interface name (not an address).

Set this option to "" to use the default setting (don't bind to a specific interface).

See also [DNS_INTERFACE](#) option in CURL manual.

See also

- 61.198 CURL.SetOptionDNSServers 2057
- 61.240 CURL.SetOptionInterface 2112

Created 8th July 2015, last changed 9th July 2015.

61.196 CURL.SetOptionDNSLocalIPv4

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionDNSLocalIPv4"; curl; IP)

Parameters**curl**

The CURL session handle.

\$curl

IP

The new IP to use.

""

Result Returns OK or error.

Description

The argument should be of string and contain a single numerical IPv4 address as a string.

Set this option to "" to use the default setting (don't bind to a specific IP address).

See also [DNS_LOCAL_IP4](#) option in CURL manual.

See also

- 61.197 CURL.SetOptionDNSLocalIPv6

Created 8th July 2015, last changed 9th July 2015.

61.197 `CURL.SetOptionDNSLocalIPv6`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionDNSLocalIPv6"; curl; IP)

Parameters

curl

The CURL session handle.

\$curl

IP

The new IP to use.

""

Result Returns OK or error.

Description

The argument should be a text and contain a single IPv6 address as a string.

Set this option to "" to use the default setting (don't bind to a specific IP address).

See also [DNS_LOCAL_IP6](#) option in CURL manual.

See also

- 61.196 `CURL.SetOptionDNSLocalIPv4`

2055

Created 8th July 2015, last changed 9th July 2015.

61.198 CURL.SetOptionDNSServers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionDNSServers"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [DNS_SERVERS](#) option in CURL manual.

See also

- 61.195 CURL.SetOptionDNSInterface 2054
- 61.241 CURL.SetOptionIssuerCert 2113
- 61.316 CURL.SetOptionReferer 2217
- 61.309 CURL.SetOptionRTSPServerCSEQ 2208
- 61.328 CURL.SetOptionSSLCert 2232

Created 15th April 2018, last changed 16th April 2018.

61.199 CURLOPT.SetOptionDNSShuffleAddresses

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURLOPT.SetOptionDNSShuffleAddresses"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The new setting, 1 or 0

1

Result Returns OK or error.

Description

When a name is resolved and more than one IP address is returned, shuffle the order of all returned addresses so that they will be used in a random order. This is similar to the ordering behavior of `gethostbyname` which is no longer used on most platforms.

Addresses will not be reshuffled if a name resolution is completed using the DNS cache. `CURLOPT.SetOptionDNSShuffleAddresses` can be used together with this option to reduce DNS cache timeout or disable caching entirely if frequent reshuffling is needed.

Since the addresses returned will be reordered randomly, their order will not be in accordance with RFC 3484 or any other deterministic order that may be generated by the system's name resolution implementation. This may have performance impacts and may cause IPv4 to be used before IPv6 or vice versa.

Default is 0.

See also [DNS_SHUFFLE_ADDRESSES](#) option in CURL manual.

See also

- 61.194 CURLOPT.SetOptionDNSShuffleAddresses 2053

61.199.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 16th May 2018, last changed 16th May 2018.

61.200 CURL.SetOptionDOHURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionDOHURL"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new URL.

Result Returns OK or error.

Description

Pass in a string to a URL for the DOH server to use for name resolving. The parameter should be URL-encoded in the following format: "https://host:port/path". It MUST specify a HTTPS URL.

libcurl doesn't validate the syntax or use this variable until the transfer is issued. Even if you set a crazy value here, CURL.SetOptionDOHURL will still return OK.

curl sends POST requests to the given DNS-over-HTTPS URL.

To find the DOH server itself, which might be specified using a name, libcurl will use the default name lookup function. You can bootstrap that by providing the address for the DOH server with CURL.SetOptionResolve.

Disable DOH use again by setting this option to "".

See also [DOH_URL](#) option in CURL manual.

See also

- 61.181 CURL.SetOptionCRLF 2027
- 61.260 CURL.SetOptionNetRC 2137
- 61.318 CURL.SetOptionResolve 2219
- 61.370 CURL.SetOptionURL 2288
- 61.376 CURL.SetOptionUseSSL 2302

61.200.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr5](#)

Created 31st October 2018, last changed 31st October 2018.

61.201 CURL.SetOptionDefaultProtocol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionDefaultProtocol"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [DEFAULT_PROTOCOL](#) option in CURL manual.

See also

- 61.226 [CURL.SetOptionHAProxyProtocol](#) 2093
- 61.315 [CURL.SetOptionRedirProtocols](#) 2215

Created 15th April 2018, last changed 16th April 2018.

61.202 `CURL.SetOptionDirListOnly`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionDirListOnly"; curl; Value)

(old name: `CURL.SetOptionFTPListOnly`)

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to limit directory listing to names only.

1

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library to just list the names of files in a directory, instead of doing a full directory listing that would include file sizes, dates etc. This works for FTP and SFTP URLs.

This causes an FTP NLST command to be sent on an FTP server. Beware that some FTP servers list only files in their response to NLST; they might not include subdirectories and symbolic links.

See also **DIRLISTONLY** option in CURL manual.

Examples

List only file names:

```
MBS( "CURL.SetOptionDirListOnly"; $curl; 1 )
```

Full listing:

```
MBS( "CURL.SetOptionDirListOnly"; $curl; 0 )
```

Query list of files in FTP/SFTP folder:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set download URL, e.g. sftp://monkeybreadsoftware.net/
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; SFTP Download::URL ) ]
# set credentials
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; SFTP Download::UserName ) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; SFTP Download::Password ) ]
# login only via password
```

61.202. *CURL.SETOPTIONDIRLISTONLY*

2063

```
Set Variable [ $result; Value:MBS( "CURL.SetOptionSSHAAuthTypes"; $curl; 2+8 ) ]  
# only get list of file/dir names  
Set Variable [ $result; Value:MBS("CURL.SetOptionDirListOnly"; $curl; 1) ]  
# run transfer  
Set Field [ SFTP Download::ErrorCode; MBS("CURL.Perform"; $curl) ]  
# check debug log for errors  
Set Field [ SFTP Download::Debug; MBS("CURL.GetDebugAsText"; $curl) ]  
Set Field [ SFTP Download::FileList; MBS("CURL.GetResultAsText"; $curl) ]  
# free CURL session  
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 *CURL.Cleanup* 1772
- 61.44 *CURL.GetDebugAsText* 1831
- 61.121 *CURL.GetResultAsText* 1926
- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954
- 61.184 *CURL.SetOptionConnectOnly* 2032
- 61.265 *CURL.SetOptionPassword* 2145
- 61.322 *CURL.SetOptionSSHAAuthTypes* 2223
- 61.370 *CURL.SetOptionURL* 2288
- 61.378 *CURL.SetOptionUsername* 2305

Example Databases

- [CURL/FTP/CURL FTP Download all Files in Directory](#)

Created 18th August 2014, last changed 21st April 2017.

61.203 `CURL.SetOptionDisallowUserNameInURL`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.3	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.SetOptionDisallowUserNameInURL"; curl; Value )
```

Parameters

curl

The CURL session handle.

\$curl

Value

The option value. Can be 1 to disable or 0 to enable.

1

Result Returns OK or error.

Description

The value 1 tells the library to not allow URLs that include an username.

Having password and username in the URL is a bad idea as you tell every proxy server your secret and the URLs appear on all proxy and the final web server right in the log files.

See also [DISALLOW_USERNAME_IN_URL](#) option in CURL manual.

Examples

Enable passwords in the URL:

```
MBS( "CURL.SetOptionDisallowUserNameInURL"; $curl; 1 )
```

61.203.1 Blog Entries

- [URLs without UserName and Password please](#)
- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 11st July 2018, last changed 5th October 2018.

61.204 CURL.SetOptionEGDSocket

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionEGDSocket"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The path to the socket.

""

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

It will be used to seed the random engine for SSL.

See also **EGDSOCKET** option in CURL manual.

Created 18th August 2014, last changed 5th July 2015.

61.205 `CURL.SetOptionExpect100TimeoutMS`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionExpect100TimeoutMS"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Time to wait in milliseconds for a response to a HTTP request containing an Expect: 100-continue header before sending the data anyway.

See also [EXPECT_100_TIMEOUT_MS](#) option in CURL manual.

See also

- 61.174 `CURL.SetOptionAcceptTimeoutMS` 2016
- 61.187 `CURL.SetOptionConnectionTimeout` 2037
- 61.185 `CURL.SetOptionConnectTimeoutMS` 2035

Created 15th April 2018, last changed 16th April 2018.

61.206 CURL.SetOptionFTPAccount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPAccount"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The account name.

"test"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

When an FTP server asks for "account data" after user name and password has been provided, this data is sent off using the ACCT command.

See also [FTP_ACCOUNT](#) option in CURL manual.

See also

- 61.210 CURL.SetOptionFTPPort 2073
- 61.212 CURL.SetOptionFTPSSLAAuth 2076
- 61.215 CURL.SetOptionFTPUseEPRT 2080
- 61.216 CURL.SetOptionFTPUseEPSV 2081
- 61.217 CURL.SetOptionFTPUsePret 2082

Created 18th August 2014, last changed 5th July 2015.

61.207 `CURL.SetOptionFTPAlternativeToUser`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPAlternativeToUser"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to use alternative user command.

1

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a string which will be used to authenticate if the usual FTP "USER user" and "PASS password" negotiation fails. This is currently only known to be required when connecting to Tumbleweed's Secure Transport FTPS server using client certificates for authentication.

See also [FTP_ALTERNATIVE_TO_USER](#) option in CURL manual.

Created 18th August 2014, last changed 5th July 2015.

61.208 CURL.SetOptionFTPCreateMissingDirs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPCreateMissingDirs"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to create missing directories. (1, 2 or 0)

2

Result Returns "OK" on success.

Description

Pass a number. If the value is 1, curl will attempt to create any remote directory that it fails to CWD into. CWD is the command that changes working directory.

This setting also applies to SFTP-connections. curl will attempt to create the remote directory if it can't obtain a handle to the target-location. The creation will fail if a file of the same name as the directory to create already exists or lack of permissions prevents creation.

Starting with 7.19.4, you can also set this value to 2, which will make libcurl retry the CWD command again if the subsequent MKD command fails. This is especially useful if you're doing many simultaneous connections against the same server and they all have this option enabled, as then CWD may first fail but then another connection does MKD before this connection and thus MKD fails but trying CWD works!

See also [FTP_CREATE_MISSING_DIRS](#) option in CURL manual.

Examples

Upload via FTP with creation of missing folders:

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; "ftp://ftp.monkeybreadsoftware.net/missingFolder/hello.txt") ]
# create any missing folders when uploading
Set Variable [ $result ; Value: MBS("CURL.SetOptionFTPCreateMissingDirs"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
# we upload some text here.
Set Variable [ $result ; Value: MBS("CURL.SetInputText"; $curl; "Hello World!") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUpload"; $curl; 1) ]
# Run transfer
```

```

Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check debug messages for errors
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

Upload via SFTP and create missing directories:

```

Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; "sftp://ftp.monkeybreadsoftware.net/missingFolder/hello.txt") ]
# create any missing folders when uploading
Set Variable [ $result ; Value: MBS("CURL.SetOptionFTPCreateMissingDirs"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionSSHAuthTypes"; $curl; 2+8 ) ]
# we upload some text here.
Set Variable [ $result ; Value: MBS("CURL.SetInputText"; $curl; "Hello World!") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUpload"; $curl; 1) ]
# Run transfer
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check debug messages for errors
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.9 CURL.Cleanup 1772
- 61.44 CURL.GetDebugAsText 1831
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954
- 61.163 CURL.SetInputText 2002
- 61.265 CURL.SetOptionPassword 2145
- 61.322 CURL.SetOptionSSHAuthTypes 2223
- 61.374 CURL.SetOptionUpload 2299
- 61.370 CURL.SetOptionURL 2288
- 61.378 CURL.SetOptionUsername 2305

Example Databases

- [CURL/SFTP/CURL sFTP Upload File](#)

61.208.1 Blog Entries

- [Tip of the day: FTP File Upload](#)

Created 18th August 2014, last changed 27th May 2017.

61.209 `CURL.SetOptionFTPFileMethod`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPFileMethod"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Which CWD command to use.

0

Result Returns "OK" on success.

Description

Pass a long that should have one of the following values. This option controls what method libcurl should use to reach a file on a FTP(S) server. The argument should be one of the following alternatives:

Default	0	default
Multi CWD	1	libcurl does a single CWD operation for each path part in the given URL. For deep hierarchies this means many commands. This is how RFC 1738 says it should be done. This is the default but the slowest behavior.
No CWD	2	libcurl does no CWD at all. libcurl will do SIZE, RETR, STOR etc and give a full path to the server for all these commands. This is the fastest behavior.
Single CWD	3	libcurl does one CWD with the full target directory and then operates on the file "normally" (like in the multicwd case). This is somewhat more standards compliant than 'nocwd' but without the full penalty of 'multicwd'.

See also [FTP_FILEMETHOD](#) option in CURL manual.

Examples

Use single CWD command:

```
MBS( "CURL.SetOptionFTPFileMethod"; $curl; 3 )
```

Created 18th August 2014, last changed 16th November 2017.

61.210 CURL.SetOptionFTPPort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPPort"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The port string.

""

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF-8"

Result Returns "OK" on success.

Description

It will be used to get the IP address to use for the FTP PORT instruction. The PORT instruction tells the remote server to connect to our specified IP address. The string may be a plain IP address, a host name, a network interface name (under Unix) or just a '-' symbol to let the library use your system's default IP address. Default FTP operations are passive, and thus won't use PORT.

The address can be followed by a ':' to specify a port, optionally followed by a '-' to specify a port range. If the port specified is 0, the operating system will pick a free port. If a range is provided and all ports in the range are not available, libcurl will report `CURLE_FTP_PORT_FAILED` for the handle. Invalid port/range settings are ignored. IPv6 addresses followed by a port or portrange have to be in brackets. IPv6 addresses without port/range specifier can be in brackets.

Examples with specified ports:

```
eth0:0 192.168.1.2:32000-33000 curl.se:32123 [ ::1 ] :1234-4567
```

You disable PORT again and go back to using the passive version by setting this option to empty string.

See also `CURL.SetOptionPort`.

See also **FTPPORT** option in CURL manual.

Examples

Sets to use default port:

MBS("CURL.SetOptionFTPPort"; \$curl; "-")

See also

- 61.215 CURL.SetOptionFTPUseEPRT 2080
- 61.265 CURL.SetOptionPassword 2145
- 61.269 CURL.SetOptionPort 2151
- 61.270 CURL.SetOptionPost 2153
- 61.275 CURL.SetOptionPreProxy 2166
- 61.278 CURL.SetOptionProxy 2171
- 61.305 CURL.SetOptionPut 2201
- 61.328 CURL.SetOptionSSLCert 2232
- 61.365 CURL.SetOptionTimeOut 2282
- 61.379 CURL.SetOptionVerbose 2307

Created 18th August 2014, last changed 19th June 2019.

61.211 CURL.SetOptionFTPResponseTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPResponseTimeout"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The timeout value in seconds.

60

Result Returns "OK" on success.

Description

Sets timeout period (in seconds) on the amount of time that the server is allowed to take in order to generate a response message for a command before the session is considered hung.

While curl is waiting for a response, this value overrides `CURL.SetOptionTimeout`. It is recommended that if used in conjunction with `CURL.SetOptionTimeout`, you set `CURL.SetOptionFTPResponseTimeout` to a value smaller than `CURL.SetOptionTimeout`.

See also [FTP_RESPONSE_TIMEOUT](#) option in CURL manual.

See also

- 61.187 `CURL.SetOptionConnectionTimeout` 2037
- 61.365 `CURL.SetOptionTimeOut` 2282

Created 18th August 2014, last changed 18th August 2014.

61.212 `CURL.SetOptionFTPSSLAUTH`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPSSLAUTH"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Sets the SSL mode.

2

Result Returns "OK" on success.

Description

Pass a long using one of the values from below, to alter how libcurl issues "AUTH TLS" or "AUTH SSL" when FTP over SSL is activated (see `CURLOPT_USE_SSL`).

<code>CURLFTPAUTH_DEFAULT</code>	0	Allow libcurl to decide.
<code>CURLFTPAUTH_SSL</code>	1	Try "AUTH SSL" first, and only if that fails try "AUTH TLS".
<code>CURLFTPAUTH_TLS</code>	2	Try "AUTH TLS" first, and only if that fails try "AUTH SSL".

See also [FTPSSLAUTH](#) option in CURL manual.

See also

- 61.210 `CURL.SetOptionFTPSPort` 2073
- 61.213 `CURL.SetOptionFTPSSLCCC` 2078
- 61.215 `CURL.SetOptionFTPUseEPRT` 2080
- 61.216 `CURL.SetOptionFTPUseEPSV` 2081
- 61.217 `CURL.SetOptionFTPUsePret` 2082
- 61.228 `CURL.SetOptionHTTPAuth` 2095
- 61.250 `CURL.SetOptionMailAuth` 2125
- 61.279 `CURL.SetOptionProxyAuth` 2173
- 61.320 `CURL.SetOptionSASLAUTHZID` 2221
- 61.345 `CURL.SetOptionSocks5Auth` 2262

61.212. *CURL.SETOPTIONFTPSSLAUTH*

2077

Created 18th August 2014, last changed 18th August 2014.

61.213 CURL.SetOptionFTPSSLCCC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPSSLCCC"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to use CCC command.

2

Result Returns "OK" on success.

Description

It shuts down the SSL/TLS layer after authenticating. The rest of the control channel communication will be unencrypted. This allows NAT routers to follow the FTP transaction. Pass a number using one of the values below. (Added in 7.16.1)

CURLFTPSSL_CCC_NONE	0	Don't attempt to use CCC.
CURLFTPSSL_CCC_PASSIVE	1	Do not initiate the shutdown, but wait for the server to do it. Do not send a reply.
CURLFTPSSL_CCC_ACTIVE	2	Initiate the shutdown and wait for a reply.

See also [FTP_SSL_CCC](#) option in CURL manual.

See also

- 61.210 CURL.SetOptionFTPSPort 2073
- 61.212 CURL.SetOptionFTPSSLAAuth 2076
- 61.328 CURL.SetOptionSSLCert 2232

Created 18th August 2014, last changed 18th August 2014.

61.214 CURL.SetOptionFTPSkipPasvIP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPSkipPasvIP"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to skip suggested IP.

1

Result Returns "OK" on success.

Description

Pass a long. If set to 1, it instructs CURL to not use the IP address the server suggests in its 227-response to CURL's PASV command when CURL connects the data connection. Instead libcurl will re-use the same IP address it already uses for the control connection. But it will use the port number from the 227-response. This option has no effect if PORT, EPRT or EPSV is used instead of PASV.

See also [FTP_SKIP_PASV_IP](#) option in CURL manual.

Created 18th August 2014, last changed 2nd August 2018.

61.215 `CURL.SetOptionFTPUseEPRT`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPUseEPRT"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to use EPRT command: 1 for EPRT, 0 for no EPRT.

1

Result Returns "OK" on success.

Description

If the value is 1, it tells curl to use the EPRT (and LPRT) command when doing active FTP downloads (which is enabled by `CURL.SetOptionFTPPort`). Using EPRT means that it will first attempt to use EPRT and then LPRT before using PORT, but if you pass zero to this option, it will not try using EPRT or LPRT, only plain PORT.

If the server is an IPv6 host, this option will have no effect.

See also [FTP_USE_EPRT](#) option in CURL manual.

See also

- 61.206 `CURL.SetOptionFTPAccount` 2067
- 61.210 `CURL.SetOptionFTPPort` 2073
- 61.212 `CURL.SetOptionFTPSSLAAuth` 2076
- 61.216 `CURL.SetOptionFTPUseEPSV` 2081
- 61.217 `CURL.SetOptionFTPUsePret` 2082

Created 18th August 2014, last changed 18th August 2014.

61.216 CURL.SetOptionFTPUseEPSV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPUseEPSV"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to use EPSV command or PASV. Pass 1 for EPSV or 0 for PASV.

1

Result Returns "OK" on success.

Description

If the value is 1, it tells curl to use the EPSV command when doing passive FTP downloads (which it always does by default). Using EPSV means that it will first attempt to use EPSV before using PASV, but if you pass zero to this option, it will not try using EPSV, only plain PASV.

If the server is an IPv6 host, this option will have no effect as of 7.12.3.

See also [FTP_USE_EPSV](#) option in CURL manual.

See also

- 61.206 CURL.SetOptionFTPAccount 2067
- 61.212 CURL.SetOptionFTPSSLAAuth 2076
- 61.215 CURL.SetOptionFTPUseEPRT 2080
- 61.217 CURL.SetOptionFTPUsePret 2082

Created 18th August 2014, last changed 18th August 2014.

61.217 CURL.SetOptionFTPUsePret

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFTPUsePret"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to use PRET command: 1 for PRET, 0 for no PRET.

1

Result Returns "OK" on success.

Description

If the value is 1, it tells curl to send a PRET command before PASV (and EPSV). Certain FTP servers, mainly drftpd, require this non-standard command for directory listings as well as up and downloads in PASV mode. Has no effect when using the active FTP transfers mode.

See also [FTP_USE_PRET](#) option in CURL manual.

See also

- 61.206 CURL.SetOptionFTPAccount 2067
- 61.210 CURL.SetOptionFTPPort 2073
- 61.212 CURL.SetOptionFTPSSLAAuth 2076
- 61.215 CURL.SetOptionFTPUseEPRT 2080
- 61.216 CURL.SetOptionFTPUseEPSV 2081
- 61.230 CURL.SetOptionHTTPHeader 2098
- 61.308 CURL.SetOptionRTSPRequest 2207

Created 18th August 2014, last changed 18th August 2014.

61.218 CURL.SetOptionFailOnError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFailOnError"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to fail on http errors.

0

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library to fail silently if the HTTP code returned is equal to or larger than 400. The default action would be to return the page normally, ignoring that code.

This method is not fail-safe and there are occasions where non-successful response codes will slip through, especially when authentication is involved (response codes 401 and 407).

You might get some amounts of headers transferred before this situation is detected, like when a "100-continue" is received as a response to a POST/PUT and a 401 or 407 is received immediately afterwards. See also **FAILONERROR** option in CURL manual.

See also

- 61.219 CURL.SetOptionFileOnlyMode 2084
- 61.251 CURL.SetOptionMailFrom 2127

Created 18th August 2014, last changed 18th August 2014.

61.219 CURL.SetOptionFileOnlyMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFileOnlyMode"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to write data to files only and avoid storing data in memory.

1

Result Returns "OK" on success or error message.

Description

If you create file with CURL.CreateOutputFile you may want to have data only in file and avoid filling memory with data for the result functions.

Do not call this method while a transfer is running.

Examples

Write data only to file:

```
MBS( "CURL.SetOptionFileOnlyMode"; $curl; 1 )
MBS( "CURL.CreateOutputFile"; $curl; "/tmp/download.dat" )
```

See also

- 61.16 CURL.CreateOutputFile 1784
- 61.218 CURL.SetOptionFailOnError 2083

61.219.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 18th August 2014.

61.220 CURL.SetOptionFileTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFileTime"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to query file time.

1

Result Returns "OK" on success.

Description

Pass a number. If it is 1, libcurl will attempt to get the modification date of the remote document in this operation. This requires that the remote server sends the time or replies to a time querying command. The `CURL.GetFileTime` function can be used after a transfer to extract the received time (if any).

See also [FILETIME](#) option in CURL manual.

See also

- 61.51 `CURL.GetFileTime` 1841
- 61.182 `CURL.SetOptionCRLFFile` 2028
- 61.239 `CURL.SetOptionInFileSize` 2110
- 61.251 `CURL.SetOptionMailFrom` 2127
- 61.255 `CURL.SetOptionMaxFileSize` 2131
- 61.268 `CURL.SetOptionPipeWait` 2150
- 61.365 `CURL.SetOptionTimeOut` 2282
- 61.366 `CURL.SetOptionTimeValue` 2284
- 61.378 `CURL.SetOptionUsername` 2305

Example Databases

- [CURL/CURL Download Picture with Info](#)

Created 18th August 2014, last changed 18th August 2014.

61.221 `CURL.SetOptionFollowLocation`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFollowLocation"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to follow locations.

1

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library to follow any `Location:` header that the server sends as part of an HTTP header.

This means that the library will re-send the same request on the new location and follow new `Location:` headers all the way until no more such headers are returned. `CURL.SetOptionMaxRedirs` can be used to limit the number of redirects libcurl will follow.

CURL can limit what protocols it will automatically follow. The accepted protocols are set with `CURL.SetOptionRedirProtocols` and it excludes the `FILE` protocol by default.

See also [FOLLOWLOCATION](#) option in CURL manual.

Examples

Allow up to three redirects:

```
Set Variable [ $result; Value: MBS("CURL.SetOptionFollowLocation"; $curl; 1) ]
```

```
Set Variable [ $result; Value: MBS("CURL.SetOptionMaxRedirs"; $curl; 3) ]
```

See also

- 61.49 `CURL.GetEffectiveURL` 1838
- 61.109 `CURL.GetRedirectURL` 1902
- 61.110 `CURL.GetRequestSize` 1904
- 61.112 `CURL.GetResultAsContainer` 1907
- 61.257 `CURL.SetOptionMaxRedirs` 2133

61.221. <i>CURL.SETOPTIONFOLLOWLOCATION</i>	2087
• 61.274 <i>CURL.SetOptionPostRedir</i>	2164
• 61.315 <i>CURL.SetOptionRedirProtocols</i>	2215
• 61.372 <i>CURL.SetOptionUnrestrictedAuth</i>	2297
• 85.225 <i>GImage.Scale</i>	4628

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL Download Picture with Info](#)
- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/Twitter oAuth](#)

Created 18th August 2014, last changed 12nd May 2016.

61.222 CURL.SetOptionForbidReuse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionForbidReuse"; curl; Value)

(old name: CURL.SetOptionForbitReuse)

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to disallow reusing connections.

0

Result Returns "OK" on success.

Description

Set to 1 to make the next transfer explicitly close the connection when done. Normally, libcurl keeps all connections alive when done with one transfer in case a succeeding one follows that can re-use them. This option should be used with caution and only if you understand what it does. Set to 0 to have libcurl keep the connection open for possible later re-use (default behavior).

see also `CURL.SetOptionFreshConnect`.

See also [FORBID_REUSE](#) option in CURL manual.

Examples

Forbit reusing connection:

```
MBS( "CURL.SetOptionForbitReuse"; $curl; 1 )
```

Forbit reuse and make fresh connection:

```
Set Variable [ $EmailID; Value: MBS( "CURL.SetOptionForbitReuse"; $curl; 1 ) ]
```

```
Set Variable [ $EmailID; Value: MBS( "CURL.SetOptionFreshConnect"; $curl; 1 ) ]
```

See also

- 61.223 `CURL.SetOptionFreshConnect`

2089

Created 18th August 2014, last changed 20th April 2018.

61.223 CURL.SetOptionFreshConnect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionFreshConnect"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to not reuse old connection for next transfer.

0

Result Returns "OK" on success.

Description

Set to 1 to make the next transfer use a new (fresh) connection by force. If the connection cache is full before this connection, one of the existing connections will be closed as according to the selected or default policy. This option should be used with caution and only if you understand what it does. Set this to 0 to have libcurl attempt re-using an existing connection (default behavior).

see also [CURL.SetOptionForbidReuse](#).

See also [FRESH_CONNECT](#) option in CURL manual.

Examples

Request a fresh connection:

```
MBS( "CURL.SetOptionFreshConnect"; $curl; 1 )
```

Forbid reuse and make fresh connection:

```
Set Variable [ $EmailID; Value: MBS( "CURL.SetOptionForbidReuse"; $curl; 1 ) ]
```

```
Set Variable [ $EmailID; Value: MBS( "CURL.SetOptionFreshConnect"; $curl; 1 ) ]
```

See also

- [61.222 CURL.SetOptionForbidReuse](#) 2088
- [61.254 CURL.SetOptionMaxConnects](#) 2130

Example Databases

- [CURL/Email/Batch Emailer](#)

Created 18th August 2014, last changed 21st June 2016.

61.224 `CURL.SetOptionGSSAPIDelegation`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionGSSAPIDelegation"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [GSSAPI_DELEGATION](#) option in CURL manual.

Created 15th April 2018, last changed 16th April 2018.

61.225 CURL.SetOptionGet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionGet"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to do a GET transfer.

1

Result Returns "OK" on success.

Description

Pass a number. If the number is 1, this forces the HTTP request to get back to GET. Usable if a POST, HEAD, PUT, or a custom request has been used previously using the same curl handle.

When setting value to 1, it will automatically set `CURL.SetOptionNoBody` to 0.

If you need POST, please use `CURL.SetOptionPost`. If you need DELETE, PATCH or others, please use `CURL.SetOptionCustomRequest` function.

Examples

Turns get on:

MBS("CURL.SetOptionGet"; \$curl; 1)

See also

- 61.260 `CURL.SetOptionNetRC` 2137
- 61.263 `CURL.SetOptionNoBody` 2141
- 61.269 `CURL.SetOptionPort` 2151
- 61.270 `CURL.SetOptionPost` 2153
- 61.305 `CURL.SetOptionPut` 2201
- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.336 `CURL.SetOptionSSLKey` 2245
- 61.365 `CURL.SetOptionTimeOut` 2282

- 61.370 `CURL.SetOptionURL` 2288
- 61.376 `CURL.SetOptionUseSSL` 2302

Example Databases

- [CURL/WebServices/Magento2 REST API](#)

Created 18th August 2014, last changed 19th June 2019.

61.226 CURL.SetOptionHAProxyProtocol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHAProxyProtocol"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new setting, 1 or 0

1

Result Returns OK or error.

Description

A value 1 tells the library to send an HAProxy PROXY protocol header at beginning of the connection. The default action is not to send this header.

This option is primarily useful when sending test requests to a service that expects this header.

Most applications do not need this option.

Default 0, do not send HAProxy PROXY protocol header.

See also [HAPROXYPROTOCOL](#) option in CURL manual.

See also

- 61.201 [CURL.SetOptionDefaultProtocol](#) 2061
- 61.315 [CURL.SetOptionRedirProtocols](#) 2215

61.226.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 16th May 2018, last changed 28th November 2019.

61.227 `CURL.SetOptionHTTP200Aliases`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHTTP200Aliases"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

List of aliases.

"ICY 200 OK"

Result Returns "OK" on success.

Description

Some servers respond with a custom header response line. For example, IceCast servers respond with "ICY 200 OK". By including this string in your list of aliases, the response will be treated as a valid HTTP header line such as "HTTP/1.0 200 OK".

The alias itself is not parsed for any version strings. Before libcurl 7.16.3, Libcurl used the value set by option `CURL.SetOptionHTTPVersion`, but starting with 7.16.3 the protocol is assumed to match HTTP 1.0 when an alias matched.

This option takes a list of items. So this function takes a variable number of arguments. If you call function with 2 parameters, you set an empty list. If you call it with 5 parameters, you set a list with 3 values. See also [HTTP200ALIASES](#) option in CURL manual.

Examples

Call with three parameters:

```
MBS( "CURL.SetOptionHTTP200Aliases"; handle; $value1; $value2; $value3 )
```

See also

- 61.80 `CURL.GetOptionHTTP200Aliases` 1873
- 61.233 `CURL.SetOptionHTTPVersion` 2104

Created 18th August 2014, last changed 18th August 2014.

61.228 CURL.SetOptionHTTPAuth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHTTPAuth"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Which http authentication to use.

15

Result Returns "OK" on success.

Description

Pass a number as parameter, which is set to a bitmask, to tell libcurl which authentication method(s) you want it to use. The available bits are listed below. If more than one bit is set, libcurl will first query the site to see which authentication methods it supports and then pick the best one you allow it to use. For some methods, this will induce an extra network round-trip. Set the actual name and password with the CURL.SetOptionUsername and the CURL.SetOptionPassword options.

See also [HTTPAUTH](#) option in CURL manual.

Examples

Request GSS-Negotiate:

MBS("CURL.SetOptionHTTPAuth"; \$curl; 4)

Use BASIC or Digest authorization:

MBS("CURL.SetOptionHTTPAuth"; \$curl; 1+2+16)

See also

- 61.101 CURL.GetProxyAuthAvail 1894
- 61.210 CURL.SetOptionFTPPort 2073
- 61.212 CURL.SetOptionFTPSSLAuth 2076
- 61.230 CURL.SetOptionHTTPHeader 2098
- 61.250 CURL.SetOptionMailAuth 2125

CURLAUTH_BASIC	1	HTTP Basic authentication. This is the default choice, and the only method that is in wide-spread use and supported virtually everywhere. This sends the user name and password over the network in plain text, easily captured by others.
CURLAUTH_DIGEST	2	HTTP Digest authentication. Digest authentication is defined in RFC 2617 and is a more secure way to do authentication over public networks than the regular old-fashioned Basic method.
CURLAUTH_DIGEST_IE	16	HTTP Digest authentication with an IE flavor. Digest authentication is defined in RFC 2617 and is a more secure way to do authentication over public networks than the regular old-fashioned Basic method. The IE flavor is simply that libcurl will use a special "quirk" that IE is known to have used before version 7 and that some servers require the client to use. (This define was added in 7.19.3)
CURLAUTH_GSSNEGOTIATE	4	HTTP GSS-Negotiate authentication. The GSS-Negotiate (also known as plain "Negotiate") method was designed by Microsoft and is used in their web applications. It is primarily meant as a support for Kerberos5 authentication but may also be used along with other authentication methods. For more information see IETF draft draft-brezak-spnego-http-04.txt. You need to build libcurl with a suitable GSS-API library for this to work.
CURLAUTH_NTLM	8	HTTP NTLM authentication. A proprietary protocol invented and used by Microsoft. It uses a challenge-response and hash concept similar to Digest, to prevent the password from being eavesdropped. You need to build libcurl with OpenSSL support for this option to work, or build libcurl on Windows.
CURLAUTH_ANY	15	This is a convenience macro that sets all bits and thus makes libcurl pick any it finds suitable. libcurl will automatically select the one it finds most secure.
CURLAUTH_ANYSAFE	14	This is a convenience macro that sets all bits except Basic and thus makes libcurl pick any it finds suitable. libcurl will automatically select the one it finds most secure.

- 61.279 CURL.SetOptionProxyAuth 2173
- 61.305 CURL.SetOptionPut 2201
- 61.345 CURL.SetOptionSocks5Auth 2262
- 61.365 CURL.SetOptionTimeout 2282
- 61.378 CURL.SetOptionUsername 2305

61.229 CURL.SetOptionHTTPContentDecoding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHTTPContentDecoding"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to do content decoding.

1

Result Returns "OK" on success.

Description

If set to zero, content decoding will be disabled. If set to 1 it is enabled. Libcurl has no default content decoding but requires you to use `CURLOPT_ENCODING` for that.

See also [HTTP_CONTENT_DECODING](#) option in CURL manual.

See also

- 61.232 `CURL.SetOptionHTTPTransferDecoding`

2103

Created 18th August 2014, last changed 18th August 2014.

61.230 `CURL.SetOptionHTTPHeader`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHTTPHeader"; curl; Values)

Parameters

curl

The CURL session handle.

\$curl

Values

Header values

"Content-Type: text/xml"

Result Returns "OK" on success.

Description

Pass a list of HTTP headers to pass to the server in your HTTP request. If you add a header that is otherwise generated and used by libcurl internally, your added one will be used instead. If you add a header with no content as in 'Accept:' (no data on the right side of the colon), the internally used header will get disabled. Thus, using this option you can add new headers, replace internal headers and remove internal headers. To add a header with no content, make the content be two quotes: "". The headers included in the linked list must not be CRLF-terminated, because curl adds CRLF after each header item. Failure to comply with this will result in strange bugs because the server will most likely ignore part of the headers you specified.

The first line in a request (containing the method, usually a GET or POST) is not a header and cannot be replaced using this option. Only the lines following the request-line are headers. Adding this method line in this list of headers will only cause your request to send an invalid header.

Pass a no parameters to this to reset back to no custom headers.

The most commonly replaced headers have "shortcuts" in the options `CURL.SetOptionCookie`, `CURL.SetOptionUserAgent` and `CURL.SetOptionReferer`.

This option takes a list of items. So this function takes a variable number of arguments. If you call function with 2 parameters, you set an empty list. If you call it with 5 parameters, you set a list with 3 values. See also [HTTPHEADER](#) option in CURL manual.

Examples

Set text/xml content type:

```
MBS( "CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml" )
```

Set two custom headers:

```
MBS( "CURL.SetOptionHTTPHeader"; $curl; "MyHeader1: hello"; "MyHeader2: world" )
```

Call with three parameters:

```
MBS( "CURL.SetOptionHTTPHeader"; handle; $value1; $value2; $value3 )
```

For SOAP, set content type and disable Expect header:

```
MBS("CURL.SetOptionHTTPHeader"; $curl; "Expect:"; "Content-Type: text/xml")
```

Set content type including a soap action:

```
MBS( "CURL.SetOptionHTTPHeader"; $curl; "Content-Type: application/soap+xml;charset=UTF-8;action=\urn:sap-com:document:sap:soap:functions:mc-style:ZMF_WS_00:ZmfWs00Request\" )
```

Request no cached copy:

```
MBS("CURL.SetOptionHTTPHeader"; $curl; "Cache-Control: no-cache")
```

Set content type for URL encoded form data:

```
MBS( "CURL.SetOptionHTTPHeader"; $curl; "Content-Type: application/x-www-form-urlencoded" )
```

Using a bearer for a webservice:

```
MBS( "CURL.SetOptionHTTPHeader"; $curl; "Authorization: Bearer a92eabb9-76f9-42ee-b280-bcd15cb2e9db";
"Content-Type: application/json")
```

Set SOAP Action and Content-Type for webservice:

```
MBS("CURL.SetOptionHTTPHeader"; $curl;
"Content-Type: text/xml;charset=\utf-8\";
"SOAPAction: \" & $SoapRequestName & \"\")
```

Query current account for Dropbox:

```
# Start new session
Set Variable [ $curl ; Value: MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; "https://api.dropboxapi.com/2/users/get_current_account") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionCustomRequest"; $curl; "POST") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionHTTPHeader"; $curl; "Accept: */*"; "Authorization: Bearer xxx"; "Cache-Control: no-cache"; "accept-encoding: gzip, deflate"; "cache-control: no-cache"; "content-length:") ]
```

```

# RUN now
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

See also

- [61.85 CURL.GetOptionProxyHeader](#) 1878
- [61.235 CURL.SetOptionHeader](#) 2106
- [61.233 CURL.SetOptionHTTPVersion](#) 2104
- [61.272 CURL.SetOptionPostFields](#) 2158
- [61.316 CURL.SetOptionReferer](#) 2217
- [61.308 CURL.SetOptionRTSPRequest](#) 2207
- [61.328 CURL.SetOptionSSLCert](#) 2232
- [61.374 CURL.SetOptionUpload](#) 2299
- [61.370 CURL.SetOptionURL](#) 2288
- [61.377 CURL.SetOptionUserAgent](#) 2304

Example Databases

- [CURL/CURL FMS Admin API](#)
- [CURL/CURL Send Form](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [CURL/WebServices/Magento2 REST API](#)
- [CURL/WebServices/Sales Force Test](#)
- [CURL/WebServices/Swiss Post Addresscheck V4-02-00](#)
- [CURL/WebServices/TinyURL](#)
- [CURL/WebServices/Twitter OAuth](#)
- [CURL/WebServices/VAT Webservice Example/VAT Webservice Example](#)

61.230.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Let CURL handle cookie list](#)
- [MBS FileMaker Plugin, version 8.2pr3](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Using NetVerify web service with FileMaker](#)
- [Swiss Post Webservice to verify addresses](#)
- [Using CURL with Rosette web service](#)
- [Translate PHP script with CURL to FileMaker Script](#)

61.230.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 20](#)
- [Ausgabe 4/2016, Seite 19](#)

Created 18th August 2014, last changed 12nd September 2019.

61.231 `CURL.SetOptionHTTPProxyTunnel`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("`CURL.SetOptionHTTPProxyTunnel`"; `curl`; Value)

Parameters

`curl`

The CURL session handle.

`$curl`

Value

Whether to tunnel or not. (1 to tunnel, 0 to not tunnel)

1

Result Returns "OK" on success.

Description

There is a big difference between using a proxy and to tunnel through it. If you don't know what this means, you probably don't want this tunneling option.

See also [HTTPPROXYTUNNEL](#) option in CURL manual.

See also

- 61.278 `CURL.SetOptionProxy`

2171

Created 18th August 2014, last changed 18th August 2014.

61.232 CURL.SetOptionHTTPTransferDecoding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHTTPTransferDecoding"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to decode.

1

Result Returns "OK" on success.

Description

If set to zero, transfer decoding will be disabled, if set to 1 it is enabled (default). libcurl does chunked transfer decoding by default unless this option is set to zero.

See also [HTTP_TRANSFER_DECODING](#) option in CURL manual.

See also

- 61.229 [CURL.SetOptionHTTPContentDecoding](#) 2097
- 61.368 [CURL.SetOptionTransferEncoding](#) 2286

Created 18th August 2014, last changed 18th August 2014.

61.233 `CURL.SetOptionHTTPVersion`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHTTPVersion"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Sets the HTTP Version.

2

Result Returns "OK" on success.

Description

This is not sensible to do unless you have a good reason.

<code>CURL_HTTP_VERSION_NONE</code>	0	We don't care about what version the library uses. libcurl will use whatever it thinks fit.
<code>CURL_HTTP_VERSION_1_0</code>	1	Enforce HTTP 1.0 requests.
<code>CURL_HTTP_VERSION_1_1</code>	2	Enforce HTTP 1.1 requests.
<code>CURL_HTTP_VERSION_2_0</code>	3	please use HTTP 2 in the request
<code>CURL_HTTP_VERSION_2TLS</code>	4	use version 2 for HTTPS, version 1.1 for HTTP
<code>CURL_HTTP_VERSION_2_PRIOR_KNOWLEDGE</code>	5	please use HTTP 2 without HTTP/1.1 Upgrade

See also [HTTP_VERSION](#) option in CURL manual.

See also

- 61.81 `CURL.GetOptionHTTPHeader` 1874
- 61.193 `CURL.SetOptionCustomRequest` 2048
- 61.227 `CURL.SetOptionHTTP200Aliases` 2094
- 61.230 `CURL.SetOptionHTTPHeader` 2098
- 61.303 `CURL.SetOptionProxyType` 2198
- 61.310 `CURL.SetOptionRTSPSessionID` 2209
- 61.343 `CURL.SetOptionSSLVersion` 2258

Created 18th August 2014, last changed 29th April 2017.

61.234 CURL.SetOptionHappyEyeballsTimeOutMS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHappyEyeballsTimeOutMS"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Head start in milliseconds to give happy eyeballs.

See also [HAPPY_EYEBALLS_TIMEOUT_MS](#) option in CURL manual.

Created 15th April 2018, last changed 16th April 2018.

61.235 `CURL.SetOptionHeader`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHeader"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

0 to disable or 1 to enable

1

Result Returns "OK" on success.

Description

A parameter set to 1 tells curl to include the header in the body output.

This is only relevant for protocols that actually have headers preceding the data (like HTTP).

For HTTP headers, please use `CURL.SetOptionHTTPHeader` function.

See also [HEADER](#) option in CURL manual.

See also

- 61.81 `CURL.GetOptionHTTPHeader` 1874
- 61.225 `CURL.SetOptionGet` 2091
- 61.230 `CURL.SetOptionHTTPHeader` 2098
- 61.260 `CURL.SetOptionNetRC` 2137
- 61.283 `CURL.SetOptionProxyHeader` 2177
- 61.306 `CURL.SetOptionQuote` 2203
- 61.314 `CURL.SetOptionRange` 2213
- 61.316 `CURL.SetOptionReferer` 2217
- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.336 `CURL.SetOptionSSLKey` 2245

Created 18th August 2014, last changed 21st June 2019.

61.236 CURL.SetOptionHeaderOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionHeaderOptions"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [HEADEROPT](#) option in CURL manual.

See also

- 61.88 [CURL.GetOptionTelnetOptions](#) 1881
- 61.247 [CURL.SetOptionLoginOptions](#) 2121
- 61.293 [CURL.SetOptionProxySSLOptions](#) 2187
- 61.338 [CURL.SetOptionSSLOptions](#) 2249
- 61.363 [CURL.SetOptionTelnetOptions](#) 2280
- 61.358 [CURL.SetOptionTFTPNoOptions](#) 2275

Created 15th April 2018, last changed 16th April 2018.

61.237 CURL.SetOptionIPResolve

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionIPResolve"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to use IPv4 and/or IPv6.

2

Result Returns "OK" on success.

Description

This is only interesting when using host names that resolve addresses using more than one version of IP. The allowed values are:

IP Resolve Default	0	Default, resolves addresses to all IP versions that your system allows.
IP Resolve v4	1	Resolve to IPv4 addresses.
IP Resolve v6	2	Resolve to IPv6 addresses.

See also [IPRESOLVE](#) option in CURL manual.

See also

- 61.87 CURL.GetOptionResolve 1880
- 61.182 CURL.SetOptionCRLFile 2028
- 61.240 CURL.SetOptionInterface 2112
- 61.276 CURL.SetOptionPreQuote 2167
- 61.318 CURL.SetOptionResolve 2219
- 61.366 CURL.SetOptionTimeValue 2284

Created 18th August 2014, last changed 25th November 2017.

61.238 CURL.SetOptionIgnoreContentLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionIgnoreContentLength"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to ignore content length. 1 to ignore and 0 to not ignore.

1

Result Returns "OK" on success.

Description

This is useful for Apache 1.x (and similar servers) which will report incorrect content length for files over 2 gigabytes. If this option is used, curl will not be able to accurately report progress, and will simply stop the download when the server ends the connection.

See also [IGNORE_CONTENT_LENGTH](#) option in CURL manual.

Created 18th August 2014, last changed 18th August 2014.

61.239 `CURL.SetOptionInFileSize`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionInFileSize"; curl; Value)

(old name: `CURL.SetOptionInFileLarge`)

Parameters

curl

The CURL session handle.

`$curl`

Value

The input size.

1234

Result Returns "OK" on success.

Description

When uploading a file to a remote site, this option should be used to tell libcurl what the expected size of the infile is. This value should be passed as a long. See also `CURL.SetOptionInFileLarge`.

For uploading using SCP, this option is mandatory.

When sending emails using SMTP, this command can be used to specify the optional SIZE parameter for the MAIL FROM command.

This option does not limit how much data libcurl will actually send, as that is controlled entirely by what the input data.

Our `CURL.SetInputText` and other input functions also set the file size.

See also [INFILESIZE](#) option in CURL manual.

Examples

Sets size of input:

MBS("CURL.SetOptionInFileSize"; `$curl`; `$size`)

See also

- 61.163 `CURL.SetInputText` 2002
- 61.178 `CURL.SetOptionBufferSize` 2020
- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.220 `CURL.SetOptionFileTime` 2085

<i>61.239. CURL.SETOPTIONINFILESIZE</i>	2111
• 61.255 CURL.SetOptionMaxFileSize	2131
• 61.271 CURL.SetOptionPostFieldSize	2157

Created 18th August 2014, last changed 8th December 2016.

61.240 CURL.SetOptionInterface

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionInterface"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

Interface name.

en0

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

The name can be an interface name, an IP address, or a host name.

See also **INTERFACE** option in CURL manual.

See also

- 61.195 CURL.SetOptionDNSInterface 2054
- 61.237 CURL.SetOptionIPResolve 2108
- 61.245 CURL.SetOptionLocalPort 2119
- 61.378 CURL.SetOptionUsername 2305
- 61.379 CURL.SetOptionVerbose 2307

Created 18th August 2014, last changed 5th July 2015.

61.241 CURL.SetOptionIssuerCert

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionIssuerCert"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The CA certificate file path.

"/tmp/cert.pem"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

If the option is set, an additional check against the peer certificate is performed to verify the issuer is indeed the one associated with the certificate provided by the option. This additional check is useful in multi-level PKI where one needs to enforce that the peer certificate is from a specific branch of the tree.

This option makes sense only when used in combination with the `CURL.SetOptionSSLVerifyPeer` option. Otherwise, the result of the check is not considered as failure.

A specific error code (`CURLE_SSL_ISSUER_ERROR`) is defined with the option, which is returned if the setup of the SSL/TLS session has failed due to a mismatch with the issuer of peer certificate (`CURL.SetOptionSSLVerifyPeer` has to be set too for the check to fail).

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

See also [ISSUERCERT](#) option in CURL manual.

See also

- 61.198 `CURL.SetOptionDNSServers` 2057
- 61.316 `CURL.SetOptionReferer` 2217
- 61.328 `CURL.SetOptionSSLCert` 2232

- 61.341 `CURL.SetOptionSSLVerifyPeer` 2254
- 61.369 `CURL.SetOptionTransferText` 2287
- 61.377 `CURL.SetOptionUserAgent` 2304

61.241.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 12nd December 2017.

61.242 CURL.SetOptionKRBLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionKRBLevel"; curl; Value { ; Encoding })

(old name: CURL.SetOptionKRB4Level)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new security level.

"safe"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

This also enables kerberos awareness. This is a string, 'clear', 'safe', 'confidential' or 'private'. If the string is set but doesn't match one of these, 'private' will be used. Set the string to empty value to disable kerberos support for FTP.

See also [KRBLEVEL](#) option in CURL manual.

See also

- 61.182 CURL.SetOptionCRLFile 2028
- 61.316 CURL.SetOptionReferer 2217
- 61.318 CURL.SetOptionResolve 2219

Created 18th August 2014, last changed 18th April 2016.

61.243 **CURL.SetOptionKeepSendingOnError**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionKeepSendingOnError"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Continue to send data if the server responds early with an HTTP status code ≥ 300 .

See also [KEEP_SENDING_ON_ERROR](#) option in CURL manual.

Created 15th April 2018, last changed 28th November 2019.

61.244 CURL.SetOptionKeyPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionKeyPassword"; curl; Value { ; Encoding })

(old name: CURL.SetOptionSSLCertPassword) (old name: CURL.SetOptionSSLKeyPassword)

Parameters**curl**

The CURL session handle.

\$curl

Value

The password text.

"hello"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a string as parameter. It will be used as the password required to use the CURL.SetOptionSSLKey private key. You never needed a pass phrase to load a certificate but you need one to load your private key. See also **KEYPASSWORD** option in CURL manual.

Examples

Set a client SSL certificate:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionSSLCert"; $curl; "/some/certfile.pem") ]
```

```
Set Variable [ $r; Value:MBS("CURL.SetOptionSSLCertType"; $curl; "PEM") ]
```

```
Set Variable [ $r; Value:MBS("CURL.SetOptionKeyPassword"; $curl; "secret") ]
```

See also

- 61.142 CURL.Perform 1954
- 61.265 CURL.SetOptionPassword 2145
- 61.284 CURL.SetOptionProxyKeyPassword 2178
- 61.285 CURL.SetOptionProxyPassword 2179
- 61.326 CURL.SetOptionSSHPrivateKeyfile 2228

- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.329 `CURL.SetOptionSSLCertType` 2236
- 61.336 `CURL.SetOptionSSLKey` 2245
- 61.360 `CURL.SetOptionTLSAuthPassword` 2277

61.244.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)

Created 18th August 2014, last changed 18th April 2016.

61.245 CURL.SetOptionLocalPort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionLocalPort"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The port number (1-65535)

8000

Result Returns "OK" on success.

Description

This can be used in combination with `CURL.SetOptionInterface` and you are recommended to use `CURL.SetOptionLocalPortRange` as well when this is set. Valid port numbers are 1 - 65535.

Local ports <1024 usually need admin/root permissions to be used.

To set port to connect to, please use `CURL.SetOptionPort` instead.

See also [LOCALPORT](#) option in CURL manual.

See also

- 61.210 `CURL.SetOptionFTPPort` 2073
- 61.240 `CURL.SetOptionInterface` 2112
- 61.246 `CURL.SetOptionLocalPortRange` 2120
- 61.269 `CURL.SetOptionPort` 2151
- 61.287 `CURL.SetOptionProxyPort` 2181

Created 18th August 2014, last changed 8th February 2019.

61.246 CURL.SetOptionLocalPortRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionLocalPortRange"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The local port number attempts.

1

Result Returns "OK" on success.

Description

It starts with the given `CURL.SetOptionLocalPort` and adds one to the number for each retry. Setting this to 1 or below will make libcurl do only one try for the exact port number. Port numbers by nature are scarce resources that will be busy at times so setting this value to something too low might cause unnecessary connection setup failures.

See also [LOCALPORTRANGE](#) option in CURL manual.

See also

- 61.245 `CURL.SetOptionLocalPort`

2119

Created 18th August 2014, last changed 18th August 2014.

61.247 CURL.SetOptionLoginOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.4	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionLoginOptions"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The options string.

""

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns OK or error.

Description

For more information about the login options please see RFC 2384, RFC5092 and IETF draft draft-earhart-url-smtp-00.txt

OptionLoginOptions can be used to set protocol specific login options, such as the preferred authentication mechanism via "AUTH=NTLM" or "AUTH=*", and should be used in conjunction with the CURL.SetOptionUserName option.

Only IMAP, POP3 and SMTP support login options.

See also [LOGIN_OPTIONS](#) option in CURL manual.

Examples

Use plain authentication:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionLoginOptions"; $curl; "AUTH=PLAIN") ]
```

Use CRAM MD5 authentication:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionLoginOptions"; $curl; "AUTH=CRAM-MD5") ]
```

Use LOGIN with username and password:

```
MBS("CURL.SetOptionLoginOptions"; $curl; "AUTH=LOGIN")
```

See also

- 61.88 CURL.GetOptionTelnetOptions 1881
- 61.236 CURL.SetOptionHeaderOptions 2107
- 61.293 CURL.SetOptionProxySSLOptions 2187
- 61.338 CURL.SetOptionSSLOptions 2249
- 61.363 CURL.SetOptionTelnetOptions 2280
- 61.358 CURL.SetOptionTFTPNoOptions 2275
- 61.378 CURL.SetOptionUsername 2305

Created 22nd November 2015, last changed 20th July 2018.

61.248 CURL.SetOptionLowSpeedLimit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionLowSpeedLimit"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The low speed limit in bytes second.

1000

Result Returns "OK" on success.

Description

It contains the transfer speed in bytes per second that the transfer should be below during CURL.SetOptionLowSpeedTime seconds for the library to consider it too slow and abort.

See also [LOW_SPEED_LIMIT](#) option in CURL manual.

See also

- 61.249 CURL.SetOptionLowSpeedTime

2124

Created 18th August 2014, last changed 18th August 2014.

61.249 `CURL.SetOptionLowSpeedTime`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionLowSpeedTime"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The slow time.

100

Result Returns "OK" on success.

Description

Pass time in seconds that the transfer should be below the `CURL.SetOptionLowSpeedLimit` for the library to consider it too slow and abort.

See also [LOW_SPEED_TIME](#) option in CURL manual.

See also

- 61.248 `CURL.SetOptionLowSpeedLimit`

2123

Created 18th August 2014, last changed 18th August 2014.

61.250 CURL.SetOptionMailAuth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.9	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMailAuth"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The new options.

""

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

This string will be used to specify the authentication address (identity) of a submitted message that is being relayed to another server.

This optional parameter allows co-operating agents in a trusted environment to communicate the authentication of individual messages and should only be used by the application program, using libcurl, if the application is itself a mail server acting in such an environment. If the application is operating as such and the AUTH address is not known or is invalid, then an empty string should be used for this parameter.

Unlike `CURL.SetOptionMailRecipients`, the address should not be specified within a pair of angled brackets (<>). However, if an empty string is used then a pair of brackets will be sent by libcurl as required by RFC 2554.

See also [MAIL_AUTH](#) option in CURL manual.

Examples

Set mail auth address:

MBS("CURL.SetOptionMailAuth"; \$curl; "<secret@cave>")

See also

- 61.212 `CURL.SetOptionFTPSSLAAuth` 2076
- 61.228 `CURL.SetOptionHTTPAAuth` 2095
- 61.251 `CURL.SetOptionMailFrom` 2127

- 61.252 `CURL.SetOptionMailRecipients` 2128
- 61.266 `CURL.SetOptionPathAsIs` 2148
- 61.279 `CURL.SetOptionProxyAuth` 2173
- 61.345 `CURL.SetOptionSocks5Auth` 2262
- 61.365 `CURL.SetOptionTimeOut` 2282

Created 18th August 2014, last changed 8th February 2018.

61.251 CURL.SetOptionMailFrom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMailFrom"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The from address.

"someone@macsw.de"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

It will be used to specify the sender address in a mail when sending an SMTP mail with libcurl.

An originator email address in SMTP lingo is specified within angle brackets (<>) which libcurl will not add for you before version 7.21.4. Failing to provide such brackets may cause the server to reject your mail. See also [MAIL_FROM](#) option in CURL manual.

See also

- 61.218 [CURL.SetOptionFailOnError](#) 2083
- 61.220 [CURL.SetOptionFileTime](#) 2085
- 61.250 [CURL.SetOptionMailAuth](#) 2125
- 61.265 [CURL.SetOptionPassword](#) 2145
- 61.319 [CURL.SetOptionResumeFrom](#) 2220

61.251.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr7](#)

Created 18th August 2014, last changed 5th July 2015.

61.252 CURL.SetOptionMailRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMailRecipients"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

First email address.

"someone@macsw.de"

Result Returns "OK" on success.

Description

Pass a list of recipients to pass to the server in your SMTP mail request. For passing several recipients, simply add more parameters to the function call.

Each recipient in SMTP lingo is specified with angle brackets (<>), but should you not use an angle bracket as first letter libcurl will assume you provide a single email address only and enclose that with angle brackets for you.

This option takes a list of items. So this function takes a variable number of arguments. If you call function with 2 parameters, you set an empty list. If you call it with 5 parameters, you set a list with 3 values. See also [MAIL_RCPT](#) option in CURL manual.

Examples

Set three recipients:

```
MBS( "CURL.SetOptionMailRecipients"; $curl; $email1; $email2; $email3 )
```

See also

- 61.82 CURL.GetOptionMailRecipients 1875
- 61.250 CURL.SetOptionMailAuth 2125

Created 18th August 2014, last changed 5th April 2017.

61.253 CURL.SetOptionMaxAgeConn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	9.3	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMaxAgeConn"; curl; Age)

Parameters**curl**

The CURL session handle.

\$curl

Age

The age in seconds.

180

Result Returns OK or error.

Description

The maximum age the connection should have in seconds.

Older connections are not reused, but discarded.

See also [MAXAGE_CONN](#) option in CURL manual.

See also

- 61.254 CURL.SetOptionMaxConnects 2130
- 61.255 CURL.SetOptionMaxFileSize 2131
- 61.257 CURL.SetOptionMaxRedirs 2133

61.253.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr1](#)

Created 22nd May 2019, last changed 23th May 2019.

61.254 `CURL.SetOptionMaxConnects`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMaxConnects"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The new limit.

5

Result Returns "OK" on success.

Description

The set amount will be the maximum amount of simultaneously open connections that libcurl may cache in this easy handle. Default is 5, and there isn't much point in changing this value unless you are perfectly aware of how this works and changes libcurl's behaviour. This concerns connections using any of the protocols that support persistent connections.

When reaching the maximum limit, curl closes the oldest one in the cache to prevent increasing the number of open connections.

If you already have performed transfers with this curl handle, setting a smaller MaxConnects than before may cause open connections to get closed unnecessarily.

See also [MAXCONNECTS](#) option in CURL manual.

See also

- 61.70 `CURL.GetMultiOptionMaxConnects` 1863
- 61.79 `CURL.GetOptionConnectTo` 1872
- 61.167 `CURL.SetMultiOptionMaxConnects` 2008
- 61.184 `CURL.SetOptionConnectOnly` 2032
- 61.186 `CURL.SetOptionConnectTo` 2036
- 61.223 `CURL.SetOptionFreshConnect` 2089
- 61.253 `CURL.SetOptionMaxAgeConn` 2129

Created 18th August 2014, last changed 18th August 2014.

61.255 CURL.SetOptionMaxFileSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMaxFileSize"; curl; Value)

(old name: CURL.SetOptionMaxFileSizeLarge)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new maximum file size.

1000000

Result Returns "OK" on success.

Description

Pass a number as parameter. This allows you to specify the maximum size (in bytes) of a file to download. If the file requested is larger than this value, the transfer will not start and `CURLE_FILESIZE_EXCEEDED` will be returned.

The file size is not always known prior to download, and for such files this option has no effect even if the file transfer ends up being larger than this given limit. This concerns both FTP and HTTP transfers.

See also [MAXFILESIZE](#) option in CURL manual.

See also

- 61.178 [CURL.SetOptionBufferSize](#) 2020
- 61.189 [CURL.SetOptionCookieFile](#) 2041
- 61.220 [CURL.SetOptionFileTime](#) 2085
- 61.239 [CURL.SetOptionInFileSize](#) 2110
- 61.253 [CURL.SetOptionMaxAgeConn](#) 2129
- 61.256 [CURL.SetOptionMaxRecvSpeed](#) 2132
- 61.257 [CURL.SetOptionMaxRedirs](#) 2133
- 61.258 [CURL.SetOptionMaxSendSpeed](#) 2135
- 61.271 [CURL.SetOptionPostFieldSize](#) 2157

Created 18th August 2014, last changed 18th April 2016.

61.256 `CURL.SetOptionMaxRecvSpeed`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMaxRecvSpeed"; curl; Value)

(old name: `CURL.SetOptionMaxRecvSpeedLarge`)

Parameters

curl

The CURL session handle.

\$curl

Value

The maximum download speed in bytes per second.

50000

Result Returns "OK" on success.

Description

If a download exceeds this speed (counted in bytes per second) on cumulative average during the transfer, the transfer will pause to keep the average rate less than or equal to the parameter value. Defaults to unlimited speed.

See also [MAX_RECV_SPEED](#) option in CURL manual.

See also

- 61.255 `CURL.SetOptionMaxFileSize` 2131
- 61.258 `CURL.SetOptionMaxSendSpeed` 2135

Created 18th August 2014, last changed 20th April 2018.

61.257 CURL.SetOptionMaxRedirs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMaxRedirs"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Maximum number of redirects.

-1

Result Returns "OK" on success.

Description

If that many redirections have been followed, the next redirect will cause an error (`CURLE_TOO_MANY_REDIRECTS`). This option only makes sense if the `CURL.SetOptionFollowLocation` is used at the same time.

Added in 7.15.1: Setting the limit to 0 will make CURL refuse any redirect. Set it to -1 for an infinite number of redirects (which is the default)

See also [MAXREDIRS](#) option in CURL manual.

Examples

Allow up to three redirects:

```
Set Variable [ $result; Value: MBS("CURL.SetOptionFollowLocation"; $curl; 1) ]
```

```
Set Variable [ $result; Value: MBS("CURL.SetOptionMaxRedirs"; $curl; 3) ]
```

See also

- 61.49 `CURL.GetEffectiveURL` 1838
- 61.112 `CURL.GetResultAsContainer` 1907
- 61.221 `CURL.SetOptionFollowLocation` 2086
- 61.253 `CURL.SetOptionMaxAgeConn` 2129
- 61.255 `CURL.SetOptionMaxFileSize` 2131
- 61.274 `CURL.SetOptionPostRedir` 2164
- 85.225 `GImage.Scale` 4628

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/WebServices/AdobeSign Webservice](#)
- [CURL/WebServices/Twitter OAuth](#)

Created 18th August 2014, last changed 12nd May 2016.

61.258 CURL.SetOptionMaxSendSpeed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionMaxSendSpeed"; curl; Value)

(old name: CURL.SetOptionMaxSendSpeedLarge)

Parameters**curl**

The CURL session handle.

\$curl

Value

Maximum sending speed in bytes per second.

50000

Result Returns "OK" on success.

Description

If an upload exceeds this speed (counted in bytes per second) on cumulative average during the transfer, the transfer will pause to keep the average rate less than or equal to the parameter value. Defaults to unlimited speed.

Useful if you have a limited pipe and you'd like your transfer not to use your entire bandwidth.

Slowing down the transfer speed is also useful for lowering CPU consumption during transfers.

See also [MAX_SEND_SPEED](#) option in CURL manual.

See also

- 61.255 CURL.SetOptionMaxFileSize 2131
- 61.256 CURL.SetOptionMaxRecvSpeed 2132

Created 18th August 2014, last changed 20th April 2018.

61.259 `CURL.SetOptionNETRCFile`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionNETRCFile"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The file path.

\$path

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a text string containing the full path name to the file you want libcurl to use as .netrc file. If this option is omitted, and `CURL.SetOptionNetRC` is set, libcurl will attempt to find a .netrc file in the current user's home directory.

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

See also [NETRC_FILE](#) option in CURL manual.

See also

- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.182 `CURL.SetOptionCRLFile` 2028
- 61.260 `CURL.SetOptionNetRC` 2137
- 61.313 `CURL.SetOptionRandomFile` 2212

61.259.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 12nd December 2017.

61.260 CURL.SetOptionNetRC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionNetRC"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The netrc preference.

0

Result Returns "OK" on success.

Description

This parameter controls the preference of libcurl between using user names and passwords from your ~/.netrc file, relative to user names and passwords in the URL supplied with CURLOPT_URL.

libcurl uses a user name (and supplied or prompted password) supplied with CURL.SetOptionUsername in preference to any of the options controlled by this parameter.

Pass a long, set to one of the values described below.

CURL_NETRC_OPTIONAL 1 The use of your ~/.netrc file is optional, and information in the URL is to be preferred. The file will be scanned for the host and user name (to find the password only) or for the host only, to find the first user name and password after that machine, which ever information is not specified in the URL. Undefined values of the option will have this effect.
CURL_NETRC_IGNORED 0 The library will ignore the file and use only the information in the URL. This is the default.
CURL_NETRC_REQUIRED 2 This value tells the library that use of the file is required, to ignore the information in the URL, and to search the file for the host only.

Only machine name, user name and password are taken into account (init macros and similar things aren't supported).

libcurl does not verify that the file has the correct properties set (as the standard Unix ftp client does). It should only be readable by user.

See also **NETRC** option in CURL manual.

See also

- 61.259 CURL.SetOptionNETRCFile 2136
- 61.263 CURL.SetOptionNoBody 2141
- 61.269 CURL.SetOptionPort 2151
- 61.270 CURL.SetOptionPost 2153

- 61.278 `CURL.SetOptionProxy` 2171
- 61.306 `CURL.SetOptionQuote` 2203
- 61.314 `CURL.SetOptionRange` 2213
- 61.370 `CURL.SetOptionURL` 2288
- 61.378 `CURL.SetOptionUsername` 2305
- 61.376 `CURL.SetOptionUseSSL` 2302

Created 18th August 2014, last changed 5th July 2015.

61.261 CURL.SetOptionNewDirectoryPerms

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionNewDirectoryPerms"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The permissions value. (octal value!)

7*8*8+5*8+5

Result Returns "OK" on success.

Description

Pass a number as a parameter, containing the value of the permissions that will be assigned to newly created directories on the remote server. The default value is 0755, but any valid value can be used. The only protocols that can use this are sftp://, scp://, and file://.

See also [NEW_DIRECTORY_PERMS](#) option in CURL manual.

See also

- 61.262 CURL.SetOptionNewFilePerms

2140

Created 18th August 2014, last changed 18th August 2014.

61.262 `CURL.SetOptionNewFilePerms`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionNewFilePerms"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The permissions value. (octal value!)

8*8*6+4+8+4

Result Returns "OK" on success.

Description

Pass a number as parameter, containing the value of the permissions that will be assigned to newly created files on the remote server. The default value is 0644, but any valid value can be used. The only protocols that can use this are sftp://, scp://, and file://.

Values are specified in octal, so octal 755 is decimal 493. Octal 644 is 420 (6*8*8+4*8+4).

See also [NEW_FILE_PERMS](#) option in CURL manual.

See also

- 61.261 `CURL.SetOptionNewDirectoryPerms`

2139

Created 18th August 2014, last changed 18th August 2014.

61.263 CURL.SetOptionNoBody

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionNoBody"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to ignore body.

1

Result Returns "OK" on success.

Description

Set to 1 tells the library to not include the body-part in the output. This is only relevant for protocols that have separate header and body parts. On HTTP(S) servers, this will make libcurl do a HEAD request.

To change request to GET, you should use `CURL.SetOptionGet`. Change request to POST with `CURL.SetOptionPost` etc.

See also **NOBODY** option in CURL manual.

Examples

Get only the headers:

MBS("CURL.SetOptionNoBody"; \$curl; 1)

See also

- 61.188 `CURL.SetOptionCookie` 2039
- 61.193 `CURL.SetOptionCustomRequest` 2048
- 61.225 `CURL.SetOptionGet` 2091
- 61.260 `CURL.SetOptionNetRC` 2137
- 61.264 `CURL.SetOptionNoProxy` 2143
- 61.270 `CURL.SetOptionPost` 2153
- 61.276 `CURL.SetOptionPreQuote` 2167
- 61.278 `CURL.SetOptionProxy` 2171

- 61.336 `CURL.SetOptionSSLKey` 2245
- 61.374 `CURL.SetOptionUpload` 2299

Example Databases

- [CURL/CURL Certificate Pinning](#)
- [CURL/SFTP/CURL sFTP Operations](#)

Created 18th August 2014, last changed 18th August 2014.

61.264 CURL.SetOptionNoProxy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionNoProxy"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The list of hosts which use no proxy.

"local.com,mbsplugins.com"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

This text should be a comma separated list of hosts which do not use a proxy, if one is specified.

The only wildcard is a single * character, which matches all hosts, and effectively disables the proxy. Each name in this list is matched as either a domain which contains the hostname, or the hostname itself. For example, local.com would match local.com, local.com:80, and www.local.com, but not www.notlocal.com.

See also **NOPROXY** option in CURL manual.

See also

- 61.210 CURL.SetOptionFTPPort 2073
- 61.263 CURL.SetOptionNoBody 2141
- 61.269 CURL.SetOptionPort 2151
- 61.270 CURL.SetOptionPost 2153
- 61.275 CURL.SetOptionPreProxy 2166
- 61.278 CURL.SetOptionProxy 2171
- 61.279 CURL.SetOptionProxyAuth 2173
- 61.287 CURL.SetOptionProxyPort 2181
- 61.303 CURL.SetOptionProxyType 2198
- 61.379 CURL.SetOptionVerbose 2307

61.265 CURL.SetOptionPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPassword"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The password text.

"test123"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

The CURL.SetOptionPassword option should be used in conjunction with the CURL.SetOptionUsername option.

See also **PASSWORD** option in CURL manual.

Examples

Set login credentials:

```
Set Variable [ $result ; Wert: MBS("CURL.SetOptionUserName"; $curl; Logins::Username) ]
Set Variable [ $result ; Wert: MBS("CURL.SetOptionPassword"; $curl; Logins::Password) ]
```

Use netverify.com to check a driver license:

```
# Setup transfer
Set Variable [ $r; Value:MBS("Trace") ]
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://netverify.com/api/netverify/v2/fast-fill") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionVerbose"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUserName"; $curl; "25D63FB16966473DA2416454FD468BBD") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; "4356789038498914948018924658901622") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionVerbose"; $curl; 1) ]
```

```

Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "Accept: application/json"; "Expect:") ]
Set Variable [ $metadata; Value:" { \"type\": \"DRIVING_LICENSE\", \"country\": \"USA\" } " ]
Set Variable [ $r; Value:MBS("CURL.FormAddKeyValue";$curl; "metadata"; $metadata) ]
Set Variable [ $r; Value:MBS("CURL.FormAddKeyContainerContentType";$curl; "backsideImage"; "test.jpg"; Donor Docs::DocPDF; "image/jpeg") ]
Set Variable [ $r; Value:MBS("CURL.FormFinish";$curl) ]
# Run transfer
Set Field [ Donor Docs::ResultCodePost; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ Donor Docs::DebugTextPost; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Field [ Donor Docs::ResultTextPost; $result ]

```

Download file via SFTP to file on disk:

```

Set Variable [ $curl; Value:MBS("CURL.New") ]
# set download URL, e.g. sftp://monkeybreadsoftware.net/test.jpg
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; SFTP Download::URL ) ]
# build file path on disk and open output file
Set Variable [ $name; Value:GetValue(SFTP Download::FileName; 1) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; SFTP Download::FolderPath; $name ) ]
Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
# login only via password
Set Variable [ $result; Value:MBS( "CURL.SetOptionSSHAuthTypes"; $curl; 2+8 ) ]
# set credentials
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; SFTP Download::UserName ) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; SFTP Download::Password ) ]
# run transfer
Set Field [ SFTP Download::ErrorCode; MBS("CURL.Perform"; $curl) ]
# check debug log for errors
Set Field [ SFTP Download::Debug; MBS("CURL.GetDebugAsText"; $curl) ]
# free CURL session
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.244 CURL.SetOptionKeyPassword 2117
- 61.251 CURL.SetOptionMailFrom 2127
- 61.266 CURL.SetOptionPathAsIs 2148
- 61.275 CURL.SetOptionPreProxy 2166
- 61.276 CURL.SetOptionPreQuote 2167
- 61.285 CURL.SetOptionProxyPassword 2179

61.265. <i>CURL.SETOPTIONPASSWORD</i>	2147
• 61.287 <i>CURL.SetOptionProxyPort</i>	2181
• 121.1 <i>Path.AddPathComponent</i>	6135
• 143.33 <i>SendMail.SetSMTPPassword</i>	6923
• 124.52 <i>Trace</i>	6326

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email Upload](#)
- [CURL/FTP/CURL FTP Download File](#)
- [CURL/FTP/CURL FTP Upload File](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [CURL/WebServices/CURL FMS Admin API v18](#)
- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [CURL/WebServices/Swiss Post Addresscheck V4-02-00](#)

61.265.1 Blog Entries

- [URLs without UserName and Password please](#)
- [Upload email to Sent folder via IMAP](#)
- [Batch sending Emails in FileMaker via MBS Plugin](#)
- [Using NetVerify web service with FileMaker](#)
- [Tip of the day: FTP File Upload](#)
- [Swiss Post Webservice to verify addresses](#)

61.265.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 20](#)
- [Ausgabe 4/2016, Seite 19](#)
- [Ausgabe 4/2016, Seite 18](#)

Created 18th August 2014, last changed 12nd July 2019.

61.266 **CURL.SetOptionPathAsIs**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPathAsIs"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Do not squash dot-dot sequences if set to 1.

See also [PATH_AS_IS](#) option in CURL manual.

See also

- 61.250 CURL.SetOptionMailAuth 2125
- 61.265 CURL.SetOptionPassword 2145
- 61.277 CURL.SetOptionProtocols 2169

Created 15th April 2018, last changed 16th April 2018.

61.267 CURL.SetOptionPinnedPublicKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPinnedPublicKey"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Native path to key file.

This option is used only if SSLVerifyPeer is true.

See also [PINNEDPUBLICKEY](#) option in CURL manual.

See also

- 61.286 [CURL.SetOptionProxyPinnedPublicKey](#)

2180

Example Databases

- [CURL/CURL Certificate Pinning](#)

Created 15th April 2018, last changed 16th April 2018.

61.268 CURL.SetOptionPipeWait

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPipeWait"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PIPEWAIT](#) option in CURL manual.

See also

- 61.220 CURL.SetOptionFileTime 2085
- 61.276 CURL.SetOptionPreQuote 2167
- 61.365 CURL.SetOptionTimeOut 2282
- 61.366 CURL.SetOptionTimeValue 2284

Created 15th April 2018, last changed 16th April 2018.

61.269 CURL.SetOptionPort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPort"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new port number.

8000

Result Returns "OK" on success.

Description

Specify what remote port number to connect to, instead of the one specified in the URL or the default port for the used protocol.

See also `CURL.SetOptionFTPPort`.

Protocols	Common Ports
http	80, 443 with SSL
ftp	20 and 21
sftp	22
smtp	25, 465 with SSL, 587
pop3	110, 995 with SSL
imap	143, 993 with TLS

See also **PORT** option in CURL manual.

Examples

Use Port 25 for smtp:

```
MBS( "CURL.SetOptionPort"; $curl; 25 )
# alternative 587 or with SSL 465.
```

Use Port 8080 for http:

```
MBS( "CURL.SetOptionPort"; $curl; 8080 )
```

See also

- [61.210 CURL.SetOptionFTPPort](#) 2073
- [61.225 CURL.SetOptionGet](#) 2091
- [61.245 CURL.SetOptionLocalPort](#) 2119
- [61.270 CURL.SetOptionPost](#) 2153
- [61.305 CURL.SetOptionPut](#) 2201
- [61.306 CURL.SetOptionQuote](#) 2203
- [61.314 CURL.SetOptionRange](#) 2213
- [61.328 CURL.SetOptionSSLCert](#) 2232
- [61.374 CURL.SetOptionUpload](#) 2299
- [143.34 SendMail.SetSMTPServer](#) 6925

Example Databases

- [CURL/Email/Batch Emailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)
- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email Upload](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/List IMAP folders](#)

61.269.1 Blog Entries

- [Upload email to Sent folder via IMAP](#)
- [Sending emails in FileMaker with MBS Plugin](#)
- [Tip of the day: FTP File Upload](#)

61.269.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 26](#)

61.270 CURL.SetOptionPost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPost"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether this is a POST request.

1

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library to do a regular HTTP post. This will also make the library use a "Content-Type: application/x-www-form-urlencoded" header. (This is by far the most commonly used POST method).

Use one of `CURL.SetOptionPostFields` options to specify what data to post and `CURL.SetOptionPostFieldSize` to set the data size.

Optionally, you can provide data to POST using the `CURL.SetInput*` functions but then you must make sure to not set `CURL.SetOptionPostFields` to anything but "". When providing data with a callback, you must transmit it using chunked transfer-encoding or you must set the size of the data with the `SetOptionPostFieldSize` or `CURL.SetOptionPostFieldSizeLarge` option. To enable chunked encoding, you simply pass in the appropriate Transfer-Encoding header.

You can override the default POST Content-Type: header by setting your own with `CURL.SetOptionHTTPHeader`.

Using POST with HTTP 1.1 implies the use of a "Expect: 100-continue" header. You can disable this header with `CURL.SetOptionHTTPHeader` as usual.

If you use POST to a HTTP 1.1 server, you can send data without knowing the size before starting the POST if you use chunked encoding. You enable this by adding a header like "Transfer-Encoding: chunked" with `CURL.SetOptionHTTPHeader`. With HTTP 1.0 or without chunked transfer, you must specify the size in the request.

When setting `CURL.SetOptionPost` to 1, it will automatically set `CURL.SetOptionNoBody` to 0 (since

7.14.1).

If you issue a POST request and then want to make a HEAD or GET using the same re-used handle, you must explicitly set the new request type using `CURL.SetOptionNoBody` or `CURL.SetOptionGet` or similar.

For debugging, the website <https://www.posttestserver.com> is very useful. It allows you to see what is received on the other end for a post operation.

If you need GET, please use `CURL.SetOptionGet`. If you need DELETE, PATCH or others, please use `CURL.SetOptionCustomRequest` function.

See also **POST** option in CURL manual.

Examples

Enables POST option:

```
MBS( "CURL.SetOptionPost"; $curl; 1 )
```

Using Rosette web service:

```
# Start new CURL transfer
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set options like Verbose Debug Messages
Set Variable [ $result; Value:MBS("CURL.SetOptionVerbose"; $curl; 1) ]
# the url of webservice
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://api.rosette.com/rest/v1/morphology/parts-of-speech") ]
# the header info for tagging, API Key comes from a global field.
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "user_key: " & RosetteAPISettings::RosetteAPIKey; "Content-Type: application/json"; "Accept: application/json" ) ]
# We want a POST transfer:
Set Variable [ $result; Value:MBS("CURL.SetOptionPost"; $curl; 1 ) ]
# Build JSON using the plugin function to properly encode a string:
Set Variable [ $request; Value:" { \"content\": " & MBS("JSON.CreateString"; TextData::TextAsInput) & " } " ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; $request) ]
# show our JSON in a field for debugging:
Set Field [ TextData::CURLInput; $request ]
# Run transfer
Set Variable [ $result; Value:MBS("CURL.Perform"; $curl) ]
# Check result and debug messages
Set Field [ TextData::CurlDebug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ TextData::CurlOutput; MBS("CURL.GetResultAsText"; $curl) ]
# Cleanup
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]
```

Charge with Stripe webservice:

```
# new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# use stripe charge API
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://api.stripe.com/v1/charges") ]
# set user name
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; "sk_test_ your id here") ]
# make a post with given content:
Set Variable [ $result; Value:MBS("CURL.SetOptionPost"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; "amount=400& currency=usd& de-
scription=Charge% 20for% 20test@example.com& source [ object ] =card& source [ number ] =4242424242424242&
source [ exp_month ] =12& source [ exp_year ] =2017& source [ cvc ] =123" ) ]
# perform
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# now check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header; MBS("CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Run a generic POST request for REST or SOAP web service:

```
# new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# use stripe charge API
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://someURL/service") ]
# set user name and password if needed:
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; "user name") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; "password") ]
# set some additional headers, which may include custom authorization and content types:
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "Authorization: Bearer a92eabb9-
76f9-42ee-b280-bcd15cb2e9db"; "Content-Type: application/json" ) ]
# make a post with given content:
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; $json ) ]
# perform
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# now check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header; MBS("CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.269 *CURL.SetOptionPort* 2151
- 61.274 *CURL.SetOptionPostRedir* 2164

- 61.314 CURL.SetOptionRange 2213
- 61.336 CURL.SetOptionSSLKey 2245
- 61.374 CURL.SetOptionUpload 2299
- 61.370 CURL.SetOptionURL 2288
- 61.378 CURL.SetOptionUsername 2305
- 61.379 CURL.SetOptionVerbose 2307
- 61.387 CURL.SetupOAuth 2324
- 100.28 JSON.CreateString 5281

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL Send Form](#)
- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/CURL FMS Admin API v18](#)
- [CURL/WebServices/Magento2 REST API](#)
- [CURL/WebServices/TinyURL](#)
- [Third Party/Google OAUTH 2 example](#)

61.270.1 Blog Entries

- [Using CURL with Rosette web service](#)
- [Translate PHP script with CURL to FileMaker Script](#)

61.270.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 20](#)

61.271 CURL.SetOptionPostFieldSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPostFieldSize"; curl; Value)

(old name: CURL.SetOptionPostFieldSizeLarge)

Parameters**curl**

The CURL session handle.

\$curl

Value

The post fields data size in bytes.

1234

Result Returns "OK" on success.

Description

If you want to post data to the server without letting libcurl do a string length() to measure the data size, this option must be used. When this option is used you can post fully binary data, which otherwise is likely to fail. If this size is set to -1, the library will use strlen() to get the size.

See also [POSTFIELDSIZE](#) option in CURL manual.

See also

- 61.239 CURL.SetOptionInFileSize 2110
- 61.255 CURL.SetOptionMaxFileSize 2131
- 61.270 CURL.SetOptionPost 2153
- 61.272 CURL.SetOptionPostFields 2158
- 61.274 CURL.SetOptionPostRedir 2164

Created 18th August 2014, last changed 18th July 2019.

61.272 CURL.SetOptionPostFields

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.SetOptionPostFields"; curl; Value { ; Encoding } )
```

Parameters

curl

The CURL session handle.

\$curl

Value

The post data.

””

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

”UTF8”

Result Returns ”OK” on success.

Description

Pass a text, which should be the full data to post in an HTTP POST operation.

The plugin sets the size for you. You can overwrite it with `CURL.SetOptionPostFieldSize` function.

If you plan to pass a form, maybe check functions like `CURL.FormAddKeyValue` instead of building post fields yourself.

You can use `CURL.SetOptionHTTPHeader` to set the content type and other headers.

Using this function is not recommended for more than a few hundred MB of text. If you need more, better stream the data with `CURL.OpenInputFile` from a file.

See also [COPYPOSTFIELDS](#) option in CURL manual.

Examples

Set post field with some XML for SOAP Webservice:

```
MBS("CURL.SetOptionPostFields"; $curl; "<xml>....</xml>"; "UTF-8")
```

Set post fields:

```
MBS("CURL.SetOptionPostFields"; $curl; "first=John& last=Smith"; "UTF-8")
```

Build form:

```
MBS( "CURL.FormAddKeyValue"; $curl; "login"; "testuser" )
MBS( "CURL.FormAddKeyValue"; $curl; "password"; "xxx" )
MBS( "CURL.FormFinish"; $curl )
```

Charge with Stripe webservice:

```
# new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# use stripe charge API
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://api.stripe.com/v1/charges") ]
# set user name
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; "sk_test__ your id here") ]
# make a post with given content:
Set Variable [ $result; Value:MBS("CURL.SetOptionPost"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; "amount=400& currency=usd& description=Charge% 20for% 20test@example.com& source [ object ] =card& source [ number ] =4242424242424242& source [ exp_month ] =12& source [ exp_year ] =2017& source [ cvc ] =123" ) ]
# perform
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# now check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header; MBS("CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Run a generic POST request for REST or SOAP web service:

```
# new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# use stripe charge API
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://someURL/service") ]
# set user name and password if needed:
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; "user name") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; "password") ]
# set some additional headers, which may include custom authorization and content types:
Set Variable [ $result; Value:MBS( "CURL.SetOptionHTTPHeader"; $curl; "Authorization: Bearer a92eabb9-76f9-42ee-b280-bcd15cb2e9db"; "Content-Type: application/json" ) ]
# make a post with given content:
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; $json ) ]
# perform
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# now check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::header; MBS("CURL.GetDebugAsText"; $curl) ]
# cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.191 `CURL.SetOptionCookieList` 2046
- 61.193 `CURL.SetOptionCustomRequest` 2048
- 61.230 `CURL.SetOptionHTTPHeader` 2098
- 61.265 `CURL.SetOptionPassword` 2145
- 61.270 `CURL.SetOptionPost` 2153
- 61.273 `CURL.SetOptionPostQuote` 2162
- 61.274 `CURL.SetOptionPostRedir` 2164
- 61.370 `CURL.SetOptionURL` 2288
- 61.378 `CURL.SetOptionUsername` 2305

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [CURL/WebServices/magento older](#)
- [CURL/WebServices/Magento2 REST API](#)
- [CURL/WebServices/Swiss Post Addresscheck V4-02-00](#)
- [CURL/WebServices/Swiss Post Addresscheck](#)
- [CURL/WebServices/Twilio API Send SMS Json](#)
- [CURL/WebServices/VAT WebService Example/VAT WebService Example](#)

61.272.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Let CURL handle cookie list](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Swiss Post Webservice to verify addresses](#)
- [Using CURL with Rosette web service](#)
- [Translate PHP script with CURL to FileMaker Script](#)

61.272.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 20
- Ausgabe 4/2016, Seite 19

Created 18th August 2014, last changed 22nd November 2019.

61.273 `CURL.SetOptionPostQuote`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.SetOptionPostQuote"; curl; Value )
```

Parameters

curl

The CURL session handle.

`$curl`

Value

The ftp commands.

””

Result Returns ”OK” on success.

Description

The commands will only be run if no error occurred. Disable this operation again by passing no value to this function.

This option takes a list of items. So this function takes a variable number of arguments. If you call function with 2 parameters, you set an empty list. If you call it with 5 parameters, you set a list with 3 values. If you want to do a ftp operation instead of download/upload/directory listing, please use `CURL.SetOptionQuote`.

See also `CURL.SetOptionQuote` and `CURL.SetOptionPreQuote`.

File names may be passed with quotes to include spaces in file names.

See also **POSTQUOTE** option in CURL manual.

Examples

Create folder:

```
MBS( "CURL.SetOptionPostQuote"; $curl; "MKD testfolder" )
```

Rename file using two FTP commands:

```
MBS( "CURL.SetOptionPostQuote" ; $curl ; "RNFR foo.txt"; "RNTO bar.txt" )
```

Delete file after upload:

```
MBS( "CURL.SetOptionPostQuote"; $curl; "DELE test.txt" )
```

Delete folder after upload:

MBS("CURL.SetOptionPostQuote"; \$curl; "RMD testfolder")

Set file permissions:

MBS("CURL.SetOptionPostQuote" ; \$curl ; "SITE CHMOD 777 testfile")

Call with three parameters:

MBS("CURL.SetOptionPostQuote"; handle; \$value1; \$value2; \$value3)

Rename file for SFTP commands:

MBS("CURL.SetOptionPostQuote" ; \$curl ; "rename \"old name.txt\" \"new name.txt\"")

Create folder with SFTP:

Set Variable [\$result ; Value: MBS("CURL.SetOptionPostQuote"; \$curl; "mkdir testPost")]

See also

- 61.83 *CURL.GetOptionPostQuote* 1876
- 61.84 *CURL.GetOptionPreQuote* 1877
- 61.265 *CURL.SetOptionPassword* 2145
- 61.270 *CURL.SetOptionPost* 2153
- 61.272 *CURL.SetOptionPostFields* 2158
- 61.274 *CURL.SetOptionPostRedir* 2164
- 61.276 *CURL.SetOptionPreQuote* 2167
- 61.277 *CURL.SetOptionProtocols* 2169
- 61.279 *CURL.SetOptionProxyAuth* 2173
- 61.306 *CURL.SetOptionQuote* 2203

Created 18th August 2014, last changed 8th November 2017.

61.274 `CURL.SetOptionPostRedir`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPostRedir"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The new bitmask for redirections.

3

Result Returns "OK" on success.

Description

Pass a bitmask to control how libcurl acts on redirects after POSTs that get a 301 or 302 response back. A parameter with bit 0 set (value `CURL_REDIR_POST_301`) tells the library to respect RFC 2616/10.3.2 and not convert POST requests into GET requests when following a 301 redirection. Setting bit 1 (value `CURL_REDIR_POST_302`) makes libcurl maintain the request method after a 302 redirect. `CURL_REDIR_POST_ALL` is a convenience define that sets both bits.

The non-RFC behaviour is ubiquitous in web browsers, so the library does the conversion by default to maintain consistency. However, a server may require a POST to remain a POST after such a redirection. This option is meaningful only when setting `CURL.SetOptionFollowLocation`. (This option was known as `CURLOPT_POST301` up to 7.19.0 as it only supported the 301 way before then)

<code>CURL_REDIR_POST_301</code>	1
<code>CURL_REDIR_POST_302</code>	2
<code>CURL_REDIR_POST_ALL</code>	3

See also [POSTREDIR](#) option in CURL manual.

See also

- 61.83 `CURL.GetOptionPostQuote` 1876
- 61.190 `CURL.SetOptionCookieJar` 2044
- 61.221 `CURL.SetOptionFollowLocation` 2086
- 61.257 `CURL.SetOptionMaxRedirs` 2133

<i>61.274. CURL.SETOPTIONPOSTREDIR</i>	2165
• 61.270 CURL.SetOptionPost	2153
• 61.272 CURL.SetOptionPostFields	2158
• 61.271 CURL.SetOptionPostFieldSize	2157
• 61.273 CURL.SetOptionPostQuote	2162
• 61.283 CURL.SetOptionProxyHeader	2177

Created 18th August 2014, last changed 18th August 2014.

61.275 CURL.SetOptionPreProxy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPreProxy"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PRE_PROXY](#) option in CURL manual.

See also

- 61.84 CURL.GetOptionPreQuote 1877
- 61.210 CURL.SetOptionFTPPort 2073
- 61.264 CURL.SetOptionNoProxy 2143
- 61.265 CURL.SetOptionPassword 2145
- 61.276 CURL.SetOptionPreQuote 2167
- 61.277 CURL.SetOptionProtocols 2169
- 61.278 CURL.SetOptionProxy 2171
- 61.287 CURL.SetOptionProxyPort 2181
- 61.379 CURL.SetOptionVerbose 2307

Created 15th April 2018, last changed 16th April 2018.

61.276 CURL.SetOptionPreQuote

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPreQuote"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The ftp commands.

""

Result Returns "OK" on success.

Description

Disable this operation again by passing no value to this function. Before version 7.15.6, if you also set `CURL.SetOptionNoBody` to 1, this option didn't work.

This option takes a list of items. So this function takes a variable number of arguments. If you call function with 2 parameters, you set an empty list. If you call it with 5 parameters, you set a list with 3 values.

See also `CURL.SetOptionQuote` and `CURL.SetOptionPostQuote`.

File names may be passed with quotes to include spaces in file names.

See also **PREQUOTE** option in CURL manual.

Examples

Create folder before upload:

```
MBS( "CURL.SetOptionPreQuote"; $curl; "MKD testfolder" )
```

Rename file before uploading using two FTP commands:

```
MBS( "CURL.SetOptionPreQuote" ; $curl ; "RNFR foo.txt"; "RNTO bar.txt" )
```

Delete file before upload:

```
MBS( "CURL.SetOptionPreQuote"; $curl; "DELE test.txt" )
```

Delete folder before upload:

```
MBS( "CURL.SetOptionPreQuote"; $curl; "RMD testfolder" )
```

Set file permissions:

```
MBS( "CURL.SetOptionPreQuote" ; $curl ; "SITE CHMOD 777 testfile")
```

Call with three parameters:

```
MBS( "CURL.SetOptionPreQuote"; handle; $value1; $value2; $value3 )
```

See also

- 61.83 CURL.GetOptionPostQuote 1876
- 61.84 CURL.GetOptionPreQuote 1877
- 61.263 CURL.SetOptionNoBody 2141
- 61.270 CURL.SetOptionPost 2153
- 61.273 CURL.SetOptionPostQuote 2162
- 61.275 CURL.SetOptionPreProxy 2166
- 61.305 CURL.SetOptionPut 2201
- 61.318 CURL.SetOptionResolve 2219
- 61.378 CURL.SetOptionUsername 2305
- 61.379 CURL.SetOptionVerbose 2307

Created 18th August 2014, last changed 6th November 2017.

61.277 CURL.SetOptionProtocols

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProtocols"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The bitmask defining which protocols to use.

1

Result Returns "OK" on success.

Description

Pass a number that holds a bitmask of protocol values (See below). If used, this bitmask limits what protocols libcurl may use in the transfer. This allows us to have a plugin built to support a wide range of protocols but still limit specific transfers to only be allowed to use a subset of them. By default libcurl will accept all protocols it supports. See also [CURL.SetOptionRedirProtocols](#).

HTTP 1

HTTPS2

See also [PROTOCOLS](#) option in CURL manual.

See also

- 61.266 [CURL.SetOptionPathAsIs](#) 2148
- 61.272 [CURL.SetOptionPostFields](#) 2158
- 61.273 [CURL.SetOptionPostQuote](#) 2162
- 61.275 [CURL.SetOptionPreProxy](#) 2166
- 61.276 [CURL.SetOptionPreQuote](#) 2167
- 61.279 [CURL.SetOptionProxyAuth](#) 2173
- 61.287 [CURL.SetOptionProxyPort](#) 2181
- 61.303 [CURL.SetOptionProxyType](#) 2198

FTP	4
FTPS	8
SCP	16
SFTP	32
TELNET	64
LDAP	128
LDAPS	256
DICT	512
FILE	1024
TFTP	2048
IMAP	4096
IMAPS	8192
POP3	16384
POP3S	32768
SMTP	65536
SMTPS	131072
RTSP	262144
ALL	-1

- 61.315 CURL.SetOptionRedirProtocols

61.278 CURL.SetOptionProxy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.SetOptionProxy"; curl; Value { ; Encoding } )
```

Parameters**curl**

The CURL session handle.

\$curl

Value

The proxy string

"http://cache.local.com/:8000"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

The parameter should be a text string holding the host name or dotted IP address. To specify port number in this string, append : [port] to the end of the host name. The proxy string may be prefixed with [protocol] :// since any such prefix will be ignored. The proxy's port number may optionally be specified with the separate option. If not specified, libcurl will default to using port 1080 for proxies. see also `CURL.SetOptionProxyPort`.

When you tell the library to use an HTTP proxy, libcurl will transparently convert operations to HTTP even if you specify an FTP URL etc. This may have an impact on what other features of the library you can use, such as `CURL.SetOptionQuote` and similar FTP specifics that don't work unless you tunnel through the HTTP proxy. Such tunneling is activated with `CURL.SetOptionHTTPProxyTunnel`.

libcurl respects the environment variables `http_proxy`, `ftp_proxy`, `all_proxy` etc, if any of those are set. The `CURL.SetOptionProxy` option does however override any possibly set environment variables.

Setting the proxy string to "" (an empty string) will explicitly disable the use of a proxy, even if there is an environment variable set for it.

Since 7.14.1, the proxy host string given in environment variables can be specified the exact same way as the proxy can be set with `CURL.SetOptionProxy`, include protocol prefix (`http://`) and embedded user + password.

Since 7.21.7, the proxy string may be specified with a protocol:// prefix to specify alternative proxy protocols. Use socks4://, socks4a://, socks5:// or socks5h:// (the last one to enable socks5 and asking the proxy to do the resolving, also known as CURLPROXY_SOCKS5_HOSTNAME type) to request the specific SOCKS version to be used. No protocol specified, http:// and all others will be treated as HTTP proxies.

Setting the property and getting back OK does just mean that the plugin passed the value. It does not confirm that the proxy is working or used.

See also **PROXY** option in CURL manual.

Examples

Set a proxy:

```
MBS( "CURL.SetOptionProxy"; $curl; "http://cache.local.com/:8000")
```

See also

- 61.264 CURL.SetOptionNoProxy 2143
- 61.270 CURL.SetOptionPost 2153
- 61.275 CURL.SetOptionPreProxy 2166
- 61.286 CURL.SetOptionProxyPinnedPublicKey 2180
- 61.303 CURL.SetOptionProxyType 2198
- 61.314 CURL.SetOptionRange 2213
- 61.336 CURL.SetOptionSSLKey 2245
- 61.374 CURL.SetOptionUpload 2299
- 61.370 CURL.SetOptionURL 2288
- 61.379 CURL.SetOptionVerbose 2307

Created 18th August 2014, last changed 5th December 2016.

61.279 CURL.SetOptionProxyAuth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyAuth"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The bitmask of allowed authentication methods. 15

Result Returns "OK" on success.

Description

Pass a number as parameter, which is set to a bitmask, to tell libcurl which authentication method(s) you want it to use for your proxy authentication. If more than one bit is set, libcurl will first query the site to see what authentication methods it supports and then pick the best one you allow it to use. For some methods, this will induce an extra network round-trip. Set the actual name and password with the `CURL.SetOptionProxyUsername` option. The bitmask can be constructed by or'ing together the bits listed above for the `CURL.SetOptionHTTPOAuth` option. As of this writing, only Basic, Digest and NTLM work. See also [PROXYAUTH](#) option in CURL manual.

See also

- 61.228 `CURL.SetOptionHTTPOAuth` 2095
- 61.277 `CURL.SetOptionProtocols` 2169
- 61.278 `CURL.SetOptionProxy` 2171
- 61.280 `CURL.SetOptionProxyCAInfo` 2174
- 61.281 `CURL.SetOptionProxyCAPath` 2175
- 61.287 `CURL.SetOptionProxyPort` 2181
- 61.291 `CURL.SetOptionProxySSLKey` 2185
- 61.303 `CURL.SetOptionProxyType` 2198
- 61.304 `CURL.SetOptionProxyUsername` 2200
- 61.345 `CURL.SetOptionSocks5Auth` 2262

Created 18th August 2014, last changed 18th August 2014.

61.280 `CURL.SetOptionProxyCAInfo`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyCAInfo"; curl; Path)

Parameters

curl

The CURL session handle.

\$curl

Path

The native file path.

Result Returns OK or error.

Description

This option is used only if `CURL.SetOptionProxySSLVerifyPeer` is true

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [PROXY_CAINFO](#) option in CURL manual.

See also

- 61.278 `CURL.SetOptionProxy` 2171
- 61.279 `CURL.SetOptionProxyAuth` 2173
- 61.281 `CURL.SetOptionProxyCAPath` 2175
- 61.283 `CURL.SetOptionProxyHeader` 2177
- 61.285 `CURL.SetOptionProxyPassword` 2179
- 61.287 `CURL.SetOptionProxyPort` 2181
- 61.288 `CURL.SetOptionProxySSLCert` 2182
- 61.303 `CURL.SetOptionProxyType` 2198
- 61.304 `CURL.SetOptionProxyUsername` 2200
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 15th April 2018, last changed 16th April 2018.

61.281 CURL.SetOptionProxyCAPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyCAPath"; curl; Path)

Parameters**curl**

The CURL session handle.

\$curl

Path

The native file path.

Result Returns OK or error.

Description

This option is used only if `CURL.SetOptionProxySSLVerifyPeer` is true

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [PROXY_CAPATH](#) option in CURL manual.

See also

- 61.85 `CURL.GetOptionProxyHeader` 1878
- 61.279 `CURL.SetOptionProxyAuth` 2173
- 61.282 `CURL.SetOptionProxyCRLFile` 2176
- 61.283 `CURL.SetOptionProxyHeader` 2177
- 61.287 `CURL.SetOptionProxyPort` 2181
- 61.288 `CURL.SetOptionProxySSLCert` 2182
- 61.291 `CURL.SetOptionProxySSLKey` 2185
- 61.295 `CURL.SetOptionProxySSLVerifyPeer` 2189
- 61.303 `CURL.SetOptionProxyType` 2198
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 15th April 2018, last changed 16th April 2018.

61.282 `CURL.SetOptionProxyCRLFile`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyCRLFile"; curl; Path)

Parameters

curl

The CURL session handle.

\$curl

Path

The native file path to the file.

Result Returns OK or error.

Description

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [PROXY_CRLFILE](#) option in CURL manual.

See also

- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.182 `CURL.SetOptionCRLFile` 2028
- 61.280 `CURL.SetOptionProxyCAInfo` 2174
- 61.281 `CURL.SetOptionProxyCAPath` 2175
- 61.283 `CURL.SetOptionProxyHeader` 2177
- 61.288 `CURL.SetOptionProxySSLCert` 2182
- 61.291 `CURL.SetOptionProxySSLKey` 2185
- 61.303 `CURL.SetOptionProxyType` 2198
- 61.304 `CURL.SetOptionProxyUsername` 2200
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 15th April 2018, last changed 16th April 2018.

61.283 CURL.SetOptionProxyHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyHeader"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PROXYHEADER](#) option in CURL manual.

See also

- 61.85 [CURL.GetOptionProxyHeader](#) 1878
- 61.280 [CURL.SetOptionProxyCAInfo](#) 2174
- 61.281 [CURL.SetOptionProxyCAPath](#) 2175
- 61.282 [CURL.SetOptionProxyCRLFile](#) 2176
- 61.285 [CURL.SetOptionProxyPassword](#) 2179
- 61.287 [CURL.SetOptionProxyPort](#) 2181
- 61.288 [CURL.SetOptionProxySSLCert](#) 2182
- 61.291 [CURL.SetOptionProxySSLKey](#) 2185
- 61.303 [CURL.SetOptionProxyType](#) 2198
- 61.304 [CURL.SetOptionProxyUsername](#) 2200

Created 15th April 2018, last changed 16th April 2018.

61.284 `CURL.SetOptionProxyKeyPassword`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyKeyPassword"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PROXY_KEYPASSWD](#) option in CURL manual.

See also

- 61.244 `CURL.SetOptionKeyPassword` 2117
- 61.285 `CURL.SetOptionProxyPassword` 2179
- 61.299 `CURL.SetOptionProxyTLSAuthPassword` 2194
- 61.360 `CURL.SetOptionTLSAuthPassword` 2277

Created 15th April 2018, last changed 16th April 2018.

61.285 CURL.SetOptionProxyPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyPassword"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The password text.

"pass123"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Please use `CURL.SetOptionProxyUsername` to set username.

See also [PROXYPASSWORD](#) option in CURL manual.

See also

- 61.244 `CURL.SetOptionKeyPassword` 2117
- 61.278 `CURL.SetOptionProxy` 2171
- 61.280 `CURL.SetOptionProxyCAInfo` 2174
- 61.283 `CURL.SetOptionProxyHeader` 2177
- 61.287 `CURL.SetOptionProxyPort` 2181
- 61.288 `CURL.SetOptionProxySSLCert` 2182
- 61.299 `CURL.SetOptionProxyTLSAuthPassword` 2194
- 61.302 `CURL.SetOptionProxyTransferMode` 2197
- 61.304 `CURL.SetOptionProxyUsername` 2200
- 61.360 `CURL.SetOptionTLSAuthPassword` 2277

Created 18th August 2014, last changed 5th July 2015.

61.286 `CURL.SetOptionProxyPinnedPublicKey`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyPinnedPublicKey"; curl; Path)

Parameters

curl

The CURL session handle.

\$curl

Path

The file path.

Result Returns OK or error.

Description

The public key in DER form used to validate the proxy public key. This option is used only if `CURL.SetOptionProxySSLVerifyPeer` is true. Please path native file path to key file.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [PROXY_PINNEDPUBLICKEY](#) option in CURL manual.

See also

- 61.267 `CURL.SetOptionPinnedPublicKey` 2149
- 61.278 `CURL.SetOptionProxy` 2171
- 61.295 `CURL.SetOptionProxySSLVerifyPeer` 2189
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 15th April 2018, last changed 16th April 2018.

61.287 CURL.SetOptionProxyPort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyPort"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new port value.

8080

Result Returns "OK" on success.

Description

See also [PROXYPORT](#) option in CURL manual.

Examples

Set proxy with explicit port:

```
Set Variable [ $r; MBS( "CURL.SetOptionProxy"; $curl; "http://cache.local.com/" ) ]
```

```
Set Variable [ $r; MBS( "CURL.SetOptionProxyPort"; $curl; 8000 ) ]
```

See also

- 61.277 [CURL.SetOptionProtocols](#) 2169
- 61.278 [CURL.SetOptionProxy](#) 2171
- 61.279 [CURL.SetOptionProxyAuth](#) 2173
- 61.280 [CURL.SetOptionProxyCAInfo](#) 2174
- 61.281 [CURL.SetOptionProxyCAPath](#) 2175
- 61.283 [CURL.SetOptionProxyHeader](#) 2177
- 61.285 [CURL.SetOptionProxyPassword](#) 2179
- 61.288 [CURL.SetOptionProxySSLCert](#) 2182
- 61.291 [CURL.SetOptionProxySSLKey](#) 2185
- 61.303 [CURL.SetOptionProxyType](#) 2198

Created 18th August 2014, last changed 4th February 2016.

61.288 `CURL.SetOptionProxySSLCert`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLCert"; curl; Path)

Parameters

curl

The CURL session handle.

\$curl

Path

The native file path.

Result Returns OK or error.

Description

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [PROXY_SSLCERT](#) option in CURL manual.

See also

- 61.287 `CURL.SetOptionProxyPort` 2181
- 61.289 `CURL.SetOptionProxySSLCertType` 2183
- 61.290 `CURL.SetOptionProxySSLCipherList` 2184
- 61.292 `CURL.SetOptionProxySSLKeyType` 2186
- 61.293 `CURL.SetOptionProxySSLOptions` 2187
- 61.294 `CURL.SetOptionProxySSLVerifyHost` 2188
- 61.296 `CURL.SetOptionProxySSLVersion` 2190
- 61.303 `CURL.SetOptionProxyType` 2198
- 61.328 `CURL.SetOptionSSLCert` 2232
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 15th April 2018, last changed 16th April 2018.

61.289 CURL.SetOptionProxySSLCertType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLCertType"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Value can be "DER", "PEM" or "ENG".

See also [PROXY_SSLCERTTYPE](#) option in CURL manual.

See also

- 61.288 CURL.SetOptionProxySSLCert 2182
- 61.291 CURL.SetOptionProxySSLKey 2185
- 61.292 CURL.SetOptionProxySSLKeyType 2186
- 61.293 CURL.SetOptionProxySSLOptions 2187
- 61.294 CURL.SetOptionProxySSLVerifyHost 2188
- 61.295 CURL.SetOptionProxySSLVerifyPeer 2189
- 61.296 CURL.SetOptionProxySSLVersion 2190
- 61.300 CURL.SetOptionProxyTLSAuthType 2195
- 61.304 CURL.SetOptionProxyUsername 2200
- 61.329 CURL.SetOptionSSLCertType 2236

Created 15th April 2018, last changed 16th April 2018.

61.290 `CURL.SetOptionProxySSLCipherList`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLCipherList"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PROXY_SSL_CIPHER_LIST](#) option in CURL manual.

See also

- 61.288 `CURL.SetOptionProxySSLCert` 2182
- 61.289 `CURL.SetOptionProxySSLCertType` 2183
- 61.293 `CURL.SetOptionProxySSLOptions` 2187
- 61.294 `CURL.SetOptionProxySSLVerifyHost` 2188
- 61.296 `CURL.SetOptionProxySSLVersion` 2190
- 61.298 `CURL.SetOptionProxyTLS13Ciphers` 2193
- 61.330 `CURL.SetOptionSSLCipherList` 2238

Created 15th April 2018, last changed 16th April 2018.

61.291 CURL.SetOptionProxySSLKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLKey"; curl; Path)

Parameters**curl**

The CURL session handle.

\$curl

Path

The native file path to the key file.

Result Returns OK or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [PROXY_SSLKEY](#) option in CURL manual.

See also

- 61.282 CURL.SetOptionProxyCRLFile 2176
- 61.287 CURL.SetOptionProxyPort 2181
- 61.288 CURL.SetOptionProxySSLCert 2182
- 61.289 CURL.SetOptionProxySSLCertType 2183
- 61.292 CURL.SetOptionProxySSLKeyType 2186
- 61.293 CURL.SetOptionProxySSLOptions 2187
- 61.296 CURL.SetOptionProxySSLVersion 2190
- 61.303 CURL.SetOptionProxyType 2198
- 61.336 CURL.SetOptionSSLKey 2245
- 121.2 Path.FileMakerPathToNativePath 6139

Created 15th April 2018, last changed 16th April 2018.

61.292 `CURL.SetOptionProxySSLKeyType`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLKeyType"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Value is DER, PEM or ENG.

See also [PROXY_SSLKEYTYPE](#) option in CURL manual.

See also

- 61.289 `CURL.SetOptionProxySSLCertType` 2183
- 61.291 `CURL.SetOptionProxySSLKey` 2185
- 61.293 `CURL.SetOptionProxySSLOptions` 2187
- 61.294 `CURL.SetOptionProxySSLVerifyHost` 2188
- 61.295 `CURL.SetOptionProxySSLVerifyPeer` 2189
- 61.296 `CURL.SetOptionProxySSLVersion` 2190
- 61.300 `CURL.SetOptionProxyTLSAuthType` 2195
- 61.303 `CURL.SetOptionProxyType` 2198
- 61.304 `CURL.SetOptionProxyUsername` 2200
- 61.337 `CURL.SetOptionSSLKeyType` 2247

Created 15th April 2018, last changed 16th April 2018.

61.293 CURL.SetOptionProxySSLOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLOptions"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PROXY_SSL_OPTIONS](#) option in CURL manual.

See also

- 61.288 CURL.SetOptionProxySSLCert 2182
- 61.289 CURL.SetOptionProxySSLCertType 2183
- 61.290 CURL.SetOptionProxySSLCipherList 2184
- 61.291 CURL.SetOptionProxySSLKey 2185
- 61.292 CURL.SetOptionProxySSLKeyType 2186
- 61.294 CURL.SetOptionProxySSLVerifyHost 2188
- 61.296 CURL.SetOptionProxySSLVersion 2190
- 61.338 CURL.SetOptionSSLOptions 2249
- 61.363 CURL.SetOptionTelnetOptions 2280
- 61.358 CURL.SetOptionTFTPNoOptions 2275

Created 15th April 2018, last changed 16th April 2018.

61.294 `CURL.SetOptionProxySSLVerifyHost`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLVerifyHost"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Set if we should verify the Common name from the proxy certificate in ssl handshake, set 1 to check existence, 2 to ensure that it matches the provided hostname.

See also [PROXY_SSL_VERIFYHOST](#) option in CURL manual.

See also

- 61.288 `CURL.SetOptionProxySSLCert` 2182
- 61.289 `CURL.SetOptionProxySSLCertType` 2183
- 61.290 `CURL.SetOptionProxySSLCipherList` 2184
- 61.292 `CURL.SetOptionProxySSLKeyType` 2186
- 61.293 `CURL.SetOptionProxySSLOptions` 2187
- 61.295 `CURL.SetOptionProxySSLVerifyPeer` 2189
- 61.296 `CURL.SetOptionProxySSLVersion` 2190
- 61.340 `CURL.SetOptionSSLVerifyHost` 2251

Created 15th April 2018, last changed 16th April 2018.

61.295 CURL.SetOptionProxySSLVerifyPeer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLVerifyPeer"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Set 1 to verify.

See also [PROXY_SSL_VERIFYPEER](#) option in CURL manual.

See also

- 61.280 [CURL.SetOptionProxyCAInfo](#) 2174
- 61.281 [CURL.SetOptionProxyCAPath](#) 2175
- 61.286 [CURL.SetOptionProxyPinnedPublicKey](#) 2180
- 61.289 [CURL.SetOptionProxySSLCertType](#) 2183
- 61.292 [CURL.SetOptionProxySSLKeyType](#) 2186
- 61.294 [CURL.SetOptionProxySSLVerifyHost](#) 2188
- 61.296 [CURL.SetOptionProxySSLVersion](#) 2190
- 61.341 [CURL.SetOptionSSLVerifyPeer](#) 2254

Created 15th April 2018, last changed 16th April 2018.

61.296 `CURL.SetOptionProxySSLVersion`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxySSLVersion"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

The SSL and TLS versions have typically developed from the most insecure version to be more and more secure in this order through history: SSL v2, SSLv3, TLS v1.0, TLS v1.1, TLS v1.2 and the most recent TLS v1.3.

Use one of the available defines for this purpose. The available options are:

Default	0	The default acceptable version range. The minimum acceptable version is by default TLS v1.0 since 7.39.0 (unless the TLS library has a stricter rule).
TLSv1	1	TLS v1.0 or later
SSLv2	2	SSL v2 (but not SSLv3)
SSLv3	3	SSL v3 (but not SSLv2)
TLSv1.0	4	TLS v1.0 or later (Added in 7.34.0)
TLSv1.1	5	TLS v1.1 or later (Added in 7.34.0)
TLSv1.2	6	TLS v1.2 or later (Added in 7.34.0)
TLSv1.3	7	TLS v1.3 or later (Added in 7.52.0)

See also `kSSLVersion*` constants.

The maximum TLS version can be set by using one of the `CURL_SSLVERSION_MAX_` macros below. It is also possible to OR one of the `CURL_SSLVERSION_` macros with one of the `CURL_SSLVERSION_MAX_` macros.

Please note that MBS Plugin does not yet support TLS v1.3 now, but may in future. See also [PROXY_SSLVERSION](#) option in CURL manual.

61.296. *CURL.SETOPTIONPROXYSSLVERSION* 2191

Default	65536	The flag defines the maximum supported TLS version by libcurl, or the default value from the SSL library is used. libcurl will use a sensible default maximum, which was TLS v1.2 up to before 7.61.0 and is TLS v1.3 since then - assuming the TLS library support it. (Added in 7.54.0)
Max TLSv1.0	262144	The flag defines maximum supported TLS version as TLS v1.0. (Added in 7.54.0)
Max TLSv1.1	327680	The flag defines maximum supported TLS version as TLS v1.1. (Added in 7.54.0)
Max TLSv1.2	393216	The flag defines maximum supported TLS version as TLS v1.2. (Added in 7.54.0)
Max TLSv1.3	458752	The flag defines maximum supported TLS version as TLS v1.3. (Added in 7.54.0)

See also

- 61.288 *CURL.SetOptionProxySSLCert* 2182
- 61.289 *CURL.SetOptionProxySSLCertType* 2183
- 61.290 *CURL.SetOptionProxySSLCipherList* 2184
- 61.291 *CURL.SetOptionProxySSLKey* 2185
- 61.292 *CURL.SetOptionProxySSLKeyType* 2186
- 61.293 *CURL.SetOptionProxySSLOptions* 2187
- 61.294 *CURL.SetOptionProxySSLVerifyHost* 2188
- 61.295 *CURL.SetOptionProxySSLVerifyPeer* 2189
- 61.304 *CURL.SetOptionProxyUsername* 2200
- 61.343 *CURL.SetOptionSSLVersion* 2258

Created 15th April 2018, last changed 22nd June 2019.

61.297 `CURL.SetOptionProxyServiceName`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyServiceName"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PROXY_SERVICE_NAME](#) option in CURL manual.

See also

- 61.304 `CURL.SetOptionProxyUsername` 2200
- 61.344 `CURL.SetOptionServiceName` 2261

Created 15th April 2018, last changed 16th April 2018.

61.298 CURL.SetOptionProxyTLS13Ciphers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.3	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyTLS13Ciphers"; curl; Ciphers)

Parameters**curl**

The CURL session handle.

\$curl

Ciphers

The list of ciphers.

Result Returns OK or error.

Description

The list of cipher suites to use for the TLS 1.3 connection to a proxy. The list must be syntactically correct, it consists of one or more cipher suite strings separated by colons.

You'll find more details about cipher lists on this URL:

<https://curl.haxx.se/docs/ssl-ciphers.html>

The application does not have to keep the string around after setting this option.

See also [PROXY_TLS13_CIPHERS](#) option in CURL manual.

See also

- 61.290 [CURL.SetOptionProxySSLCipherList](#) 2184
- 61.359 [CURL.SetOptionTLS13Ciphers](#) 2276

61.298.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 11st July 2018, last changed 11st July 2018.

61.299 `CURL.SetOptionProxyTLSAuthPassword`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyTLSAuthPassword"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PROXY_TLSAUTH_PASSWORD](#) option in CURL manual.

See also

- 61.284 `CURL.SetOptionProxyKeyPassword` 2178
- 61.285 `CURL.SetOptionProxyPassword` 2179
- 61.300 `CURL.SetOptionProxyTLSAuthType` 2195
- 61.301 `CURL.SetOptionProxyTLSAuthUsername` 2196
- 61.360 `CURL.SetOptionTLSAuthPassword` 2277

Created 15th April 2018, last changed 16th April 2018.

61.300 CURL.SetOptionProxyTLSAuthType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyTLSAuthType"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PROXY_TLSAUTH_TYPE](#) option in CURL manual.

See also

- 61.289 [CURL.SetOptionProxySSLCertType](#) 2183
- 61.292 [CURL.SetOptionProxySSLKeyType](#) 2186
- 61.299 [CURL.SetOptionProxyTLSAuthPassword](#) 2194
- 61.301 [CURL.SetOptionProxyTLSAuthUsername](#) 2196
- 61.361 [CURL.SetOptionTLSAuthType](#) 2278

Created 15th April 2018, last changed 16th April 2018.

61.301 `CURL.SetOptionProxyTLSAuthUsername`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyTLSAuthUsername"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [PROXY_TLSAUTH_USERNAME](#) option in CURL manual.

See also

- 61.299 `CURL.SetOptionProxyTLSAuthPassword` 2194
- 61.300 `CURL.SetOptionProxyTLSAuthType` 2195
- 61.304 `CURL.SetOptionProxyUsername` 2200
- 61.362 `CURL.SetOptionTLSAuthUsername` 2279

Created 15th April 2018, last changed 16th April 2018.

61.302 CURL.SetOptionProxyTransferMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyTransferMode"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to pass transfer mode to proxy.

1

Result Returns "OK" on success.

Description

If the value is set to 1 (one), it tells libcurl to set the transfer mode (binary or ASCII) for FTP transfers done via an HTTP proxy, by appending ;type=a or ;type=i to the URL. Without this setting, or it being set to 0 (zero, the default), `CURL.SetOptionTransferText` has no effect when doing FTP via a proxy. Beware that not all proxies support this feature.

See also [PROXY_TRANSFER_MODE](#) option in CURL manual.

See also

- 61.285 `CURL.SetOptionProxyPassword` 2179
- 61.304 `CURL.SetOptionProxyUsername` 2200
- 61.369 `CURL.SetOptionTransferText` 2287

Created 18th August 2014, last changed 28th November 2019.

61.303 `CURL.SetOptionProxyType`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyType"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The proxy type. Pass number listed below, e.g. 1 for `CURLPROXY_HTTP_1_0`.

1

Result Returns "OK" on success.

Description

Available options for this are `CURLPROXY_HTTP` (0), `CURLPROXY_HTTP_1_0` (1), `CURLPROXY SOCKS4` (4), `CURLPROXY SOCKS5` (5), `CURLPROXY SOCKS4A` (6) and `CURLPROXY SOCKS5_HOST-NAME` (7). The HTTP type is default.

If you set proxy type to `CURLPROXY_HTTP_1_0` (0), it will only affect how libcurl speaks to a proxy when `CONNECT` is used. The HTTP version used for "regular" HTTP requests is instead controlled with `CURL.SetOptionHTTPVersion`.

See also [PROXYTYPE](#) option in CURL manual.

Examples

Set Socks 5 proxy:

```
MBS( "CURL.SetOptionProxyType"; $curl; 5 )
```

See also

- 61.233 `CURL.SetOptionHTTPVersion` 2104
- 61.278 `CURL.SetOptionProxy` 2171
- 61.279 `CURL.SetOptionProxyAuth` 2173
- 61.280 `CURL.SetOptionProxyCAInfo` 2174
- 61.282 `CURL.SetOptionProxyCRLFile` 2176
- 61.283 `CURL.SetOptionProxyHeader` 2177
- 61.287 `CURL.SetOptionProxyPort` 2181

<i>61.303. CURL.SETOPTIONPROXYTYPE</i>	2199
• 61.288 CURL.SetOptionProxySSLCert	2182
• 61.291 CURL.SetOptionProxySSLKey	2185
• 61.337 CURL.SetOptionSSLKeyType	2247

Created 18th August 2014, last changed 4th February 2016.

61.304 CURL.SetOptionProxyUsername

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionProxyUsername"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The user name.

"testuser"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

In order to specify the password to be used in conjunction with the user name use the CURL.SetOptionProxyPassword option.

See also [PROXYUSERNAME](#) option in CURL manual.

See also

- 61.278 CURL.SetOptionProxy 2171
- 61.279 CURL.SetOptionProxyAuth 2173
- 61.283 CURL.SetOptionProxyHeader 2177
- 61.285 CURL.SetOptionProxyPassword 2179
- 61.297 CURL.SetOptionProxyServiceName 2192
- 61.296 CURL.SetOptionProxySSLVersion 2190
- 61.301 CURL.SetOptionProxyTLSAuthUsername 2196
- 61.302 CURL.SetOptionProxyTransferMode 2197
- 61.362 CURL.SetOptionTLSAuthUsername 2279
- 61.378 CURL.SetOptionUsername 2305

Created 18th August 2014, last changed 5th July 2015.

61.305 CURL.SetOptionPut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionPut"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether this is a PUT request.

1

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library to use HTTP PUT to transfer data. The data should be set with `CURL.SetInputText` or other functions.

This option is deprecated and starting with version 7.12.1 you should instead use `CURL.SetOptionUpload`. See also **PUT** option in CURL manual.

Examples

Turns put on:

```
MBS( "CURL.SetOptionPut"; $curl; 1 )
```

Make request with PUT:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "http://test.test/test/hello.txt") ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPut"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
Set Variable [ $result; Value:MBS("CURL.SetInputText"; $curl; "This is content to upload") ]
# run
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# check results
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.163 CURL.SetInputText 2002
- 61.260 CURL.SetOptionNetRC 2137
- 61.269 CURL.SetOptionPort 2151
- 61.276 CURL.SetOptionPreQuote 2167
- 61.278 CURL.SetOptionProxy 2171
- 61.306 CURL.SetOptionQuote 2203
- 61.314 CURL.SetOptionRange 2213
- 61.365 CURL.SetOptionTimeOut 2282
- 61.374 CURL.SetOptionUpload 2299
- 61.378 CURL.SetOptionUsername 2305

Example Databases

- [CURL/CURL FMS Admin API](#)
- [CURL/CURL get and put/CURLS get and put](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/CURL FMS Admin API v18](#)

Created 18th August 2014, last changed 13th September 2019.

61.306 CURL.SetOptionQuote

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionQuote"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The ftp commands.

"mkdir testfolder"

Result Returns "OK" on success.

Description

This will be done before any other commands are issued (even before the CWD command for FTP). Disable this operation again by passing no value to this function. When speaking to a FTP (or SFTP) server, prefix the command with an asterisk (*) to make libcurl continue even if the command fails as by default libcurl will stop at first failure.

The set of valid FTP commands depends on the server (see RFC 959 for a list of mandatory commands).

The valid SFTP commands are: chgrp, chmod, chown, ln, mkdir, pwd, rename, rm, rmdir, symlink.

This option takes a list of items. So this function takes a variable number of arguments. If you call function with 2 parameters, you set an empty list. If you call it with 5 parameters, you set a list with 3 values.

See also `CURL.SetOptionPreQuote` and `CURL.SetOptionPostQuote`.

Here is list of raw FTP commands:

http://en.wikipedia.org/wiki/List_of_FTP_commands

File names may be passed with quotes to include spaces in file names.

See also **QUOTE** option in CURL manual.

Examples

Delete file only:

MBS("CURL.SetOptionQuote"; \$curl; "DELE test.txt")

Delete folder:

```
MBS( "CURL.SetOptionQuote"; $curl; "RMD testfolder" )
```

Create folder with FTP:

```
MBS( "CURL.SetOptionQuote"; $curl; "MKD testfolder" )
```

Rename file using two FTP commands:

```
MBS( "CURL.SetOptionQuote" ; $curl ; "RNFR foo.txt"; "RNTO bar.txt" )
```

Set file permissions for FTP:

```
MBS( "CURL.SetOptionQuote" ; $curl ; "SITE CHMOD 777 testfile")
```

Call with three parameters:

```
MBS( "CURL.SetOptionQuote"; handle; $value1; $value2; $value3 )
```

List all files:

```
MBS( "CURL.SetOptionQuote" ; $curl ; "NLST -all" )
```

Connect to FTP server and delete a file:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
# this is URL to ftp server
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "ftp://www.monkeybreadsoftware.de/") ]
# set user name
Set Variable [ $r; Value:MBS("CURL.SetOptionUserName"; $curl; "xxx") ]
# set password
Set Variable [ $r; Value:MBS("CURL.SetOptionPassword"; $curl; "xxx") ]
# set delete command of file "test.jpg" in folder "images"
Set Variable [ $r; Value:MBS("CURL.SetOptionQuote"; $curl; "DELE images/test.jpg") ]
# run transfer
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# get debug messages
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Move file on SFTP in done folder with variables and quotes:

```
MBS("CURL.SetOptionQuote"; $curl; "rename " & "\"" & $Path & $folder & "/" & $$FileName & "\""
& " " & "\"" & $Path & $folder & "Done/"
```



```
& $$FileName & "\")
```

Change file permissions via SFTP:

```
# set permissions to 777, so everyone can read/write/execute the file.  
Set Variable [ $result ; Value: MBS( "CURL.SetOptionQuote"; $curl; "chmod 777 /Users/cs/Pictures/test.jpg"  
)]
```

Change file owner group via SFTP:

```
# change group to group 20  
Set Variable [ $result ; Value: MBS( "CURL.SetOptionQuote"; $curl; "chgrp 20 /Users/cs/Pictures/test.jpg"  
)]
```

Change file owner via SFTP:

```
# change owner to user 501  
Set Variable [ $result ; Value: MBS( "CURL.SetOptionQuote"; $curl; "chown 501 /Users/cs/Pictures/test.jpg"  
)]
```

See also

- 61.86 *CURL.GetOptionQuote* 1879
- 61.142 *CURL.Perform* 1954
- 61.265 *CURL.SetOptionPassword* 2145
- 61.270 *CURL.SetOptionPost* 2153
- 61.273 *CURL.SetOptionPostQuote* 2162
- 61.276 *CURL.SetOptionPreQuote* 2167
- 61.314 *CURL.SetOptionRange* 2213
- 61.336 *CURL.SetOptionSSLKey* 2245
- 61.370 *CURL.SetOptionURL* 2288
- 61.378 *CURL.SetOptionUsername* 2305

Example Databases

- [CURL/FTP/CURL FTP Delete File](#)
- [CURL/SFTP/CURL sFTP Operations](#)

Created 18th August 2014, last changed 30th November 2018.

61.307 CURL.SetOptionRTSPClientCSEQ

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRTSPClientCSEQ"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [RTSP_CLIENT_CSEQ](#) option in CURL manual.

See also

- 61.309 CURL.SetOptionRTSPServerCSEQ

2208

Created 15th April 2018, last changed 16th April 2018.

61.308 CURL.SetOptionRTSPRequest

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRTSPRequest"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [RTSP_REQUEST](#) option in CURL manual.

See also

- 61.193 [CURL.SetOptionCustomRequest](#) 2048
- 61.217 [CURL.SetOptionFTPUsePret](#) 2082
- 61.230 [CURL.SetOptionHTTPHeader](#) 2098

Created 15th April 2018, last changed 16th April 2018.

61.309 CURL.SetOptionRTSPServerCSEQ

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRTSPServerCSEQ"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [RTSP_SERVER_CSEQ](#) option in CURL manual.

See also

- 61.198 CURL.SetOptionDNSServers 2057
- 61.307 CURL.SetOptionRTSPClientCSEQ 2206
- 61.310 CURL.SetOptionRTSPSessionID 2209
- 61.311 CURL.SetOptionRTSPStreamURI 2210

Created 15th April 2018, last changed 16th April 2018.

61.310 CURL.SetOptionRTSPSessionID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRTSPSessionID"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [RTSP_SESSION_ID](#) option in CURL manual.

See also

- 61.192 [CURL.SetOptionCookieSession](#) 2047
- 61.233 [CURL.SetOptionHTTPVersion](#) 2104
- 61.309 [CURL.SetOptionRTSPServerCSEQ](#) 2208
- 61.311 [CURL.SetOptionRTSPStreamURI](#) 2210
- 61.312 [CURL.SetOptionRTSPTransport](#) 2211
- 61.339 [CURL.SetOptionSSLSessionIDCache](#) 2250
- 61.343 [CURL.SetOptionSSLVersion](#) 2258

Created 15th April 2018, last changed 16th April 2018.

61.311 CURL.SetOptionRTSPStreamURI

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRTSPStreamURI"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [RTSP_STREAM_URI](#) option in CURL manual.

See also

- 61.309 CURL.SetOptionRTSPServerCSEQ 2208
- 61.310 CURL.SetOptionRTSPSessionID 2209

Created 15th April 2018, last changed 16th April 2018.

61.312 CURL.SetOptionRTSPTransport

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRTSPTransport"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [RTSP_TRANSPORT](#) option in CURL manual.

See also

- 61.310 CURL.SetOptionRTSPSessionID

2209

Created 15th April 2018, last changed 16th April 2018.

61.313 `CURL.SetOptionRandomFile`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRandomFile"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

File path for SSL engine.

"/tmp/test.txt"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

Pass a file path. The file will be used to read from to seed the random engine for SSL. The more random the specified file is, the more secure the SSL connection will become.

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

See also [RANDOM_FILE](#) option in CURL manual.

See also

- 61.189 `CURL.SetOptionCookieFile` 2041
- 61.182 `CURL.SetOptionCRLFile` 2028
- 61.259 `CURL.SetOptionNETRCFile` 2136

61.313.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 12nd December 2017.

61.314 CURL.SetOptionRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRange"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

Range string.

"1000-2000"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

Pass a text as parameter, which should contain the specified range you want. It should be in the format "X-Y", where X or Y may be left out. HTTP transfers also support several intervals, separated with commas as in "X-Y,N-M". Using this kind of multiple intervals will cause the HTTP server to send the response document in pieces (using standard MIME separation techniques). For RTSP, the formatting of a range should follow RFC 2326 Section 12.29. For RTSP, byte ranges are not permitted. Instead, ranges should be given in npt, utc, or smpte formats.

Pass an empty string to this option to disable the use of ranges.

Ranges work on HTTP, FTP, FILE (since 7.18.0), and RTSP (since 7.20.0) transfers only.

See also [RANGE](#) option in CURL manual.

See also

- 61.260 CURL.SetOptionNetRC 2137
- 61.269 CURL.SetOptionPort 2151
- 61.270 CURL.SetOptionPost 2153
- 61.278 CURL.SetOptionProxy 2171
- 61.305 CURL.SetOptionPut 2201

2214

• 61.306 CURL.SetOptionQuote	2203
• 61.316 CURL.SetOptionReferer	2217
• 61.318 CURL.SetOptionResolve	2219
• 61.336 CURL.SetOptionSSLKey	2245
• 61.370 CURL.SetOptionURL	2288

CHAPTER 61. CURL

Created 18th August 2014, last changed 5th July 2015.

61.315 CURL.SetOptionRedirProtocols

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRedirProtocols"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The bitmask defining which protocols to use.

1

Result Returns "OK" on success.

Description

Pass a number that holds a bitmask of protocol values (see below). If used, this bitmask limits what protocols libcurl may use in a transfer that it follows to in a redirect when `CURL.SetOptionFollowLocation` is enabled. This allows you to limit specific transfers to only be allowed to use a subset of protocols in redirections. By default libcurl will allow all protocols except for FILE and SCP.

HTTP 1

HTTPS2

See also [REDIR_PROTOCOLS](#) option in CURL manual.

See also

- 61.201 `CURL.SetOptionDefaultProtocol` 2061
- 61.221 `CURL.SetOptionFollowLocation` 2086
- 61.226 `CURL.SetOptionHAProxyProtocol` 2093
- 61.277 `CURL.SetOptionProtocols` 2169

Created 18th August 2014, last changed 18th August 2014.

FTP	4
FTPS	8
SCP	16
SFTP	32
TELNET	64
LDAP	128
LDAPS	256
DICT	512
FILE	1024
TFTP	2048
IMAP	4096
IMAPS	8192
POP3	16384
POP3S	32768
SMTP	65536
SMTPS	131072
RTSP	262144
ALL	-1

61.316 CURL.SetOptionReferer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionReferer"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The new referrer string.

"https://www.mbsplugins.de/"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

This string will be used to set the Referer: header in the http request sent to the remote server. This can be used to fool servers or scripts. You can also set any custom header with `CURL.SetOptionHTTPHeader`. See also [REFERER](#) option in CURL manual.

See also

- 61.177 `CURL.SetOptionAutoReferer` 2019
- 61.235 `CURL.SetOptionHeader` 2106
- 61.230 `CURL.SetOptionHTTPHeader` 2098
- 61.241 `CURL.SetOptionIssuerCert` 2113
- 61.242 `CURL.SetOptionKRBLevel` 2115
- 61.314 `CURL.SetOptionRange` 2213
- 61.318 `CURL.SetOptionResolve` 2219
- 61.319 `CURL.SetOptionResumeFrom` 2220
- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.379 `CURL.SetOptionVerbose` 2307

Created 18th August 2014, last changed 5th July 2015.

61.317 `CURL.SetOptionRequestTarget`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionRequestTarget"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [REQUEST_TARGET](#) option in CURL manual.

Created 15th April 2018, last changed 16th April 2018.

61.318 CURL.SetOptionResolve

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionResolve"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Provide custom host name to IP address resolves.

See also **RESOLVE** option in CURL manual.

See also

- 61.87 CURL.GetOptionResolve 1880
- 61.200 CURL.SetOptionDOHURL 2059
- 61.237 CURL.SetOptionIPResolve 2108
- 61.242 CURL.SetOptionKRBLevel 2115
- 61.276 CURL.SetOptionPreQuote 2167
- 61.306 CURL.SetOptionQuote 2203
- 61.316 CURL.SetOptionReferer 2217
- 61.366 CURL.SetOptionTimeValue 2284
- 61.378 CURL.SetOptionUsername 2305
- 61.379 CURL.SetOptionVerbose 2307

Created 15th April 2018, last changed 15th April 2018.

61.319 `CURL.SetOptionResumeFrom`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionResumeFrom"; curl; Value)

(old name: `CURL.SetOptionResumeFromLarge`)

Parameters

curl

The CURL session handle.

\$curl

Value

The offset to start at.

1000

Result Returns "OK" on success.

Description

Pass a number as parameter. It contains the offset in number of bytes that you want the transfer to start from. Set this option to 0 to make the transfer start from the beginning (effectively disabling resume). For FTP, set this option to -1 to make the transfer start from the end of the target file (useful to continue an interrupted upload).

When doing uploads with FTP, the resume position is where in the local/source file libcurl should try to resume the upload from and it will then append the source file to the remote target file.

See also [RESUME_FROM](#) option in CURL manual.

See also

- 61.251 `CURL.SetOptionMailFrom` 2127
- 61.316 `CURL.SetOptionReferer` 2217

Created 18th August 2014, last changed 18th April 2016.

61.320 CURL.SetOptionSASLAAuthZID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	9.4	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSASLAAuthZID"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new authorisation identity.

Result Returns OK or error.

Description

Pass a text as parameter, which should be pointing to the authorisation identity (authzid) for the transfer. Only applicable to the PLAIN SASL authentication mechanism where it is optional.

When not specified only the authentication identity (authcid) as specified by the username will be sent to the server, along with the password. The server will derive a authzid from the authcid when not provided, which it will then uses internally.

When the authzid is specified, the use of which is server dependent, it can be used to access another user's inbox, that the user has been granted access to, or a shared mailbox for example.

See also [SASL_AUTHZID](#) option in CURL manual.

See also

- 61.212 [CURL.SetOptionFTPSSLAAuth](#) 2076
- 61.322 [CURL.SetOptionSSHAuthTypes](#) 2223
- 61.338 [CURL.SetOptionSSLOptions](#) 2249
- 61.361 [CURL.SetOptionTLSAuthType](#) 2278

61.320.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 11st September 2019, last changed 11st September 2019.

61.321 CURL.SetOptionSASLIR

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSASLIR"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [SASL_IR](#) option in CURL manual.

See also

- 61.179 CURL.SetOptionCAINFO 2022
- 61.180 CURL.SetOptionCAPATH 2025
- 61.181 CURL.SetOptionCRLF 2027
- 61.328 CURL.SetOptionSSLCert 2232
- 61.336 CURL.SetOptionSSLKey 2245
- 61.370 CURL.SetOptionURL 2288

Created 15th April 2018, last changed 16th April 2018.

61.322 CURL.SetOptionSSHAuthTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSHAuthTypes"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new types.

3

Result Returns "OK" on success.

Description

Pass a number set to a bitmask consisting of one or more of CURLSSH_AUTH_PUBLICKEY, CURLSSH_AUTH_PASSWORD, CURLSSH_AUTH_HOST, CURLSSH_AUTH_KEYBOARD. Set CURLSSH_AUTH_ANY to let libcurl pick one.

CURLSSH_AUTH_ANY	-1	all types supported by the server.
CURLSSH_AUTH_NONE	0	none allowed, silly but complete.
CURLSSH_AUTH_PUBLICKEY	1	public/private key files.
CURLSSH_AUTH_PASSWORD	2	password.
CURLSSH_AUTH_HOST	4	host key files.
CURLSSH_AUTH_KEYBOARD	8	keyboard interactive.
CURLSSH_AUTH_DEFAULT	-1	default.

See also [SSH_AUTH_TYPES](#) option in CURL manual.

Examples

Use password, no private key:

```
MBS( "CURL.SetOptionSSHAuthTypes"; $curl; 2+8 )
```

Download file via SFTP to file on disk:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
# set download URL, e.g. sftp://monkeybreadsoftware.net/test.jpg
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; SFTP Download::URL ) ]
# build file path on disk and open output file
Set Variable [ $name; Value:GetValue(SFTP Download::FileName; 1) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; SFTP Download::FolderPath; $name ) ]
```

```

Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
# login only via password
Set Variable [ $result; Value:MBS( "CURL.SetOptionSSHAuthTypes"; $curl; 2+8 ) ]
# set credentials
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; SFTP Download::UserName ) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; SFTP Download::Password ) ]
# run transfer
Set Field [ SFTP Download::ErrorCode; MBS("CURL.Perform"; $curl) ]
# check debug log for errors
Set Field [ SFTP Download::Debug; MBS("CURL.GetDebugAsText"; $curl) ]
# free CURL session
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.9 CURL.Cleanup 1772
- 61.16 CURL.CreateOutputFile 1784
- 61.139 CURL.New 1947
- 61.202 CURL.SetOptionDirListOnly 2062
- 61.208 CURL.SetOptionFTPCreateMissingDirs 2069
- 61.265 CURL.SetOptionPassword 2145
- 61.329 CURL.SetOptionSSLCertType 2236
- 61.361 CURL.SetOptionTLSAuthType 2278
- 61.370 CURL.SetOptionURL 2288
- 61.378 CURL.SetOptionUsername 2305

Created 18th August 2014, last changed 21st April 2017.

61.323 CURL.SetOptionSSHCompression

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSHCompression"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value. Pass 1 to enable or 0 to disable.

Result Returns OK or error.

Description

See also [SSH_COMPRESSION](#) option in CURL manual.

See also

- 61.192 [CURL.SetOptionCookieSession](#) 2047
- 61.330 [CURL.SetOptionSSLCipherList](#) 2238
- 61.343 [CURL.SetOptionSSLVersion](#) 2258

Created 15th April 2018, last changed 16th April 2018.

61.324 `CURL.SetOptionSSHHostPublicKeyMD5`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSHHostPublicKeyMD5"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The new MD5 hash.

"8B1A9953C4611296A827ABF8C47804D7"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a string containing 32 hexadecimal digits. The string should be the 128 bit MD5 checksum of the remote host's public key, and libcurl will reject the connection to the host unless the md5sums match. This option is only for SCP and SFTP transfers.

See also [SSH_HOST_PUBLIC_KEY_MD5](#) option in CURL manual.

See also

- 61.327 `CURL.SetOptionSSHPublicKeyfile`

2230

Created 18th August 2014, last changed 5th July 2015.

61.325 CURL.SetOptionSSHKnownHosts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSHKnownHosts"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The known hosts file path.

"/tmp/knownhosts.txt"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

The known_hosts file should use the OpenSSH file format as supported by libssh2. If this file is specified, libcurl will only accept connections with hosts that are known and present in that file, with a matching public key.

See also [SSH_KNOWNHOSTS](#) option in CURL manual.

See also

- 61.340 CURL.SetOptionSSLVerifyHost

2251

Created 18th August 2014, last changed 5th July 2015.

61.326 `CURL.SetOptionSSHPrivateKeyfile`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSHPrivateKeyfile"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

`$curl`

Value

The new file path.

`"c:\myprivatekey"`

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

`"UTF8"`

Result Returns "OK" on success.

Description

If not used, libcurl defaults to using `~/.ssh/id_dsa`. If the file is password-protected, set the password with `CURL.SetOptionKeyPassword`.

For a SFTP transfer (= file transfer over SSH), you would tell the plugin your public and private keys, so the plugin can login.

See also [SSH_PRIVATE_KEYFILE](#) option in CURL manual.

Examples

Login via SSH with public key:

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; "sftp://test.com:1222/test.fmp12" ) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionVerbose"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionConnectionTimeout"; $curl; 10) ]
#
# specify paths to keys, public key optional as it is usually included in private key file:
Set Variable [ $result ; Value: MBS("CURL.SetOptionSSHPrivateKeyfile"; $curl; "/Users/jameykey/.ssh/id_rsa") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionSSHPublicKeyfile"; $curl; "/Users/jameykey/.ssh/id_rsa.pub") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
#
```



```
# no password with private key!
// Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
#
# upload text or open a file path
Set Variable [ $d ; Value: "Just a little bit text. Have fun!" ]
Set Variable [ $result ; Value: MBS("CURL.SetInputText"; $curl; $d) ]
// Set Variable [ $result ; Value: MBS("CURL.OpenInputFile"; $curl; "/Users/test/Desktop/test.fmp12") ]
#
# do it!
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 *CURL.Cleanup* 1772
- 61.44 *CURL.GetDebugAsText* 1831
- 61.139 *CURL.New* 1947
- 61.141 *CURL.OpenInputFile* 1951
- 61.187 *CURL.SetOptionConnectionTimeout* 2037
- 61.244 *CURL.SetOptionKeyPassword* 2117
- 61.265 *CURL.SetOptionPassword* 2145
- 61.327 *CURL.SetOptionSSHPublicKeyfile* 2230
- 61.374 *CURL.SetOptionUpload* 2299
- 61.370 *CURL.SetOptionURL* 2288

61.326.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 13th February 2020.

61.327 `CURL.SetOptionSSHPublicKeyfile`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSHPublicKeyfile"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The new public key file path.

"c:\mykey.pub"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

If not used, libcurl defaults to using ~/.ssh/id_dsa.pub.

For a SFTP transfer (= file transfer over SSH), you would tell the plugin your public and private keys, so the plugin can login.

See also [SSH_PUBLIC_KEYFILE](#) option in CURL manual.

Examples

Login via SSH with public key:

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; "sftp://test.com:1222/test.fmp12" ) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionVerbose"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUpload"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionConnectionTimeout"; $curl; 10) ]
#
# specify paths to keys, public key optional as it is usually included in private key file:
Set Variable [ $result ; Value: MBS("CURL.SetOptionSSHPrivateKeyfile"; $curl; "/Users/jameykey/.ssh/id_rsa")
]
Set Variable [ $result ; Value: MBS("CURL.SetOptionSSHPublicKeyfile"; $curl; "/Users/jameykey/.ssh/id_rsa.pub")
]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
#
# no password with private key!
```

```
// Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
#
# upload text or open a file path
Set Variable [ $d ; Value: "Just a little bit text. Have fun!" ]
Set Variable [ $result ; Value: MBS("CURL.SetInputText"; $curl; $d) ]
// Set Variable [ $result ; Value: MBS("CURL.OpenInputFile"; $curl; "/Users/test/Desktop/test.fmp12") ]
#
# do it!
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 *CURL.Cleanup* 1772
- 61.139 *CURL.New* 1947
- 61.141 *CURL.OpenInputFile* 1951
- 61.142 *CURL.Perform* 1954
- 61.163 *CURL.SetInputText* 2002
- 61.265 *CURL.SetOptionPassword* 2145
- 61.326 *CURL.SetOptionSSHPrivateKeyfile* 2228
- 61.374 *CURL.SetOptionUpload* 2299
- 61.378 *CURL.SetOptionUsername* 2305
- 61.379 *CURL.SetOptionVerbose* 2307

61.327.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 18th March 2019.

61.328 `CURL.SetOptionSSLCert`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLCert"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The file path to the certificate.

"/tmp/test.pem"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

Pass a text string as parameter. The string should be the file name of your certificate. The default format is "PEM" and can be changed with `CURL.SetOptionSSLCertType`.

With NSS this can also be the nickname of the certificate you wish to authenticate with. If you want to use a file from the current directory, please precede it with "/" prefix, in order to avoid confusion with a nickname.

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

For the GSX example, apple-cert+key.pem in our case is a text file containing the key and certificate:

```
—BEGIN RSA PRIVATE KEY—
```

```
Proc-Type: 4,ENCRYPTED
```

```
DEK-Info: AES-256-CBC,B8DCBDA00BFB07EB3CE3901334FC7028
```

```
lKa9vkyhSkx1N8PS+0gUsDLa5Ki36z9wuw9IdVQAeNuGYwPvpPwGzYiUWXE7p8H1
```

```
...
```

```
WHhQqB/FACH0XbOWWUtHInNlNVHFcKKtJdg/JllkMQfvSD3XnSNLgLvOpr10L85Z
```

```
—END RSA PRIVATE KEY—
```

```
—BEGIN CERTIFICATE—
```

```
MIIEuTCCA6GgAwIBAgIIVbEoCG6/FTIwDQYJKoZIhvcNAQELBQAwezE1MDMGA1UE
```

```
....
AYf7yNIM0btoU2ymPrzwn02AKxnk6QRMqVkirDHSWew/mQfxlOg2HN2HJ1MQR9wC
3bxbgvJL1EFq9AAK5g==
—END CERTIFICATE—
```

You can normally just copy the files together with a text editor.
See also **SSLCERT** option in CURL manual.

Examples

Set a client SSL certificate:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionSSLCert"; $curl; "/some/certfile.pem") ]
Set Variable [ $r; Value:MBS("CURL.SetOptionSSLCertType"; $curl; "PEM") ]
Set Variable [ $r; Value:MBS("CURL.SetOptionKeyPassword"; $curl; "secret") ]
```

Send request to Apple's gsx webservice:

```
Set Variable [ $XMLRequest; Value:"" ]
# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# URL for web service
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://gsxapiut.apple.com:443/gsx-
ws/services/emea/asp") ]
# Mark content as XML
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml; charset=UTF-
8") ]
# Pass XML content for request
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; $XMLRequest) ]
# Certificate and private key in one file
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLCert"; $curl; "/Users/cs/Keys/apple-cert+key.pem")
]
# Root certificates
Set Variable [ $result; Value:MBS("CURL.SetOptionCAInfo"; $curl; "/Users/cs/Keys/cacert.pem") ]
# SSL Key is in PEM Format
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLCertType"; $curl; "PEM") ]
# Password for key file
Set Variable [ $result; Value:MBS("CURL.SetOptionKeyPassword"; $curl; "xxx") ]
# SSL Verification on
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyPeer"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyHost"; $curl; 1) ]
# use TLS v1.2
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVersion"; $curl; 6) ]
# RUN now
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
```

```
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Talk to Apple's global service exchange webservice:

```
# Various parameters
Set Variable [ $userid ; Value: "???" ]
Set Variable [ $serviceAccountNo ; Value: "???" ]
Set Variable [ $PrivateKeyPassword ; Value: "???" ]

# Build XML with our values:
Set Variable [ $xml ; Value: Tabelle::Login XML Template ]
Set Variable [ $xml ; Value: Substitute($xml; "$userid$"; MBS("Text.EncodeToXML"; $userid)) ]
Set Variable [ $xml ; Value: Substitute($xml; "$serviceAccountNo$"; MBS("Text.EncodeToXML"; $serviceAccountNo)) ]

# Start CURL
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionURL"; $curl; "https://gsxapi.apple.com/gsx-ws/services/emea/asp") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionSSLCertType"; $curl; "PEM") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionKeyPassword"; $curl; $PrivateKeyPassword) ]
# pem file with private key and certificate from Apple
Set Variable [ $r ; Value: MBS("CURL.SetOptionSSLCert"; $curl; "/Users/test/Desktop/test.pem") ]
# some root certificates
Set Variable [ $r ; Value: MBS("CURL.SetOptionCAINFO"; $curl; "/Users/test/Desktop/cacert.pem") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionSSLVersion"; $curl; 6) // TLS v1.2 ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionTimeout"; $curl; 10) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml; charset=UTF-8") ]
# run the login query
Set Variable [ $r ; Value: MBS("CURL.Perform"; $curl) ]
# check result
Set Variable [ $httpResponse ; Value: MBS("CURL.GetResponseCode"; $curl) ]
Set Field [ Tabelle::CURL Result ; $r ]
Set Field [ Tabelle::CURL Input ; $xml ]
Set Field [ Tabelle::CURL Debug ; MBS("CURL.GetDebugAsText"; $curl; "UTF8") ]
Set Field [ Tabelle::CURL Output ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
# here we extract session
Set Field [ Tabelle::SessionID ; MBS("Text.FindBetween"; Tabelle::CURL Output; "<userSessionId>"; "</userSessionId>") ]
Wenn [ $r = "OK" UND $httpResponse = 200 ]
# OK
Ende (wenn)
Set Variable [ $r ; Value: MBS("CURL.Cleanup") ]
```

61.328. *CURL.SETOPTIONSSLCERT* 2235

See also

- 61.288 *CURL.SetOptionProxySSLCert* 2182
- 61.316 *CURL.SetOptionReferer* 2217
- 61.329 *CURL.SetOptionSSLCertType* 2236
- 61.330 *CURL.SetOptionSSLCipherList* 2238
- 61.333 *CURL.SetOptionSSLEngine* 2242
- 61.336 *CURL.SetOptionSSLKey* 2245
- 61.340 *CURL.SetOptionSSLVerifyHost* 2251
- 61.341 *CURL.SetOptionSSLVerifyPeer* 2254
- 61.365 *CURL.SetOptionTimeOut* 2282
- 164.39 *Text.FindBetween* 7831

61.328.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [MBS FileMaker Plugin, version 7.6pr3](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)

Created 18th August 2014, last changed 30th May 2018.

61.329 `CURL.SetOptionSSLCertType`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLCertType"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The type string.

"PEM"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a string as parameter. The string should be the format of your certificate. Supported formats are "PEM", "DER" and "P12" for PKCS# 12-encoded files.

Due to a bug the P12 format was not working in 7.4 or earlier. This was fixed in 7.5.
See also [SSLCERTTYPE](#) option in CURL manual.

Examples

Set a client SSL certificate:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionSSLCert"; $curl; "/some/certfile.pem") ]
Set Variable [ $r; Value:MBS("CURL.SetOptionSSLCertType"; $curl; "PEM") ]
Set Variable [ $r; Value:MBS("CURL.SetOptionKeyPassword"; $curl; "secret") ]
```

Use P12 certificate with pfx file:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionSSLCert"; $curl; "/some/certfile.pfx") ]
Set Variable [ $r; Value:MBS("CURL.SetOptionSSLCertType"; $curl; "P12") ]
Set Variable [ $r; Value:MBS("CURL.SetOptionKeyPassword"; $curl; "secret") ]
```

See also

- 61.142 `CURL.Perform`

<i>61.329. CURL.SETOPTIONSSLCERTTYPE</i>	2237
• 61.244 CURL.SetOptionKeyPassword	2117
• 61.289 CURL.SetOptionProxySSLCertType	2183
• 61.322 CURL.SetOptionSSHAUTHTypes	2223
• 61.328 CURL.SetOptionSSLCert	2232
• 61.336 CURL.SetOptionSSLKey	2245
• 61.337 CURL.SetOptionSSLKeyType	2247
• 61.340 CURL.SetOptionSSLVerifyHost	2251
• 61.341 CURL.SetOptionSSLVerifyPeer	2254
• 61.361 CURL.SetOptionTLSAUTHType	2278

61.329.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)

Created 18th August 2014, last changed 19th April 2018.

61.330 `CURL.SetOptionSSLCipherList`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLCipherList"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The new text string with list of ciphers.

"RC4-SHA:SHA1+DES"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

The list must be syntactically correct, it consists of one or more cipher strings separated by colons. Commas or spaces are also acceptable separators but colons are normally used, !, - and + can be used as operators.

For OpenSSL and GnuTLS valid examples of cipher lists include 'RC4-SHA', 'SHA1+DES', 'TLSv1' and 'DEFAULT'. The default list is normally set when you compile OpenSSL.

You'll find more details about cipher lists on this URL: <http://www.openssl.org/docs/apps/ciphers.html>

For NSS, valid examples of cipher lists include 'rsa_rc4_128_md5', 'rsa_aes_128_sha', etc. With NSS you don't add/remove ciphers. If one uses this option then all known ciphers are disabled and only those passed in are enabled.

You'll find more details about the NSS cipher lists on this URL: [http://directory.fedora.redhat.com/docs/mod_nss.html#](http://directory.fedora.redhat.com/docs/mod_nss.html#Directives)

Directives

See also [SSL_CIPHER_LIST](#) option in CURL manual.

See also

- 61.191 `CURL.SetOptionCookieList` 2046
- 61.290 `CURL.SetOptionProxySSLCipherList` 2184

<i>61.330. CURL.SETOPTIONSSLCIPHERLIST</i>	2239
• 61.323 CURL.SetOptionSSHCompression	2225
• 61.328 CURL.SetOptionSSLCert	2232
• 61.335 CURL.SetOptionSSLFalseStart	2244
• 61.340 CURL.SetOptionSSLVerifyHost	2251
• 61.343 CURL.SetOptionSSLVersion	2258
• 61.359 CURL.SetOptionTLS13Ciphers	2276

Created 18th August 2014, last changed 5th July 2015.

61.331 CURL.SetOptionSSLEnableALPN

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLEnableALPN"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

http2 over ssl might fail without.

See also [SSL_ENABLE_ALPN](#) option in CURL manual.

See also

- 61.332 CURL.SetOptionSSLEnableNPN

2241

Created 15th April 2018, last changed 29th November 2019.

61.332 CURL.SetOptionSSLEnableNPN

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLEnableNPN"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [SSL_ENABLE_NPN](#) option in CURL manual.

See also

- 61.331 [CURL.SetOptionSSLEnableALPN](#) 2240
- 61.333 [CURL.SetOptionSSLEngine](#) 2242

Created 15th April 2018, last changed 16th April 2018.

61.333 CURL.SetOptionSSLEngine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLEngine"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The name of the crypto engine.

""

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

Pass a string as parameter. It will be used as the identifier for the crypto engine you want to use for your private key.

If the crypto device cannot be loaded, `CURLE_SSL_ENGINE_NOTFOUND` is returned.

See also [SLENGINE](#) option in CURL manual.

See also

- 61.182 CURL.SetOptionCRLFile 2028
- 61.328 CURL.SetOptionSSLCert 2232
- 61.332 CURL.SetOptionSSEnableNPN 2241
- 61.337 CURL.SetOptionSSLKeyType 2247
- 61.338 CURL.SetOptionSSLOptions 2249
- 61.343 CURL.SetOptionSSLVersion 2258

Created 18th August 2014, last changed 5th July 2015.

61.334 CURL.SetOptionSSLEngineDefault

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLEngineDefault"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Pass always 1.

1

Result Returns "OK" on success.

Description

If the crypto device cannot be set, `CURLE_SSL_ENGINE_SETFAILED` is returned.

See also [SSLENGINE_DEFAULT](#) option in CURL manual.

Created 18th August 2014, last changed 18th August 2014.

61.335 **CURL.SetOptionSSLFalseStart**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLFalseStart"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Pass 1 to enable.

See also [SSL_FALSESTART](#) option in CURL manual.

See also

- 61.330 CURL.SetOptionSSLCipherList

2238

Created 15th April 2018, last changed 16th April 2018.

61.336 CURL.SetOptionSSLKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLKey"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The private key file path.

"/tmp/test.pem"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a string as parameter. The string should be the file name of your private key. The default format is "PEM" and can be changed with `CURL.SetOptionSSLKeyType`.

Starting with version 8.0 the plugin will always use UTF-8 encoding for file path on Linux and macOS. For macOS we also do the unicode character normalization for file names for you.

See also **SSLKEY** option in CURL manual.

Examples

Set private key:

```
MBS( "CURL.SetOptionSSLKey"; $curl; $cacertPath )
```

Send request to Apple's gsx webservice:

```
Set Variable [ $XMLRequest; Value:"" ]
```

```
# Start new session
```

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
```

```
# URL for web service
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "https://gsxapiut.apple.com:443/gsx-  
ws/services/emea/asp") ]
```

```
# Mark content as XML
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionHTTPHeader"; $curl; "Content-Type: text/xml; charset=UTF-  
8") ]
```

```

# Pass XML content for request
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; $XMLRequest) ]
# Certificate and private key in one file
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLCert"; $curl; "/Users/cs/Keys/apple-cert+key.pem")
]
# Root certificates
Set Variable [ $result; Value:MBS("CURL.SetOptionCAInfo"; $curl; "/Users/cs/Keys/cacert.pem") ]
# SSL Key is in PEM Format
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLCertType"; $curl; "PEM") ]
# Password for key file
Set Variable [ $result; Value:MBS("CURL.SetOptionKeyPassword"; $curl; "xxx") ]
# SSL Verification on
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyPeer"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyHost"; $curl; 1) ]
# use TLS v1.2
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVersion"; $curl; 6) ]
# RUN now
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.235 `CURL.SetOptionHeader` 2106
- 61.272 `CURL.SetOptionPostFields` 2158
- 61.278 `CURL.SetOptionProxy` 2171
- 61.291 `CURL.SetOptionProxySSLKey` 2185
- 61.321 `CURL.SetOptionSASLIR` 2222
- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.329 `CURL.SetOptionSSLCertType` 2236
- 61.337 `CURL.SetOptionSSLKeyType` 2247
- 61.340 `CURL.SetOptionSSLVerifyHost` 2251
- 61.370 `CURL.SetOptionURL` 2288

61.336.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 18th August 2014, last changed 12nd December 2017.

61.337 CURL.SetOptionSSLKeyType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLKeyType"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The key type.

"PEM"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

Pass a string as parameter. The string should be the format of your private key. Supported formats are "PEM", "DER" and "ENG".

The format "ENG" enables you to load the private key from a crypto engine. In this case `CURL.SetOptionSSLKey` is used as an identifier passed to the engine. You have to set the crypto engine with `CURL.SetOptionSSLEngine`. "DER" format key file currently does not work because of a bug in OpenSSL.

See also [SSLKEYTYPE](#) option in CURL manual.

See also

- 61.303 `CURL.SetOptionProxyType` 2198
- 61.322 `CURL.SetOptionSSHAAuthTypes` 2223
- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.329 `CURL.SetOptionSSLCertType` 2236
- 61.333 `CURL.SetOptionSSLEngine` 2242
- 61.336 `CURL.SetOptionSSLKey` 2245
- 61.338 `CURL.SetOptionSSLOptions` 2249
- 61.341 `CURL.SetOptionSSLVerifyPeer` 2254

- 61.343 `CURL.SetOptionSSLVersion` 2258
- 61.361 `CURL.SetOptionTLSAuthType` 2278

Created 18th August 2014, last changed 5th July 2015.

61.338 CURL.SetOptionSSLOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLOptions"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [SSL_OPTIONS](#) option in CURL manual.

See also

- 61.236 [CURL.SetOptionHeaderOptions](#) 2107
- 61.247 [CURL.SetOptionLoginOptions](#) 2121
- 61.293 [CURL.SetOptionProxySSLOptions](#) 2187
- 61.320 [CURL.SetOptionSASLAUTHZID](#) 2221
- 61.329 [CURL.SetOptionSSLCertType](#) 2236
- 61.333 [CURL.SetOptionSSLEngine](#) 2242
- 61.337 [CURL.SetOptionSSLKeyType](#) 2247
- 61.343 [CURL.SetOptionSSLVersion](#) 2258
- 61.363 [CURL.SetOptionTelnetOptions](#) 2280
- 61.358 [CURL.SetOptionTFTPNoOptions](#) 2275

Created 15th April 2018, last changed 16th April 2018.

61.339 **CURL.SetOptionSSLSessionIDCache**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLSessionIDCache"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to cache session IDs.

1

Result Returns "OK" on success.

Description

Set to 0 to disable cache. Set this to 1 to enable it. By default all transfers are done using the cache. While nothing ever should get hurt by attempting to reuse SSL session-IDs, there seem to be broken SSL implementations in the wild that may require you to disable this in order for you to succeed. See also [SSL_SESSIONID_CACHE](#) option in CURL manual.

See also

- 61.310 CURL.SetOptionRTSPSessionID

2209

Created 18th August 2014, last changed 18th August 2014.

61.340 CURL.SetOptionSSLVerifyHost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLVerifyHost"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to verify host.

1

Result Returns "OK" on success.

Description

This option determines whether libcurl verifies that the server cert is for the server it is known as.

When negotiating a SSL connection, the server sends a certificate indicating its identity.

When value is 2, that certificate must indicate that the server is the server to which you meant to connect, or the connection fails.

Curl considers the server the intended one when the Common Name field or a Subject Alternate Name field in the certificate matches the host name in the URL to which you told Curl to connect.

When the value is 1, the certificate must contain a Common Name field, but it doesn't matter what name it says. (This is not ordinarily a useful setting).

When the value is 0, the connection succeeds regardless of the names in the certificate.

The default, since 7.10, is 2.

This option controls checking the server's claimed identity. The server could be lying. To control lying, see `CURL SetOptionSSLVerifyPeer`.

see also

http://www.mbsplugins.de/archive/2013-01-31/SSL_Security_with_CURL/monkeybreadsoftware_blog_archive

When you don't set the options for certificate path or load system certificates, the MBS Plugin will disable the verify step to let the transfer run.

See also [SSL_VERIFYHOST](#) option in CURL manual.

Examples

Disable SSL Verification:

```
MBS( "CURL.SetOptionSSLVerifyPeer"; $curl; 0 )
```

```
MBS( "CURL.SetOptionSSLVerifyHost"; $curl; 0 )
```

Enables verification and uses cacert.pem file for certificates:

```
MBS( "CURL.SetOptionCAInfo"; $curl; $cacertPath )
```

```
MBS( "CURL.SetOptionSSLVerifyHost"; $curl; 2 )
```

```
MBS( "CURL.SetOptionSSLVerifyPeer"; $curl; 1 )
```

See also

- [61.139 CURL.New](#) 1947
- [61.142 CURL.Perform](#) 1954
- [61.179 CURL.SetOptionCAINFO](#) 2022
- [61.294 CURL.SetOptionProxySSLVerifyHost](#) 2188
- [61.325 CURL.SetOptionSSHKnownHosts](#) 2227
- [61.328 CURL.SetOptionSSLCert](#) 2232
- [61.329 CURL.SetOptionSSLCertType](#) 2236
- [61.330 CURL.SetOptionSSLCipherList](#) 2238
- [61.341 CURL.SetOptionSSLVerifyPeer](#) 2254
- [61.343 CURL.SetOptionSSLVersion](#) 2258

Example Databases

- [CURL/CURL Download Picture to file](#)
- [CURL/CURL Send Form](#)
- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)
- [CURL/Email/IMAP Email Upload](#)

- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/Twilio API Send SMS Json](#)
- [CURL/WebServices/Twitter oAuth](#)
- [Third Party/Google OAUTH 2 example](#)

61.340.1 Blog Entries

- [Upload email to Sent folder via IMAP](#)
- [Sending emails in FileMaker with MBS Plugin](#)
- [Translate PHP script with CURL to FileMaker Script](#)

61.340.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 26](#)

Created 18th August 2014, last changed 15th November 2019.

61.341 `CURL.SetOptionSSLVerifyPeer`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLVerifyPeer"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Whether to verify peer.

1

Result Returns "OK" on success.

Description

Pass a number as parameter. By default, curl assumes a value of 1.

This option determines whether curl verifies the authenticity of the peer's certificate. A value of 1 means curl verifies; 0 (zero) means it doesn't.

When negotiating an SSL connection, the server sends a certificate indicating its identity. Curl verifies whether the certificate is authentic, i.e. that you can trust that the server is who the certificate says it is. This trust is based on a chain of digital signatures, rooted in certification authority (CA) certificates you supply. curl uses a default bundle of CA certificates (the path for that is determined at build time) and you can specify alternate certificates with the `CURL.SetOptionCAINFO` option or the `CURL.SetOptionCAPATH` option.

When `CURL.SetOptionSSLVerifyPeer` is nonzero, and the verification fails to prove that the certificate is authentic, the connection fails. When the option is zero, the peer certificate verification succeeds regardless.

Authenticating the certificate is not by itself very useful. You typically want to ensure that the server, as authentically identified by its certificate, is the server you mean to be talking to. Use `CURL.SetOptionSSLVerifyHost` to control that. The check that the host name in the certificate is valid for the host name you're connecting to is done independently of the `CURL.SetOptionSSLVerifyPeer` option.

see also

http://www.mbsplugins.de/archive/2013-01-31/SSL_Security_with_CURL/monkeybreadsoftware_blog_archive

When you don't set the options for certificate path or load system certificates, the MBS Plugin will disable the verify step to let the transfer run.

See also [SSL_VERIFYPEER](#) option in CURL manual.

Examples

Disable SSL Verification:

```
MBS( "CURL.SetOptionSSLVerifyPeer"; $curl; 0 )
MBS( "CURL.SetOptionSSLVerifyHost"; $curl; 0 )
```

Enables verification and uses cacert.pem file for certificates:

```
MBS( "CURL.SetOptionCAInfo"; $curl; $cacertPath )
MBS( "CURL.SetOptionSSLVerifyHost"; $curl; 2 )
MBS( "CURL.SetOptionSSLVerifyPeer"; $curl; 1 )
```

See also

- [61.139 CURL.New](#) 1947
- [61.142 CURL.Perform](#) 1954
- [61.179 CURL.SetOptionCAINFO](#) 2022
- [61.180 CURL.SetOptionCAPATH](#) 2025
- [61.241 CURL.SetOptionIssuerCert](#) 2113
- [61.328 CURL.SetOptionSSLCert](#) 2232
- [61.336 CURL.SetOptionSSLKey](#) 2245
- [61.337 CURL.SetOptionSSLKeyType](#) 2247
- [61.342 CURL.SetOptionSSLVerifyStatus](#) 2257
- [61.343 CURL.SetOptionSSLVersion](#) 2258

Example Databases

- [CURL/CURL Download Picture to file](#)
- [CURL/CURL Send Form](#)
- [CURL/Email/Batch Emailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)
- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/Magento2 REST API](#)

- [CURL/WebServices/Twilio API Send SMS Json](#)
- [CURL/WebServices/Twitter oAuth](#)
- [Third Party/Google OAUTH 2 example](#)

61.341.1 Blog Entries

- [Upload email to Sent folder via IMAP](#)
- [Sending emails in FileMaker with MBS Plugin](#)
- [MBS Filemaker Plugin, version 4.5pr1](#)
- [Translate PHP script with CURL to FileMaker Script](#)

61.341.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 26](#)

Created 18th August 2014, last changed 15th November 2019.

61.342 CURL.SetOptionSSLVerifyStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLVerifyStatus"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Pass 1 to enable.

See also [SSL_VERIFYSTATUS](#) option in CURL manual.

See also

- 61.340 [CURL.SetOptionSSLVerifyHost](#) 2251
- 61.341 [CURL.SetOptionSSLVerifyPeer](#) 2254

Created 15th April 2018, last changed 16th April 2018.

61.343 `CURL.SetOptionSSLVersion`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSSLVersion"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Pass number from 0 to 7.

0

Result Returns "OK" on success.

Description

The SSL and TLS versions have typically developed from the most insecure version to be more and more secure in this order through history: SSL v2, SSLv3, TLS v1.0, TLS v1.1, TLS v1.2 and the most recent TLS v1.3.

Use one of the available defines for this purpose. The available options are:

Default	0	The default acceptable version range. The minimum acceptable version is by default TLS v1.0 since 7.39.0 (unless the TLS library has a stricter rule).
TLSv1	1	TLS v1.0 or later
SSLv2	2	SSL v2 (but not SSLv3)
SSLv3	3	SSL v3 (but not SSLv2)
TLSv1.0	4	TLS v1.0 or later (Added in 7.34.0)
TLSv1.1	5	TLS v1.1 or later (Added in 7.34.0)
TLSv1.2	6	TLS v1.2 or later (Added in 7.34.0)
TLSv1.3	7	TLS v1.3 or later (Added in 7.52.0)

See also `kSSLVersion*` constants.

The maximum TLS version can be set by using one of the `CURL_SSLVERSION_MAX_` macros below. It is also possible to OR one of the `CURL_SSLVERSION_` macros with one of the `CURL_SSLVERSION_MAX_` macros.

Please note that MBS Plugin does not yet support TLS v1.3 now, but may in future.

See also [SSLVERSION](#) option in CURL manual.

Default	65536	The flag defines the maximum supported TLS version by libcurl, or the default value from the SSL library is used. libcurl will use a sensible default maximum, which was TLS v1.2 up to before 7.61.0 and is TLS v1.3 since then - assuming the TLS library support it. (Added in 7.54.0)
Max TLSv1.0	262144	The flag defines maximum supported TLS version as TLS v1.0. (Added in 7.54.0)
Max TLSv1.1	327680	The flag defines maximum supported TLS version as TLS v1.1. (Added in 7.54.0)
Max TLSv1.2	393216	The flag defines maximum supported TLS version as TLS v1.2. (Added in 7.54.0)
Max TLSv1.3	458752	The flag defines maximum supported TLS version as TLS v1.3. (Added in 7.54.0)

Examples

SMTP via SSL without TLS:

```
$r = MBS( "CURL.SetOptionSSLVersion"; $curl; 3 )
$r = MBS( "CURL.SetOptionPort"; $curl; 25 )
```

Set to use TLSv1.2:

```
Set Variable [ $r; MBS( "CURL.SetOptionUseSSL"; $curl; 3 ) ]
Set Variable [ $r; MBS( "CURL.SetOptionSSLVersion"; $curl; 6 ) ]
```

Do FTPS by using FTP and upgrade to TLS:

```
# Start new session
Set Variable [ $curl ; Value: MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; "ftp://ftp.christians-software.de/") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUsername"; $curl; "12144-test") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionPassword"; $curl; "qr"8km3% Eu"7") ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionConnectionTimeout"; $curl; 10) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionSSLVersion"; $curl; 1) // want TLS v1.0 or better ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUseSSL"; $curl; 3) // require SSL ]
# RUN now
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.233 [CURL.SetOptionHTTPVersion](#) 2104
- 61.269 [CURL.SetOptionPort](#) 2151
- 61.329 [CURL.SetOptionSSLCertType](#) 2236
- 61.330 [CURL.SetOptionSSLCipherList](#) 2238
- 61.333 [CURL.SetOptionSSLEngine](#) 2242
- 61.336 [CURL.SetOptionSSLKey](#) 2245
- 61.340 [CURL.SetOptionSSLVerifyHost](#) 2251
- 61.341 [CURL.SetOptionSSLVerifyPeer](#) 2254
- 61.370 [CURL.SetOptionURL](#) 2288
- 61.376 [CURL.SetOptionUseSSL](#) 2302

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)
- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email Upload](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/List IMAP folders](#)

61.343.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Upload email to Sent folder via IMAP](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Sending emails in FileMaker with MBS Plugin](#)

Created 18th August 2014, last changed 22nd June 2019.

61.344 CURL.SetOptionServiceName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionServiceName"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [SERVICE_NAME](#) option in CURL manual.

See also

- 61.297 CURL.SetOptionProxyServiceName

2192

Created 15th April 2018, last changed 16th April 2018.

61.345 `CURL.SetOptionSocks5Auth`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSocks5Auth"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Bitmask of allowed auth methods for connections to SOCKS 5 proxies.

See also [SOCKS5_AUTH](#) option in CURL manual.

See also

- 61.212 `CURL.SetOptionFTPSSLAAuth` 2076
- 61.228 `CURL.SetOptionHTTPAAuth` 2095
- 61.250 `CURL.SetOptionMailAuth` 2125
- 61.279 `CURL.SetOptionProxyAuth` 2173

Created 15th April 2018, last changed 16th April 2018.

61.346 CURL.SetOptionSocks5GSSAPINec

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSocks5GSSAPINec"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The setting.

1

Result Returns "OK" on success.

Description

Pass a long set to 1 to enable or 0 to disable. As part of the gssapi negotiation a protection mode is negotiated. The rfc1961 says in section 4.3/4.4 it should be protected, but the NEC reference implementation does not. If enabled, this option allows the unprotected exchange of the protection mode negotiation.

See also [SOCKS5_GSSAPI_NEC](#) option in CURL manual.

See also

- 61.347 *CURL.SetOptionSocks5GSSAPIService*

2264

Created 18th August 2014, last changed 18th August 2014.

61.347 `CURL.SetOptionSocks5GSSAPIService`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSocks5GSSAPIService"; curl; Value { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Value

The service name.

""

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

The default service name for a SOCKS5 server is rcmd/server-fqdn. This option allows you to change it. See also [SOCKS5_GSSAPI_SERVICE](#) option in CURL manual.

See also

- 61.346 `CURL.SetOptionSocks5GSSAPINec`

2263

Created 18th August 2014, last changed 5th July 2015.

61.348 CURL.SetOptionStreamDepends

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionStreamDepends"; curl; OtherCURL)

Parameters**curl**

The CURL session handle.

\$curl

OtherCURL

The second CURL session handle.

\$curl2

Result Returns OK or error.

Description

See also [STREAM_DEPENDS](#) option in CURL manual.

See also

- 61.349 CURL.SetOptionStreamDependsE 2266
- 61.350 CURL.SetOptionStreamWeight 2267

Created 15th April 2018, last changed 16th April 2018.

61.349 `CURL.SetOptionStreamDependsE`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionStreamDependsE"; curl; OtherCURL)

Parameters

curl

The CURL session handle.

\$curl

OtherCURL

The second CURL session handle.

\$curl2

Result Returns OK or error.

Description

See also [STREAM_DEPENDS_E](#) option in CURL manual.

See also

- 61.348 `CURL.SetOptionStreamDepends` 2265
- 61.350 `CURL.SetOptionStreamWeight` 2267

Created 15th April 2018, last changed 16th April 2018.

61.350 CURL.SetOptionStreamWeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionStreamWeight"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Default is 16.

See also [STREAM_WEIGHT](#) option in CURL manual.

See also

- 61.348 [CURL.SetOptionStreamDepends](#) 2265
- 61.349 [CURL.SetOptionStreamDependsE](#) 2266

Created 15th April 2018, last changed 16th April 2018.

61.351 `CURL.SetOptionSuppressConnectHeaders`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionSuppressConnectHeaders"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

Pass 1 to suppress or 0 if not.

See also [SUPPRESS_CONNECT_HEADERS](#) option in CURL manual.

Created 15th April 2018, last changed 16th April 2018.

61.352 CURL.SetOptionTCPFastOpen

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTCPFastOpen"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [TCP_FASTOPEN](#) option in CURL manual.

Created 15th April 2018, last changed 16th April 2018.

61.353 **CURL.SetOptionTCPKeepAlive**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTCPKeepAlive"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new setting. 1 = on and 0 = off.

1

Result Returns OK or error.

Description

If set to 1, TCP keepalive probes will be sent. The delay and frequency of these probes can be controlled by the `CURL.SetOptionTCPKeepIdle` and `CURL.SetOptionTCPKeepInterval` options, provided the operating system supports them. Set to 0 (default behavior) to disable keepalive probes.

See also [TCP_KEEPALIVE](#) option in CURL manual.

Examples

Configure keep alive:

```
# Enable TCP keep-alive for this transfer
Set Variable [ $r; Value:MBS( "CURL.SetOptionTCPKeepAlive"; $curl; 1 ) ]
# keep-alive idle time to 120 seconds
Set Variable [ $r; Value:MBS( "CURL.SetOptionTCPKeepIdle"; $curl; 120 ) ]
# interval time between keep-alive probes: 60 seconds
Set Variable [ $r; Value:MBS( "CURL.SetOptionTCPKeepInterval"; $curl; 60 ) ]
```

See also

- 61.354 `CURL.SetOptionTCPKeepIdle` 2271
- 61.355 `CURL.SetOptionTCPKeepInterval` 2272

Created 8th July 2015, last changed 9th July 2015.

61.354 CURL.SetOptionTCPKeepIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTCPKeepIdle"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new setting.

120

Result Returns OK or error.

Description

Sets the delay, in seconds, that the operating system will wait while the connection is idle before sending keepalive probes. Not all operating systems support this option.

See also [TCP_KEEPIDLE](#) option in CURL manual.

See also

- 61.353 [CURL.SetOptionTCPKeepAlive](#) 2270
- 61.355 [CURL.SetOptionTCPKeepInterval](#) 2272

Created 8th July 2015, last changed 9th July 2015.

61.355 `CURL.SetOptionTCPKeepInterval`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTCPKeepInterval"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The new value.

60

Result Returns OK or error.

Description

Sets the interval, in seconds, that the operating system will wait between sending keepalive probes. Not all operating systems support this option.

See also [TCP_KEEPINTVL](#) option in CURL manual.

See also

- 61.353 `CURL.SetOptionTCPKeepAlive` 2270
- 61.354 `CURL.SetOptionTCPKeepIdle` 2271
- 61.373 `CURL.SetOptionUpkeepIntervalMS` 2298

Created 8th July 2015, last changed 9th July 2015.

61.356 CURL.SetOptionTCPNoDelay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTCPNoDelay"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new setting.

1

Result Returns "OK" on success.

Description

Pass a number specifying whether the `TCP_NODELAY` option should be set or cleared (1 = set, 0 = clear). The option is cleared by default. This will have no effect after the connection has been established.

Setting this option will disable TCP's Nagle algorithm. The purpose of this algorithm is to try to minimize the number of small packets on the network (where "small packets" means TCP segments less than the Maximum Segment Size (MSS) for the network).

Maximizing the amount of data sent per TCP segment is good because it amortizes the overhead of the send. However, in some cases (most notably telnet or rlogin) small segments may need to be sent without delay. This is less efficient than sending larger amounts of data at a time, and can contribute to congestion on the network if overdone.

See also [TCP_NODELAY](#) option in CURL manual.

Created 18th August 2014, last changed 18th August 2014.

61.357 `CURL.SetOptionTFTPBlockSize`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTFTPBlockSize"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Block size for TFTP

512

Result Returns "OK" on success.

Description

Valid range as per RFC 2348 is 8-65464 bytes. The default of 512 bytes will be used if this option is not specified. The specified block size will only be used pending support by the remote server. If the server does not return an option acknowledgement or returns an option acknowledgement with no blksize, the default of 512 bytes will be used.

See also [TFTP_BLKSIZE](#) option in CURL manual.

See also

- 61.358 `CURL.SetOptionTFTPNoOptions`

2275

Created 18th August 2014, last changed 18th August 2014.

61.358 CURL.SetOptionTFTPNoOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTFTPNoOptions"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

See also [TFTP_NO_OPTIONS](#) option in CURL manual.

See also

- 61.88 [CURL.GetOptionTelnetOptions](#) 1881
- 61.236 [CURL.SetOptionHeaderOptions](#) 2107
- 61.247 [CURL.SetOptionLoginOptions](#) 2121
- 61.293 [CURL.SetOptionProxySSLOptions](#) 2187
- 61.338 [CURL.SetOptionSSLOptions](#) 2249
- 61.363 [CURL.SetOptionTelnetOptions](#) 2280
- 61.357 [CURL.SetOptionTFTPBlockSize](#) 2274
- 61.364 [CURL.SetOptionTimeCondition](#) 2281

Created 15th April 2018, last changed 16th April 2018.

61.359 `CURL.SetOptionTLS13Ciphers`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.3	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTLS13Ciphers"; curl; Ciphers)

Parameters

curl

The CURL session handle.

\$curl

Ciphers

The list of ciphers.

Result Returns OK or error.

Description

The list of cipher suites to use for the TLS 1.3 connection. The list must be syntactically correct, it consists of one or more cipher suite strings separated by colons.

You'll find more details about cipher lists on this URL:

<https://curl.haxx.se/docs/ssl-ciphers.html>

The application does not have to keep the string around after setting this option.

See also [TLS13_CIPHERS](#) option in CURL manual.

See also

- 61.298 `CURL.SetOptionProxyTLS13Ciphers` 2193
- 61.330 `CURL.SetOptionSSLCipherList` 2238

61.359.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 11st July 2018, last changed 11st July 2018.

61.360 CURL.SetOptionTLSAuthPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTLSAuthPassword"; curl; Password { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Password

The password.

\$Password

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns OK or error.

Description

Please also set OptionTLSAuthType.

See also [TLSAUTH_PASSWORD](#) option in CURL manual.

See also

- 61.244 [CURL.SetOptionKeyPassword](#) 2117
- 61.284 [CURL.SetOptionProxyKeyPassword](#) 2178
- 61.285 [CURL.SetOptionProxyPassword](#) 2179
- 61.299 [CURL.SetOptionProxyTLSAuthPassword](#) 2194
- 61.362 [CURL.SetOptionTLSAuthUsername](#) 2279

Created 18th August 2014, last changed 5th July 2015.

61.361 `CURL.SetOptionTLSAuthType`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTLSAuthType"; curl; Type { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

Type

the TLS authentication type.

"SRP"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns OK or error.

Description

Please also set username and password.

You can set this to "SRP" to use Secure Remote Password authentication.

See also [TLSAUTH_TYPE](#) option in CURL manual.

See also

- 61.300 `CURL.SetOptionProxyTLSAuthType` 2195
- 61.320 `CURL.SetOptionSASLAuthZID` 2221
- 61.322 `CURL.SetOptionSSHAAuthTypes` 2223
- 61.329 `CURL.SetOptionSSLCertType` 2236
- 61.337 `CURL.SetOptionSSLKeyType` 2247
- 61.362 `CURL.SetOptionTLSAuthUsername` 2279

Created 18th August 2014, last changed 5th July 2015.

61.362 CURL.SetOptionTLSAuthUsername

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTLSAuthUsername"; curl; Username { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Username

The user name.

\$Username

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns OK or error.

Description

Please also set OptionTLSAuthType.

See also [TLSAUTH_USERNAME](#) option in CURL manual.

See also

- 61.301 CURL.SetOptionProxyTLSAuthUsername 2196
- 61.304 CURL.SetOptionProxyUsername 2200
- 61.360 CURL.SetOptionTLSAuthPassword 2277
- 61.361 CURL.SetOptionTLSAuthType 2278

Created 18th August 2014, last changed 5th July 2015.

61.363 `CURL.SetOptionTelnetOptions`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTelnetOptions"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The new options.

””

Result Returns "OK" on success.

Description

Provide a list with variables to pass to the telnet negotiations. The variables should be in the format <option=value>. libcurl supports the options 'TTYTYPE', 'XDISPLOC' and 'NEW_ENV'. See the TELNET standard for details.

This option takes a list of items. So this function takes a variable number of arguments. If you call function with 2 parameters, you set an empty list. If you call it with 5 parameters, you set a list with 3 values. See also [TELNETOPTIONS](#) option in CURL manual.

Examples

Call with three parameters:

MBS("CURL.SetOptionTelnetOptions"; handle; \$value1; \$value2; \$value3)

See also

- 61.88 `CURL.GetOptionTelnetOptions` 1881
- 61.236 `CURL.SetOptionHeaderOptions` 2107
- 61.247 `CURL.SetOptionLoginOptions` 2121
- 61.293 `CURL.SetOptionProxySSLOptions` 2187
- 61.338 `CURL.SetOptionSSLOptions` 2249
- 61.358 `CURL.SetOptionTFTPNoOptions` 2275

Created 18th August 2014, last changed 18th August 2014.

61.364 CURL.SetOptionTimeCondition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTimeCondition"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The time condition. Pass 0 for none, 1 for If Modified since, 2 for If not modified since.

2

Result Returns "OK" on success.

Description

Pass a number as parameter. This defines how the CURL.SetOptionTimeValue time value is treated. You can set this parameter to `CURL_TIMECOND_IFMODSINCE` (1) or `CURL_TIMECOND_IFUNMODSINCE` (2). This feature applies to HTTP, FTP, RTSP, and FILE.

The last modification time of a file is not always known and in such instances this feature will have no effect even if the given time condition would not have been met. `CURL.GetConditionUnmet` can be used after a transfer to learn if a zero-byte successful "transfer" was due to this condition not matching.

See also [TIMECONDITION](#) option in CURL manual.

See also

- 61.38 `CURL.GetConditionUnmet` 1823
- 61.358 `CURL.SetOptionTFTPNoOptions` 2275
- 61.366 `CURL.SetOptionTimeValue` 2284

Created 18th August 2014, last changed 18th August 2014.

61.365 `CURL.SetOptionTimeout`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTimeout"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

Timeout in seconds.

60

Result Returns "OK" on success.

Description

Normally, name lookups can take a considerable time and limiting operations to less than a few minutes risk aborting perfectly normal operations. This option will cause curl to use the SIGALRM to enable time-outing system calls.

See also [TIMEOUT](#) option in CURL manual.

Examples

Sets timeout to one minute:

```
MBS( "CURL.SetOptionTimeout"; $curl; 60 )
```

See also

- 61.187 `CURL.SetOptionConnectionTimeout` 2037
- 61.211 `CURL.SetOptionFTPResponseTimeout` 2075
- 61.228 `CURL.SetOptionHTTPAuth` 2095
- 61.250 `CURL.SetOptionMailAuth` 2125
- 61.268 `CURL.SetOptionPipeWait` 2150
- 61.276 `CURL.SetOptionPreQuote` 2167
- 61.305 `CURL.SetOptionPut` 2201
- 61.316 `CURL.SetOptionReferer` 2217
- 61.328 `CURL.SetOptionSSLCert` 2232
- 61.366 `CURL.SetOptionTimeValue` 2284

61.365.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Translate PHP script with CURL to FileMaker Script](#)

Created 18th August 2014, last changed 8th December 2016.

61.366 CURL.SetOptionTimeValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTimeValue"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The new time value.

123456789

Result Returns "OK" on success.

Description

This should be the time in seconds since 1 Jan 1970, and the time will be used in a condition as specified with CURL.SetOptionTimeCondition.

See also [TIMEVALUE](#) option in CURL manual.

See also

- 61.220 CURL.SetOptionFileTime 2085
- 61.237 CURL.SetOptionIPResolve 2108
- 61.268 CURL.SetOptionPipeWait 2150
- 61.318 CURL.SetOptionResolve 2219
- 61.364 CURL.SetOptionTimeCondition 2281
- 61.365 CURL.SetOptionTimeOut 2282
- 61.367 CURL.SetOptionTimeoutMS 2285

Created 18th August 2014, last changed 18th August 2014.

61.367 CURL.SetOptionTimeoutMS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTimeoutMS"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Timeout value in milliseconds.

60000

Result Returns "OK" on success.

Description

Like `CURL.SetOptionTimeout` but takes number of milliseconds instead. If libcurl is built to use the standard system name resolver, that portion of the transfer will still use full-second resolution for timeouts with a minimum timeout allowed of one second.

See also [TIMEOUT_MS](#) option in `CURL` manual.

Examples

Sets timeout to half second:

```
MBS( "CURL.SetOptionTimeOutMS"; $curl; 500 )
```

See also

- 61.174 `CURL.SetOptionAcceptTimeoutMS` 2016
- 61.365 `CURL.SetOptionTimeOut` 2282
- 61.366 `CURL.SetOptionTimeValue` 2284

Created 18th August 2014, last changed 8th December 2016.

61.368 `CURL.SetOptionTransferEncoding`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTransferEncoding"; curl; Param)

Parameters

curl

The CURL session handle.

\$curl

Param

The new setting.

1

Result Returns OK or error.

Description

Pass 1 to enable or 0 to disable.

Adds a request for compressed Transfer Encoding in the outgoing HTTP request. If the server supports this and so desires, it can respond with the HTTP response sent using a compressed Transfer-Encoding that will be automatically uncompressed by libcurl on reception.

Transfer-Encoding differs slightly from the Content-Encoding you ask for with `CURL.SetOptionAcceptEncoding` in that a Transfer-Encoding is strictly meant to be for the transfer and thus **MUST** be decoded before the data arrives in the client. Traditionally, Transfer-Encoding has been much less used and supported by both HTTP clients and HTTP servers.

See also [TRANSFER_ENCODING](#) option in CURL manual.

Examples

Enable transfer encoding:

```
MBS( "CURL.SetOptionTransferEncoding"; $curl; 1 )
```

See also

- 61.173 `CURL.SetOptionAcceptEncoding` 2014
- 61.232 `CURL.SetOptionHTTPTransferDecoding` 2103

Created 8th July 2015, last changed 8th December 2016.

61.369 CURL.SetOptionTransferText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionTransferText"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to use ASCII mode.

1

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library to use ASCII mode for FTP transfers, instead of the default binary transfer. For win32 systems it does not set the stdout to binary mode. This option can be usable when transferring text data between systems with different views on certain characters, such as newlines or similar.

libcurl does not do a complete ASCII conversion when doing ASCII transfers over FTP. This is a known limitation/ flaw that nobody has rectified. libcurl simply sets the mode to ASCII and performs a standard transfer.

See also **TRANSFERTEXT** option in CURL manual.

Examples

Set transfer mode to binary data:

MBS("CURL.SetOptionTransferText"; \$curl; 0)

Set transfer mode to text:

MBS("CURL.SetOptionTransferText"; \$curl; 1)

See also

- 61.142 CURL.Perform 1954
- 61.241 CURL.SetOptionIssuerCert 2113
- 61.302 CURL.SetOptionProxyTransferMode 2197

Created 18th August 2014, last changed 7th December 2016.

61.370 `CURL.SetOptionURL`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionURL"; curl; URL { ; Encoding })

Parameters

curl

The CURL session handle.

\$curl

URL

The URL you want to use.

"http://www.mbsplugins.de/"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"utf8"

Result Returns "OK" on success.

Description

If you want to include password and username, please use `CURL.SetOptionUsername` and `CURL.SetOptionPassword` instead of including them in the URL.

The parameter should be a text string which must be URL-encoded in the following format:

```
scheme://host:port/path
```

For a greater explanation of the format please see RFC 3986 (<http://curl.haxx.se/rfc/rfc3986.txt>).

If the given URL lacks the scheme, or protocol, part ("http://" or "ftp://" etc), libcurl will attempt to resolve which protocol to use based on the given host name. If the protocol is not supported, libcurl will return (`CURLE_UNSUPPORTED_PROTOCOL`) when you call `CURL.Perform` or `CURL.PerformInBackground`. Use `CURL.Protocols` for detailed information on which protocols are supported.

The host part of the URL contains the address of the server that you want to connect to. This can be the fully qualified domain name of the server, the local network name of the machine on your network or the IP address of the server or machine represented by either an IPv4 or IPv6 address. For example:

```
http://www.example.com/
```

`http://hostname/`

`http://192.168.0.1/`

`http:// [2001:1890:1112:1::20] /`

It is also possible to specify the user name and password as part of the host, for some protocols, when connecting to servers that require authentication.

For example the following types of authentication support this:

`http://user:password@www.domain.com ftp://user:password@ftp.domain.com pop3://user:password@mail.domain.com`

The port is optional and when not specified libcurl will use the default port based on the determined or specified protocol: 80 for http, 21 for ftp and 25 for smtp, etc. The following examples show how to specify the port:

`http://www.weirdserver.com:8080/` - This will connect to a web server using port 8080.

`smtp://mail.domain.com:587/` - This will connect to a smtp server on the alternative mail port.

The path part of the URL is protocol specific and whilst some examples are given below this list is not conclusive:

HTTP

The path part of a HTTP request specifies the file to retrieve and from what directory. If the directory is not specified then the web server's root directory is used. If the file is omitted then the default document will be retrieved for either the directory specified or the root directory. The exact resource returned for each URL is entirely dependent on the server's configuration.

`http://www.netscape.com` - This gets the main page (index.html in this example) from Netscape's web server.

`http://www.netscape.com/index.html` - This returns the main page from Netscape by specifying the page to get.

`http://www.netscape.com/contactus/` - This returns the default document from the contactus directory.

FTP

The path part of an FTP request specifies the file to retrieve and from what directory. If the file part is omitted then libcurl downloads the directory listing for the directory specified. If the directory is omitted then the directory listing for the root / home directory will be returned.

`ftp://cool.haxx.se` - This retrieves the directory listing for our FTP server.

`ftp://cool.haxx.se/readme.txt` - This downloads the file `readme.txt` from the root directory.

`ftp://cool.haxx.se/libcurl/readme.txt` - This downloads `readme.txt` from the `libcurl` directory.

`ftp://user:password@my.example.com/readme.txt` - This retrieves the `readme.txt` file from the user's home directory. When a username and password is specified, everything that is specified in the path part is relative to the user's home directory. To retrieve files from the root directory or a directory underneath the root directory then the absolute path must be specified by prepending an additional forward slash to the beginning of the path.

`ftp://user:password@my.example.com//readme.txt` - This retrieves the `readme.txt` from the root directory when logging in as a specified user.

SMTP

The path part of a SMTP request specifies the host name to present during communication with the mail server. If the path is omitted then libcurl will attempt to resolve the local computer's host name. However, this may not return the fully qualified domain name that is required by some mail servers and specifying this path allows you to set an alternative name, such as your machine's fully qualified domain name, which you might have obtained from an external function such as `gethostname` or `getaddrinfo`.

`smtp://mail.domain.com` - This connects to the mail server at `domain.com` and sends your local computer's host name in the HELO / EHLO command.

`smtp://mail.domain.com/client.domain.com` - This will send `client.domain.com` in the HELO / EHLO command to the mail server at `domain.com`.

POP3

The path part of a POP3 request specifies the mailbox (message) to retrieve. If the mailbox is not specified then a list of waiting messages is returned instead.

pop3://user:password@mail.domain.com - This lists the available messages
pop3://user:password@mail.domain.com/1 - This retrieves the first message

SCP

The path part of an SCP request specifies the file to retrieve and from what directory. The file part may not be omitted. The file is taken as an absolute path from the root directory on the server. To specify a path relative to the user's home directory on the server, prepend ~/ to the path portion. If the user name is not embedded in the URL, it can be set with the `CURL.SetOptionUsername` option.

scp://user@example.com/etc/issue - This specifies the file `/etc/issue`

scp://example.com/~my-file - This specifies the file `my-file` in the user's home directory on the server

SFTP

The path part of an SFTP request specifies the file to retrieve and from what directory. If the file part is omitted then libcurl downloads the directory listing for the directory specified. If the path ends in a / then a directory listing is returned instead of a file. If the path is omitted entirely then the directory listing for the root / home directory will be returned. If the user name is not embedded in the URL, it can be set with the `SetOptionUsername` option.

sftp://user:password@example.com/etc/issue - This specifies the file `/etc/issue`

sftp://user@example.com/~my-file - This specifies the file `my-file` in the user's home directory

sftp://ssh.example.com/~Documents/ - This requests a directory listing of the `Documents` directory under the user's home directory

NOTES

Starting with version 7.20.0, the fragment part of the URI will not be sent as part of the path, which was previously the case.

`CURLOPT_URL` is the only option that must be set before `CURL.Preform` or `CURL.PerformInBackground` is called.

`CURLOPT_PROTOCOLS` can be used to limit what protocols libcurl will use for this transfer, independent of what libcurl has been compiled to support. That may be useful if you accept the URL from an external source and want to limit the accessibility.

For file uploads or downloads, please include the file name in the URL.

Please do never include username and passwords in URLs, as those get often written to log files and would reveal your credentials!

Instead use `OptionUsername` and `OptionPassword`.

See also [URL](#) option in CURL manual.

Examples

Set URL for FTP:

```
MBS( "CURL.SetOptionURL"; $curl; "ftp://user:password@my.example.com/readme.txt" )
```

Set URL for a REST API:

```
Set Variable [ $r; MBS("CURL.SetOptionURL"; $curl; "https://example.com/wc-api/v2/products" ) ]
```

Query webservice with JSON request:

```
Set Variable [ $curl; Value:MBS("CURL.New" ) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "http://test.test/ws/v1/catalogo/get-modelos" ) ]
# pass JSON for query
Set Variable [ $result; Value:MBS("CURL.SetOptionPostFields"; $curl; " { \"brandId\" : \"1\", \"device\" : \"70\" } "; "UTF-8" ) ]
Set Field [ models::result; MBS("CURL.Perform"; $curl) ]
Set Field [ models::text; MBS("CURL.GetResultAsText"; $curl;"UTF8" ) ]
Set Field [ models::header; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Set URL for a POP3 email download:

```
Set Variable [ $r; MBS("CURL.SetOptionURL"; $curl; "pop3://example.test" ) ]
```

Set URL for a IMAP email download:

```
Set Variable [ $r; MBS("CURL.SetOptionURL"; $curl; "imap://example.test" ) ]
# connect unencrypted and ask for TLS upgrade
Set Variable [ $r; MBS("CURL.SetOptionUseSSL"; $curl; 3) ]
```

Set URL for Gmail imap server:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "imaps://imap.gmail.com/INBOX" ) ]
Set Variable [ $r; Value:MBS("CURL.SetOptionUseSSL"; $curl; 6) ]
Set Variable [ $r; Value:MBS("CURL.SetOptionPort"; $curl; 993) ]
```


Set URL for a IMAP email download via SSL:

```
# connect with SSLv3 directly:
Set Variable [ $r; MBS("CURL.SetOptionURL"; $curl; "imaps://example.test") ]
```

Load email list from gmail:

```
Go to Layout [ "IMAP Postbox" (IMAP Postbox) ; Animation: None ]
# get URL
Set Variable [ $URL ; Value: "imaps://imap.gmail.com/INBOX" ]
# query list of emails
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionURL"; $curl; $URL) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionUserName"; $curl; IMAP Postbox::Username) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionPassword"; $curl; IMAP Postbox::Password) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionUseSSL"; $curl; 3) // required ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionSSLVersion"; $curl; 6) // TLS v1.2 ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionPort"; $curl; 993) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionConnectionTimeout"; $curl; 10) ]
# Set query for all emails by UID. Not all fields are needed. Only request those you need to make it quicker.
Set Variable [ $r ; Value: MBS("CURL.SetOptionCustomRequest"; $curl; "UID FETCH 1:* (FLAGS INTERNALDATE RFC822.SIZE BODY.PEEK [ HEADER.FIELDS (Message-Id DATE FROM SUBJECT TO SENDER REPLY-TO CC BCC) ] )") ]
# Run transfer
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
# We show results for debugging
Set Variable [ $output ; Value: MBS("CURL.GetResultAsText"; $curl) ]
Set Variable [ $debug ; Value: MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $list ; Value: MBS( "JSON.Colorize";MBS("CURL.GetResultAsEMailList"; $curl)) ]
Set Variable [ $r ; Value: MBS("CURL.Cleanup"; $curl) ]
Set Field [ IMAP Postbox::Log ; $debug ]
Set Field [ IMAP Postbox::JSON ; $list ]
```

See also

- 61.181 *CURL.SetOptionCRLF* 2027
- 61.225 *CURL.SetOptionGet* 2091
- 61.305 *CURL.SetOptionPut* 2201
- 61.314 *CURL.SetOptionRange* 2213
- 61.321 *CURL.SetOptionSASLIR* 2222
- 61.336 *CURL.SetOptionSSLKey* 2245
- 61.374 *CURL.SetOptionUpload* 2299

- 100.15 JSON.Colorize 5261
- 100.52 JSON.GetPathItem 5314
- 100.65 JSON.Parse 5333

Example Databases

- [CURL/CURL Check FileMaker Server](#)
- [CURL/CURL Download PDF and add preview with DynaPDF](#)
- [CURL/CURL Download Text](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/FTP/CURL FTP Delete File](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [CURL/WebServices/Query IP and Country](#)
- [CURL/WebServices/TinyURL](#)
- [CURL/WebServices/Twitter OAuth](#)

61.370.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Let CURL handle cookie list](#)
- [Use root certificates included with FileMaker](#)
- [URLs without UserName and Password please](#)
- [Upload email to Sent folder via IMAP](#)
- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Query geolocation in FileMaker via MBS Plugin and Google Maps API](#)
- [Batch sending Emails in FileMaker via MBS Plugin](#)
- [Using NetVerify web service with FileMaker](#)
- [Tip of the day: FTP File Upload](#)

61.370.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 20
- Ausgabe 4/2016, Seite 19
- Ausgabe 4/2016, Seite 18

Created 18th August 2014, last changed 10th February 2019.

61.371 `CURL.SetOptionUnixSocketPath`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionUnixSocketPath"; curl; Path)

Parameters

curl

The CURL session handle.

\$curl

Path

Native unix socket path.

Result Returns OK or error.

Description

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [UNIX_SOCKET_PATH](#) option in CURL manual.

See also

- 121.2 `Path.FileMakerPathToNativePath`

6139

Created 15th April 2018, last changed 16th April 2018.

61.372 CURL.SetOptionUnrestrictedAuth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionUnrestrictedAuth"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to follow with authentication.

0

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library it can continue to send authentication (user+password) when following locations, even when hostname changed. This option is meaningful only when setting `CURL.SetOptionFollowLocation`.

See also [UNRESTRICTED_AUTH](#) option in CURL manual.

See also

- 61.221 `CURL.SetOptionFollowLocation`

2086

Created 18th August 2014, last changed 28th November 2019.

61.373 `CURL.SetOptionUpkeepIntervalMS`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionUpkeepIntervalMS"; curl; Value)

Parameters

curl

The CURL session handle.

\$curl

Value

The new interval.

Result Returns OK or error.

Description

Some protocols have "connection upkeep" mechanisms. These mechanisms usually send some traffic on existing connections in order to keep them alive; this can prevent connections from being closed due to overzealous firewalls, for example.

The user needs to explicitly call Upkeep in order to perform the upkeep work.

Currently the only protocol with a connection upkeep mechanism is HTTP/2: when the connection upkeep interval is exceeded and Upkeep is called, an HTTP/2 PING frame is sent on the connection. See also [UPKEEP_INTERVAL_MS](#) option in CURL manual.

See also

- 61.355 `CURL.SetOptionTCPKeepInterval` 2272
- 61.388 `CURL.Upkeep` 2329

61.373.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr5](#)

Created 31st October 2018, last changed 31st October 2018.

61.374 CURL.SetOptionUpload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionUpload"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

Whether to do an upload.

1

Result Returns "OK" on success.

Description

A parameter set to 1 tells the library to prepare for an upload. With the `CURL.SetInput` functions you can define the upload data. If the protocol is HTTP, uploading means using the PUT request unless you tell curl otherwise.

Using PUT with HTTP 1.1 implies the use of a "Expect: 100-continue" header. You can disable this header with `CURL.SetOptionHTTPHeader` as usual.

If you use PUT to a HTTP 1.1 server, you can upload data without knowing the size before starting the transfer if you use chunked encoding. You enable this by adding a header like "Transfer-Encoding: chunked" with `CURL.SetOptionHTTPHeader`. With HTTP 1.0 or without chunked transfer, you must specify the size.

See also `CURL.SetOptionPost`.

See also **UPLOAD** option in CURL manual.

Examples

Set CURL session to be upload:

MBS("CURL.SetOptionUpload"; \$curl; 1)

See also

- 61.176 `CURL.SetOptionAppend` 2018
- 61.178 `CURL.SetOptionBufferSize` 2020
- 61.263 `CURL.SetOptionNoBody` 2141

- 61.270 `CURL.SetOptionPost` 2153
- 61.278 `CURL.SetOptionProxy` 2171
- 61.326 `CURL.SetOptionSSHPrivateKeyfile` 2228
- 61.327 `CURL.SetOptionSSHPrivateKeyfile` 2230
- 61.375 `CURL.SetOptionUploadBufferSize` 2301
- 61.370 `CURL.SetOptionURL` 2288
- 61.376 `CURL.SetOptionUseSSL` 2302

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL FMS Admin API](#)
- [CURL/Email/IMAP Email Upload](#)
- [CURL/FTP/CURL FTP Upload File](#)
- [CURL/FTP/CURL FTP Upload multiple files](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/FTP/CURL FTP Upload](#)
- [CURL/SFTP/CURL sFTP Operations](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [CURL/WebServices/Magento2 REST API](#)

61.374.1 Blog Entries

- [Upload email to Sent folder via IMAP](#)
- [Tip of the day: FTP File Upload](#)

Created 18th August 2014, last changed 24th February 2016.

61.375 CURL.SetOptionUploadBufferSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionUploadBufferSize"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new buffer size.

Result Returns OK or error.

Description

Pass an integer specifying your preferred size (in bytes) for the upload buffer in libcurl. It makes libcurl use a larger buffer that gets passed to the next layer in the stack to get sent off. In some setups and for some protocols, there's a huge performance benefit of having a larger upload buffer.

This is just treated as a request, not an order. You cannot be guaranteed to actually get the given size.

The upload buffer size is by default 64 kilobytes. The maximum buffer size allowed to be set is 2 megabytes. The minimum buffer size allowed to be set is 16 kilobytes.

Since curl 7.61.1 the upload buffer is allocated on-demand - so if the handle isn't used for upload, this buffer will not be allocated at all.

For slow upload/downloads, it may be better to set buffer size to 1 MB with `CURL.SetOptionUploadBufferSize` or `CURL.SetOptionBufferSize` properties to make transfers faster.

See also [UPLOAD_BUFFERSIZE](#) option in CURL manual.

See also

- 61.178 `CURL.SetOptionBufferSize` 2020
- 61.374 `CURL.SetOptionUpload` 2299

61.375.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr5](#)

Created 31st October 2018, last changed 3th October 2019.

61.376 CURL.SetOptionUseSSL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionUseSSL"; curl; Value)

(old name: CURL.SetOptionFTPSSL)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new SSL setting.

3

Result Returns "OK" on success.

Description

Pass a number using one of the values from below, to make libcurl use your desired level of SSL for the FTP transfer.

None	0	Don't attempt to use SSL.
Try	1	Try using SSL, proceed as normal otherwise.
Control	2	Require SSL for the control connection or fail with CURLE_USE_SSL_FAILED.
All	3	Require SSL for all communication or fail with CURLE_USE_SSL_FAILED.

Even as this function has FTP in name, we also use it for email sending. So the email upload starts unencrypted and we use TLS to upgrade to an SSL connection.

See also [USE_SSL](#) option in CURL manual.

Examples

Set to use SSL:

```
$r = MBS( "CURL.SetOptionUseSSL"; $curl; 3 )
```

Set to use TLSv1.2:

```
Set Variable [ $r; MBS( "CURL.SetOptionUseSSL"; $curl; 3 ) ]
Set Variable [ $r; MBS( "CURL.SetOptionSSLVersion"; $curl; 6 ) ]
```

61.376. *CURL.SETOPTIONUSESSL* 2303

Set URL for Gmail imap server:

```
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "imaps://imap.gmail.com/INBOX") ]  
Set Variable [ $r; Value:MBS("CURL.SetOptionUseSSL"; $curl; 3) ]
```

See also

- 61.114 *CURL.GetResultAsEMailList* 1912
- 61.200 *CURL.SetOptionDOHURL* 2059
- 61.225 *CURL.SetOptionGet* 2091
- 61.260 *CURL.SetOptionNetRC* 2137
- 61.343 *CURL.SetOptionSSLVersion* 2258
- 61.374 *CURL.SetOptionUpload* 2299
- 61.370 *CURL.SetOptionURL* 2288
- 61.378 *CURL.SetOptionUsername* 2305

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)
- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email Upload](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/List IMAP folders](#)

61.376.1 Blog Entries

- [Upload email to Sent folder via IMAP](#)
- [Sending emails in FileMaker with MBS Plugin](#)

Created 18th August 2014, last changed 5th February 2017.

61.377 `CURL.SetOptionUserAgent`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "CURL.SetOptionUserAgent"; curl; Value { ; Encoding } )
```

Parameters

curl

The CURL session handle.

\$curl

Value

The user agent string.

"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.0)"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

It will be used for the user agent Header in the http request sent to the remote server. This can be used to fool servers or scripts. You can also set any custom header with `CURL.SetOptionHTTPHeader`. See also [USERAGENT](#) option in CURL manual.

Examples

Set IE 6 user agent:

```
MBS( "CURL.SetOptionUserAgent"; $curl; "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.0)" )
```

Set Safari as user agent:

```
MBS( "CURL.SetOptionUserAgent"; $curl; "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/13.0.4 Safari/605.1.15" )
```

See also

- 61.230 `CURL.SetOptionHTTPHeader` 2098
- 61.241 `CURL.SetOptionIssuerCert` 2113
- 61.378 `CURL.SetOptionUsername` 2305

Created 18th August 2014, last changed 29th January 2020.

61.378 CURL.SetOptionUsername

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionUsername"; curl; Value { ; Encoding })

Parameters**curl**

The CURL session handle.

\$curl

Value

The user name

"cs"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns "OK" on success.

Description

In order to specify the password to be used in conjunction with the user name use the CURL.SetOption-Password option.

See also [USERNAME](#) option in CURL manual.

Examples

Set login credentials:

```
Set Variable [ $result ; Wert: MBS("CURL.SetOptionUserName"; $curl; Logins::Username) ]
```

```
Set Variable [ $result ; Wert: MBS("CURL.SetOptionPassword"; $curl; Logins::Password) ]
```

See also

- 61.220 CURL.SetOptionFileTime 2085
- 61.240 CURL.SetOptionInterface 2112
- 61.304 CURL.SetOptionProxyUsername 2200
- 61.318 CURL.SetOptionResolve 2219
- 61.322 CURL.SetOptionSSHAuthTypes 2223
- 61.326 CURL.SetOptionSSHPrivateKeyfile 2228
- 61.370 CURL.SetOptionURL 2288

- 61.377 `CURL.SetOptionUserAgent` 2304
- 61.376 `CURL.SetOptionUseSSL` 2302
- 61.380 `CURL.SetOptionWildCardMatch` 2309

Example Databases

- [CURL/Email/IMAP Email Upload](#)
- [CURL/FTP/CURL FTP Delete File](#)
- [CURL/FTP/CURL FTP Directory Listing](#)
- [CURL/FTP/CURL FTP Download all Files in Directory](#)
- [CURL/FTP/CURL FTP Upload File](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/FTP/CURL FTP Upload](#)
- [CURL/SFTP/CURL sFTP Operations](#)
- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [CURL/WebServices/Twilio API Send SMS Json](#)

61.378.1 Blog Entries

- [URLs without UserName and Password please](#)
- [Upload email to Sent folder via IMAP](#)
- [Batch sending Emails in FileMaker via MBS Plugin](#)
- [Using NetVerify web service with FileMaker](#)
- [Tip of the day: FTP File Upload](#)
- [Swiss Post Webservice to verify addresses](#)

61.378.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 20](#)
- [Ausgabe 4/2016, Seite 19](#)

61.379 CURL.SetOptionVerbose

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionVerbose"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

0 to disable or 1 to enable

1

Result Returns "OK" on success.

Description

Set the parameter to 1 to get curl to display a lot of verbose information about its operations.

Very useful protocol debugging and understanding. You can get the debug messages with `CURL.GetDebugAsText`.

Since version 5.2 of our plugin, this is on by default.

See `CURL.SetDebugWithData`, `CURL.SetDebugWithProgress` and `CURL.SetDebugWithTime` to include data/time in the debug log.

See also **VERBOSE** option in CURL manual.

Examples

Set verbose mode:

```
Set Variable [ $result ; Wert: MBS("CURL.SetOptionVerbose"; $curl; 1) ]
```

Download with debug log with full details:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
```

```
Set Variable [ $result; Value:MBS("CURL.CreateDebugOutputFile"; $curl; "/tmp/curl.log") ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "http://www.monkeybreadsoftware.de/images/mbs.jpg") ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetDebugWithTime"; $curl; 1) ]
```

```
Set Variable [ $result; Value:MBS("CURL.SetDebugWithProgress"; $curl; 1) ]
```

```
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
```

```
Set Field [ CURL Test::Image; MBS("CURL.GetResultAsJPEG"; $curl) ]
```

```
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
```

```
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- [61.190 CURL.SetOptionCookieJar](#) 2044
- [61.264 CURL.SetOptionNoProxy](#) 2143
- [61.270 CURL.SetOptionPost](#) 2153
- [61.276 CURL.SetOptionPreQuote](#) 2167
- [61.278 CURL.SetOptionProxy](#) 2171
- [61.318 CURL.SetOptionResolve](#) 2219
- [61.326 CURL.SetOptionSSHPrivateKeyfile](#) 2228
- [61.327 CURL.SetOptionSSHPublicKeyfile](#) 2230
- [61.370 CURL.SetOptionURL](#) 2288
- [61.378 CURL.SetOptionUsername](#) 2305

Example Databases

- [CURL/CURL Download on Server](#)
- [CURL/FTP/CURL FTP Download File](#)
- [CURL/FTP/CURL FTP Upload File](#)
- [CURL/FTP/CURL FTP Upload from file with Progress](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/FTP/CURL FTP Upload](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/Magento2 REST API](#)
- [CURL/WebServices/Twitter oAuth](#)

61.379.1 Blog Entries

- [Upload email to Sent folder via IMAP](#)
- [Using NetVerify web service with FileMaker](#)
- [Using CURL with Rosette web service](#)
- [Translate PHP script with CURL to FileMaker Script](#)

Created 18th August 2014, last changed 15th June 2016.

61.380 CURL.SetOptionWildCardMatch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionWildCardMatch"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The new setting. Can be 1 (on) or 0 (off).

1

Result Returns OK or error.

Description

Set parameter to 1 if you want to transfer multiple files according to a file name pattern. The pattern can be specified as part of the OptionURL option, using an fnmatch-like pattern (Shell Pattern Matching) in the last part of URL (file name).

By default, libcurl uses its internal wildcard matching implementation.

A brief introduction of its syntax follows:

- - ASTERISK

ftp://example.com/some/path/*.txt (for all txt's from the root directory)

? - QUESTION MARK

Question mark matches any (exactly one) character.

ftp://example.com/some/path/photo?.jpeg

[- BRACKET EXPRESSION

The left bracket opens a bracket expression. The question mark and asterisk have no special meaning in a bracket expression. Each bracket expression ends by the right bracket and matches exactly one character.

Some examples follow:

```
[ a-zA-Z0-9 ] or [ f-gF-G ] - character interval
[ abc ] - character enumeration
[ ^abc ] or [ !abc ] - negation
[ :name: ] class expression. Supported classes are alnum,lower, space, alpha, digit, print, upper, blank, graph, xdigit.
[ ] [ -!^ ] - special case - matches only '-', '!', '^', ' ', '!', or '^'. These characters have no special purpose.
[ \[ \] \\ ] - escape syntax. Matches '[', ']' or '\'
```

Using the rules above, a file name pattern can be constructed:

```
ftp://example.com/some/path/ [ a-z [ :upper: ] \\ ] .jpeg
```

This feature is only supported for FTP download.
See also **WILDCARDMATCH** option in CURL manual.

Examples

Enable wildcard match:

```
MBS( "CURL.SetOptionWildCardMatch"; $curl; 1 )
```

Download several files via FTP:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL with wildcard match
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
# Set folder where to put files
Set Variable [ $result; Value:MBS("CURL.SetBatchDestinationPath"; $curl; CURL Test::DestPath) ]
# credentials...
Set Variable [ $result; Value:MBS("CURL.SetOptionPassword"; $curl; CURL Test::Password) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionUsername"; $curl; CURL Test::Name) ]
# enable wildcard match
Set Variable [ $result; Value:MBS("CURL.SetOptionWildCardMatch"; $curl; 1) ]
# download them all
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# check results
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ CURL Test::FileNames; MBS("CURL.GetBatchFileNames"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 CURL.Cleanup

<i>61.380. CURL.SETOPTIONWILDCARDMATCH</i>	2311
• 61.20 CURL.FileInfos	1793
• 61.36 CURL.GetBatchFileNames	1820
• 61.44 CURL.GetDebugAsText	1831
• 61.139 CURL.New	1947
• 61.142 CURL.Perform	1954
• 61.152 CURL.SetBatchDestinationPath	1979
• 61.265 CURL.SetOptionPassword	2145
• 61.370 CURL.SetOptionURL	2288
• 61.378 CURL.SetOptionUsername	2305

Example Databases

- [CURL/FTP/CURL FTP Directory Listing](#)
- [CURL/FTP/CURL FTP Download all Files in Directory](#)

Created 8th July 2015, last changed 19th December 2016.

61.381 CURL.SetOptionXOAuth2Bearer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetOptionXOAuth2Bearer"; curl; Value)

Parameters**curl**

The CURL session handle.

\$curl

Value

The option value.

Result Returns OK or error.

Description

For open authentication used with web services.

No Bearer prefix please.

See also [XOAUTH2_BEARER](#) option in CURL manual.

Examples

Setup OAuth for SMTP with user name, bearer and no password:

```
Set Variable [ $r ; Value: MBS("SendMail.SetSMTPUsername"; $EmailID; "test@gmail.com") ]
```

```
Set Variable [ $r ; Value: MBS("SendMail.SetSMTPPassword"; $EmailID; "" // empty ) ]
```

```
# ...
```

```
Set Variable [ $r ; Value: MBS("CURL.SetOptionXOAuth2Bearer"; $curl; "dXNlcj1zb21...") ]
```

See also

- 61.177 [CURL.SetOptionAutoReferer](#) 2019
- 143.33 [SendMail.SetSMTPPassword](#) 6923
- 143.35 [SendMail.SetSMTPUserName](#) 6927

Example Databases

- [CURL/WebServices/ebay webservice/ebay Webservice](#)

Created 15th April 2018, last changed 3th January 2020.

61.382 CURL.SetProgressEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	6.1	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetProgressEvaluate"; curl; Expression)

Parameters**curl**

The CURL session handle.

\$curl

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the curl reference, so you can pass it to other functions if needed.

See also

- 61.94 *CURL.GetProgressEvaluate* 1887
- 61.95 *CURL.GetProgressFileName* 1888

61.382.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)
- [Evaluate vs. Script Trigger](#)

Created 4th March 2016, last changed 4th April 2018.

61.383 `CURL.SetProgressScript`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	No	No	Yes

MBS("CURL.SetProgressScript"; curl; Filename; ScriptName)

Parameters

curl

The CURL session handle.

\$curl

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

This script is called for asynchronous transfers when percent value changed.

So you can update progress user interface.

Does not work on server due to missing capability to trigger scripts in the plugin SDK with FileMaker Server.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Start a curl session and setup a few scripts:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
```

```
Set Variable [ $r; Value:MBS("CURL.SetFinishedScript"; $curl; Get(Filename); "DownloadFinished") ]
```

```
Set Variable [ $r; Value:MBS("CURL.SetProgressScript"; $curl; Get(Filename); "ProgressScript") ]
```

See also

- 61.96 `CURL.GetProgressPercent` 1889
- 61.97 `CURL.GetProgressScriptName` 1890
- 61.139 `CURL.New` 1947
- 61.143 `CURL.PerformAsync` 1963

61.383. *CURL.SETPROGRESSSCRIPT*

2315

- 61.157 *CURL.SetFinishedScript*

1989

Example Databases

- [CURL/CURL Download in Background](#)
- [CURL/CURL Download with Progress](#)
- [CURL/Download Async](#)

Created 12nd July 2015, last changed 22nd December 2016.

61.384 CURL.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetTag"; curl { ; Value })

Parameters**curl**

The CURL session handle.

\$curl

Value

Optional

The new tag value.

Get(RecordID)

Result Returns OK or error.

Description

The tag value allows you to store any value related to the CURL transfer here like a RecordID in FileMaker.

In the finished script, you can then use the CURL handle passed as parameter to query your tag value.

See also CURL.SetFinishedScript and CURL.PerformAsync.

Examples

Sets tag to be record ID:

```
Set Variable [ $r; Value:MBS("CURL.SetTag"; $curl; Get(RecordID)) ]
```

Test tag:

```
Set Variable [ $curl; Value:MBS( "CURL.New" ) ]
```

```
# Set Tag to some value
```

```
Set Variable [ $r; Value:MBS( "CURL.SetTag"; $curl; "Hello World" ) ]
```

```
# Later read back the value
```

```
Set Variable [ $tag; Value:MBS( "CURL.GetTag"; $curl ) ]
```

See also

- 61.131 CURL.GetTag 1939
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954
- 61.143 CURL.PerformAsync 1963
- 61.157 CURL.SetFinishedScript 1989

Example Databases

- [CURL/Download Async](#)
- [CURL/Email/Batch Emailer](#)

Created 12nd July 2015, last changed 11st May 2016.

61.385 `CURL.SetUpdateProgressDialog`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetUpdateProgressDialog"; curl; value)

Parameters

curl

The CURL session handle.

\$curl

value

0 to disable updates or 1 to enable updates

1

Result Returns "OK" on success.

Description

You can setup a progress dialog with our `ProgressDialog` functions. If you enable updates, the plugin will automatically update the progress bar with percentage of upload or download done.

Does not work with `CURL.PerformInBackground`.

Examples

Enable updates

```
MBS( "CURL.SetUpdateProgressDialog"; $curl; 1 )
```

Use progress dialog with upload or download:

```
# setup progress dialog
Set Variable [ $result; Value:MBS("ProgressDialog.SetCancel"; 0) ]
Set Variable [ $result; Value:MBS("ProgressDialog.SetProgress"; 0) ]
Set Variable [ $result; Value:MBS("ProgressDialog.SetTopText"; "Sending email...") ]
Set Variable [ $result; Value:MBS("ProgressDialog.SetShowButton"; 0) ]
Set Variable [ $result; Value:MBS("ProgressDialog.Show") ]
# Tell plugin to move bar for us automatically.
Set Variable [ $result; Value:MBS("CURL.SetUpdateProgressDialog"; $curl; 1) ]
# Run the transfer
Set Variable [ $r; Value:MBS("CURL.Perform"; $curl) ]
# hide progress dialog
Set Variable [ $result; Value:MBS("ProgressDialog.Hide") ]
```

See also

- 61.142 `CURL.Perform` 1954
- 61.143 `CURL.PerformAsync` 1963

<i>61.385. CURL.SETUPDATEPROGRESSDIALOG</i>	2319
• 61.144 CURL.PerformInBackground	1965
• 63.47 Dialog.SetTop	2389
• 130.14 ProgressDialog.Hide	6508
• 130.18 ProgressDialog.SetCancel	6515
• 130.25 ProgressDialog.SetProgress	6525
• 130.26 ProgressDialog.SetShowButton	6527
• 130.29 ProgressDialog.SetTopText	6533
• 130.30 ProgressDialog.Show	6535

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL Download in Background](#)
- [CURL/CURL Download with Progress](#)
- [CURL/FTP/CURL FTP Upload from file with Progress](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/SFTP/CURL sFTP Upload File](#)

61.385.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr7](#)

Created 18th August 2014, last changed 11st April 2017.

61.386 **CURL.SetupAWS**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetupAWS"; curl; AWSAccessKeyId; AWSSecretAccessKey; Region; Service; Path; Domain; Verb { ; HashedPayload; Headers; QueryParameters })

Parameters

curl

The CURL session handle.

\$curl

AWSAccessKeyId

Your access key for AWS.

AWSSecretAccessKey

Your secret.

Region

The region to use.

"eu-central-1"

Service

The service to use.

"s3"

Path

The path for the URL. Should always start with "/".

"/bucketname/test.jpg"

Domain

Optional the domain to use. By default we just build it from region and service.

"s3.eu-central-1.amazonaws.com" or "s3-ap-southeast-2.amazonaws.com"

Verb

The HTTP Operation to do. Can be POST, PUT, GET or DELETE.

"PUT"

HashedPayload

Optional

The hashed payload. If empty, we calculate it automatically from input data or postfields. This is a lowercase hex SHA256.

Headers

Optional

Extra HTTP headers to include. Here you can specify various headers to include in signature and request.

"x-amz-acl: public-read"

QueryParameters

Optional

Available in MBS FileMaker Plugin 8.4 or newer.

List of query parameters to include. Keys and values must be URL encoded.

"id=123&test=abc"

Result Returns OK or error.

Description

This implements AWS4-HMAC-SHA256 signature for credentials, sets authentication, URL, HTTP Headers and other parameters.

For upload or post, please set input parameters first.

When using `CURL.OpenInputFile` to stream data, you need to calculate the payload hash yourself and pass it here as parameter.

Examples

Download via S3:

```
Set Variable [ $AWSAccessKeyId; Value:"xxx" ]
Set Variable [ $AWSSecretAccessKey; Value:"yyy" ]
Set Variable [ $Region; Value:"eu-central-1" ]
Set Variable [ $Bucketname; Value:"zzz" ]
Set Variable [ $Filename; Value:"test.jpg" ]
Set Variable [ $Verb; Value:"GET" ]
Set Variable [ $Service; Value:"s3" ]
# Keep those empty for default
Set Variable [ $Domain; Value:"" ]
Set Variable [ $HashedPayload; Value:"" ]
# Build a path
Set Variable [ $Path; Value:"/" & $BucketName & "/" & $Filename ]
#
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $result; Value:MBS("CURL.SetupAWS"; $curl; $AWSAccessKeyId; $AWSSecretAccessKey;
$Region; $Service; $Path; $Domain; $Verb) ]
Set Variable [ $result; Value:MBS("CURL.SetDebugWithData"; $curl; 1) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::Image; MBS("CURL.GetResultAsJPEG"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

Upload to S3:

```
Set Variable [ $AWSAccessKeyId; Value:"xxx" ]
Set Variable [ $AWSSecretAccessKey; Value:"xxx" ]
Set Variable [ $Region; Value:"us-east-1" ]
Set Variable [ $Bucketname; Value:"xxx" ]
Set Variable [ $Filename; Value:"test.jpg" ]
Set Variable [ $Service; Value:"s3" ]
# do upload
```

```

Set Variable [ $Verb; Value:"PUT" ]
# make file available to public
Set Variable [ $Headers ; Value: "Content-Type: image/jpeg$X-amz-acl: public-read" ]
# Keep those empty for default
Set Variable [ $Domain; Value:"" ]
Set Variable [ $HashedPayload; Value:"" ]
# Build a path
Set Variable [ $Path; Value:"/" & $BucketName & "/" & $Filename ]
#
Set Variable [ $curl; Value:MBS("CURL.New") ]
# pass in container
Set Variable [ $result; Value:MBS("CURL.SetInputFile"; $curl; CURL Test::Image) ]
#
Set Variable [ $result; Value:MBS("CURL.SetupAWS"; $curl; $AWSAccessKeyId; $AWSSecretAccessKey;
$Region; $Service; $Path; $Domain; $Verb; ""; $Headers) ]
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ CURL Test::resultText; MBS("CURL.GetResultAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]

```

Upload PDF from container:

```

Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetInputPDF"; $curl; Documents::PDFContainer) ]
Set Variable [ $result ; Value: MBS("CURL.SetupAWS"; $curl; $AWSAccessKeyId; $AWSSecretAccessKey;
$Region; $Service; $Path; $Domain; $Verb; ""; $headers) ]
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

Upload file from disk and calculate hash ourselves:

```

# Build a path to file (local) and in AWS
Set Variable [ $Filename ; Value: "test.pdf" ]
Set Variable [ $Path ; Value: "/" & $BucketName & "/PDF/" & $Filename ]
Set Variable [ $localPath ; Value: "/Users/cs/Desktop/license.pdf" ]
# calculate hash for file to upload
Set Variable [ $HashedPayload ; Value: Lower(MBS( "Hash.Digest"; "sha256"; "path"; $localPath; ""; "hex"
)) ]
# upload
Set Variable [ $curl ; Value: MBS("CURL.New") ]
# file content is streamed
Set Variable [ $result ; Value: MBS("CURL.OpenInputFile"; $curl; $localPath) ]
# setup AWS
Set Variable [ $result ; Value: MBS("CURL.SetupAWS"; $curl; $AWSAccessKeyId; $AWSSecretAccessKey;
$Region; $Service; $Path; $Domain; $Verb; $HashedPayload; $headers) ]
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]

```

61.386. *CURL.SETUPAWS*

2323

Set Field [*CURL Test::debug* ; MBS("CURL.GetDebugAsText"; \$curl)]
Set Variable [\$result ; Value: MBS("CURL.Cleanup"; \$curl)]

See also

- 61.9 *CURL.Cleanup* 1772
- 61.44 *CURL.GetDebugAsText* 1831
- 61.117 *CURL.GetResultAsJPEG* 1918
- 61.121 *CURL.GetResultAsText* 1926
- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954
- 61.153 *CURL.SetDebugWithData* 1981
- 61.158 *CURL.SetInputFile* 1991
- 61.161 *CURL.SetInputPDF* 1998
- 86.2 *Hash.Digest* 4787

Example Databases

- [CURL/Amazon S3 Buckets](#)
- [CURL/Amazon S3 Download Picture](#)
- [CURL/Amazon S3 Upload File](#)
- [CURL/Amazon S3 Upload Picture](#)

61.386.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr3](#)
- [MBS FileMaker Plugin v8.1 with 5100 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.1](#)
- [MBS FileMaker Plugin, version 8.1pr3](#)
- [MBS FileMaker Plugin, version 8.0pr7](#)
- [Amazon S3 Upload with Mime Type and Permissions](#)
- [MBS FileMaker Plugin 7.2](#)

Created 22nd March 2017, last changed 21st September 2018.

61.387 **CURL.SetupOAuth**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.3	Yes	Yes	Yes	Yes	Yes

MBS("CURL.SetupOAuth"; ConsumerKey; ConsumerSecret; AccessToken; AccessTokenSecret; HTTPVerb; URL { ; Parameters; Headers; Datas; Nonce; Timestamp; HMAC; Verifier })

Parameters

ConsumerKey

The oauth consumer key.

"xvz1evFS4wEEPTGEFPHBog"

ConsumerSecret

The oauth consumer secret.

"kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw"

AccessToken

The oauth access token.

"370773112-GmHxMAgYyLbNEtIKZeRNFsMKPR9EyMZeS9weJAEb"

AccessTokenSecret

The oauth access token secret. Can be empty if not yet known.

"LswwdoUaIvS8ltyTt5jkrh4J50vUPVVHtR2YPi5kE"

HTTPVerb

The HTTP verb. e.g. POST, PUT, GET, DELETE. Default if empty is GET.

"POST"

URL

The URL to query without parameters.

"https://api.twitter.com/1.1/statuses/update.json"

Parameters

Optional

List of parameters. Can be empty. Please pass list with newline as delimiter. values should be URL encoded already.

"include_entities=true"

Headers

Optional

List of additional header entries to include. Can be empty. We automatically set Authorization header.

"Accept: application/json\$Content-Type: application/json"

Datas

Optional

Data value list for POST.

"status=Hello{others=123}"

Nonce

Optional

The nonce value. If empty, we generate it automatically for you.

```
"kYjzVBB8Y0ZFabxSWbWovY3uYSQ2pTgmZeNu2VS4cg"
```

Timestamp

Optional

The timestamp to use for signature. If empty, we query current timestamp (same as you calling Time.Unix-TimeStamp)

```
1318622958
```

HMAC

Optional

Which HMAC algorithm to use. Can be HMAC-SHA512, HMAC-SHA256 or HMAC-SHA1. Default is HMAC-SHA1 if parameter is missing or empty.

```
"HMAC-SHA1"
```

Verifier

Optional

The verifier. Usually an ID shown on a website after login to the service and authorization of an app.

```
"3456789"
```

Result Returns OK or error.

Description

The plugin calculates the signature and adds headers for authorization to the CURL handle.

Sets URL with parameters and optionally data values for POST.

Examples

Setup OAuth query for Twitter:

```
# global settings (Sample entries from Twitter documentation)
# https://developer.twitter.com/en/docs/basics/authentication/guides/creating-a-signature.html
#
Set Variable [ $ConsumerKey ; Value: "xvz1evFS4wEEPTGEFPHBog" ]
Set Variable [ $ConsumerSecret ; Value: "kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw" ]
Set Variable [ $AccessToken ; Value: "370773112-GmHxMAgYyLbNEtIKZeRNFsMKPR9EyMZeS9weJAEb" ]
]
Set Variable [ $AccessTokenSecret ; Value: "LswwdoUaIvS8ltyTt5jkRh4J50vUPVVHtR2YPi5kE" ]
Set Variable [ $nonce ; Value: "kYjzVBB8Y0ZFabxSWbWovY3uYSQ2pTgmZeNu2VS4cg" ]
Set Variable [ $TimeStamp ; Value: "1318622958" ]
#
Set Variable [ $URL ; Value: "https://api.twitter.com/1.1/statuses/update.json" ]
Set Variable [ $Method ; Value: "POST" ]
#
Set Variable [ $Parameters ; Value: "include_entities=true" ]
Set Variable [ $Headers ; Value: "" ]
Set Variable [ $Data ; Value: "status=Hello% 20Ladies% 20% 2B% 20Gentlemen% 2C% 20a% 20signed% 20OAuth% 20request% 21" ]
#
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetupOAuth"; $curl; $ConsumerKey; $ConsumerSecret; $Ac-
```

```

cessToken; $AccessTokenSecret; $Method; $URL; $Parameters; $Headers; $Data; $Nonce; $Timestamp) ]
# Perform...
#
# signature must be hCtSmYh+iHYCEqBWrE7C7hYmtUk=
#
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

Query magento web service:

```

# globale einstellungen für Zugang
Set Variable [ $ConsumerKey ; Value: "xxx" ]
Set Variable [ $ConsumerSecret ; Value: "xxx" ]
Set Variable [ $AccessToken ; Value: "xxx" ]
Set Variable [ $AccessTokenSecret ; Value: "xxx" ]
#
# Für diesen Request GET mit der Customers URL
Set Variable [ $URL ; Value: "http://xxxx/index.php/rest/V1/customers/" & $customerID ]
Set Variable [ $Method ; Value: "GET" ]
# Optional parameters for filters
Set Variable [ $Parameters ; Value: "abc=hello&test=world" ]
#
# Start new session
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetupOAuth"; $curl; $ConsumerKey; $ConsumerSecret; $Ac-
cessToken; $AccessTokenSecret; $Method; $URL; $Parameters; "") ]
# RUN now
Set Field [ CURL::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL::HTTP Response ; MBS("CURL.GetResponseCode"; $curl) ]
Set Field [ CURL::Customer Info ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

Update customers in magento:

```

Set Variable [ $ConsumerKey ; Value: "xxx" ]
Set Variable [ $ConsumerSecret ; Value: "xxx" ]
Set Variable [ $AccessToken ; Value: "xxx" ]
Set Variable [ $AccessTokenSecret ; Value: "xxx" ]
#
# PUT to this URL
Set Variable [ $URL ; Value: "http://m2.castinfo.im-labor.de/index.php/rest/V1/customers/" & CURL::cus-
tomerID ]
Set Variable [ $Method ; Value: "PUT" ]
Set Variable [ $Content ; Value: MBS( "JSON.AddItemToObject"; " { } "; "customer"; CURL::Customer

```

```

Info) ]
Set Variable [ $Parameters ; Value: "" ]
Set Variable [ $Headers ; Value: "Accept: application/json$Content-Type: application/json" ]
#
#
# Start new session
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $result ; Value: MBS("CURL.SetupOAuth"; $curl; $ConsumerKey; $ConsumerSecret; $Access-Token; $AccessTokenSecret; $Method; $URL; $Parameters; $Headers) ]
Set Variable [ $result ; Value: MBS("CURL.SetDebugWithData"; $curl; 1) ]
Set Variable [ $result ; Value: MBS("CURL.SetOptionPostFields"; $curl; $Content; "UTF8") ]
# RUN now
Set Field [ CURL::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL::HTTP Response ; MBS("CURL.GetResponseCode"; $curl) ]
Set Field [ CURL::Customer Info ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]

```

See also

- 61.9 *CURL.Cleanup* 1772
- 61.44 *CURL.GetDebugAsText* 1831
- 61.111 *CURL.GetResponseCode* 1905
- 61.139 *CURL.New* 1947
- 61.142 *CURL.Perform* 1954
- 61.153 *CURL.SetDebugWithData* 1981
- 61.270 *CURL.SetOptionPost* 2153
- 61.272 *CURL.SetOptionPostFields* 2158
- 100.7 *JSON.AddItemToObject* 5244
- 175.14 *Time.UnixTimeStamp* 8245

Example Databases

- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [CURL/WebServices/Twitter OAuth](#)

61.387.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [MBS FileMaker Plugin, version 8.3pr6](#)
- [MBS FileMaker Plugin, version 8.3pr1](#)
- [CURL function for OAuth](#)

61.387.2 FileMaker Magazin

- [Ausgabe 4/2018, Seite 38](#)

Created 24th May 2018, last changed 28th May 2018.

61.388 CURL.Upkeep

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	8.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Upkeep"; curl)

Parameters**curl**

The CURL session handle.

\$curl

Result Returns OK or error.

Description

Some protocols have "connection upkeep" mechanisms. These mechanisms usually send some traffic on existing connections in order to keep them alive; this can prevent connections from being closed due to overzealous firewalls, for example.

Currently the only protocol with a connection upkeep mechanism is HTTP/2: when the connection upkeep interval is exceeded and CURL.Upkeep is called, an HTTP/2 PING frame is sent on the connection.

This function must be explicitly called in order to perform the upkeep work. The connection upkeep interval is set with CURL.SetOptionUpkeepIntervalMS.

See also

- 61.373 CURL.SetOptionUpkeepIntervalMS 2298

61.388.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr5](#)

Created 31st October 2018, last changed 31st October 2018.

61.389 CURL.UseSystemCertificates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	7.2	Yes	Yes	Yes	No	No

MBS("CURL.UseSystemCertificates"; curl)

Parameters

curl

The CURL session handle.

\$curl

Result Returns number or error.

Description

For macOS and Windows we load the available certificates from keychain or Windows Certificate Store and pass them to CURL. This is better than having no certificates at all.

Even better is normally to provide a cacert.pem file with only the expected certificates.

Returns number of certificates loaded.

Examples

Enable system certificates:

```
Set Variable [ $result; Value:MBS("CURL.UseSystemCertificates"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyPeer"; $curl; 1) ]
Set Variable [ $result; Value:MBS("CURL.SetOptionSSLVerifyHost"; $curl; 2 ) ]
```

Do download with TLS and system certificates:

```
# Start new session
Set Variable [ $curl ; Value: MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result ; Value: MBS("CURL.SetOptionURL"; $curl; CURL Test::URL) ]
# Use system certificate store for TLS
Set Variable [ $result ; Value: MBS( "CURL.UseSystemCertificates"; $curl ) ]
# RUN now
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ CURL Test::Text ; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
# Cleanup
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 CURL.Cleanup 1772
- 61.44 CURL.GetDebugAsText 1831

<i>61.389. CURL.USESYSTEMCERTIFICATES</i>	2331
• 61.121 CURL.GetResultAsText	1926
• 61.139 CURL.New	1947
• 61.142 CURL.Perform	1954
• 61.340 CURL.SetOptionSSLVerifyHost	2251
• 61.341 CURL.SetOptionSSLVerifyPeer	2254
• 61.370 CURL.SetOptionURL	2288

61.389.1 Blog Entries

- [Using system SSL Certificates in CURL](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 19th March 2017, last changed 12nd July 2019.

61.390 CURL.Version

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
61 CURL	2.5	Yes	Yes	Yes	Yes	Yes

MBS("CURL.Version")

Result CURL's version string.

Description

Examples

Show version in dialog:

Show Custom Dialog [MBS("CURL.Version")]

Example Databases

- [CURL/CURL Version and Protocols](#)

Created 18th August 2014, last changed 16th December 2015.

Chapter 62

Debugger

Control the debugger window on macOS.

62.1 Debugger.BringToFront

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
62 Debugger	7.4	Yes	No	No	No	No

MBS("Debugger.BringToFront")

Result Returns OK or error.

Description

Created 14th August 2017, last changed 14th August 2017.

62.2 Debugger.CurrentLineNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
62 Debugger	8.5	Yes	No	No	No	No

MBS("Debugger.CurrentLineNumber")

Result Returns number or error.

Description

This is the line number showing the hash mark and may not be the current line.

If FileMaker does not update the debugger window while running several steps, the line returned is usually the last one it stopped.

Result is -1 if not known. First row is number 1.

62.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)

Created 25th October 2018, last changed 25th October 2018.

62.3 Debugger.GetCallStack

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
62 Debugger	7.4	Yes	No	No	No	No

MBS("Debugger.GetCallStack")

Result Returns list or error.

Description

Usually first entry is current script followed by callers.

Created 14th August 2017, last changed 15th August 2017.

62.4 Debugger.IsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
62 Debugger	7.4	Yes	No	No	No	No

MBS("Debugger.IsVisible")

Result Returns 1, 0 or error.

Description

Returns 1 if visible or 0 if not.

Example Databases

- [CURL/Amazon S3 Upload File](#)

Created 14th August 2017, last changed 14th August 2017.

62.5 Debugger.Title

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
62 Debugger	7.4	Yes	No	No	No	No

MBS("Debugger.Title")

Result Returns text or error.

Description

Created 14th August 2017, last changed 14th August 2017.

62.6 Debugger.Window

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
62 Debugger	7.4	Yes	No	No	No	No

MBS("Debugger.Window")

Result Returns window reference number or error.

Description

Allows to use other commands like Window.Hide.

See also

- 182.41 Window.Hide

8581

Created 14th August 2017, last changed 14th August 2017.

Chapter 63

Dialog

Shows a message dialog with icon and customized buttons.

63.1 Dialog.AddField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	6.4	Yes	No	No	No	No

MBS("Dialog.AddField"; Label { ; Text; Placeholder; Password; TextViewHeight })

Parameters

Label

The label text for the field.

"First Name:"

Text

Optional

The text for the field. This is initial text.

""

Placeholder

Optional

The placeholder text shown when no text is in the field. (not for text view)

"Put your name here"

Password

Optional

Pass 1 to hide text with • or 0 for normal text field.

0

TextViewHeight

Optional

Available in MBS FileMaker Plugin 10.0 or newer.

Pass number of points in height for a textView. If value is >20, we will use a text view instead of a text field.

50

Result Returns index or error.

Description

Please use Dialog.GetFieldText later to query text for field.

Returns the index of the field.

Maximum we allow 10 fields.

Examples

Adds two fields:

```
Set Variable [ $r; Value:MBS("Dialog.AddField"; "Username:"; ""; "username here") ]
```

```
Set Variable [ $r; Value:MBS("Dialog.AddField"; "Password:"; ""; "password here"; 1) ]
```

See also

- [63.9 Dialog.GetFieldText](#) 2348
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

63.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)
- [Add a search and replace command for FileMaker Script Workspace](#)
- [MBS FileMaker Plugin, version 8.1pr5](#)
- [MBS FileMaker Plugin, version 6.4pr8](#)
- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 13th September 2016, last changed 13th December 2019.

63.2 Dialog.ClearFields

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	6.4	Yes	No	No	No	No

MBS("Dialog.ClearFields")

Result Returns OK or error.

Description

See also

- 159.1 SyntaxColoring.AddContextMenuCommand

7553

63.2.1 Blog Entries

- [Add a search and replace command for FileMaker Script Workspace](#)
- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 13th September 2016, last changed 13th September 2016.

63.3 Dialog.CloseSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.2	Yes	No	No	No	No

MBS("Dialog.CloseSheet")

Result Returns OK or error.

Description

This will not call the script for the sheet notification.

Created 18th August 2014, last changed 26th March 2016.

63.4 Dialog.GetAlternateButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetAlternateButton")

Result Returns text or error.

Description

See also

- 63.30 Dialog.SetAlternateButton

2370

Created 18th August 2014, last changed 26th March 2016.

63.5 Dialog.GetButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	7.1	Yes	Yes	No	No	No

MBS("Dialog.GetButton"; Index)

Parameters

Index

The index of the button. From 1 to 10.

4

Result Returns text or error.

Description

See also

- [63.7 Dialog.GetButtons](#) 2346
- [63.10 Dialog.GetIcon](#) 2349
- [63.28 Dialog.Run](#) 2367
- [63.29 Dialog.RunSheet](#) 2369
- [63.31 Dialog.SetButton](#) 2371
- [63.32 Dialog.SetButtons](#) 2373

63.5.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 14th February 2017, last changed 14th February 2017.

63.6 Dialog.GetButtonPressed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	7.2	Yes	Yes	No	No	No

MBS("Dialog.GetButtonPressed")

Result Returns number or error.

Description

Value is negative If not applicable.

Index is 0 for first button.

See also

- [63.28 Dialog.Run](#) 2367
- [63.29 Dialog.RunSheet](#) 2369
- [63.31 Dialog.SetButton](#) 2371

63.6.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr3](#)

Created 6th April 2017, last changed 6th April 2017.

63.7 Dialog.GetButtons

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetButtons")

Result Returns buttons or error.

Description

Possible combinations are: OK, OKCancel, RetryCancel, YesNo, YesNoCancel, AbortRetryIgnore or CancelTryContinue.

See also

- 63.5 Dialog.GetButton 2344
- 63.31 Dialog.SetButton 2371
- 63.32 Dialog.SetButtons 2373

Created 18th August 2014, last changed 26th March 2016.

63.8 Dialog.GetDefaultButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetDefaultButton")

Result Returns text or error.

Description

See also

- 63.33 Dialog.SetDefaultButton

2374

Created 18th August 2014, last changed 26th March 2016.

63.9 Dialog.GetFieldText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	6.4	Yes	No	No	No	No

MBS("Dialog.GetFieldText"; FieldIndex)

Parameters

FieldIndex

The index of the field. Range from 0 to 9.

0

Result Returns field text or error.

Description

Examples

Query text of first field:

```
MBS("Dialog.GetFieldText"; 0)
```

See also

- [63.1 Dialog.AddField](#) 2339
- [63.34 Dialog.SetFieldText](#) 2375
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

63.9.1 Blog Entries

- [Add a search and replace command for FileMaker Script Workspace](#)
- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 13th September 2016, last changed 13th September 2016.

63.10 Dialog.GetIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetIcon" { ; ImageType; Filename })

Parameters

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG. Ignored on Windows: Always returns PNG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

The default image is the application icon (NSApplicationIcon application property).

See also

- 63.5 Dialog.GetButton 2344
- 63.13 Dialog.GetLeft 2352
- 63.15 Dialog.GetMode 2354
- 63.25 Dialog.GetTop 2364
- 63.35 Dialog.SetIcon 2376

Created 18th August 2014, last changed 26th March 2016.

63.11 Dialog.GetInformativeText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetInformativeText")

Result Returns text.

Description

See also

- 63.36 Dialog.SetInformativeText

2377

Created 18th August 2014, last changed 26th March 2016.

63.12 Dialog.GetLastResult

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.2	Yes	Yes	No	No	No

MBS("Dialog.GetLastResult")

Result Returns name of button pressed.

Description

This is useful for sheets to query the status in a script later.

If a timeout occurred, the result is "Timeout".

See also

- 63.29 Dialog.RunSheet

2369

Created 18th August 2014, last changed 26th March 2016.

63.13 Dialog.GetLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	7.3	Yes	Yes	No	No	No

MBS("Dialog.GetLeft")

Result Returns value or error.

Description

Returns -1 if not defined.

See also

- [63.10 Dialog.GetIcon](#) 2349
- [63.15 Dialog.GetMode](#) 2354
- [63.37 Dialog.SetLeft](#) 2378
- [182.22 Window.GetLeft](#) 8562

63.13.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr4](#)

Created 12nd June 2017, last changed 12nd June 2017.

63.14 Dialog.GetMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetMessage")

Result Returns message text.

Description

See also

- 63.38 Dialog.SetMessage 2379
- 77.16 FileDialog.GetMessage 3724
- 77.37 FileDialog.SetMessage 3757

Created 18th August 2014, last changed 18th August 2014.

63.15 Dialog.GetMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetMode")

Result Returns the mode or the error.

Description

See also

- 63.10 Dialog.GetIcon 2349
- 63.13 Dialog.GetLeft 2352
- 63.25 Dialog.GetTop 2364
- 63.39 Dialog.SetMode 2380

Created 18th August 2014, last changed 18th August 2014.

63.16 Dialog.GetOtherButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetOtherButton")

Result Returns title or error.

Description

See also

- 63.40 Dialog.SetOtherButton

2381

Created 18th August 2014, last changed 26th March 2016.

63.17 Dialog.GetSheetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	6.2	Yes	No	No	No	No

MBS("Dialog.GetSheetEvaluate")

Result Returns OK or error.

Description

If you use sheet functions you can setup an evaluation, so the plugin can evaluates this expression when sheet is done.

See also

- [63.18 Dialog.GetSheetFileName](#) 2357
- [63.41 Dialog.SetSheetEvaluate](#) 2382

63.17.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 29th March 2016.

63.18 Dialog.GetSheetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.2	Yes	No	No	No	No

MBS("Dialog.GetSheetFileName")

Result Returns file name.

Description

If you use sheet functions you can setup a file name and script name, so the plugin can call this script when sheet is done.

See also

- 63.17 Dialog.GetSheetEvaluate 2356
- 63.20 Dialog.GetSheetScriptName 2359
- 63.42 Dialog.SetSheetFileName 2383
- 63.43 Dialog.SetSheetScriptName 2384

Created 18th August 2014, last changed 18th August 2014.

63.19 Dialog.GetSheetRunning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.2	Yes	No	No	No	No

MBS("Dialog.GetSheetRunning")

Result Returns status or error.

Description

You can run a loop with script pauses if you want your script to wait. You exit your loop when this function returns not a 1.

Created 18th August 2014, last changed 18th August 2014.

63.20 Dialog.GetSheetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.2	Yes	No	No	No	No

MBS("Dialog.GetSheetScriptName")

Result Returns script name.

Description

If you use sheet functions you can setup a file name and script name, so the plugin can call this script when sheet is done.

See also

- 63.18 Dialog.GetSheetFileName 2357
- 63.42 Dialog.SetSheetFileName 2383
- 63.43 Dialog.SetSheetScriptName 2384

Created 18th August 2014, last changed 18th August 2014.

63.21 Dialog.GetShowsSuppressionButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetShowsSuppressionButton")

Result Returns 0, 1 or error.

Description

Value is 1 when the alert shows a suppression button, 0 otherwise. The default is 0.

See also

- 63.44 Dialog.SetShowsSuppressionButton

2385

Created 18th August 2014, last changed 26th March 2016.

63.22 Dialog.GetSuppressionButtonTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetSuppressionButtonTitle")

Result Returns text or error.

Description

See also

- 63.45 Dialog.SetSuppressionButtonTitle

2386

Created 18th August 2014, last changed 26th March 2016.

63.23 Dialog.GetSuppressionState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetSuppressionState")

Result Returns 0, 1 or error.

Description

So first call Dialog.SetShowsSuppressionButton to set flag to 1. Than you use Dialog.Run to show the dialog and finally after the dialog is done, you can use this function to query result and see if checkbox was set by user.

See also

- [63.28 Dialog.Run](#) 2367
- [63.44 Dialog.SetShowsSuppressionButton](#) 2385

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 26th March 2016.

63.24 Dialog.GetTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	5.2	Yes	Yes	No	No	No

MBS("Dialog.GetTimeout")

Result Returns OK or error.

Description

See also

- 63.46 Dialog.SetTimeout

2387

Created 11st June 2015, last changed 26th March 2016.

63.25 Dialog.GetTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	7.3	Yes	Yes	No	No	No

MBS("Dialog.GetTop")

Result Returns value or error.

Description

Returns -1 if not defined.

See also

- [63.10 Dialog.GetIcon](#) 2349
- [63.15 Dialog.GetMode](#) 2354
- [63.47 Dialog.SetTop](#) 2389

63.25.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr4](#)

Created 12nd June 2017, last changed 12nd June 2017.

63.26 Dialog.GetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.GetWindowTitle")

Result Returns title text.

Description

See also

- 63.48 Dialog.SetWindowTitle 2391
- 77.26 FileDialog.GetWindowTitle 3736
- 77.46 FileDialog.SetWindowTitle 3768
- 104.21 ListDialog.GetWindowTitle 5584
- 104.42 ListDialog.SetWindowTitle 5605

Created 18th August 2014, last changed 18th March 2017.

63.27 Dialog.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.Reset")

Result Returns OK.

Description

See also

- [63.37 Dialog.SetLeft](#) 2378
- [63.47 Dialog.SetTop](#) 2389
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.31 FileDialog.SelectItemDialog](#) 3747
- [80.37 FM.SetSQLBatchMode](#) 4162
- [91.86 ImageCapture.RequestScan](#) 5018
- [130.14 ProgressDialog.Hide](#) 6508
- [130.30 ProgressDialog.Show](#) 6535
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

Example Databases

- [Dialog](#)
- [Utility functions/Idle](#)

63.27.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)
- [Add a search and replace command for FileMaker Script Workspace](#)

Created 18th August 2014, last changed 18th August 2014.

63.28 Dialog.Run

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.Run")

Result Returns OK or error.

Description

Returns which button was pressed.

On Windows may return Abort, Cancel, Continue, Ignore, No, OK, Retry, Try Again or Yes.

On Mac returns text of the buttons clicked.

Version 6.2 adds new capabilities for Windows including custom buttons, timeout, suppression checkbox and icon.

Examples

Show dialog with 7 buttons:

```
Set Variable [ $r; Value: MBS("Dialog.Reset") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 0; "Send All Copies to US") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 1; "Send All Copies to the Informant") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 2; "No Copies are required") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 3; "Reorder copies and send them to Informant") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 4; "Reorder copies and send them to US") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 5; "Reorder and send to US") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 6; "Town Hall Form Only") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 7; "Cancel") ]
Set Variable [ $r; Value: MBS( "Dialog.SetMessage"; "Hello World" ) ]
Set Variable [ $r; Value: MBS( "Dialog.SetWindowTitle"; "test" ) ]
Set Variable [ $r; Value: MBS( "Dialog.Run" ) ]
Set Variable [ $button; Value: MBS( "Dialog.GetButtonPressed" ) ]
```

See also

- [63.5 Dialog.GetButton](#) 2344
- [63.6 Dialog.GetButtonPressed](#) 2345
- [63.23 Dialog.GetSuppressionState](#) 2362
- [63.27 Dialog.Reset](#) 2366
- [63.31 Dialog.SetButton](#) 2371
- [63.38 Dialog.SetMessage](#) 2379
- [63.41 Dialog.SetSheetEvaluate](#) 2382

- 63.42 Dialog.SetSheetFileName 2383
- 63.43 Dialog.SetSheetScriptName 2384
- 63.48 Dialog.SetWindowTitle 2391

Example Databases

- [Dialog](#)
- [Utility functions/Idle](#)

63.28.1 Blog Entries

- [Add a search and replace command for FileMaker Script Workspace](#)
- [MBS FileMaker Plugin, version 9.2pr3](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [MBS Filemaker Plugin, version 4.3pr9](#)

Created 18th August 2014, last changed 26th October 2017.

63.29 Dialog.RunSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.2	Yes	No	No	No	No

MBS("Dialog.RunSheet"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns Ok or error.

Description

Please pass reference to a window to use as parent window.

The script will be triggered later and you can query the button clicked with Dialog.GetButtonPressed or Dialog.GetLastResult. The button clicked is also passed as parameter to the script. Use Dialog.SetSheetFileName and Dialog.SetSheetScriptName to define which script to run.

See also

- 63.5 Dialog.GetButton 2344
- 63.6 Dialog.GetButtonPressed 2345
- 63.12 Dialog.GetLastResult 2351
- 63.41 Dialog.SetSheetEvaluate 2382
- 63.42 Dialog.SetSheetFileName 2383
- 63.43 Dialog.SetSheetScriptName 2384
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 25th November 2019.

63.30 Dialog.SetAlternateButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetAlternateButton"; text)

Parameters

text

The new text.

"Don't Save"

Result Returns OK.

Description

See also

- [63.4 Dialog.GetAlternateButton](#) 2343
- [63.31 Dialog.SetButton](#) 2371
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

Example Databases

- [Dialog](#)
- [Utility functions/Idle](#)

63.30.1 Blog Entries

- [Add a search and replace command for FileMaker Script Workspace](#)

Created 18th August 2014, last changed 26th March 2016.

63.31 Dialog.SetButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	7.1	Yes	Yes	No	No	No

MBS("Dialog.SetButton"; Index; Text)

Parameters

Index

The index of the button. From 1 to 10.

4

Text

The new button label.

Result Returns OK or error.

Description

Index 1 is default button, 2 alternate button, 3 other button and 4 to 10 are even more buttons.

Examples

Set six buttons:

```
Set Variable [ $r; Value:MBS("Dialog.SetDefaultButton"; "1") ]
Set Variable [ $r; Value:MBS("Dialog.SetAlternateButton"; "2") ]
Set Variable [ $r; Value:MBS("Dialog.SetOtherButton"; "3") ]
Set Variable [ $r; Value:MBS("Dialog.SetButton"; 4; "4") ]
Set Variable [ $r; Value:MBS("Dialog.SetButton"; 5; "5") ]
Set Variable [ $r; Value:MBS("Dialog.SetButton"; 6; "6") ]
```

Show dialog with 7 buttons:

```
Set Variable [ $r; Value: MBS("Dialog.Reset") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 0; "Send All Copies to US") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 1; "Send All Copies to the Informant") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 2; "No Copies are required") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 3; "Reorder copies and send them to Informant") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 4; "Reorder copies and send them to US") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 5; "Reorder and send to US") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 6; "Town Hall Form Only") ]
Set Variable [ $r; Value: MBS("Dialog.SetButton"; 7; "Cancel") ]
Set Variable [ $r; Value: MBS( "Dialog.SetMessage"; "Hello World" ) ]
Set Variable [ $r; Value: MBS( "Dialog.SetWindowTitle"; "test" ) ]
Set Variable [ $r; Value: MBS( "Dialog.Run" ) ]
Set Variable [ $button; Value: MBS( "Dialog.GetButtonPressed" ) ]
```

See also

- 63.7 Dialog.GetButtons 2346
- 63.32 Dialog.SetButtons 2373
- 63.33 Dialog.SetDefaultButton 2374
- 63.35 Dialog.SetIcon 2376
- 63.48 Dialog.SetWindowTitle 2391
- 80.3 FM.CompareTables 4069
- 91.86 ImageCapture.RequestScan 5018
- 91.91 ImageCapture.SetParameter 5026
- 130.17 ProgressDialog.SetButtonCaption 6513
- 191.12 XML.Import 9273

63.31.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 14th February 2017, last changed 26th October 2017.

63.32 Dialog.SetButtons

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetButtons"; buttons)

Parameters

buttons

Which buttons to show.

"OK"

Result Returns OK or error.

Description

On Windows only a fixed list of combinations are allowed.

Possible combinations are: OK, OKCancel, RetryCancel, YesNo, YesNoCancel, AbortRetryIgnore or CancelTryContinue.

See also

- [63.5 Dialog.GetButton](#) 2344
- [63.7 Dialog.GetButtons](#) 2346
- [63.31 Dialog.SetButton](#) 2371

Example Databases

- [Dialog](#)

63.32.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)
- [MBS FileMaker Plugin, version 5.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

63.33 Dialog.SetDefaultButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetDefaultButton"; text { ; NoDefault })

Parameters

text

The new default button text.

"OK"

NoDefault

Optional

Whether to not have a default button. Pass 1 to have no default button, so return key will not close dialog.

Default value here is 0 for allowing enter. (Mac only)

0

Result Returns OK or error.

Description

When an empty string, a default localized button title ("OK" in English) is used.

See also

- [63.8 Dialog.GetDefaultButton](#) 2347
- [63.31 Dialog.SetButton](#) 2371
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

Example Databases

- [Dialog](#)
- [Utility functions/Idle](#)

63.33.1 Blog Entries

- [Add a search and replace command for FileMaker Script Workspace](#)

Created 18th August 2014, last changed 27th October 2017.

63.34 Dialog.SetFieldText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	6.4	Yes	No	No	No	No

MBS("Dialog.SetFieldText"; FieldIndex; Text)

Parameters

FieldIndex

The index of the field. Range from 0 to 9.

0

Text

The text for the field.

"Hello"

Result Returns OK or error.

Description

See also

- [63.9 Dialog.GetFieldText](#)

2348

63.34.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 13th September 2016, last changed 13th September 2016.

63.35 Dialog.SetIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetIcon"; Image)

Parameters

Image

The container with image to use as dialog icon. Should be a PNG with transparency.

Result Returns OK or error.

Description

By default, the image is the application icon, accessed through the application bundle's `NSApplicationIcon` property.

So for FileMaker Pro, the icon is the FileMaker icon.

See also

- [63.10 Dialog.GetIcon](#) 2349
- [63.31 Dialog.SetButton](#) 2371
- [63.37 Dialog.SetLeft](#) 2378
- [63.39 Dialog.SetMode](#) 2380
- [63.46 Dialog.SetTimeout](#) 2387
- [63.47 Dialog.SetTop](#) 2389

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 26th March 2016.

63.36 Dialog.SetInformativeText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetInformativeText"; text)

Parameters

text

The new informative text.

"Hello World"

Result Returns OK or error.

Description

This text shows below the message text set with Dialog.SetMessage.

See also

- [63.11 Dialog.GetInformativeText](#) 2350
- [63.38 Dialog.SetMessage](#) 2379
- [63.46 Dialog.SetTimeout](#) 2387
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

Example Databases

- [Dialog](#)

63.36.1 Blog Entries

- [Add a search and replace command for FileMaker Script Workspace](#)

Created 18th August 2014, last changed 14th November 2019.

63.37 Dialog.SetLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	7.3	Yes	Yes	No	No	No

MBS("Dialog.SetLeft"; Value)

Parameters

Value

The new horizontal position.

100

Result Returns OK or error.

Description

Value -1 means not defined.

This is reset by Dialog.Reset function.

You should not need this as dialog is automatically positioned in front of FileMaker window.

Examples

Set to 100 points:

MBS("Dialog.SetLeft"; 100)

See also

- [63.13 Dialog.GetLeft](#) 2352
- [63.27 Dialog.Reset](#) 2366
- [63.35 Dialog.SetIcon](#) 2376
- [63.39 Dialog.SetMode](#) 2380

63.37.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr4](#)

Created 12nd June 2017, last changed 12nd June 2017.

63.38 Dialog.SetMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetMessage"; text)

Parameters

text

The new message text.

"Hello World"

Result Returns OK.

Description

Use Dialog.SetInformativeText to show some text in smaller font size below for information.

See also

- [63.31 Dialog.SetButton](#) 2371
- [63.36 Dialog.SetInformativeText](#) 2377
- [63.46 Dialog.SetTimeout](#) 2387
- [77.19 FileDialog.GetPath](#) 3727
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747
- [77.37 FileDialog.SetMessage](#) 3757
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

Example Databases

- [Dialog](#)
- [Utility functions/Idle](#)

63.38.1 Blog Entries

- [Add a search and replace command for FileMaker Script Workspace](#)

Created 18th August 2014, last changed 14th November 2019.

63.39 Dialog.SetMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetMode"; Mode)

Parameters

Mode

The new mode.

"Warning"

Result Returns OK or error.

Description

Indicates the severity level of the alert.

Allowed modes on Mac: Warning, Information, Critical, Error.

Allowed modes on Windows: Question, Hand, Stop, Error, Information, Warning or Exclamation.

So the cross platform options are Information, Error and Warning.

New in 7.1 for Mac: Note and Stop.

See also

- [63.15 Dialog.GetMode](#) 2354
- [63.35 Dialog.SetIcon](#) 2376
- [63.37 Dialog.SetLeft](#) 2378
- [63.46 Dialog.SetTimeout](#) 2387
- [63.47 Dialog.SetTop](#) 2389

Example Databases

- [Dialog](#)
- [Utility functions/Idle](#)

63.39.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

Created 18th August 2014, last changed 8th March 2017.

63.40 Dialog.SetOtherButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetOtherButton"; text { ; NoCancel })

Parameters

text

The title for the other button.

"Cancel"

NoCancel

Optional

Whether to not allow a cancel button. Pass 1 to have no cancel button, so esc key will not close dialog. Default value here is 0 for allowing cancel. (Windows only)

0

Result Returns OK or error.

Description

See also

- [63.16 Dialog.GetOtherButton](#) 2355
- [63.31 Dialog.SetButton](#) 2371
- [104.32 ListDialog.SetOtherButtonEvaluate](#) 5595
- [104.33 ListDialog.SetOtherButtonLabel](#) 5596

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 6th April 2016.

63.41 Dialog.SetSheetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	6.2	Yes	No	No	No	No

MBS("Dialog.SetSheetEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

If you run a sheet, this expression is evaluated when the sheet is done.

Only used for Dialog.RunSheet.

See also

- [63.17 Dialog.GetSheetEvaluate](#) 2356
- [63.28 Dialog.Run](#) 2367
- [63.29 Dialog.RunSheet](#) 2369
- [63.42 Dialog.SetSheetFileName](#) 2383

63.41.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 25th November 2019.

63.42 Dialog.SetSheetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.2	Yes	No	No	No	No

MBS("Dialog.SetSheetFileName"; filename)

Parameters

filename

The database file name where the script is located.

"test.fmp12"

Result Returns OK or error.

Description

If you run a sheet, this file name is used to locate the script to call when the sheet is done.

Only used for Dialog.RunSheet.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Sets notification script:

```
MBS( "Dialog.SetSheetFileName"; "test.fmp12" )
MBS( "Dialog.SetSheetScriptName"; "SheetDoneScript" )
```

See also

- 63.18 Dialog.GetSheetFileName 2357
- 63.20 Dialog.GetSheetScriptName 2359
- 63.28 Dialog.Run 2367
- 63.29 Dialog.RunSheet 2369
- 63.41 Dialog.SetSheetEvaluate 2382
- 63.43 Dialog.SetSheetScriptName 2384

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 25th November 2019.

63.43 Dialog.SetSheetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.2	Yes	No	No	No	No

MBS("Dialog.SetSheetScriptName"; ScriptName)

Parameters

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

If you run a sheet, this script name is used to locate the script to call when the sheet is done.

Only used for Dialog.RunSheet.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Sets notification script:

```
MBS( "Dialog.SetSheetFileName"; "test.fmp12" )
MBS( "Dialog.SetSheetScriptName"; "SheetDoneScript" )
```

See also

- [63.18 Dialog.GetSheetFileName](#) 2357
- [63.20 Dialog.GetSheetScriptName](#) 2359
- [63.28 Dialog.Run](#) 2367
- [63.29 Dialog.RunSheet](#) 2369
- [63.42 Dialog.SetSheetFileName](#) 2383

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 25th November 2019.

63.44 Dialog.SetShowsSuppressionButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetShowsSuppressionButton"; Value)

Parameters

Value

When 1 the alert includes the suppression checkbox, else 0.

Result Returns OK or error.

Description

See also

- [63.21 Dialog.GetShowsSuppressionButton](#) 2360
- [63.23 Dialog.GetSuppressionState](#) 2362

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 26th March 2016.

63.45 Dialog.SetSuppressionButtonTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetSuppressionButtonTitle"; text)

Parameters

text

The new button label.

"Never show this message again."

Result Returns OK or error.

Description

This allows you to show a checkbox. It doesn't need to be a suppression checkbox, you can use it for other questions to user.

See also

- [63.22 Dialog.GetSuppressionButtonTitle](#) 2361

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 27th March 2016.

63.46 Dialog.SetTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	5.2	Yes	Yes	No	No	No

MBS("Dialog.SetTimeout"; Value)

Parameters

Value

The new timeout value in seconds.

30

Result Returns OK or error.

Description

If a timeout is set the plugin will run a timer to close the window after a given time period. The result of the dialog will be "Abort" and your scripts can continue.

Examples

Run a dialog with timeout:

```
Set Variable [ $r; Value:MBS("Dialog.Reset") ]
Set Variable [ $r; Value:MBS("Dialog.SetIcon"; Dialog::Icon) ]
Set Variable [ $r; Value:MBS("Dialog.SetInformativeText"; Dialog::InformativeText) ]
Set Variable [ $r; Value:MBS("Dialog.SetMessage"; Dialog::Message) ]
Set Variable [ $r; Value:MBS("Dialog.SetMode"; "Warning") ]
Set Variable [ $r; Value:MBS("Dialog.SetWindowTitle"; Dialog::WindowTitle) ]
Set Variable [ $r; Value:MBS("Dialog.SetTimeout"; 20) ]
Set Variable [ $result; Value:MBS("Dialog.Run") ]
Set Field [ Dialog::Result; $result ]
```

See also

- 63.24 Dialog.GetTimeout 2363
- 63.27 Dialog.Reset 2366
- 63.28 Dialog.Run 2367
- 63.35 Dialog.SetIcon 2376
- 63.36 Dialog.SetInformativeText 2377
- 63.38 Dialog.SetMessage 2379
- 63.39 Dialog.SetMode 2380
- 63.48 Dialog.SetWindowTitle 2391

Example Databases

- [Utility functions/Idle](#)

63.46.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr3](#)

Created 11st June 2015, last changed 26th March 2016.

63.47 Dialog.SetTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	7.3	Yes	Yes	No	No	No

MBS("Dialog.SetTop"; Value)

Parameters

Value

The new vertical position.

100

Result Returns OK or error.

Description

Value -1 means not defined.

This is reset by Dialog.Reset function.

You should not need this as dialog is automatically positioned in front of FileMaker window.

Examples

Set to 100 points:

MBS("Dialog.SetTop"; 100)

See also

- 61.385 CURL.SetUpdateProgressDialog 2318
- 63.25 Dialog.GetTop 2364
- 63.27 Dialog.Reset 2366
- 63.39 Dialog.SetMode 2380
- 80.37 FM.SetSQLBatchMode 4162
- 91.86 ImageCapture.RequestScan 5018
- 100.56 JSON.Import 5322
- 130.28 ProgressDialog.SetTopMost 6531
- 130.29 ProgressDialog.SetTopText 6533
- 191.12 XML.Import 9273

63.47.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr4](#)

Created 12nd June 2017, last changed 12nd June 2017.

63.48 Dialog.SetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
63 Dialog	4.1	Yes	Yes	No	No	No

MBS("Dialog.SetWindowTitle"; Title)

Parameters

Title

The new window title.

"Hello"

Result Returns OK or error.

Description

Only Windows operation system uses the window title property.

See also

- 63.26 Dialog.GetWindowTitle 2365
- 63.28 Dialog.Run 2367
- 63.31 Dialog.SetButton 2371
- 63.46 Dialog.SetTimeout 2387
- 77.26 FileDialog.GetWindowTitle 3736
- 77.29 FileDialog.SaveFileDialog 3742
- 77.30 FileDialog.SelectFolderDialog 3744
- 77.31 FileDialog.SelectItemDialog 3747
- 104.21 ListDialog.GetWindowTitle 5584
- 104.42 ListDialog.SetWindowTitle 5605

Example Databases

- [Dialog](#)

Created 18th August 2014, last changed 18th March 2017.

Chapter 64

DialogModifications

Modifications for built in FileMaker dialogs.

64.1 DialogModifications.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
64 DialogModifications	4.3	Yes	No	No	No	No

```
MBS( "DialogModifications.Clear" )
```

Result Returns OK.

Description

Examples

Install with setup and clear:

```
MBS( "DialogModifications.Install" )  
MBS( "DialogModifications.Clear" )  
MBS( "DialogModifications.Set"; "Import", "Import of Contacts" )  
# do something here which shows dialog  
MBS( "DialogModifications.Clear" )
```

See also

- [64.2 DialogModifications.Install](#) 2394
- [64.3 DialogModifications.Set](#) 2395

Created 18th August 2014, last changed 18th August 2014.

64.2 DialogModifications.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
64 DialogModifications	4.3	Yes	No	No	No	No

MBS("DialogModifications.Install")

Result Returns OK or error.

Description

Those functions are to rename text in a FileMaker dialogs. So before you run an operation which shows one of the built in dialogs, you can install, clear and set the items to replace. After the dialog finished you should call DialogModifications.Clear function. This makes sure you don't replace text when you don't expect this. See also DialogModifications.Uninstall.

Examples

Install with setup:

MBS("DialogModifications.Install")

MBS("DialogModifications.Clear")

MBS("DialogModifications.Set"; "Import", "Import of Contacts")

See also

- 64.1 DialogModifications.Clear 2393
- 64.3 DialogModifications.Set 2395
- 64.4 DialogModifications.Uninstall 2396

Created 18th August 2014, last changed 18th August 2014.

64.3 DialogModifications.Set

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
64 DialogModifications	4.3	Yes	No	No	No	No

MBS("DialogModifications.Set"; Key; Value)

Parameters

Key

The item to look for. Text must match exactly.

"Sichern"

Value

The new text to use.

"Daten sichern"

Result Returns OK.

Description

See also DialogModifications.Clear.

Be aware that match is exactly byte per byte, so different variants of quotes like " and " or " can make a big difference.

Also you may need to provide several variants of text to cover all variants in different FileMaker localizations or versions.

Examples

Replaces a text:

MBS("DialogModifications.Set"; "Wollen Sie den GESAMTEN Datensatz löschen?"; "Wollen Sie den Kontakt löschen?")

See also

- [64.1 DialogModifications.Clear](#) 2393
- [64.2 DialogModifications.Install](#) 2394

64.3.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 18th August 2014, last changed 10th September 2014.

64.4 DialogModifications.Uninstall

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
64 DialogModifications	4.3	Yes	No	No	No	No

MBS("DialogModifications.Uninstall")

Result Returns OK.

Description

You should call this when you no longer need the replacements.
See also DialogModifications.Install.

See also

- 64.2 DialogModifications.Install

2394

Created 18th August 2014, last changed 18th August 2014.

Chapter 65

Dictionary

Key/Value map to store values. An associative array preserving data types.

65.1 Dictionary.AddSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.AddSQL"; DictionaryRef; SQL Statement; FileName { ; Params })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.
\$dic

SQL Statement

SQL Statement as a Text string

FileName

The target database name. Can be empty to not limit query to one database.
""

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns number of items added or error.

Description

From the result set, the first field is used as key and second field if exists as value.

Returns error in case of SQL error with error message.

You don't need to use ORDER BY in SQL as the order in a dictionary is defined by storage which for you means unordered.

This function is currently only supported for FileMaker 11 and newer. If you need it for older versions, please contact us.

Examples

Test function:

```
# create dictionary
$dic = MBS("Dictionary.Create")
# add keys and values via SQL
MBS("Dictionary.AddSQL"; $dic; "SELECT TextField, NumberField FROM \"Test Table\"")
# query keys
$keys = MBS("Dictionary.Keys"; $dic)
# and values
$values = MBS("Dictionary.ValueForKey"; $dic; "Hello")
# free
MBS("Dictionary.Release"; $dic )
```

Add zip codes for three countries from 3 databases to dictionary:

```
MBS( "Dictionary.AddSQL"; $dic; "SELECT ('DE' + \"_5_stellige_PLZ\"),Ort FROM \"PLZ Deutschland Konvertiert\" "; "PLZ Deutschland" ) +
MBS( "Dictionary.AddSQL"; $dic; "SELECT ('AT' + \"_4_stellige_PLZ\"),Ort FROM \"PLZ Österreich Konvertiert\" "; "PLZ Österreich" ) +
MBS( "Dictionary.AddSQL"; $dic; "SELECT ('CH' + \"_4_stellige_PLZ\"),Ort FROM \"PLZ Schweiz Konvertiert\" "; "PLZ Schweiz" )
```

See also

- 80.1 Dictionary.AddSQLRecord 4065
- 80.2 Dictionary.AddSQLRecords 4067
- 65.7 Dictionary.Create 2407
- 65.12 Dictionary.Keys 2415
- 65.14 Dictionary.Release 2417
- 100.1 Dictionary.ToJSON 5231
- 65.24 Dictionary.ValueForKey 2433

65.1.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 12nd March 2015, last changed 13th February 2017.

65.2 Dictionary.AddSQLRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary 80 FMSQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.AddSQLRecord"; DictionaryRef; Keys; SQL Statement; FileName { ; Params })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Keys

The list of keys for the dictionary. Could be the same as the field list.

"FirstName\$LastName\$Company"

SQL Statement

SQL Statement as a Text string

FileName

The target database name. Can be empty to not limit query to one database.

""

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

From the result set, the first record is used for values and given key list for the keys.

Returns error in case of SQL error with error message.

As we only use first record, you can use FETCH FIRST 1 ROWS ONLY in the SQL command to only query first record.

This function is currently only supported for FileMaker 11 and newer. If you need it for older versions, please contact us.

Examples

Query record and get JSON:

```
Set Variable [ $dic ; Value: MBS("Dictionary.Create") ]
Set Variable [ $r ; Value: MBS( "Dictionary.AddSQLRecord"; $dic; "Vorname$Nachname$Firma"; "SE-
LECT Vorname, Nachname, Firma FROM Kontakte"; "Kontakte" ) ]
Set Variable [ $json ; Value: MBS( "Dictionary.ToJSON"; $dic ) ]
Set Variable [ $r ; Value: MBS( "Dictionary.Release"; $dic ) ]
```

65.2. *DICTIONARY.ADDSQLRECORD* 2401

See also

- 65.1 Dictionary.AddSQL 2397
- 80.2 Dictionary.AddSQLRecords 4067
- 65.7 Dictionary.Create 2407
- 65.14 Dictionary.Release 2417
- 100.1 Dictionary.ToJSON 5231

65.2.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr8](#)

Created 21st September 2017, last changed 20th February 2018.

65.3 Dictionary.AddSQLRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary 80 FMSQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.AddSQLRecords"; DictionaryRef; Keys; SQL Statement; FileName { ; Params })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.
\$dic

Keys

The list of keys for the dictionary. Could be the same as the field list.
"FirstName\$LastName\$Company"

SQL Statement

SQL Statement as a Text string

FileName

The target database name. Can be empty to not limit query to one database.
""

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

From the result set, the records are used for values and given key list for the keys.
If you have multiple records, you get all values collected per field in a list.
Returns error in case of SQL error with error message.

This function is currently only supported for FileMaker 11 and newer. If you need it for older versions, please contact us.

Examples

Query record and get JSON:

```
Set Variable [ $dic ; Value: MBS("Dictionary.Create") ]
Set Variable [ $r ; Value: MBS( "Dictionary.AddSQLRecords"; $dic; "Vorname$Nachname$Firma"; "SELECT Vorname, Nachname, Firma FROM Kontakte"; "Kontakte" ) ]
Set Variable [ $json ; Value: MBS( "Dictionary.ToJSON"; $dic ) ]
Set Variable [ $r ; Value: MBS( "Dictionary.Release"; $dic ) ]
```

See also

<i>65.3. DICTIONARY.ADDSQLRECORDS</i>	2403
• 65.1 Dictionary.AddSQL	2397
• 80.1 Dictionary.AddSQLRecord	4065
• 65.7 Dictionary.Create	2407
• 65.14 Dictionary.Release	2417
• 100.1 Dictionary.ToJSON	5231

Created 23th September 2017, last changed 20th February 2018.

65.4 Dictionary.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Clear"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Result Returns OK or error.

Description

Removes all keys and values.

See also

- 65.5 Dictionary.Clone 2405
- 65.6 Dictionary.Count 2406
- 65.7 Dictionary.Create 2407
- 65.12 Dictionary.Keys 2415
- 65.14 Dictionary.Release 2417

Created 12nd December 2014, last changed 12nd December 2014.

65.5 Dictionary.Clone

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Clone"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Result Returns reference number or error.

Description

A new reference number with a new dictionary behind and all keys and values copied.

See also

- 65.4 Dictionary.Clear 2404
- 65.6 Dictionary.Count 2406
- 65.7 Dictionary.Create 2407

65.5.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 5th March 2016, last changed 5th March 2016.

65.6 Dictionary.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Count"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Result Returns number or error.

Description

Examples

Query count of a dictionary:

```
$count = MBS("Dictionary.Count"; $Param)
```

See also

- 65.4 Dictionary.Clear 2404
- 65.5 Dictionary.Clone 2405
- 65.7 Dictionary.Create 2407
- 65.11 Dictionary.KeyAtIndex 2414
- 65.13 Dictionary.List 2416
- 65.22 Dictionary.ToText 2429
- 191.1 Dictionary.ToXML 9253

Example Databases

- [Dictionary/Pass Parameters with Dictionary](#)

Created 12nd December 2014, last changed 12nd December 2014.

65.7 Dictionary.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Create" { ; Key; Value })

Parameters

Key

Optional

Optional, a key.

Value

Optional

Optional, a value.

Result Returns dictionary reference number or error.

Description

Dictionaries are hash maps, so lookup is very fast (often faster than search in your FileMaker database). You can use them for storing parameters or lookup tables.

Optionally you can pass keys and values as parameters to this function.

If you looked for assoziative arrays, you are right here.

Examples

Build a dictionary in a calculation:

```
Let ( [
/*
Create new Dictionary
/
param = MBS( "Dictionary.Create" );

/*
Fill in parameters
/
r1 = MBS( "Dictionary.SetValueForKey"; param; "text"; Pass Parameters with Dictionary::TextField );
r2 = MBS( "Dictionary.SetValueForKey"; param; "number"; Pass Parameters with Dictionary::Number-
Field);
r3 = MBS( "Dictionary.SetValueForKey"; param; "date"; Pass Parameters with Dictionary::DateField);
r4 = MBS( "Dictionary.SetValueForKey"; param; "time"; Pass Parameters with Dictionary::TimeField);
r5 = MBS( "Dictionary.SetValueForKey"; param; "timestamp"; Pass Parameters with Dictionary::TimeS-
tampField);
r6 = MBS( "Dictionary.SetValueForKey"; param; "container"; Pass Parameters with Dictionary::Contain-
erField)
/*
```

```
return dictionary
/
]; param )
```

Build a dictionary with given Keys and Values:

```
MBS("Dictionary.Create"; "FirstName"; $FirstName; "LastName"; $LastName; "City"; $City; "Phone";
$Phone; "Email"; $Email)
```

Test script to look for duplicate UUIDs:

```
Set Variable [ $dic ; Value: MBS( "Dictionary.Create" ) ]
Loop
Set Variable [ $uuid ; Value: Get(UUID) ]
If [ MBS("Dictionary.HasKey"; $dic; $uuid) ]
Show Custom Dialog [ "Duplicate!" ; $uuid ]
Exit Loop If [ 1 ]
End If
Set Variable [ $r ; Value: MBS( "Dictionary.SetValueForKey"; $dic; $uuid; $uuid ) ]
End Loop
Set Field [ test::test ; MBS( "Dictionary.Keys"; $dic ) ]
Set Variable [ $r ; Value: MBS( "Dictionary.Release"; $dic ) ]
```

See also

- 65.1 Dictionary.AddSQL 2397
- 80.2 Dictionary.AddSQLRecords 4067
- 65.5 Dictionary.Clone 2405
- 65.8 Dictionary.CreateNamed 2410
- 65.16 Dictionary.Serialize 2419
- 65.18 Dictionary.SetQuickList 2422
- 65.19 Dictionary.SetValueForKey 2423
- 65.20 Dictionary.SetVariables 2426
- 100.1 Dictionary.ToJSON 5231
- 65.26 Dictionary.Values 2436

Example Databases

- [Dictionary/Dictionary Container Test](#)
- [Dictionary/Pass Parameters with Dictionary 2](#)
- [Dictionary/Pass Parameters with Dictionary](#)

65.7.1 Blog Entries

- [MBS FileMaker Plugin 5.1 for OS X/Windows](#)
- [Passing parameters via dictionary functions](#)

Created 12nd December 2014, last changed 15th June 2017.

65.8 Dictionary.CreateNamed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	8.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.CreateNamed"; KeyRef { ; Key; Value })

Parameters

KeyRef

The desired key reference.

"IDs"

Key

Optional

Optional, a key.

Value

Optional

Optional, a value.

Result Returns dictionary reference or error.

Description

Dictionaries are hash maps, so lookup is very fast (often faster than search in your FileMaker database). You can use them for storing parameters or lookup tables.

Optionally you can pass keys and values as parameters to this function.

If you looked for assoziative arrays, you are right here.

Examples

Creates new dictionary with reference number "IDs":

```
MBS("Dictionary.CreateNamed"; "IDs")
```

See also

- 65.7 Dictionary.Create

2407

65.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr6](#)

Created 27th February 2018, last changed 27th February 2018.

65.9 Dictionary.Deserialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Deserialize"; Text)

Parameters

Text

The serialized data as text.

Result Returns dictionary reference number or error.

Description

Examples

Create a dictionary and serialize it:

```
Set Variable [ $list; Value:MBS( "Dictionary.Create"; "Hello"; "World"; "1234"; "Just a test!" ) ]
Set Variable [ $text; Value:MBS("Dictionary.Serialize"; $list) ]
Set Variable [ $secondList; Value:MBS("Dictionary.Deserialize"; $text) ]
Show Custom Dialog [ "List"; "Encoded: " & $text & $& $& "Decoded Keys: " & MBS("Dictionary.Keys";
$secondList) & $& $& "D... ]
Set Variable [ $r; Value:MBS("Dictionary.Release"; $list) ]
Set Variable [ $r; Value:MBS("Dictionary.Release"; $secondList) ]
```

Serialize and unserialize with date and time:

```
# Create Dictionary
Set Variable [ $dict; Value:MBS ( "Dictionary.Create" ) ]
# put date and time inside:
Set Variable [ $r; Value:MBS ( "Dictionary.SetValueForKey"; $dict; "theTime"; Get ( CurrentTime ) ) ]
Set Variable [ $r; Value:MBS ( "Dictionary.SetValueForKey"; $dict; "theDate"; Get ( CurrentDate ) ) ]
# Serialize this
Set Variable [ $dictEncoded; Value:MBS ( "Dictionary.Serialize"; $dict ) ]
# Free dictionary
Set Variable [ $r; Value:MBS ( "Dictionary.Release"; $dict ) ]
# Unpack it:
Set Variable [ $newDict; Value:MBS ( "Dictionary.Deserialize"; $dictEncoded ) ]
# and get values
Set Variable [ $TheTime; Value: MBS ( "Dictionary.ValueForKey"; $newDict; "theTime" ) ]
Set Variable [ $TheDate; Value: MBS ( "Dictionary.ValueForKey"; $newDict; "theDate" ) ]
Show Custom Dialog [ $TheTime & " " & $TheDate ]
Set Variable [ $r; Value:MBS ( "Dictionary.Release"; $newDict ) ]
```

See also

- 65.7 Dictionary.Create 2407
- 65.12 Dictionary.Keys 2415
- 65.14 Dictionary.Release 2417
- 65.16 Dictionary.Serialize 2419
- 65.19 Dictionary.SetValueForKey 2423
- 65.24 Dictionary.ValueForKey 2433

Example Databases

- [Dictionary/Dictionary Container Test](#)

65.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr5](#)
- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 6th July 2015, last changed 22nd February 2016.

65.10 Dictionary.HasKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.HasKey"; DictionaryRef; Key)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Key

The key to use. Keys are case sensitive. Also keys must be text and should be single line.

"FirstName"

Result Returns 1, 0 or error.

Description

Examples

Checks if some values are there:

```
$hasText = MBS("Dictionary.HasKey"; $Param; "text")
```

```
$hasFun = MBS("Dictionary.HasKey"; $Param; "fun")
```

See also

- [65.7 Dictionary.Create](#) 2407
- [65.12 Dictionary.Keys](#) 2415
- [65.26 Dictionary.Values](#) 2436

Example Databases

- [Dictionary/Pass Parameters with Dictionary](#)

Created 12nd December 2014, last changed 12nd December 2014.

65.11 Dictionary.KeyAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.KeyAtIndex"; DictionaryRef; Index)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Index

The index for the key. Range from 0 to Dictionary.Count-1.

0

Result Returns OK or error.

Description

Index starts at zero and ends at Dictionary.Count-1.

Examples

Query first key:

```
MBS("Dictionary.KeyAtIndex"; $Param; 0)
```

See also

- [65.6 Dictionary.Count](#) 2406
- [65.7 Dictionary.Create](#) 2407

Example Databases

- [Dictionary/Pass Parameters with Dictionary](#)

Created 12nd December 2014, last changed 12nd December 2014.

65.12 Dictionary.Keys

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Keys"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Result Returns list or error.

Description

The order is random and defined by how the dictionary internally stores values.

See also Dictionary.Values.

Examples

Query list of keys:

```
$keys = MBS("Dictionary.Keys"; $Param)
```

See also

- [65.1 Dictionary.AddSQL](#) 2397
- [65.4 Dictionary.Clear](#) 2404
- [65.7 Dictionary.Create](#) 2407
- [65.9 Dictionary.Deserialize](#) 2411
- [65.10 Dictionary.HasKey](#) 2413
- [65.13 Dictionary.List](#) 2416
- [65.16 Dictionary.Serialize](#) 2419
- [65.26 Dictionary.Values](#) 2436

Example Databases

- [Dictionary/Pass Parameters with Dictionary](#)

Created 12nd December 2014, last changed 10th September 2015.

65.13 Dictionary.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.List")

Result Returns list or error.

Description

This helps debugging, especially finding scripts which do not release their objects properly.

See also

- [65.6 Dictionary.Count](#) 2406
- [65.12 Dictionary.Keys](#) 2415
- [65.17 Dictionary.SetList](#) 2421

65.13.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr7](#)

Created 16th July 2015, last changed 21st September 2015.

65.14 Dictionary.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Release"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.
\$dic

Result Returns OK or error.

Description

See also

- 65.1 Dictionary.AddSQL 2397
- 80.1 Dictionary.AddSQLRecord 4065
- 80.2 Dictionary.AddSQLRecords 4067
- 65.4 Dictionary.Clear 2404
- 65.7 Dictionary.Create 2407
- 65.16 Dictionary.Serialize 2419
- 100.1 Dictionary.ToJSON 5231
- 65.22 Dictionary.ToText 2429
- 65.24 Dictionary.ValueForKey 2433
- 65.26 Dictionary.Values 2436

Example Databases

- [Dictionary/Dictionary Container Test](#)
- [Dictionary/Pass Parameters with Dictionary 2](#)
- [Dictionary/Pass Parameters with Dictionary](#)

65.14.1 Blog Entries

- [Passing parameters via dictionary functions](#)

Created 12nd December 2014, last changed 12nd December 2014.

65.15 Dictionary.RemoveKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.RemoveKey"; DictionaryRef; Key)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.
\$dic

Key

The key to use. Keys are case sensitive.
"FirstName"

Result Returns OK or error.

Description

See also

- 65.7 Dictionary.Create

2407

Created 12nd December 2014, last changed 12nd December 2014.

65.16 Dictionary.Serialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Serialize"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Result Returns text or error.

Description

The dictionary content is stored in a base64 encoded string which the plugin function Dictionary.Deserialize can read.

Does not work with external containers.

Using this function allows to store a dictionary in a text field or transmit it with Socket functions, SerialPort functions or by writing it to a file.

Examples

Create a dictionary and serialize it:

```
Set Variable [ $list; Value:MBS( "Dictionary.Create"; "Hello"; "World"; "1234"; "Just a test!" ) ]
Set Variable [ $text; Value:MBS("Dictionary.Serialize"; $list) ]
Set Variable [ $secondList; Value:MBS("Dictionary.Deserialize"; $text) ]
Show Custom Dialog [ "List"; "Encoded: " & $text & $& $& "Decoded Keys: " & MBS("Dictionary.Keys";
$secondList) & $& $& "D... ]
Set Variable [ $r; Value:MBS("Dictionary.Release"; $list) ]
Set Variable [ $r; Value:MBS("Dictionary.Release"; $secondList) ]
```

Serialize and unserialize with date and time:

```
# Create Dictionary
Set Variable [ $dict; Value:MBS ( "Dictionary.Create" ) ]
# put date and time inside:
Set Variable [ $r; Value:MBS ( "Dictionary.SetValueForKey"; $dict; "theTime"; Get ( CurrentTime ) ) ]
Set Variable [ $r; Value:MBS ( "Dictionary.SetValueForKey"; $dict; "theDate"; Get ( CurrentDate ) ) ]
# Serialize this
Set Variable [ $dictEncoded; Value:MBS ( "Dictionary.Serialize"; $dict ) ]
# Free dictionary
Set Variable [ $r; Value:MBS ( "Dictionary.Release"; $dict ) ]
# Unpack it:
Set Variable [ $newDict; Value:MBS ( "Dictionary.Deserialize"; $dictEncoded ) ]
# and get values
Set Variable [ $TheTime; Value: MBS ( "Dictionary.ValueForKey"; $newDict; "theTime" ) ]
Set Variable [ $TheDate; Value: MBS ( "Dictionary.ValueForKey"; $newDict; "theDate" ) ]
```

```
Show Custom Dialog [ $TheTime & " " & $TheDate ]  
Set Variable [ $r; Value:MBS ( "Dictionary.Release"; $newDict ) ]
```

See also

- [65.7 Dictionary.Create](#) 2407
- [65.9 Dictionary.Deserialize](#) 2411
- [65.12 Dictionary.Keys](#) 2415
- [65.14 Dictionary.Release](#) 2417
- [65.19 Dictionary.SetValueForKey](#) 2423
- [65.24 Dictionary.ValueForKey](#) 2433

Example Databases

- [Dictionary/Dictionary Container Test](#)

65.16.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)
- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 6th July 2015, last changed 22nd February 2016.

65.17 Dictionary.SetList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	6.2	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.SetList"; DictionaryRef; List { ; Delimiter })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

List

The list of values with delimiter.

"Hello=World\$Other=Value"

Delimiter

Optional

The delimiter for the value list. Default is tab key.

"="

Result Returns OK or error.

Description

The list contains key=value entries with a configurable delimiter.

See also

- 65.7 Dictionary.Create 2407
- 65.13 Dictionary.List 2416
- 65.14 Dictionary.Release 2417
- 65.18 Dictionary.SetQuickList 2422

65.17.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr7](#)

Created 2nd May 2016, last changed 2nd May 2016.

65.18 Dictionary.SetQuickList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	7.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.SetQuickList"; DictionaryRef; ListRef { ; Delimiter })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

ListRef

The reference to the list returned from QuickList.New function.

\$List

Delimiter

Optional

The delimiter for the value list. Default is tab key.

"="

Result Returns OK or error.

Description

The list contains key=value entries with a configurable delimiter.

See also

- 65.7 Dictionary.Create 2407
- 65.17 Dictionary.SetList 2421
- 103.69 QuickList.New 5521

Created 11st March 2017, last changed 11st March 2017.

65.19 Dictionary.SetValueForKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.SetValueForKey"; DictionaryRef; Key; Value)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Key

The key to use. Keys are case sensitive. Also keys must be text and should be single line.

"FirstName"

Value

The new value. Supported data types include empty, text, number, boolean, container, time, timestamp and date.

"Hello World"

Result Returns OK or error.

Description

Data type is preserved, so you can even store containers in the dictionary.

Keys should be text and are handled case sensitive.

Examples

Build a dictionary in a calculation:

```
Let ( [
/*
Create new Dictionary
/
param = MBS( "Dictionary.Create" );

/*
Fill in parameters
/
r1 = MBS( "Dictionary.SetValueForKey"; param; "text"; Pass Parameters with Dictionary::TextField );
r2 = MBS( "Dictionary.SetValueForKey"; param; "number"; Pass Parameters with Dictionary::Number-
Field);
r3 = MBS( "Dictionary.SetValueForKey"; param; "date"; Pass Parameters with Dictionary::DateField);
r4 = MBS( "Dictionary.SetValueForKey"; param; "time"; Pass Parameters with Dictionary::TimeField);
r5 = MBS( "Dictionary.SetValueForKey"; param; "timestamp"; Pass Parameters with Dictionary::TimeS-
tampField);
r6 = MBS( "Dictionary.SetValueForKey"; param; "container"; Pass Parameters with Dictionary::Contain-
erField)
/*
```

```
return dictionary
/
]; param )
```

Serialize and unserialize with date and time:

```
# Create Dictionary
Set Variable [ $dict; Value:MBS ( "Dictionary.Create" ) ]
# put date and time inside:
Set Variable [ $r; Value:MBS ( "Dictionary.SetValueForKey"; $dict; "theTime"; Get ( CurrentTime ) ) ]
Set Variable [ $r; Value:MBS ( "Dictionary.SetValueForKey"; $dict; "theDate"; Get ( CurrentDate ) ) ]
# Serialize this
Set Variable [ $dictEncoded; Value:MBS ( "Dictionary.Serialize"; $dict ) ]
# Free dictionary
Set Variable [ $r; Value:MBS ( "Dictionary.Release"; $dict ) ]
# Unpack it:
Set Variable [ $newDict; Value:MBS ( "Dictionary.Deserialize"; $dictEncoded ) ]
# and get values
Set Variable [ $TheTime; Value: MBS ( "Dictionary.ValueForKey"; $newDict; "theTime" ) ]
Set Variable [ $TheDate; Value: MBS ( "Dictionary.ValueForKey"; $newDict; "theDate" ) ]
Show Custom Dialog [ $TheTime & " " & $TheDate ]
Set Variable [ $r; Value:MBS ( "Dictionary.Release"; $newDict ) ]
```

See also

- 65.7 Dictionary.Create 2407
- 65.9 Dictionary.Deserialize 2411
- 65.14 Dictionary.Release 2417
- 65.16 Dictionary.Serialize 2419
- 100.1 Dictionary.ToJSON 5231
- 65.22 Dictionary.ToText 2429
- 191.1 Dictionary.ToXML 9253
- 65.24 Dictionary.ValueForKey 2433
- 65.25 Dictionary.ValueTypeForKey 2435

Example Databases

- [Dictionary/Dictionary Container Test](#)
- [Dictionary/Pass Parameters with Dictionary](#)

65.19.1 Blog Entries

- [Passing parameters via dictionary functions](#)

Created 12nd December 2014, last changed 22nd February 2016.

65.20 Dictionary.SetVariables

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.SetVariables"; DictionaryRef { ; Options })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Options

Optional

Whether to create local or global variables. Pass 2 to create global variables (\$\$) Pass 0 to create local variables (\$), default.

Add 1 to free the dictionary after doing this.

1+2

Result Returns OK or error.

Description

The plugin evaluates a Let statement which defines variables in current script with the content of the dictionary. This is very useful for passing arguments to a script (see blog post & guide)

This does not work, if passing Directory reference number from client to server or back!

See also

- [65.7 Dictionary.Create](#) 2407

Example Databases

- [Dictionary/Pass Parameters with Dictionary 2](#)

65.20.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr5](#)
- [Passing parameters via dictionary functions](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 14th March 2015, last changed 8th May 2017.

65.21 Dictionary.ToJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary 100 JSON	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.ToJSON"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Result Returns OK or error.

Description

This is useful for passing data from dictionary to some javascript.

Examples

Test exporting dictionaries:

```
#
#
# Create new Dictionary
#
Set Variable [ $param; Value:MBS( "Dictionary.Create" ) ]
#
# Fill in values
#
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "text"; Pass Parameters with Dictionary::TextField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "number"; Pass Parameters with Dictionary::NumberField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "date"; Pass Parameters with Dictionary::DateField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "time"; Pass Parameters with Dictionary::TimeField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "timestamp"; Pass Parameters with Dictionary::TimeStampField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "container"; Pass Parameters with Dictionary::ContainerField ) ]
#
# Call save xml, json and text
#
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToXML"; $param; 1); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.xml"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToText"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.txt"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToJSON"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.json"); "UTF8" ) ]
```

```
dPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.json.txt"); "UTF8") ]  
#  
# free memory  
#  
Set Variable [ $r; Value:MBS("Dictionary.Release"; $param) ]
```

See also

- 65.1 Dictionary.AddSQL 2397
- 80.1 Dictionary.AddSQLRecord 4065
- 80.2 Dictionary.AddSQLRecords 4067
- 65.7 Dictionary.Create 2407
- 65.14 Dictionary.Release 2417
- 65.22 Dictionary.ToText 2429
- 191.1 Dictionary.ToXML 9253
- 81.8 Folders.UserDesktop 4177
- 121.1 Path.AddPathComponent 6135
- 164.68 Text.WriteTextFile 7871

65.21.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 25th February 2016, last changed 20th February 2018.

65.22 Dictionary.ToText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.ToText"; DictionaryRef { ; Column Delimiter; Row Delimiter })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Column Delimiter

Optional

The delimiter between key and value. Should not be part of content. By default we use tab key.

Row Delimiter

Optional

The delimiter between rows. By default we use return key (char 13)

Result Returns OK or error.

Description

Containers are just added as text and delimiters inside a text value can cause trouble.

Examples

Test exporting dictionaries:

```
#
#
# Create new Dictionary
#
Set Variable [ $param; Value:MBS( "Dictionary.Create" ) ]
#
# Fill in values
#
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "text"; Pass Parameters with Dictionary::TextField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "number"; Pass Parameters with Dictionary::NumberField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "date"; Pass Parameters with Dictionary::DateField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "time"; Pass Parameters with Dictionary::TimeField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "timestamp"; Pass Parameters with Dictionary::TimeStampField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "container"; Pass Parameters with Dictionary::ContainerField ) ]
#
```

```

# Call save xml, json and text
#
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToXML"; $param; 1); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.xml"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToText"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.txt"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToJSON"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.json.txt"); "UTF8" ) ]
#
# free memory
#
Set Variable [ $r; Value:MBS("Dictionary.Release"; $param) ]

```

See also

- 65.6 Dictionary.Count 2406
- 65.7 Dictionary.Create 2407
- 65.14 Dictionary.Release 2417
- 65.19 Dictionary.SetValueForKey 2423
- 100.1 Dictionary.ToJSON 5231
- 191.1 Dictionary.ToXML 9253
- 81.8 Folders.UserDesktop 4177
- 121.1 Path.AddPathComponent 6135
- 164.68 Text.WriteTextFile 7871

65.22.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 25th February 2016, last changed 25th February 2016.

65.23 Dictionary.ToXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary 191 XML	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.ToXML"; DictionaryRef { ; Format })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Format

Optional

If 1, we format pretty. Pass 0 to get compact xml.

1

Result Returns OK or error.

Description

Examples

Test exporting dictionaries:

```
#
#
# Create new Dictionary
#
Set Variable [ $param; Value:MBS( "Dictionary.Create" ) ]
#
# Fill in values
#
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "text"; Pass Parameters with Dictionary::TextField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "number"; Pass Parameters with Dictionary::NumberField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "date"; Pass Parameters with Dictionary::DateField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "time"; Pass Parameters with Dictionary::TimeField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "timestamp"; Pass Parameters with Dictionary::TimeStampField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "container"; Pass Parameters with Dictionary::ContainerField ) ]
#
# Call save xml, json and text
#
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToXML"; $param; 1); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.xml"); "UTF8" ) ]
```

```

Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToText"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.txt"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToJSON"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.json.txt"); "UTF8" ) ]
#
# free memory
#
Set Variable [ $r; Value:MBS("Dictionary.Release"; $param) ]

```

See also

- 65.6 Dictionary.Count 2406
- 65.7 Dictionary.Create 2407
- 65.14 Dictionary.Release 2417
- 65.19 Dictionary.SetValueForKey 2423
- 100.1 Dictionary.ToJSON 5231
- 65.22 Dictionary.ToText 2429
- 81.8 Folders.UserDesktop 4177
- 121.1 Path.AddPathComponent 6135
- 164.68 Text.WriteTextFile 7871

65.23.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 25th February 2016, last changed 20th February 2018.

65.24 Dictionary.ValueForKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.ValueForKey"; DictionaryRef; Key)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Key

The key to use. Keys are case sensitive.

"FirstName"

Result Returns value or error.

Description

As dictionary preserves data type, result can be empty, text, number, date, time, timestamp, container or boolean.

Examples

Serialize and unserialize with date and time:

```
# Create Dictionary
Set Variable [ $dict; Value:MBS ( "Dictionary.Create" ) ]
# put date and time inside:
Set Variable [ $r; Value:MBS ( "Dictionary.SetValueForKey"; $dict; "theTime"; Get ( CurrentTime ) ) ]
Set Variable [ $r; Value:MBS ( "Dictionary.SetValueForKey"; $dict; "theDate"; Get ( CurrentDate ) ) ]
# Serialize this
Set Variable [ $dictEncoded; Value:MBS ( "Dictionary.Serialize"; $dict ) ]
# Free dictionary
Set Variable [ $r; Value:MBS ( "Dictionary.Release"; $dict ) ]
# Unpack it:
Set Variable [ $newDict; Value:MBS ( "Dictionary.Deserialize"; $dictEncoded ) ]
# and get values
Set Variable [ $TheTime; Value: MBS ( "Dictionary.ValueForKey"; $newDict; "theTime" ) ]
Set Variable [ $TheDate; Value: MBS ( "Dictionary.ValueForKey"; $newDict; "theDate" ) ]
Show Custom Dialog [ $TheTime & " " & $TheDate ]
Set Variable [ $r; Value:MBS ( "Dictionary.Release"; $newDict ) ]
```

See also

- 65.1 Dictionary.AddSQL 2397
- 65.7 Dictionary.Create 2407
- 65.9 Dictionary.Deserialize 2411

- 65.14 Dictionary.Release 2417
- 65.16 Dictionary.Serialize 2419
- 65.19 Dictionary.SetValueForKey 2423
- 65.25 Dictionary.ValueTypeForKey 2435

Example Databases

- [Dictionary/Dictionary Container Test](#)
- [Dictionary/Pass Parameters with Dictionary](#)

65.24.1 Blog Entries

- [Passing parameters via dictionary functions](#)

Created 12nd December 2014, last changed 22nd February 2016.

65.25 Dictionary.ValueTypeForKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.ValueTypeForKey"; DictionaryRef; Key)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Key

The key to use. Keys are case sensitive.

"FirstName"

Result Returns type or error.

Description

Value can be Invalid, Text, Number, Date, Time, TimeStamp, Container or Boolean.

See also

- 65.7 Dictionary.Create 2407
- 65.19 Dictionary.SetValueForKey 2423
- 65.24 Dictionary.ValueForKey 2433

65.25.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 12nd March 2015, last changed 12nd March 2015.

65.26 Dictionary.Values

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.Values"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.

\$dic

Result Returns list or error.

Description

Of course data in dictionary is converted to text, so this function will not return details like data type or container content.

Order is same as for Dictionary.Keys if the dictionary is not changed inbetween.

Examples

Query list of keys and values:

```
$keys = MBS("Dictionary.Keys"; $Param)
$values = MBS("Dictionary.Values"; $Param)
```

See also

- 65.7 Dictionary.Create 2407
- 65.10 Dictionary.HasKey 2413
- 65.12 Dictionary.Keys 2415
- 65.14 Dictionary.Release 2417

65.26.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 12nd March 2015, last changed 12nd March 2015.

Chapter 66

DirectoryWatcher

Watch directories for changes on Windows.

Watch changes on directories and get script triggered for changes. See FSEvents functions for Mac.

66.1 DirectoryWatcher.AddDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	Yes, Windows only	No	No

MBS("DirectoryWatcher.AddDirectory"; Watcher; Path; recursive; Action)

Parameters

Watcher

The watcher reference number.

\$watcher

Path

The directory path to verify.

"C:\Users\Administrator\Desktop"

recursive

Whether to recursively check subdirectories. Pass 1 to turn on or 0 to turn off.

1

Action

The changes to monitor.

"Filename\$DirName\$Attributes\$Size\$LastWrite\$LastAccess\$Creation\$Security"

Result Returns OK or error.

Description

With the actions you can define what changes to report.

Action	Value	Description
Filename	1	Any file name change in the watched directory or subtree causes a change notification wait operation to return. Changes include renaming, creating, or deleting a file name.
DirName	2	Any directory-name change in the watched directory or subtree causes a change notification wait operation to return. Changes include creating or deleting a directory.
Attributes	4	Any attribute change in the watched directory or subtree causes a change notification wait operation to return.
Size	8	Any file-size change in the watched directory or subtree causes a change notification wait operation to return. The operating system detects a change in file size only when the file is written to the disk. For operating systems that use extensive caching, detection occurs only when the cache is sufficiently flushed.
LastWrite	16	Any change to the last write-time of files in the watched directory or subtree causes a change notification wait operation to return. The operating system detects a change to the last write-time only when the file is written to the disk. For operating systems that use extensive caching, detection occurs only when the cache is sufficiently flushed.
LastAccess	32	Any change to the last access time of files in the watched directory or subtree causes a change notification wait operation to return.
Creation	64	Any change to the creation time of files in the watched directory or subtree causes a change notification wait operation to return.
Security	256	Any security-descriptor change in the watched directory or subtree causes a change notification wait operation to return.

Examples

Watch for changes in directory:

```
MBS("DirectoryWatcher.AddDirectory"; $Watcher; Directory Watcher::Directory; 1; "Filename$DirName$Attributes$Size$LastWrite$LastAccess$Creation$Security")
```

Example Databases

- [Win Only/Directory Watcher](#)

Created 5th March 2017, last changed 26th May 2017.

66.2 DirectoryWatcher.ChangeCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	Yes, Windows only	No	No

MBS("DirectoryWatcher.ChangeCount"; Watcher)

Parameters

Watcher

The watcher reference number.

\$watcher

Result Returns number or error.

Description

We queue the changes in a list and you can query it.

Example Databases

- [Win Only/Directory Watcher](#)

Created 5th March 2017, last changed 5th March 2017.

66.3 DirectoryWatcher.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	Yes, Windows only	No	No

MBS("DirectoryWatcher.Create")

Result Returns reference number or error.

Description

Works on server and client.

May not work for network shared disks as most drivers don't pass through change events.

See also

- 66.8 DirectoryWatcher.Release

2445

Example Databases

- [Win Only/Directory Watcher](#)

Created 5th March 2017, last changed 27th February 2019.

66.4 DirectoryWatcher.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	No	No	No

MBS("DirectoryWatcher.GetEvaluate"; Watcher)

Parameters

Watcher

The watcher reference number.

\$watcher

Result Returns text or error.

Description

See also

- 66.5 DirectoryWatcher.GetFileName 2442
- 66.6 DirectoryWatcher.GetScriptName 2443
- 66.7 DirectoryWatcher.NextChange 2444
- 66.8 DirectoryWatcher.Release 2445
- 66.10 DirectoryWatcher.SetEvaluate 2447
- 66.11 DirectoryWatcher.SetFileName 2448

Created 5th March 2017, last changed 5th March 2017.

66.5 DirectoryWatcher.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	No	No	No

MBS("DirectoryWatcher.GetFileName"; Watcher)

Parameters

Watcher

The watcher reference number.

\$watcher

Result Returns text or error.

Description

See also

- 66.4 DirectoryWatcher.GetEvaluate 2441
- 66.6 DirectoryWatcher.GetScriptName 2443
- 66.8 DirectoryWatcher.Release 2445
- 66.10 DirectoryWatcher.SetEvaluate 2447
- 66.11 DirectoryWatcher.SetFileName 2448
- 66.12 DirectoryWatcher.SetScriptName 2449

Created 5th March 2017, last changed 5th March 2017.

66.6 DirectoryWatcher.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	No	No	No

MBS("DirectoryWatcher.GetScriptName"; Watcher)

Parameters**Watcher**

The watcher reference number.

\$watcher

Result Returns text or error.

Description**See also**

- 66.4 DirectoryWatcher.GetEvaluate 2441
- 66.5 DirectoryWatcher.GetFileName 2442
- 66.11 DirectoryWatcher.SetFileName 2448
- 66.12 DirectoryWatcher.SetScriptName 2449

Created 5th March 2017, last changed 5th March 2017.

66.7 DirectoryWatcher.NextChange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	Yes, Windows only	No	No

MBS("DirectoryWatcher.NextChange"; Watcher)

Parameters

Watcher

The watcher reference number.

\$watcher

Result Returns list or error.

Description

The list contains first the path name, second the action code and third the name of the action.

Action	Name
1	Added
2	Removed
3	Modified
4	Renamed Old Name
5	Renamed New Name

See also

- 66.4 DirectoryWatcher.GetEvaluate 2441
- 66.8 DirectoryWatcher.Release 2445
- 66.10 DirectoryWatcher.SetEvaluate 2447

Example Databases

- [Win Only/Directory Watcher](#)

Created 5th March 2017, last changed 5th March 2017.

66.8 DirectoryWatcher.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	Yes, Windows only	No	No

MBS("DirectoryWatcher.Release"; Watcher)

Parameters

Watcher

The watcher reference number.

\$watcher

Result Returns OK or error.

Description

This will free all memory used and stops the checks.

See also

- 66.3 DirectoryWatcher.Create 2440
- 66.4 DirectoryWatcher.GetEvaluate 2441
- 66.5 DirectoryWatcher.GetFileName 2442
- 66.7 DirectoryWatcher.NextChange 2444
- 66.9 DirectoryWatcher.ReleaseAll 2446
- 66.10 DirectoryWatcher.SetEvaluate 2447
- 66.11 DirectoryWatcher.SetFileName 2448

Created 5th March 2017, last changed 5th March 2017.

66.9 DirectoryWatcher.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.4	No	Yes	Yes, Windows only	No	No

MBS("DirectoryWatcher.ReleaseAll")

Result Returns OK or error.

Description

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

See also

- [66.8 DirectoryWatcher.Release](#) 2445

66.9.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 6th August 2017, last changed 9th January 2020.

66.10 DirectoryWatcher.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	No	No	No

MBS("DirectoryWatcher.SetEvaluate"; Watcher; Expression)

Parameters**Watcher**

The watcher reference number.

\$watcher

Expression

The expression to evaluate.

Result Returns OK or error.

Description**See also**

- 66.4 DirectoryWatcher.GetEvaluate 2441
- 66.5 DirectoryWatcher.GetFileName 2442
- 66.7 DirectoryWatcher.NextChange 2444
- 66.8 DirectoryWatcher.Release 2445
- 66.11 DirectoryWatcher.SetFileName 2448
- 66.12 DirectoryWatcher.SetScriptName 2449

Created 5th March 2017, last changed 5th March 2017.

66.11 DirectoryWatcher.SetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	No	No	No

MBS("DirectoryWatcher.SetFileName"; Watcher; Filename)

Parameters

Watcher

The watcher reference number.

\$watcher

Filename

The database file name where the script is located.

"test.fmp12"

Result Returns OK or error.

Description

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 66.4 DirectoryWatcher.GetEvaluate 2441
- 66.5 DirectoryWatcher.GetFileName 2442
- 66.6 DirectoryWatcher.GetScriptName 2443
- 66.8 DirectoryWatcher.Release 2445
- 66.10 DirectoryWatcher.SetEvaluate 2447
- 66.12 DirectoryWatcher.SetScriptName 2449

Example Databases

- [Win Only/Directory Watcher](#)

Created 5th March 2017, last changed 5th March 2017.

66.12 DirectoryWatcher.SetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
66 DirectoryWatcher	7.1	No	Yes	No	No	No

MBS("DirectoryWatcher.SetScriptName"; Watcher; ScriptName)

Parameters

Watcher

The watcher reference number.

\$watcher

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- [66.5 DirectoryWatcher.GetFileName](#) 2442
- [66.6 DirectoryWatcher.GetScriptName](#) 2443
- [66.10 DirectoryWatcher.SetEvaluate](#) 2447
- [66.11 DirectoryWatcher.SetFileName](#) 2448

Example Databases

- [Win Only/Directory Watcher](#)

Created 5th March 2017, last changed 5th March 2017.

Chapter 67

DNSLookup

Query the IP address for a domain name.

Or find the domain name for an IPv4 or IPv6 address.

67.1 DNSLookup.Address

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
67 DNSLookup	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DNSLookup.Address"; LookupRef { ; Index })

Parameters

LookupRef

The reference number for the DNS Lookup.

\$Lookup

Index

Optional

The index of the address. From 0 to DNSLookup.AddressCount-1. Index of -1 gives list with all values.

0

Result Returns text or error.

Description

See also

- 67.2 DNSLookup.AddressCount 2453
- 67.5 DNSLookup.LookupHostByAddress 2456
- 67.6 DNSLookup.LookupHostByName 2458

Example Databases

- [DNS Lookup](#)

67.1.1 Blog Entries

- [DNS Lookups in FileMaker](#)

Created 25th November 2015, last changed 25th November 2015.

67.2 DNSLookup.AddressCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
67 DNSLookup	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DNSLookup.AddressCount"; LookupRef)

Parameters

LookupRef

The reference number for the DNS Lookup.

\$Lookup

Result Returns number or error.

Description

See also

- [67.1 DNSLookup.Address](#) 2451
- [67.4 DNSLookup.AliasCount](#) 2455

67.2.1 Blog Entries

- [DNS Lookups in FileMaker](#)

Created 25th November 2015, last changed 25th November 2015.

67.3 DNSLookup.Alias

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
67 DNSLookup	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DNSLookup.Alias"; LookupRef { ; Index })

Parameters

LookupRef

The reference number for the DNS Lookup.

\$Lookup

Index

Optional

The index of the alias. From 0 to DNSLookup.AliasCount-1. Index of -1 gives list with all values.

0

Result Returns text or error.

Description

See also

- [67.4 DNSLookup.AliasCount](#) 2455
- [67.5 DNSLookup.LookupHostByAddress](#) 2456
- [67.6 DNSLookup.LookupHostByName](#) 2458
- [67.8 DNSLookup.Release](#) 2461

Example Databases

- [DNS Lookup](#)

67.3.1 Blog Entries

- [DNS Lookups in FileMaker](#)

Created 25th November 2015, last changed 25th November 2015.

67.4 DNSLookup.AliasCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
67 DNSLookup	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DNSLookup.AliasCount"; LookupRef)

Parameters

LookupRef

The reference number for the DNS Lookup.
\$Lookup

Result Returns number or error.

Description

See also

- [67.2 DNSLookup.AddressCount](#) 2453
- [67.3 DNSLookup.Alias](#) 2454

67.4.1 Blog Entries

- [DNS Lookups in FileMaker](#)

Created 25th November 2015, last changed 25th November 2015.

67.5 DNSLookup.LookupHostByAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
67 DNSLookup	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DNSLookup.LookupHostByAddress"; IP)

Parameters

IP

The IP address to query.

"192.35.60.462"

Result Returns reference number or error.

Description

Lookup is synchronous.

Examples

Lookup an IP:

```
Set Variable [ $q; Value:MBS( "DNSLookup.LookupHostByAddress"; DNS Lookup::IP to lookup ) ]
If [ MBS("IsError") = 0 ]
Set Field [ DNS Lookup::Name; MBS( "DNSLookup.Name"; $q ) ]
Set Field [ DNS Lookup::Addresses; MBS( "DNSLookup.Address"; $q; -1 ) ]
Set Field [ DNS Lookup::Aliases; MBS( "DNSLookup.Alias"; $q; -1 ) ]
Set Variable [ $r; Value:MBS( "DNSLookup.Release"; $q ) ]
End If
```

See also

- 67.1 DNSLookup.Address 2451
- 67.3 DNSLookup.Alias 2454
- 67.6 DNSLookup.LookupHostByName 2458
- 67.7 DNSLookup.Name 2460
- 67.8 DNSLookup.Release 2461
- 124.6 IsError 6266

Example Databases

- [DNS Lookup](#)

67.5.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [DNS Lookups in FileMaker](#)

Created 25th November 2015, last changed 1st January 2016.

67.6 DNSLookup.LookupHostByName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
67 DNSLookup	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DNSLookup.LookupHostByName"; DomainName { ; Type })

Parameters

DomainName

The domain name to lookup.
"monkeybreadsoftware.de"

Type

Optional

What IP type to find. Can be 4 for IPv4 or 6 for IPv6. Default is IPv4. This is currently ignored on Windows and you get back default IP type.

4

Result Returns reference number or error.

Description

Lookup is synchronous.

By default queries the primary IP type the machine is configured for.

Examples

Lookup domain name:

```
Set Variable [ $q; Value:MBS( "DNSLookup.LookupHostByName"; DNS Lookup::Name to lookup; Get(Script-Parameter) ) ]
If [ MBS("IsError") = 0 ]
Set Field [ DNS Lookup::Name; MBS( "DNSLookup.Name"; $q ) ]
Set Field [ DNS Lookup::Addresses; MBS( "DNSLookup.Address"; $q; -1 ) ]
Set Field [ DNS Lookup::Aliases; MBS( "DNSLookup.Alias"; $q; -1 ) ]
Set Variable [ $r; Value:MBS( "DNSLookup.Release"; $q ) ]
End If
```

See also

- 67.1 DNSLookup.Address 2451
- 67.3 DNSLookup.Alias 2454
- 67.5 DNSLookup.LookupHostByAddress 2456
- 67.7 DNSLookup.Name 2460
- 67.8 DNSLookup.Release 2461
- 124.6 IsError 6266

Example Databases

- [DNS Lookup](#)

67.6.1 Blog Entries

- [DNS Lookups in FileMaker](#)

Created 25th November 2015, last changed 25th November 2015.

67.7 DNSLookup.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
67 DNSLookup	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DNSLookup.Name"; LookupRef)

Parameters

LookupRef

The reference number for the DNS Lookup.
\$Lookup

Result Returns text or error.

Description

See also

- [67.5 DNSLookup.LookupHostByAddress](#) 2456
- [67.6 DNSLookup.LookupHostByName](#) 2458

Example Databases

- [DNS Lookup](#)

67.7.1 Blog Entries

- [DNS Lookups in FileMaker](#)

Created 25th November 2015, last changed 25th November 2015.

67.8 DNSLookup.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
67 DNSLookup	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DNSLookup.Release"; LookupRef)

Parameters

LookupRef

The reference number for the DNS Lookup.
\$Lookup

Result Returns OK or error.

Description

See also

- [67.3 DNSLookup.Alias](#) 2454
- [67.5 DNSLookup.LookupHostByAddress](#) 2456
- [67.6 DNSLookup.LookupHostByName](#) 2458

Example Databases

- [DNS Lookup](#)

67.8.1 Blog Entries

- [DNS Lookups in FileMaker](#)

Created 25th November 2015, last changed 25th November 2015.

Chapter 68

DocumentCameraScan

Scan documents on iOS directly into FileMaker with the camera.

For MacOS see ContinuityCamera functions.

68.1 DocumentCameraScan.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.Clear")

Result Returns OK or error.

Description

Optional function to call if you like to release memory for last scan result.

Examples

Clears current scan:

```
Set Variable [ $r; Value: MBS( "DocumentCameraScan.Clear" ) ]
```

See also

- 68.2 DocumentCameraScan.Close 2465
- 68.7 DocumentCameraScan.PageImage 2471
- 68.8 DocumentCameraScan.Scan 2473
- 68.11 DocumentCameraScan.Title 2477
- 68.12 DocumentCameraScan.Visible 2478

68.2 DocumentCameraScan.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.Close")

Result Returns OK or error.

Description

If the dialog is not open, this function does nothing.
The plugin will close it automatically when the script is triggered.

See also

- 68.1 DocumentCameraScan.Clear 2463
- 68.8 DocumentCameraScan.Scan 2473
- 68.10 DocumentCameraScan.Supported 2476
- 68.11 DocumentCameraScan.Title 2477
- 68.12 DocumentCameraScan.Visible 2478

Created 6th January 2020, last changed 8th January 2020.

68.3 DocumentCameraScan.ErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.ErrorMessage")

Result Returns text.

Description

Examples

Script may look like this:

```
Set Variable [ $param ; Value: Get( ScriptParameter ) ]
If [ $param = "Error" ]
Show Custom Dialog [ "Failed to scan" ; MBS( "DocumentCameraScan.ErrorMessage" ) ]
Else If [ $param = "Scan" ]
Perform Script [ Specified: From list ; "Import" ; Parameter: ]
Else If [ $param = "Cancel" ]
# do nothing
End If
```

See also

- 68.7 DocumentCameraScan.PageImage 2471
- 68.9 DocumentCameraScan.SetScript 2474

Example Databases

- [iOS/DocumentCameraScan test](#)

Created 6th January 2020, last changed 8th January 2020.

68.4 DocumentCameraScan.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.Initialize")

Result Returns OK or error.

Description

Requires iOS 13 or newer.

Examples

Script to initialize:

```
# Initialize document camera scanner
#
If [ MBS("DocumentCameraScan.IsInitialized") = 0 ]
Set Variable [ $r ; Value: MBS("DocumentCameraScan.Initialize") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to initialize" ; $r ]
Else If [ MBS("DocumentCameraScan.Supported") = 0 ]
Show Custom Dialog [ "Not supported on this device." ]
End If
End If
```

See also

- 68.5 DocumentCameraScan.IsInitialized 2469
- 68.8 DocumentCameraScan.Scan 2473
- 68.9 DocumentCameraScan.SetScript 2474
- 68.10 DocumentCameraScan.Supported 2476
- 68.11 DocumentCameraScan.Title 2477
- 68.12 DocumentCameraScan.Visible 2478
- 124.6 IsError 6266

Example Databases

- [iOS/DocumentCameraScan test](#)

68.4.1 Blog Entries

- [Document Camera Scan functions for FileMaker iOS SDK](#)

68.5 DocumentCameraScan.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.IsInitialized")

Result Returns 1, 0 or error.

Description

Returns 1 on success or 0 on failure.

Examples

Script to initialize:

```
# Initialize document camera scanner
#
If [ MBS("DocumentCameraScan.IsInitialized") = 0 ]
Set Variable [ $r ; Value: MBS("DocumentCameraScan.Initialize") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to initialize" ; $r ]
Else If [ MBS("DocumentCameraScan.Supported") = 0 ]
Show Custom Dialog [ "Not supported on this device." ]
End If
End If
```

See also

- 68.4 DocumentCameraScan.Initialize 2467
- 68.10 DocumentCameraScan.Supported 2476
- 124.6 IsError 6266

Created 6th January 2020, last changed 24th January 2020.

68.6 DocumentCameraScan.PageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.PageCount")

Result Returns number or error.

Description

Examples

Import scan result:

```

Set Variable [ $count ; Value: MBS( "DocumentCameraScan.PageCount" ) ]
If [ $count >0 ]
Set Variable [ $index ; Value: 0 ]
Loop
# store image
New Record/Request
Set Field [ Contacts::Video ; MBS( "DocumentCameraScan.PageImage"; $Index; "PNG"; "test.png" ) ]
Commit Records/Requests [ With dialog: On ]
# next
Set Variable [ $index ; Value: $index + 1 ]
Exit Loop If [ $index $count ]
End Loop
End If

```

See also

- [68.7 DocumentCameraScan.PageImage](#) 2471
- [68.9 DocumentCameraScan.SetScript](#) 2474

Example Databases

- [iOS/DocumentCameraScan test](#)

68.6.1 Blog Entries

- [Document Camera Scan functions for FileMaker iOS SDK](#)

Created 6th January 2020, last changed 6th January 2020.

68.7 DocumentCameraScan.PageImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.PageImage"; Index { ; ImageType; Filename })

Parameters

Index

The index of the page. Range is 0 to DocumentCameraScan.PageCount-1.

0

ImageType

Optional

The type of image to return. Either JPEG or PNG. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns container value or error.

Description

See DocumentCameraScan.PageCount for the count of pages.

Examples

Import scan result:

```
Set Variable [ $count ; Value: MBS( "DocumentCameraScan.PageCount" ) ]
```

```
If [ $count >0 ]
```

```
Set Variable [ $index ; Value: 0 ]
```

```
Loop
```

```
# store image
```

```
New Record/Request
```

```
Set Field [ Contacts::Video ; MBS( "DocumentCameraScan.PageImage"; $Index; "PNG"; "test.png" ) ]
```

```
Commit Records/Requests [ With dialog: On ]
```

```
# next
```

```
Set Variable [ $index ; Value: $index + 1 ]
```

```
Exit Loop If [ $index $count ]
```

```
End Loop
```

```
End If
```

See also

- 68.1 DocumentCameraScan.Clear 2463
- 68.3 DocumentCameraScan.ErrorMessage 2466

- 68.6 DocumentCameraScan.PageCount

Example Databases

- [iOS/DocumentCameraScan test](#)

68.7.1 Blog Entries

- [Document Camera Scan functions for FileMaker iOS SDK](#)

Created 6th January 2020, last changed 6th January 2020.

68.8 DocumentCameraScan.Scan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.Scan")

Result Returns OK or error.

Description

Please use DocumentCameraScan.Initialize before and check DocumentCameraScan.Supported to make sure you only show the button when it may work.

Examples

Start the dialog:

```
Set Variable [ $r ; Value: MBS( "DocumentCameraScan.Scan" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to scan" ; $r ]
End If
```

See also

- 68.1 DocumentCameraScan.Clear 2463
- 68.2 DocumentCameraScan.Close 2465
- 68.4 DocumentCameraScan.Initialize 2467
- 68.10 DocumentCameraScan.Supported 2476
- 68.11 DocumentCameraScan.Title 2477
- 124.6 IsError 6266

Example Databases

- [iOS/DocumentCameraScan test](#)

68.8.1 Blog Entries

- [Document Camera Scan functions for FileMaker iOS SDK](#)

Created 6th January 2020, last changed 8th January 2020.

68.9 DocumentCameraScan.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.SetScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Parameter to the script is either Cancel, Error or Scan.

In case of error, please use DocumentCameraScan.ErrorMessage to query the error message to display.

When you get Scan as parameter, you may use DocumentCameraScan.PageCount function to query number of pages scanned.

Examples

Script may look like this:

```
Set Variable [ $param ; Value: Get(ScriptParameter) ]
If [ $param = "Error" ]
Show Custom Dialog [ "Failed to scan" ; MBS( "DocumentCameraScan.ErrorMessage" ) ]
Else If [ $param = "Scan" ]
Perform Script [ Specified: From list ; "Import" ; Parameter: ]
Else If [ $param = "Cancel" ]
# do nothing
End If
```

See also

- 68.3 DocumentCameraScan.ErrorMessage 2466
- 68.4 DocumentCameraScan.Initialize 2467
- 68.6 DocumentCameraScan.PageCount 2470
- 68.10 DocumentCameraScan.Supported 2476

Example Databases

- [iOS/DocumentCameraScan test](#)

68.9.1 Blog Entries

- [Document Camera Scan functions for FileMaker iOS SDK](#)

Created 6th January 2020, last changed 8th January 2020.

68.10 DocumentCameraScan.Supported

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.Supported")

Result Returns 1, 0 or error.

Description

May return 0 if hardware is not supported.

Examples

Check supported state:

```
If [ MBS("DocumentCameraScan.Supported") = 1 ]
Show Custom Dialog [ "Not supported on this device." ]
End If
```

See also

- 68.2 DocumentCameraScan.Close 2465
- 68.4 DocumentCameraScan.Initialize 2467
- 68.5 DocumentCameraScan.IsInitialized 2469
- 68.8 DocumentCameraScan.Scan 2473
- 68.9 DocumentCameraScan.SetScript 2474

Created 6th January 2020, last changed 8th January 2020.

68.11 DocumentCameraScan.Title

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.Title")

Result Returns text or error.

Description

See also

- 68.1 DocumentCameraScan.Clear 2463
- 68.2 DocumentCameraScan.Close 2465
- 68.4 DocumentCameraScan.Initialize 2467
- 68.8 DocumentCameraScan.Scan 2473
- 68.12 DocumentCameraScan.Visible 2478

Created 6th January 2020, last changed 6th January 2020.

68.12 DocumentCameraScan.Visible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
68 DocumentCameraScan	10.0	No	No	No	No	Yes

MBS("DocumentCameraScan.Visible")

Result Returns 1, 0 or error.

Description

As we use animation the dialog may be in transition in or out.

See also

- 68.1 DocumentCameraScan.Clear 2463
- 68.2 DocumentCameraScan.Close 2465
- 68.4 DocumentCameraScan.Initialize 2467
- 68.11 DocumentCameraScan.Title 2477

Created 6th January 2020, last changed 6th January 2020.

Chapter 69

DragDrop

Accept Drag& Drop of files, text, pictures, URLs or Emails.

69.1 DragDrop.ClearDragActionHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.ClearDragActionHandler"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns "OK" on success.

Description

Basically the reverse of SetDragActionHandler.

Examples

Clears all handlers:

```
MBS( "DragDrop.ClearDragActionHandler"; $dropHandle )  
MBS( "DragDrop.ClearDragEnterHandler"; $dropHandle )  
MBS( "DragDrop.ClearDragExitHandler"; $dropHandle )
```

See also

- 69.2 DragDrop.ClearDragEnterHandler

2481

- 69.3 DragDrop.ClearDragExitHandler 2482
- 69.6 DragDrop.CreateWithControl 2487
- 69.40 DragDrop.SetDragActionHandler 2534

Created 18th August 2014, last changed 5th February 2018.

69.2 DragDrop.ClearDragEnterHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.ClearDragEnterHandler"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns "OK" on success.

Description

Basically the reverse of SetDragActionHandler.

Examples

Clears all handlers:

```
MBS( "DragDrop.ClearDragActionHandler"; $dropHandle )
MBS( "DragDrop.ClearDragEnterHandler"; $dropHandle )
MBS( "DragDrop.ClearDragExitHandler"; $dropHandle )
```

See also

- 69.1 DragDrop.ClearDragActionHandler 2479
- 69.3 DragDrop.ClearDragExitHandler 2482
- 69.6 DragDrop.CreateWithControl 2487
- 69.41 DragDrop.SetDragEnterHandler 2536
- 69.42 DragDrop.SetDragExitHandler 2538

Created 18th August 2014, last changed 5th February 2018.

69.3 DragDrop.ClearDragExitHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.ClearDragExitHandler"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns "OK" on success.

Description

Basically the reverse of SetDragActionHandler.

Examples

Clears all handlers:

```
MBS( "DragDrop.ClearDragActionHandler"; $dropHandle )
MBS( "DragDrop.ClearDragEnterHandler"; $dropHandle )
MBS( "DragDrop.ClearDragExitHandler"; $dropHandle )
```

See also

- 69.1 DragDrop.ClearDragActionHandler 2479
- 69.2 DragDrop.ClearDragEnterHandler 2481
- 69.6 DragDrop.CreateWithControl 2487
- 69.41 DragDrop.SetDragEnterHandler 2536
- 69.42 DragDrop.SetDragExitHandler 2538

Created 18th August 2014, last changed 5th February 2018.

69.4 DragDrop.CreateOnPopoverWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	9.2	Yes	Yes	No	No	No

```
MBS( "DragDrop.CreateOnPopoverWithControl"; WindowRef; Popover Name; ControlName { ; DX; DY }
)
```

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Popover Name

The name of the popover to look for on the window.

"MyPopover"

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move drop area more to left or right.

0

DY

Optional

A delta to move drop area more to top or bottom.

0

Result Returns Drop Area ID on success.

Description

Use DragDrop.Release later to destroy the drop area.

Drag & Drop reference numbers are starting at 31000 and counting up for each new drop area.

See also

- 69.5 DragDrop.CreateOnPopoverWithSize 2485
- 69.36 DragDrop.Release 2527
- 165.3 TextView.CreateOnPopoverWithControl 7879
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [Drag and Drop/DragTest Popover](#)

69.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [Drag & Drop to a popover coming for next MBS Plugin](#)

Created 22nd March 2019, last changed 28th March 2019.

69.5 DragDrop.CreateOnPopoverWithSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	9.2	Yes	Yes	No	No	No

MBS("DragDrop.CreateOnPopoverWithSize"; WindowRef; Popover Name; x; y; w; h)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Popover Name

The name of the popover to look for on the window.

"MyPopover"

x

The left coordinate in the popover.

0

y

The top coordinate in the popover.

0

w

The width of the drop area in the popover.

600

h

The height of the drop area in the popover.

400

Result Returns Drop Area ID on success.

Description

Use DragDrop.Release later to destroy the drop area.

Drag & Drop reference numbers are starting at 31000 and counting up for each new drop area.

See also

- 69.4 DragDrop.CreateOnPopoverWithControl 2483
- 69.36 DragDrop.Release 2527
- 165.4 TextView.CreateOnPopoverWithSize 7881
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [Drag and Drop/DragTest Popover](#)

69.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)
- [Drag & Drop to a popover coming for next MBS Plugin](#)

Created 22nd March 2019, last changed 22nd March 2019.

69.6 DragDrop.CreateWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.CreateWithControl"; WindowRef; ControlName { ; DX; DY })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a rectangle.

"mymedia"

DX

Optional

A delta to move drop area more to left or right.

0

DY

Optional

A delta to move drop area more to top or bottom.

0

Result Returns Drop Area ID on success.

Description

Use DragDrop.Release later to destroy the drop area.

If you use a register on the window, be aware that the drop area actually is in front of the register. So you need to check in the script which register page is current and should get the dropped files.

Drag & Drop reference numbers are starting at 31000 and counting up for each new drop area.

Added Windows support for MBS Plugin 8.1 for FileMaker 16 or newer.

When creating on a card window, please pass reference to parent window or just 0 for front window. On MacOS you may need to pass delta y value to adjust position.

If you create a control on a new window, you may do window update command in your script first to have FileMaker actually build the window with controls and display it. A short script pause or using FM.RunScriptLater with 0.1 delay can help having all controls draw themselves. Then you can use this command to put our control on top. We use GetControl() to query left, top, width and height and this gives empty value if control is not yet here.

Examples

Creates a new drop area:

```

Set Variable [ $$dropview ; Value: MBS("DragDrop.CreateWithControl"; Get(WindowName); "drop") ]
Set Variable [ $result ; Value: MBS( "DragDrop.RegisterDropTypes"; $$dropview; "file") ]
Set Variable [ $result ; Value: MBS( "DragDrop.SetDragActionHandler"; $$dropview; Get ( FileName );
"DragAction") ]
Set Variable [ $result ; Value: MBS( "DragDrop.SetCursor"; $$dropview; 1) ]
Set Variable [ $result ; Value: MBS( "DragDrop.SetImage"; $$dropview; DragTest::DropLogo) ]

```

See also

- 69.35 DragDrop.RegisterDropTypes 2525
- 69.36 DragDrop.Release 2527
- 69.38 DragDrop.SetAutoResizingMask 2530
- 69.40 DragDrop.SetDragActionHandler 2534
- 69.44 DragDrop.SetFrameWithControl 2541
- 69.48 DragDrop.UnregisterDropTypes 2547
- 93.2 ImageView.CreateWithControl 5092
- 106.8 MapView.CreateWithControl 5650
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest Email](#)
- [Drag and Drop/for Mac/DragTest File](#)
- [Drag and Drop/for Mac/DragTest Image](#)
- [Drag and Drop/for Mac/DragTest Text](#)
- [Drag and Drop/for Mac/DragTest URL](#)
- [Drag and Drop/for Mac/Image drag from one database to other/Image drop](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drag](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drop](#)

69.6.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS Filemaker Plugin, version 4.3pr2](#)

Created 18th August 2014, last changed 25th December 2019.

69.7 DragDrop.CreateWithSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.CreateWithSize"; WindowRef; x; y; w; h)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

x

The left coordinate in the window.

0

y

The top coordinate in the window.

0

w

The width of the drop area in the window.

100

h

The height of the drop area in the window.

100

Result Returns Drop Area ID on success.

Description

Use DragDrop.Release later to destroy the drop area.

If you use a register on the window, be aware that the drop area actually is in front of the register. So you need to check in the script which register page is current and should get the dropped files.

Drag & Drop reference numbers are starting at 31000 and counting up for each new drop area.

Added Windows support for MBS Plugin 8.1 for FileMaker 16 or newer.

See also

- 69.8 DragDrop.CreateWithWindow 2492
- 69.36 DragDrop.Release 2527
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

69.7.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 17th June 2018.

69.8 DragDrop.CreateWithWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.CreateWithWindow"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns Drop Area ID on success.

Description

Use DragDrop.Release later to destroy the drop area.

If you use a register (tab controls) on the window, be aware that the drop area actually is in front of the register (tab controls). So you need to check in the script which register page is current and should get the dropped files.

Drag & Drop reference numbers are starting at 31000 and counting up for each new drop area.

Added Windows support for MBS Plugin 8.1 for FileMaker 16 or newer. On Windows the control can't be transparent, so you may not want to use this function on Windows.

Not recommended for Windows. Better use DragDrop.CreateWithControl.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.7 DragDrop.CreateWithSize 2490
- 69.36 DragDrop.Release 2527
- 93.4 ImageView.CreateWithWindow 5096
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [Drag and Drop/for Mac/DragTest multiple picture files](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

Created 18th August 2014, last changed 5th November 2019.

69.9 DragDrop.GetAutoResizingMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	9.1	Yes	No	No	No	No

MBS("DragDrop.GetAutoResizingMask"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns number or error.

Description

This defines whether view changes its size based on the surrounding window.

Name	Value	Description
NotSizable	0	The view cannot be resized.
MinXMargin	1	The left margin between the view and its superview is flexible.
WidthSizable	2	The view's width is flexible.
MaxXMargin	4	The right margin between the view and its superview is flexible.
MinYMargin	8	The bottom margin between the view and its superview is flexible.
HeightSizable	16	The view's height is flexible.
MaxYMargin	32	The top margin between the view and its superview is flexible.

e.g. the value 18 means the view can resize both horizontally and vertically with the parent view (window).
See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.38 DragDrop.SetAutoResizingMask 2530
- 106.15 MapView.GetAutoResizingMask 5659
- 106.65 MapView.SetAutoResizingMask 5712
- 165.10 TextView.GetAutoResizingMask 7888
- 180.52 WebView.GetAutoResizingMask 8347

69.9.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 20th February 2019, last changed 22nd February 2019.

69.10 DragDrop.GetEmailAccount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.7	Yes	No	No	No	No

MBS("DragDrop.GetEmailAccount"; droparea; Index)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Index

Optional, zero based index of the received email. Default is 0.

1

Result The account name as text.

Description

Index from 0 to DragDrop.GetEmailCount -1.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.11 DragDrop.GetEmailCount 2495
- 69.13 DragDrop.GetEmailMailbox 2497
- 69.14 DragDrop.GetEmailSubject 2498
- 69.35 DragDrop.RegisterDropTypes 2525

Example Databases

- [Drag and Drop/for Mac/DragTest Email](#)

Created 18th August 2014, last changed 18th August 2014.

69.11 DragDrop.GetEmailCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.7	Yes	No	No	No	No

MBS("DragDrop.GetEmailCount"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result The number of emails or error.

Description

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.10 DragDrop.GetEmailAccount 2494
- 69.12 DragDrop.GetEmailID 2496
- 69.13 DragDrop.GetEmailMailbox 2497
- 69.14 DragDrop.GetEmailSubject 2498
- 69.23 DragDrop.GetPathCount 2510
- 69.35 DragDrop.RegisterDropTypes 2525

Created 18th August 2014, last changed 18th August 2014.

69.12 DragDrop.GetEmailID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.7	Yes	No	No	No	No

MBS("DragDrop.GetEmailID"; droparea; Index)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area. \$dropHandle

Index

Optional, zero based index of the received email. Default is 0.

1

Result Returns the email id as text.

Description

Index from 0 to DragDrop.GetEmailCount -1.

Using the ID you can ask Mail by Apple Script for the content or other details on the email.

For an email drag from Apple Mail, the function DragDrop.GetPath may give the path to a copy of the email file in temporary folder.

You can use DragDrop.GetPath to get the email as file.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.11 DragDrop.GetEmailCount 2495
- 69.22 DragDrop.GetPath 2507
- 69.35 DragDrop.RegisterDropTypes 2525

Example Databases

- [Drag and Drop/for Mac/DragTest Email](#)

Created 18th August 2014, last changed 7th May 2017.

69.13 DragDrop.GetEmailMailbox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.7	Yes	No	No	No	No

MBS("DragDrop.GetEmailMailbox"; droparea; Index)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Index

Optional, zero based index of the received email. Default is 0.

1

Result The mailbox name as text.

Description

Index from 0 to DragDrop.GetEmailCount -1.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.10 DragDrop.GetEmailAccount 2494
- 69.11 DragDrop.GetEmailCount 2495
- 69.14 DragDrop.GetEmailSubject 2498
- 69.35 DragDrop.RegisterDropTypes 2525

Example Databases

- [Drag and Drop/for Mac/DragTest Email](#)

Created 18th August 2014, last changed 18th August 2014.

69.14 DragDrop.GetEmailSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.7	Yes	No	No	No	No

MBS("DragDrop.GetEmailSubject"; droparea; Index)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area. \$dropHandle

Index

Optional, zero based index of the received email. Default is 0.

1

Result The email subject as text.

Description

Index from 0 to DragDrop.GetEmailCount -1.

For an email drag from Apple Mail, the function DragDrop.GetPath may give the path to a copy of the email file in temporary folder.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.10 DragDrop.GetEmailAccount 2494
- 69.11 DragDrop.GetEmailCount 2495
- 69.13 DragDrop.GetEmailMailbox 2497
- 69.22 DragDrop.GetPath 2507
- 69.35 DragDrop.RegisterDropTypes 2525

Example Databases

- [Drag and Drop/for Mac/DragTest Email](#)

Created 18th August 2014, last changed 7th May 2017.

69.15 DragDrop.GetFileDescriptor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	8.1	No	Yes	No	No	No

MBS("DragDrop.GetFileDescriptor"; droparea; Index; Selector)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Index

The index of the file descriptor from 0 to DragDrop.GetFileDescriptorCount-1.

0

Selector

Which value to return. Can be Name, Size, Data or Path.

"Name"

Result Returns value or error.

Description

The file descriptor may include a file path and/or file data.

The data is returned as container value.

Examples

Check for a file descriptor coming with Drag & Drop:

```
Set Variable [ $count ; Value: MBS("DragDrop.GetFileDescriptorCount"; $dropview; "") ]
If [ $count >0 ]
Set Variable [ $index ; Value: 0 ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $name ; Value: MBS("DragDrop.GetFileDescriptor"; $dropview; $index; "name") ]
Set Variable [ $data ; Value: MBS("DragDrop.GetFileDescriptor"; $dropview; $index; "data") ]
Set Variable [ $size ; Value: MBS("DragDrop.GetFileDescriptor"; $dropview; $index; "size") ]
Set Variable [ $path ; Value: MBS("DragDrop.GetFileDescriptor"; $dropview; $index; "path") ]

If [ Length ( $path ) >0 ]
New Record/Request
Set Field [ DragTest::field ; MBS("Files.ReadFile"; $path; "auto") ]
Set Field [ DragTest::Description ; "Got via file descriptor with path" ]
Set Field [ DragTest::Text ; $path ]
Commit Records/Requests [ With dialog: Off ]
Else If [ $size >0 ]
New Record/Request
Set Field [ DragTest::field ; $data ]
Set Field [ DragTest::Text ; $name ]
```

```
Set Field [ DragTest::Description ; "Got via file descriptor with data" ]
Commit Records/Requests [ With dialog: Off ]
End If
```

```
# next
Set Variable [ $index ; Value: $index+1 ]
Exit Loop If [ $index = $count ]
End Loop
End If
```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.16 DragDrop.GetFileDescriptorCount 2501
- 78.45 Files.ReadFile 3844

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)

Created 5th February 2018, last changed 5th February 2018.

69.16 DragDrop.GetFileDescriptorCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	8.1	No	Yes	No	No	No

MBS("DragDrop.GetFileDescriptorCount"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns number or error.

Description

See also

- [69.6 DragDrop.CreateWithControl](#) 2487
- [69.15 DragDrop.GetFileDescriptor](#) 2499

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)

Created 5th February 2018, last changed 5th February 2018.

69.17 DragDrop.GetHTML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	9.2	Yes	Yes	No	No	No

MBS("DragDrop.GetHTML"; droparea { ; Encoding })

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area. \$dropHandle

Encoding

Optional

The text encoding for result. Default is Windows ANSI.

UTF8

Result Returns HTML text or error.

Description

HTML may be prefixed on Windows with metadata like the source URL. You may remove all text before <html> to get only the html.

See also

- [69.6 DragDrop.CreateWithControl](#) 2487
- [69.19 DragDrop.GetLeft](#) 2504
- [69.22 DragDrop.GetPath](#) 2507
- [69.25 DragDrop.GetRTF](#) 2514
- [69.26 DragDrop.GetTag](#) 2515
- [69.27 DragDrop.GetText](#) 2516
- [69.28 DragDrop.GetTop](#) 2518
- [69.30 DragDrop.GetURL](#) 2520
- [69.46 DragDrop.SetTag](#) 2545

Example Databases

- [Drag and Drop/DragTest](#)

69.17.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 13th March 2019, last changed 13th March 2019.

69.18 DragDrop.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.0	Yes	Yes	No	No	No

MBS("DragDrop.GetHeight"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns height or error.

Description

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.19 DragDrop.GetLeft 2504
- 69.27 DragDrop.GetText 2516
- 69.32 DragDrop.GetWidth 2522

Created 18th August 2014, last changed 5th February 2018.

69.19 DragDrop.GetLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.0	Yes	Yes	No	No	No

MBS("DragDrop.GetLeft"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns x coordinate or error.

Description

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.18 DragDrop.GetHeight 2503
- 69.17 DragDrop.GetHTML 2502
- 69.22 DragDrop.GetPath 2507
- 69.25 DragDrop.GetRTF 2514
- 69.26 DragDrop.GetTag 2515
- 69.27 DragDrop.GetText 2516
- 69.28 DragDrop.GetTop 2518
- 69.30 DragDrop.GetURL 2520
- 69.32 DragDrop.GetWidth 2522

Created 18th August 2014, last changed 5th February 2018.

69.20 DragDrop.GetMouseX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.GetMouseX"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns the mouse x coordinate.

Description

Call this function in the drag action script. The mouse position is relative to the window.
Added Windows support for MBS Plugin 8.1.

Examples

Queries Mouse X and Y coordinates:

```
MBS( "DragDrop.GetMouseX"; $droparea ) & " / " & MBS( "DragDrop.GetMouseY"; $droparea )
```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.21 DragDrop.GetMouseY 2506
- 69.29 DragDrop.GetTypes 2519

Created 18th August 2014, last changed 5th February 2018.

69.21 DragDrop.GetMouseY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.GetMouseY"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns the mouse y coordinate.

Description

Call this function in the drag action script. The mouse position is relative to the window.
Added Windows support for MBS Plugin 8.1.

Examples

Queries Mouse X and Y coordinates:

```
MBS( "DragDrop.GetMouseX"; $droparea ) & " / " & MBS( "DragDrop.GetMouseY"; $droparea )
```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.20 DragDrop.GetMouseX 2505
- 69.29 DragDrop.GetTypes 2519

Created 18th August 2014, last changed 5th February 2018.

69.22 DragDrop.GetPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.GetPath"; droparea { ; index })

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

index

Optional

Optional index for the file path. Index goes from 0 to DragDrop.GetPathCount-1.

0

Result The path or empty value.

Description

Call this function in the drag action script.

For an email drag from Apple Mail, this function may give the path to a copy of the email file in temporary folder.

Use Path.NativePathToFileMakerPath to convert to a FileMaker path if you plan to use "filemac:" for an insert file script step.

Added Windows support for MBS Plugin 8.1.

Examples

Process paths in Drag & Drop:

```
Set Variable [ $count ; Value: MBS("DragDrop.GetPathCount"; $dropview) ]
If [ $count >0 ]
Set Variable [ $index ; Value: 0 ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $path ; Value: MBS("DragDrop.GetPath"; $dropview; $index) ]
If [ Length ( $path ) >0 ]
If [ MBS("Files.FileExists"; $path) = 0 ]
# File not yet written? Wait a bit
Pause/Resume Script [ Duration (seconds): 1 ]
End If
New Record/Request
Set Field [ DragTest::field ; MBS("Files.ReadFile"; $path; "auto") ]
Set Field [ DragTest::Text ; $path ]
Set Field [ DragTest::Description ; "Got via path list" ]
Commit Records/Requests [ With dialog: Off ]
End If
```

```
# next
Set Variable [ $index ; Value: $index+1 ]
Exit Loop If [ $index = $count ]
End Loop
End If
```

Stores files in records:

```
Set Variable [ $dropview ; Value: Get(ScriptParameter) ]
Set Variable [ $count ; Value: MBS("DragDrop.GetPathCount"; $dropview) ]
// Show Custom Dialog [ "Number of files: " & $count ]
Set Variable [ $index ; Value: 0 ]
If [ $count >0 ]
Loop
Set Variable [ $OSPfad ; Value: MBS("DragDrop.GetPath"; $dropview; $index) ]
Set Variable [ $FMPfad ; Value: MBS( "Path.NativePathToFilemakerPath"; $OSPfad ) ]
#
If [ MBS("Files.FileExists"; $OSPfad) ]
Go to Layout [ "MIX" ; Animation: None ]
New Record/Request
#
Set Field [ MIX::Path ; $OSPfad ]
Set Field [ MIX::Name ; MBS( "Path.LastPathComponent"; $OSPfad ) ]
#
Go to Field [ MIX::Image ]
Insert Picture [ Reference ; "$FMPfad" ]
#
Commit Records/Requests [ With dialog: Off ]
Go to Layout [ original layout ; Animation: None ]
End If
#
Set Variable [ $index ; Value: $index+1 ]
Exit Loop If [ $index = $count ]
End Loop
End If
```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.14 DragDrop.GetEmailSubject 2498
- 69.23 DragDrop.GetPathCount 2510
- 69.25 DragDrop.GetRTF 2514
- 69.26 DragDrop.GetTag 2515
- 69.28 DragDrop.GetTop 2518

69.22. DRAGDROP.GETPATH	2509
• 69.30 DragDrop.GetURL	2520
• 69.32 DragDrop.GetWidth	2522
• 121.5 Path.LastPathComponent	6144
• 121.7 Path.NativePathToFileMakerPath	6147

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest File](#)
- [Drag and Drop/for Mac/DragTest multiple picture files](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

69.22.1 Blog Entries

- [MBS Filemaker Plugin, version 2.4pr8](#)

Created 18th August 2014, last changed 8th February 2018.

69.23 DragDrop.GetPathCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.GetPathCount"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result The number of paths.

Description

Call this function in the drag action script.
Added Windows support for MBS Plugin 8.1.

Examples

Stores files in records:

```

Set Variable [ $dropview ; Value: Get( ScriptParameter ) ]
Set Variable [ $count ; Value: MBS( "DragDrop.GetPathCount"; $dropview ) ]
// Show Custom Dialog [ "Number of files: " & $count ]
Set Variable [ $index ; Value: 0 ]
If [ $count > 0 ]
Loop
Set Variable [ $OSPFad ; Value: MBS( "DragDrop.GetPath"; $dropview; $index ) ]
Set Variable [ $FMPfad ; Value: MBS( "Path.NativePathToFilemakerPath"; $OSPFad ) ]
#
If [ MBS( "Files.FileExists"; $OSPFad ) ]
Go to Layout [ "MIX" ; Animation: None ]
New Record/Request
#
Set Field [ MIX::Path ; $OSPFad ]
Set Field [ MIX::Name ; MBS( "Path.LastPathComponent"; $OSPFad ) ]
#
Go to Field [ MIX::Image ]
Insert Picture [ Reference ; "$FMPfad" ]
#
Commit Records/Requests [ With dialog: Off ]
Go to Layout [ original layout ; Animation: None ]
End If
#
Set Variable [ $index ; Value: $index+1 ]
Exit Loop If [ $index = $count ]
End Loop
End If

```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.11 DragDrop.GetEmailCount 2495
- 69.22 DragDrop.GetPath 2507
- 69.24 DragDrop.GetPicture 2512
- 78.19 Files.FileExists 3801
- 121.5 Path.LastPathComponent 6144
- 121.7 Path.NativePathToFileMakerPath 6147

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest multiple picture files](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

Created 18th August 2014, last changed 8th February 2018.

69.24 DragDrop.GetPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	No	No	No	No

```
MBS( "DragDrop.GetPicture"; droparea { ; ImageType; Filename; index } )
```

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.
"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.
"test.jpg"

index

Optional

Index for the file path. Index goes from 0 to DragDrop.GetPathCount-1.
0

Result Returns container value with picture.

Description

Call this function in the drag action script. This can be a direct picture drag or a file drag where we load the picture file.

Examples

Queries picture as PNG

```
MBS( "DragDrop.GetPicture"; $droparea; "PNG"; "myfile.png" )
```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.22 DragDrop.GetPath 2507
- 69.23 DragDrop.GetPathCount 2510
- 69.31 DragDrop.GetVisible 2521
- 69.32 DragDrop.GetWidth 2522

Example Databases

- [Drag and Drop/for Mac/DragTest Image](#)

Created 18th August 2014, last changed 12nd July 2015.

69.25 DragDrop.GetRTF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	9.2	Yes	Yes	No	No	No

MBS("DragDrop.GetRTF"; droparea { ; Encoding })

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area. \$dropHandle

Encoding

Optional

The text encoding for result. Default is Windows ANSI.

UTF8

Result Returns RTF or error.

Description

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.17 DragDrop.GetHTML 2502
- 69.19 DragDrop.GetLeft 2504
- 69.22 DragDrop.GetPath 2507
- 69.26 DragDrop.GetTag 2515
- 69.27 DragDrop.GetText 2516
- 69.28 DragDrop.GetTop 2518
- 69.30 DragDrop.GetURL 2520
- 69.46 DragDrop.SetTag 2545

Example Databases

- [Drag and Drop/DragTest](#)

69.25.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 13th March 2019, last changed 13th March 2019.

69.26 DragDrop.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	3.3	Yes	Yes	No	No	No

MBS("DragDrop.GetTag"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns the stored tag value or an error.

Description

See also

- [69.17 DragDrop.GetHTML](#) 2502
- [69.19 DragDrop.GetLeft](#) 2504
- [69.22 DragDrop.GetPath](#) 2507
- [69.25 DragDrop.GetRTF](#) 2514
- [69.27 DragDrop.GetText](#) 2516
- [69.28 DragDrop.GetTop](#) 2518
- [69.29 DragDrop.GetTypes](#) 2519
- [69.30 DragDrop.GetURL](#) 2520
- [69.45 DragDrop.SetImage](#) 2543
- [69.46 DragDrop.SetTag](#) 2545

69.26.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr5](#)

Created 18th August 2014, last changed 5th February 2018.

69.27 DragDrop.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.6	Yes	Yes	No	No	No

MBS("DragDrop.GetText"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result The text.

Description

Added Windows support for MBS Plugin 8.1.

Examples

Process text coming with Drag & Drop:

```
Set Variable [ $text ; Value: MBS("DragDrop.GetText"; $dropview) ]
If [ Length($text) >0 ]
New Record/Request
Set Field [ DragTest::Text ; $text ]
Set Field [ DragTest::Description ; "Got text" ]
Commit Records/Requests [ With dialog: Off ]
End If
```

See also

- 69.18 DragDrop.GetHeight 2503
- 69.19 DragDrop.GetLeft 2504
- 69.22 DragDrop.GetPath 2507
- 69.25 DragDrop.GetRTF 2514
- 69.26 DragDrop.GetTag 2515
- 69.28 DragDrop.GetTop 2518
- 69.29 DragDrop.GetTypes 2519
- 69.30 DragDrop.GetURL 2520
- 69.32 DragDrop.GetWidth 2522
- 69.46 DragDrop.SetTag 2545

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest Text](#)
- [Drag and Drop/for Mac/Image drag from one database to other/Image drop](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drag](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drop](#)

69.27.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr6](#)

Created 18th August 2014, last changed 5th February 2018.

69.28 DragDrop.GetTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.0	Yes	Yes	No	No	No

MBS("DragDrop.GetTop"; droparea; swap)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

swap

Whether to swap y coordinate. By default we swap them. Pass 0 to disable or 1 to swap.

1

Result Returns y coordinate or error.

Description

As Cocoa framework uses zero for the bottom coordinate, we have to swap for the normal topdown coordinates to be used.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.17 DragDrop.GetHTML 2502
- 69.19 DragDrop.GetLeft 2504
- 69.22 DragDrop.GetPath 2507
- 69.25 DragDrop.GetRTF 2514
- 69.26 DragDrop.GetTag 2515
- 69.27 DragDrop.GetText 2516
- 69.29 DragDrop.GetTypes 2519
- 69.30 DragDrop.GetURL 2520
- 69.46 DragDrop.SetTag 2545

Created 18th August 2014, last changed 5th February 2018.

69.29 DragDrop.GetTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.3	Yes	No	No	No	No

MBS("DragDrop.GetTypes"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns list of types or error.

Description

This are the names Apple uses for drag and drop, e.g. NSStringPBoardType for text.

See also

- [69.6 DragDrop.CreateWithControl](#) 2487
- [69.20 DragDrop.GetMouseX](#) 2505
- [69.21 DragDrop.GetMouseY](#) 2506
- [69.26 DragDrop.GetTag](#) 2515
- [69.27 DragDrop.GetText](#) 2516
- [69.28 DragDrop.GetTop](#) 2518
- [69.32 DragDrop.GetWidth](#) 2522

69.29.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

69.30 DragDrop.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.6	Yes	No	No	No	No

MBS("DragDrop.GetURL"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result The URL text.

Description

Useful for receiving links from Safari.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.17 DragDrop.GetHTML 2502
- 69.19 DragDrop.GetLeft 2504
- 69.22 DragDrop.GetPath 2507
- 69.25 DragDrop.GetRTF 2514
- 69.26 DragDrop.GetTag 2515
- 69.27 DragDrop.GetText 2516
- 69.28 DragDrop.GetTop 2518
- 69.46 DragDrop.SetTag 2545

Example Databases

- [Drag and Drop/for Mac/DragTest Email](#)
- [Drag and Drop/for Mac/DragTest URL](#)

69.30.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr6](#)

Created 18th August 2014, last changed 18th August 2014.

69.31 DragDrop.GetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.0	Yes	Yes	No	No	No

MBS("DragDrop.GetVisible"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if hidden.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.24 DragDrop.GetPicture 2512
- 69.47 DragDrop.SetVisible 2546

Created 18th August 2014, last changed 5th February 2018.

69.32 DragDrop.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.0	Yes	Yes	No	No	No

MBS("DragDrop.GetWidth"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns width or error.

Description

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.18 DragDrop.GetHeight 2503
- 69.19 DragDrop.GetLeft 2504
- 69.22 DragDrop.GetPath 2507
- 69.24 DragDrop.GetPicture 2512
- 69.27 DragDrop.GetText 2516
- 69.29 DragDrop.GetTypes 2519

Created 18th August 2014, last changed 5th February 2018.

69.33 DragDrop.GetWindowRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	3.3	Yes	Yes	No	No	No

MBS("DragDrop.GetWindowRef"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns window reference number or error.

Description

See also

- 69.6 DragDrop.CreateWithControl

2487

69.33.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr5](#)

Created 18th August 2014, last changed 15th April 2019.

69.34 DragDrop.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.0	Yes	Yes	No	No	No

MBS("DragDrop.List")

Result Returns list of IDs.

Description

This helps debugging, especially finding scripts which do not release their objects properly.
Created 18th August 2014, last changed 5th February 2018.

69.35 DragDrop.RegisterDropTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	No	No	No	No

MBS("DragDrop.RegisterDropTypes"; droparea; Types)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area. \$dropHandle

Types

The types you want to accept for the window. This can be Cocoa native type specifications or some special types: "images" for all image types, "movies" for movie types, "file" for files, "URL" for URLs, "Email" for emails and "text" for text. If you use more than one type, separate them with comma.

"images"

Result Returns "OK" on success.

Description

Call this function for each window where you want to define drag types. As FileMaker defines some types by itself, you don't need to call this method for every type.

Version 2.7 adds "Emails" as type. You can receive Email drops from Apple Mail this way. The functions DragDrop.GetEmailCount, DragDrop.GetEmailID, DragDrop.GetEmailMailbox, DragDrop.GetEmailAccount and DragDrop.GetEmailSubject give you the details on received emails. GetURL gives URL of email if you received only one.

For Version 9.2 or newer you can pass RTF and HTML for the types.

Examples

Registers for file drop for the current window:

```
MBS( "DragDrop.RegisterDropTypes"; $droparea; "file")
```

Create with control:

```
Set Variable [ $dropview ; Value: MBS("DragDrop.CreateWithControl"; 0; "DropArea") ]
```

```
Set Variable [ $result ; Value: MBS( "DragDrop.RegisterDropTypes"; $dropview; "file") ]
```

```
Set Variable [ $result ; Value: MBS( "DragDrop.SetDragActionHandler"; $dropview; Get ( FileName ); "DragAction") ]
```

```
Set Variable [ $result ; Value: MBS( "DragDrop.SetCursor"; $dropview; 1) ]
```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.10 DragDrop.GetEmailAccount 2494

- 69.11 DragDrop.GetEmailCount 2495
- 69.12 DragDrop.GetEmailID 2496
- 69.13 DragDrop.GetEmailMailbox 2497
- 69.14 DragDrop.GetEmailSubject 2498
- 69.39 DragDrop.SetCursor 2532
- 69.40 DragDrop.SetDragActionHandler 2534
- 69.48 DragDrop.UnregisterDropTypes 2547

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest Email](#)
- [Drag and Drop/for Mac/DragTest File](#)
- [Drag and Drop/for Mac/DragTest multiple picture files](#)
- [Drag and Drop/for Mac/DragTest Text](#)
- [Drag and Drop/for Mac/DragTest URL](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drag](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drop](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

Created 18th August 2014, last changed 13th March 2019.

69.36 DragDrop.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.Release"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns "OK" on success.

Description

If you go to layout editor and drop zones are still active, this may cause trouble. Like you can't drag & drop controls.

Examples

Releases a drop area:

```
If [ Length($$dropView) >0 ]
Set Variable [ $result ; Value: MBS( "DragDrop.Release"; $$dropview) ]
Set Variable [ $$dropview ; Value: "" ]
End If
```

See also

- 69.4 DragDrop.CreateOnPopoverWithControl 2483
- 69.5 DragDrop.CreateOnPopoverWithSize 2485
- 69.6 DragDrop.CreateWithControl 2487
- 69.7 DragDrop.CreateWithSize 2490
- 69.8 DragDrop.CreateWithWindow 2492
- 69.37 DragDrop.ReleaseAll 2529

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest multiple picture files](#)

69.36.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 18th August 2014, last changed 5th February 2018.

69.37 DragDrop.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.ReleaseAll")

Result Returns number of drop views released.

Description

See also

- [69.36 DragDrop.Release](#)

2527

69.37.1 Blog Entries

- [MBS Filemaker Plugin, version 2.4pr8](#)

Created 18th August 2014, last changed 5th February 2018.

69.38 DragDrop.SetAutoResizingMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	9.1	Yes	No	No	No	No

MBS("DragDrop.SetAutoResizingMask"; droparea; Value)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Value

The new setting.
4+8

Result Returns OK or error.

Description

This defines whether view changes its size based on the surrounding window.

Name	Value	Description
NotSizable	0	The view cannot be resized.
MinXMargin	1	The left margin between the view and its superview is flexible.
WidthSizable	2	The view's width is flexible.
MaxXMargin	4	The right margin between the view and its superview is flexible.
MinYMargin	8	The bottom margin between the view and its superview is flexible.
HeightSizable	16	The view's height is flexible.
MaxYMargin	32	The top margin between the view and its superview is flexible.

e.g. the value 18 means the view can resize both horizontally and vertically with the parent view (window).

Examples

Resize with window growing:

MBS("DragDrop.SetAutoResizingMask"; \$\$dragDrop; 4+2+8+16)

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.9 DragDrop.GetAutoResizingMask 2493
- 106.15 MapView.GetAutoResizingMask 5659
- 106.65 MapView.SetAutoResizingMask 5712

<i>69.38. DRAGDROP.SETAUTORESIZINGMASK</i>	2531
• 165.30 TextView.SetAutoResizingMask	7908
• 180.122 WebView.SetAutoResizingMask	8449

69.38.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 20th February 2019, last changed 22nd February 2019.

69.39 DragDrop.SetCursor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.SetCursor"; droparea; mode)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

mode

The cursor mode. Currently: 0 = default, 1 = copy, 2 = link and 4 = move.

1

Result Returns "OK" on success.

Description

This defines what cursor the user sees when moving mouse over the drop area.

FileMaker seems to overwrite our cursor change. Sorry.

Added Windows support for MBS Plugin 8.1 and new mode Move.

Examples

Set cursor to shop plus sign:

```
MBS( "DragDrop.SetCursor"; $dropview; 1)
```

See also

- [69.6 DragDrop.CreateWithControl](#) 2487
- [69.35 DragDrop.RegisterDropTypes](#) 2525
- [69.43 DragDrop.SetFrame](#) 2540

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest multiple picture files](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

69.39.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr3](#)

- [MBS FileMaker Plugin, version 5.2pr1](#)

Created 18th August 2014, last changed 10th February 2018.

69.40 DragDrop.SetDragActionHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.SetDragActionHandler"; droparea; FileName; ScriptName)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

FileName

The name of the FileMaker File that contains the script

ScriptName

The name of the script to run

Result Returns "OK" on success.

Description

Specify a filename and script name to have this script being called when a drag operation drops something on the window. This gives you the possibility to process the data.

The script parameter will be the drop area reference.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers drag action handler:

```
MBS( "DragDrop.SetDragActionHandler"; $dropHandle; Get ( FileName ); "MyDragAction")
```

See also

- 69.1 DragDrop.ClearDragActionHandler 2479
- 69.6 DragDrop.CreateWithControl 2487
- 69.35 DragDrop.RegisterDropTypes 2525
- 69.41 DragDrop.SetDragEnterHandler 2536
- 69.42 DragDrop.SetDragExitHandler 2538

Example Databases

- [Drag and Drop/DragTest Popover](#)

- Drag and Drop/for Mac/DragTest Email
- Drag and Drop/for Mac/DragTest File
- Drag and Drop/for Mac/DragTest Image
- Drag and Drop/for Mac/DragTest multiple picture files
- Drag and Drop/for Mac/DragTest Text
- Drag and Drop/for Mac/DragTest URL
- Drag and Drop/for Mac/Image drag from one database to other/Image drop
- Drag and Drop/for Mac/Text drag from one database to other/Text drop
- Mac and iOS/Machine Learning/Core ML Photos

Created 18th August 2014, last changed 5th February 2018.

69.41 DragDrop.SetDragEnterHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.SetDragEnterHandler"; droparea; FileName; ScriptName)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area. \$dropHandle

FileName

The name of the FileMaker File that contains the script

ScriptName

The name of the script to run

Result Returns "OK" on success.

Description

Specify a filename and script name to have this script being called when a drag operation enters the window. This gives you the possibility to draw something like a note "Drop here". The script parameter will be the drop area reference.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers drag enter handler:

```
MBS( "DragDrop.SetDragEnterHandler"; $dropHandle; Get ( FileName ); "MyDragEnter")
```

See also

- 69.2 DragDrop.ClearDragEnterHandler 2481
- 69.3 DragDrop.ClearDragExitHandler 2482
- 69.6 DragDrop.CreateWithControl 2487
- 69.40 DragDrop.SetDragActionHandler 2534
- 69.42 DragDrop.SetDragExitHandler 2538

Example Databases

- [Drag and Drop/for Mac/DragTest File](#)

69.41. *DRAGDROP.SETDRAGENTERHANDLER*

2537

Created 18th August 2014, last changed 5th February 2018.

69.42 DragDrop.SetDragExitHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.SetDragExitHandler"; droparea; FileName; ScriptName)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

FileName

The name of the FileMaker File that contains the script

ScriptName

The name of the script to run

Result Returns "OK" on success.

Description

Specify a filename and script name to have this script being called when a drag operation leaves the window. This gives you the possibility to restore the window from anything you drew there on Drag Enter. The script parameter will be the drop area reference.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers drag exit handler:

```
MBS( "DragDrop.SetDragExitHandler"; $dropHandle; Get ( FileName ); "MyDragExit")
```

See also

- 69.2 DragDrop.ClearDragEnterHandler 2481
- 69.3 DragDrop.ClearDragExitHandler 2482
- 69.6 DragDrop.CreateWithControl 2487
- 69.40 DragDrop.SetDragActionHandler 2534
- 69.41 DragDrop.SetDragEnterHandler 2536

Example Databases

- [Drag and Drop/for Mac/DragTest File](#)

Created 18th August 2014, last changed 5th February 2018.

69.43 DragDrop.SetFrame

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.0	Yes	Yes	No	No	No

MBS("DragDrop.SetFrame"; droparea; X; Y; Width; Height { ; swap })

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

X

The x coordinate.

Y

The y coordinate.

Width

The width of the control.

Height

The height of the control.

swap

Optional

Whether to swap y coordinate. By default we swap them. Pass 0 to disable or 1 to swap.

1

Result Returns OK or error.

Description

As Cocoa framework uses zero for the bottom coordinate, we have to swap for the normal topdown coordinates to be used.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.39 DragDrop.SetCursor 2532
- 69.44 DragDrop.SetFrameWithControl 2541
- 69.45 DragDrop.SetImage 2543
- 69.46 DragDrop.SetTag 2545

Created 18th August 2014, last changed 5th February 2018.

69.44 DragDrop.SetFrameWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	8.5	Yes	Yes	No	No	No

MBS("DragDrop.SetFrameWithControl"; droparea; ControlName { ; DX; DY })

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move drop area more to left or right.

0

DY

Optional

A delta to move drop area more to top or bottom.

0

Result Returns OK or error.

Description

If you moved control in layout mode, this can move the drop area back to the new position.

Also useful to switch between different locations on the layout.

Examples

Move drop area:

```
Set Variable [ $r ; Value: MBS( "DragDrop.SetFrameWithControl"; $$dropview; "drop" ) ]
```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.43 DragDrop.SetFrame 2540
- 93.15 ImageView.SetFrameWithControl 5107
- 106.69 MapView.SetFrameWithControl 5717
- 165.33 TextView.SetFrameWithControl 7912

69.44.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr3](#)

Created 19th October 2018, last changed 19th October 2018.

69.45 DragDrop.SetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	Yes	No	No	No

MBS("DragDrop.SetImage"; droparea; image)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area. \$dropHandle

image

the image to use. For best results, pass a container value with a PNG image.

Result Returns "OK" on success.

Description

Currently not working right in FileMaker 13. Better just put image in layout where you plan to put the drag area.

Added Windows support for MBS Plugin 8.1. Please use picture without alpha channel.

Image is scaled to viewing area, so best make sure you have exactly two times the pixels in the image relative to size of the control.

Examples

Put a picture on drop area:

```
Set Variable [ $result; Value:MBS( "DragDrop.SetImage"; $dropview; DragTest::img ) ]
```

See also

- [69.6 DragDrop.CreateWithControl](#) 2487
- [69.26 DragDrop.GetTag](#) 2515
- [69.43 DragDrop.SetFrame](#) 2540
- [69.46 DragDrop.SetTag](#) 2545

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)

69.45.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr10](#)
- [MBS Filemaker Plugin, version 2.4pr7](#)

Created 18th August 2014, last changed 13th October 2018.

69.46 DragDrop.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	3.3	Yes	Yes	No	No	No

MBS("DragDrop.SetTag"; droparea; tag)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area. \$dropHandle

tag

A string you want to associate with the dropview.

Result Returns OK or error message.

Description

Use the tag to store whatever value you want to associate with the dropview. You can later query it using DragDrop.GetTag.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.17 DragDrop.GetHTML 2502
- 69.22 DragDrop.GetPath 2507
- 69.25 DragDrop.GetRTF 2514
- 69.26 DragDrop.GetTag 2515
- 69.27 DragDrop.GetText 2516
- 69.28 DragDrop.GetTop 2518
- 69.30 DragDrop.GetURL 2520
- 69.43 DragDrop.SetFrame 2540
- 69.45 DragDrop.SetImage 2543

69.46.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr5](#)

Created 18th August 2014, last changed 5th February 2018.

69.47 DragDrop.SetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	4.0	Yes	Yes	No	No	No

MBS("DragDrop.SetVisible"; droparea; Visible)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Visible

The new visible state.

1

Result Returns OK or error.

Description

By default we create it visible, but you can hide it if it's on a register and the user clicked to other tab.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.31 DragDrop.GetVisible 2521

Example Databases

- [Drag and Drop/DragTest](#)

Created 18th August 2014, last changed 5th February 2018.

69.48 DragDrop.UnregisterDropTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
69 DragDrop	2.4	Yes	No	No	No	No

MBS("DragDrop.UnregisterDropTypes"; droparea)

Parameters

droparea

The reference ID for this drop area. Use functions like DragDrop.CreateWithControl to create a drop area.
\$dropHandle

Result Returns "OK" on success.

Description

This can be done for cleanup, but normally you simply let the window go away.

Examples

Unregisters all drag types for the drop area:

```
MBS( "DragDrop.UnregisterDropTypes"; $droparea)
```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 69.35 DragDrop.RegisterDropTypes 2525

Created 18th August 2014, last changed 18th August 2014.

Chapter 70

DynaPDF

Create, Import and Modify PDFs on Mac OS X and Windows.

70.1 DynaPDF.AddActionToObj

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddActionToObj"; PDF; ObjectType; ObjectEvent; Action Handle; Object Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

ObjectType

The type of object that should get the action. Can be Action, Annotation, Bookmark, Catalog, Field, Page or PageLink.

"Field"

ObjectEvent

Which event should trigger the action. Can be OnOpen, OnClose, OnMouseUp, OnMouseEnter, OnMouseExit, OnMouseDown, OnFocus, OnBlur, OnKeyStroke, OnFormat, OnCalc, OnValidate, OnPageVisible, OnPageInVisible, OnPageOpen, OnPageClose, OnBeforeClosign, OnBeforeSaving, OnAfterSaving, OnBeforePrinting or OnAfterPrinting.

"OnCalc"

Action Handle

The handle for the action. e.g. returned by DynaPDF.CreateJSAction.

\$action

Object Handle

The object handle, e.g. a field number for a ObjectType = Field.
\$o

Result Returns OK or error.

Description

The parameter ActHandle requires a handle that was returned by a function that creates an action object such as DynaPDF.CreateGoToAction, etc. The object handle is also a return value of its creation function. If the object type is a page, then use the page number as handle.

It is possible to add multiple actions to one object, but note that DynaPDF does not check whether all actions are valid. For example, it is possible to add more than one action to a text field to the OnFormat event, but Acrobat executes only the first one. Always test your actions with different Acrobat versions because each version handles actions in a different manner.

The OnMouseUp event is the standard event supported by all objects. This event type supports also all action types. The other events are handled differently depending on the Acrobat version. Acrobat 4 supports JavaScript actions only in non-OnMouseUp events. Newer versions support also predefined action types. However, test your forms with the Acrobat versions that should be supported - this is the only way to find incompatibilities.

See also [AddActionToObj](#) function in DynaPDF manual.

Examples

Create sum field:

```
Set Variable [ $y; Value:50 ]
Set Variable [ $script; Value:"var v1 = this.getField(\"Val1\");" & $& "var v2 = this.getField(\"Val2\");"
& $& "var v3 = this.getField(\"Val3\");" & $& "event.value = v1.value + v2.value + v3.value;" ]
Set Variable [ $script; Value:MBS( "Text.ReplaceNewline"; $script; 2 ) ]
Set Variable [ $a; Value:MBS( "DynaPDF.CreateJSAction"; $pdf; $script ) ]
# Create 1st field
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Val1"; -1; 0; 0; 50; $y; 200; 20 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetTextFieldValue"; $pdf; $f; "50.00"; "50.00"; "Right" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetNumberFormat"; $pdf; $f; "NoneDot"; 2; "MinusBlack" ) ]
# Create 2nd field
Set Variable [ $y; Value:$y + 30 ]
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Val2"; -1; 0; 0; 50; $y; 200; 20 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetTextFieldValue"; $pdf; $f; "100.00"; "100.00"; "Right" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetNumberFormat"; $pdf; $f; "NoneDot"; 2; "MinusBlack" ) ]
# Create 3rd field
Set Variable [ $y; Value:$y + 30 ]
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Val3"; -1; 0; 0; 50; $y; 200; 20 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetTextFieldValue"; $pdf; $f; "200.00"; "200.00"; "Right" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetNumberFormat"; $pdf; $f; "NoneDot"; 2; "MinusBlack" ) ]
# Create sum field
# This last field calculates sum of other fields
# Works only in PDF Viewers supporting JavaScript!
Set Variable [ $y; Value:$y + 30 ]
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Sum"; -1; 0; 10; 50; $y; 200; 20 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetFieldBorderWidth"; $pdf; $f; 0 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetTextFieldValue"; $pdf; $f; "350.00 €"; "350.00 €"; "Right" ) ]
```

```
Set Variable [ $r; Value:MBS( "DynaPDF.SetFieldFlags"; $pdf; $f; "ReadOnly"; 0 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.AddActionToObj"; $pdf; "Field"; "OnCalc"; $a; $f ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetNumberFormat"; $pdf; $f; "CommaDot"; 2; "MinusBlack"; "€"; 0 ) ]
```

Create checkbox to confirm page and jump to next one:

```
Set Variable [ $f ; Value: MBS( "DynaPDF.CreateCheckBox"; $pdf; "OK"; "OK";0; -1; $PageWidth-150; $pageHeight-20; 15; 15 ) ]
# This is javascript from Adobe to go to next page You could substitute many of their examples
Set Variable [ $script ; Value: "this.pageNum++" ]
Set Variable [ $script ; Value: MBS( "Text.ReplaceNewline"; $script; 2 ) ]
Set Variable [ $a ; Value: MBS( "DynaPDF.CreateJSAction"; $pdf; $script ) ]
Set Variable [ $r ; Value: MBS( "DynaPDF.AddActionToObj"; $pdf; "Field"; "OnMouseUp"; $a; $f ) ]
```

See also

- [70.50 DynaPDF.CreateGoToAction](#) 2630
- [70.52 DynaPDF.CreateGoToRAction](#) 2634
- [70.53 DynaPDF.CreateGoToRActionEx](#) 2636
- [70.55 DynaPDF.CreateJSAction](#) 2640
- [70.275 DynaPDF.InsertBookmarkEx](#) 2950
- [70.290 DynaPDF.New](#) 2981
- [70.367 DynaPDF.SetFieldBorderWidth](#) 3125
- [70.372 DynaPDF.SetFieldFlags](#) 3134
- [70.404 DynaPDF.SetNumberFormat](#) 3186
- [70.425 DynaPDF.SetTextFieldValue](#) 3226

Example Databases

- [DynaPDF/Create PDF with sum form field](#)

70.1.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr5](#)
- [Tip of the day: DynaPDF form creation with calculation with FileMaker](#)

Created 24th August 2016, last changed 21st May 2017.

70.2 DynaPDF.AddAnnotToPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddAnnotToPage"; PDF; PageNum; Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

PageNum

The page number.

Handle

The annotation handle.

Result Returns OK or error.

Description

With exception of PopUp annotations all annotation types can be drawn on multiple pages. Watermark or Stamp annotations are typical annotations which can be placed on multiple pages.

See also [AddAnnotToPage](#) function in DynaPDF manual.

See also

- [70.290 DynaPDF.New](#) 2981
- [70.500 DynaPDF.WatermarkAnnot](#) 3343

70.2.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 13th December 2016, last changed 13th December 2016.

70.3 DynaPDF.AddBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddBookmark"; PDF; Title; Parent; DestPage { ; Open })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Title

Title of the bookmark

"Chapter 2"

Parent

The Parent bookmark or -1.

-1

DestPage

Destination page.

5

Open

Optional

Optional, whether bookmark should appear open initially. Default is 0 for closed.

0

Result Returns Handle of bookmark or error.

Description

It sets also the page mode to pmUseOutlines (see DynaPDF.SetPageMode). If the outline tree should not be shown when opening the document, then set the page mode back to pmUseNone or any other value before closing the PDF file.

Parent can be a handle of another bookmark if it should be added as a child of this bookmark. If Parent is set to -1 the bookmark is added as a root node.

DestPage specifies the page that should be opened when clicking on the bookmark. The parameter can be set to a page number that does not yet exist. If the page does not exist when closing file then it is adjusted to page number 1.

The parameter Open specifies whether a bookmark node should appear open or closed when it contains children. When a bookmark contains no children then this parameter should be set to false.

Related functions: DynaPDF.AddBookmarkEx, DynaPDF.ChangeBookmark, DynaPDF.InsertBookmark, DynaPDF.InsertBookmarkEx, DynaPDF.SetBookmarkDest, DynaPDF.SetBookmarkStyle.

See also [AddBookmark](#) function in DynaPDF manual.

Examples

Add a bookmark to link to page 5

MBS("DynaPDF.AddBookmark"; \$PDF; "Test"; -1; 5; 0)

See also

- 70.4 DynaPDF.AddBookmarkEx 2555
- 70.30 DynaPDF.ChangeBookmark 2597
- 70.57 DynaPDF.CreateNamedDest 2646
- 70.103 DynaPDF.FindBookmark 2720
- 70.124 DynaPDF.GetBookmark 2753
- 70.274 DynaPDF.InsertBookmark 2948
- 70.275 DynaPDF.InsertBookmarkEx 2950
- 70.290 DynaPDF.New 2981
- 70.345 DynaPDF.SetBookmarkDest 3095
- 70.415 DynaPDF.SetPageMode 3207

Example Databases

- [DynaPDF/Bookmarks](#)

Created 18th August 2014, last changed 18th August 2014.

70.4 DynaPDF.AddBookmarkEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddBookmarkEx"; PDF; Title; Parent; NamedDest; Open)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Title

Title of the bookmark.

"Chapter 2"

Parent

Parent bookmark if any or -1 for a root node.

-1

NamedDest

Name of a named destination (text) or Named Destination handle (number).

"test"

Open

Open (1) or close (0) the node when it has children?

0

Result Returns new bookmark handle or error.

Description

It sets also the page mode to UseOutlines (see DynaPDF.SetPageMode). If the outline tree should not be shown when opening the document, set the page mode back to pmUseNone or any other value before closing the document.

Parent can be a handle of another bookmark if it should be added as a child of this bookmark. If Parent is set to -1 the bookmark is added as a root node.

The difference in comparison to DynaPDF.AddBookmarkEx is that the named destination can be defined as a string. This makes it possible to create the bookmark, also if you don't have the required information to create the named destination at this point. If the named destination does not exist when the file is closed then the bookmark does nothing. See also DynaPDF.CreateNamedDest().

See also [AddBookmarkEx](#) function in DynaPDF manual.

See also

- 70.3 DynaPDF.AddBookmark 2553
- 70.57 DynaPDF.CreateNamedDest 2646
- 70.103 DynaPDF.FindBookmark 2720
- 70.124 DynaPDF.GetBookmark 2753

- 70.275 DynaPDF.InsertBookmarkEx 2950
- 70.290 DynaPDF.New 2981
- 70.415 DynaPDF.SetPageMode 3207

Created 18th August 2014, last changed 18th August 2014.

70.5 DynaPDF.AddContinueText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddContinueText"; PDF; text)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

text

Text to be printed.
"Hello World"

Result Returns OK or error message.

Description

Text lines created by this function are handled as a separate block. Before calling the function the first time, the usage must be prepared with DynaPDF.BeginContinueText.

The distance between two text lines can be adjusted with DynaPDF.SetLeading.

See also [AddContinueText](#) function in DynaPDF manual.

See also

- [70.20 DynaPDF.BeginContinueText](#) 2584
- [70.202 DynaPDF.GetLeading](#) 2847
- [70.290 DynaPDF.New](#) 2981
- [70.397 DynaPDF.SetLeading](#) 3176

Example Databases

- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)

Created 18th August 2014, last changed 27th May 2017.

70.6 DynaPDF.AddDeviceNProcessColorants

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "DynaPDF.AddDeviceNProcessColorants"; PDF; DeviceNCS; Colorants; NumColorants; ProcessCS
{ ; Handle } )
```

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

DeviceNCS

Handle of a DeviceN or NChannel color space

Colorants

Array of colorant names.

NumColorants

Number of colorants in the arrays.

ProcessCS

Process color space

Handle

Optional

Alternate color space handle or -1.

Result Returns OK or error.

Description

Adds a dictionary to a DeviceN or NChannel color space that describes the process color space whose components are included in the DeviceN or NChannel color space.

The array Colorants holds the process colorant names which are included in the process color space. The names must appear in the normal color space order, e.g. Red, Green, and Blue, for a RGB color space and the number of colorant names must match the number of color components in the process color space. However, the names in the Colorants array need not match the actual color space names. For example, a Red component need not be named Red.

Definitions of process colorants must not appear in the definition of spot colorants (see DynaPDF.AddDeviceNSeparations).

The reserved names Cyan, Magenta, Yellow, and Black are always considered to be process colors, which do not necessarily correspond to the colorants of a specific device; they are not required to have entries in the process dictionary.

If NumColorants is zero the functions deletes existing definitions of process colorants in the DeviceN or NChannel color space. Otherwise, existing definitions will be overridden.

Remarks:

Process colorant names must be defined in the code page 1252 (WinAnsi). The plugin will convert text to Windows ANSI.

70.6. *DYNAPDF.ADDDEVICENPROCESSCOLORANTS* 2559

See also [AddDeviceNProcessColorants](#) function in DynaPDF manual.

See also

- 70.7 DynaPDF.AddDeviceNSeparations 2560
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/Create DeviceN ColorSpace](#)

70.6.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 27th August 2017, last changed 27th August 2017.

70.7 DynaPDF.AddDeviceNSeparations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddDeviceNSeparations"; PDF; DeviceNCS; Colorants; SeparationCS; NumColorants)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DeviceNCS

Handle of a DeviceN or NChannel color space.

Colorants

Array of colorant names.

SeparationCS

Array of Separation color space handles.

NumColorants

Number of colorants and handles in the arrays.

Result Returns OK or error.

Description

Adds a dictionary to a DeviceN or NChannel color space that describes the spot colorants which are used in the color space.

This dictionary provides information about the individual colorants that may be useful to some applications. In particular, the alternate color space and tint transformation function of a Separation color space describe the appearance of that colorant alone, whereas those of a DeviceN color space describe only the appearance of its colorants in combination.

The array Colorants holds the spot colorant names and the array SeparationCS holds the corresponding Separation color space handles. The colorant names in the array must match the names in the corresponding Separation color spaces. In addition, the colorants must be included in the DeviceN or NChannel color space. If NumColorants is zero the functions deletes existing definitions of spot colorants in the DeviceN or NChannel color space. Otherwise, existing definitions will be overridden.

See also [AddDeviceNSeparations](#) function in DynaPDF manual.

Examples

Create separation color space with spotcolor and use it:

```
# Create the DeviceN color space
# Create Blend function (see dynapdf_help.pdf for how this was created)
Set Variable [ $PostScriptFunc ; Value: " { 2 index 0.38 mul 2 index 0 add add 0 3 index 0.56 mul 0 add
add 4 index 0.34 mul 0 4 index add add 0 0 0 add add 7 4 roll pop pop pop } " ]
Set Variable [ $cls ; Value: "PANTONE 345 CVC$PANTONE 293 CVC$Yellow" ]
Set Variable [ $cs ; Value: MBS("DynaPDF.CreateDeviceNColorSpace"; $pdf; $cls; 3; $PostScriptFunc;
"DeviceCMYK"; -1) ]
```

```

# We create also Separation color spaces for the spot colors and add
# these color spaces as an attribute to the DeviceN color space:
# First spot color
Set Variable [ $separations0 ; Value: MBS("DynaPDF.CreateSeparationCS"; $pdf; Trim(GetValue ( $cls; 1
)); "DeviceCMYK"; -1; MBS("DynaPDF.CMYK"; 97; 0; 87; 0) ) ]
# Second spot color
Set Variable [ $separations1 ; Value: MBS("DynaPDF.CreateSeparationCS"; $pdf; Trim(GetValue ( $cls; 2
)); "DeviceCMYK"; -1; MBS("DynaPDF.CMYK"; 255; 143; 0; 0) ) ]
# Put in a list:
Set Variable [ $separations ; Value: $separations0 & $& $separations1 ]
# Add the separation color spaces to the DeviceN color space.
Set Variable [ $r ; Value: MBS("DynaPDF.AddDeviceNSeparations"; $pdf; $cs; $cls; $separations; 2) ]
# Because the DeviceN color space uses a process color we add also
# the attributes of the process color space to it. Note that all
# colorant names must be defined, also if the DeviceN color space
# uses only one component of the process color space.
Set Variable [ $pcs ; Value: "Cyan$Magenta$Yellow$Black" ]
Set Variable [ $r ; Value: MBS("DynaPDF.AddDeviceNProcessColorants"; $pdf; $cs; $pcs; 4; "DeviceCMYK";
-1) ]
# The DeviceN color space is now fully created so that we can use it
# Set the DeviceN color space
Set Variable [ $r ; Value: MBS("DynaPDF.SetExtColorSpace"; $pdf; $cs) ]
# Draw a rectangle with this color
Set Variable [ $r ; Value: MBS("DynaPDF.SetFillColor"; $pdf; 150/255; 100/255; 100/255) ]
Set Variable [ $r ; Value: MBS("DynaPDF.Rectangle"; $pdf; 50; 690; 200; 100; "fill") ]

```

See also

- 70.6 DynaPDF.AddDeviceNProcessColorants 2558
- 70.27 DynaPDF.CMYK 2593
- 70.49 DynaPDF.CreateDeviceNColorSpace 2628
- 70.59 DynaPDF.CreateSeparationCS 2650
- 70.290 DynaPDF.New 2981
- 70.310 DynaPDF.Rectangle 3031
- 70.360 DynaPDF.SetExtColorSpace 3116
- 70.384 DynaPDF.SetFillColor 3150

Example Databases

- [DynaPDF/Create DeviceN ColorSpace](#)

70.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 27th August 2017, last changed 27th August 2017.

70.8 DynaPDF.AddFontSearchPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddFontSearchPath"; PDF; Path; Recursive)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Path

Path to font file directory or path to font file.
"C:\Fonts"

Recursive

Include subdirectories (search recursively). Pass 1 for recursive or 0 for not recursive.
1

Result Returns number of fonts loaded or error message.

Description

An arbitrary number of search paths can be added at runtime. Subdirectories are added recursively if the parameter Recursive is 1.

Result may be 0 if all those fonts in were already loded.

See also [AddFontSearchPath](#) function in DynaPDF manual.

Examples

Loads font folder on Windows:

```
MBS( "DynaPDF.AddFontSearchPath"; "C:\Fonts"; 1 )
```

See also

- [70.251 DynaPDF.GetUseSystemFonts](#) 2907
- [70.290 DynaPDF.New](#) 2981
- [70.435 DynaPDF.SetUseSystemFonts](#) 3239

70.8.1 Blog Entries

- [Install fonts for PDF generation in FileMaker Cloud](#)
- [PDF Standard Fonts](#)
- [MBS Filemaker Plugin, version 4.1pr5](#)

Created 18th August 2014, last changed 21st October 2014.

70.9 DynaPDF.AddOutputIntent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddOutputIntent"; PDF; Path)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Path

The native path to the ICC profile.
\$path

Result Returns handle of the Rendering Intent object or error.

Description

see also DynaPDF.AddOutputIntentEx.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [AddOutputIntent](#) function in DynaPDF manual.

See also

- 70.10 DynaPDF.AddOutputIntentEx 2565
- 70.215 DynaPDF.GetOutputIntent 2864
- 70.290 DynaPDF.New 2981
- 121.2 Path.FileMakerPathToNativePath 6139

70.9.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr9](#)

Created 3th November 2014, last changed 27th May 2017.

70.10 DynaPDF.AddOutputIntentEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddOutputIntentEx"; PDF; Container)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Container

The container with the ICC Profile as file content.

Result Returns handle of the Rendering Intent object or error.

Description

see also DynaPDF.AddOutputIntent.

See also [AddOutputIntentEx](#) function in DynaPDF manual.

Examples

Check conformance and add required output intents:

```
# Check if this PDF conforms to PDF/A-1b 2005
Set Variable [ $c; Value:MBS("DynaPDF.CheckConformance"; $pdf; "PDF/A 1b 2005") ]
If [ $c = 1 ]
# A RGB ICC profile must be added to the document
Set Variable [ $r; Value:MBS("DynaPDF.AddOutputIntentEx"; $pdf; ZUGFeRD Invoice::RGB ICC Profile)
]
Else If [ $c = 2 ]
# A CMYK ICC profile must be added to the document
Set Variable [ $r; Value:MBS("DynaPDF.AddOutputIntentEx"; $pdf; ZUGFeRD Invoice::CMYK ICC Profile) ]
Else If [ $c = 3 ]
# A Gray, RGB, or CMYK ICC profile must be added to the document
Set Variable [ $r; Value:MBS("DynaPDF.AddOutputIntentEx"; $pdf; ZUGFeRD Invoice::RGB ICC Profile)
]
End If
```

See also

- 70.9 DynaPDF.AddOutputIntent 2564
- 70.37 DynaPDF.CheckConformance 2605
- 70.215 DynaPDF.GetOutputIntent 2864
- 70.290 DynaPDF.New 2981

Example Databases

- DynaPDF/Convert to PDF/A
- DynaPDF/Create Text as PDF/A
- DynaPDF/Scan with WIA to PDF
- DynaPDF/ZUGFeRD/ZUGFeRD Invoice
- DynaPDF/ZUGFeRD 2.0/Factur-X Invoice
- DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice

70.10.1 Blog Entries

- ZUGFeRD 2.0 and Factur-X for FileMaker
- Creating PDF/A in FileMaker with ZUGFeRD standard
- Creating PDF/A in FileMaker with ZUGFeRD standard
- MBS Filemaker Plugin, version 4.4pr9

70.10.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 24

Created 3th November 2014, last changed 16th August 2016.

70.11 DynaPDF.AddValToChoiceField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AddValToChoiceField"; PDF; Field; ExpValue; Value { ; Selected })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

ExpValue

Export value (can be empty)

""

Value

Visible choice value (required).

"Hello"

Selected

Optional

Whether this value should be selected. 1 to select and 0 to not select.

0

Result Returns OK or error.

Description

The parameter Field must be a handle of a combo box or list box. The parameter ExpValue defines the export value that will be submitted to a web server if the value is selected in Adobe's Acrobat. The export value can be an empty string and it is possible to use one export value for multiple values.

The parameter Value is the visible text that can be selected inside the combo box or list box. Value must be a unique string inside the combo box or list box values. Value is required; it must not be an empty string.

If the parameter Selected is true the value appears as selected value in Adobe's Acrobat. List boxes support multiple selected values depending on whether the flag ffMultiSelect was set or not (see DynaPDF.SetFieldFlags and DynaPDF.CreateListBox for further information). If the flag ffMultiSelect is not set, a selected value disables all others (default).

See also [AddValToChoiceField](#) function in DynaPDF manual.

See also

- 70.48 DynaPDF.CreateComboBox

- 70.56 DynaPDF.CreateListBox 2643
- 70.290 DynaPDF.New 2981
- 70.372 DynaPDF.SetFieldFlags 3134

70.11.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 9th July 2015.

70.12 DynaPDF.AllowPageBreak

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AllowPageBreak"; PDF; Allow; PosX; PosY; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Allow

Whether to allow page breaks. Can be 1 to allow or 0 to disallow.

0

PosX

The X position of new text rectangle on the new page.

100

PosY

The Y position of new text rectangle on the new page.

100

Width

The width of new text rectangle on the new page.

400

Height

The height of new text rectangle on the new page.

600

Result Returns OK or error.

Description

By default DynaPDF.WriteFText and DynaPDF.WriteFTextEx functions stop when text rectangle is filled.

If you allow a page break, the plugin will start a new page and add text there.

If you pass all 6 parameters, we use the new rectangle for the following pages.

Examples

Disable page break:

```
MBS("DynaPDF.AllowPageBreak"; $pdf; 0)
```

See also

- 70.290 DynaPDF.New 2981
- 70.503 DynaPDF.WriteFText 3350

- 70.504 DynaPDF.WriteFTextEx 3352
- 70.506 DynaPDF.WriteStyledText 3358
- 70.507 DynaPDF.WriteStyledTextEx 3360

Example Databases

- [DynaPDF/WriteFText](#)

Created 18th August 2014, last changed 28th November 2019.

70.13 DynaPDF.AppendImagePage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AppendImagePage"; PDF; Image Container { ; Resolution })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Image Container

The container with the image to insert.

Resolution

Optional

The resolution to use. Normally we use the ones in the images, but you can overwrite it here.

300

Result Returns OK or error.

Description

This is a convenience function. It creates a page (DynaPDF.AppendPage), reads image format (DynaPDF.ReadImageFormat) and resolution (DynaPDF.ReadImageResolution) and places image on the new page (DynaPDF.InsertImageFile).

Returns number of images added. Because TIFF files can include several images, this count may be higher than 1.

Examples

Create PDF with an image:

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# new page with container image
Set Variable [ $r; Value:MBS("DynaPDF.AppendImagePage"; $pdf; Create Text::test) ]
# Render one page as Picture
Set Variable [ $PDFData; Value:MBS("DynaPDF.Save"; $pdf; "hello.pdf") ]
# cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
# Put in Container
Set Field [ Create Text::PDF; $PDFData ]
```

See also

- 70.14 DynaPDF.AppendImagePages 2573
- 70.15 DynaPDF.AppendPage 2575
- 70.276 DynaPDF.InsertImage 2952

- 70.277 DynaPDF.InsertImageFile 2956
- 70.290 DynaPDF.New 2981
- 70.308 DynaPDF.ReadImageFormat 3028
- 70.309 DynaPDF.ReadImageResolution 3030
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 181.11 WIA.Images 8510

70.13.1 Blog Entries

- [MBS FileMaker Plugin 6.3 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.3pr5](#)

Created 27th June 2016, last changed 27th June 2016.

70.14 DynaPDF.AppendImagePages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AppendImagePages"; PDF; Image Paths { ; Resolution })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Image Paths

The list of native file paths.

"/Users/cs/Desktop/test.jpg"

Resolution

Optional

The resolution to use. Normally we use the ones in the images, but you can overwrite it here.

300

Result Returns number or error.

Description

This is a convenience function. It creates pages (DynaPDF.AppendPage), reads image format (DynaPDF.ReadImageFormat) and resolution (DynaPDF.ReadImageResolution) and places image on page (DynaPDF.InsertImageFile).

Returns number of images added. Because TIFF files can include several images, this count may be higher than the number of file paths.

Examples

Create PDF with images:

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# Set destination path
Set Variable [ $r; Value:MBS( "DynaPDF.OpenOutputFile"; $pdf; "/Users/cs/Desktop/test.pdf" ) ]
# Add pages
Set Variable [ $r; Value:MBS( "DynaPDF.AppendImagePages"; $pdf; "/Users/cs/Desktop/Auto2.JPG$/Users/cs/Desktop/Auto4.JPG$/Users/cs/Desktop/Auto1.JPG"; 300 ) ]
# Save
Set Variable [ $PDFData; Value:MBS("DynaPDF.Save"; $pdf; "hello.pdf" ) ]
# Cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 70.13 DynaPDF.AppendImagePage 2571
- 70.15 DynaPDF.AppendPage 2575

- 70.276 DynaPDF.InsertImage 2952
- 70.277 DynaPDF.InsertImageFile 2956
- 70.290 DynaPDF.New 2981
- 70.291 DynaPDF.OpenOutputFile 2984
- 70.308 DynaPDF.ReadImageFormat 3028
- 70.309 DynaPDF.ReadImageResolution 3030
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)

70.14.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr5](#)
- [MBS FileMaker Plugin 6.3 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.3pr5](#)

Created 27th June 2016, last changed 3th July 2016.

70.15 DynaPDF.AppendPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AppendPage"; PDF)

(old name: DynaPDF.Append)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK on success.

Description

The default page format for new created pages is DIN A4. However, when changing the page format, the next page is created in the same format as the previous one. The CropBox is also set to the values of the previous page. The other bounding boxes such as ArtBox, BleedBox and so on must be set manually for each page.

Use DynaPDF.SetPageHeight and DynaPDF.SetPageWidth or DynaPDF.SetPageFormat function to change size of current page.

See also [Append](#) function in DynaPDF manual.

Examples

Append page:

```
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
```

See also

- [70.13 DynaPDF.AppendImagePage](#) 2571
- [70.90 DynaPDF.EndPage](#) 2697
- [70.290 DynaPDF.New](#) 2981
- [70.315 DynaPDF.RenderPage](#) 3040
- [70.321 DynaPDF.RotateTemplate](#) 3055
- [70.413 DynaPDF.SetPageHeight](#) 3203
- [70.427 DynaPDF.SetTextRect](#) 3229
- [70.456 DynaPDF.Table.Create](#) 3270
- [70.460 DynaPDF.Table.Draw](#) 3276

- 70.506 DynaPDF.WriteStyledText

Example Databases

- [DynaPDF/Bookmarks](#)
- [DynaPDF/Create Form](#)
- [DynaPDF/Create PDF with sum form field](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/DynaPDF Coordinates](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/WMF Conversion](#)
- [DynaPDF/WriteFText](#)

70.15.1 Blog Entries

- [Merge PDF with table of contents](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

70.15.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 28](#)

Created 18th August 2014, last changed 12nd October 2019.

70.16 DynaPDF.AssociateEmbFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AssociateEmbFile"; PDF; DestObject; DestHandle; Relationship; EmbFile)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DestObject

The destination object type. Can be Annotation, Catalog, Field, Image, Page or Template.

"Annotation"

DestHandle

The destination object handle or -1.

-1

Relationship

The relationship for the object to its parent. Can be Associated, Data, Source, Supplement or Alternative.

The value Alternative must be used for ZUGFeRD compatible invoices.

"Alternative"

EmbFile

Handle of an embedded file.

Result Returns OK or error.

Description

The parameter DestHandle must be a valid handle of a PDF object. If destination object type is a page, then the page number must be used as handle. The first page is denoted by one. If the destination object is the documents catalog then the parameter DestHandle is ignored. Set the parameter to zero or -1 in this case.

The parameter EmbFile must be a valid handle of an embedded file. See DynaPDF.AttachFile or AttachFile for further information.

Associated files are supported since PDF 2.0 and in PDF/A 3 files. In PDF/A 3 files all embedded files must be associated with a PDF object.

See also [AssociateEmbFile](#) function in DynaPDF manual.

Examples

Add ZUGFeRD invoice xml file:

```
Set Variable [ $FileHandle; Value:MBS("DynaPDF.AttachFileText"; $pdf; ZUGFeRD Invoice::Invoice XML; "UTF-8"; "ZUGFeRD-invoice.xml"; "Invoice as XML" ) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.AssociateEmbFile"; $pdf; "Catalog"; -1; "Alternative"; $FileHandle) ]
```

See also

- [70.17 DynaPDF.AttachFile](#) 2579
- [70.19 DynaPDF.AttachFileText](#) 2582
- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.16.1 Blog Entries

- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [MBS FileMaker Plugin, version 5.5pr3](#)

70.16.2 FileMaker Magazin

- [Ausgabe 1/2018, Seite 24](#)

Created 15th December 2015, last changed 16th August 2016.

70.17 DynaPDF.AttachFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AttachFile"; PDF; FilePath { ; Description; Compress })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

FilePath

The native file path for the file to attach.

"/Users/cs/Desktop/invoice.xml"

Description

Optional

The description for the file.

"ZUGfERD-invoice.xml"

Compress

Optional

Pass 1 to compress or 0 to not compress. You should pass 1 for text data like XML or JSON.

0

Result Returns handle for embedded file or error.

Description

The description is optional, the parameter can be set to "". The embedded file is compressed if the parameter Compress is set to 1. Otherwise it is left uncompressed. It is not always useful to compress embedded files especially if the file is already compressed, e.g. Zip files or already compressed image formats require no further compression. In the worst case the compressed file becomes larger as the uncompressed version. However, text files and most document formats should be compressed to reduce the file size.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also [AttachFile](#) function in DynaPDF manual.

See also

- 70.16 DynaPDF.AssociateEmbFile 2577
- 70.19 DynaPDF.AttachFileText 2582
- 70.100 DynaPDF.FileAttachAnnot 2714
- 70.290 DynaPDF.New 2981
- 121.2 Path.FileMakerPathToNativePath 6139

70.17.1 Blog Entries

- [MBS FileMaker Plugin, version 5.5pr3](#)

70.17.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 25

Created 15th December 2015, last changed 15th August 2016.

70.18 DynaPDF.AttachFileContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AttachFileContainer"; PDF; Container; FileName { ; Description; Compress })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Container

The container value to use.

\$xmlContainer

FileName

The file name to display in PDF viewer.

"ZUGfERD-invoice.xml"

Description

Optional

The description for the file.

"invoice.xml"

Compress

Optional

Pass 1 to compress or 0 to not compress. You should pass 1 for text data like XML or JSON.

0

Result Returns OK or error.

Description

The description is optional, the parameter can be set to "". The embedded file is compressed if the parameter Compress is set to 1. Otherwise it is left uncompressed. It is not always useful to compress embedded files especially if the file is already compressed, e.g. Zip files or already compressed image formats require no further compression. In the worst case the compressed file becomes larger as the uncompressed version. However, text files and most document formats should be compressed to reduce the file size.

See also

- 70.290 DynaPDF.New

2981

Example Databases

- [DynaPDF/Shrink PDF pages](#)

Created 15th December 2015, last changed 15th August 2016.

70.19 DynaPDF.AttachFileText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.AttachFileText"; PDF; Text; TextEncoding; FileName { ; Description; Compress })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Text

The text content for the file.

\$xml

TextEncoding

The text encoding for the text.

"UTF-8"

FileName

The file name to display in PDF viewer.

"ZUGFeRD-invoice.xml"

Description

Optional

The description for the file.

"invoice.xml"

Compress

Optional

Pass 1 to compress or 0 to not compress. You should pass 1 for text data like XML or JSON.

0

Result Returns OK or error.

Description

The description is optional, the parameter can be set to "". The embedded file is compressed if the parameter Compress is set to 1. Otherwise it is left uncompressed. It is not always useful to compress embedded files especially if the file is already compressed, e.g. Zip files or already compressed image formats require no further compression. In the worst case the compressed file becomes larger as the uncompressed version. However, text files and most document formats should be compressed to reduce the file size.

Examples

Add ZUGFeRD invoice xml file:

```
Set Variable [ $FileHandle; Value:MBS("DynaPDF.AttachFileText"; $pdf; ZUGFeRD Invoice::Invoice XML; "UTF-8"; "ZUGFeRD-invoice.xml"; "Invoice as XML") ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.AssociateEmbFile"; $pdf; "Catalog"; -1; "Alternative"; $FileHandle) ]
```

See also

- 70.16 DynaPDF.AssociateEmbFile 2577
- 70.17 DynaPDF.AttachFile 2579
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.19.1 Blog Entries

- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)

70.19.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 24

Created 16th December 2015, last changed 29th September 2017.

70.20 DynaPDF.BeginContinueText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.BeginContinueText"; PDF; PosX; PosY)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of the first text line

\$x

PosY

Y-Coordinate of the first text line

\$y

Result Returns OK or error message.

Description

The distance between two text lines can be adjusted with DynaPDF.SetLeading. If no leading was defined it will be set to the font size. Note that the function changes the leading of the graphics state if it was not defined beforehand. Subsequent calls use then the leading that was set in a prior call. If the font or font size will be changed it is strongly recommended to set the leading to a correct value. The default leading is the font size. The leading, font, character spacing, word spacing, text scaling, or the text color can be changed before calling DynaPDF.AddContinueText the next time.

The point PosX, PosY defines the baseline of the first text line if the coordinate system is bottom-up, otherwise the top-left corner of the text's bounding box. The origin can be changed with the function DynaPDF.SetFontOrigin.

If the font uses horizontal writing mode the text cursor moves from top to bottom. In vertical writing mode the text cursor moves from left to right.

See also [BeginContinueText](#) function in DynaPDF manual.

See also

- 70.5 DynaPDF.AddContinueText 2557
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.388 DynaPDF.SetFontOrigin 3158
- 70.397 DynaPDF.SetLeading 3176

Example Databases

- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)

Created 18th August 2014, last changed 27th May 2017.

70.21 DynaPDF.BeginLayer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.BeginLayer"; PDF; OCG)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

OCG

OCG or OCMD handle.
\$OCG

Result Returns layer reference number or error.

Description

The layer must be closed with DynaPDF.EndLayer when finish. The parameter OCG must be valid handle of an Optional Content Group (OCG) or Optional Content Membership Dictionary (OCMD) (see DynaPDF.CreateOCG and DynaPDF.CreateOCMD for further information). The OCG or OCMD controls the visibility of the contents that is included in the layer.

DynaPDF.BeginLayer/DynaPDF.EndLayer calls connect normal page contents, such as text, images, and vector graphics with a layer but no interactive objects like annotations or form fields. Annotations and Form Fields can be added to a layer with DynaPDF.AddObjectToLayer.

It is not required to draw the entire contents of a layer in one pass. The page contents can be drawn as usual and delimited into DynaPDF.BeginLayer/DynaPDF.EndLayer calls as necessary. Only contents that is delimited into DynaPDF.BeginLayer/DynaPDF.EndLayer calls becomes part of a layer.

Layers can be nested by calling DynaPDF.BeginLayer more than one time with different OCGs or OCMDs. The visibility of an inner layer depends then also on the visibility of the out ones (see example below). If an outer layer is invisible then all inner layers are invisible too, regardless of the visibility settings of the inner layers. A layer is not part of the graphics state. Neither DynaPDF.BeginLayer nor DynaPDF.EndLayer change any parameter of the graphics state. DynaPDF.BeginLayer must not be called within an open path. See also [BeginLayer](#) function in DynaPDF manual.

See also

- 70.22 DynaPDF.BeginPattern 2587
- 70.89 DynaPDF.EndLayer 2696
- 70.287 DynaPDF.LockLayer 2977
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.22 DynaPDF.BeginPattern

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.BeginPattern"; PDF; PatternType; TilingType; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PatternType

The pattern type. Can be Colored, UnColored or ShadingPattern.

"Colored"

TilingType

The tiling type. Can be ConstSpacing, NoDistortion or FastConstSpacing.

"ConstSpacing"

Width

Cell width.

10

Height

Cell height.

10

Result Returns pattern reference number or error.

Description

See `dynapdf_help` manual for details.

See also [BeginPattern](#) function in DynaPDF manual.

See also

- 70.21 DynaPDF.BeginLayer 2586
- 70.91 DynaPDF.EndPattern 2699
- 70.108 DynaPDF.FindPattern 2726
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.23 DynaPDF.BeginTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.BeginTemplate"; PDF; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Width

Width of the template.
100

Height

Height of the template.
100

Result Returns template handle or error.

Description

See [dynapdf_help.pdf](#) manual for details.
See also [BeginTemplate](#) function in DynaPDF manual.
See also

- 70.76 DynaPDF.DeleteTemplate 2673
- 70.85 DynaPDF.EditTemplate 2688
- 70.86 DynaPDF.EditTemplate2 2690
- 70.92 DynaPDF.EndTemplate 2700
- 70.290 DynaPDF.New 2981
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.301 DynaPDF.PlaceTemplateEx 3015
- 70.321 DynaPDF.RotateTemplate 3055

Created 6th February 2015, last changed 6th February 2015.

70.24 DynaPDF.Bezier123

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Bezier123"; PDF; x1; y1; x2; y2; x3; y3)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

x1

X-Coordinate of the first control point P1

\$x1

y1

Y-Coordinate of the first control point P1

\$y1

x2

X-Coordinate of the second control point P2

\$x2

y2

Y-Coordinate of the second control point P2

\$y2

x3

X-Coordinate of the end point P3

\$x3

y3

Y-Coordinate of the end point P3

\$y3

Result Returns OK or error.

Description

Curved path segments are specified as cubic Bézier curves. Such curves are defined by four points: the two endpoints (the current point P0 and the final point P3) and two control points P1 and P2. Given the coordinates of the four points, the curve is generated by varying the parameter t from 0.0 to 1.0 in the following equation:

$$R(t) = (1-t)^3P0 + 3t(1-t)^2P1 + 3t^2(1-t)P2 + t^3P3$$

When t = 0.0, the value of the function R(t) coincides with the current point P0; when t = 1.0, R(t) coincides with the final point P3. Intermediate values of t generate intermediate points along the curve. The curve does not, in general, pass through the two control points P1 and P2. Cubic Bézier curves have two desirable properties:

- The curve can be very quickly split into smaller pieces for rapid rendering.
- The curve is contained within the convex hull of the four points defining the curve, most easily visualized as the polygon obtained by stretching a rubber band around the outside of the four points. This property allows rapid testing of whether the curve lies completely outside the visible region, and hence does not have to be rendered.

The most general type of curve in PDF is the cubic Bézier curve with two control points. The starting point P0 is the current point that was set before by a painting operator (DynaPDF.MoveTo, DynaPDF.LineTo and so on). PDF also supports two other Bézier curves with only one control point (see DynaPDF.Bezier13 and DynaPDF.Bezier23). These two curve types are rarely used but still supported by all Acrobat versions incl. DynaPDF.

As mentioned earlier the function requires a start point that must be set with DynaPDF.MoveTo or another painting operator beforehand. Once the start point was set, multiple curve segments can be drawn to build circles, ellipses or other curved paths. The DynaPDF functions DynaPDF.DrawArc, DynaPDF.DrawCircle, DynaPDF.Ellipse and so on use all DynaPDF.Bezier123 to construct the path.

See also

- 70.25 DynaPDF.Bezier13 2591
- 70.26 DynaPDF.Bezier23 2592
- 70.79 DynaPDF.DrawArc 2676
- 70.82 DynaPDF.DrawCircle 2682
- 70.87 DynaPDF.Ellipse 2691
- 70.284 DynaPDF.LineTo 2971
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/Create PDF with Bezier Curves](#)

Created 18th August 2014, last changed 18th August 2014.

70.25 DynaPDF.Bezier13

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Bezier13"; PDF; x1; y1; x3; y3)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

x1

X-Coordinate of the first control point P1
\$x1

y1

Y-Coordinate of the first control point P1
\$y1

x3

X-Coordinate of the end point P3
\$x3

y3

Y-Coordinate of the end point P3
\$y3

Result Returns OK or error.

Description

The second control point P2 coincides with the final point P3 of the curve. The start point P0 must be set with DynaPDF.MoveTo or any other painting operator before.

See also

- 70.24 DynaPDF.Bezier123 2589
- 70.26 DynaPDF.Bezier23 2592
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/Create PDF with Bezier Curves](#)

Created 18th August 2014, last changed 18th August 2014.

70.26 DynaPDF.Bezier23

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Bezier23"; PDF; x2; y2; x3; y3)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

x2

X-Coordinate of the second control point P2
\$x2

y2

Y-Coordinate of the second control point P2
\$y2

x3

X-Coordinate of the end point P3
\$x3

y3

Y-Coordinate of the end point P3
\$y3

Result Returns OK or error.

Description

In this version the first control coincides with initial point P0 of the curve. The start point P0 must be set with DynaPDF.MoveTo or any other painting operator before.

See also

- 70.24 DynaPDF.Bezier123 2589
- 70.25 DynaPDF.Bezier13 2591
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/Create PDF with Bezier Curves](#)

Created 18th August 2014, last changed 18th August 2014.

70.27 DynaPDF.CMYK

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CMYK"; Cyan; Magenta; Yellow; Black)

Parameters

Cyan

The cyan color component from 0 to 255.

0

Magenta

The magenta color component from 0 to 255.

0

Yellow

The yellow color component from 0 to 255.

255

Black

The black color component from 0 to 255.

255

Result Returns color value as number.

Description

For use with functions which take a color as a big number.

Calculation is Cyan * 16777216 + Magenta * 65536 + Yellow * 256 + Black.

Use it only if the color space is CMYK.

Examples

Get a black color value:

MBS("DynaPDF.CMYK"; 0; 0; 0; 255)

See also

- 70.7 DynaPDF.AddDeviceNSeparations 2560
- 70.59 DynaPDF.CreateSeparationCS 2650
- 70.360 DynaPDF.SetExtColorSpace 3116
- 70.384 DynaPDF.SetFillColor 3150

Example Databases

- [DynaPDF/Change Separation Colorant](#)
- [DynaPDF/Create DeviceN ColorSpace](#)

70.27.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 18th August 2014.

70.28 DynaPDF.ChangeAnnotName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeAnnotName"; PDF; AnnotationHandle; Name)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

Name

The new annotation name.

"MyAnnotation"

Result Returns OK or error.

Description

If the parameter Name contains an empty string, the name will be deleted. The annotation name must be a unique string so that the annotation can be identified in JavaScript actions. The string could be a GUIID, a hash, or any other string that uniquely identifies the annotation.

See also [ChangeAnnotName](#) function in DynaPDF manual.

See also

- [70.29 DynaPDF.ChangeAnnotPos](#) 2596
- [70.32 DynaPDF.ChangeFontSize](#) 2600
- [70.290 DynaPDF.New](#) 2981

Created 25th November 2014, last changed 25th November 2014.

70.29 DynaPDF.ChangeAnnotPos

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeAnnotPos"; PDF; AnnotationHandle; X; Y; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

X

The new x position

\$x

Y

The new y position

\$y

Width

The new width.

100

Height

The new height.

100

Result Returns OK or error.

Description

Annotations which contain a visible appearance such as 3D annotations should be scaled without changing the annotation's aspect ratio.

See also [ChangeAnnotPos](#) function in DynaPDF manual.

See also

- [70.28 DynaPDF.ChangeAnnotName](#) 2595
- [70.290 DynaPDF.New](#) 2981

Created 25th November 2014, last changed 25th November 2014.

70.30 DynaPDF.ChangeBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeBookmark"; PDF; BookmarkHandle; Title; Parent; DestPage; Open)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

BookmarkHandle

The reference number for the bookmark. Either returned by one of the add/insert functions or just counting from 0 to DynaPDF.GetBookmarkCount-1.

\$BookmarkHandle

Title

New title

"Hello"

Parent

New parent bookmark.

-1

DestPage

New destination page

5

Open

Open the bookmark?

0

Result Returns OK or error.

Description

There is no difference between imported bookmarks and bookmarks which were created with DynaPDF. The parameter ABmk requires a valid bookmark handle. A bookmark handle is a simple array index ranging from zero to DynaPDF.GetBookmarkCount -1.

The parameter Title can be "" if it should be deleted. The parameter Open will be ignored if the bookmark contains no children.

The function does not check whether the destination page exists at the time the bookmark is changed. If the destination page does not exist when file is closed then it will be set to page 1.

To get the handle of a specific bookmark use the functions DynaPDF.FindBookmark and DynaPDF.FindNextBookmark to find the bookmark.

It is also possible to enumerate all bookmarks by using DynaPDF.GetBookmarkCount and DynaPDF.GetBookmark until the used bookmark was found (see DynaPDF.GetBookmark for further information).

See also [ChangeBookmark](#) function in DynaPDF manual.

Examples

Change the bookmark with new title and new page:

```
MBS( "DynaPDF.ChangeBookmark"; $PDF; $BookmarkHandle; "Hello World"; $NewParent; 6; 0 )
```

See also

- 70.3 DynaPDF.AddBookmark 2553
- 70.68 DynaPDF.DeleteBookmark 2665
- 70.93 DynaPDF.ExchangeBookmarks 2701
- 70.103 DynaPDF.FindBookmark 2720
- 70.107 DynaPDF.FindNextBookmark 2725
- 70.124 DynaPDF.GetBookmark 2753
- 70.125 DynaPDF.GetBookmarkCount 2755
- 70.274 DynaPDF.InsertBookmark 2948
- 70.290 DynaPDF.New 2981
- 70.345 DynaPDF.SetBookmarkDest 3095

Created 18th August 2014, last changed 18th August 2014.

70.31 DynaPDF.ChangeFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeFont"; PDF; FontHandle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

FontHandle

Handle of the new font.
\$font

Result Returns OK or error message.

Description

FontHandle must be a valid font handle that was returned by DynaPDF.SetFont, DynaPDF.SetFontEx, DynaPDF.SetCIDFont, or DynaPDF.LoadFont.

The font size is taken from the current font if any. If no font is active when the function is called, the font size will be set to the value that was used to load font the last time.

See also [ChangeFont](#) function in DynaPDF manual.

See also

- 70.32 DynaPDF.ChangeFontSize 2600
- 70.33 DynaPDF.ChangeFontStyle 2601
- 70.34 DynaPDF.ChangeFontStyleEx 2602
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.387 DynaPDF.SetFontEx 3156

Created 18th August 2014, last changed 27th May 2017.

70.32 DynaPDF.ChangeFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeFontSize"; PDF; Size)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Size

The new font size.
10

Result Returns OK or error message.

Description

The font size must be greater zero.
See also [ChangeFontSize](#) function in DynaPDF manual.

See also

- 70.28 DynaPDF.ChangeAnnotName 2595
- 70.31 DynaPDF.ChangeFont 2599
- 70.33 DynaPDF.ChangeFontStyle 2601
- 70.34 DynaPDF.ChangeFontStyleEx 2602
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 27th May 2017.

70.33 DynaPDF.ChangeFontStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeFontStyle"; PDF; Style)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Style

The new font style. See DynaPDF.LoadFont for details.
8

Result Returns OK or error message.

Description

Only the style flags Underlined (4) and Striked (8) can be set with this function. The font styles fsBold and fsItalic requires another font file that must be selected with DynaPDF.SetFont.

See also [ChangeFontStyle](#) function in DynaPDF manual.

See also

- [70.31 DynaPDF.ChangeFont](#) 2599
- [70.32 DynaPDF.ChangeFontSize](#) 2600
- [70.34 DynaPDF.ChangeFontStyleEx](#) 2602
- [70.290 DynaPDF.New](#) 2981
- [70.386 DynaPDF.SetFont](#) 3154

Example Databases

- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)

Created 18th August 2014, last changed 27th May 2017.

70.34 DynaPDF.ChangeFontStyleEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeFontStyleEx"; PDF; Style)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Style

The new font style. See DynaPDF.LoadFont for details.

3

Result Returns OK or error message.

Description

These flags can be used to explicitly enable the emulation of a missing font style.

See also [ChangeFontStyleEx](#) function in DynaPDF manual.

See also

- 70.31 DynaPDF.ChangeFont 2599
- 70.32 DynaPDF.ChangeFontSize 2600
- 70.33 DynaPDF.ChangeFontStyle 2601
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 27th May 2017.

70.35 DynaPDF.ChangeLinkAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeLinkAnnot"; PDF; AnnotationHandle; URL)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

AnnotationHandle

The annotation index.
5

URL

URL or file path.
"http://www.mbsplugins.de/"

Result Returns OK or error.

Description

The parameter AnnotationHandle must be a valid handle of a file link, page link, or web link Annotation. The parameter URL can be either a file path or an URL to an internet resource; it must not be an empty string. Note that you cannot change the type of the annotation with this function. For example, a web link annotation requires still a URL to an internet resource, while a file link annotation requires a path to a file on a local hard drive.

Imported file link or web link annotations are mostly defined as page link annotation because it is impossible to distinguish between these types during import. Use the function DynaPDF.FindLinkAnnot if you need to change an imported file link or web link annotation.

See also [ChangeLinkAnnot](#) function in DynaPDF manual.

See also

- 70.106 DynaPDF.FindLinkAnnot 2724
- 70.290 DynaPDF.New 2981

70.35.1 FileMaker Magazin

- Ausgabe 3/2019, Seite 37

Created 25th November 2014, last changed 25th November 2014.

70.36 DynaPDF.ChangeSeparationColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ChangeSeparationColor"; PDF; CSHandle; NewColor; Alternate { ; AltHandle })

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

CSHandle

Handle of the separation color space.

NewColor

New color in the alternate color space.

Alternate

The alternate color space. Can be DeviceRGB, DeviceCMYK, DeviceGray, CalGray, CalRGB, Lab, IC-CBased, Pattern, Indexed, Separation, DeviceN, NChannel or the matching number value.

AltHandle

Optional
The Color space handle or -1 for device spaces.

Result Returns OK or error.

Description

The new color value must be defined in the alternate color space. The alternate color space can be any device or ICC based color space including Lab. If a non-device color space is used, the parameter AltHandle must be set to the color space handle of the alternate color space.

If the function succeeds the return value is OK. If the function fails the return value is the error.

See also [ChangeSeparationColor](#) function in DynaPDF manual.

See also

- [70.290 DynaPDF.New](#)

2981

Example Databases

- [DynaPDF/Change Separation Colorant](#)

70.36.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 22nd March 2017, last changed 22nd March 2017.

70.37 DynaPDF.CheckConformance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CheckConformance"; PDF; Type { ; Options })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Type

PDF Version to check. This can be "PDF/A 1b 2005", "PDF/A 2b", "PDF/A 3b" or "Normalize". Version 6.0 of DynaPDF supports also: ZUGFeRD Basic, ZUGFeRD Comfort and ZUGFeRD Extended.

"PDF/A 1b 2005"

Options

Optional

Various options. If no options are specified, we use default. Can be specified as number or a texts.

"DeletePostscript\$DeleteOPICComments"

Result Returns result or error.

Description

This function can be used to convert any PDF to PDF/A.

The conversion of arbitrary imported PDF files to PDF/A requires a separate license of the PDF/A Extension (extra purchase in addition to Pro license).

See `dynapdf_help.pdf` manual file for more details on this function.

You can pass those texts for options:

See also [CheckConformance](#) function in DynaPDF manual.

Examples

Check conformance for ZUGFeRD Extended:

```
MBS( "DynaPDF.CheckConformance"; $pdf; "ZUGFeRD Extended"; "Default" )
```

Check conformance only:

```
MBS("DynaPDF.CheckConformance"; $pdf; "PDF/A 1b 2005"; 0)
```

Check conformance for ZUGFeRD with Pro license:

```
MBS("DynaPDF.CheckConformance"; $pdf; "ZUGFeRD Basic")
```

```
// using default options
```

Check conformance for ZUGFeRD with Lite license:

```
MBS("DynaPDF.CheckConformance"; $pdf; "ZUGFeRD Basic"; 0)
// no corrections
```

See also

- [70.10 DynaPDF.AddOutputIntentEx](#) 2565
- [70.290 DynaPDF.New](#) 2981
- [70.418 DynaPDF.SetReplaceICCPProfile](#) 3213
- [70.419 DynaPDF.SetReplaceICCPProfileData](#) 3215

Example Databases

- [DynaPDF/Convert to PDF/A](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.37.1 Blog Entries

- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [MBS Filemaker Plugin, version 4.4pr9](#)

70.37.2 FileMaker Magazin

- [Ausgabe 1/2018, Seite 25](#)
- [Ausgabe 1/2018, Seite 24](#)

Created 2nd November 2014, last changed 29th August 2017.

Default	Default options.
EmbedSubsets	Embed Subsets
DeleteTransferFuncs	Delete Transfer Functions
DeleteMultiMediaContents	Delete MultiMedia content
DeleteActionsAndScripts	Delete Actions and Scripts
DeleteInvRenderingIntent	Delete Invisible Rendering Intent
FlattenFormFields	Flatten form fields
ReplaceV4ICCPProfiles	Replace V4 ICC Profiles
DeleteEmbeddedFiles	Delete embedded files
DeleteOPIComments	Delete OPI comments.
DeleteSignatures	Delete signatures.
DeletePostscript	Delete Postscript XObjects. Rarely used and such Postscript fragments are meaningful on a Postscript device only. It is usually safe to delete such objects.
DeleteAlternateImages	Alternate images are seldom used and prohibited in PDF/A.
ReComprJPEG2000Images	Recompression results usually in larger images. It is often better to keep such files as is.
ResolveOverprint	PDF/A 2 and 3. Set the overprint mode to 0 if overprint mode = 1 and if overprinting for fill or stroke is true and if an ICCBased CMYK color space is used. Note that DeviceCMYK is treated as ICCBased color space due to implicit color conversion rules.
DeleteAppEvents	PDF/A 2 and 3. Application events are prohibited in PDF/A. The view state will be applied.
ApplyExportState	Meaningful only if coDeleteAppEvents is set. Apply the export state.
ApplyPrintState	Meaningful only if coDeleteAppEvents is set. Apply the print state.
DeleteReplies	Delete annotation replies. If absent, replies will be converted to regular text annotations.
ReplCCITTFaxWithFlate	Replace CCITT Fax compression with Flate.
DeleteHalftones	Delete halftone screens.
FlattenLayers	Flatten layers if any.
DeletePresentation	Presentations are prohibited in PDF/A 2 and 3.
NoFontEmbedding	If this flag is set no valid PDF/A file will be produced!
FlushPages	Write converted pages directly into the output file to reduce the memory usage.
AllowDeviceSpaces	If set, device color spaces will not be replaced with ICC based color spaces. This flag is meaningful for normalization only.
MakeLayerVisible	PDF/A 2 and 3 prohibit invisible layers. Layers can also be flattened if this is no option.

70.38 DynaPDF.CheckFieldNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CheckFieldNames"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns number or error.

Description

Use this function if multiple interactive forms were imported. DynaPDF does not check or change duplicate field names during import. Therefore, check the field names and change invalid names if necessary before closing the document. If an interactive form contains duplicate field names or fields with different types, the document will be damaged.

If a form contains invalid duplicate field names, the names must be changed with DynaPDF.SetFieldName. However, if such a field is used in a JavaScript action or by a global JavaScript, the JavaScript(s) must also be changed to avoid error messages in Adobe's Acrobat.

Global JavaScripts can be accessed with the function DynaPDF.GetJavaScript and changed with the function DynaPDF.ChangeJavaScript. A JavaScript action can be accessed with the function DynaPDF.GetJavaScriptAction and changed with the function DynaPDF.ChangeJavaScriptAction.

The function returns the handle of the first invalid field name that was found, that is a value greater or equal zero. If no invalid field name was found the return value is -1.

See also [CheckFieldNames](#) function in DynaPDF manual.

See also

- 70.164 DynaPDF.GetFieldName 2801
- 70.290 DynaPDF.New 2981
- 70.379 DynaPDF.SetFieldName 3144

70.38.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr3](#)

Created 22nd October 2018, last changed 22nd October 2018.

70.39 DynaPDF.CircleAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CircleAnnot"; PDF; PosX; PosY; Width; Height; LineWidth; FillColor; StrokeColor; ColorSpace)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-coordinate of the annotation

100

PosY

Y-coordinate of the annotation

100

Width

Width of the annotation

100

Height

Height of the annotation

100

LineWidth

Line width of the circle or ellipse

2

FillColor

Fill color for circle.

200

StrokeColor

Stroke color for circle.

255

ColorSpace

Color space of the fill and stroke colors.

"RGB"

Result Returns annotation handle or error.

Description

If the parameters Width and Height are equal the function draws a circle, an ellipse otherwise. If the annotation should be drawn without a border, set the parameter LineWidth to zero or StrokeColor to the special constant NO_COLOR (4294967281).

If the interior should be transparent set `FillColor` to the special constant `NO_COLOR` (4294967281). Although the line width can be set to any positive floating point value, Adobe's Acrobat or Reader restrict the line width to 0 through 12 units. The line width should be restricted in the same way to avoid issues in Adobe viewer products.

See also [CircleAnnot](#) function in DynaPDF manual.

See also

- 70.283 `DynaPDF.LineAnnot` 2969
- 70.290 `DynaPDF.New` 2981
- 70.446 `DynaPDF.SquareAnnot` 3253

Created 28th November 2014, last changed 1st December 2014.

70.40 DynaPDF.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Clear"; PDF { ; Path })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Path

Optional

The file path to create the PDF.

"C:\Test.pdf"

Result Returns OK on success.

Description

Writing PDF to file to disk while creating it allows PDF files to be bigger than available memory. In order to have that working well, you need to call DynaPDF.FlushPages regularly to free memory.

Use Path.FilemakerPathToNativePath to convert a FileMaker path to a native path if required.

Examples

Starts with a new blank PDF:

```
$r = MBS( "DynaPDF.clear"; $PDF )
```

See also

- 70.113 DynaPDF.FlushPages 2734
- 70.290 DynaPDF.New 2981
- 70.435 DynaPDF.SetUseSystemFonts 3239
- 121.2 Path.FileMakerPathToNativePath 6139

Created 18th August 2014, last changed 9th July 2015.

70.41 DynaPDF.ClipPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ClipPath"; PDF; ClipMode; FillMode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

ClipMode

The clipping mode. Can be EvenOdd for using the Even-Odd rule or winding for using the nonzero Winding Number rule.

"winding"

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error.

Description

The function must be called after a closable path was created. A path that consists of a DynaPDF.MoveTo and DynaPDF.LineTo only call cannot be closed!

A clipping path can also be filled, stroked, or both in one pass. However, the combination of a clipping path operator with a path painting operator is seldom used and not supported in all PDF viewers. To avoid unnecessary problems a path should always be clipped and painted in two separate steps, also if this causes some unnecessary overhead.

Once the clipping was created and activated with DynaPDF.ClipPath you can draw arbitrary contents into it, such as images, text, or vector graphics.

A clipping path is part of the current graphics state. The only way to deactivate a clipping path is to restore the graphics state with DynaPDF.RestoreGraphicState. This assumes that it was saved with DynaPDF.SaveGraphicState before the clipping path was created.

Note that it is not possible to extend or widen an active clipping path. It is only possible to intersect it with a new one. The intersection of two clipping paths is never larger than the initial clipping path.

Remarks:

Text objects are handled separately in PDF for use as clipping path. See DynaPDF.SetTextDrawMode for further information.

See also [ClipPath](#) function in DynaPDF manual.

Examples

Clip image to circle:

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
```



```

End If
# Clear current PDF document
Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
# Add image on page
Set Variable [ $destPage ; Value: 1 ]
Set Variable [ $r ; Value: MBS("DynaPDF.AppendPage"; $pdf) ]
# no recompression if possible! But if needed, we use JPEG 90%
Set Variable [ $r ; Value: MBS("DynaPDF.SetSaveNewImageFormat"; $pdf; 0) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetJPEGQuality"; $pdf; 90) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetCompressionFilter"; $pdf; "jpeg") ]
# Save old state to restore later
Set Variable [ $r ; Value: MBS( "DynaPDF.SaveGraphicState"; $pdf ) ]
# Draw circle for clipping
Set Variable [ $r ; Value: MBS( "DynaPDF.DrawCircle"; $pdf; 260; 220; 100; "nofill" ) ]
Set Variable [ $r ; Value: MBS( "DynaPDF.ClipPath"; $pdf; "Winding"; "fill" ) ]
# Draw clipped image
Set Variable [ $r ; Value: MBS("DynaPDF.InsertImage"; $pdf; Merge PDFs::InputImage; 100; 100; 320; 200) ]
# restore graphics static to get unclipped drawing
Set Variable [ $r ; Value: MBS( "DynaPDF.RestoreGraphicState"; $pdf ) ]
# Close page and store PDF in container
Set Variable [ $r ; Value: MBS("DynaPDF.EndPage"; $pdf) ]
Set Field [ Merge PDFs::FinalPDF ; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]

```

See also

- 70.43 DynaPDF.ClosePath 2615
- 70.282 DynaPDF.IsInitialized 2966
- 70.289 DynaPDF.MoveTo 2979
- 70.311 DynaPDF.Release 3033
- 70.322 DynaPDF.RoundRect 3058
- 70.328 DynaPDF.SaveGraphicState 3071
- 70.354 DynaPDF.SetCompressionFilter 3107
- 70.395 DynaPDF.SetJPEGQuality 3172
- 70.421 DynaPDF.SetSaveNewImageFormat 3219
- 70.424 DynaPDF.SetTextDrawMode 3224

70.42 DynaPDF.CloseImportFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CloseImportFile"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK.

Description

The current working PDF stays in memory.
See also [CloseImportFile](#) function in DynaPDF manual.

Examples

Load a PDF from container, work with it and close PDF:

```
$r = MBS("DynaPDF.OpenPDFFromContainer"; $PDF; Test::data)
# work with import PDF
MBS( "DynaPDF.CloseImportFile"; $PDF )
```

See also

- [70.290 DynaPDF.New](#) 2981
- [70.291 DynaPDF.OpenOutputFile](#) 2984
- [70.293 DynaPDF.OpenPDFFromContainer](#) 2988
- [70.433 DynaPDF.SetUseGlobalImpFiles](#) 3236

Example Databases

- [DynaPDF/Apply Letter Paper to PDF](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/Merge PDFs](#)

70.42.1 Blog Entries

- [Merge PDF with table of contents](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 18th August 2014.

70.43 DynaPDF.ClosePath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ClosePath"; PDF; FillMode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error message.

Description

In PDF all vector graphics are paths. Paths can be filled, stroked, or both. Filled path can be drawn by applying the nonzero winding number rule or the even-odd rule (see Path Construction and Painting for further information). Both rules produce different results on complex paths but they have no effect on simple paths like rectangles, circles, and so on.

The filling rules are can be used to produce holes in a path; an area that is left unpainted. The draw direction is important when drawing simple shapes like rectangles and so on. See DynaPDF.SetDrawDirection for further information.

The flag NoFill can be used to discard a path that was already drawn.

Paths are invisible until they will be filled or stroked. DynaPDF displays a warning if an unused path is in memory when drawing an image, text, or when closing the page. The function checks whether a path is in memory prior execution. If no open path is detected the function returns with an error message.

See also [ClosePath](#) function in DynaPDF manual.

Examples

Draw triangle path:

```
# blue color
Set Variable [ $r ; Value: MBS("DynaPDF.SetFillColor"; $pdf; 0; 0; 1) ]
# go to start point
Set Variable [ $r ; Value: MBS("DynaPDF.MoveTo"; $pdf; 100; 100) ]
# add more points
Set Variable [ $r ; Value: MBS("DynaPDF.LineTo"; $pdf; 200; 100) ]
Set Variable [ $r ; Value: MBS("DynaPDF.LineTo"; $pdf; 100; 200) ]
# and fill
Set Variable [ $r ; Value: MBS("DynaPDF.ClosePath"; $pdf; "fill") ]
```

See also

- 70.41 DynaPDF.ClipPath 2612
- 70.79 DynaPDF.DrawArc 2676
- 70.81 DynaPDF.DrawChord 2680
- 70.82 DynaPDF.DrawCircle 2682
- 70.87 DynaPDF.Ellipse 2691
- 70.289 DynaPDF.MoveTo 2979
- 70.323 DynaPDF.RoundRectEx 3060
- 70.359 DynaPDF.SetDrawDirection 3115
- 70.384 DynaPDF.SetFillColor 3150
- 70.448 DynaPDF.StrokePath 3257

Created 18th August 2014, last changed 7th March 2020.

70.44 DynaPDF.ConvertColors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ConvertColors"; PDF; Flags { ; Add })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Flags

The mode to operate. Can be BW_To_Gray (RGB and B/W to gray), RGB_To_Gray (RGB to gray), ToGrayAdjust (Lighten or darken colors).

"BW_To_Gray"

Add

Optional

The value for ToGrayAdjust flag.

1.0

Result Returns OK or error.

Description

The function converts inline RGB operators in the current open page to gray. At time of publication only inline operators like g, rg, G, and RG are processed. CMYK colors will be left unchanged. The parameter Add is optional and considered only if the constant ToGrayAdjust is used.

The conversion of RGB inline color operators can be useful if the document was created with a GDI application, e.g. Microsoft Word, Excel and so on and if the file must be split into black & white and color pages. DynaPDF.IsColorPage can then be used to determine whether the page contains still colored objects. The advantage is that RGB black & white values, which are used for text and vector graphics, are already removed so that DynaPDF.IsColorPage returns only true if any other object uses a color, e.g. an image.

The constant ToGrayAdjust can be used to convert RGB colors to gray and to darken or lighten RGB and gray colors. The parameter Add must be a pointer of a floating point variable. The value can be in the range -1.0 through 1.0. Colors in PDF are stored as floating point values in the range 0.0 through 1.0. Since DeviceGray is an additive color space, 0 denotes black and 1.0 white. If all color operators should be set to black for example, then set the variable to -1.0. The function performs a range check. If the color becomes out of range then it will be adjusted to the nearest value that is inside the allowed color range.

See also [ConvertColors](#) function in DynaPDF manual.

See also

- 70.280 DynaPDF.IsColorPage 2963
- 70.290 DynaPDF.New 2981

70.44.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr4](#)

Created 17th April 2019, last changed 17th April 2019.

70.45 DynaPDF.ConvertStyledText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ConvertStyledText"; PDF; Text)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Text

The text to write.
"Hello World"

Result Returns text or error.

Description

Requires an open page to load fonts.

See also

- 70.290 DynaPDF.New 2981
- 70.506 DynaPDF.WriteStyledText 3358

Example Databases

- [DynaPDF/Styled Text](#)

Created 13th October 2016, last changed 14th October 2016.

70.46 DynaPDF.CreateButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateButton"; PDF; Name; Caption; Parent; PosX; PosY; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Name

Name of the text field
"Test"

Caption

The caption to use.
"Click me"

Parent

Parent group field if any or -1.
-1

PosX

X-Coordinate of the text field.
100

PosY

Y-Coordinate of the text field.
100

Width

Width of the text field.
100

Height

Height of the text field.
20

Result Returns OK or error.

Description

The parameter Name must be a unique name for the button field. It is not allowed to create two buttons with an identical name within the hierarchy in which they appear.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the button. If the coordinate system is top-down it defines the upper left corner.

Like all form fields, the width and height is measured incl. the line width of the border. The size of normal vector graphics is measured without the line width; this must be taken into account when calculating the

width and height of a form field.

The border is drawn by using the current line width and border style (see `DynaPDF.SetBorderStyle`). However, interactive form fields support natively the line width 1, 2 and 3 units only (thin, medium, thick). Other values can be applied but the appearance can be changed by Adobe's Acrobat when the form is reset by a Reset Form Action.

The appearance can be influenced with the following properties:

- `DynaPDF.GetFieldBackColor` and `DynaPDF.SetFieldBackColor` // Background color * `DynaPDF.GetFieldBorderColor` and `DynaPDF.SetFieldBorderColor` // Border color * `DynaPDF.GetFieldColor` and `DynaPDF.SetFieldColor` // Change a specific color of a field
- `DynaPDF.GetFieldTextColor` and `DynaPDF.SetFieldTextColor` // Color of the caption
- `DynaPDF.GetLineWidth` and `DynaPDF.SetLineWidth` // Line width of the border

The border and background color can be set to `NoColor` (4294967281), the background or border appears then transparent. The border appears also transparent when the line width was set to zero.

`DynaPDF` supports also image buttons. To create an image button store the handle of the button in a variable and add one or more images to the different button states (see `DynaPDF.AddButtonImage` for further information). The caption of the button will be overridden when an image to the up state is added.

Buttons are used to execute an action; the following events are supported by button fields:

- `OnMouseUp`
- `OnMouseDown`
- `OnMouseExit`
- `OnFocus`
- `OnBlur`

This function is implemented in an ANSI and Unicode compatible version. However, CJK encodings or Unicode are NOT supported by form fields. It is possible to use Unicode strings but the font must NOT use the code page `cpUnicode`. Unicode strings must contain characters of the actual used 8 bit code page.

Buttons requires a font, if no font was set before Helvetica is used to draw the caption by using the code page 1252. The caption is centred horizontally and vertically. By default the caption is drawn on multiple lines if it does not fit into a single line. To avoid a line break inside a button field remove the flag `Multiline` (see `DynaPDF.SetFieldFlags`).

Buttons are excluded from printing by default. If a button should be printable set the flag `Print` (see `DynaPDF.SetFieldFlags()` for further information).

Interactive form fields can be structured into several groups by passing a handle of a group field to the parameter `Parent`. See `DynaPDF.CreateGroupField` for further information.

If the function succeeds the return value is the field handle, a value greater or equal zero. If the function fails the return value is an error.

See also [CreateButton](#) function in DynaPDF manual.

See also

- 70.56 DynaPDF.CreateListBox 2643
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.154 DynaPDF.GetFieldColor 2790
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.203 DynaPDF.GetLineWidth 2848
- 70.347 DynaPDF.SetBorderStyle 3099
- 70.364 DynaPDF.SetFieldBackColor 3122
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.382 DynaPDF.SetFieldTextColor 3148

Example Databases

- [DynaPDF/Create PDF with sum form field](#)

70.46.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr5](#)

Created 26th August 2016, last changed 13th January 2020.

70.47 DynaPDF.CreateCheckBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateCheckBox"; PDF; Name; ExpValue; Checked; Parent; PosX; PosY; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Name of the text field

"IsMale"

ExpValue

Export value (required)

"IsMale"

Checked

If 1, the check box appears checked. Else pass 0 for unchecked.

0

Parent

Parent group field if any or -1.

-1

PosX

X-Coordinate of the text field.

100

PosY

Y-Coordinate of the text field.

100

Width

Width of the text field.

100

Height

Height of the text field.

20

Result Returns field handle or error.

Description

See CreateCheckBox function in dynapdf_help.pdf for details.

See also [CreateCheckBox](#) function in DynaPDF manual.

See also

- 70.1 DynaPDF.AddActionToObj 2549
- 70.48 DynaPDF.CreateComboBox 2625
- 70.55 DynaPDF.CreateJSAction 2640
- 70.56 DynaPDF.CreateListBox 2643
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/Create Form](#)

70.47.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.48 DynaPDF.CreateComboBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateComboBox"; PDF; Name; Sort; Parent; PosX; PosY; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Name of the field

"IsMale"

Sort

If 1, the items are sorted.

0

Parent

Parent group field if any or -1.

-1

PosX

X-Coordinate of the text field.

100

PosY

Y-Coordinate of the text field.

100

Width

Width of the text field.

100

Height

Height of the text field.

20

Result Returns handle or error.

Description

The choice values of the combo box must be added with the function DynaPDF.AddValToChoiceField. This function requires the field handle that was returned by this function.

A combo box can contain value that is not included in the array of choice values. This value can be used to display a string in the combo box when no choice value is selected, e.g. "Select a value!".

The field value can be set with the function `DynaPDF.SetFieldExpValue` as follows:

The parameter `ValIndex` of the function `DynaPDF.SetFieldExpValue` must be set to `PDF_MAX_INT` (2147483647) and the parameter `Value` must contain the wished value or be empty. If `Value` is empty string, a maybe existing field value will be deleted. The choice values of the combo box get the state unselected when setting a field value in this way.

If the coordinate system is bottom-up the point `PosX`, `PosY` defines the lower left corner of the button. If the coordinate system is top-down it defines the upper left corner.

Like all form fields the width and height is measured incl. the line width of the border. The size of normal vector graphics is measured without the line width; this must be taken into account when calculating the width or height of a form field. The line width of the border is derived from the current graphics state (see `DynaPDF.SetLineWidth`), it should be either 0, 1, 2, or 3 units (no border, thin, medium, or thick). The border style can be changed with the functions `DynaPDF.SetBorderStyle` or `DynaPDF.SetFieldBorderStyle`.

The values of the combo box are sorted if the parameter `Sort` is 1.

A combo box requires a font. If no font is active the standard font Helvetica is used. Note: If the form must be compatible to Acrobat 4 the used fonts by the form fields must be restricted to the 14 standard fonts (see `SetFont()` for further information). Acrobat 4 does not support interactive forms that use other fonts than the 14 standard fonts. Such a form requires Acrobat 5 or higher.

However, it is possible to use an arbitrary font as long as the code page 1252 is used.

The font size of a combo box is set to "auto" if either the font size of the active font is set to 1.0 unit or if no font is active when the field is created.

Specific flags supported by combo boxes:

<code>Edit</code>	Enable adding of values in Adobe's Acrobat
<code>Sorted</code>	Change the sort flag if necessary
<code>CommitOnSelCh</code>	Submit the new value immediately (PDF 1.5)
<code>DoNotSpellCheck</code>	Disable spell checking (requires <code>Edit</code>)

Earlier versions of `DynaPDF` allowed the usage of arbitrary 8 bit code pages. Due to changes in Acrobat viewer applications it is no longer possible to use another code page than 1252. In addition, it seems that Acrobat versions greater 6 do no longer support `Type1` fonts in form fields, with the exception of the 14 standard fonts.

Interactive form fields can be structured into several groups by passing a handle of a group field to the parameter `Parent`. See `DynaPDF.CreateGroupField` for further information.

If the function succeeds the return value is the handle of the combo box, a value greater or equal zero. If the function fails it returns an error message.

70.48. *DYNAPDF.CREATECOMBOBOX* 2627

See also [CreateComboBox](#) function in DynaPDF manual.

See also

- 70.11 DynaPDF.AddValToChoiceField 2567
- 70.47 DynaPDF.CreateCheckBox 2623
- 70.54 DynaPDF.CreateGroupField 2638
- 70.56 DynaPDF.CreateListBox 2643
- 70.290 DynaPDF.New 2981
- 70.347 DynaPDF.SetBorderStyle 3099
- 70.366 DynaPDF.SetFieldBorderStyle 3124
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.399 DynaPDF.SetLineWidth 3178

70.48.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

70.49 DynaPDF.CreateDeviceNColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateDeviceNColorSpace"; PDF; Colorants; NumColorants; PostScriptFunc; Alternate { ; Handle })

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Colorants

Array of colorant names (required)

NumColorants

Number of colorants in the array.

PostScriptFunc

Postscript calculator function (required)

Alternate

The alternate color space. Can be DeviceRGB, DeviceCMYK, DeviceGray, CalGray, CalRGB, Lab, IC-CBased, Pattern, Indexed, Separation, DeviceN, NChannel or the matching number value.
"DeviceCMYK"

Handle

Optional
Alternate color space handle or -1.

Result Returns OK or error.

Description

DeviceN color spaces (PDF 1.3) can contain up to 32 color components. They provide greater flexibility than is possible with standard device color spaces such as DeviceCMYK or with individual Separation color spaces. For example, it is possible to create a DeviceN color space consisting of only the cyan, magenta, and yellow color components, with the black component excluded.

Colors of a DeviceN color space are always treated as subtractive colors, even if the device produces output for the designated component by an additive method. Thus, a tint value of 0 denotes the lightest color that can be achieved with the given colorant and 255 the darkest. This convention is the same one as for DeviceCMYK color components but opposite to the one for DeviceGray or DeviceRGB.

DeviceN was designed to represent color spaces containing multiple components that correspond to colorants of some target device. As with Separation color spaces, PDF consumer applications must be able to approximate the colorants if they are not available on the current output device, such as a display. To accomplish this, the color space definition provides a tint transformation function that can be used to convert all the components to an alternate color space.

The tint transformation function consists of a PostScript calculator function that is called with *n* tint values and returns *m* color component values, where *n* is the number of components needed to specify a color in

the DeviceN color space and *m* is the number of components required by the alternate color space.

Note: Painting in the alternate color space may produce a good approximation of the intended color when only opaque objects are painted. However, it does not correctly represent the interactions between an object and its backdrop when the object is painted with transparency or when overprinting is enabled (see also `DynaPDF.CreateExtGState`).

A DeviceN color space supports the special colorant name `None` which produces no visible output on the device. When a DeviceN color space is painting the named device colorants directly, color components corresponding to `None` colorants are discarded. However, when the DeviceN color space reverts to its alternate color space, those components are passed to the tint transformation function, which can use them as desired.

Note: A DeviceN color space whose component colorant names are all `None` always discards its output, just the same as a Separation color space for `None`; it never reverts to the alternate color space. Reversion occurs only if at least one color component (other than `None`) is specified and is not available on the device.

Encoding for colorants name is UTF-8.

See also [CreateDeviceNColorSpace](#) function in DynaPDF manual.

Examples

Create the DeviceN color space:

```
# Create Blend function (see dynapdf_help.pdf for how this was created)
Set Variable [ $PostScriptFunc ; Value: " { 2 index 0.38 mul 2 index 0 add add 0 3 index 0.56 mul 0 add
add 4 index 0.34 mul 0 4 index add add 0 0 0 add add 7 4 roll pop pop pop } " ]
Set Variable [ $cls ; Value: "PANTONE 345 CVC$PANTONE 293 CVC$Yellow" ]
Set Variable [ $cs ; Value: MBS("DynaPDF.CreateDeviceNColorSpace"; $pdf; $cls; 3; $PostScriptFunc;
"DeviceCMYK"; -1) ]
```

See also

- [70.7 DynaPDF.AddDeviceNSeparations](#) 2560
- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/Create DeviceN ColorSpace](#)

70.49.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 27th August 2017, last changed 27th August 2017.

70.50 DynaPDF.CreateGoToAction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	10.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateGoToAction"; PDF; DestType; DestPage { ; a; b; c; d })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DestType

The type of destination, can be XYZoom, Fit, FitHTop, FitVLeft, FitRect, FitB, FitBHTop or FitBVLeft. "Fit"

DestPage

Destination Page

5

a

Optional

Various, depends on destination type

b

Optional

Various, depends on destination type

c

Optional

Various, depends on destination type

d

Optional

Various, depends on destination type

Result Returns action number or error.

Description

The go-to action changes the view to a specific destination (page, location, and magnification factor). This action type is useful if a specific destination must be used by several objects such as bookmarks and page links.

See also [CreateGoToAction](#) function in DynaPDF manual.

See also

- 70.1 DynaPDF.AddActionToObj 2549
- 70.51 DynaPDF.CreateGoToActionEx 2632
- 70.52 DynaPDF.CreateGoToRAction 2634

70.50. <i>DYNAPDF.CREATEGOTOACTION</i>	2631
• 70.53 DynaPDF.CreateGoToRActionEx	2636
• 70.55 DynaPDF.CreateJSAction	2640
• 70.57 DynaPDF.CreateNamedDest	2646
• 70.58 DynaPDF.CreateRadioButton	2648
• 70.290 DynaPDF.New	2981
• 70.474 DynaPDF.Table.SetCellAction	3294

70.50.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 5th December 2019, last changed 5th December 2019.

70.51 DynaPDF.CreateGoToActionEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	10.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateGoToActionEx"; PDF; NamedDest)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

NamedDest

The index of the named destination.

Result Returns an action number or error.

Description

A named destination can be used if the destination should be accessible from another PDF file. See also DynaPDF.CreateNamedDest.

See also [CreateGoToActionEx](#) function in DynaPDF manual.

Examples

Adds a go-to action for a cell in the table:

```
Set Variable [ $NamedDest ; Value: MBS( "DynaPDF.CreateNamedDest"; $pdf; "test"; 2; "Fit" ) ]
Set Variable [ $Action ; Value: MBS( "DynaPDF.CreateGoToActionEx"; $PDF; $NamedDest ) ]
Set Variable [ $r ; Value: MBS( "DynaPDF.Table.SetCellAction"; $Table; $rowNum; 0; $action; "Invert" ) ]
```

See also

- [70.50 DynaPDF.CreateGoToAction](#) 2630
- [70.52 DynaPDF.CreateGoToRAction](#) 2634
- [70.53 DynaPDF.CreateGoToRActionEx](#) 2636
- [70.55 DynaPDF.CreateJSAction](#) 2640
- [70.57 DynaPDF.CreateNamedDest](#) 2646
- [70.290 DynaPDF.New](#) 2981
- [70.474 DynaPDF.Table.SetCellAction](#) 3294

Example Databases

- [DynaPDF/Merge PDFs](#)

70.51.1 Blog Entries

- [Merge PDF with table of contents](#)
- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 5th December 2019, last changed 5th December 2019.

70.52 DynaPDF.CreateGoToRAction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	10.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateGoToRAction"; PDF; FileName; PageNum)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

FileName

File path to external PDF file.

PageNum

Destination Page
5

Result Returns action index or error.

Description

A go-to-remote action opens an external PDF file and jumps to the page defined by the parameter PageNum. If the destination page does not exist the first page will be displayed.

The path to the external PDF file should be defined as relative path. Actions must be added to a PDF object with DynaPDF.AddActionToObj. This function is also implemented in a wide version that accepts an Unicode file path. However, Unicode file path are supported since PDF 1.7 (Acrobat 8). Earlier Acrobat versions will fail to open the file if the path contains non-Ansi characters.

If the function succeeds the return value is the action handle, a value greater or equal zero.

See also [CreateGoToRAction](#) function in DynaPDF manual.

See also

- 70.1 DynaPDF.AddActionToObj 2549
- 70.50 DynaPDF.CreateGoToAction 2630
- 70.51 DynaPDF.CreateGoToActionEx 2632
- 70.53 DynaPDF.CreateGoToRActionEx 2636
- 70.55 DynaPDF.CreateJSAction 2640
- 70.57 DynaPDF.CreateNamedDest 2646
- 70.275 DynaPDF.InsertBookmarkEx 2950
- 70.290 DynaPDF.New 2981
- 70.474 DynaPDF.Table.SetCellAction 3294

70.52.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 5th December 2019, last changed 5th December 2019.

70.53 DynaPDF.CreateGoToRActionEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	10.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateGoToRActionEx"; PDF; FileName; DestName; NewWindow)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

FileName

File path to external PDF file.

DestName

Named Destination to access.

NewWindow

If true, the file is opened in a new window.

1

Result Returns action index or error.

Description

Creates a go-to-remote action that opens a named destination in an external PDF file. The parameter DestName must be the name of a named destination located in the external PDF file. Note that this is a binary string which must be specified exactly and case-sensitive. If the name was originally defined as an Unicode string, the go-to remote action must use the same string format. Otherwise the destination cannot be found. See also DynaPDF.CreateNamedDest.

The path to the external PDF file should be defined as relative path. Actions must be added to a PDF object with DynaPDF.AddActionToObj.

Unicode file path are supported since PDF 1.7 (Acrobat 8). Earlier Acrobat versions will fail to open the file if the path contains non-Ansi characters.

If the function succeeds the return value is the action handle, a value greater or equal zero.

See also [CreateGoToRActionEx](#) function in DynaPDF manual.

See also

- 70.1 DynaPDF.AddActionToObj 2549
- 70.50 DynaPDF.CreateGoToAction 2630
- 70.51 DynaPDF.CreateGoToActionEx 2632
- 70.52 DynaPDF.CreateGoToRAction 2634
- 70.57 DynaPDF.CreateNamedDest 2646

70.53. <i>DYNAPDF.CREATEGOTORACTIONEX</i>	2637
• 70.275 DynaPDF.InsertBookmarkEx	2950
• 70.290 DynaPDF.New	2981

70.53.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 5th December 2019, last changed 5th December 2019.

70.54 DynaPDF.CreateGroupField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateGroupField"; PDF; Name; Parent)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Name of the field

"Hello"

Parent

Parent group field if any or -1.

-1

Result Returns handle or error.

Description

The field itself has no appearance, it is invisible.

For example, if an interactive form contains fields for private personal data and fields for company data in any kind, the fields can be structured into two base parts: `PersonalData` and `CompanyData`. The field names of each part must be unique inside its own hierarchy. However, duplicate field names of fields of the same type are still allowed.

Field names and Group fields

The name of a specific interactive form field is the partial field name. The fully qualified name is not explicitly defined, but is constructed from the partial field name of the field and all of its ancestors.

For a field with no parent, the partial field name and the fully qualified name are the same; for a field that is the child of a parent (group) field, the fully qualified name is formed by appending the child field's partial name to the parent's fully qualified name, separated by a period (.):

```
parent_field_name.child_partial_name
```

For example, if a group field with the partial field name `PersonalData` has a child whose partial field name is `Address`, which in turn has a child with the partial field name `ZipCode`, then the fully qualified name of this last field would be

```
PersonalData.Address.ZipCode
```

Thus all fields descended from a common ancestor will share the ancestor's fully qualified field name as a common prefix in their own fully qualified names.

The naming scheme must be taken into account when accessing fields of a group in JavaScript functions.

Acrobat 4 does not support group fields inside a hide or form action. For example, if a group field will be added to a hide action, the entire group becomes invisible if the action is executed in Acrobat 5 or higher. Acrobat 4 ignores the group field; each field of the group must be manually added to the hide action.

See also [CreateGroupField](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.48 DynaPDF.CreateComboBox 2625
- 70.56 DynaPDF.CreateListBox 2643
- 70.60 DynaPDF.CreateSigField 2653
- 70.61 DynaPDF.CreateSigFieldAP 2656
- 70.63 DynaPDF.CreateTextField 2659
- 70.290 DynaPDF.New 2981

70.54.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 21st October 2014.

70.55 DynaPDF.CreateJSAction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateJSAction"; PDF; Script)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Script

The javascript text.

Result Returns number or error.

Description

A JavaScript Action causes a script to be compiled and executed by the JavaScript interpreter of Adobe's Acrobat. Depending on the nature of the scripts, this can cause various interactive form fields in the document to update their values or change their visual appearances.

The parameter Script must be a valid JavaScript. The script is not checked by DynaPDF whether it is valid or not. Note that older Acrobat versions of Adobe's Acrobat do not support all JavaScript functions. Due to several bugs in Acrobat 4/5 an invalid JavaScript can cause an access violation in Adobe's Acrobat. Test your scripts carefully with all Acrobat versions which must be supported.

See also [CreateJSAction](#) function in DynaPDF manual.

Examples

Create sum field:

```
Set Variable [ $y; Value:50 ]
Set Variable [ $script; Value:"var v1 = this.getField(\\"Val1\\");" & $& "var v2 = this.getField(\\"Val2\\");"
& $& "var v3 = this.getField(\\"Val3\\");" & $& "event.value = v1.value + v2.value + v3.value;" ]
Set Variable [ $script; Value:MBS( "Text.ReplaceNewline"; $script; 2 ) ]
Set Variable [ $a; Value:MBS( "DynaPDF.CreateJSAction"; $pdf; $script ) ]
# Create 1st field
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Val1"; -1; 0; 0; 50; $y; 200; 20 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetTextFieldValue"; $pdf; $f; "50.00"; "50.00"; "Right" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetNumberFormat"; $pdf; $f; "NoneDot"; 2; "MinusBlack" ) ]
# Create 2nd field
Set Variable [ $y; Value:$y + 30 ]
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Val2"; -1; 0; 0; 50; $y; 200; 20 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetTextFieldValue"; $pdf; $f; "100.00"; "100.00"; "Right" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetNumberFormat"; $pdf; $f; "NoneDot"; 2; "MinusBlack" ) ]
# Create 3rd field
Set Variable [ $y; Value:$y + 30 ]
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Val3"; -1; 0; 0; 50; $y; 200; 20 ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetTextFieldValue"; $pdf; $f; "200.00"; "200.00"; "Right" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetNumberFormat"; $pdf; $f; "NoneDot"; 2; "MinusBlack" ) ]
```

```

# Create sum field
# This last field calculates sum of other fields
# Works only in PDF Viewers supporting JavaScript!
Set Variable [ $y; Value:$y + 30 ]
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Sum"; -1; 0; 10; 50; $y; 200; 20) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetFieldBorderWidth"; $pdf; $f; 0) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetTextFieldValue"; $pdf; $f; "350.00 €"; "350.00 €"; "Right") ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetFieldFlags"; $pdf; $f; "ReadOnly"; 0) ]
Set Variable [ $r; Value:MBS( "DynaPDF.AddActionToObj"; $pdf; "Field"; "OnCalc"; $a; $f) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetNumberFormat"; $pdf; $f; "CommaDot"; 2; "MinusBlack"; "€"; 0) ]

```

Create checkbox to confirm page and jump to next one:

```

Set Variable [ $f ; Value: MBS( "DynaPDF.CreateCheckBox"; $pdf; "OK"; "OK";0; -1; $PageWidth-150; $pageHeight-20; 15; 15 ) ]
# This is javascript from Adobe to go to next page You could substitute many of their examples
Set Variable [ $script ; Value: "this.pageNum++" ]
Set Variable [ $script ; Value: MBS( "Text.ReplaceNewline"; $script; 2 ) ]
Set Variable [ $a ; Value: MBS( "DynaPDF.CreateJSAction"; $pdf; $script ) ]
Set Variable [ $r ; Value: MBS( "DynaPDF.AddActionToObj"; $pdf; "Field"; "OnMouseUp"; $a; $f ) ]

```

See also

- 70.1 DynaPDF.AddActionToObj 2549
- 70.46 DynaPDF.CreateButton 2620
- 70.50 DynaPDF.CreateGoToAction 2630
- 70.51 DynaPDF.CreateGoToActionEx 2632
- 70.52 DynaPDF.CreateGoToRAction 2634
- 70.56 DynaPDF.CreateListBox 2643
- 70.367 DynaPDF.SetFieldBorderWidth 3125
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.425 DynaPDF.SetTextFieldValue 3226
- 164.59 Text.ReplaceNewline 7857

Example Databases

- [DynaPDF/Create PDF with sum form field](#)

70.55.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr5](#)
- [Tip of the day: DynaPDF form creation with calculation with FileMaker](#)

Created 24th August 2016, last changed 21st May 2017.

70.56 DynaPDF.CreateListBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateListBox"; PDF; Name; Sort; Parent; PosX; PosY; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Name of the field

"IsMale"

Sort

Sort the choice values? 0 = no, 1 = yes.

1

Parent

Parent group field if any or -1.

-1

PosX

X-Coordinate of the text field.

100

PosY

Y-Coordinate of the text field.

100

Width

Width of the text field.

100

Height

Height of the text field.

20

Result Returns handle or error.

Description

The choice values of the list box must be added with the function DynaPDF.AddValToChoiceField. This function requires the field handle that was returned by this function.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the list box. If the coordinate system is top-down it defines the upper left corner.

Like all form fields, the width and height is measured incl. the line width of the border. The size of normal vector graphics is measured without the line width; this must be taken into account when calculating the width or height of a form field. The line width of the border is derived from the current graphics state (see `DynaPDF.SetLineWidth()`), it should be either 0, 1, 2, or 3 units (no border, thin, medium, or thick). The border style can be changed with the functions `SetBorderStyle()` or `DynaPDF.SetFieldBorderStyle()`.

The values of the list box are sorted if the parameter `Sort` is true. List boxes support multiple selected values. To enable multi selection add the flag `ffMultiSelect` to the field (see `DynaPDF.SetFieldFlags()` for further information).

A list box requires a font. If no font is active the standard font Helvetica is used. Note that if the form must be compatible to Acrobat 4, the used fonts by the form fields must be restricted to the 14 standard fonts (see `SetFont()` for further information). Acrobat 4 does not support interactive forms that use other fonts than the 14 standard fonts. Such a form requires Acrobat 5 or higher.

However, it is possible to use an arbitrary font as long as the code page 1252 is used.

The font size of a list box is set to "auto" if either the font size of the active font is set to 1.0 unit or if no font is active when the field is created.

A text field can be formatted and the allowed input values can be restricted to specific data formats. See `DynaPDF.SetDateTimeFormat()`, `DynaPDF.SetNumberFormat()` for further information.

Specific flags supported by list boxes:

- `Sorted` // Change the sort flag if necessary
- `MultiSelect` // Enable multi selection

Earlier versions of DynaPDF allowed the usage of arbitrary 8 bit code pages. Due to changes in Acrobat viewer applications it is no longer possible to use another code page than 1252. In addition, it seems that Acrobat versions greater 6 do no longer support Type1 fonts in form fields, with the exception of the 14 standard fonts.

Interactive form fields can be structured into several groups by passing a handle of a group field to the parameter `Parent`. See `DynaPDF.CreateGroupField()` for further information.

If the function succeeds the return value is the handle of the combo box, a value greater or equal zero. If the function fails the return value is a negative error code.

See also [CreateListBox](#) function in DynaPDF manual.

See also

- 70.11 `DynaPDF.AddValToChoiceField()` 2567
- 70.46 `DynaPDF.CreateButton()` 2620
- 70.48 `DynaPDF.CreateComboBox()` 2625

70.56. <i>DYNAPDF.CREATELISTBOX</i>	2645
• 70.54 DynaPDF.CreateGroupField	2638
• 70.55 DynaPDF.CreateJSAction	2640
• 70.290 DynaPDF.New	2981
• 70.366 DynaPDF.SetFieldBorderStyle	3124
• 70.372 DynaPDF.SetFieldFlags	3134
• 70.399 DynaPDF.SetLineWidth	3178
• 70.404 DynaPDF.SetNumberFormat	3186

Created 18th August 2014, last changed 18th August 2014.

70.57 DynaPDF.CreateNamedDest

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateNamedDest"; PDF; Name; DestPage; DestType { ; a; b; c; d })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Name of the destination

"Chapter1"

DestPage

Destination Page

5

DestType

The type of destination, can be XYZoom, Fit, FitHTop, FitVLeft, FitRect, FitB, FitBHTop or FitBVLeft.

"Fit"

a

Optional

optional parameter

b

Optional

optional parameter

c

Optional

optional parameter

d

Optional

optional parameter

Result Returns number or error.

Description

Named destinations are useful if the destination must be accessed from another PDF file. For example, a link to the beginning of Chapter 3 in another document might refer to the destination by a name, such as Chap3.begin, instead of an explicit page number in the other document. This makes it possible to change the destination in the document without invalidating the external link that refers to the destination.

Named destinations can be used in the same document by bookmarks, page links, and go-to actions. This makes it possible to share named destinations with external and internal links. Named destinations which are located in another document can be accessed with a go-to-remote action (see DynaPDF.CreateGoToRAC-

tionEx for further information).

The different destination types are described in detail at `DynaPDF.CreateGoToAction`.

To avoid unnecessary problems it is usually best to use 7 bit Ansi strings for named destinations.

If the function succeeds the return value is the destination handle, a value greater or equal zero. If the function fails the return value is an error message.

See also [CreateNamedDest](#) function in DynaPDF manual.

Examples

Created named dest and add a bookmark using it:

```
$NamedDest = MBS("DynaPDF.CreateNamedDest"; $pdf; "link" & Create Text::DestPage; Create Text::DestPage; "FitRect"; 100; 200; 300; 400)
$b = MBS("DynaPDF.AddBookmarkEx"; $pdf; Create Text::Title; Create Text::Parent; $NamedDest; Create Text::Open)
```

See also

- [70.3 DynaPDF.AddBookmark](#) 2553
- [70.4 DynaPDF.AddBookmarkEx](#) 2555
- [70.50 DynaPDF.CreateGoToAction](#) 2630
- [70.51 DynaPDF.CreateGoToActionEx](#) 2632
- [70.52 DynaPDF.CreateGoToRAction](#) 2634
- [70.53 DynaPDF.CreateGoToRActionEx](#) 2636
- [70.275 DynaPDF.InsertBookmarkEx](#) 2950
- [70.290 DynaPDF.New](#) 2981
- [70.474 DynaPDF.Table.SetCellAction](#) 3294

Example Databases

- [DynaPDF/Merge PDFs](#)

70.57.1 Blog Entries

- [Merge PDF with table of contents](#)
- [MBS Filemaker Plugin, version 4.4pr5](#)

Created 6th October 2014, last changed 21st October 2014.

70.58 DynaPDF.CreateRadioButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateRadioButton"; PDF; Name; ExpValue; Checked; Parent; PosX; PosY; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Name of the field

"IsMale"

ExpValue

Export value (required)

"IsMale"

Checked

If 1, the check box appears checked. Else pass 0 for unchecked.

0

Parent

Parent group field if any or -1.

-1

PosX

X-Coordinate of the text field.

100

PosY

Y-Coordinate of the text field.

100

Width

Width of the text field.

100

Height

Height of the text field.

20

Result Returns handle or error.

Description

A radio button field is a set of related toggle controls (check boxes), at most one of which may be on at any given time; selecting any one of the button automatically deselects all others.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the first check box that is automatically created by this function. If the coordinate system is top-down it defines the upper left corner.

Like all form fields, the width and height is measured incl. the line width of the border. The size of normal vector graphics is measured without the line width; this must be taken into account when calculating the width or height of a form field. The line width of the border is derived from the current graphics state (see DynaPDF.SetLineWidth), it should be either 0, 1, 2, or 3 units (no border, thin, medium, or thick). The border style can be changed with the functions DynaPDF.SetBorderStyle or DynaPDF.SetFieldBorderStyle.

This field type supports two additional flags: `ffNoToggleToOff` and `ffRadioIsUnion`. The flag `ffNoToggleToOff` has no more any effect in Adobes Acrobat or Reader. The radio button behaves always as if the flag `ffNoToggleToOff` is set.

If the flag `ffRadioIsUnion` is set, and if two or more check boxes contain the same export value, then these check boxes will be selected in unison.

It is not possible to add an action to a radio button field. Actions must be added to the check boxes which are included in the radio button. The handle of the first check box can be calculated by adding 1 to the handle value of the radio button field. For example, if the handle of the radio button is 1, then the handle of the first check box is 2.

If the function succeeds the return value is the handle of the radio button, a value greater or equal zero. If the function fails the return is error message.

See also [CreateRadioButton](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.50 DynaPDF.CreateGoToAction 2630
- 70.290 DynaPDF.New 2981
- 70.347 DynaPDF.SetBorderStyle 3099
- 70.366 DynaPDF.SetFieldBorderStyle 3124
- 70.399 DynaPDF.SetLineWidth 3178

70.58.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

70.59 DynaPDF.CreateSeparationCS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateSeparationCS"; PDF; Colorant; Alternate; Handle; Color)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Colorant

Colorant name. Required.

"Pantone"

Alternate

The alternate color space. Can be DeviceRGB, DeviceCMYK, DeviceGray, CalGray, CalRGB, Lab, IC-CBased, Pattern, Indexed, Separation, DeviceN, NChannel or the matching number value.

"DeviceCMYK"

Handle

Alternate color space handle or -1.

Color

Color value defined in the alt. color space.

Result Returns color space handle or error.

Description

Color output devices produce full color by combining primary or process colorants in varying amounts. On an additive color device such as a display, the primary colorants consist of red, green, and blue phosphors; on a subtractive device such as a printer, they typically consist of cyan, magenta, yellow, and sometimes black inks. In addition, some devices can apply special colorants, often called spot colorants, to produce effects that cannot be achieved with the standard process colorants alone. Examples include metallic and fluorescent colors and special textures.

When printing a page, most devices produce a single composite page on which all process colorants (and spot colorants, if any) are combined. However, some devices, such as imagesetters, produce a separate, monochromatic rendition of the page, called a separation, for each colorant. When the separations are later combined—on a printing press, for example—and the proper inks or other colorants are applied to them, the result is a full-color page.

A Separation color space (PDF 1.2) provides a means for specifying the use of additional colorants or for isolating the control of individual color components of a device color space for a subtractive device. When such a space is the current color space, the current color is a single-component value, called a tint, that controls the application of the given colorant or color components only.

The parameter Colorant specifies the colorant name which this Separation color space is intended to represent. The special colorant name All refers collectively to all colorants available on an output device, including those for the standard process colorants. When a Separation space with this colorant name is the current color space, painting operators apply tint values to all available colorants at once. This is useful for purposes

such as painting registration targets in the same place on every separation.

Such marks are typically painted as the last step in composing a page to ensure that they are not overwritten by subsequent painting operations.

The special colorant name None never produces any visible output. Painting operations in a Separation space with this colorant name have no effect on the current page.

The parameter Alternate specifies the alternate color space in which the color should be rendered if the device does not support the specified colorant. The alternate color space can be any Device or CIE based color space but not in turn a special color space like Separation, Indexed, or DeviceN.

The parameter Handle specifies the handle of the alternate color space if a CIE based color space should be used. If the alternate color space is a device color space the parameter Handle is ignored.

The parameter Color specifies the alternate color value, defined in the alternate color space, which is used if the device does not support the colorant.

A color value in a Separation color space consists of a single tint component in the range 0 to 255. The value 0 represents the minimum amount of colorant that can be applied; 255 represent the maximum. Tints are always treated as subtractive colors, even if the device produces output for the designated component by an additive method. Thus, a tint value of 0 denotes the lightest color that can be achieved with the given colorant, and 255 is the darkest. This convention is the same as for DeviceCMYK color components but opposite to the one for DeviceGray and DeviceRGB.

Encoding of Colorant Names

MBS Plugin uses UTF-8 for colorants names.

Notice:

Non-device color spaces cannot be used for interactive objects such as annotations or form fields. The active color space must always be changed to a device color space before creating interactive objects; see `DynaPDF.SetColorSpace`. Note also that annotations support DeviceRGB only. Form fields support DeviceGray, DeviceRGB, and DeviceCMYK.

Remarks:

Use the function `DynaPDF.SetExtColorSpace` to activate the color space in the graphics state. To set a color of a Separation space pass the wished color value to `DynaPDF.SetFillColor`, `DynaPDF.SetStrokeColor`, or `DynaPDF.SetColors`.

Return values:

If the function succeeds the return value is the color space handle, a value greater or equal zero. If the function fails the return value is an error message.

See also [CreateSeparationCS](#) function in DynaPDF manual.

Examples

Create separation color space:

```
# We create also Separation color spaces for the spot colors and add
# these color spaces as an attribute to the DeviceN color space:
Set Variable [ $separations0 ; Value: MBS("DynaPDF.CreateSeparationCS"; $pdf; "Yellow"; "DeviceCMYK";
-1; MBS("DynaPDF.CMYK"; 0; 0; 87; 0)) ]
```

Draw line in a separation color:

```
# draw line in Cut Color
Set Variable [ $cs ; Value: MBS("DynaPDF.CreateSeparationCS"; $pdf; "Through Cut"; "DeviceCMYK";
-1; MBS("DynaPDF.CMYK"; 0; 255; 0; 0)) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetExtColorSpace"; $pdf; $cs) ]
```

```
Set Variable [ $r ; Value: MBS("DynaPDF.SetFillColor"; $pdf; 1) ]
```

```
Set Variable [ $r ; Value: MBS( "DynaPDF.Rectangle"; $pdf; $x; $y; $w; $h; "Stroke" ) ]
```

See also

- [70.7 DynaPDF.AddDeviceNSeparations](#) 2560
- [70.27 DynaPDF.CMYK](#) 2593
- [70.290 DynaPDF.New](#) 2981
- [70.310 DynaPDF.Rectangle](#) 3031
- [70.353 DynaPDF.SetColorSpace](#) 3105
- [70.360 DynaPDF.SetExtColorSpace](#) 3116
- [70.384 DynaPDF.SetFillColor](#) 3150
- [70.423 DynaPDF.SetStrokeColor](#) 3222

Example Databases

- [DynaPDF/Create DeviceN ColorSpace](#)

70.59.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 27th August 2017, last changed 11st November 2018.

70.60 DynaPDF.CreateSigField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateSigField"; PDF; Name; ExpValue; Checked; Parent; PosX; PosY; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Name of the field

"IsMale"

ExpValue

Export value (required)

"IsMale"

Checked

If 1, the check box appears checked. Else pass 0 for unchecked.

0

Parent

Parent group field if any or -1.

-1

PosX

X-Coordinate of the text field.

100

PosY

Y-Coordinate of the text field.

100

Width

Width of the text field.

100

Height

Height of the text field.

20

Result Returns handle or error message.

Description

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the signature field. If the coordinate system is top-down it defines the upper left corner.

Like all form fields, the width and height is measured incl. the line width of the border. The size of normal vector graphics is measured without the line width; this must be taken into account when calculating the width or height of a form field. The line width of the border is derived from the current graphics state (see `DynaPDF.SetLineWidth`), it should be either 0, 1, 2, or 3 units (no border, thin, medium, or thick). The border style can be changed with the functions `DynaPDF.SetBorderStyle` or `DynaPDF.SetFieldBorderStyle`. If the PDF file should be digitally signed by DynaPDF call the function `DynaPDF.CloseAndSignFile` or `DynaPDF.CloseAndSignFileEx` after all pages has been created. The first signature field is used for signing if multiple signature fields exist. In this case it is also possible to create a user defined appearance for the signature field. See `CreateSigFieldAP()` for further information.

A signature field can be visible or invisible depending on your requirements. To create a hidden signature field set the flag `ffHidden` to the field (see also `DynaPDF.SetFieldFlags`).

How to lock an Interactive Form after signing?

If an Interactive Form should be filled in and signed within the full version of Adobe's Acrobat 4 or higher then it is possible to create an empty signature field which executes a special JavaScript Action to lock the form after it has been signed. This can be done with a JavaScript Action which contains the JavaScript function `AFSignature_Format()`. This function can be called within the `OnFormat` event of the signature field. Note that this is the one and only event that signature fields support.

The function supports two parameters, the first parameter defines whether all or only specific fields should be locked, the second parameter contains either an empty array or an array of full qualified field names delimited by a comma:

- `AFSignature_Format("ALL", new Array (""));`
- `AFSignature_Format("THESE", new Array ("Field1, Field2"));`
- `AFSignature_Format("EXCEPT", new Array ("Field1, Field2"));`

If a form contains a button with a Submit Form Action then it is recommended to exclude the button field from locking so that it is still possible to submit the form data. Otherwise, the entire form is locked, incl. the submit button, and it is impossible to submit the form data to a web server.

See also [CreateSigField](#) function in DynaPDF manual.

See also

- 70.54 `DynaPDF.CreateGroupField` 2638
- 70.61 `DynaPDF.CreateSigFieldAP` 2656
- 70.63 `DynaPDF.CreateTextField` 2659
- 70.290 `DynaPDF.New` 2981
- 70.347 `DynaPDF.SetBorderStyle` 3099

70.60. <i>DYNAPDF.CREATESIGFIELD</i>	2655
• 70.366 DynaPDF.SetFieldBorderStyle	3124
• 70.372 DynaPDF.SetFieldFlags	3134
• 70.399 DynaPDF.SetLineWidth	3178

70.60.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

70.61 DynaPDF.CreateSigFieldAP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateSigFieldAP"; PDF; SigField)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

SigField

Handle of a signature field.

\$SigField

Result Returns action handle or error.

Description

The created template is already opened if the function succeeds and you can draw arbitrary contents into it. After the appearance has been defined the template must be closed with EndTemplate.

Note that the template is reserved for the signature field. It must not be placed on pages or other templates. When creating a user defined appearance for a signature field you should also place the validation icon properly so that it does not overprint the entire contents. See also DynaPDF.PlaceSigFieldValidateIcon.

If the function succeeds the return value is the action handle, a value greater or equal zero. If the function fails the return value is the error message.

See also [CreateSigFieldAP](#) function in DynaPDF manual.

See also

- [70.54 DynaPDF.CreateGroupField](#) 2638
- [70.60 DynaPDF.CreateSigField](#) 2653
- [70.63 DynaPDF.CreateTextField](#) 2659
- [70.290 DynaPDF.New](#) 2981

70.61.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

70.62 DynaPDF.CreateStructureTree

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateStructureTree"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See dynapdf_help.pdf manual for details.

Required for PDF/A.

See also [CreateStructureTree](#) function in DynaPDF manual.

Examples

Create structure tree:

```
Set Variable [ $r; Value:MBS("DynaPDF.CreateStructureTree"; $pdf) ]
```

See also

- [70.290 DynaPDF.New](#)

2981

Example Databases

- [DynaPDF/Convert to PDF/A](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factor-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.62.1 Blog Entries

- [ZUGFeRD 2.0 and Factor-X for FileMaker](#)

- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)

70.62.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 25
- Ausgabe 1/2018, Seite 24

Created 4th November 2014, last changed 18th June 2016.

70.63 DynaPDF.CreateTextField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateTextField"; PDF; Name; Parent; Multiline; MaxLen; PosX; PosY; Width; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Name of the text field

"Input"

Parent

Parent group field if any or -1.

-1

Multiline

Enable multi line text output.

0

MaxLen

Maximum length of the text or 0.

0

PosX

X-Coordinate of the text field.

100

PosY

Y-Coordinate of the text field.

100

Width

Width of the text field.

100

Height

Height of the text field.

20

Result Returns field handle or error.

Description

See CreateTextField function in dynapdf_help.pdf for details.

See also [CreateTextField](#) function in DynaPDF manual.

Examples

Create a text field:

```
Set Variable [ $f; Value:MBS( "DynaPDF.CreateTextField"; $pdf; "Val1"; -1; 0; 0; 50; $y; 200; 20) ]
```

See also

- [70.1 DynaPDF.AddActionToObj](#) 2549
- [70.54 DynaPDF.CreateGroupField](#) 2638
- [70.55 DynaPDF.CreateJSAction](#) 2640
- [70.60 DynaPDF.CreateSigField](#) 2653
- [70.61 DynaPDF.CreateSigFieldAP](#) 2656
- [70.115 DynaPDF.FreeTextAnnot](#) 2738
- [70.290 DynaPDF.New](#) 2981
- [70.404 DynaPDF.SetNumberFormat](#) 3186

Example Databases

- [DynaPDF/Create Form](#)
- [DynaPDF/Create PDF with sum form field](#)
- [DynaPDF/Form/Form](#)

70.63.1 Blog Entries

- [Tip of the day: DynaPDF form creation with calculation with FileMaker](#)
- [MBS Filemaker Plugin, version 4.1pr4](#)

Created 18th August 2014, last changed 18th October 2016.

70.64 DynaPDF.CreateXFASStream

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.CreateXFASStream"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

The parameter Name must be the name of the XFA resource. XML must be a valid XFA stream buffer or empty text, if the buffer should be set later with DynaPDF.SetXFASStream.

If the function succeeds the return value is the stream handle, a value greater or equal zero.

If the function fails the return value is an error message.

See also

- 70.261 DynaPDF.GetXFASStream 2918
- 70.290 DynaPDF.New 2981
- 70.443 DynaPDF.SetXFASStream 3248

70.64.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr4](#)

Created 20th October 2019, last changed 20th October 2019.

70.65 DynaPDF.DeleteAcroForm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteAcroForm"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

If the document contains no interactive form the function does nothing.
See also [DeleteAcroForm](#) function in DynaPDF manual.

See also

- 70.78 DynaPDF.DeleteXFAForm 2675
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.66 DynaPDF.DeleteActionFromObjEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteActionFromObjEx"; PDF; ObjType; ActHandle; ObjHandle)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

ObjType

The type of object. Can be Action, Annotation, Bookmark, Catalog, Field, Page or PageLink.

"Page"

ActHandle

The action handle.

\$action

ObjHandle

The object handle.

\$obj

Result Returns OK or error.

Description

If the object type is page, then use the page number as handle. If the handle of the action is not known, because the object was may be imported from an external PDF file, then use the function DynaPDF.DeleteActionFromObjEx instead.

See also [DeleteActionFromObjEx](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New

2981

Created 6th February 2015, last changed 6th February 2015.

70.67 DynaPDF.DeleteAnnotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteAnnotation"; PDF; AnnotationHandle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

Result Returns OK or error.

Description

Annotations are global objects. To delete specific annotations of a PDF file use the functions DynaPDF.GetAnnotCount, DynaPDF.GetAnnotType and DynaPDF.DeleteAnnotation.

Annotations are marked as deleted and not removed from list of annotations right away.

See also [DeleteAnnotation](#) function in DynaPDF manual.

See also

- 70.121 DynaPDF.GetAnnotation 2748
- 70.117 DynaPDF.GetAnnotCount 2743
- 70.120 DynaPDF.GetAnnotType 2746
- 70.219 DynaPDF.GetPageAnnotation 2869
- 70.290 DynaPDF.New 2981

Created 25th November 2014, last changed 16th January 2020.

70.68 DynaPDF.DeleteBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteBookmark"; PDF; BookmarkHandle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

BookmarkHandle

The reference number for the bookmark. Either returned by one of the add/insert functions or just counting from 0 to DynaPDF.GetBookmarkCount-1.

\$BookmarkHandle

Result Returns number or error.

Description

The parameter BookmarkHandle must be a valid bookmark handle. Please note that this function invalidates all bookmark handles which are numerically greater than BookmarkHandle. DynaPDF supports several functions to find or enumerate bookmarks. It is safe to delete a bookmark within a search run. See the following functions for further information:

- DynaPDF.GetBookmarkCount
- DynaPDF.GetBookmark
- DynaPDF.FindBookmark and DynaPDF.FindNextBookmark

If the function succeeds the return value is the remaining number of bookmarks. If the function fails the return value is an error.

See also [DeleteBookmark](#) function in DynaPDF manual.

See also

- 70.30 DynaPDF.ChangeBookmark 2597
- 70.103 DynaPDF.FindBookmark 2720
- 70.107 DynaPDF.FindNextBookmark 2725
- 70.124 DynaPDF.GetBookmark 2753
- 70.125 DynaPDF.GetBookmarkCount 2755
- 70.274 DynaPDF.InsertBookmark 2948
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 18th August 2014.

70.69 DynaPDF.DeleteEmbeddedFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteEmbeddedFile"; PDF; Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

The index number for the embedded file. Range from 0 to DynaPDF.GetEmbeddedFileCount.

0

Result Returns OK or error.

Description

The parameter Handle must be a valid embedded file handle. Such a handle is a simple array index. DynaPDF.GetEmbeddedFileCount returns the remaining number of embedded files. If all embedded files should be deleted then delete the files from top to bottom by decrementing the loop variable. This is faster because it is not required to reorganize the array in which the files are stored in this case. All handles above the deleted file index become invalid after the file was deleted.

See also [DeleteEmbeddedFile](#) function in DynaPDF manual.

See also

- 70.104 DynaPDF.FindEmbeddedFile 2722
- 70.143 DynaPDF.GetEmbeddedFile 2774
- 70.145 DynaPDF.GetEmbeddedFileCount 2777
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.70 DynaPDF.DeleteField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteField"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

A field handle.
\$field

Result Returns OK or error.

Description

The parameter Field must be a valid field handle. If the field is a radio button or group field, the child fields used are also deleted. There is no need to delete each field separately.

A field is never physically deleted. All field handles are still valid after a field was deleted, but the "Used" flag of the field is set to false (see DynaPDF.GetField for further information). If a field contained an action that was not used by another object then the action is also deleted.

Fields can also be deleted by using its name instead of the handle. See DynaPDF.DeleteFieldEx for further information.

See also [DeleteField](#) function in DynaPDF manual.

See also

- [70.71 DynaPDF.DeleteFieldEx](#) 2668
- [70.73 DynaPDF.DeletePage](#) 2670
- [70.113 DynaPDF.FlushPages](#) 2734
- [70.148 DynaPDF.GetField](#) 2783
- [70.290 DynaPDF.New](#) 2981

Created 6th February 2015, last changed 6th February 2015.

70.71 DynaPDF.DeleteFieldEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteFieldEx"; PDF; Name)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Full qualified field name.

"FirstName"

Result Returns OK or error.

Description

This function deletes an interactive form field by using its full qualified name, that is the name of any parent group field separated by a period (.) plus the field name.

Check boxes of a radio button have no name. It is not possible to delete such a check box by using this function, use DynaPDF.DeleteField instead. However, the entire radio button can be deleted with this function.

See also [DeleteFieldEx](#) function in DynaPDF manual.

See also

- 70.70 DynaPDF.DeleteField 2667
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.72 DynaPDF.DeleteJavaScripts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteJavaScripts"; PDF; DelJavaScriptActions)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DelJavaScriptActions

Delete Javascript Actions? Pass 1 to delete or 0 to not delete.

1

Result Returns OK or error.

Description

Optionally deletes all Javascript Actions from the document.

See also [DeleteJavaScripts](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New

2981

Created 6th February 2015, last changed 6th February 2015.

70.73 DynaPDF.DeletePage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeletePage"; PDF; PageNumber)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

PageNumber

The page number to delete. Range from 1 to DynaPDF.GetPageCount.
1

Result Returns OK or error.

Description

See also [DeletePage](#) function in DynaPDF manual.

See also

- 70.15 DynaPDF.AppendPage 2575
- 70.70 DynaPDF.DeleteField 2667
- 70.113 DynaPDF.FlushPages 2734
- 70.222 DynaPDF.GetPageCount 2873
- 70.290 DynaPDF.New 2981
- 70.302 DynaPDF.Print 3017
- 70.315 DynaPDF.RenderPage 3040

70.73.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr3](#)

Created 18th August 2014, last changed 18th August 2014.

70.74 DynaPDF.DeletePageLabels

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeletePageLabels"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See also [DeletePageLabels](#) function in DynaPDF manual.

See also

- 70.225 DynaPDF.GetPageLabel 2878
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.75 DynaPDF.DeleteSeparationInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteSeparationInfo"; PDF { ; AllPages })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AllPages

Optional

Optionally, delete the separation info of all pages? Pass 1 to delete.

0

Result Returns OK or error.

Description

If of all pages if the parameter AllPages is set to 1.

See also [DeleteSeparationInfo](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.422 DynaPDF.SetSeparationInfo 3221

Created 6th February 2015, last changed 6th February 2015.

70.76 DynaPDF.DeleteTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteTemplate"; PDF; Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

Template handle.

\$template

Result Returns OK or error.

Description

The parameter Handle must be a valid template handle. A template is not physically deleted by this function, only the content stream is cleared. Templates can be references in other content stream so that it is quite complex to delete a template physically at runtime. However, this behavior is maybe changed in a future version of DynaPDF.

Imported PDF pages are converted to templates by default. The handles of such templates are often not known, however, it is possibly to delete them by using the function DynaPDF.DeleteTemplateEx(

See also [DeleteTemplate](#) function in DynaPDF manual.

See also

- 70.23 DynaPDF.BeginTemplate 2588
- 70.77 DynaPDF.DeleteTemplateEx 2674
- 70.85 DynaPDF.EditTemplate 2688
- 70.86 DynaPDF.EditTemplate2 2690
- 70.290 DynaPDF.New 2981
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.301 DynaPDF.PlaceTemplateEx 3015
- 70.321 DynaPDF.RotateTemplate 3055

Created 6th February 2015, last changed 6th February 2015.

70.77 DynaPDF.DeleteTemplateEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteTemplateEx"; PDF; Index)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

Index of the template inside the page's array.

0

Result Returns OK or error.

Description

The parameter Index represents an index into the array of templates used by the current open page. The number of templates used by a page is returned by the function DynaPDF.GetTemplCount.

It is not easy to identify a specific template, all templates used by a page can be deleted easily, but it is much more complex to delete a specific template if the page contains more than one.

However, if a template contains text, then the functions DynaPDF.EditTemplate and DynaPDF.GetPageText can be used to identify a template, but in most cases it is easier to delete a template and check the file with Acrobat or Reader to determine whether it was the right one.

See also [DeleteTemplateEx](#) function in DynaPDF manual.

See also

- 70.76 DynaPDF.DeleteTemplate 2673
- 70.85 DynaPDF.EditTemplate 2688
- 70.237 DynaPDF.GetTemplCount 2892
- 70.290 DynaPDF.New 2981
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.301 DynaPDF.PlaceTemplateEx 3015
- 70.321 DynaPDF.RotateTemplate 3055

Created 6th February 2015, last changed 6th February 2015.

70.78 DynaPDF.DeleteXFAForm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DeleteXFAForm"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error.

Description

This can be useful if the PDF file contains a hybrid form because DynaPDF does not allow editing form fields as long as an XFA form is present.

See also [DeleteXFAForm](#) function in DynaPDF manual.

See also

- 70.65 DynaPDF.DeleteAcroForm 2662
- 70.190 DynaPDF.GetInIsXFAForm 2834
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.79 DynaPDF.DrawArc

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DrawArc"; PDF; PosX; PosY; Radius; StartAngle; EndAngle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of the midpoint of the arc

\$x

PosY

Y-Coordinate of the midpoint of the arc

\$y

Radius

Radius of the arc.

50

StartAngle

Start Angle.

\$StartAngle

EndAngle

End Angle.

\$EndAngle

Result Returns OK or error.

Description

A full circle is drawn if the start and end angles are the same. The path is not closed, stroked or filled so that it will be invisible as long it is not stroked, filled or both (see DynaPDF.ClosePath, DynaPDF.StrokePath for further information).

The current point is connected with the start point of the arc and then updated to end point of the arc, see example below.

The draw direction can be changed with the function DynaPDF.SetDrawDirection. The start and end angles are always measured counter clockwise independent of the drawing direction.

See also [DrawArc](#) function in DynaPDF manual.

See also

- 70.24 DynaPDF.Bezier123 2589
- 70.43 DynaPDF.ClosePath 2615
- 70.80 DynaPDF.DrawArcEx 2678

70.79. <i>DYNAPDF.DRAWARC</i>	2677
• 70.81 DynaPDF.DrawChord	2680
• 70.82 DynaPDF.DrawCircle	2682
• 70.83 DynaPDF.DrawPie	2684
• 70.290 DynaPDF.New	2981
• 70.359 DynaPDF.SetDrawDirection	3115

70.79.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.80 DynaPDF.DrawArcEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DrawArcEx"; PDF; PosX; PosY; Width; Height; StartAngle; EndAngle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of the midpoint of the arc

\$x

PosY

Y-Coordinate of the midpoint of the arc

\$y

Width

Width of the bounding rectangle

\$w

Height

Height of the bounding rectangle

\$h

StartAngle

Start Angle.

\$StartAngle

EndAngle

End Angle.

\$EndAngle

Result Returns OK or error.

Description

A full ellipse is drawn if the start and end angles are the same. The path is not closed, stroked or filled so that it will be invisible as long it is not stroked, filled or both (see DynaPDF.ClosePath, DynaPDF.StrokePath for further information).

The current point is connected with the start point of the ellipse and then updated to the end point of the ellipse.

The draw direction can be changed with the function DynaPDF.SetDrawDirection. The start and end angles are always measured counter clockwise independent of the drawing direction.

See also [DrawArcEx](#) function in DynaPDF manual.

See also

- 70.43 DynaPDF.ClosePath

<i>70.80. DYNAPDF.DRAWARCEX</i>	2679
• 70.79 DynaPDF.DrawArc	2676
• 70.81 DynaPDF.DrawChord	2680
• 70.82 DynaPDF.DrawCircle	2682
• 70.290 DynaPDF.New	2981
• 70.359 DynaPDF.SetDrawDirection	3115

70.80.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.81 DynaPDF.DrawChord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DrawChord"; PDF; PosX; PosY; Width; Height; StartAngle; EndAngle; FillMode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of the midpoint of the chord

\$x

PosY

Y-Coordinate of the midpoint of the chord

\$y

Width

Width of the bounding rectangle

\$w

Height

Height of the bounding rectangle

\$h

StartAngle

Start Angle.

\$StartAngle

EndAngle

End Angle.

\$EndAngle

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error.

Description

The draw direction can be changed with the function DynaPDF.SetDrawDirection. The start and end angles are always measured counter clockwise independent of the drawing direction.

A chord is a closed path that can be filled, stroked or both. It is also possible to draw a chord invisible to apply the filling rules nonzero winding number or even-odd. The filling rules are described under DynaPDF.ClipPath. The parameter FillMode is ignored if the chord is drawn inside a clipping path. The fill modes are described under DynaPDF.ClosePath.

70.81. *DYNAPDF.DRAWCHORD* 2681

See also [DrawChord](#) function in DynaPDF manual.

See also

- 70.41 DynaPDF.ClipPath 2612
- 70.43 DynaPDF.ClosePath 2615
- 70.79 DynaPDF.DrawArc 2676
- 70.80 DynaPDF.DrawArcEx 2678
- 70.82 DynaPDF.DrawCircle 2682
- 70.290 DynaPDF.New 2981
- 70.359 DynaPDF.SetDrawDirection 3115
- 70.445 DynaPDF.SkewCoords 3251

70.81.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.82 DynaPDF.DrawCircle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DrawCircle"; PDF; PosX; PosY; Radius; FillMode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of the midpoint of the pie.

\$x

PosY

Y-Coordinate of the midpoint of the pie.

\$y

Radius

The radius to use.

\$radius

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error.

Description

The draw direction can be changed with the function DynaPDF.SetDrawDirection.

A circle is a closed path that can be filled, stroked or both. It is also possible to draw a circle invisible to apply the filling rules nonzero winding number or even-odd. The filling rules are described under DynaPDF.ClipPath. The parameter FillMode is ignored if the circle is drawn inside a clipping path. The fill modes are described under DynaPDF.ClosePath.

See also [DrawCircle](#) function in DynaPDF manual.

Examples

Clip image to circle:

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
End If
# Clear current PDF document
Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
# Add image on page
Set Variable [ $destPage ; Value: 1 ]
```

```

Set Variable [ $r ; Value: MBS("DynaPDF.AppendPage"; $pdf) ]
# no recompression if possible! But if needed, we use JPEG 90%
Set Variable [ $r ; Value: MBS("DynaPDF.SetSaveNewImageFormat"; $pdf; 0) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetJPEGQuality"; $pdf; 90) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetCompressionFilter"; $pdf; "jpeg") ]
# Save old state to restore later
Set Variable [ $r ; Value: MBS( "DynaPDF.SaveGraphicState"; $pdf ) ]
# Draw circle for clipping
Set Variable [ $r ; Value: MBS( "DynaPDF.DrawCircle"; $pdf; 260; 220; 100; "nofill" ) ]
Set Variable [ $r ; Value: MBS( "DynaPDF.ClipPath"; $pdf; "Winding"; "fill" ) ]
# Draw clipped image
Set Variable [ $r ; Value: MBS("DynaPDF.InsertImage"; $pdf; Merge PDFs::InputImage; 100; 100; 320; 200) ]
# restore graphics static to get unclipped drawing
Set Variable [ $r ; Value: MBS( "DynaPDF.RestoreGraphicState"; $pdf ) ]
# Close page and store PDF in container
Set Variable [ $r ; Value: MBS("DynaPDF.EndPage"; $pdf) ]
Set Field [ Merge PDFs::FinalPDF ; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]

```

See also

- 70.80 DynaPDF.DrawArcEx 2678
- 70.83 DynaPDF.DrawPie 2684
- 70.276 DynaPDF.InsertImage 2952
- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 70.319 DynaPDF.RestoreGraphicState 3050
- 70.324 DynaPDF.Save 3062
- 70.328 DynaPDF.SaveGraphicState 3071
- 70.359 DynaPDF.SetDrawDirection 3115
- 70.421 DynaPDF.SetSaveNewImageFormat 3219

Example Databases

- [DynaPDF/Picture to PDF with navigation](#)

70.82.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 17th January 2019.

70.83 DynaPDF.DrawPie

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.DrawPie"; PDF; PosX; PosY; Width; Height; StartAngle; EndAngle; FillMode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of the midpoint of the pie.

\$x

PosY

Y-Coordinate of the midpoint of the pie.

\$y

Width

Width of the bounding rectangle.

\$w

Height

Height of the bounding rectangle.

\$h

StartAngle

Start Angle.

\$StartAngle

EndAngle

End Angle.

\$EndAngle

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error.

Description

The draw direction can be changed with the function DynaPDF.SetDrawDirection. The start and end angles are always measured counter clockwise independent of the drawing direction.

A pie is a closed path that can be filled, stroked or both. It is also possible to draw a pie invisible to apply the filling rules nonzero winding number or even-odd. The filling rules are described under DynaPDF.ClipPath. The parameter FillMode is ignored if the pie is drawn inside a clipping path. The fill modes are described under DynaPDF.ClosePath.

70.83. *DYNAPDF.DRAWPIE* 2685

See also [DrawPie](#) function in DynaPDF manual.

See also

- 70.41 DynaPDF.ClipPath 2612
- 70.43 DynaPDF.ClosePath 2615
- 70.79 DynaPDF.DrawArc 2676
- 70.82 DynaPDF.DrawCircle 2682
- 70.290 DynaPDF.New 2981
- 70.359 DynaPDF.SetDrawDirection 3115

70.83.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.84 DynaPDF.EditPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.EditPage"; PDF; Page)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Page

The number of the page to edit. Range from 1 to DynaPDF.GetPageCount.

1

Result Returns OK on success.

Description

If the page does exist (PageNum is greater than the number of pages in the document), new pages are appended until the number of pages is equal PageNum. An open page must be closed with EndPage() after the required changes are made.

See also [EditPage](#) function in DynaPDF manual.

Examples

Edit page 1:

```
Set Variable [ $r; Value:MBS("DynaPDF.EditPage"; $pdf; 1) ]
```

Loop over pages and add page numbers:

```
Set Variable [ $PageCount; Value:MBS( "DynaPDF.GetPageCount"; $pdf ) ]
```

```
Set Variable [ $PageNumber; Value:1 ]
```

```
Set Variable [ $pageWidth; Value:MBS("DynaPDF.GetPageWidth"; $pdf) ]
```

```
Set Variable [ $pageHeight; Value:MBS("DynaPDF.GetPageHeight"; $pdf) ]
```

Loop

```
Set Variable [ $r; Value:MBS("DynaPDF.EditPage"; $pdf; $PageNumber) ]
```

```
Set Variable [ $r; Value:MBS( "DynaPDF.SetFont"; $pdf; "Helvetica"; 0; 12) ]
```

```
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $pdf; 50; $pageHeight - 50; $pageWidth-100; 30; "right"; GetAsText($PageNumber) & " of " & $PageCount) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
```

```
Set Variable [ $PageNumber; Value:$PageNumber +1 ]
```

```
Exit Loop If [ $PageNumber >$PageCount ]
```

End Loop

See also

- 70.90 DynaPDF.EndPage

70.84. <i>DYNAPDF.EDITPAGE</i>	2687
• 70.276 DynaPDF.InsertImage	2952
• 70.288 DynaPDF.MovePage	2978
• 70.296 DynaPDF.PageLink	3001
• 70.297 DynaPDF.PageLinkEx	3004
• 70.386 DynaPDF.SetFont	3154
• 70.408 DynaPDF.SetOrientationEx	3192
• 70.446 DynaPDF.SquareAnnot	3253
• 70.501 DynaPDF.WebLink	3345
• 70.503 DynaPDF.WriteFText	3350

Example Databases

- [Barcode/QRCode PDF](#)
- [DynaPDF/Add Page Numbers](#)
- [DynaPDF/DynaPDF Highlight Text](#)
- [DynaPDF/DynaPDF Replace Text](#)
- [DynaPDF/Form/Form](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/List Annotations](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/PDF Library](#)
- [DynaPDF/Personalized PDFs](#)

70.84.1 Blog Entries

- [Merge PDF with table of contents](#)

70.84.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 37
- Ausgabe 2/2019, Seite 27

Created 18th August 2014, last changed 18th June 2016.

70.85 DynaPDF.EditTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.EditTemplate"; PDF; TemplateIndex)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

TemplateIndex

Index of template. From 0 to DynaPDF.GetTemplateCount-1.

0

Result Returns OK or error.

Description

The parameter Index is the array index inside the page that contains the template. To get the number of templates used by a page call the function DynaPDF.GetTemplCount. The current graphics state is saved entirely before the template will be opened. This graphics state is restored when the template is closed with DynaPDF.EndTemplate. That means, the current font, line width, fill color and so on are all restored to its values before entering the template. DynaPDF.EndTemplate requires an open page that must be opened with DynaPDF.EditPage beforehand. After the changes are made the template must be closed with DynaPDF.EndTemplate.

DynaPDF.EditTemplate is mostly used to extract text strings from imported PDF files because imported pages are converted to templates by default. See DynaPDF.GetPagetext() for an example application.

See also [EditTemplate](#) function in DynaPDF manual.

See also

- 70.76 DynaPDF.DeleteTemplate 2673
- 70.77 DynaPDF.DeleteTemplateEx 2674
- 70.84 DynaPDF.EditPage 2686
- 70.86 DynaPDF.EditTemplate2 2690
- 70.92 DynaPDF.EndTemplate 2700
- 70.137 DynaPDF.GetContent 2767
- 70.237 DynaPDF.GetTemplCount 2892
- 70.290 DynaPDF.New 2981
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.321 DynaPDF.RotateTemplate 3055

70.85.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr9](#)

Created 16th May 2015, last changed 17th May 2015.

70.86 DynaPDF.EditTemplate2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.EditTemplate2"; PDF; TemplateHandle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

TemplateHandle

The template handle number.

\$template

Result Returns OK or error.

Description

Templates can be edited multiple times in the same way as normal PDF pages. Therefore, the function prepares the template for editing. The current graphics state is saved entirely before the template will be opened and restored when the template will be closed with DynaPDF.EndTemplate. The current font, line width, fill color and so on are all restored to its values before entering the template.

The function depends not on an open page.

See also [EditTemplate2](#) function in DynaPDF manual.

See also

- 70.23 DynaPDF.BeginTemplate 2588
- 70.76 DynaPDF.DeleteTemplate 2673
- 70.85 DynaPDF.EditTemplate 2688
- 70.92 DynaPDF.EndTemplate 2700
- 70.290 DynaPDF.New 2981
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.321 DynaPDF.RotateTemplate 3055

70.86.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr9](#)

Created 16th May 2015, last changed 16th May 2015.

70.87 DynaPDF.Ellipse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Ellipse"; PDF; PosX; PosY; Width; Height; FillMode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of the bounding rectangle

\$x

PosY

Y-Coordinate of the bounding rectangle.

\$y

Width

Width of the bounding rectangle.

200

Height

Height of the bounding rectangle.

150

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error.

Description

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the bounding rectangle. If the coordinate system is top-down it defines the upper left corner.

The draw direction can be changed with the function DynaPDF.SetDrawDirection.

An ellipse is a closed path that can be filled, stroked or both. It is also possible to draw an ellipse invisible to apply the filling rules nonzero winding number or even-odd. The filling rules are described under DynaPDF.ClipPath. The parameter FillMode is ignored if the ellipse is drawn inside a clipping path. The fill modes are described under DynaPDF.ClosePath.

See also [Ellipse](#) function in DynaPDF manual.

See also

- 70.24 DynaPDF.Bezier123 2589
- 70.41 DynaPDF.ClipPath 2612

- 70.43 DynaPDF.ClosePath 2615
- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 70.359 DynaPDF.SetDrawDirection 3115

Created 6th February 2015, last changed 6th February 2015.

70.88 DynaPDF.EnableEncryption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.EnableEncryption"; PDF; OpenPwd; OwnerPwd; Encryption { ; RestrictFlags })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

OpenPwd

Open password.

""

OwnerPwd

Owner password.

"Hello"

Encryption

Which encryption to use. Can be 40bit, 128bit, 128bitEx, AES128, AES256 or AESRev6.

"AES256"

RestrictFlags

Optional

What restrictions to apply. See above.

4+8

Result Returns OK on success.

Description

Available Encryption methods:

ID	Encryption	PDF Version	Acrobat Version
0	RC4 40bit	PDF 1.2	Acrobat 3 or higher
1	RC4 128bit	PDF 1.4	Acrobat 5 or higher
2	RC4 128bit improved	PDF 1.5	Acrobat 6 or higher
3	AES 128bit	PDF 1.6	Acrobat 7 or higher
4	AES 256bit	PDF 1.7	Acrobat 9 or higher

Available restrictions:

FillInFormFields and later are for 128/256 bit encryption only, so ignored if 40 bit encryption is used.

Please combine those like this: Print and Modify = 4 + 8 = 12.

Please see DynaPDF manual on CloseFileEx function for details on which combination of restrictions are possible.

DenyNothing	0	Encrypt the file only
DenyAll	3900	Deny anything
Print	4	Deny printing
Modify	8	Deny modification of contents
CopyObj	16	Deny copying of contents
AddObj	32	No commenting
FillInFormFields	256	requires Modify + AddObj
ExtractObj	512	requires Modify
Assemble	1024	requires Modify
PrintHighRes	2048	Disable high res. printing
ExlMetadata	4096	PDF 1.5 Exclude metadata streams
EmbFilesOnly	8192	PDF 1.6 AES Encryption only

For passwords, please use only ASCII characters to avoid trouble with text encodings.

Requires DynaPDF Pro license.

Examples

Don't allow adding content:

```
MBS( "DynaPDF.EnableEncryption"; $PDF; ""; "secret"; 1; 16 + 32 + 256 + 1024 )
```

Create AES 256-bit encrypted PDF:

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ Specified: From list ; "InitDynaPDF" ; Parameter: ]
End If
# Clear current PDF document
Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
# Add page
Set Variable [ $r ; Value: MBS("DynaPDF.AppendPage"; $pdf) ]
# Write some text
Set Variable [ $r ; Value: MBS("DynaPDF.SetFont"; $pdf; "Helvetica"; 0; 12) ]
Set Variable [ $x ; Value: MBS("DynaPDF.GetPageHeight"; $pdf)-100 ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetFillColor"; $pdf; 0; 0; 0) ]
Set Variable [ $r ; Value: MBS("DynaPDF.WriteText"; $pdf; 100; $x; "Some black text") ]
# End page
Set Variable [ $r ; Value: MBS("DynaPDF.EndPage"; $pdf) ]
# Add encryption with AES
Set Variable [ $r ; Value: MBS( "DynaPDF.EnableEncryption"; $PDF; "xxx"; "yyy"; "AES256"; 8+16+32+256+512+1024+2048+4096+8192
) ]
# Save PDF to put in container later
Set Variable [ $PDFData ; Value: MBS("DynaPDF.Save"; $pdf; "hello.pdf") ]
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]
# Put in Container
```

70.88. *DYNAPDF.ENABLEENCRYPTION* 2695
Set Field [Create Text::PDF ; \$PDFData]

See also

- 70.15 DynaPDF.AppendPage 2575
- 70.90 DynaPDF.EndPage 2697
- 70.224 DynaPDF.GetPageHeight 2876
- 70.282 DynaPDF.IsInitialized 2966
- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.384 DynaPDF.SetFillColor 3150
- 70.386 DynaPDF.SetFont 3154
- 70.509 DynaPDF.WriteText 3364

70.88.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr2](#)

Created 18th August 2014, last changed 15th July 2019.

70.89 DynaPDF.EndLayer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.EndLayer"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See also [EndLayer](#) function in DynaPDF manual.

See also

- 70.21 DynaPDF.BeginLayer 2586
- 70.90 DynaPDF.EndPage 2697
- 70.91 DynaPDF.EndPattern 2699
- 70.287 DynaPDF.LockLayer 2977
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.90 DynaPDF.EndPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.EndPage"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK on success.

Description

See also [EndPage](#) function in DynaPDF manual.

Examples

Close current page:

Set Variable [\$r; Value:MBS("DynaPDF.EndPage"; \$pdf)]

See also

- [70.84 DynaPDF.EditPage](#) 2686
- [70.91 DynaPDF.EndPattern](#) 2699
- [70.288 DynaPDF.MovePage](#) 2978
- [70.290 DynaPDF.New](#) 2981
- [70.308 DynaPDF.ReadImageFormat](#) 3028
- [70.315 DynaPDF.RenderPage](#) 3040
- [70.321 DynaPDF.RotateTemplate](#) 3055
- [70.456 DynaPDF.Table.Create](#) 3270
- [70.460 DynaPDF.Table.Draw](#) 3276
- [70.501 DynaPDF.WebLink](#) 3345

Example Databases

- [DynaPDF/Apply Letter Paper to PDF](#)
- [DynaPDF/Convert to 2 Pages](#)
- [DynaPDF/Create DeviceN ColorSpace](#)

- [DynaPDF/Create PDF with sum form field](#)
- [DynaPDF/List Annotations](#)
- [DynaPDF/Personalized PDFs](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Styled Text](#)
- [DynaPDF/WriteFText](#)

70.90.1 Blog Entries

- [Merge PDF with table of contents](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

70.90.2 FileMaker Magazin

- [Ausgabe 3/2019, Seite 38](#)
- [Ausgabe 2/2019, Seite 27](#)
- [Ausgabe 5/2018, Seite 28](#)

Created 18th August 2014, last changed 18th October 2016.

70.91 DynaPDF.EndPattern

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.EndPattern"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

You can open patterns with DynaPDF.BeginPattern or DynaPDF.CreateStdPattern.
See also [EndPattern](#) function in DynaPDF manual.

See also

- 70.22 DynaPDF.BeginPattern 2587
- 70.89 DynaPDF.EndLayer 2696
- 70.90 DynaPDF.EndPage 2697
- 70.108 DynaPDF.FindPattern 2726
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.92 DynaPDF.EndTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.EndTemplate")

Result Returns OK or error.

Description

You can open one with DynaPDF.BeginTemplate, DynaPDF.EditTemplate or DynaPDF.EditTemplate2. See also [EndTemplate](#) function in DynaPDF manual.

See also

- 70.23 DynaPDF.BeginTemplate 2588
- 70.85 DynaPDF.EditTemplate 2688
- 70.86 DynaPDF.EditTemplate2 2690
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.500 DynaPDF.WatermarkAnnot 3343

Created 7th January 2017, last changed 7th January 2017.

70.93 DynaPDF.ExchangeBookmarks

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ExchangeBookmarks"; PDF; Bmk1; Bmk2)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Bmk1

Handle of first bookmark.

3

Bmk2

Handle of second bookmark.

5

Result Returns OK or error

Description

See also [ExchangeBookmarks](#) function in DynaPDF manual.

See also

- 70.30 DynaPDF.ChangeBookmark 2597
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 18th August 2014.

70.94 DynaPDF.ExchangePages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ExchangePages"; PDF; First; Second)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

First

First page number.

3

Second

Second page number.

5

Result Returns OK or error.

Description

Page links, bookmarks, go-to actions, and named destinations are changed so that the destination page still refers to the correct page. Note that page numbering starts at 1. It is also possible to move a page to another position in the file (see DynaPDF.MovePage for further information).

See also [ExchangePages](#) function in DynaPDF manual.

See also

- 70.96 DynaPDF.ExtractImages 2705
- 70.288 DynaPDF.MovePage 2978
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 18th August 2014.

70.95 DynaPDF.ExtractDocumentText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ExtractDocumentText"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns text or error.

Description

This is like extracting page by page, but plugin may do it faster than a loop in a FileMaker script and puts a newline between pages.

Use DynaPDF.ExtractPageText if you need text from just one page.

For Mac only solutions, you can also try PDFKit.GetPDFText.

Needs DynaPDF Lite license.

Examples

Load PDF and extract text:

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer";$pdf; Test::data) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile";$pdf) ]
Set Field [ Test::PageText; MBS("DynaPDF.ExtractDocumentText"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

Full script to get text with error checking:

```
If [ MBS("DynaPDF.IsInitialized") = 1 ]
Perform Script [ "InitDynaPDF" ]
End If
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "DynaPDF Fehler"; $pdf ]
Else
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer";$pdf; Test::data) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "DynaPDF Fehler"; $r ]
Else
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile";$pdf) ]
If [ MBS("IsError") ]
```

```
Show Custom Dialog [ "DynaPDF Fehler"; $r ]
Else
Set Field [ Test::PageText; MBS("DynaPDF.ExtractTextOld"; $pdf) ]
Commit Records/Requests [ No dialog ]
End If
End If
# Cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
End If
```

See also

- 70.97 DynaPDF.ExtractPageRectText 2707
- 70.98 DynaPDF.ExtractPageText 2709
- 70.99 DynaPDF.ExtractText 2711
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.282 DynaPDF.IsInitialized 2966
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.311 DynaPDF.Release 3033
- 124.6 IsError 6266
- 122.23 PDFKit.GetPDFText 6191

Example Databases

- [DynaPDF/PDF Library](#)

70.95.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 8th December 2015, last changed 21st January 2019.

70.96 DynaPDF.ExtractImages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ExtractImages"; PDF; Path { ; Flags; Page })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Path

The native Path to the folder ending with slash/backslash.

"C:\Images\"

Flags

Optional

Optional, various flags for image extraction.

0

Page

Optional

The page number to look at. If missing or empty, we process all pages.

123

Result Returns number of imported files or error.

Description

Please import first a PDF file (or selected pages)

For the flags, please check the pf flags in dynapdf manual.

e.g. pass 34 (pfConvImagesToRGB + pfDecomprAllImages) convert all images to RGB.

Filenames are 4 digit number counting up the images with jpg, jp2 or tif extensions.

This function uses the parser interface in DynaPDF and needs a Pro license.

See also

- 70.94 DynaPDF.ExchangePages 2702
- 70.98 DynaPDF.ExtractPageText 2709
- 70.176 DynaPDF.GetImageCount 2815
- 70.273 DynaPDF.Initialize 2941
- 70.286 DynaPDF.ListImages 2974
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/Extract Images](#)

70.96.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr7](#)

Created 18th August 2014, last changed 19th March 2019.

70.97 DynaPDF.ExtractPageRectText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ExtractPageRectText"; PDF; pageIndex; RectLeft; RectTop; RectRight; RectBottom)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

pageIndex

The number of the page. Must be within 1 and DynaPDF.GetPageCount.

1

RectLeft

Left coordinate of the rectangle to search.

0

RectTop

Top coordinate of the rectangle to search.

0

RectRight

Right coordinate of the rectangle to search.

595

RectBottom

Bottom coordinate of the rectangle to search.

842

Result Returns the text or error message.

Description

Use DynaPDF.ExtractPageText if you need text from whole page.

Text that starts within the given rectangle is captured.

Be aware that PDF coordinates start on bottom left of page with 0/0.

Needs DynaPDF Lite license.

Examples

Takes text only from top rectangle:

```
MBS("DynaPDF.ExtractPageRectText"; $pdf; $PageIndex; 0; 695; 595; 842)
```

Takes text only from left column:

```
MBS("DynaPDF.ExtractPageRectText"; $pdf; $PageIndex; 0; 0; 295; 842)
```

Takes text only from right column:

```
MBS("DynaPDF.ExtractPageRectText"; $pdf; $PageIndex; 295; 0; 595; 842)
```

See also

- 70.95 DynaPDF.ExtractDocumentText 2703
- 70.98 DynaPDF.ExtractPageText 2709
- 70.222 DynaPDF.GetPageCount 2873
- 70.290 DynaPDF.New 2981
- 120.14 OCR.SetImage 6125

70.97.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin, version 6.2pr7](#)

Created 30th April 2016, last changed 20th January 2018.

70.98 DynaPDF.ExtractPageText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ExtractPageText"; PDF; pageIndex)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

pageIndex

The number of the page. Must be within 1 and DynaPDF.GetPageCount.

1

Result Returns the text or error message.

Description

Use DynaPDF.ExtractDocumentText is you need text from whole document.

For Mac only solutions, you can also try PDFKit.GetPDFPageText instead.
Needs DynaPDF Lite license.

Examples

Queries page text of page 5:

```
$text = MBS( "DynaPDF.ExtractPageText"; $PDF; 5 )
```

Load PDF and extract text of page 2:

```
# initialize DynaPDF before running this:
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# load PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer";$pdf; Test::data) ]
# import all pages
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile";$pdf) ]
# extra text of page 2
Set Field [ Test::PageText; MBS("DynaPDF.ExtractPageText"; $pdf; 2) ]
# Cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 70.95 DynaPDF.ExtractDocumentText 2703
- 70.96 DynaPDF.ExtractImages 2705

- 70.97 DynaPDF.ExtractPageRectText 2707
- 70.99 DynaPDF.ExtractText 2711
- 70.222 DynaPDF.GetPageCount 2873
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 120.14 OCR.SetImage 6125
- 122.19 PDFKit.GetPDFPageText 6184

Example Databases

- [DynaPDF/DynaPDF Test](#)

70.98.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.98.2 FileMaker Magazin

- [Ausgabe 1/2016, Seite 32](#)

Created 18th August 2014, last changed 8th November 2019.

70.99 DynaPDF.ExtractText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ExtractText"; PDF; PageNum { ; Flags; AreaLeft; AreaTop; AreaRight; AreaBottom })

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

PageNum

The page number.
1

Flags

Optional
The flags for text extraction. Can include SortTextX, SortTextY, SortTextXY and/or DeleteOverlappingText.
"SortTextXY"

AreaLeft

Optional
The left coordiante of the area.

AreaTop

Optional
The top coordiante of the area.

AreaRight

Optional
The right coordiante of the area.

AreaBottom

Optional
The bottom coordiante of the area.

Result Returns text or error.

Description

The first page is denoted by 1.

Text lines can be sorted in x- and y-direction. The flag DeleteOverlappingText causes that identical text records which are placed on the same position (with a tolerance of 2 units) will be deleted. The records must occur one after the other in order to detect them.

The optional parameter Area can be set to restrict the text extraction to that rectangle. The rectangle must be defined according to the current coordinate system. That means either in bottom up or top down coor-

ordinates, see `SetPageCoords()` for further information. Note also that the function considers the orientation of the page. The width and height of the rectangle must be exchanged if the orientation is 90, -90, 270, or -270 degrees.

If the function succeeds the return value is the text. If the function fails the return value is an error.

Special thing: If this function is called with two parameters, it redirects to old function `DynaPDF.ExtractDocumentText` to keep compatibility with existing scripts. If area parameters are not given or all zero, the area is not used.

Needs DynaPDF Lite license.

See also [ExtractText](#) function in DynaPDF manual.

Examples

Extract some text:

```
Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
Set Variable [ $r ; Value: MBS("DynaPDF.OpenPDFFromContainer";$pdf; Test::data) ]
Set Variable [ $r ; Value: MBS("DynaPDF.ImportPDFFile";$pdf) ]
Set Field [ Test::PageText ; MBS("DynaPDF.ExtractText"; $pdf; 1; 0) ]
# Cleanup
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]
```

Extract text in area:

```
Set Field [ Test::PageText ; MBS("DynaPDF.ExtractText"; $pdf; 1; "Default"; 200; 200; 400; 400) ]
```

See also

- 70.95 `DynaPDF.ExtractDocumentText` 2703
- 70.98 `DynaPDF.ExtractPageText` 2709
- 70.268 `DynaPDF.ImportPDFFile` 2928
- 70.290 `DynaPDF.New` 2981
- 70.293 `DynaPDF.OpenPDFFromContainer` 2988
- 70.311 `DynaPDF.Release` 3033
- 120.14 `OCR.SetImage` 6125
- 122.23 `PDFKit.GetPDFText` 6191

Example Databases

- [DynaPDF/Extract Text](#)
- [DynaPDF/PDF Library](#)

70.99.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)
- [MBS FileMaker Plugin 8.0 - More than 5000 Functions In One Plugin](#)
- [MBS FileMaker Plug-in 8.0 - Über 5000 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin, version 7.6pr5](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.5pr1](#)

70.99.2 FileMaker Magazin

- [Ausgabe 1/2016, Seite 32](#)

Created 21st December 2017, last changed 20th January 2018.

70.100 DynaPDF.FileAttachAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FileAttachAnnot"; PDF; PosX; PosY; Icon; Author; Description; FilePath; Compress)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate for the annotation icon

100

PosY

Y-Coordinate for the annotation icon

100

Icon

Which icon to use. Can be Graph, PaperClip, PushPin or Tag.

"Graph"

Author

Name of author. Can be empty.

"Christian Schmitz"

Description

Description text. Can be empty.

"Original File"

FilePath

The native file path to the file to embed.

"/Users/cs/Desktop/test.mp3"

Compress

If 1, the embedded file is compressed. Pass 0 for no compression.

0

Result Returns annotation handle or error.

Description

If the coordinate system is bottom-up the point PosX, PosY defines the lower left point of the annotation icon. If the coordinate system is top-down it defines the upper left point. The width and height of the icon is not changeable.

The embedded file is compressed if the parameter Compress is set to 1. Otherwise it is left uncompressed. It is not always useful to compress embedded files especially if the file is already compressed, e.g. Zip files or already compressed image formats require no further compression. In the worst case the compressed files becomes larger. However, text files and most document formats should be compressed to reduce the file size.

File attachment annotations are supported since PDF 1.3 (Acrobat 4). File attachments are supported since PDF 1.4 (Acrobat 5). The difference between both attachment types is that a file attachment annotation is used as a comment that has usually a visible icon on a page, e.g. to provide additional information about a specific object.

File attachments are used to add arbitrary files to the PDF file, e.g. job options, the original document from which the file was created, or any other file (see also `DynaPDF.AttachFile`).

Note that Acrobat 7 or higher restricts access to executable files and compressed file formats such as zip, or rar. If such files must be embedded then change the file extension, e.g. to `.dat` or `.bin`. The user must then change the extension again when extracting the file.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also `FileAttachAnnot` function in DynaPDF manual.

See also

- 70.17 `DynaPDF.AttachFile` 2579
- 70.101 `DynaPDF.FileAttachAnnotEx` 2716
- 70.290 `DynaPDF.New` 2981
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 28th November 2014, last changed 30th November 2014.

70.101 DynaPDF.FileAttachAnnotEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FileAttachAnnotEx"; PDF; PosX; PosY; Icon; Author; Description; FileName; Compress; Container)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate for the annotation icon

100

PosY

Y-Coordinate for the annotation icon

100

Icon

Which icon to use. Can be Graph, PaperClip, PushPin or Tag.

"Graph"

Author

Name of author. Can be empty.

"Christian Schmitz"

Description

Description text. Can be empty.

"Original File"

FileName

The file name to use.

"test.mp3"

Compress

If 1, the embedded file is compressed. Pass 0 for no compression.

0

Container

The container with the file content.

Test::MyFile

Result Returns annotation handle or error.

Description

Same as DynaPDF.FileAttachAnnot, but with data from container instead of file path.

See also [FileAttachAnnotEx](#) function in DynaPDF manual.

See also

<i>70.101. DYNAPDF.FILEATTACHANNOTEX</i>	2717
• 70.100 DynaPDF.FileAttachAnnot	2714
• 70.290 DynaPDF.New	2981

70.101.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr5](#)

Created 21st December 2017, last changed 21st December 2017.

70.102 DynaPDF.FileLink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FileLink"; PDF; PosX; PosY; Width; Height; FilePath)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of bounding rectangle

100

PosY

Y-Coordinate of bounding rectangle

100

Width

Width of bounding rectangle

100

Height

Height of bounding rectangle

20

FilePath

The file path to use.

"C:\test.pdf"

Result Returns number or error.

Description

A file link annotation opens a file by using the application that is connected with the file extension (MIME type). Viewer applications may display a warning before the file is opened.

The file path can be defined as relative or absolute path. However, the usage of an absolute makes only sense if it can be guaranteed that the path exist on an arbitrary system.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the bounding rectangle. If the coordinate system is top-down it defines the upper left corner.

The border of the link annotation is drawn by using the current line width, stroke color and line dash pattern. If the link should appear without a border set the line width to zero beforehand (with DynaPDF.SetLineWidth).

When clicking on a link annotation the rectangle is highlighted, that is a simple visual effect. Several highlight modes are supported, see `DynaPDF.SetLinkHighlightMode` for further information. The function does not check whether the path is valid.

If the function succeeds the return value is an annotation handle, a value greater or equal zero. If the function fails it returns an error.

Use `DynaPDF.WebLink` for web links, `DynaPDF.FileLink` for file links, `DynaPDF.PageLink` or `DynaPDF.PageLinkEx` for page links and `DynaPDF.FindText` can help to find the location where to place the link.

See also [FileLink](#) function in DynaPDF manual.

See also

- 70.109 `DynaPDF.FindText` 2727
- 70.290 `DynaPDF.New` 2981
- 70.296 `DynaPDF.PageLink` 3001
- 70.297 `DynaPDF.PageLinkEx` 3004
- 70.399 `DynaPDF.SetLineWidth` 3178
- 70.400 `DynaPDF.SetLinkHighlightMode` 3180
- 70.501 `DynaPDF.WebLink` 3345

70.102.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr5](#)

Created 29th April 2017, last changed 9th December 2019.

70.103 DynaPDF.FindBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FindBookmark"; PDF; DestPage; Title)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DestPage

Destination page used by the bookmark or -1.

-1

Title

The title of the bookmark or a part of it.

"Chapter 1"

Result Returns bookmark handle or error.

Description

If the parameter DestPage is greater zero the function returns the handle of the first bookmark that uses this page number as destination page.

If DestPage is smaller 1 the function returns the handle of the first bookmark that contains the substring Title in the bookmark title. The substring Title is compared non-case-sensitive.

The parameter Title can be "", the function searches for bookmarks with no title in this case. To search for the next bookmark with the same search parameters call DynaPDF.FindNextBookmark.

It is safe to delete a found bookmark with DynaPDF.DeleteBookmark and continue the search run with DynaPDF.FindNextBookmark.

If a bookmark can be found the return value is the bookmark handle, a value greater or equal zero. If no bookmark can be found the return value is -1. If an error occurred, the return value is an error.

See also [FindBookmark](#) function in DynaPDF manual.

See also

- 70.3 DynaPDF.AddBookmark 2553
- 70.4 DynaPDF.AddBookmarkEx 2555
- 70.30 DynaPDF.ChangeBookmark 2597
- 70.68 DynaPDF.DeleteBookmark 2665
- 70.107 DynaPDF.FindNextBookmark 2725
- 70.124 DynaPDF.GetBookmark 2753
- 70.290 DynaPDF.New 2981

70.104 DynaPDF.FindEmbeddedFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FindEmbeddedFile"; Name)

Parameters

Name

The name of the embedded file.

\$name

Result Returns number or error.

Description

The file can then be extracted with DynaPDF.GetEmbeddedFile.

If the function succeeds the return value is an embedded file handle, a value greater or equal zero. If the file cannot be found the return value is -1.

See also [FindEmbeddedFile](#) function in DynaPDF manual.

See also

- 70.69 DynaPDF.DeleteEmbeddedFile 2666
- 70.143 DynaPDF.GetEmbeddedFile 2774

Created 1st June 2016, last changed 1st June 2016.

70.105 DynaPDF.FindField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FindField"; PDF; Name)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Name

The fully qualified field name.
"FirstName"

Result Returns field handle or error.

Description

The fully qualified field name is constructed from the partial field name of the field and all of its ancestors. For a field with no parent group field, the partial and fully qualified names are the same. For a field that is the child of another field, the fully qualified name is formed by appending the child field's partial name to the parent's fully qualified name, separated by a period, e.g. "Company.Employee.Name".

Field names are case-sensitive; the name must be specified exactly.

See also [FindField](#) function in DynaPDF manual.

See also

- 70.109 DynaPDF.FindText 2727
- 70.148 DynaPDF.GetField 2783
- 70.162 DynaPDF.GetFieldIndex 2799
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 18th August 2014.

70.106 DynaPDF.FindLinkAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FindLinkAnnot"; PDF; URL)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

URL

The URL to find.
"http://www.mbsplugins.de/"

Result Returns annotation handle or error.

Description

The parameter URL must be the URL of a web link annotation or the file path of a file link annotation, exactly defined in a case sensitive manner.

See also [FindLinkAnnot](#) function in DynaPDF manual.

See also

- 70.35 DynaPDF.ChangeLinkAnnot 2603
- 70.119 DynaPDF.GetAnnotLink 2745
- 70.283 DynaPDF.LineAnnot 2969
- 70.290 DynaPDF.New 2981

70.106.1 FileMaker Magazin

- Ausgabe 3/2019, Seite 37

Created 25th November 2014, last changed 25th November 2014.

70.107 DynaPDF.FindNextBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FindNextBookmark"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns bookmark handle.

Description

Searches for the next bookmark with the same search parameters which were used by a previous call of DynaPDF.FindBookmark. DynaPDF.FindBookmark must be called beforehand.

It is safe to delete a found bookmark with DynaPDF.DeleteBookmark and to continue the search run.

If a bookmark can be found the return value is the bookmark handle, a value greater or equal zero. If no bookmark can be found the return value is -1. This function cannot fail; other return values are impossible. See also [FindNextBookmark](#) function in DynaPDF manual.

See also

- 70.30 DynaPDF.ChangeBookmark 2597
- 70.68 DynaPDF.DeleteBookmark 2665
- 70.103 DynaPDF.FindBookmark 2720
- 70.274 DynaPDF.InsertBookmark 2948
- 70.275 DynaPDF.InsertBookmarkEx 2950
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 18th August 2014.

70.108 DynaPDF.FindPattern

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FindPattern"; PDF; Text)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Text

The text to search.
"Hello"

Result Returns number of locations found.

Description

You need to have an open page. you can use DynaPDF.EditPage to edit an existing one.

See also

- 70.22 DynaPDF.BeginPattern 2587
- 70.84 DynaPDF.EditPage 2686
- 70.91 DynaPDF.EndPattern 2699
- 70.290 DynaPDF.New 2981

70.108.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr2](#)

Created 18th August 2014, last changed 18th August 2014.

70.109 DynaPDF.FindText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FindText"; PDF; Text { ; CaseInsensitive })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Text

The text to search.

"Hello"

CaseInsensitive

Optional

Optional, if 1, the case of the letters is ignored (also umlauts).

1

Result Returns list of found positions.

Description

You need to have an open page. you can use DynaPDF.EditPage to edit an existing one.

The list of returned coordinates contains a rectangle for each found position defined by 4 coordinates. The coordinates (x1 y1 x2 y2 x3 y3 x4 y4) define the surrounding rectangle of the text area.

This function uses the parser interface in DynaPDF and needs a Lite license.

Examples

Highlight "Apple" with yellow:

MBS("DynaPDF.FindText"; \$PDF; "Apple"; 1)

Example result: "96.001800 662.040000 168.307802 662.040000 168.307802 676.080000 96.001800 676.080000"

See also

- 70.84 DynaPDF.EditPage 2686
- 70.102 DynaPDF.FileLink 2718
- 70.105 DynaPDF.FindField 2723
- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.296 DynaPDF.PageLink 3001

- 70.501 DynaPDF.WebLink 3345
- 70.509 DynaPDF.WriteText 3364

Example Databases

- [DynaPDF/Form/Form](#)

70.109.1 Blog Entries

- [MBS FileMaker Plugin 4.1 for OS X/Windows - More than 2400 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 4.1pr1](#)

70.109.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 38
- Ausgabe 3/2019, Seite 37

Created 18th August 2014, last changed 19th March 2019.

70.110 DynaPDF.FlattenAnnotOrField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	10.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FlattenAnnotOrField"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

Form fields are annotations of type atWidget. The annotations of a page can be enumerated with DynaPDF.GetPageAnnotation and DynaPDF.GetPageAnnotCount.

The annotation or form field is deleted from the page's annotation array after it was flattened. If the function succeeds the return value is OK. If the function fails the return value is an error message.

See also

- 70.219 DynaPDF.GetPageAnnotation 2869
- 70.218 DynaPDF.GetPageAnnotCount 2868
- 70.290 DynaPDF.New 2981

70.110.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr8](#)

Created 9th January 2020, last changed 9th January 2020.

70.111 DynaPDF.FlattenAnnots

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FlattenAnnots"; PDF; Flags)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Flags

The flags as text or number. Default is None. Can be None, UseViewState, MarkupAnnots or both combined as VisibleMarkupAnnots.

"UseViewState"

Result Returns number or error message.

Description

Draws all annotations according to the used flags on the corresponding pages and deletes the annotations when finish. The flatten flags can be combined. The flag MarkupAnnots causes that non-markup annotations will be left intact (all kind of link, sound, and file attach annotations).

The function flattens only annotations which contain an appearance stream. The function does not create missing appearances on demand.

If the function succeeds the return value is the number of annotations which are still in memory.

By default all annotations which have an appearance stream and which have the print flag set are flattened. All annotations are deleted when the function returns with the exception of file attachment annotations. If you want to flatten the view state then set the flag affUseViewState.

See also [FlattenAnnots](#) function in DynaPDF manual.

See also

- [70.112 DynaPDF.FlattenForm](#) 2732
- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/DynaPDF Highlight Text](#)

Flag Name	Flag Number	Description
None	0	Printable annotations independent of type.
UseViewState	1	If set, annotations which are visible in a viewer become flattened.
MarkupAnnots	2	If set, markup annotations are flattened only. Link, Sound, or FileAttach annotations are no markup annotations. Such types will be left intact.
NonPDFA_1	4	If set, flatten all annotations which are not supported in PDF/A 1.
NonPDFA_2	8	If set, flatten all annotations which are not supported in PDF/A 2 or 3.
FormFields	16	If set, form fields will be flattened too.
UseFieldViewState	32	Meaningful only if affFormFields or affSigFields is set. If set, flatten the view state of form fields. Use the print state otherwise.
SigFields	64	Meaningful only if affFormFields is not set. If set, signed signature fields will be flattened.
KeepLinkAnnots	4096	If set, link annotations will be kept.
KeepFileAttach	8192	If set, file attachment annotations will be kept.
KeepTextAnnots	16384	If set, text annotations will be kept.
KeepEmptySigFields	32768	If set, signature fields which are not already signed will be kept.
PreserveZOrder	4194304	If set, preserve the z-order under any circumstances. That means visible overlapping annotations or form fields will be flattened, regardless the type.

70.111.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr1](#)

Created 18th August 2014, last changed 19th November 2019.

70.112 DynaPDF.FlattenForm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FlattenForm"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error message.

Description

Draws all form fields on the corresponding pages and deletes the form fields, incl. corresponding JavaScripts and JavaScript actions. The resulting PDF pages look after flattening as if the form were printed.

Note that this function does not support XFA forms. If the form is a hybrid form, the PDF form fields will be flattened. A maybe existing XFA form will be deleted but not flattened.

Fields, which are invisible for printing, due to an absent print flag, or if the hidden flag was set, are excluded from flattening. These fields are deleted without drawing them on the page.

This function is especially useful if a large amount of Interactive Forms (which are already filled out by the user) should be prepared for printing, or if the forms should be archived without allowing further changes. Flattened forms require less disk space and can be printed faster.

XFA Forms which are created by Adobe's Designer are not fully supported. Only hybrid forms can be flatted.

Requires DynaPDF Pro license.

See also [FlattenForm](#) function in DynaPDF manual.

Examples

Make all forms flat:

MBS("DynaPDF.FlattenForm"; \$PDF)

See also

- [70.111 DynaPDF.FlattenAnnots](#) 2730
- [70.273 DynaPDF.Initialize](#) 2941
- [70.290 DynaPDF.New](#) 2981

70.112.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr1](#)

70.113 DynaPDF.FlushPages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FlushPages"; PDF; Flags)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Flags

A combination of the flag values. Default is 0.

0

Result Returns OK or error message.

Description

The function can be called every time a new page was created or whenever the pages in memory are no longer required.

Calling the function on a memory based PDF file is not meaningful. The output file must already be open before the function can be called. If no output file was set in DynaPDF.New then open the output file with DynaPDF.OpenOutputFile beforehand.

Flushed pages can no longer be accessed with DynaPDF.EditPage but it is of course possible to add further pages to the file.

By default, the function writes the content streams of all pages and referenced templates, patterns, and images to the output file. The content streams of these objects will be released but the objects remain in memory. So, all handles remain valid and it is still possible to use already flushed objects in subsequent pages. For example, a flushed image or template can still be inserted in other pages with DynaPDF.PlaceImage or DynaPDF.PlaceTemplate because the content streams or image buffers are not required for this action.

The flag ImagesOnly can be used to flush the images in memory only. This can be useful if further objects must be added to the pages in memory or if a large image was inserted.

It is allowed to call the function within an open page. In this case the function does not flush the content stream of the current open page but anything else depending on the used flags.

Calling a function like DynaPDF.DeletePage, DynaPDF.DeleteField or any other function that deletes a flushed object results in a damaged PDF file.

Default	0	Write anything to the file that is possible
ImagesOnly	1	If set, only images are written to the PDF file. All pages are still kept in memory and can be modified with DynaPDF.EditPage. Flushed images can still be referenced in other pages. The image handles remain valid.
ExclLastPage	2	If set, the last page is not flushed

See also [FlushPages](#) function in DynaPDF manual.

Examples

Do a flush:

```
MBS( "DynaPDF.FlushPages" )
```

See also

- [70.40 DynaPDF.Clear](#) 2611
- [70.70 DynaPDF.DeleteField](#) 2667
- [70.73 DynaPDF.DeletePage](#) 2670
- [70.84 DynaPDF.EditPage](#) 2686
- [70.290 DynaPDF.New](#) 2981
- [70.291 DynaPDF.OpenOutputFile](#) 2984
- [70.300 DynaPDF.PlaceTemplate](#) 3013

Example Databases

- [DynaPDF/Merge PDFs to File](#)
- [DynaPDF/Merge PDFs](#)

70.113.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr6](#)

Created 18th August 2014, last changed 18th August 2014.

70.114 DynaPDF.FontInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FontInfo"; PDF; Index; Selector { ; FileName })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

The font index from zero to DynaPDF.GetFontCount.

0

Selector

Which value to return. Can be Ascent, AvgWidth, BaseEncoding, BaseFont, CapHeight, CharSet, CharSet-Size, CIDOrdering, CIDRegistry, CIDSet, CIDSetSize, CIDSupplement, CIDToGIDMap, CMapBuf, CMapBufSize, CMapName, Encoding, FirstChar, FontBBox, Flags, FontBufSize, FontBuffer, FontFamily, FontFilePath, FontFileType, FontName, FontStretch, FontType, FontWeight, FullName, HaveEncoding, HorzWidths, HorzWidthsCount, Imported, ItalicAngle, Lang, LastChar, Leading, Length1, Length2, Length3, MaxWidth, Metadata, MetadataSize, MisWidth, Panose, PostScriptName, SpaceWidth, StemH, StemV, ToUnicode, ToUnicodeSize, VertDefPos, VertWidths, VertWidthsCount, WMode or XHeight.

"FamilyName"

FileName

Optional

Optional file name for values returned as container values. For CMapBuf and FontBuffer.

"test.dat"

Result Returns value or error.

Description

CMapBuf and FontBuffer values are returned as container values.

HorzWidths is returned as a list of floating point numbers separated by newline character.

VertDefPos is returned as two floating point numbers for X and Y separated by space character.

VertWidths is returned as list of three floating pointing numbers. First is width, second X and third value is Y.

FontFamily, FontFilePath, FullName and PostScriptName are returned as unicode texts if possible.

For embedded fonts the FontBufSize field is >0.

Examples

Get Family Name for first font:

MBS("DynaPDF.FontInfo"; \$pdf; 0; "FamilyName")

Create records with family name for each font in PDF file:

```
# Load PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; System Font Info::PDF) ]
# import a page
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]
# List fonts in PDF
Set Variable [ $FontCount; Value:MBS("DynaPDF.GetFontCount"; $pdf) ]
If [ $FontCount >0 ]
Set Variable [ $index; Value:0 ]
Loop
# Get values
New Record/Request
Set Field [ System Font Info::FontFamily; MBS("DynaPDF.FontInfo"; $pdf; $Index; "FontFamily") ]
Commit Records/Requests [ Skip data entry validation; No dialog ]
# Next
Set Variable [ $Index; Value:1 + $Index ]
Exit Loop If [ $Index >= $FontCount ]
End Loop
End If
```

See also

- 70.170 DynaPDF.GetFontCount 2807
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.449 DynaPDF.SysFontInfo 3259

Example Databases

- [DynaPDF/PDF Font Info](#)

70.114.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr2](#)

Created 21st March 2015, last changed 20th December 2019.

70.115 DynaPDF.FreeTextAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.FreeTextAnnot"; PDF; PosX; PosY; Width; Height; Author; Text; Textalign)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

x-coordinate

100

PosY

y-coordinate

100

Width

Stamp width

100

Height

Stamp height

100

Author

The author name. Can be empty.

"Christian Schmitz"

Text

The visible text of the annotation.

"Hello World"

Textalign

The text alignment. Can be Left, Center, Right or Justify.

"Justify"

Result Returns annotation handle or error.

Description

The text of a Free Text annotation appears directly on screen such as normal text of a page. However, Free Text annotations are used to add comments. Comments can be excluded from printing if necessary (see DynaPDF.SetAnnotFlags for further information) and the contents of a Free Text annotation can be edited in Adobe's Acrobat.

The text of the annotation is printed into the bounding box by applying a formatting algorithm so that the text appears left aligned, right aligned, centered, or justified. Justified text is not directly supported by Adobe's Acrobat. However, the annotation appears correctly on screen but the alignment is set to left

aligned text if the text will be changed in Acrobat.

The border of the annotation is drawn by using the current line width, stroke color and line dash pattern. If the annotation should appear without a border set the line width to zero beforehand.

The border appears completely inside the bounding box of the annotation. This must be considered because normal vector graphics such as rectangles, ellipses and so on are measured without the line width. For instance, the real width of a rectangle is the width plus the line width.

A Free Text annotation requires a font. If no font is set beforehand Helvetica is used. The largest font size that can be used in Free Text annotations is 12 units. If the active font uses a larger font size then it will be changed to 12 units.

Text positioning issues:

Acrobat 7 or higher use a very unusual way to place text into a Free Text annotation. While the baseline of text is very well defined in practically all typo graphics systems, Acrobat uses a dynamic position depending on the height of the largest character in the first line. The baseline is placed at the annotation's height - border width - cap height as long as the first line contains no character with an accent (e.g. Ä, Ö, Ü, Å, È, Ê, Ñ). Because the cap height is not large enough for accented characters Acrobat adjusts the position of the first line if necessary. So, the text position depends on the contents of the first text line.

DynaPDF places the text at the annotation's height - border width - font size. This makes it possible to change the text of a Free Text annotation without changing its position. However, if the annotation will be edited with Adobe's Acrobat the text position will slightly change. If the text position is important then it is mostly better to use text fields instead (see `DynaPDF.CreateTextField`).

See also [FreeTextAnnot](#) function in DynaPDF manual.

See also

- 70.63 `DynaPDF.CreateTextField` 2659
- 70.290 `DynaPDF.New` 2981
- 70.331 `DynaPDF.SetAnnotBorderStyle` 3076
- 70.332 `DynaPDF.SetAnnotBorderWidth` 3078
- 70.333 `DynaPDF.SetAnnotColor` 3079
- 70.335 `DynaPDF.SetAnnotFlags` 3083
- 70.495 `DynaPDF.TextAnnot` 3335

Created 28th November 2014, last changed 30th November 2014.

70.116 DynaPDF.GeneratePreview

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

```
MBS( "DynaPDF.GeneratePreview"; PDFContainer { ; OnlyImage; ImageName } )
```

Parameters

PDFContainer

The input PDF container value. Must contain a PDF file.

MyTable::PDFContainer

OnlyImage

Optional

Default is 0. But if you pass 1, the plugin does not return the PDF data in the result, but only the preview.

0

ImageName

Optional

If OnlyImage is 1, you can specify a file name for the image result.

"preview.jpg"

Result Returns updated container value or error.

Description

On Windows if you have a PDF in a container FileMaker will not show a preview due to a missing PDF rendering library. On Mac OS X the system can show PDF directly and FileMaker uses this.

This function renders first page as JPEG and add it to the container value as preview.

You need to use DynaPDF.Initialize before to load the DynaPDF library and set the license key (Pro required).

With version 5.0 optionally only creates image without passing PDF data back.

Requires DynaPDF Pro license for the raster engine to create bitmaps from PDF pages.

See also DynaPDF.RenderPage for more options on rendering.

On Mac the PDFKit.GeneratePreview function can be an alternative way, but limited to the capabilities of Apple's frameworks.

Examples

Add a preview to PDF container

```
# does container have jpeg preview?
```

```
If [ MBS( "Container.GetTypeSIze" ; test::pdf; "JPEG" ) <= 0 ]
```

```
# Add preview to PDF in container
```

```
Set Field [ test::pdf; MBS("DynaPDF.GeneratePreview"; test::pdf) ]
```

```
End If
```


Add a preview to PDF container if needed:

```
# get a PDF somewhere
Set Variable [ $PDF ; Value: MBS( "Files.ReadFile"; "C:\Users\Christian\Desktop\test.pdf"; "auto" ) ]
# Does have PDF and no image?
Set Variable [ $types ; Value: MBS( "Container.GetTypes"; $PDF ) ]
# PDF included?
If [ Position ( $types ; "PDF " ; 1 ; 1 ) >0 ]
# Image preview missing?
If [ Position ( $types ; "JPEG" ; 1 ; 1 ) <1 and Position ( $types ; "PNGf" ; 1 ; 1 ) <1 ]
# Use DynaPDF if initialized, we can use it
If [ MBS( "DynaPDF.IsInitialized" ) ]
Set Variable [ $PDF2 ; Value: MBS( "DynaPDF.GeneratePreview"; $PDF ) ]
If [ MBS("IsError") = 0 ]
# Success, so use the new PDF
Set Variable [ $PDF ; Value: $PDF2 ]
End If
Else If [ MBS( "IsMacOSX" ) = 1 ]
# On Mac use PDFKit
Set Variable [ $PDF2 ; Value: MBS( "PDFKit.GeneratePreview"; $PDF ) ]
If [ MBS("IsError") = 0 ]
# Success, so use the new PDF
Set Variable [ $PDF ; Value: $PDF2 ]
End If
End If
End If
End If
# Store PDF with preview
Set Field [ test::Image ; $PDF ]
```

See also

- 55.6 Container.Export 1613
- 55.24 Container.GetTypes 1640
- 55.23 Container.GetTypeSize 1638
- 61.119 CURL.GetResultAsPDF 1922
- 70.273 DynaPDF.Initialize 2941
- 70.282 DynaPDF.IsInitialized 2966
- 70.315 DynaPDF.RenderPage 3040
- 78.45 Files.ReadFile 3844
- 122.7 PDFKit.GeneratePreview 6164
- 122.15 PDFKit.GetPDFPageImage 6177

Example Databases

- [CURL/CURL Download PDF and add preview with DynaPDF](#)
- [DynaPDF/Generate Previews](#)

70.116.1 Blog Entries

- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)
- [FileMaker and PDF Containers](#)
- [MBS FileMaker Plugin, version 5.0pr9](#)
- [MBS Filemaker Plugin, version 4.1pr3](#)
- [MBS Filemaker Plugin, version 4.0pr2](#)

Created 18th August 2014, last changed 26th September 2019.

70.117 DynaPDF.GetAnnotCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetAnnotCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

Note: This value includes also annotations which were deleted by DynaPDF.DeleteAnnotation because annotations are not physically deleted at runtime. This value can be used to loop over all annotations. Annotation handles are simple array indexes.

See also [GetAnnotCount](#) function in DynaPDF manual.

See also

- 70.67 DynaPDF.DeleteAnnotation 2664
- 70.170 DynaPDF.GetFontCount 2807
- 70.185 DynaPDF.GetInFieldCount 2829
- 70.211 DynaPDF.GetOCGCount 2860
- 70.222 DynaPDF.GetPageCount 2873
- 70.290 DynaPDF.New 2981
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.338 DynaPDF.SetAnnotIcon 3087
- 70.342 DynaPDF.SetAnnotString 3091

Example Databases

- [DynaPDF/Extract Attachments](#)
- [DynaPDF/List Annotations](#)

Created 25th November 2014, last changed 25th November 2014.

70.118 DynaPDF.GetAnnotFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetAnnotFlags"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See also [GetAnnotFlags](#) function in DynaPDF manual.

See also

- 70.178 DynaPDF.GetImportFlags 2819
- 70.290 DynaPDF.New 2981
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.336 DynaPDF.SetAnnotFlagsEx 3085
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.392 DynaPDF.SetGStateFlags 3164
- 70.393 DynaPDF.SetImportFlags 3166
- 70.394 DynaPDF.SetImportFlags2 3170

Created 25th November 2014, last changed 27th May 2017.

70.119 DynaPDF.GetAnnotLink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetAnnotLink"; PDF; AnnotationHandle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

Result Returns text or error.

Description

The parameter AnnotationHandle must be a valid handle of a file link, page link, or web link annotation. Imported file link or web link annotations are mostly defined as page link annotation because it is impossible to distinguish between these types during import. Use the function DynaPDF.FindLinkAnnot if you need to change an imported file link or web link annotation.

See also [GetAnnotLink](#) function in DynaPDF manual.

See also

- 70.106 DynaPDF.FindLinkAnnot 2724
- 70.121 DynaPDF.GetAnnotation 2748
- 70.117 DynaPDF.GetAnnotCount 2743
- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.120 DynaPDF.GetAnnotType 2746
- 70.290 DynaPDF.New 2981
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.338 DynaPDF.SetAnnotIcon 3087
- 70.342 DynaPDF.SetAnnotString 3091

Created 25th November 2014, last changed 25th November 2014.

70.120 DynaPDF.GetAnnotType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetAnnotType"; PDF; AnnotationHandle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

AnnotationHandle

The annotation index.
5

Result Returns type or error.

Description

If the function succeeds the return value is the annotation type.

See also [GetAnnotType](#) function in DynaPDF manual.

See also

- 70.67 DynaPDF.DeleteAnnotation 2664
- 70.121 DynaPDF.GetAnnotation 2748
- 70.117 DynaPDF.GetAnnotCount 2743
- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.119 DynaPDF.GetAnnotLink 2745
- 70.169 DynaPDF.GetFieldType 2806
- 70.290 DynaPDF.New 2981
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.338 DynaPDF.SetAnnotIcon 3087

Created 25th November 2014, last changed 25th November 2014.

Value	Description
Caret	Caret
Circle	Circle
FileLink	A Link annotation with an associated GoToR action (go to remote)
FreeText	Free text
Highlight	Highlight annotation
Ink	Ink drawing
Line	Line
PageLink	A Link annotation with an associated GoTo action
Polygon	Polygon
PolyLine	Polyline
PopUp	Popup
Square	Square
Squiggly	Highlight annotation
Stamp	Stamp
StrikeOut	Highlight annotation
Text	Also used as container to store the State Model
Underline	Highlight annotation
WebLink	A Link annotation with an associated URI action
Widget	Form Fields are handled separately
3D	3D, PDF 1.6
SoundAnnot	Sound, PDF 1.2
FileAttach	File Attachment, PDF 1.3
Redact	Redact, PDF 1.7
Watermark	Watermark, PDF 1.6
Unknown	Unknown annotation type
MovieAnnot	Movie, PDF 1.2
PrinterMark	Printer Mark, PDF 1.4
Projection	Projection, PDF 1.7 Extension Level 3
RichMedia	Rich Media, PDF 1.7 Extension Level 3
Screen	Screen, PDF 1.5
TrapNet	TrapNet, PDF 1.3

70.121 DynaPDF.GetAnnotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetAnnotation"; PDF; AnnotationHandle; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

Selector

Which value to query. Possible values: Type, Deleted, BBox, BorderWidth, BorderColor, BorderStyle, BackColor, Handle, Author, Content, Name, Subject, PageNum, HighlightMode, DestPage, DestPos, DestType, DestFile, Icon, StampName, AnnotFlags, CreateDate, ModDate, Grouped, Open, Parent, PopUp, State, StateModel, EmbeddedFile, Subtype, PageIndex, MarkupAnnot, Opacity, QuadPointCount, QuadPoints, DashPattern, DashPatternCount, Intent, LE1, LE2, Vertices, VerticesCount, Caption, CaptionOffsetX, CaptionOffsetY, CaptionPos, LeaderLineLen, LeaderLineExtend or LeaderLineOffset.

"Name"

Result Returns value or error.

Description

Please check also dynapdf manual with details on the pdfGetAnnotEx function.

See also

- 70.219 DynaPDF.GetPageAnnotation 2869
- 70.290 DynaPDF.New 2981
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.338 DynaPDF.SetAnnotIcon 3087
- 70.340 DynaPDF.SetAnnotOpacity 3089
- 70.342 DynaPDF.SetAnnotString 3091
- 70.407 DynaPDF.SetOrientation 3191
- 70.420 DynaPDF.SetResolution 3217

Example Databases

- [DynaPDF/Extract Attachments](#)
- [DynaPDF/List Annotations](#)

Created 25th November 2014, last changed 25th November 2014.

70.122 DynaPDF.GetAscent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetAscent"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

The ascender is a typographic value that specifies the maximum extent to which characters rise above the baseline.

See also [GetAscent](#) function in DynaPDF manual.

See also

- 70.137 DynaPDF.GetContent 2767
- 70.138 DynaPDF.GetDocInfo 2768
- 70.255 DynaPDF.GetUserUnit 2911
- 70.290 DynaPDF.New 2981
- 70.356 DynaPDF.SetContent 3110

Created 6th February 2015, last changed 6th February 2015.

70.123 DynaPDF.GetBBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetBBox"; PDF; box; Selector { ; Unit })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

box

Which box to set. Can be Art, Bleed, Crop, Trim or Media.

"Media"

Selector

What value to return. Can be Left, Right, Bottom or Top to get the coordinates. Can be Width and Height to get the size of page in points. Can be Exists to check if the given page bound exists. Returns 1 or 0.

"Width"

Unit

Optional

The unit to return values with. Default is points (72 dpi raster). You can pass "point", "cm" or "mm". If an user unit is used, we include it into the calculation for meters.

"point"

Result Returns value or error.

Description

This function returns a bounding box of a PDF page. A PDF page may be prepared either for a finished medium, such as a sheet of paper, or as part of a prepress process in which the content of the page is placed on an intermediate medium, such as film or an imposed reproduction plate.

In the latter case, it is important to distinguish between the intermediate page and the finished page. The intermediate page may often include additional production-related content, such as bleeds or printer marks that falls outside the boundaries of the finished page. To handle such cases, a PDF page can define as many as five separate boundaries to control various aspects of the imaging process.

The function requires an open page because each page can use its own boundaries. Please use DynaPDF.EditPage to edit a page.

See also [GetBBox](#) function in DynaPDF manual.

Examples

Query with of crop box in millimeter:

```
MBS( "DynaPDF.GetBBox"; $pdf; "crop"; "Width"; "mm")
```

See also

- [70.84 DynaPDF.EditPage](#) 2686
- [70.209 DynaPDF.GetOCG](#) 2855
- [70.220 DynaPDF.GetPageBBox](#) 2870
- [70.290 DynaPDF.New](#) 2981
- [70.344 DynaPDF.SetBBox](#) 3093

Example Databases

- [DynaPDF/List Pages](#)
- [DynaPDF/PDF Crop](#)
- [DynaPDF/Shrink PDF pages](#)

70.123.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr1](#)

Created 19th July 2016, last changed 31st July 2016.

70.124 DynaPDF.GetBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetBookmark"; PDF; BookmarkHandle; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

BookmarkHandle

The reference number for the bookmark. Either returned by one of the add/insert functions or just counting from 0 to DynaPDF.GetBookmarkCount-1.

\$BookmarkHandle

Selector

Which information to query.

"Title"

Result Returns value or error.

Description

Selectors can be:

Color	Bookmark color (PDF 1.4)
DestPage	Destination page
DestPos	Destination position
DestType	Destination type (see DynaPDF.SetBookmarkDest)
Open	1 if the bookmark appears open
Parent	Parent bookmark if any or -1
Style	Text style. a combination of 1 for italic and 2 for bold.
Title	Title text.
TitleLen	Title length in characters.

See also [GetBookmark](#) function in DynaPDF manual.

Examples

query title of a bookmark:

MBS("DynaPDF.GetBookmark"; \$PDF; \$BookmarkHandle; "Title")

See also

- 70.3 DynaPDF.AddBookmark 2553
- 70.4 DynaPDF.AddBookmarkEx 2555
- 70.30 DynaPDF.ChangeBookmark 2597
- 70.68 DynaPDF.DeleteBookmark 2665
- 70.103 DynaPDF.FindBookmark 2720
- 70.125 DynaPDF.GetBookmarkCount 2755
- 70.274 DynaPDF.InsertBookmark 2948
- 70.290 DynaPDF.New 2981
- 70.345 DynaPDF.SetBookmarkDest 3095
- 70.346 DynaPDF.SetBookmarkStyle 3097

Created 18th August 2014, last changed 18th August 2014.

70.125 DynaPDF.GetBookmarkCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetBookmarkCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

See also [GetBookmarkCount](#) function in DynaPDF manual.

Examples

Query bookmark count:

MBS("DynaPDF.GetBookmarkCount"; \$PDF)

See also

- [70.30 DynaPDF.ChangeBookmark](#) 2597
- [70.68 DynaPDF.DeleteBookmark](#) 2665
- [70.124 DynaPDF.GetBookmark](#) 2753
- [70.133 DynaPDF.GetColorSpaceCount](#) 2763
- [70.176 DynaPDF.GetImageCount](#) 2815
- [70.290 DynaPDF.New](#) 2981
- [70.345 DynaPDF.SetBookmarkDest](#) 3095
- [70.346 DynaPDF.SetBookmarkStyle](#) 3097

Created 18th August 2014, last changed 18th August 2014.

70.126 DynaPDF.GetBorderStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetBorderStyle"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns border style or error.

Description

To determine the style of a specific field use the function DynaPDF.GetFieldBorderStyle.
See also [GetBorderStyle](#) function in DynaPDF manual.

See also

- [70.148 DynaPDF.GetField](#) 2783
- [70.151 DynaPDF.GetFieldBorderStyle](#) 2787
- [70.290 DynaPDF.New](#) 2981
- [70.331 DynaPDF.SetAnnotBorderStyle](#) 3076
- [70.346 DynaPDF.SetBookmarkStyle](#) 3097
- [70.347 DynaPDF.SetBorderStyle](#) 3099
- [70.366 DynaPDF.SetFieldBorderStyle](#) 3124

70.126.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

70.127 DynaPDF.GetCMapCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetCMapCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

This value can be used to access the header information of CMap files with DynaPDF.GetCMap.

See also [GetCMapCount](#) function in DynaPDF manual.

See also

- 70.117 DynaPDF.GetAnnotCount 2743
- 70.155 DynaPDF.GetFieldCount 2791
- 70.170 DynaPDF.GetFontCount 2807
- 70.176 DynaPDF.GetImageCount 2815
- 70.211 DynaPDF.GetOCGCount 2860
- 70.222 DynaPDF.GetPageCount 2873
- 70.237 DynaPDF.GetTemplCount 2892
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.128 DynaPDF.GetCharacterSpacing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetCharacterSpacing"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

See also [GetCharacterSpacing](#) function in DynaPDF manual.

See also

- [70.290 DynaPDF.New](#) 2981
- [70.349 DynaPDF.SetCharacterSpacing](#) 3101

70.128.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr6](#)

Created 18th August 2014, last changed 18th August 2014.

70.129 DynaPDF.GetCheckBoxChar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetCheckBoxChar"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns char or error.

Description

The checkbox char can be: Check, Circle, Cross1, Cross2, Cross3, Cross4, Diamond, Square or Star.

See also [GetCheckBoxChar](#) function in DynaPDF manual.

See also

- [70.130 DynaPDF.GetCheckBoxCharEx](#) 2760
- [70.290 DynaPDF.New](#) 2981
- [70.350 DynaPDF.SetCheckBoxChar](#) 3102
- [70.352 DynaPDF.SetCheckBoxState](#) 3104

70.129.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr10](#)

Created 5th November 2014, last changed 5th November 2014.

70.130 DynaPDF.GetCheckBoxCharEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetCheckBoxCharEx"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns number or error.

Description

See also [GetCheckBoxCharEx](#) function in DynaPDF manual.

See also

- [70.129 DynaPDF.GetCheckBoxChar](#) 2759
- [70.290 DynaPDF.New](#) 2981
- [70.350 DynaPDF.SetCheckBoxChar](#) 3102
- [70.352 DynaPDF.SetCheckBoxState](#) 3104

70.130.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr10](#)

Created 5th November 2014, last changed 5th November 2014.

70.131 DynaPDF.GetCheckBoxDefState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetCheckBoxDefState"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns 0, 1 or error.

Description

That is 1 = checked or 0 = unchecked. The parameter Field must be a valid handle of a check box. The default state can differ from the current visible state of a check box. The default state is used when a form is reset with a Reset Form Action.

See also [GetCheckBoxDefState](#) function in DynaPDF manual.

See also

- [70.290 DynaPDF.New](#) 2981
- [70.351 DynaPDF.SetCheckBoxDefState](#) 3103
- [70.352 DynaPDF.SetCheckBoxState](#) 3104

70.131.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr10](#)

Created 5th November 2014, last changed 5th November 2014.

70.132 DynaPDF.GetColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetColorSpace"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns current setting on success or error message.

Description

See also DynaPDF.SetColorSpace.

See also [GetColorSpace](#) function in DynaPDF manual.

See also

- 70.133 DynaPDF.GetColorSpaceCount 2763
- 70.134 DynaPDF.GetColorSpaceInfo 2764
- 70.290 DynaPDF.New 2981
- 70.353 DynaPDF.SetColorSpace 3105
- 70.360 DynaPDF.SetExtColorSpace 3116

Created 18th August 2014, last changed 18th August 2014.

70.133 DynaPDF.GetColorSpaceCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetColorSpaceCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

Color spaces can be accessed with DynaPDF.GetColorSpaceObj.

See also [GetColorSpaceCount](#) function in DynaPDF manual.

See also

- 70.125 DynaPDF.GetBookmarkCount 2755
- 70.132 DynaPDF.GetColorSpace 2762
- 70.134 DynaPDF.GetColorSpaceInfo 2764
- 70.183 DynaPDF.GetImportPageCount 2825
- 70.290 DynaPDF.New 2981
- 70.353 DynaPDF.SetColorSpace 3105

Example Databases

- [DynaPDF/Change Separation Colorant](#)
- [DynaPDF/List ColorSpaces](#)

Created 6th February 2015, last changed 6th February 2015.

70.134 DynaPDF.GetColorSpaceInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetColorSpaceInfo"; PDF; Index; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

The index of the colorspace. From 0 to DynaPDF.GetColorSpaceCount-1.

0

Selector

Which value to return.

"Type"

Result Returns value or error.

Description

You can query Type, Alternate, Size (byte size of ICC Profile), Buffer (ICC Profile), NumInComponents, NumOutComponents, NumColors, ColorantsCount, Colorants (names of colorants as list), MetadataSize, Metadata (XMP metadata as text).

See also

- [70.132 DynaPDF.GetColorSpace](#) 2762
- [70.133 DynaPDF.GetColorSpaceCount](#) 2763
- [70.177 DynaPDF.GetImportDocInfo](#) 2817
- [70.290 DynaPDF.New](#) 2981
- [70.353 DynaPDF.SetColorSpace](#) 3105

Example Databases

- [DynaPDF/Change Separation Colorant](#)
- [DynaPDF/List ColorSpaces](#)

70.134.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr1](#)

Created 19th July 2016, last changed 19th July 2016.

70.135 DynaPDF.GetCompressionFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetCompressionFilter"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns compression filter.

Description

Note that 1 bit images are always compressed with Flate.
See also [GetCompressionFilter](#) function in DynaPDF manual.

See also

- 70.136 DynaPDF.GetCompressionLevel 2766
- 70.290 DynaPDF.New 2981
- 70.354 DynaPDF.SetCompressionFilter 3107
- 70.355 DynaPDF.SetCompressionLevel 3109

Created 18th August 2014, last changed 18th August 2014.

70.136 DynaPDF.GetCompressionLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetCompressionLevel"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns compression level or error.

Description

JPEG images are compressed with optimized Huffmann tables if the compression level is Max. This results in 5% to 10% better compression ratio without losing quality. The compression level can also be used to switch the compression mode to real or integer when using the JPEG2000 compression filter (see also DynaPDF.InsertImage).

See also DynaPDF.SetCompressionLevel.

See also [GetCompressionLevel](#) function in DynaPDF manual.

See also

- 70.135 DynaPDF.GetCompressionFilter 2765
- 70.276 DynaPDF.InsertImage 2952
- 70.290 DynaPDF.New 2981
- 70.354 DynaPDF.SetCompressionFilter 3107
- 70.355 DynaPDF.SetCompressionLevel 3109
- 53.38 ZipFile.SetCompressionLevel 1517

70.136.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 30th November 2019.

70.137 DynaPDF.GetContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetContent"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns Text or error.

Description

The page or template must be open with DynaPDF.EditPage or DynaPDF.EditTemplate beforehand.
See also [GetContent](#) function in DynaPDF manual.

See also

- [70.84 DynaPDF.EditPage](#) 2686
- [70.85 DynaPDF.EditTemplate](#) 2688
- [70.122 DynaPDF.GetAscent](#) 2750
- [70.170 DynaPDF.GetFontCount](#) 2807
- [70.173 DynaPDF.GetFontWeight](#) 2810
- [70.211 DynaPDF.GetOCGCount](#) 2860
- [70.290 DynaPDF.New](#) 2981
- [70.299 DynaPDF.ParseContent](#) 3011
- [70.356 DynaPDF.SetContent](#) 3110
- [70.387 DynaPDF.SetFontEx](#) 3156

70.137.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 13th December 2016, last changed 13th December 2016.

70.138 DynaPDF.GetDocInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetDocInfo"; PDF; key)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

key

The key to set. Can be Author, Creator, Keywords, Producer, Subject, Title, Company, PDFXVersion, PDFXConfiguration, CreationDate or ModificationDate.

"Author"

Result Returns value or error message.

Description

Please note that we have DynaPDF.GetDocInfo for the current working PDF and the DynaPDF.GetImportDocInfo for the current open import PDF.

See also [GetDocInfo](#) function in DynaPDF manual.

Examples

Query title of current PDF:

```
$r = MBS( "DynaPDF.GetDocInfo"; $PDF; "title" )
```

Queries keywords:

```
Set Variable [ $r; Value:MBS("DynaPDF.GetImportDocInfo"; $pdf; "keywords") ]
```

See also

- [70.122 DynaPDF.GetAscent](#) 2750
- [70.139 DynaPDF.GetDocInfoCount](#) 2770
- [70.177 DynaPDF.GetImportDocInfo](#) 2817
- [70.290 DynaPDF.New](#) 2981
- [70.357 DynaPDF.SetDocInfo](#) 3111
- [70.358 DynaPDF.SetDocInfoEx](#) 3113

Example Databases

- [DynaPDF/PDF Library](#)

70.138.1 Blog Entries

- [Introducing DynaPDF to MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 18th June 2016.

70.139 DynaPDF.GetDocInfoCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetDocInfoCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

This function can be used in combination with GetDocInfoEx() to enumerate the document info entries of the PDF file.

See also [GetDocInfoCount](#) function in DynaPDF manual.

See also

- 70.117 DynaPDF.GetAnnotCount 2743
- 70.138 DynaPDF.GetDocInfo 2768
- 70.170 DynaPDF.GetFontCount 2807
- 70.184 DynaPDF.GetInDocInfoCount 2828
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.140 DynaPDF.GetDocUsesTransparency

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetDocUsesTransparency"; PDF { ; Flags })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Flags

Optional

Flags for check.

Result Returns 1, 0 or error.

Description

Checks whether a PDF file uses native PDF Transparency (PDF 1.4). The file uses transparency when it contains soft masks, blend modes other than Normal, or fill or stroke alpha values smaller than 1.0.

The function checks all pages, templates, extended graphics states, images, annotations, and form fields.

If the file uses transparency the return value is 1. If it uses no transparency the return value is 0.

See also [GetDocUsesTransparency](#) function in DynaPDF manual.

See also

- 70.256 DynaPDF.GetUsesTransparency 2912
- 70.252 DynaPDF.GetUseTransparency 2908
- 70.290 DynaPDF.New 2981
- 70.436 DynaPDF.SetUseTransparency 3241

Created 8th May 2018, last changed 8th May 2018.

70.141 DynaPDF.GetDrawDirection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetDrawDirection"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns draw direction or error message.

Description

You can use DynaPDF.SetDrawDirection to set the direction.
See also [GetDrawDirection](#) function in DynaPDF manual.

See also

- 70.142 DynaPDF.GetDynaPDFVersion 2773
- 70.290 DynaPDF.New 2981
- 70.359 DynaPDF.SetDrawDirection 3115

Created 18th August 2014, last changed 18th August 2014.

70.142 DynaPDF.GetDynaPDFVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetDynaPDFVersion")

Result Returns version string.

Description

See also [GetDynaPDFVersion](#) function in DynaPDF manual.

See also

- 70.141 DynaPDF.GetDrawDirection 2772
- 70.181 DynaPDF.GetImportPDFVersion 2822
- 70.217 DynaPDF.GetPDFVersion 2867
- 70.409 DynaPDF.SetPDFVersion 3195

Created 18th August 2014, last changed 16th May 2019.

70.143 DynaPDF.GetEmbeddedFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetEmbeddedFile"; PDF; Index; Selector { ; Encoding })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

The index of the embedded file. From 0 to DynaPDF.GetEmbeddedFileCount-1.

0

Selector

Which value to query. Can be DataSize, FileSize, Compressed, Name, FileName, isURL, UnicodeName, Description, MimeType, CreationDate, ModificationDate or CheckSum. With value "Content" you can query the content of the embedded file as text. Optional Text encoding parameter is used in this case.

"Name"

Encoding

Optional

The text encoding for the content.

Result Returns value or error.

Description

See also [GetEmbeddedFile](#) function in DynaPDF manual.

Examples

Query name of first file:

```
MBS( "DynaPDF.GetEmbeddedFile"; $pdf; 0; "name"
```

Query content as text in UTF-8:

```
MBS( "DynaPDF.GetEmbeddedFile"; $pdf; 0; "Content"; "UTF-8" )
```

See also

- 70.69 DynaPDF.DeleteEmbeddedFile 2666
- 70.104 DynaPDF.FindEmbeddedFile 2722
- 70.144 DynaPDF.GetEmbeddedFileAsContainer 2776
- 70.145 DynaPDF.GetEmbeddedFileCount 2777

70.143. *DYNAPDF.GETEMBEDDEDFILE*

2775

- 70.290 DynaPDF.New

2981

Example Databases

- [DynaPDF/Extract Attachments](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Extract XML](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD Extract XML](#)

70.143.1 Blog Entries

- [MBS FileMaker Plugin, version 5.5pr1](#)
- [MBS Filemaker Plugin, version 4.3pr11](#)

70.143.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 26

Created 11st September 2014, last changed 15th December 2015.

70.144 DynaPDF.GetEmbeddedFileAsContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetEmbeddedFileAsContainer"; PDF; Index)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

The index of the embedded file. From 0 to DynaPDF.GetEmbeddedFileCount-1.

0

Result Returns OK or error.

Description

You can store this in a container or write it to disk using Files.WriteFile.

Examples

Query first embedded file as container:

```
MBS( "DynaPDF.GetEmbeddedFileAsContainer"; $pdf; 0 )
```

See also

- [70.143 DynaPDF.GetEmbeddedFile](#) 2774
- [70.145 DynaPDF.GetEmbeddedFileCount](#) 2777
- [70.290 DynaPDF.New](#) 2981
- [78.62 Files.WriteFile](#) 3871

Example Databases

- [DynaPDF/Extract Attachments](#)
- [DynaPDF/Shrink PDF pages](#)

70.144.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 11st September 2014, last changed 30th November 2015.

70.145 DynaPDF.GetEmbeddedFileCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetEmbeddedFileCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

Note that the number of embedded files from an external PDF file is available after the PDF file has been imported. Depending of the used import flags embedded files can be excluded from import. See DynaPDF.SetImportFlags, or DynaPDF.ImportPDFFile for further information.
See also [GetEmbeddedFileCount](#) function in DynaPDF manual.

See also

- [70.69 DynaPDF.DeleteEmbeddedFile](#) 2666
- [70.143 DynaPDF.GetEmbeddedFile](#) 2774
- [70.144 DynaPDF.GetEmbeddedFileAsContainer](#) 2776
- [70.268 DynaPDF.ImportPDFFile](#) 2928
- [70.290 DynaPDF.New](#) 2981
- [70.393 DynaPDF.SetImportFlags](#) 3166

Example Databases

- [DynaPDF/Extract Attachments](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Extract XML](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD Extract XML](#)

70.145.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

70.145.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 26

Created 11st September 2014, last changed 11st September 2014.

70.146 DynaPDF.GetFTextHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFTextHeight"; PDF; Align; Text)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Align

The text alignment. Can be left, center, right or justify.

"left"

Text

The text to write.

"Hello World"

Result Returns height or error message.

Description

Before calling this function a font (see DynaPDF.SetFont) and the output rectangle must be set with the function DynaPDF.SetTextRect. The parameter Height of DynaPDF.SetTextRect should be set to -1 to avoid page breaks. Otherwise the height of the first text block is returned that fits into the given height of the rectangle.

The parameter AText must contain the same text (incl. format tags if any) as which should be printed later with DynaPDF.WriteFText.

See also DynaPDF.GetFTextHeightEx.

See also [GetFTextHeight](#) function in DynaPDF manual.

See also

- 70.173 DynaPDF.GetFontWeight 2810
- 70.147 DynaPDF.GetFTextHeightEx 2781
- 70.224 DynaPDF.GetPageHeight 2876
- 70.245 DynaPDF.GetTextWidth 2900
- 70.386 DynaPDF.SetFont 3154
- 70.413 DynaPDF.SetPageHeight 3203
- 70.427 DynaPDF.SetTextRect 3229
- 70.504 DynaPDF.WriteFTextEx 3352
- 70.506 DynaPDF.WriteStyledText 3358

- 70.507 DynaPDF.WriteStyledTextEx

Created 18th August 2014, last changed 27th May 2017.

70.147 DynaPDF.GetFTextHeightEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFTextHeightEx"; PDF; Width; Align; Text)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Width

Width of output rectangle

\$width

Align

The text alignment. Can be left, center, right or justify.

"left"

Text

The text to write.

"Hello World"

Result Returns height or error message.

Description

The function works in the same way as DynaPDF.GetFTextHeight but the output rectangle must not be set manually beforehand.

The height of the output rectangle is set to -1 to avoid a page break during measuring.

The parameter text must contain the same text (incl. format tags if any) as which should be printed later with DynaPDF.GetFTextHeightEx.

See also DynaPDF.GetFTextHeight.

See also [GetFTextHeightEx](#) function in DynaPDF manual.

See also

- 70.173 DynaPDF.GetFontWeight 2810
- 70.146 DynaPDF.GetFTextHeight 2779
- 70.238 DynaPDF.GetTemplHeight 2893
- 70.290 DynaPDF.New 2981
- 70.503 DynaPDF.WriteFText 3350
- 70.504 DynaPDF.WriteFTextEx 3352
- 70.506 DynaPDF.WriteStyledText 3358
- 70.507 DynaPDF.WriteStyledTextEx 3360

70.148 DynaPDF.GetField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetField"; PDF; Field; Selector)

(old name: DynaPDF.GetFieldEx)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name. Zero based and up to DynaPDF.GetFieldCount-1.

"FirstName"

Selector

What value to query. Can be Deleted, BBox, FieldType, GroupType, Handle, BackColor, BackColorSP, BorderColor, BorderColorSP, BorderStyle, BorderWidth, CharSpacing, Checked, CheckBoxChar, DefState, DefValue, EditFont, ExpValueCount, BorderColor, FieldFlags, FieldFont, FontSize, FieldName, Highlight-Mode, IsCalcField, MapName, MaxLen, KidCount, PageNum, Rotate, TextAlign, TextColor, TextColorSP, TextScaling, ToolTip, UniqueName, Value, WordSpacing, Parent or Kids.

Added ModDate, CaptionPos, DownCaption, DownImage, RollCaption, RollImage, UpCaption, UpImage, Action and ActionType for version 9.0.

"Name"

Result Returns field handle or error.

Description

Field handles are simple array indexes into the field array of the global AcroForm object. To enumerate all fields of a document execute the function in a loop from 0 though DynaPDF.GetFieldCount-1.

See GetFieldEx function in DynaPDF help file for details.

See also [GetFieldEx](#) function in DynaPDF manual.

Examples

Query bounding box of field:

```
MBS( "DynaPDF.GetField"; $pdf; "FirstName"; "BBox" )
```

See also

- 70.70 DynaPDF.DeleteField 2667
- 70.105 DynaPDF.FindField 2723
- 70.153 DynaPDF.GetFieldChoiceValue 2789

- 70.155 DynaPDF.GetFieldCount 2791
- 70.156 DynaPDF.GetFieldExpValCount 2792
- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.158 DynaPDF.GetFieldExpValueEx 2794
- 70.164 DynaPDF.GetFieldName 2801
- 70.290 DynaPDF.New 2981
- 70.370 DynaPDF.SetFieldExpValue 3130

Example Databases

- [DynaPDF/Form/Form](#)
- [DynaPDF/Show PDF Fields](#)

70.148.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr3](#)
- [MBS FileMaker Plugin, version 7.5pr3](#)
- [MBS Filemaker Plugin, version 4.4pr3](#)

Created 18th August 2014, last changed 28th May 2019.

70.149 DynaPDF.GetFieldBackColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldBackColor"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns color as number or error.

Description

Note that color values must be defined in the current color space. See DynaPDF.SetColorSpace for further information.

If the return value is equal NO_COLOR (4294967281) the border is transparent.

Default value = 0 for Black.

See also [GetFieldBackColor](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.154 DynaPDF.GetFieldColor 2790
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.290 DynaPDF.New 2981
- 70.353 DynaPDF.SetColorSpace 3105
- 70.364 DynaPDF.SetFieldBackColor 3122
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.368 DynaPDF.SetFieldColor 3127
- 70.382 DynaPDF.SetFieldTextColor 3148

Created 18th August 2014, last changed 18th August 2014.

70.150 DynaPDF.GetFieldBorderColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldBorderColor"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns color as number or error.

Description

Note that color values must be defined in the current color space. See DynaPDF.SetColorSpace for further information.

If the return value is equal NO_COLOR (4294967281) the border is transparent.

Default value = 0 for Black.

See also [GetFieldBorderColor](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.152 DynaPDF.GetFieldBorderWidth 2788
- 70.154 DynaPDF.GetFieldColor 2790
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.353 DynaPDF.SetColorSpace 3105
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.366 DynaPDF.SetFieldBorderStyle 3124
- 70.367 DynaPDF.SetFieldBorderWidth 3125
- 70.382 DynaPDF.SetFieldTextColor 3148

Created 18th August 2014, last changed 18th August 2014.

70.151 DynaPDF.GetFieldBorderStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldBorderStyle"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns border style or error.

Description

It is also possible to change the style of a specific field, see DynaPDF.SetFieldBorderStyle for further information.

If the function succeeds the return value is the border style, a value greater or equal zero.

Value can be Solid, Bevelled, Inset, Underline or Dashed.

See also [GetFieldBorderStyle](#) function in DynaPDF manual.

See also

- 70.126 DynaPDF.GetBorderStyle 2756
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.152 DynaPDF.GetFieldBorderWidth 2788
- 70.290 DynaPDF.New 2981
- 70.331 DynaPDF.SetAnnotBorderStyle 3076
- 70.347 DynaPDF.SetBorderStyle 3099
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.366 DynaPDF.SetFieldBorderStyle 3124
- 70.367 DynaPDF.SetFieldBorderWidth 3125

Created 18th August 2014, last changed 18th August 2014.

70.152 DynaPDF.GetFieldBorderWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldBorderWidth"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns value or error.

Description

All field types are supported by this function.

If the function succeeds the return value is the line width of the field's border (a value greater or equal zero).

See also [GetFieldBorderWidth](#) function in DynaPDF manual.

See also

- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.151 DynaPDF.GetFieldBorderStyle 2787
- 70.290 DynaPDF.New 2981
- 70.332 DynaPDF.SetAnnotBorderWidth 3078
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.366 DynaPDF.SetFieldBorderStyle 3124
- 70.367 DynaPDF.SetFieldBorderWidth 3125

Created 18th August 2014, last changed 18th August 2014.

70.153 DynaPDF.GetFieldChoiceValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldChoiceValue"; PDF; Field; ValIndex; Selector)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

ValIndex

The value index.

0

Selector

Which value to return. Can be ExpValue, ExpValueLen, Value, ValueLen or Selected.

"Value"

Result Returns value or error.

Description

The parameter Field must be a valid handle of a combo or list box. ValIndex is the array index of the choice value to be retrieved. Call DynaPDF.GetFieldExpValCount to determine how many choice values are available in the combo or list box.

Choice values can be inherited from a parent group field. This is the case if the field is part of a field group. See "Interactive Forms/What is a Field Group?" Section in DynaPDF help file for further information.

See also [GetFieldChoiceValue](#) function in DynaPDF manual.

See also

- 70.148 DynaPDF.GetField 2783
- 70.156 DynaPDF.GetFieldExpValCount 2792
- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.158 DynaPDF.GetFieldExpValueEx 2794
- 70.290 DynaPDF.New 2981
- 70.370 DynaPDF.SetFieldExpValue 3130

Created 18th August 2014, last changed 27th May 2017.

70.154 DynaPDF.GetFieldColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldColor"; PDF; Field; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Selector

What to return. This can be ColorSpace or Color. For RGB colorspace also Red, Green or Blue to get component.
"Color"

Result Returns value or error.

Description

The parameter ColorSpace defines the color space in which the color was defined.
See also [GetFieldColor](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.155 DynaPDF.GetFieldCount 2791
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.368 DynaPDF.SetFieldColor 3127
- 70.374 DynaPDF.SetFieldFontEx 3138
- 70.377 DynaPDF.SetFieldIndex 3142
- 70.382 DynaPDF.SetFieldTextColor 3148
- 70.383 DynaPDF.SetFieldToolTip 3149
- 70.384 DynaPDF.SetFillColor 3150

Created 18th August 2014, last changed 18th August 2014.

70.155 DynaPDF.GetFieldCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

This is the number of fields in the current document, not the imported one.
See also [GetFieldCount](#) function in DynaPDF manual.

See also

- 70.148 DynaPDF.GetField 2783
- 70.154 DynaPDF.GetFieldColor 2790
- 70.222 DynaPDF.GetPageCount 2873
- 70.223 DynaPDF.GetPageFieldCount 2875
- 70.237 DynaPDF.GetTemplCount 2892
- 70.290 DynaPDF.New 2981
- 70.368 DynaPDF.SetFieldColor 3127
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.373 DynaPDF.SetFieldFont 3136
- 70.374 DynaPDF.SetFieldFontEx 3138

Example Databases

- [DynaPDF/Show PDF Fields](#)

Created 18th August 2014, last changed 18th August 2014.

70.156 DynaPDF.GetFieldExpValCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldExpValCount"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns number or error.

Description

Supported field types are combo boxes, list boxes, radio buttons, and check boxes. If the field is a radio button, the function returns the number of check boxes which are connected with the radio button. This number can be used to access the check boxes of the radio button either with DynaPDF.GetFieldExpValueEx or DynaPDF.SetFieldExpValue. If the field is a check box, the return value is always 1 because check boxes do not support multiple export values. However, this function is normally used to determine the number of available choice values within a combo box or list box because only these field types support multiple choice values. See also DynaPDF.GetFieldExpValueEx.

If the function succeeds the return value is the number of values/export values which are defined for a field. See also [GetFieldExpValCount](#) function in DynaPDF manual.

See also

- 70.148 DynaPDF.GetField 2783
- 70.153 DynaPDF.GetFieldChoiceValue 2789
- 70.155 DynaPDF.GetFieldCount 2791
- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.158 DynaPDF.GetFieldExpValueEx 2794
- 70.290 DynaPDF.New 2981
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.371 DynaPDF.SetFieldExpValueEx 3132

Created 18th August 2014, last changed 18th August 2014.

70.157 DynaPDF.GetFieldExpValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldExpValue"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns value or error.

Description

The field must be a valid field handle of a check box, list box or combo box.

The export value of a check box can be either "Off" if the check box is not selected or an arbitrary string when the check box is selected.

The export value of a combo box or list box can be empty when no value is selected.

Since Acrobat 5, list boxes support multiple selected values. In this case the export values are delimited by a newline character.

The field type can be determined with the functions DynaPDF.GetFieldType, DynaPDF.GetField or DynaPDF.GetPageField.

See also [GetFieldExpValue](#) function in DynaPDF manual.

See also

- 70.148 DynaPDF.GetField 2783
- 70.156 DynaPDF.GetFieldExpValCount 2792
- 70.158 DynaPDF.GetFieldExpValueEx 2794
- 70.163 DynaPDF.GetFieldMapName 2800
- 70.169 DynaPDF.GetFieldType 2806
- 70.242 DynaPDF.GetTextFieldValue 2897
- 70.290 DynaPDF.New 2981
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.371 DynaPDF.SetFieldExpValueEx 3132
- 70.378 DynaPDF.SetFieldMapName 3143

Created 18th August 2014, last changed 18th August 2014.

70.158 DynaPDF.GetFieldExpValueEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldExpValueEx"; PDF; Field; ValIndex; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

ValIndex

The value index.
0

Selector

Which value to get. Can be Value, Selected or ExpValue.
"Value"

Result Returns OK on success or error on failure.

Description

If the field is a check box, the parameter ValIndex will be ignored and the export value and selectedstate are returned.

To enumerate the choice values of a combo box or list box call GetFieldExpValCount() to determine the number of available values. The parameter ValIndex can then be used to access each value / export value pair within the array.

Beginning with PDF 1.5 choice values of combo and list boxes can be in Unicode format. Because Unicode strings are not supported by this function the function DynaPDF.GetFieldChoiceValue should be used to enumerate choice values of these field types.

The parameters Value, ExpValue, and Selected require variables so that the values can be set by the function. To change a choice value of a combo box or list box call the function DynaPDF.SetFieldExpValue.

See also [GetFieldExpValueEx](#) function in DynaPDF manual.

See also

- 70.148 DynaPDF.GetField 2783
- 70.153 DynaPDF.GetFieldChoiceValue 2789
- 70.156 DynaPDF.GetFieldExpValCount 2792
- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.290 DynaPDF.New 2981

70.158. <i>DYNAPDF.GETFIELDEXPVALUEEX</i>	2795
• 70.370 DynaPDF.SetFieldExpValue	3130
• 70.371 DynaPDF.SetFieldExpValueEx	3132

Created 18th August 2014, last changed 18th August 2014.

70.159 DynaPDF.GetFieldFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldFlags"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns value or error.

Description

Interactive form fields and annotations support the same basic set of field flags because both object types are in fact annotations. When we talk about form fields then we talk about an extended version of annotations because form fields are annotations. However, to make the handling easier, form fields and annotations are handled separately by DynaPDF.

The flags are described in detail on the DynaPDF help file.

See also [GetFieldFlags](#) function in DynaPDF manual.

See also

- 70.174 DynaPDF.GetGStateFlags 2811
- 70.178 DynaPDF.GetImportFlags 2819
- 70.290 DynaPDF.New 2981
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.368 DynaPDF.SetFieldColor 3127
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.373 DynaPDF.SetFieldFont 3136
- 70.374 DynaPDF.SetFieldFontEx 3138
- 70.377 DynaPDF.SetFieldIndex 3142
- 70.379 DynaPDF.SetFieldName 3144

Created 18th August 2014, last changed 27th May 2017.

70.160 DynaPDF.GetFieldType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldType"; PDF; Field)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns type or error.

Description

A field group is a set of fields which have all the same name. Such fields contain always the same value with exception of checkboxes. If a field group consists of checkboxes the export value is also taken into account. However, a set of fields with identical names are internally stored in a group field. The group type specifies the field type of the group, e.g. ftText if text fields are stored in the group. A field group cannot contain different field types. An indication whether a field is a child of a field group is an empty field name because the field name is taken from the parent group field in this case. Radio buttons are identically organized, but the field type is ftRadioBtn in this case.

Value can be Button, CheckBox, RadioButton, ComboBox, Listbox, Text, Signature or Group.

See also [GetFieldType](#) function in DynaPDF manual.

See also

- 70.168 DynaPDF.GetFieldToolTip 2805
- 70.169 DynaPDF.GetFieldType 2806
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 18th August 2014.

70.161 DynaPDF.GetFieldHighlightMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldHighlightMode"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns mode or error.

Description

All other field types have no property highlight mode, the function returns None in this case.

Value can be None, Invert, Outline, Push or PushUpd.

See also [GetFieldHighlightMode](#) function in DynaPDF manual.

See also

- 70.204 DynaPDF.GetLinkHighlightMode 2849
- 70.290 DynaPDF.New 2981
- 70.337 DynaPDF.SetAnnotHighlightMode 3086
- 70.376 DynaPDF.SetFieldHighlightMode 3141
- 70.400 DynaPDF.SetLinkHighlightMode 3180

Created 18th August 2014, last changed 18th August 2014.

70.162 DynaPDF.GetFieldIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldIndex"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns value or error.

Description

The index of newly created fields starts at 1000. This makes it easier to set a field to another position inside the tab order. The field index can be changed with the function DynaPDF.SetFieldIndex. Note that fields must be sorted by index with the function DynaPDF.SortFieldsByIndex. Fields must be sorted for each page separately.

This is for tab order index. For index of field in the list of fields, please use DynaPDF.FindField.

See also [GetFieldIndex](#) function in DynaPDF manual.

See also

- 70.105 DynaPDF.FindField 2723
- 70.159 DynaPDF.GetFieldFlags 2796
- 70.169 DynaPDF.GetFieldType 2806
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.368 DynaPDF.SetFieldColor 3127
- 70.369 DynaPDF.SetFieldDate 3129
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.374 DynaPDF.SetFieldFontEx 3138
- 70.377 DynaPDF.SetFieldIndex 3142
- 70.379 DynaPDF.SetFieldName 3144

Created 18th August 2014, last changed 9th October 2018.

70.163 DynaPDF.GetFieldMapName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldMapName"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns error or text.

Description

The mapping name is used when interactive form field data is exported from the document.
See also [GetFieldMapName](#) function in DynaPDF manual.

See also

- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.159 DynaPDF.GetFieldFlags 2796
- 70.164 DynaPDF.GetFieldName 2801
- 70.169 DynaPDF.GetFieldType 2806
- 70.290 DynaPDF.New 2981
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.378 DynaPDF.SetFieldMapName 3143
- 70.379 DynaPDF.SetFieldName 3144

Created 18th August 2014, last changed 18th August 2014.

70.164 DynaPDF.GetFieldName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldName"; PDF; Field)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns text or error.

Description

Note that the check boxes of a radio button field do not have a name.
See also [GetFieldName](#) function in DynaPDF manual.

See also

- 70.162 DynaPDF.GetFieldIndex 2799
- 70.163 DynaPDF.GetFieldMapName 2800
- 70.169 DynaPDF.GetFieldType 2806
- 70.290 DynaPDF.New 2981
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.369 DynaPDF.SetFieldDate 3129
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.373 DynaPDF.SetFieldFont 3136
- 70.377 DynaPDF.SetFieldIndex 3142
- 70.378 DynaPDF.SetFieldMapName 3143

Created 18th August 2014, last changed 18th August 2014.

70.165 DynaPDF.GetFieldOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldOrientation"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns field orientation or error.

Description

The orientation is measured in degrees; it is always a multiple of 90 or 0.
See also [GetFieldOrientation](#) function in DynaPDF manual.

See also

- 70.166 DynaPDF.GetFieldTextAlign 2803
- 70.180 DynaPDF.GetImportOrientation 2821
- 70.214 DynaPDF.GetOrientation 2863
- 70.290 DynaPDF.New 2981
- 70.380 DynaPDF.SetFieldOrientation 3146
- 70.407 DynaPDF.SetOrientation 3191

Created 18th August 2014, last changed 18th August 2014.

70.166 DynaPDF.GetFieldTextAlign

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldTextAlign"; PDF; Field)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns text align or error.

Description

Value can be Left, Center, Right or Justify.
See also [GetFieldTextAlign](#) function in DynaPDF manual.

See also

- 70.165 DynaPDF.GetFieldOrientation 2802
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.290 DynaPDF.New 2981
- 70.381 DynaPDF.SetFieldTextAlign 3147
- 70.382 DynaPDF.SetFieldTextColor 3148

Created 18th August 2014, last changed 18th August 2014.

70.167 DynaPDF.GetFieldTextColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldTextColor"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns color or error.

Description

See also [GetFieldTextColor](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.154 DynaPDF.GetFieldColor 2790
- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.166 DynaPDF.GetFieldTextAlign 2803
- 70.290 DynaPDF.New 2981
- 70.364 DynaPDF.SetFieldBackColor 3122
- 70.381 DynaPDF.SetFieldTextAlign 3147
- 70.382 DynaPDF.SetFieldTextColor 3148

Created 18th August 2014, last changed 18th August 2014.

70.168 DynaPDF.GetFieldToolTip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldToolTip"; PDF; Field)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns error or tooltip text.

Description

See also [GetFieldToolTip](#) function in DynaPDF manual.

See also

- 70.154 DynaPDF.GetFieldColor 2790
- 70.155 DynaPDF.GetFieldCount 2791
- 70.159 DynaPDF.GetFieldFlags 2796
- 70.160 DynaPDF.GetFieldGroupType 2797
- 70.290 DynaPDF.New 2981
- 70.368 DynaPDF.SetFieldColor 3127
- 70.383 DynaPDF.SetFieldToolTip 3149

Created 18th August 2014, last changed 18th August 2014.

70.169 DynaPDF.GetFieldType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFieldType"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns type or error.

Description

The type can be Button, CheckBox, RadioButton, ComboBox, Listbox, Text, Signature or Group.
See also [GetFieldType](#) function in DynaPDF manual.

See also

- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.160 DynaPDF.GetFieldGroupType 2797
- 70.162 DynaPDF.GetFieldIndex 2799
- 70.163 DynaPDF.GetFieldMapName 2800
- 70.164 DynaPDF.GetFieldName 2801
- 70.290 DynaPDF.New 2981
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.369 DynaPDF.SetFieldDate 3129
- 70.377 DynaPDF.SetFieldIndex 3142
- 70.379 DynaPDF.SetFieldName 3144

Created 18th August 2014, last changed 18th August 2014.

70.170 DynaPDF.GetFontCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFontCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See also [GetFontCount](#) function in DynaPDF manual.

See also

- 70.114 DynaPDF.FontInfo 2736
- 70.117 DynaPDF.GetAnnotCount 2743
- 70.137 DynaPDF.GetContent 2767
- 70.139 DynaPDF.GetDocInfoCount 2770
- 70.155 DynaPDF.GetFieldCount 2791
- 70.176 DynaPDF.GetImageCount 2815
- 70.211 DynaPDF.GetOCGCount 2860
- 70.237 DynaPDF.GetTemplCount 2892
- 70.290 DynaPDF.New 2981
- 70.356 DynaPDF.SetContent 3110

Example Databases

- [DynaPDF/PDF Font Info](#)

Created 21st October 2014, last changed 23th October 2014.

70.171 DynaPDF.GetFontOrigin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFontOrigin"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

The font origin is automatically set to `orTopLeft` or `orDownLeft` if the coordinate system will be changed. The origin can be changed at runtime with the function `DynaPDF.SetFontOrigin`.

Returns `DownLeft` (BaseLine) or `TopLeft` (Upper left corner of the font's bounding box).

See also [GetFontOrigin](#) function in DynaPDF manual.

See also

- 70.173 DynaPDF.GetFontWeight 2810
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.388 DynaPDF.SetFontOrigin 3158
- 70.391 DynaPDF.SetFontWeight 3162

Created 21st October 2014, last changed 21st October 2014.

70.172 DynaPDF.GetFontSelMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFontSelMode"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns value or error.

Description

The font selection mode describes what kind of font name must be passed to DynaPDF.SetFont. Note that a font cannot be found if the wrong mode is set.

See also [GetFontSelMode](#) function in DynaPDF manual.

See also

- 70.173 DynaPDF.GetFontWeight 2810
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.390 DynaPDF.SetFontSelMode 3161

Created 21st October 2014, last changed 21st October 2014.

70.173 DynaPDF.GetFontWeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetFontWeight"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See also DynaPDF.SetFontWeight.

See also [GetFontWeight](#) function in DynaPDF manual.

See also

- 70.170 DynaPDF.GetFontCount 2807
- 70.146 DynaPDF.GetFTextHeight 2779
- 70.147 DynaPDF.GetFTextHeightEx 2781
- 70.224 DynaPDF.GetPageHeight 2876
- 70.238 DynaPDF.GetTemplHeight 2893
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.388 DynaPDF.SetFontOrigin 3158
- 70.391 DynaPDF.SetFontWeight 3162
- 70.413 DynaPDF.SetPageHeight 3203

Created 21st October 2014, last changed 21st October 2014.

70.174 DynaPDF.GetGStateFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetGStateFlags"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

See DynaPDF.SetGStateFlags for details on flags.

Flags are returns as numeric value.

See also [GetGStateFlags](#) function in DynaPDF manual.

See also

- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.159 DynaPDF.GetFieldFlags 2796
- 70.178 DynaPDF.GetImportFlags 2819
- 70.207 DynaPDF.GetMetaConvFlags 2852
- 70.290 DynaPDF.New 2981
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.392 DynaPDF.SetGStateFlags 3164

70.174.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 21st August 2015, last changed 21st August 2015.

70.175 DynaPDF.GetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImage"; PDF; Index; Selector { ; FileName })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

The index of the image from 0 to DynaPDF.GetImageCount-1.

\$index

Selector

Which value to query.

"Picture"

FileName

Optional

In case we return a container value, the file name to use.

"test.jpg"

Result Returns OK or error.

Description

If all image types should be decompressed set the flag pfDecompressAllImages.

Selectors include:

This function allows to extract images from PDF with DynaPDF Lite or higher license.

Examples

Query colorspace of an image:

```
MBS( "DynaPDF.GetImage"; $pdf; $ImageIndex; "ColorSpace"
```

See also

- 70.176 DynaPDF.GetImageCount 2815
- 70.276 DynaPDF.InsertImage 2952
- 70.277 DynaPDF.InsertImageFile 2956
- 70.286 DynaPDF.ListImages 2974

70.175. <i>DYNAPDF.GETIMAGE</i>	2813
• 70.290 DynaPDF.New	2981
• 70.316 DynaPDF.ReplaceImage	3043

Example Databases

- [DynaPDF/PSD Conversion](#)

70.175.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr1](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 5th August 2016, last changed 16th July 2019.

BufSize	The size of the image buffer in bytes.
Buffer	The image data as JPEG or FILE.
Picture	The image as a picture container. Either JPEG or TIFF.
Filter	The format of image: Required decode filter if the image is compressed. Possible values are dfDCTDecode (JPEG), dfJPXDecode (JPEG2000), and dfJBIG2Decode. Other filters are already removed by DynaPDF since a conversion to a native file format is then always required.
OrgFilter	The image was compressed with this filter in the PDF file. This info is useful to determine which compression filter should be used when creating a new image file from the image buffer.
BitsPerPixel	Bit depth of the image buffer. Possible values are 1, 2, 4, 8, 24, 32, and 64.
ColorSpace	The color space refers either to the image buffer or to the color table if set.
NumComponents	The number of components stored in the image buffer.
MinIsWhite	If 1, the colors of 1 bit images are reversed.
ColorCount	The number of colors in the color table.
Width	Image width in pixel.
Height	Image height in pixel.
ScanLineLength	The length of a scanline in bytes.
InlineImage	If 1, the image is an inline image.
Interpolate	If 1, image interpolation should be performed.
Transparent	The meaning is different depending on the bit depth and whether a color table is available. If the image is a 1 bit image and if no color table is available, black pixels must be drawn with the current fill color. If the image contains a color table, ColorMask contains the range of indexes in the form min/max index which should appear transparent. If no color table is present ColorMask contains the transparent ranges in the form min/max for every color component.
Intent	The rendering intent. Default is none.
MetadataSize	Length of Metadata in bytes.
ResolutionX	Image resolution on the x-axis.
ResolutionY	Image resolution on the y-axis.
Metadata	Optional XML Metadata stream as text.
ICCProfile	ICC Color Profile of the colorspace (can be empty).
MaskImage	If set, a 1 bit image is used as a transparency mask. Returns index of that image.
SoftMask	If set, a grayscale image is used as alpha channel. Returns index of that image.

70.176 DynaPDF.GetImageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImageCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

Returns the number of image objects which were loaded with DynaPDF functions or imported from external PDF files. This does not include inline images.

The images can be accessed with DynaPDF.GetImage.

If you need to write all files to disk, you can use DynaPDF.ExtractImages or use DynaPDF.ListImages to list them all with details.

See also [GetImageCount](#) function in DynaPDF manual.

See also

- 70.96 DynaPDF.ExtractImages 2705
- 70.127 DynaPDF.GetCMapCount 2757
- 70.170 DynaPDF.GetFontCount 2807
- 70.211 DynaPDF.GetOCGCount 2860
- 70.221 DynaPDF.GetPageCoords 2872
- 70.222 DynaPDF.GetPageCount 2873
- 70.227 DynaPDF.GetPageLayout 2881
- 70.237 DynaPDF.GetTemplCount 2892
- 70.277 DynaPDF.InsertImageFile 2956
- 70.285 DynaPDF.List 2973

Example Databases

- [DynaPDF/Replace Image](#)

70.176.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 5th August 2016, last changed 29th September 2017.

70.177 DynaPDF.GetImportDocInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImportDocInfo"; PDF; key)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

key

The key to set. Can be Author, Creator, Keywords, Producer, Subject, Title, Company, PDFXVersion, PDFXConfiguration, CreationDate or ModificationDate.

"Author"

Result Returns value or error message.

Description

Please note that we have DynaPDF.GetDocInfo for the current working PDF and the DynaPDF.GetImportDocInfo for the current open import PDF.

Examples

Query title of import PDF:

```
$r = MBS( "DynaPDF.GetImportDocInfo"; $PDF; "title" )
```

See also

- [70.134 DynaPDF.GetColorSpaceInfo](#) 2764
- [70.138 DynaPDF.GetDocInfo](#) 2768
- [70.290 DynaPDF.New](#) 2981
- [70.422 DynaPDF.SetSeparationInfo](#) 3221

Example Databases

- [DynaPDF/DynaPDF Batch Preview](#)

70.177.1 Blog Entries

- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.177.2 FileMaker Magazin

- Ausgabe 6/2016, Seite 24

Created 18th August 2014, last changed 18th August 2014.

70.178 DynaPDF.GetImportFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImportFlags"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns number or error.

Description

The flags are described in detail under DynaPDF.SetImportFlags.

See also [GetImportFlags](#) function in DynaPDF manual.

See also

- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.159 DynaPDF.GetFieldFlags 2796
- 70.174 DynaPDF.GetGStateFlags 2811
- 70.179 DynaPDF.GetImportFlags2 2820
- 70.290 DynaPDF.New 2981
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.393 DynaPDF.SetImportFlags 3166
- 70.394 DynaPDF.SetImportFlags2 3170

70.178.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr4](#)

Created 18th August 2014, last changed 27th May 2017.

70.179 DynaPDF.GetImportFlags2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImportFlags2")

Result Returns flags.

Description

See also [GetImportFlags2](#) function in DynaPDF manual.

See also

- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.178 DynaPDF.GetImportFlags 2819
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.393 DynaPDF.SetImportFlags 3166
- 70.394 DynaPDF.SetImportFlags2 3170

Created 18th August 2014, last changed 18th August 2014.

70.180 DynaPDF.GetImportOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImportOrientation"; PDF; Page)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Page

The page index from 0 to DynaPDF.GetImportPageCount-1.

0

Result Returns OK or error message.

Description

The function returns the orientation of a specific page within the currently open import file.

If the function succeeds the return value is the orientation of the page in degrees. Possible values are 0, 90, 180, 270, or the same values as negative numbers. If the function fails, it returns an error.

See also

- [70.165 DynaPDF.GetFieldOrientation](#) 2802
- [70.183 DynaPDF.GetImportPageCount](#) 2825
- [70.181 DynaPDF.GetImportPDFVersion](#) 2822
- [70.214 DynaPDF.GetOrientation](#) 2863
- [70.290 DynaPDF.New](#) 2981
- [70.380 DynaPDF.SetFieldOrientation](#) 3146

Example Databases

- [DynaPDF/Generate Previews](#)

70.180.1 Blog Entries

- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

Created 18th August 2014, last changed 18th August 2014.

70.181 DynaPDF.GetImportPDFVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImportPDFVersion"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns PDF Version like "1.3".

Description

The PDF file must be opened with DynaPDF.OpenPDFFromFile or DynaPDF.OpenPDFFromContainer beforehand.

See also

- 70.142 DynaPDF.GetDynaPDFVersion 2773
- 70.180 DynaPDF.GetImportOrientation 2821
- 70.217 DynaPDF.GetPDFVersion 2867
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992

Created 18th August 2014, last changed 18th August 2014.

70.182 DynaPDF.GetImportPageBounds

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImportPageBounds"; PDF; PageIndex { ; Box })

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

PageIndex

The page index in range from 1 to DynaPDF.GetImportPageCount.
1

Box

Optional

Optional, which box to use. Default is Mediabox. You can pass MediaBox, CropBox, ArtBox, BleedBox or TrimBox.
"MediaBox"

Result Returns rectangle as string with four numbers for left, top, right and bottom.

Description

Please note that we have DynaPDF.GetPageBounds for the current working PDF and the DynaPDF.GetImportPageBounds for the current open import PDF.

Examples

Queries crop size of page 5 from import PDF:

```
$r = MBS( "DynaPDF.GetImportPageBounds"; $PDF; 5; "CropBox" )
```

See also

- [70.183 DynaPDF.GetImportPageCount](#) 2825
- [70.220 DynaPDF.GetPageBBox](#) 2870
- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/Convert to 2 Pages](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)

70.182.1 Blog Entries

- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.182.2 FileMaker Magazin

- Ausgabe 6/2016, Seite 24

Created 18th August 2014, last changed 18th August 2014.

70.183 DynaPDF.GetImportPageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetImportPageCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns page number or error message.

Description

Please note that we have DynaPDF.GetPageCount for the current working PDF and the DynaPDF.GetImportPageCount for the current open import PDF.

Examples

Load a PDF from container and query page count:

```
$r = MBS("DynaPDF.OpenPDFFromContainer"; $PDF; Test::data)
$pageCount = MBS("DynaPDF.GetImportPageCount"; $PDF)
```

Import selected pages from one PDF and write into a new one:

```
# New PDF
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]

# Open existing PDF file (or use DynaPDF.OpenPDFFromContainer for container)
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromFile"; $pdf; $path ) ]

# Query page count
Set Variable [ $pageCount; Value:MBS( "DynaPDF.GetImportPageCount"; $pdf ) ]

# Import the pages you need
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 1) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 2) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 3) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 1) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 2) ]

# Set output to this file path
# MBS( "DynaPDF.OpenOutputFile"; $pdf; "/Users/cs/Desktop/output.pdf" )

# Write PDF
Set Variable [ $r; Value:MBS("DynaPDF.Save"; $pdf) ]
```

```
# release memory
Set Variable [ $r1; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- [70.133 DynaPDF.GetColorSpaceCount](#) 2763
- [70.176 DynaPDF.GetImageCount](#) 2815
- [70.180 DynaPDF.GetImportOrientation](#) 2821
- [70.182 DynaPDF.GetImportPageBounds](#) 2823
- [70.222 DynaPDF.GetPageCount](#) 2873
- [70.269 DynaPDF.ImportPDFPage](#) 2931
- [70.290 DynaPDF.New](#) 2981
- [70.293 DynaPDF.OpenPDFFromContainer](#) 2988
- [70.294 DynaPDF.OpenPDFFromFile](#) 2992
- [70.324 DynaPDF.Save](#) 3062

Example Databases

- [DynaPDF/Apply Letter Paper to PDF](#)
- [DynaPDF/Convert to 2 Pages](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/DynaPDF Test](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/PDF Library](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/Split PDF](#)
- [DynaPDF/Tables](#)

70.183.1 Blog Entries

- [Merge PDF with table of contents](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.183.2 FileMaker Magazin

- Ausgabe 6/2016, Seite 24

Created 18th August 2014, last changed 4th August 2016.

70.184 DynaPDF.GetInDocInfoCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInDocInfoCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns number or error.

Description

Returns the number of available document info entries of the currently opened import file or a negative error code on failure. The document info entries can be enumerated with DynaPDF.GetInDocInfoEx.

See also [GetInDocInfoCount](#) function in DynaPDF manual.

See also

- 70.139 DynaPDF.GetDocInfoCount 2770
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.185 DynaPDF.GetInFieldCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInFieldCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns the number of fields or error.

Description

The number of top level fields may not match the number of fields in the PDF file. For example, interactive forms created by Adobe's Designer contain usually one top level group field that contains all other fields of the document. The return value would be 1 in this case because the children of group fields are not taken into account.

See also [GetInFieldCount](#) function in DynaPDF manual.

See also

- 70.117 DynaPDF.GetAnnotCount 2743
- 70.154 DynaPDF.GetFieldColor 2790
- 70.155 DynaPDF.GetFieldCount 2791
- 70.176 DynaPDF.GetImageCount 2815
- 70.223 DynaPDF.GetPageFieldCount 2875
- 70.237 DynaPDF.GetTemplCount 2892
- 70.290 DynaPDF.New 2981
- 70.368 DynaPDF.SetFieldColor 3127
- 70.373 DynaPDF.SetFieldFont 3136

Created 18th August 2014, last changed 18th August 2014.

70.186 DynaPDF.GetInIsCollection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInIsCollection"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns 0, 1 or error.

Description

The PDF file must be opened with DynaPDF.OpenPDFFromContainer or DynaPDF.OpenPDFFromFile before this function can be called.

See also [GetInIsCollection](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992

Created 18th August 2014, last changed 18th August 2014.

70.187 DynaPDF.GetInIsEncrypted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInIsEncrypted"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns 0, 1 or error.

Description

The PDF file must be opened with DynaPDF.OpenPDFFromContainer or DynaPDF.OpenPDFFromFile before this function can be called.

See also [GetInIsEncrypted](#) function in DynaPDF manual.

See also

- 70.189 DynaPDF.GetInIsTrapped 2833
- 70.267 DynaPDF.ImportEncryptionSettings 2927
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992

Created 18th August 2014, last changed 18th August 2014.

70.188 DynaPDF.GetInIsSigned

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInIsSigned"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns 0, 1 or error.

Description

The PDF file must be opened with DynaPDF.OpenPDFFromContainer or DynaPDF.OpenPDFFromFile before this function can be called.

See also [GetInIsSigned](#) function in DynaPDF manual.

See also

- 70.189 DynaPDF.GetInIsTrapped 2833
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992

Created 18th August 2014, last changed 18th August 2014.

70.189 DynaPDF.GetInIsTrapped

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInIsTrapped"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns 0, 1 or error.

Description

The PDF file must be opened with DynaPDF.OpenPDFFromContainer or DynaPDF.OpenPDFFromFile beforehand. If the key is not set the return value is false.
See also [GetInIsTrapped](#) function in DynaPDF manual.

See also

- 70.187 DynaPDF.GetInIsEncrypted 2831
- 70.188 DynaPDF.GetInIsSigned 2832
- 70.247 DynaPDF.GetTrapped 2903
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992
- 70.431 DynaPDF.SetTrapped 3234

Created 18th August 2014, last changed 18th August 2014.

70.190 DynaPDF.GetInIsXFAForm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInIsXFAForm"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns 0, 1 or error.

Description

DynaPDF does not allow editing of XFA forms. If the form is a hybrid form the XFA part can be deleted and the remaining PDF form fields can be edited as usual.

The PDF file must be opened with DynaPDF.OpenPDFFromContainer or DynaPDF.OpenPDFFromFile before this function can be called.

DynaPDF.GetXFASStream can be used to read the form definition and values.

See also [GetInIsXFAForm](#) function in DynaPDF manual.

See also

- 70.78 DynaPDF.DeleteXFAForm 2675
- 70.261 DynaPDF.GetXFASStream 2918
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992

Example Databases

- [DynaPDF/Show PDF Fields](#)

Created 18th August 2014, last changed 21st April 2018.

70.191 DynaPDF.GetInMetadata

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInMetadata"; PDF; ObjType { ; PageNum })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

ObjType

The object type. Can be Catalog, Font, Image, Page or Template.

"Catalog"

PageNum

Optional

Page number or -1 to access the global XMP stream.

-1

Result Returns text or error.

Description

The function can be used to access the optional metadata streams of pages or the global metadata stream of the current open import file. Metadata streams are in XMP format that is a superset of XML. The PDF file must be opened with DynaPDF.OpenPDFFromFile or DynaPDF.OpenPDFFromContainer beforehand. Although the global XMP stream does usually exist in today's PDF files, metadata streams are optional and maybe not present. The function empty text, if no metadata stream is present.

See also [GetInMetadata](#) function in DynaPDF manual.

Examples

Open PDF and get XMP metadata:

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; DynaPDF XMP::InputPDF) ]
```

```
Set Field [ DynaPDF XMP::XMP; MBS( "DynaPDF.GetInMetadata"; $pdf; "Catalog"; -1 ) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 70.208 DynaPDF.GetMetadata 2853
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992
- 70.311 DynaPDF.Release 3033

- 70.402 DynaPDF.SetMetadata

70.191.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 29th July 2015, last changed 31st July 2015.

70.192 DynaPDF.GetInPrintSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInPrintSettings"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error.

Description

The PDF file must be opened with DynaPDF.OpenPDFFromContainer or DynaPDF.OpenPDFFromFile before the function can be used. The print settings are used to initialize the print dialog in a viewer application.

NumCopies, PickTrayByPDFSize and PrintRangesCount return a number (-1 if undefined). PrintRanges returns a list of values for the ranges. DuplexMode returns values like FlipShortEdge, FlipLongEdge, Simplex or None. PrintScaling returns None or AppDefault.

See also DynaPDF.GetPrintSettings and DynaPDF.SetPrintSettings.

See also [GetInPrintSettings](#) function in DynaPDF manual.

See also

- 70.231 DynaPDF.GetPrintSettings 2886
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992
- 70.417 DynaPDF.SetPrintSettings 3211

70.192.1 Blog Entries

- [Tip of the day: PDF print settings](#)

Created 14th March 2015, last changed 14th March 2015.

70.193 DynaPDF.GetInRepairMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetInRepairMode"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns 0, 1 or error.

Description

When a PDF file was loaded in normal mode and if it contains damages which were not recognized when opening the file, e.g. if it is not possible to load one or more pages of it, then it is possible to load the file explicitly in repair mode to repair the damages. Not all damages can be repaired but DynaPDF contains a very robust and powerful PDF parser that is able to repair many damages in a PDF file.

See also DynaPDF.OpenImportFile.

If the current open import file was already opened in repair mode then the return value is 1. If it was loaded in normal mode then the return value is 0. If no import file is in memory the return value is a negative error code.

See also [GetInRepairMode](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New

2981

Created 18th August 2014, last changed 18th August 2014.

70.194 DynaPDF.GetIsFixedPitch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetIsFixedPitch"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns 0, 1 or error.

Description

You must set a font before this function can be used (see DynaPDF.SetFont for further information).

See also

- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154

Created 18th August 2014, last changed 18th August 2014.

70.195 DynaPDF.GetIsTaggingEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetIsTaggingEnabled"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns 1 if tagging is enabled, 0 if not or error.

Description

If the function is called within an open page then it checks whether tagging is enabled for this page. DynaPDF.EditPage does not fully disable tagging when the structure information of a specific page is damaged. When the function is called outside of an open page then it checks whether tagging for the entire document is enabled. Tagging can be disabled when a page of a PDF file with tagging information was imported while a structure tree was already in memory.

See also [GetIsTaggingEnabled](#) function in DynaPDF manual.

See also

- 70.84 DynaPDF.EditPage 2686
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 18th August 2014.

70.196 DynaPDF.GetJPEGQuality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetJPEGQuality"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns JPEG quality number (0 to 100)

Description

The function returns the current JPEG compression quality which is used when compressing images with the JPEG or JPEG2000 compression filter. The return value can be negative indicating that the pass-through mode is disabled. The absolute value represents the wished image quality in percent if the JPEG compression filter is used.

If the JPEG2000 compression filter is used the value represents a divisor of the uncompressed image size to the wished compressed image size. The absolute value ranges from 0 to 1000. If the value is 0 or 1000 then the loss-less variant of JPEG2000 compression is used (see also Dynapdf.SetJPEGQuality).

See also [GetJPEGQuality](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.395 DynaPDF.SetJPEGQuality 3172

Created 18th August 2014, last changed 18th August 2014.

70.197 DynaPDF.GetJavaScriptCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetJavaScriptCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

See also [GetJavaScriptCount](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New

2981

Created 6th February 2015, last changed 6th February 2015.

70.198 DynaPDF.GetLanguage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetLanguage"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns text or error.

Description

Language tags are defined as normal ANSI string values.
The Language identifiers are described in detail under DynaPDF.SetLanguage.
See also [GetLanguage](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.396 DynaPDF.SetLanguage 3174

Created 28th July 2015, last changed 28th July 2015.

70.199 DynaPDF.GetLastErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetLastErrorMessage"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns last error message as text.

Description

Examples

Opens PDF:

```
$r = MBS( "DynaPDF.OpenPDFFromContainer"; $PDF; $PDFFile )
$error = MBS( "DynaPDF.GetLastErrorMessage"; $PDF )
```

See also

- [70.290 DynaPDF.New](#) 2981
- [70.293 DynaPDF.OpenPDFFromContainer](#) 2988

70.199.1 Blog Entries

- [Introducing DynaPDF to MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 18th August 2014.

70.200 DynaPDF.GetLastTextPosX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetLastTextPosX"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns position.

Description

see also pdfGetLastTextPosX function in dynapdf manual.

See also

- 70.201 DynaPDF.GetLastTextPosY 2846
- 70.290 DynaPDF.New 2981

Created 18th August 2014, last changed 18th August 2014.

70.201 DynaPDF.GetLastTextPosY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetLastTextPosY"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns position.

Description

see also pdfGetLastTextPosY function in dynapdf manual.

See also

- 70.200 DynaPDF.GetLastTextPosX 2845
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/Create Text as PDF A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/Invoice/Invoice](#)

Created 18th August 2014, last changed 18th August 2014.

70.202 DynaPDF.GetLeading

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetLeading"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns leading value.

Description

The leading is the distance between two text lines. The default leading in PDF is the font size. The property is used by the function DynaPDF.AddContinueText and DynaPDF.WriteFText. A value of 0 determines that the font size should be used as leading, this is the default behaviour.

Default value = 0

See also [GetLeading](#) function in DynaPDF manual.

See also

- 70.5 DynaPDF.AddContinueText 2557
- 70.208 DynaPDF.GetMetadata 2853
- 70.213 DynaPDF.GetOpacity 2862
- 70.290 DynaPDF.New 2981
- 70.397 DynaPDF.SetLeading 3176
- 70.503 DynaPDF.WriteFText 3350

Created 18th August 2014, last changed 27th May 2017.

70.203 DynaPDF.GetLineWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetLineWidth"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns line width or error.

Description

The function returns the current line width used for stroked vector graphics and the border of interactive objects.

See also [GetLineWidth](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.230 DynaPDF.GetPageWidth 2884
- 70.239 DynaPDF.GetTemplWidth 2894
- 70.245 DynaPDF.GetTextWidth 2900
- 70.290 DynaPDF.New 2981
- 70.399 DynaPDF.SetLineWidth 3178
- 70.416 DynaPDF.SetPageWidth 3208

Created 18th August 2014, last changed 18th August 2014.

70.204 DynaPDF.GetLinkHighlightMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetLinkHighlightMode"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See also [GetLinkHighlightMode](#) function in DynaPDF manual.

See also

- [70.161 DynaPDF.GetFieldHighlightMode](#) 2798
- [70.290 DynaPDF.New](#) 2981
- [70.337 DynaPDF.SetAnnotHighlightMode](#) 3086
- [70.376 DynaPDF.SetFieldHighlightMode](#) 3141
- [70.400 DynaPDF.SetLinkHighlightMode](#) 3180

70.204.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 18th December 2016, last changed 18th December 2016.

70.205 DynaPDF.GetLogMetafileSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.GetLogMetafileSize"; PDF; Filename)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Filename

The native file path to the EMF file.

"C:\test.wmf"

Result Returns rectangle or error.

Description

Retrieves the logical bounding box of an enhanced or Windows metafile. The parameter FileName must be the file path to the EMF or WMF file. Returns the unscaled logical bounding box of the metafile. This bounding box is required to calculate a user defined cutting area or viewport (see the example below the description of the function).

Two WMF formats are available, the old non-portable WMF format and the newer portable WMF format. Both formats must be converted to EMF with the GDI function SetWinMetaFileBits() before the logical bounding box can be calculated (the conversion is done automatically). However, non-portable WMF files are device-dependent, they contain no size information. To get correct results, the default size must be set with the function DynaPDF.SetWMFDefExtent beforehand. The parameters Width and Height are passed to the member xExt, yExt of the structure METAFILEPICT which is required to convert WMF files to EMF. The default size is 0, 0, that means the GDI calculates the size automatically but mostly incorrect. Because the GDI function SetWinMeatFileBits() is used to convert WMF files to EMF, WMF files are not supported under Linux or UNIX.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [GetLogMetafileSize](#) function in DynaPDF manual.

See also

- 70.206 DynaPDF.GetLogMetafileSizeEx 2851
- 70.290 DynaPDF.New 2981
- 70.440 DynaPDF.SetWMFDefExtent 3245
- 121.2 Path.FileMakerPathToNativePath 6139

Created 18th May 2017, last changed 18th May 2017.

70.206 DynaPDF.GetLogMetafileSizeEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.GetLogMetafileSizeEx"; PDF; Data)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Data

The container value with EMF or WMF file inside.

Result Returns rectangle or error.

Description

See also [GetLogMetafileSizeEx](#) function in DynaPDF manual.

See also

- [70.205 DynaPDF.GetLogMetafileSize](#) 2850
- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/WMF Conversion](#)

Created 18th May 2017, last changed 18th May 2017.

70.207 DynaPDF.GetMetaConvFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.GetMetaConvFlags"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

See also [GetMetaConvFlags](#) function in DynaPDF manual.

See also

- 70.174 DynaPDF.GetGStateFlags 2811
- 70.290 DynaPDF.New 2981
- 70.401 DynaPDF.SetMetaConvFlags 3181

Created 18th May 2017, last changed 18th May 2017.

70.208 DynaPDF.GetMetadata

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetMetadata"; PDF; ObjType { ; Handle })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

ObjType

The object type. Can be Catalog, Font, Image, Page or Template.

"Catalog"

Handle

Optional

Object handle or -1 for the catalog object.

-1

Result Returns text or error.

Description

Reads the optional metadata streams of pages, fonts, images, pages, templates, as well as the global metadata stream that is associated with the Catalog object. Metadata streams are in XMP format that is a superset of XML.

The global metadata stream will be created when this function is called. The returned stream is a preview of the XMP stream that will be stored in the file when DynaPDF.CloseFile or DynaPDF.CloseFileEx is called. Note that the creation and modification date will be updated when the file is closed (except if the stream will be modified or replaced with DynaPDF.SetMetadata).

The original global XMP stream of external PDF files can be accessed with DynaPDF.GetInMetadata.

Metadata streams are optional and maybe not present. The function returns true if no error occurs, also if no metadata stream is present. The caller must also check whether the text returned has a length greater than zero to determine whether stream data was returned.

See also [GetMetadata](#) function in DynaPDF manual.

See also

- [70.191 DynaPDF.GetInMetadata](#) 2835
- [70.202 DynaPDF.GetLeading](#) 2847
- [70.290 DynaPDF.New](#) 2981
- [70.402 DynaPDF.SetMetadata](#) 3183

70.208.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

70.209 DynaPDF.GetOCG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetOCG"; PDF; Handle; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

The OCG handle.

\$OCG

Selector

Which value to return.

"Name"

Result Returns value or error.

Description

returns the properties of the Content Usage dictionary that is associated with an OCG or layer. If the OCG is not included in an application event, then the contents in this dictionary serves as pure information.

If the OCG is included in one or more application events, then these settings control also the visibility state of the OCG. The function DynaPDF.GetOCG returns the events and categories which control the layer visibility.

If UserNamesCount is greater zero, the dictionary contains also user names. The user names can be accessed with DynaPDF.GetOCGUsageUserName.

Properties:

Handle	Handle or array index
Intent	Bitmask, see TOCGIntent. For Intent and visibility state
Name	Layer name
HaveContUsage	If 1, the layer contains a Content Usage dictionary. See DynaPDF.GetOCG-ContUsage
AppEvents	Bitmask, see TOCAppEvent. If non-zero, the layer is included in one or more app events which control the layer state.
Categories	Bitmask, see TOCGUsageCategory. The Usage Categories which control the layer state.

See also [GetOCG](#) function in DynaPDF manual.

Examples

Find layers in PDF:

```

Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
#
# import file
Set Variable [ $r ; Value: MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Layers::Input PDF) ]
Set Variable [ $r ; Value: MBS("DynaPDF.ImportPDFPage"; $pdf; 1) ]
#
# look for layers
Set Variable [ $count ; Value: MBS ( "DynaPDF.GetOCGCount" ; $pdf ) ]
Set Variable [ $index ; Value: 0 ]
Loop
Exit Loop If [ $index $count ]
#
Set Variable [ $Name ; Value: MBS ( "DynaPDF.GetOCG" ; $pdf ; $index; "Name" ) ]
Set Variable [ $Intent ; Value: MBS ( "DynaPDF.GetOCG" ; $pdf ; $index; "Intent" ) ]
Set Variable [ $Visible ; Value: MBS( "Math.BitwiseAND"; $intent; 32 ) = 32 ]
#
New Record/Request
Set Field [ Layers::Name ; $Name ]
Set Field [ Layers::Visible ; $visible ]
Commit Records/Requests [ With dialog: Off ]
#
Set Variable [ $index ; Value: $index + 1 ]
End Loop
#
Set Variable [ $r ; Value: MBS( "DynaPDF.Release"; $pdf ) ]

```

See also

- 70.123 DynaPDF.GetBBox 2751
- 70.210 DynaPDF.GetOCGContUsage 2858
- 70.211 DynaPDF.GetOCGCount 2860
- 70.212 DynaPDF.GetOCGUsageUserName 2861
- 70.269 DynaPDF.ImportPDFPage 2931
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.311 DynaPDF.Release 3033
- 70.405 DynaPDF.SetOCGState 3188
- 108.1 Math.BitwiseAND 5753

70.209.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 18th February 2019, last changed 18th February 2019.

70.210 DynaPDF.GetOCGContUsage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetOCGContUsage"; PDF; Handle; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

The OCG handle.

\$OCG

Selector

Which value to return.

"Language"

Result Returns value or error.

Description

returns the properties of the Content Usage dictionary that is associated with an OCG or layer. If the OCG is not included in an application event, then the contents in this dictionary serves as pure information.

If the OCG is included in one or more application events, then these settings control also the visibility state of the OCG. The function DynaPDF.GetOCG returns the events and categories which control the layer visibility.

If UserNamesCount is greater zero, the dictionary contains also user names. The user names can be accessed with DynaPDF.GetOCGUsageUserName.

Properties:

See also [GetOCGContUsage](#) function in DynaPDF manual.

See also

- [70.209 DynaPDF.GetOCG](#) 2855
- [70.212 DynaPDF.GetOCGUsageUserName](#) 2861
- [70.290 DynaPDF.New](#) 2981
- [70.396 DynaPDF.SetLanguage](#) 3174

70.210.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

ExportState	0 = Off, 1 = On, PDF_MAX_INT = not set
InfoCreator	CreatorInfo ->The application that created the group
InfoSubtype	CreatorInfo ->A name defining the type of content, e.g. Artwork, Technical etc.
Language	A language code as described at DynaPDF.SetLanguage
LangPreferred	0 = Off, 1 = On, PDF_MAX_INT = not set. The preferred state if there is a partial but no exact match of the lang id
PageElement	If the group contains a pagination artefact
PrintState	0 = Off, 1 = On, PDF_MAX_INT = not set
PrintSubtype	The type of content that is controlled by the OCG, e.g. Trapping, Printers-Marks or Watermark.
UserNamesCount	The user names can be accessed with DynaPDF.GetOCGUsageUserName
UserType	The user for whom the OCG is primarily intended
ViewState	0 = Off, 1 = On, PDF_MAX_INT = not set
ZoomMin	Minimum zoom factor at which the OCG should be On. -1 = not set
ZoomMax	Maximum zoom factor at which the OCG should be On. -1 = not set

Created 18th February 2019, last changed 18th February 2019.

70.211 DynaPDF.GetOCGCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetOCGCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns count or error.

Description

See also [GetOCGCount](#) function in DynaPDF manual.

Examples

Query count of layers:

```
Set Variable [ $count ; Value: MBS ( "DynaPDF.GetOCGCount" ; $pdf ) ]
```

See also

- [70.117 DynaPDF.GetAnnotCount](#) 2743
- [70.127 DynaPDF.GetCMapCount](#) 2757
- [70.137 DynaPDF.GetContent](#) 2767
- [70.170 DynaPDF.GetFontCount](#) 2807
- [70.176 DynaPDF.GetImageCount](#) 2815
- [70.209 DynaPDF.GetOCG](#) 2855
- [70.222 DynaPDF.GetPageCount](#) 2873
- [70.237 DynaPDF.GetTemplCount](#) 2892
- [70.290 DynaPDF.New](#) 2981
- [70.405 DynaPDF.SetOCGState](#) 3188

70.211.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 18th February 2019, last changed 18th February 2019.

70.212 DynaPDF.GetOCGUsageUserName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetOCGUsageUserName"; PDF; Handle; Index)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

The OCG handle.

\$OCG

Index

Index of the name.

0

Result Returns text or error.

Description

Returns a user name of a Content Usage dictionary that is associated with an OCG or layer.

See also [GetOCGUsageUserName](#) function in DynaPDF manual.

See also

- [70.209 DynaPDF.GetOCG](#) 2855
- [70.210 DynaPDF.GetOCGContUsage](#) 2858
- [70.290 DynaPDF.New](#) 2981

70.212.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 18th February 2019, last changed 18th February 2019.

70.213 DynaPDF.GetOpacity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetOpacity"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

A value of 1 determines that the annotation is completely opaque. If the value is zero, newly created annotations will be invisible. The opacity flag is not supported by all annotation types.

At time of publication the opacity property is used for annotations only. Later versions of DynaPDF use this property may be for other PDF objects too.

See also [GetOpacity](#) function in DynaPDF manual.

See also

- 70.202 DynaPDF.GetLeading 2847
- 70.290 DynaPDF.New 2981
- 70.406 DynaPDF.SetOpacity 3190

Created 18th August 2014, last changed 18th August 2014.

70.214 DynaPDF.GetOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetOrientation"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error message.

Description

The function returns the orientation of the current open page if an open page was detected or the default orientation for newly created pages if no open page was detected.

The orientation is measured in degrees; it is also always a multiple of 90 or 0.

See also [GetOrientation](#) function in DynaPDF manual.

See also

- 70.121 DynaPDF.GetAnnotation 2748
- 70.165 DynaPDF.GetFieldOrientation 2802
- 70.180 DynaPDF.GetImportOrientation 2821
- 70.219 DynaPDF.GetPageAnnotation 2869
- 70.290 DynaPDF.New 2981
- 70.380 DynaPDF.SetFieldOrientation 3146
- 70.407 DynaPDF.SetOrientation 3191
- 70.408 DynaPDF.SetOrientationEx 3192

Created 18th August 2014, last changed 18th August 2014.

70.215 DynaPDF.GetOutputIntent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetOutputIntent"; PDF; Index; Selector { ; FileName })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

The index of the output indent. From 0 to DynaPDF.GetOutputIntentCount-1.

0

Selector

The value to query. Possible values: Buffer, BufSize, Info, NumComponents, OutputCondition, OutputConditionID or RegistryName.

"Info"

FileName

Optional

Optional for the buffer option to get the ICC profile, this parameter provides the file name to include in container.

"profile.icc"

Result Returns OK or error.

Description

An output intent is an ICC profile that describes the characteristics of the output device. The profile is mostly embedded but certain standards like PDF/X 4p, for example, allow also the usage of non-embedded profiles.

The parameter Index is the array index of the output intent. To determine the number of available intents call DynaPDF.GetOutputIntentCount.

See also [GetOutputIntent](#) function in DynaPDF manual.

See also

- 70.9 DynaPDF.AddOutputIntent 2564
- 70.10 DynaPDF.AddOutputIntentEx 2565
- 70.216 DynaPDF.GetOutputIntentCount 2866
- 70.290 DynaPDF.New 2981

70.215.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 28th July 2015, last changed 28th July 2015.

70.216 DynaPDF.GetOutputIntentCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetOutputIntentCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

See also [GetOutputIntentCount](#) function in DynaPDF manual.

See also

- [70.215 DynaPDF.GetOutputIntent](#) 2864
- [70.290 DynaPDF.New](#) 2981

70.216.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 28th July 2015, last changed 28th July 2015.

70.217 DynaPDF.GetPDFVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPDFVersion"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns PDF Version like "1.3".

Description

See also [GetPDFVersion](#) function in DynaPDF manual.

See also

- 70.142 DynaPDF.GetDynaPDFVersion 2773
- 70.181 DynaPDF.GetImportPDFVersion 2822
- 70.290 DynaPDF.New 2981
- 70.409 DynaPDF.SetPDFVersion 3195

Example Databases

- [DynaPDF/Convert to PDF/A](#)

70.217.1 FileMaker Magazin

- Ausgabe 6/2016, Seite 24

Created 18th August 2014, last changed 18th August 2014.

70.218 DynaPDF.GetPageAnnotCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageAnnotCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number of annotations or error.

Description

The page must be opened with EditPage() before the function can be used. The annotations of the page can be accessed with DynaPDF.GetAnnotation.

Return values:

If the function succeeds the return value is the number of annotations which are used by a page. If the function fails the return value is a negative error code.

See also [GetPageAnnotCount](#) function in DynaPDF manual.

See also

- 70.110 DynaPDF.FlattenAnnotOrField 2729
- 70.121 DynaPDF.GetAnnotation 2748
- 70.117 DynaPDF.GetAnnotCount 2743
- 70.219 DynaPDF.GetPageAnnotation 2869
- 70.222 DynaPDF.GetPageCount 2873
- 70.223 DynaPDF.GetPageFieldCount 2875
- 70.226 DynaPDF.GetPageLabelCount 2880
- 70.290 DynaPDF.New 2981

Created 25th November 2014, last changed 16th January 2020.

70.219 DynaPDF.GetPageAnnotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageAnnotation"; PDF; AnnotationHandle; Selector)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

Selector

Which value to query. Possible values: Type, Deleted, BBox, BorderWidth, BorderColor, BorderStyle, BackColor, Handle, Author, Content, Name, Subject, PageNum, HighlightMode, DestPage, DestPos, DestType, DestFile, Icon, StampName, AnnotFlags, CreateDate, ModDate, Grouped, Open, Parent, PopUp, State, StateModel, EmbeddedFile, Subtype, PageIndex, MarkupAnnot, Opacity, QuadPoints, DashPattern, Intent, LE1, LE2, Vertices, Caption, CaptionOffsetX, CaptionOffsetY, CaptionPos, LeaderLineLen, LeaderLineExtend or LeaderLineOffset.

"Name"

Result Returns value or error.

Description

Please check also dynapdf manual with details on the pdfGetAnnotEx function.

The parameter AnnotationHandle must be the array index of the page in which the annotation is used. To enumerate the annotations of a page execute the function in a loop from 0 to DynaPDF.GetPageAnnotCount - 1.

See also

- 70.67 DynaPDF.DeleteAnnotation 2664
- 70.110 DynaPDF.FlattenAnnotOrField 2729
- 70.121 DynaPDF.GetAnnotation 2748
- 70.214 DynaPDF.GetOrientation 2863
- 70.218 DynaPDF.GetPageAnnotCount 2868
- 70.290 DynaPDF.New 2981

Created 25th November 2014, last changed 25th November 2014.

70.220 DynaPDF.GetPageBBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageBBox"; PDF; PageIndex { ; Box })

(old name: DynaPDF.GetPageBounds)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PageIndex

The page index in range from 1 to DynaPDF.GetPageCount.

1

Box

Optional

Optional, which box to use. Default is Mediabox. You can pass MediaBox, CropBox, ArtBox, BleedBox or TrimBox.

"MediaBox"

Result Returns rectangle as string with four numbers for left, top, right and bottom.

Description

Please note that we have DynaPDF.GetPageBBox for the current working PDF and the DynaPDF.GetImportPageBounds for the current open import PDF.

Examples

Queries crop size of page 5 from current working PDF:

```
$r = MBS( "DynaPDF.GetPageBBox"; $PDF; 5; "CropBox" )
```

See also

- 70.123 DynaPDF.GetBBox 2751
- 70.221 DynaPDF.GetPageCoords 2872
- 70.225 DynaPDF.GetPageLabel 2878
- 70.227 DynaPDF.GetPageLayout 2881
- 70.228 DynaPDF.GetPageMode 2882
- 70.229 DynaPDF.GetPageNum 2883
- 70.230 DynaPDF.GetPageWidth 2884

70.220. <i>DYNAPDF.GETPAGEBBOX</i>	2871
• 70.290 DynaPDF.New	2981
• 70.410 DynaPDF.SetPageBBox	3197
• 70.415 DynaPDF.SetPageMode	3207

Created 18th August 2014, last changed 4th May 2018.

70.221 DynaPDF.GetPageCoords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageCoords"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns current setting on success or error message.

Description

The native coordinate system of the Portable Document Format is bottom-up. However, DynaPDF supports also top-down coordinates to make the usage of the library easier.

See also DynaPDF.SetPageCoords.

See also [GetPageCoords](#) function in DynaPDF manual.

See also

- 70.220 DynaPDF.GetPageBBox 2870
- 70.222 DynaPDF.GetPageCount 2873
- 70.224 DynaPDF.GetPageHeight 2876
- 70.227 DynaPDF.GetPageLayout 2881
- 70.228 DynaPDF.GetPageMode 2882
- 70.290 DynaPDF.New 2981
- 70.320 DynaPDF.RotateCoords 3052
- 70.329 DynaPDF.ScaleCoords 3072
- 70.412 DynaPDF.SetPageFormat 3201
- 70.415 DynaPDF.SetPageMode 3207

Created 18th August 2014, last changed 18th August 2014.

70.222 DynaPDF.GetPageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns page number or error message.

Description

Please note that we have DynaPDF.GetPageCount for the current working PDF and the DynaPDF.GetImportPageCount for the current open import PDF.

See also [GetPageCount](#) function in DynaPDF manual.

Examples

Queries number of pages in current working PDF:

```
$PageCount = MBS( "DynaPDF.GetPageCount"; $PDF )
```

See also

- [70.183 DynaPDF.GetImportPageCount](#) 2825
- [70.227 DynaPDF.GetPageLayout](#) 2881
- [70.230 DynaPDF.GetPageWidth](#) 2884
- [70.276 DynaPDF.InsertImage](#) 2952
- [70.290 DynaPDF.New](#) 2981
- [70.298 DynaPDF.PageStatistics](#) 3008
- [70.315 DynaPDF.RenderPage](#) 3040
- [70.410 DynaPDF.SetPageBBox](#) 3197
- [70.411 DynaPDF.SetPageCoords](#) 3199
- [70.414 DynaPDF.SetPageLayout](#) 3206

Example Databases

- [DynaPDF/Add Page Numbers](#)

- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/List Annotations](#)
- [DynaPDF/List Pages](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/PDF Crop](#)
- [DynaPDF/PDF Library](#)
- [DynaPDF/Personalized PDFs](#)
- [DynaPDF/Watermark pages](#)

70.222.1 Blog Entries

- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.222.2 FileMaker Magazin

- [Ausgabe 2/2019, Seite 27](#)

Created 18th August 2014, last changed 18th August 2014.

70.223 DynaPDF.GetPageFieldCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageFieldCount"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

The page must be opened beforehand with the function DynaPDF.EditPage.

See also [GetPageFieldCount](#) function in DynaPDF manual.

See also

- 70.84 DynaPDF.EditPage 2686
- 70.155 DynaPDF.GetFieldCount 2791
- 70.185 DynaPDF.GetInFieldCount 2829
- 70.218 DynaPDF.GetPageAnnotCount 2868
- 70.222 DynaPDF.GetPageCount 2873
- 70.226 DynaPDF.GetPageLabelCount 2880
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.224 DynaPDF.GetPageHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageHeight"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns page height value.

Description

If no open page can be detected the return value is the default height which will be used for newly created pages.

See also [GetPageHeight](#) function in DynaPDF manual.

See also

- [70.222 DynaPDF.GetPageCount](#) 2873
- [70.227 DynaPDF.GetPageLayout](#) 2881
- [70.238 DynaPDF.GetTemplHeight](#) 2893
- [70.254 DynaPDF.GetUserRights](#) 2910
- [70.308 DynaPDF.ReadImageFormat](#) 3028
- [70.412 DynaPDF.SetPageFormat](#) 3201
- [70.413 DynaPDF.SetPageHeight](#) 3203
- [70.416 DynaPDF.SetPageWidth](#) 3208
- [70.504 DynaPDF.WriteFTextEx](#) 3352
- [70.506 DynaPDF.WriteStyledText](#) 3358

Example Databases

- [DynaPDF/Add Page Numbers](#)
- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Create Text as PDF](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Invoice/Invoice](#)

- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Personalized PDFs](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Report](#)
- [DynaPDF/Watermark pages](#)

70.224.1 FileMaker Magazin

- Ausgabe 3/2019, Seite 37
- Ausgabe 2/2019, Seite 27

Created 18th August 2014, last changed 18th August 2014.

70.225 DynaPDF.GetPageLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageLabel"; PDF; Index; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

Page label handle or array index.

\$index

Selector

What value to query. Can be StartRange, Format, FirstPageNum or Prefix.

"Prefix"

Result Returns value or error.

Description

The parameter Index must be the array index of the page label. The number of available page labels can be queried with the function DynaPDF.GetPageLabelCount.

A page label is used to construct a format string. The start range identifies the first page to which this label applies. If no further page labels follow, the label is applied to all subsequent pages through DynaPDF.GetPageCount. The member FirstPageNum represents the numeric portion of the first page label in the range. Subsequent pages are numbered sequentially from this value.

Page label format can be: DecimalArabic, UppercaseRoman, LowercaseRoman, UppercaseLetters, LowercaseLetters or None.

See also [GetPageLabel](#) function in DynaPDF manual.

See also

- 70.74 DynaPDF.DeletePageLabels 2671
- 70.222 DynaPDF.GetPageCount 2873
- 70.226 DynaPDF.GetPageLabelCount 2880
- 70.227 DynaPDF.GetPageLayout 2881
- 70.228 DynaPDF.GetPageMode 2882
- 70.229 DynaPDF.GetPageNum 2883
- 70.230 DynaPDF.GetPageWidth 2884
- 70.290 DynaPDF.New 2981
- 70.414 DynaPDF.SetPageLayout 3206

70.225. *DYNAPDF.GETPAGELABEL*

2879

- 70.415 DynaPDF.SetPageMode

3207

Created 6th February 2015, last changed 6th February 2015.

70.226 DynaPDF.GetPageLabelCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageLabelCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See also [GetPageLabelCount](#) function in DynaPDF manual.

See also

- 70.218 DynaPDF.GetPageAnnotCount 2868
- 70.222 DynaPDF.GetPageCount 2873
- 70.223 DynaPDF.GetPageFieldCount 2875
- 70.225 DynaPDF.GetPageLabel 2878
- 70.227 DynaPDF.GetPageLayout 2881
- 70.290 DynaPDF.New 2981
- 70.414 DynaPDF.SetPageLayout 3206

Created 6th February 2015, last changed 6th February 2015.

70.227 DynaPDF.GetPageLayout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageLayout"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns the current page layout.

Description

The page layout can be SinglePage, OneColumn, TwoColumnLeft, TwoColumnRight, TwoPageLeft, TwoPageRight or Default.

See also [GetPageLayout](#) function in DynaPDF manual.

See also

- 70.221 DynaPDF.GetPageCoords 2872
- 70.222 DynaPDF.GetPageCount 2873
- 70.224 DynaPDF.GetPageHeight 2876
- 70.226 DynaPDF.GetPageLabelCount 2880
- 70.228 DynaPDF.GetPageMode 2882
- 70.229 DynaPDF.GetPageNum 2883
- 70.290 DynaPDF.New 2981
- 70.412 DynaPDF.SetPageFormat 3201
- 70.413 DynaPDF.SetPageHeight 3203
- 70.414 DynaPDF.SetPageLayout 3206

Created 18th August 2014, last changed 18th August 2014.

70.228 DynaPDF.GetPageMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageMode"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns page mode or error.

Description

The mode can be UseMode, UseOutlines, UseThumbs, Fullscreen, UseOC or UseAttachments.
See also [GetPageMode](#) function in DynaPDF manual.

See also

- 70.221 DynaPDF.GetPageCoords 2872
- 70.225 DynaPDF.GetPageLabel 2878
- 70.227 DynaPDF.GetPageLayout 2881
- 70.229 DynaPDF.GetPageNum 2883
- 70.230 DynaPDF.GetPageWidth 2884
- 70.290 DynaPDF.New 2981
- 70.410 DynaPDF.SetPageBBox 3197
- 70.411 DynaPDF.SetPageCoords 3199
- 70.415 DynaPDF.SetPageMode 3207
- 70.416 DynaPDF.SetPageWidth 3208

Created 18th August 2014, last changed 27th May 2017.

70.229 DynaPDF.GetPageNum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageNum"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

See also [GetPageNum](#) function in DynaPDF manual.

See also

- 70.220 DynaPDF.GetPageBBox 2870
- 70.222 DynaPDF.GetPageCount 2873
- 70.225 DynaPDF.GetPageLabel 2878
- 70.227 DynaPDF.GetPageLayout 2881
- 70.228 DynaPDF.GetPageMode 2882
- 70.230 DynaPDF.GetPageWidth 2884
- 70.290 DynaPDF.New 2981
- 70.410 DynaPDF.SetPageBBox 3197
- 70.415 DynaPDF.SetPageMode 3207

Created 6th February 2015, last changed 6th February 2015.

70.230 DynaPDF.GetPageWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPageWidth"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns page width value.

Description

If no open page can be detected the return value is the default width which will be used for newly created pages.

See also [GetPageWidth](#) function in DynaPDF manual.

See also

- [70.203 DynaPDF.GetLineWidth](#) 2848
- [70.228 DynaPDF.GetPageMode](#) 2882
- [70.245 DynaPDF.GetTextWidth](#) 2900
- [70.290 DynaPDF.New](#) 2981
- [70.320 DynaPDF.RotateCoords](#) 3052
- [70.408 DynaPDF.SetOrientationEx](#) 3192
- [70.412 DynaPDF.SetPageFormat](#) 3201
- [70.413 DynaPDF.SetPageHeight](#) 3203
- [70.415 DynaPDF.SetPageMode](#) 3207
- [70.504 DynaPDF.WriteFTextEx](#) 3352

Example Databases

- [DynaPDF/Apply Letter Paper to PDF](#)
- [DynaPDF/Catalog with tables](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Personalized PDFs](#)

- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Styled Text](#)
- [DynaPDF/Watermark pages](#)
- [DynaPDF/WriteFText](#)
- [Mac and iOS/PDFKit/Pictures to PDF](#)

70.230.1 FileMaker Magazin

- Ausgabe 3/2019, Seite 37
- Ausgabe 2/2019, Seite 27

Created 18th August 2014, last changed 18th August 2014.

70.231 DynaPDF.GetPrintSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetPrintSettings"; PDF; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Selector

Which value to retrieve. Can be NumCopies, PickTrayByPDFSize, PrintRangesCount, PrintScaling, DuplexMode and PrintRanges.

"NumCopies"

Result Returns OK or error.

Description

The print settings are used to initialize the print dialog in a viewer application.

NumCopies, PickTrayByPDFSize and PrintRangesCount return a number (-1 if undefined). PrintRanges returns a list of values for the ranges. DuplexMode returns values like FlipShortEdge, FlipLongEdge, Simplex or None. PrintScaling returns None or AppDefault.

See also DynaPDF.SetPrintSettings and DynaPDF.GetInPrintSettings.

See also [GetPrintSettings](#) function in DynaPDF manual.

See also

- 70.192 DynaPDF.GetInPrintSettings 2837
- 70.290 DynaPDF.New 2981
- 70.417 DynaPDF.SetPrintSettings 3211

70.231.1 Blog Entries

- [Tip of the day: PDF print settings](#)

Created 14th March 2015, last changed 14th March 2015.

70.232 DynaPDF.GetReplaceICCProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetReplaceICCProfile"; PDF; ICCProfileType)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

ICCProfileType

The profile type. Can be Gray, RGB, CMYK or Lab.
"RGB"

Result Returns path text or error.

Description**Examples**

Query RGB profile path:

MBS("DynaPDF.GetReplaceICCProfile"; \$pdf; "RGB")

See also

- 70.233 DynaPDF.GetReplaceICCProfileData 2888
- 70.234 DynaPDF.GetReplaceICCProfilesCounter 2889
- 70.290 DynaPDF.New 2981
- 70.418 DynaPDF.SetReplaceICCProfile 3213
- 70.419 DynaPDF.SetReplaceICCProfileData 3215

Created 8th March 2016, last changed 30th September 2017.

70.233 DynaPDF.GetReplaceICCProfileData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetReplaceICCProfileData"; PDF; ICCProfileType)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

ICCProfileType

The profile type. Can be Gray, RGB, CMYK or Lab.
"RGB"

Result Returns container value or error.

Description

See also

- 70.232 DynaPDF.GetReplaceICCProfile 2887
- 70.234 DynaPDF.GetReplaceICCProfilesCounter 2889
- 70.290 DynaPDF.New 2981
- 70.418 DynaPDF.SetReplaceICCProfile 3213
- 70.419 DynaPDF.SetReplaceICCProfileData 3215

70.233.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr1](#)

Created 30th September 2017, last changed 30th September 2017.

70.234 DynaPDF.GetReplaceICCProfilesCounter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetReplaceICCProfilesCounter"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

The plugin has a callback for ReplaceICCProfile for the CheckConformance function.
This counter is increased for each call to the callback, so you can see how often it was called.

See also

- 70.232 DynaPDF.GetReplaceICCProfile 2887
- 70.233 DynaPDF.GetReplaceICCProfileData 2888
- 70.290 DynaPDF.New 2981
- 70.419 DynaPDF.SetReplaceICCProfileData 3215

Created 8th March 2016, last changed 8th March 2016.

70.235 DynaPDF.GetResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetResolution"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns current resolution value.

Description

The function returns the resolution in DPI (Dots per Inch), in which images are stored by DynaPDF. The value will be ignored if the property SaveNewImageFormat was set to false.

The default value is 150 (DPI).

See also [GetResolution](#) function in DynaPDF manual.

See also

- 70.121 DynaPDF.GetAnnotation 2748
- 70.290 DynaPDF.New 2981
- 70.420 DynaPDF.SetResolution 3217

Created 18th August 2014, last changed 27th May 2017.

70.236 DynaPDF.GetSaveNewImageFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetSaveNewImageFormat"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns current state.

Description

See also DynaPDF.SetSaveNewImageFormat.

See also [GetSaveNewImageFormat](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.421 DynaPDF.SetSaveNewImageFormat 3219

Created 18th August 2014, last changed 18th August 2014.

70.237 DynaPDF.GetTemplCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTemplCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns count or error.

Description

The page must be opened with DynaPDF.EditPage beforehand.
See also [GetTemplCount](#) function in DynaPDF manual.

See also

- 70.77 DynaPDF.DeleteTemplateEx 2674
- 70.84 DynaPDF.EditPage 2686
- 70.85 DynaPDF.EditTemplate 2688
- 70.155 DynaPDF.GetFieldCount 2791
- 70.170 DynaPDF.GetFontCount 2807
- 70.176 DynaPDF.GetImageCount 2815
- 70.185 DynaPDF.GetInFieldCount 2829
- 70.211 DynaPDF.GetOCGCount 2860
- 70.238 DynaPDF.GetTemplHeight 2893
- 70.290 DynaPDF.New 2981

Created 16th May 2015, last changed 16th May 2015.

70.238 DynaPDF.GetTemplHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTemplHeight"; PDF; Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

Template handle.

\$template

Result Returns number or error.

Description

The parameter Handle must be a valid template handle.

See also [GetTemplHeight](#) function in DynaPDF manual.

See also

- [70.173 DynaPDF.GetFontWeight](#) 2810
- [70.146 DynaPDF.GetFTextHeight](#) 2779
- [70.147 DynaPDF.GetFTextHeightEx](#) 2781
- [70.224 DynaPDF.GetPageHeight](#) 2876
- [70.237 DynaPDF.GetTemplCount](#) 2892
- [70.239 DynaPDF.GetTemplWidth](#) 2894
- [70.290 DynaPDF.New](#) 2981
- [70.413 DynaPDF.SetPageHeight](#) 3203

Example Databases

- [DynaPDF/Generate Previews](#)
- [DynaPDF/Shrink PDF pages](#)

70.238.1 Blog Entries

- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

Created 6th February 2015, last changed 6th February 2015.

70.239 DynaPDF.GetTemplWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTemplWidth"; PDF; Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Handle

Template handle.
\$template

Result Returns number or error.

Description

The parameter Handle must be a valid template handle.
See also [GetTemplWidth](#) function in DynaPDF manual.

See also

- [70.203 DynaPDF.GetLineWidth](#) 2848
- [70.230 DynaPDF.GetPageWidth](#) 2884
- [70.237 DynaPDF.GetTemplCount](#) 2892
- [70.238 DynaPDF.GetTemplHeight](#) 2893
- [70.245 DynaPDF.GetTextWidth](#) 2900
- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/Generate Previews](#)
- [DynaPDF/Shrink PDF pages](#)

70.239.1 Blog Entries

- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

Created 6th February 2015, last changed 6th February 2015.

70.240 DynaPDF.GetTextDrawMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTextDrawMode"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns mode or error.

Description

Mode can be Normal, Stroke, FillStroke, Invisible, FillClip, StrokeClip, FillStrokeClip or Clipping.
See also [GetTextDrawMode](#) function in DynaPDF manual.

See also

- [70.290 DynaPDF.New](#) 2981
- [70.424 DynaPDF.SetTextDrawMode](#) 3224

70.240.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr8](#)

Created 22nd January 2016, last changed 22nd January 2016.

70.241 DynaPDF.GetTextFieldDefaultValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTextFieldDefaultValue"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns the text or an error.

Description

See also

- [70.242 DynaPDF.GetTextFieldValue](#) 2897
- [70.290 DynaPDF.New](#) 2981

70.241.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr3](#)

Created 18th August 2014, last changed 18th August 2014.

70.242 DynaPDF.GetTextFieldValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTextFieldValue"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns the text or an error.

Description

See also [GetTextFieldValue](#) function in DynaPDF manual.

See also

- [70.157 DynaPDF.GetFieldExpValue](#) 2793
- [70.241 DynaPDF.GetTextFieldDefaultValue](#) 2896
- [70.290 DynaPDF.New](#) 2981
- [70.425 DynaPDF.SetTextFieldValue](#) 3226
- [70.426 DynaPDF.SetTextFieldValueEx](#) 3228

70.242.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr3](#)

Created 18th August 2014, last changed 18th August 2014.

70.243 DynaPDF.GetTextRise

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTextRise"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns rise value or error.

Description

Text rise specifies the distance, in unscaled text space units, to move the baseline up or down from its default location. Positive values of text rise move the baseline up. Adjustments to the baseline are useful for drawing superscripts or subscripts. The default location of the baseline can be restored by setting the text rise to 0. The figure below illustrates the effect of the text rise. Text rise always applies to the vertical coordinate in text space. See also DynaPDF.SetTextRise.

The text moves around the baseline.

Default value = 0

See also DynaPDF.SetTextRise.

See also [GetTextRise](#) function in DynaPDF manual.

Examples

Queries text rise:

MBS("DynaPDF.GetTextRise"; \$PDF)

See also

- 70.245 DynaPDF.GetTextWidth 2900
- 70.290 DynaPDF.New 2981
- 70.427 DynaPDF.SetTextRect 3229
- 70.428 DynaPDF.SetTextRise 3231

Created 18th August 2014, last changed 18th August 2014.

70.244 DynaPDF.GetTextScaling

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTextScaling"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns value or error.

Description

The scaling value adjusts the width of glyphs by stretching or compressing them in the horizontal direction. Its value is specified as a percentage of the normal width of the glyphs, with 100 being the normal width. See also DynaPDF.SetTextScaling.

Default value = 100

See also DynaPDF.SetTextScaling.

See also [GetTextScaling](#) function in DynaPDF manual.

Examples

Queries text scaling:

MBS("DynaPDF.GetTextScaling"; \$PDF)

See also

- 70.260 DynaPDF.GetWordSpacing 2917
- 70.290 DynaPDF.New 2981
- 70.429 DynaPDF.SetTextScaling 3232

Created 18th August 2014, last changed 18th August 2014.

70.245 DynaPDF.GetTextWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTextWidth"; PDF; Text)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Text

The text to measure.

"Hello World"

Result Returns width or error.

Description

The graphics state parameters character spacing, word spacing, text scaling, and the current font size are all considered. A font must be set before this function can be used.

The function computes the visible width of the string. This is the width excluding the last character spacing. The bounding box of the string is the text width plus the current character spacing. This behavior must be taken into account when writing right aligned text with DynaPDF.WriteFText. Due to certain formatting rules DynaPDF.WriteFText uses the bounding box of a text string to output text.

See also [GetTextWidth](#) function in DynaPDF manual.

See also

- 70.146 DynaPDF.GetFTextHeight 2779
- 70.203 DynaPDF.GetLineWidth 2848
- 70.230 DynaPDF.GetPageWidth 2884
- 70.243 DynaPDF.GetTextRise 2898
- 70.290 DynaPDF.New 2981
- 70.399 DynaPDF.SetLineWidth 3178
- 70.416 DynaPDF.SetPageWidth 3208
- 70.427 DynaPDF.SetTextRect 3229
- 70.428 DynaPDF.SetTextRise 3231
- 70.503 DynaPDF.WriteFText 3350

70.245.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 12nd November 2014, last changed 12nd November 2014.

70.246 DynaPDF.GetTransparentColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTransparentColor"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

See also [GetTransparentColor](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.430 DynaPDF.SetTransparentColor 3233

Created 6th February 2015, last changed 6th February 2015.

70.247 DynaPDF.GetTrapped

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetTrapped"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

The default value is false. However, the real default value is unknown that means the key is not written to the file. The trapped key must be set with SetTrapped if it should be written to the file.

See also [GetTrapped](#) function in DynaPDF manual.

See also

- 70.189 DynaPDF.GetInIsTrapped 2833
- 70.290 DynaPDF.New 2981
- 70.431 DynaPDF.SetTrapped 3234

Created 6th February 2015, last changed 6th February 2015.

70.248 DynaPDF.GetUseExactPwd

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUseExactPwd"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns value or error.

Description

If the property UseExactPwd is 0, an encrypted PDF file can always be decrypted, if either the open or owner password in the file is an empty string. If 1, the open or owner password must be known to open the PDF file (see also DynaPDF.SetUseExactPwd).

Default value = 1

If your application should allow the modification of encrypted PDF files, you may check the access permissions to grant user rights, if the file was opened with the open password instead of the owner password (see also DynaPDF.GetUserRights).

Due to the license agreement of Adobe, all manufacturers of applications which make the treatment of encrypted PDF files possible, must respect the access permissions of a PDF file, if the file was opened with the open password.

Only if the file was opened with the owner password, all rights should be granted. See PDF Reference 1.5 for further information.

The property UseExactPwd should be 1, if the application is a commercial software product.

See also [GetUseExactPwd](#) function in DynaPDF manual.

See also

- 70.254 DynaPDF.GetUserRights 2910
- 70.290 DynaPDF.New 2981
- 70.432 DynaPDF.SetUseExactPwd 3235

Created 6th February 2015, last changed 6th February 2015.

70.249 DynaPDF.GetUseGlobalImpFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUseGlobalImpFiles"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

Specifies whether import files should be loaded permanent into memory, e.g. to enable splitting of large PDF files. An open import file will not be closed when DynaPDF.CloseFile or DynaPDF.FreePDF is called when the property is true. See also DynaPDF.SetUseGlobalImpFiles.

Default value = 0

See also [GetUseGlobalImpFiles](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.433 DynaPDF.SetUseGlobalImpFiles 3236

Created 6th February 2015, last changed 6th February 2015.

70.250 DynaPDF.GetUseStdFonts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUseStdFonts"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

PDF viewer applications support 14 standard fonts, these fonts are not embedded by default, also if the parameter Embed of the function DynaPDF.SetFont is true and if the font file is available.

If a standard font should be embedded it is recommended to disable the internal fonts supported by DynaPDF. See also DynaPDF.SetFont or DynaPDF.SetUseStdFonts.

Default value = 1 (on)

See also DynaPDF.SetUseStdFonts.

See also [GetUseStdFonts](#) function in DynaPDF manual.

Examples

Queries standard fonts usage:

MBS("DynaPDF.GetUseStdFonts"; \$PDF)

See also

- 70.254 DynaPDF.GetUserRights 2910
- 70.251 DynaPDF.GetUseSystemFonts 2907
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.434 DynaPDF.SetUseStdFonts 3237
- 70.435 DynaPDF.SetUseSystemFonts 3239

Created 18th August 2014, last changed 18th August 2014.

70.251 DynaPDF.GetUseSystemFonts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUseSystemFonts"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns value (0 or 1) or error.

Description

The property specifies whether the default font directory of the operating system should be added to the list of font search paths. On Windows this is the % Windows% /Fonts directory plus additional fonts which can be named in the Registry.

On Mac OS X the following font directories will be added to the list of font search paths (in this order):

~/Library/Fonts/

/Library/Fonts/

/System/Library/Fonts/

System fonts are loaded on demand, e.g. when a function tries to load a font. To improve processing speed the internal font cache is hold in memory until the PDF instance will be deleted. Additional font search paths can be added with DynaPDF.AddFontSearchPath.

Because Linux and UNIX operating system support no default font directory the property is ignored.

See also DynaPDF.SetUseSystemFonts.

See also [GetUseSystemFonts](#) function in DynaPDF manual.

Examples

Queries system fonts usage:

MBS("DynaPDF.GetUseSystemFonts"; \$PDF)

See also

- 70.8 DynaPDF.AddFontSearchPath 2563
- 70.250 DynaPDF.GetUseStdFonts 2906
- 70.290 DynaPDF.New 2981
- 70.434 DynaPDF.SetUseStdFonts 3237
- 70.435 DynaPDF.SetUseSystemFonts 3239

Created 18th August 2014, last changed 18th August 2014.

70.252 DynaPDF.GetUseTransparency

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUseTransparency"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns current state (0 or 1) or error.

Description

If 1, the transparent color (see DynaPDF.SetTransparentColor is used to mask an image. The property has no effect for JPEG compressed images.

The default value is 1 (true).

See also [GetUseTransparency](#) function in DynaPDF manual.

See also

- 70.140 DynaPDF.GetDocUsesTransparency 2771
- 70.256 DynaPDF.GetUsesTransparency 2912
- 70.290 DynaPDF.New 2981
- 70.430 DynaPDF.SetTransparentColor 3233
- 70.436 DynaPDF.SetUseTransparency 3241

Created 18th August 2014, last changed 27th May 2017.

70.253 DynaPDF.GetUseVisibleCoords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUseVisibleCoords"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

The crop box crops a page, but the paper format (media box) is left unchanged. To move the coordinates into the visible area, set the property to true. Coordinates can then be used as if no crop box was defined. The bounding boxes are described in detail at DynaPDF.SetBBox.

See also [GetUseVisibleCoords](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.344 DynaPDF.SetBBox 3093
- 70.437 DynaPDF.SetUseVisibleCoords 3242

Created 6th February 2015, last changed 6th February 2015.

70.254 DynaPDF.GetUserRights

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUserRights"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

See also [GetUserRights](#) function in DynaPDF manual.

See also

- [70.224 DynaPDF.GetPageHeight](#) 2876
- [70.248 DynaPDF.GetUseExactPwd](#) 2904
- [70.255 DynaPDF.GetUserUnit](#) 2911
- [70.250 DynaPDF.GetUseStdFonts](#) 2906
- [70.267 DynaPDF.ImportEncryptionSettings](#) 2927
- [70.290 DynaPDF.New](#) 2981
- [70.432 DynaPDF.SetUseExactPwd](#) 3235

70.254.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.5](#)
- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.5pr4](#)

Created 17th October 2019, last changed 17th October 2019.

70.255 DynaPDF.GetUserUnit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUserUnit"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK on success or error message.

Description

A user unit acts like a scaling factor. The page format and all page coordinates are multiplied with this factor in a viewer application. The default size of a PDF unit is 1/72 inch and the default user unit is 1.0. User units can be useful if the page format would be too large to be expressed in standard PDF units. The largest page format in PDF is limited to 14400 units or 200 inches. This limit can be extended with the user unit.

The largest value that is supported is 75.0 which results in a maximum page format of 15,000 x 15,000 inches or 1,800,000 units.

See also [GetUserUnit](#) function in DynaPDF manual.

See also

- [70.122 DynaPDF.GetAscent](#) 2750
- [70.254 DynaPDF.GetUserRights](#) 2910
- [70.290 DynaPDF.New](#) 2981
- [70.438 DynaPDF.SetUserUnit](#) 3243

70.255.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr2](#)

Created 18th August 2014, last changed 18th August 2014.

70.256 DynaPDF.GetUsesTransparency

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetUsesTransparency"; PDF; PageIndex)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PageIndex

The page index in range from 1 to DynaPDF.GetPageCount.

1

Result Returns OK or error.

Description

This is no quick check as DynaPDF.GetDocUsesTransparency applies. The function parses the page or pages to determine whether transparent objects are really used.

To check whether a specific page uses transparency set the parameter PageNum to the wished page number. The first page is denoted by 1. To check the entire PDF file set PageNum to -1.

The return value is a bit mask on success (a positive integer value), or a error message on failure.

The following flags are defined:

0: The page or document uses no transparency. 1: The content stream of a page contains transparent objects. 2: A page defines the blending color space (Group dictionary). 4: A page contains transparent annotations or form fields. The above values can occur in any combination. To check whether a specific flag was set use a binary and operator, e.g. Math.BitwiseAND. e.g. Value 6 means both 2 and 4 flags are set.

See also [GetUsesTransparency](#) function in DynaPDF manual.

See also

- 70.140 DynaPDF.GetDocUsesTransparency 2771
- 70.222 DynaPDF.GetPageCount 2873
- 70.252 DynaPDF.GetUseTransparency 2908
- 70.290 DynaPDF.New 2981
- 70.436 DynaPDF.SetUseTransparency 3241
- 108.1 Math.BitwiseAND 5753

70.256.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr6](#)

70.256. *DYNAPDF.GETUSESTRANSPARENCY*

2913

Created 4th May 2018, last changed 4th May 2018.

70.257 DynaPDF.GetViewerPreferences

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetViewerPreferences"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns list or error.

Description

The plugin returns a list of the values set, e.g. "HideToolBar\$HideMenuBar\$NonFullScrUseNone".
See DynaPDF help for list of options.
See also [GetViewerPreferences](#) function in DynaPDF manual.

See also

- [70.290 DynaPDF.New](#) 2981
- [70.439 DynaPDF.SetViewerPreferences](#) 3244

70.257.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 19th March 2019, last changed 20th March 2019.

70.258 DynaPDF.GetWMFDefExtent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.GetWMFDefExtent"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns both values as list or an error.

Description

See DynaPDF.InsertMetafile for further information.

Default value:

Width = 0

Height = 0

See also [GetWMFDefExtent](#) function in DynaPDF manual.

See also

- 70.278 DynaPDF.InsertMetafile 2959
- 70.290 DynaPDF.New 2981
- 70.440 DynaPDF.SetWMFDefExtent 3245

Created 18th May 2017, last changed 29th May 2017.

70.259 DynaPDF.GetWMFPixelPerInch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.GetWMFPixelPerInch"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

DynaPDF uses a corrected value to get exact proportions. See DynaPDF.InsertMetafile for further information.

Default value = 2400

See also [GetWMFPixelPerInch](#) function in DynaPDF manual.

See also

- 70.278 DynaPDF.InsertMetafile 2959
- 70.290 DynaPDF.New 2981
- 70.441 DynaPDF.SetWMFPixelPerInch 3246

Created 29th May 2017, last changed 29th May 2017.

70.260 DynaPDF.GetWordSpacing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetWordSpacing"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns value or error.

Description

See also DynaPDF.SetWordSpacing.

See also [GetWordSpacing](#) function in DynaPDF manual.

See also

- 70.244 DynaPDF.GetTextScaling 2899
- 70.290 DynaPDF.New 2981
- 70.442 DynaPDF.SetWordSpacing 3247

Created 18th August 2014, last changed 18th August 2014.

70.261 DynaPDF.GetXFASStream

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetXFASStream"; PDF; Index; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Index

The index for the stream. From 0 to DynaPDF.GetXFASStreamCount-1.

0

Selector

Which value to query. BufSize: Size of stream in bytes. Buffer: The stream data as text. Container: The stream data as a container value. Name: The name of the stream.

"Buffer"

Result Returns OK or error.

Description

The parameter Index is the array index. The function DynaPDF.GetXFASStreamCount returns the number of available streams.

An XFA form consist of several XML streams. The stream name must be used to determine which stream was returned.

See also [GetXFASStream](#) function in DynaPDF manual.

See also

- 70.64 DynaPDF.CreateXFASStream 2661
- 70.190 DynaPDF.GetInIsXFAForm 2834
- 70.262 DynaPDF.GetXFASStreamCount 2920
- 70.290 DynaPDF.New 2981
- 70.443 DynaPDF.SetXFASStream 3248

Example Databases

- [DynaPDF/List XFA Fields](#)
- [DynaPDF/List XFA Streams](#)

70.261.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

Created 15th November 2016, last changed 15th November 2016.

70.262 DynaPDF.GetXFASStreamCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.GetXFASStreamCount"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns number or error.

Description

XFA streams are available after a PDF file was imported.
See also [GetXFASStreamCount](#) function in DynaPDF manual.

See also

- [70.261 DynaPDF.GetXFASStream](#) 2918
- [70.290 DynaPDF.New](#) 2981
- [70.443 DynaPDF.SetXFASStream](#) 3248

Example Databases

- [DynaPDF/List XFA Fields](#)
- [DynaPDF/List XFA Streams](#)

70.262.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

Created 15th November 2016, last changed 15th November 2016.

70.263 DynaPDF.HaveOpenDocument

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.HaveOpenDocument"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns 1, 0 or error.

Description

If an error occurred it is not always clear whether the PDF file was already deleted or if it is still in memory. Therefore, this function can be used to determine whether a PDF file is still in memory.

If an open PDF file is in memory the return value is 1. If no open PDF file is in memory the return value is 0.

See also

- [70.290 DynaPDF.New](#) 2981
- [70.291 DynaPDF.OpenOutputFile](#) 2984
- [70.292 DynaPDF.OpenOutputFileEncrypted](#) 2986

70.263.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 12nd February 2017, last changed 12nd February 2017.

70.264 DynaPDF.HaveOpenPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.HaveOpenPage"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns 1, 0 or error.

Description

The function returns true (1) if an open page is in memory. Otherwise the return value is false (0).
See also [HaveOpenPage](#) function in DynaPDF manual.

See also

- [70.290 DynaPDF.New](#)

2981

70.264.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 12nd February 2017, last changed 12nd February 2017.

70.265 DynaPDF.HighlightAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.HighlightAnnot"; PDF; PosX; PosY; Width; Height; HighlightColor; Author; Subject; Comment)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-coordinate of the annotation

100

PosY

Y-coordinate of the annotation

100

Width

Width of the annotation

100

Height

Height of the annotation

100

HighlightColor

Highlight color.

200

Author

The author name. Can be empty.

"Christian Schmitz"

Subject

The subject to use. Can be empty.

Comment

The comment. Can be empty.

Result Returns annotation handle or error.

Description

Highlight annotations are used to mark text on a PDF page.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the bounding rectangle. If the coordinate system is top-down it defines the upper left corner.

The parameter Color specifies the highlight color; it must be defined in RGB color space. The line width of a Strikout or Underline annotation is not adjustable. The line width depends on the size of the annotation

and is automatically calculated.

The active color space must be set to DeviceRGB before creating the annotation. See `DynaPDF.SetColorSpace` for further information.

See also `HighlightAnnot` function in DynaPDF manual.

See also

- 70.290 `DynaPDF.New` 2981
- 70.353 `DynaPDF.SetColorSpace` 3105

Created 28th November 2014, last changed 30th November 2014.

70.266 DynaPDF.HighlightPattern

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.HighlightPattern"; PDF; Text { ; HighlightColor; CaseInsensitive })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Text

The text to search.

"Hello"

HighlightColor

Optional

The highlight color. Default is yellow. Value is the RGB color as integer. Blue*65536+Green*256+Red with each color channel having a range from 0 to 255.

MBS("DynaPDF.RGB"; 0; 0; 255)

CaseInsensitive

Optional

Optional, if 1, the case of the letters is ignored (also umlauts).

1

Result Returns number of locations found.

Description

You need to have an open page. you can use DynaPDF.EditPage to edit an existing one.

You can use DynaPDF.RGB function to calculate RGB color value.

This function uses the parser interface in DynaPDF and needs a Lite license.

Examples

Highlight "Apple" with yellow:

MBS("DynaPDF.HighlightPattern"; \$PDF; "Apple"; MBS("DynaPDF.RGB"; 0; 255; 255); 1)

Same, but with color calculated ourself:

MBS("DynaPDF.HighlightPattern"; \$pdf; "Apple"; 255+255*256; 1)

See also

- 70.84 DynaPDF.EditPage

- [70.273 DynaPDF.Initialize](#) 2941
- [70.290 DynaPDF.New](#) 2981
- [70.307 DynaPDF.RGB](#) 3026

Example Databases

- [DynaPDF/DynaPDF Highlight Text](#)
- [DynaPDF/PDF Library](#)

70.266.1 Blog Entries

- [DynaPDF Screenshot](#)
- [MBS FileMaker Plugin, version 7.4pr1](#)
- [MBS Filemaker Plugin, version 4.0pr5](#)
- [MBS Filemaker Plugin, version 3.5pr10](#)

Created 18th August 2014, last changed 19th March 2019.

70.267 DynaPDF.ImportEncryptionSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ImportEncryptionSettings"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error.

Description

If the PDF file is not encrypted, the function does nothing. To determine whether the open PDF file is encrypted call DynaPDF.GetInIsEncrypted.

The encryption settings should be imported to make sure that the PDF file can be saved with the same settings after it was edited. The user rights should be considered if the file was opened with the open password, also if the password was just an empty string. See DynaPDF.GetUserRights for further information.

If the file was opened with the owner password, then all editing rights should be granted. The PDF file must be closed with DynaPDF.CloseFile or DynaPDF.CloseAndSignFile for example. Don't use DynaPDF.CloseFileEx for example since this function would override the encryption settings. If the file should be saved unencrypted call DynaPDF.ResetEncryptionSettings() before closing the file. If the function succeeds the return value is 1. If the function fails the return value is 0.

See also [ImportEncryptionSettings](#) function in DynaPDF manual.

See also

- 70.187 DynaPDF.GetInIsEncrypted 2831
- 70.254 DynaPDF.GetUserRights 2910
- 70.290 DynaPDF.New 2981
- 70.318 DynaPDF.ResetEncryptionSettings 3049

Created 19th January 2017, last changed 19th January 2017.

70.268 DynaPDF.ImportPDFFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ImportPDFFile"; PDF; DestPage)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DestPage

The first number of the first imported page. Use this to insert pages at some position in new PDF. Default is 1.

1

Result Returns error message or last page number.

Description

The function imports an external PDF file including interactive objects such as annotations, bookmarks, form fields, and so on. DynaPDF supports a large set of flags to enable import of required objects only. Unwanted objects can be removed by the function if necessary.

The parameter DestPage specifies the destination page on which the new pages will be inserted or added if the pages already exist. It is possible to import multiple PDF files on the same or overlapping destination page.

If the function succeeds the return value is the last page number that was touched. For example, if the document in memory contains already 20 pages, and if we import a PDF file with 23 pages, and if the destination page is 21 the return value should be 43 because this is the last page that was invoked during import.

If the function fails the return value is a negative error code.

To open the import PDF, please use DynaPDF.OpenPDFFromFile or DynaPDF.OpenPDFFromContainer. See also [ImportPDFFile](#) function in DynaPDF manual.

Examples

Imports all pages from import PDF and put in current PDF starting at page 5

```
$r = MBS( "DynaPDF.ImportPDFFile"; $PDF; 5 )
```

Load PDF and extract text of page 2:

```
# initialize DynaPDF before running this:
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# load PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer";$pdf; Test::data) ]
```

```
# import all pages
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile";$pdf) ]
# extra text of page 2
Set Field [ Test::PageText; MBS("DynaPDF.ExtractPageText"; $pdf; 2) ]
# Cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

Import and Export PDF:

```
# Start new PDF
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# set import flags
Set Variable [ $r; Value:MBS( "DynaPDF.SetImportFlags"; $pdf; "ImportAll ImportAsPage PrepareFor-
PDFA" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetImportFlags2"; $pdf; "DuplicateCheck" ) ]
# Import PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; MyTable::InputPDF) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]
# Save back
Set Field [ MyTable::OutputPDF; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 70.269 DynaPDF.ImportPDFPage 2931
- 70.298 DynaPDF.PageStatistics 3008
- 70.302 DynaPDF.Print 3017
- 70.305 DynaPDF.Print.SetDevMode 3023
- 70.315 DynaPDF.RenderPage 3040
- 70.313 DynaPDF.RenderPDFFile 3036
- 70.316 DynaPDF.ReplaceImage 3043
- 70.393 DynaPDF.SetImportFlags 3166
- 70.394 DynaPDF.SetImportFlags2 3170
- 70.402 DynaPDF.SetMetadata 3183

Example Databases

- [DynaPDF/Change Separation Colorant](#)
- [DynaPDF/DynaPDF Test](#)
- [DynaPDF/List Images](#)

- [DynaPDF/List Pages](#)
- [DynaPDF/PDF Font Info](#)
- [DynaPDF/Print PDF with options](#)
- [DynaPDF/Show PDF Fields](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD Extract XML](#)

70.268.1 Blog Entries

- [Merge PDF with table of contents](#)
- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [MBS FileMaker Plugin, version 8.3pr5](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Custom function to optimize PDF in FileMaker via DynaPDF](#)
- [Optimize PDF Script](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.268.2 FileMaker Magazin

- [Ausgabe 3/2019, Seite 37](#)
- [Ausgabe 2/2019, Seite 27](#)
- [Ausgabe 2/2019, Seite 26](#)
- [Ausgabe 1/2018, Seite 26](#)
- [Ausgabe 1/2018, Seite 24](#)
- [Ausgabe 6/2017, Seite 26](#)
- [Ausgabe 6/2016, Seite 24](#)

Created 18th August 2014, last changed 27th May 2017.

70.269 DynaPDF.ImportPDFPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ImportPDFPage"; PDF; PageIndex)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PageIndex

The source page number from 1 to DynaPDF.GetImportPageCount.

1

Result Returns OK or error message.

Description

See also pdfImportPDFPage in dynapdf manual.

To open the import PDF, please use DynaPDF.OpenPDFFromFile or DynaPDF.OpenPDFFromContainer.

Requires DynaPDF Pro license.

Use DynaPDF.SetImportFlags including AllPageObjects option to preserve links.

Examples

Import a single page:

```
Set Variable [ $r; Value: MBS( "DynaPDF.SetImportFlags"; $pdf; "ImportAll$ImportAsPage$AllPageObjects" ) ]
```

```
Set Variable [ $r; Value: MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Invoice::PDF Template) ]
```

```
Set Variable [ $r; Value: MBS("DynaPDF.ImportPDFPage"; $pdf; 1) ]
```

Import selected pages from one PDF and write into a new one:

```
# New PDF
```

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
```

```
# Open existing PDF file (or use DynaPDF.OpenPDFFromContainer for container)
```

```
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromFile"; $pdf; $path ) ]
```

```
# Query page count
```

```
Set Variable [ $pageCount; Value:MBS( "DynaPDF.GetImportPageCount"; $pdf ) ]
```

```
# Import the pages you need
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 1) ]
```

```

Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 2) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 3) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 1) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 2) ]

# Set output to this file path
# MBS( "DynaPDF.OpenOutputFile"; $pdf; "/Users/cs/Desktop/output.pdf" )

# Write PDF
Set Variable [ $r; Value:MBS("DynaPDF.Save"; $pdf) ]

# release memory
Set Variable [ $r1; Value:MBS("DynaPDF.Release"; $pdf) ]

```

See also

- 70.209 DynaPDF.GetOCG 2855
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.291 DynaPDF.OpenOutputFile 2984
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.302 DynaPDF.Print 3017
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.393 DynaPDF.SetImportFlags 3166

Example Databases

- [DynaPDF/Apply Letter Paper to PDF](#)
- [DynaPDF/Click Points](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/DynaPDF Highlight Text](#)
- [DynaPDF/DynaPDF Replace Text](#)
- [DynaPDF/Generate Previews](#)
- [DynaPDF/Invoice/Invoice](#)

- [DynaPDF/PDF Differences](#)
- [DynaPDF/PDF Library](#)
- [DynaPDF/Render Page](#)

70.269.1 Blog Entries

- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.269.2 FileMaker Magazin

- [Ausgabe 1/2018, Seite 25](#)

Created 18th August 2014, last changed 21st March 2019.

70.270 DynaPDF.ImportPageAsTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ImportPageAsTemplate"; PDF; PageNumber)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

PageNumber

The page number in the open import PDF.
1

Result Returns template reference number or error.

Description

See also pdfImportPage function in dynapdf manual.

Requires DynaPDF Pro license.

Examples

Import 5th page:

```
MBS( "DynaPDF.ImportPageAsTemplate"; $PDF; 5 )
```

See also

- [70.273 DynaPDF.Initialize](#) 2941
- [70.290 DynaPDF.New](#) 2981
- [70.300 DynaPDF.PlaceTemplate](#) 3013
- [70.301 DynaPDF.PlaceTemplateEx](#) 3015
- [70.321 DynaPDF.RotateTemplate](#) 3055
- [70.481 DynaPDF.Table.SetCellTemplate](#) 3309

Example Databases

- [DynaPDF/Apply Letter Paper to PDF](#)
- [DynaPDF/Convert to 2 Pages](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)

- [DynaPDF/Generate Previews](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/Tables](#)

70.270.1 Blog Entries

- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

Created 18th August 2014, last changed 9th February 2015.

70.271 DynaPDF.InitColorManagement

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.InitColorManagement"; PDF { ; DestSpace; Flags; DefInGray; DefInRGB; DefInCMYK; DeviceProfile; SoftProof })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DestSpace

Optional

Destination color space. Can be DeviceRGB, DeviceCMYK or DeviceGray. Default is DeviceRGB. "DeviceRGB"

Flags

Optional

Flags for color management initialization. Can be Default or a combination of BPCompensation (1), Check-BlackPoint (2) or both (3).

"BPCompensation"

DefInGray

Optional

Path to gray profile. You can pass empty text if you have no gray profile.

"/Users/cs/Desktop/Generic Gray Profile.icc"

DefInRGB

Optional

Path to RGB profile. You can pass empty text if you have no RGB profile.

"/Users/cs/Desktop/Generic RGB Profile.icc"

DefInCMYK

Optional

Path to CMYK profile. You can pass empty text if you have no CMYK profile.

"/Users/cs/Desktop/Generic CMYK Profile.icc"

DeviceProfile

Optional

Path to Device profile, must be compatible with the output color space. Default is sRGB. You can pass empty text if you have no device profile.

SoftProof

Optional

Path to output profile for emulating output device. You can pass empty text if you have no soft proof profile.

Result Returns OK or error.

Description

All color profiles are optional. Default profiles for DeviceGray and DeviceRGB color spaces (sRGB is default) are automatically created if not provided.

The most important color profile is the CMYK profile because it is not possible to create such a profile with build-in functions. If no CMYK profile is set DynaPDF renders CMYK only with color management if the file contains corresponding ICCBased color spaces or an embedded CMYK output intent.

The SoftProof profile specifies an arbitrary output color space that should be simulated.

Although Black Point Compensation (BPC) is not enabled by default, it is recommended to enable it because it improves the rendering quality of CMYK images a lot.

All profile paths must be absolute paths. Otherwise it is maybe not possible to reload a profile if necessary. DynaPDF must be able to reload the profiles if a PDF file contains ICCBased color spaces.

Initializing the color management requires a considerable amount of processing time. It is strongly recommended to use one PDF instance as long as possible so that it must not be initialized again when another PDF file will be rendered.

The color management can be initialized right after the PDF instance was created. If you want to initialize it on demand then make sure that you call the function before `OpenImportFile`. Otherwise it is possible that certain objects will be rendered without color management.

Returns OK on success.

See also `DynaPDF.InitColorManagementEx`.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also [InitColorManagement](#) function in DynaPDF manual.

Examples

Initialize with only a CMYK profile:

```
MBS("DynaPDF.InitColorManagement"; $pdf; "DeviceCMYK"; 3; ""; ""; ""; "/Users/cs/Desktop/PDF_to_JPEG Test/Generic CMYK Profile.icc")
```

Initialize for output to CMYK:

```
MBS("DynaPDF.InitColorManagement"; $pdf; "DeviceCMYK";
3;
"/Users/cs/Desktop/PDF_to_JPEG Test/Generic Gray Profile.icc";
"/Users/cs/Desktop/PDF_to_JPEG Test/Generic RGB Profile.icc";
"/Users/cs/Desktop/PDF_to_JPEG Test/Generic CMYK Profile.icc";
"/Users/cs/Desktop/PDF_to_JPEG Test/Generic CMYK Profile.icc"
)
```

See also

- 70.272 `DynaPDF.InitColorManagementEx` 2939
- 70.290 `DynaPDF.New` 2981
- 121.2 `Path.FileMakerPathToNativePath` 6139

70.271.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 17th August 2015, last changed 21st September 2017.

70.272 DynaPDF.InitColorManagementEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.InitColorManagementEx"; PDF { ; DestSpace; Flags; DefInGray; DefInRGB; DefInCMYK; DeviceProfile; SoftProof })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

DestSpace

Optional

Destination color space. Can be DeviceRGB, DeviceCMYK or DeviceGray. Default is DeviceRGB.

"DeviceRGB"

Flags

Optional

Flags for color management initialization. Can be Default or a combination of BPCompensation (1), Check-BlackPoint (2) or both (3).

"BPCompensation"

DefInGray

Optional

The gray profile as Container. You can pass empty text/value if you have no gray profile.

MyTable::gDefInGray

DefInRGB

Optional

The RGB profile as container. You can pass empty text/value if you have no RGB profile.

MyTable::gDefInRGB

DefInCMYK

Optional

The CMYK profile as container. You can pass empty text/value if you have no CMYK profile.

MyTable::gDefInCMYK

DeviceProfile

Optional

The Device profile as container, must be compatible with the output color space. Default is sRGB. You can pass empty text/value if you have no device profile.

MyTable::gDeviceProfile

SoftProof

Optional

The output profile as container for emulating output device. You can pass empty text/value if you have no soft proof profile.

MyTable::gSoftProof

Result Returns OK or error.

Description

Enables color management the functions `DynaPDF.RenderPage`, `DynaPDF.RenderPDFFile` exactly like `DynaPDF.InitColorManagement` but accepts ICC profile as containers instead of file paths. See `DynaPDF.InitColorManagement` for further information.

Initializing the color management requires a considerable amount of processing time. It is strongly recommended to use one PDF instance as long as possible so that it must not be initialized again when another PDF file will be rendered.

The color management can be initialized right after the PDF instance was created.

See also [InitColorManagementEx](#) function in DynaPDF manual.

See also

- 70.271 `DynaPDF.InitColorManagement` 2936
- 70.290 `DynaPDF.New` 2981
- 70.315 `DynaPDF.RenderPage` 3040
- 70.313 `DynaPDF.RenderPDFFile` 3036

Created 27th January 2016, last changed 27th January 2016.

70.273 DynaPDF.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Initialize"; LibraryPath { ; SerialNumber })

Parameters

LibraryPath

The native file path to the DynaPDF library file. Can be empty for default file name with file in same folder as plugin.

\$path

SerialNumber

Optional

The DynaPDF serial number. If you don't provide a serial number, you run DynaPDF in demo mode.

\$serial

Result

Description

You need to pass the path to the dynapdf library and the plugin loads it.

The DynaPDF dll/dylib files are included with the plugin archive in the examples folder. Please check our example projects on sample scripts to load and initialize DynaPDF.

If you provide a serial number, the plugin will also register DynaPDF. If you need a serial number, please order one from Monkeybread Software.

Starting with version 4.4, you can pass just the filename of library and the plugin finds it in the Extensions folder or in FileMaker's application folder.

Pro license is required for the following functions:

- BeginTransparencyGroup
- ConvertColors
- Create3DAnnot
- CreateSoftMask
- DynaPDF.FlattenForm
- DynaPDF.ImportPageAsTemplate
- DynaPDF.ImportPDFPage
- DynaPDF.Optimize
- DynaPDF.ParseContent

- DynaPDF.Print
- DynaPDF.RenderPage
- DynaPDF.RenderPDFFile and DynaPDF.RenderPDFFileEx
- DynaPDF.SetCMapDir
- DynaPDF.SetExtColorSpace, DynaPDF.SetExtFillColorSpace and DynaPDF.SetExtStrokeColorSpace.
- DynaPDF.SetUseGlobalImpFiles
- RenderAnnotOrField
- DynaPDF.PageStatistics
- DynaPDF.ListImages
- DynaPDF.ExtractImages

Lite is required for:

- AddRenderingIntent and AddRenderingIntentEx
- GetPageText
- Create form fields
- CloseFileEx
- ConvertEMFSpool
- CreateCollection
- CreateExtGState
- DynaPDF.SetAlpha
- DynaPDF.InsertMetafile and DynaPDF.InsertMetafileEx
- DynaPDF.OpenPDFFromFile and DynaPDF.OpenPDFFromContainer
- DynaPDF.SetPDFVersion for PDF/A and PDF/X
- DynaPDF.FindText
- DynaPDF.HighlightPattern

And all functions relying on those functions internally.

For testing you can pass "Lite", "Pro" or "Starter" for the license key. DynaPDF runs in demo mode, but will returners if you use functions which are not covered by the license.

Windows error 193 means that 64-bit FileMaker tried to load 32-bit library or 32-bit FileMaker tried to load 64-bit library. The bit level must match between app and library. For Mac OS X the error message will tell you about wrong architecture.

If you download the library files directly from dynaforms.com website, you can use the libdynapdf.dylib, libdynapdf.so or dynapdf.dll files, too.

For iOS with plugin version 7.3, you can just pass name of the dynapdf.framework or full file path. Please add the dynapdf.framework for the right platform (device vs. simulator) to your iOS SDK application and add it to the frameworks to link to in order to get it added to the app.

Starting version 9.5, the plugin will look into the same folder for the DLL as the plugin resides. And we still look for 32/64 suffixes to DLL name. If no name is provided, we look for dynapdf/dylib/so files.

If you get a crash here on MacOS, please check if crash report says Code Signature Invalid. Then you may need to code sign the dylib yourself to match the code signature of your runtime application. The dylib from MBS is normally code signed already and should work as is.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Initialize with path for demo:

```
MBS( "DynaPDF.Initialize"; $path)
```

Initialize with path and serial for real usage:

```
MBS( "DynaPDF.Initialize"; $path; $serial)
```

Initialize on server with dynapdf.dylib in Server folder on Mac:

```
MBS( "DynaPDF.Initialize"; "/Library/FileMaker Server/dynapdf.dylib"; $serial)
```

Initialize on server with dynapdf.dylib in Server folder on Windows:

```
MBS( "DynaPDF.Initialize"; "C:\Programs\FileMaker Server\dynapdf.dll"; $serial)
```

Initialize when needed:

```
# Initialize DynaPDF
If [ MBS( "DynaPDF.IsInitialized" ) = 1 ]
If [ Get ( SystemPlatform ) = -3 ]
# iOS
```

```

Exit Script [ ]
Else If [ Get ( SystemPlatform ) = -2 ]
# Windows
Set Variable [ $path; Value: "dynapdf.dll" ]
Else
# Mac
Set Variable [ $path; Value: "dynapdf.dylib" ]
End If
Set Variable [ $r; Value: MBS( "DynaPDF.Initialize"; $path; "12345..." ) ]
If [ $r "OK" ]
Show Custom Dialog [ "DynaPDF failed to initialize"; $r ]
End If
End If

```

Initialize with check for server:

```

If [ MBS("IsServer") ]
# locate with absolute path
Set Variable [ $path; Value: "/Library/FileMaker Server/Database Server/Extensions/dynapdf.dylib" ]
Else
# locate with name in extensions folder
Set Variable [ $path; Value: "dynapdf.dylib" ]
End If

```

```

# initialize dynapdf
Set Variable [ $r; Value: MBS( "DynaPDF.Initialize"; $path ) ]

```

Write library to disk from container and initialize:

```

# your license key if you have one
Set Variable [ $SerialNumber; Value:"" ]
# where we store the library file
Set Variable [ $tempFolder; Value:MBS( "Folders.UserTemporary" ) ]
If [ MBS( "IsMacOSX" ) ]
# library for Mac from Container
Set Variable [ $container; Value:DynaPDF::DynaPDFLibMacContainer ]
Set Variable [ $filename; Value:"dynapdf.dylib" ]
Else If [ MBS( "IsWindows" ) ]
# library for Win from Container
Set Variable [ $container; Value:DynaPDF::DynaPDFLibWinContainer ]
Set Variable [ $filename; Value:"dynapdf.dll" ]
Else
Exit Script [ ]
End If
Set Variable [ $filepath; Value:MBS( "Path.AddPathComponent"; $tempFolder; $filename ) ]
# write file
Set Variable [ $r; Value:MBS( "Files.WriteFile"; $container; $filepath ) ]

```

```

If [ $r "OK" ]
Show Custom Dialog [ "Writing file failed"; $r ]
End If
# now initialize
Set Variable [ $r; Value:MBS( "DynaPDF.Initialize"; $filepath; $SerialNumber) ]
If [ $r "OK" ]
Show Custom Dialog [ "DynaPDF initialization failed"; $r ]
End If

```

Register with Startup script for server and client:

Startup Script:

```

# Register for client
Perform Script [ "InitMBS" ]
# Register for server. Will be ignored if no server or no plugin installed on server
Perform Script on Server [ "InitMBS" ]

```

InitMBS script:

```

# Enable debug logging. Shows messages in DebugView/Console.app
Set Variable [ $r; Value:MBS("Trace") ]
# Register if needed for right platform
If [ MBS("IsRegistered") = 0 ]
If [ MBS("IsRuntime") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "Runtime"; 123; 123) ]
Else If [ MBS("IsServer") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "Server"; 123; 123) ]
Else If [ MBS("IsClient") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "5 Seats"; 123; 123) ]
Else
Set Variable [ $r; Value:"Unknown platform: " & MBS("Platform") ]
End If
# Show errors, so developer can fix them
If [ $r "OK" ]
Show Custom Dialog [ "InitMBS failed."; $r ]
End If
End If
# May initialize other stuff
# like dynapdf with library in extensions folder
If [ MBS("DynaPDF.IsInitialized") = 0 ]
Set Variable [ $DynaPDFLicense; Value:"1003637-16022016-3-8-12-685C57F..." ]
If [ MBS("IsWindows") ]
Set Variable [ $r; Value:MBS( "DynaPDF.Initialize"; "dynapdf.dll"; $DynaPDFLicense) ]
Else If [ MBS("IsMacOSX") ]
Set Variable [ $r; Value:MBS( "DynaPDF.Initialize"; "dynapdf.dylib"; $DynaPDFLicense) ]
Else

```

```

Set Variable [ $r; Value:"Unknown platform: " & MBS("Platform") ]
End If
# Show errors, so developer can fix them
If [ $r "OK" ]
Show Custom Dialog [ "InitMBS failed."; $r ]
End If
End If

```

Initialize on server with dynapdf.so in Server folder on FileMaker Cloud (Linux):

```
MBS( "DynaPDF.Initialize"; "/opt/FileMaker/FileMaker Server/dynapdf.so"; $serial)
```

Initialize in iOS:

```

MBS("DynaPDF.Initialize"; "DynaPDF.framework")
# framework or dylib in Frameworks folder inside app, name case sensitive!

```

Write DynaPDF library to same folder as plugin:

```

Goto Layout [ "MBS Update" (MBS Update) ; Animation: None ]
Go to Record/Query/Page [ First ]
Set Variable [ $folder ; Value: MBS( "Plugin.Path" ) ]
Set Variable [ $folder ; Value: MBS( "Path.RemoveLastPathComponent"; $folder ) ]
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $folder; "dynapdf.dylib" ) ]
Set Variable [ $Plat ; Value: MBS("Files.MoveToTrash"; $path) ]
Set Variable [ $Plat ; Value: MBS("Files.WriteFile"; MBS Update::dynaPdfMac; $path) ]

```

Initialize automatically and look in same folder as plugin for the DLL/dylib/so file:

```
MBS("DynaPDF.Initialize"; ""; $license)
```

See also

- 70.499 DynaPDF.Uninitialize 3342
- 81.16 Folders.UserTemporary 4187
- 124.5 IsClient 6265
- 124.14 IsRuntime 6277
- 124.16 IsWindows 6280
- 121.1 Path.AddPathComponent 6135
- 124.17 Platform 6281
- 124.35 Plugin.Path 6302

70.273. <i>DYNAPDF.INITIALIZE</i>	2947
• 124.49 Register	6320
• 124.52 Trace	6326

Example Databases

- [CURL/CURL Download PDF and add preview with DynaPDF](#)
- [DynaPDF/Create PDF with Bezier Curves](#)
- [DynaPDF/DynaPDF Replace Text](#)
- [DynaPDF/Extract Images](#)
- [DynaPDF/List ColorSpaces](#)
- [DynaPDF/Merge PDFs to File](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/System Font Info](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)
- [OCR/OCR with DynaPDF](#)

70.273.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr3](#)
- [MBS FileMaker Plugin, version 9.5pr6](#)
- [DynaPDF for iOS](#)
- [Neues MBS FileMaker Plugin 9.2](#)
- [MBS FileMaker Plugin 9.2 - More than 5800 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [MBS FileMaker Plugin, version 8.5pr6](#)
- [DynaPDF for iOS](#)
- [MBS FileMaker Plugin, version 8.0pr7](#)
- [Properly register MBS FileMaker Plugin](#)

70.273.2 FileMaker Magazin

- [Ausgabe 1/2018, Seite 24](#)
- [Ausgabe 6/2016, Seite 25](#)

Created 18th August 2014, last changed 14th November 2019.

70.274 DynaPDF.InsertBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.InsertBookmark"; PDF; Title; Parent; DestPage { ; Open; AddChildren })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Title

Bookmark title

"Chapter 2"

Parent

Immediate parent bookmark

-1

DestPage

Destination page that should be opened.

5

Open

Optional

Optionally, open or close the node when it contains children. Default 0.

0

AddChildren

Optional

Optionally, add all bookmarks below the new one as children. Default 0.

0

Result Returns new bookmark handle or error.

Description

It sets also the page mode to UseOutlines (see DynaPDF.SetPageMode). If the outline tree should not be shown when opening the document then set the page mode back to UseNone or another value before closing the document.

Parent can be the handle of the parent bookmark after the new bookmark should be inserted or -1. If Parent is set to -1 the bookmark is inserted as the first root node in the outline tree.

If the parameter AddChildren is set to true, the bookmarks below the new one are added as children to the new bookmark. This can be useful when merging PDF files and if the bookmarks from each PDF file should be separated.

Notice: When inserting a bookmark the handles of all bookmarks below the new one are incremented by one.

See also [InsertBookmark](#) function in DynaPDF manual.

See also

<i>70.274. DYNAPDF.INSERTBOOKMARK</i>	2949
• 70.3 DynaPDF.AddBookmark	2553
• 70.30 DynaPDF.ChangeBookmark	2597
• 70.68 DynaPDF.DeleteBookmark	2665
• 70.107 DynaPDF.FindNextBookmark	2725
• 70.124 DynaPDF.GetBookmark	2753
• 70.275 DynaPDF.InsertBookmarkEx	2950
• 70.290 DynaPDF.New	2981
• 70.415 DynaPDF.SetPageMode	3207

Created 18th August 2014, last changed 18th August 2014.

70.275 DynaPDF.InsertBookmarkEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.InsertBookmarkEx"; PDF; Title; Parent; NamedDest { ; Open; AddChildren })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Title

The Bookmark title.

"Chapter 1"

Parent

Immediate parent bookmark. Must be a valid bookmark handle or -1.

-1

NamedDest

Named Destination handle

\$Dest

Open

Optional

Optional, whether to open or close the node when it contains children. Default is 0 to close.

1

AddChildren

Optional

Optionally, add all bookmarks below the new one as children. Default 0.

0

Result Returns new bookmark handle or error.

Description

It sets also the page mode to UseOutlines (see DynaPDF.SetPageMode). If the outline tree should not be shown when opening the document then set the page mode back to UseNone or another value before closing the document.

Parent can be the handle of the parent bookmark after the new bookmark should be inserted or -1. If Parent is set to -1 the bookmark is inserted as the first root node in the outline tree.

If the parameter AddChildren is set to 1, the bookmarks below the new one are added as children to the new bookmark. This can be useful when merging PDF files and if the bookmarks from each PDF file should be separated.

NamedDest must be a valid handle from a named destination, see DynaPDF.CreateNamedDest for further information. If the destination lies in another document then insert the bookmark with DynaPDF.InsertBookmark, create an extended Go To Remote Action with DynaPDF.CreateGoToRActionEx, and add the action finally to the bookmark with DynaPDF.AddActionToObj.

70.275. *DYNAPDF.INSERTBOOKMARKEX* 2951

Notice: When inserting a bookmark the handles of all bookmarks below the new one are incremented by one.

See also [InsertBookmarkEx](#) function in DynaPDF manual.

See also

- 70.1 DynaPDF.AddActionToObj 2549
- 70.3 DynaPDF.AddBookmark 2553
- 70.4 DynaPDF.AddBookmarkEx 2555
- 70.52 DynaPDF.CreateGoToRAction 2634
- 70.53 DynaPDF.CreateGoToRActionEx 2636
- 70.57 DynaPDF.CreateNamedDest 2646
- 70.107 DynaPDF.FindNextBookmark 2725
- 70.274 DynaPDF.InsertBookmark 2948
- 70.290 DynaPDF.New 2981
- 70.415 DynaPDF.SetPageMode 3207

Created 18th August 2014, last changed 18th August 2014.

70.276 DynaPDF.InsertImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.InsertImage"; PDF; Container; PosX; PosY; ScaleWidth; ScaleHeight { ; Index })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Container

The image container value. Pass the container field or a variable with the container content.

\$image

PosX

The X position (from left of page)

0

PosY

The Y position (from bottom of page)

0

ScaleWidth

The scaled width of the image.

\$width

ScaleHeight

The scaled height of the image.

\$height

Index

Optional

The index of the image for multi image files.

1

Result Returns image handle number or error message.

Description

Same as DynaPDF.InsertImageFile, but reading from container. A specific image of a multi-page image can be selected with the parameter Index; the first image is denoted by the index 1. If the image file is not a multi-page image, the parameter Index is ignored. To determine the number of images stored in an image file use the function DynaPDF.GetImageCount. The usage of the function is described in detail at DynaPDF.InsertImageFile.

See also pdfInsertImage in dynapdf manual.

Please use DynaPDF.SetCompressionFilter to define the compression of your images. Use "flate" there for no jpeg compression. Use DynaPDF.SetJPEGQuality to define JPEG compression quality. also use Dy-

naPDF.SetSaveNewImageFormat with parameter 0 to embed JPEGs to PDF without recompression. Also you should turn off transparency by key color using DynaPDF.SetUseTransparency. You can use DynaPDF.SetAlpha to set fill transparency to affect how images gain extra transparency.

Coordinates in PDF are by default in a 72dpi raster with lower left being 0/0 point. You can query page size by DynaPDF.GetPageWidth and DynaPDF.GetPageHeight functions.

Examples

Set a few options and insert image from file:

```
MBS( "DynaPDF.SetCompressionFilter"; $PDF; "flate" )
MBS( "DynaPDF.SetSaveNewImageFormat"; $PDF; 0 )
MBS( "DynaPDF.SetResolution"; $PDF; 300 )
MBS( "DynaPDF.SetUseTransparency"; $PDF; 0 )
MBS( "DynaPDF.InsertImage"; $PDF; MyDatabase::ImageContainer; 72; 72; 300; 200; 1 )
```

Insert and reduce quality to save space:

```
MBS( "DynaPDF.SetJPEGQuality"; $PDF; 75 )
MBS( "DynaPDF.SetCompressionFilter"; $PDF; "jpeg" )
MBS( "DynaPDF.SetSaveNewImageFormat"; $PDF; 1 )
MBS( "DynaPDF.SetResolution"; $PDF; 100 )
MBS( "DynaPDF.SetUseTransparency"; $PDF; 0 )
MBS( "DynaPDF.InsertImage"; $PDF; MyDatabase::ImageContainer; 72; 72; 300; 200; 1 )
```

Loop over all pages and insert an image on each page:

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ Specified: From list ; "InitDynaPDF" ; Parameter: ]
End If
# Start new PDF environment
Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
# Load PDF from container
Set Variable [ $r ; Value: MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Watermark pages::InputPDF) ]
# import a page
Set Variable [ $r ; Value: MBS("DynaPDF.ImportPDFFile"; $pdf) ]
# now edit all pages
Set Variable [ $count ; Value: MBS("DynaPDF.GetPageCount"; $pdf) ]
Set Variable [ $index ; Value: 1 ]
Loop
Set Variable [ $r ; Value: MBS("DynaPDF.EditPage"; $pdf; $index) ]
Set Variable [ $index ; Value: $index + 1 ]
# Options for saving image
Set Variable [ $r ; Value: MBS("DynaPDF.SetSaveNewImageFormat"; $pdf; ,5) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetCompressionFilter"; $pdf; "jpeg") ]
# Insert image
```

```

Set Variable [ $w ; Value: 200 ]
Set Variable [ $h ; Value: 200 ]
Set Variable [ $x ; Value: (MBS("DynaPDF.GetPageWidth"; $pdf) - $w)/2 ]
Set Variable [ $y ; Value: (MBS("DynaPDF.GetPageHeight"; $pdf) - $h)/2 ]
Set Variable [ $r ; Value: MBS("DynaPDF.InsertImage"; $pdf; Watermark pages::WatermarkPicture; $x;
$y; $w; $h) ]
# End page
Set Variable [ $r ; Value: MBS("DynaPDF.EndPage"; $pdf) ]
Exit Loop If [ $count <$index ]
End Loop
# Set title
Set Variable [ $r ; Value: MBS("DynaPDF.SetDocInfo"; $pdf; "Title"; "Test PDF") ]
# Save
Set Variable [ $PDFData ; Value: MBS("DynaPDF.Save"; $pdf; "hello.pdf") ]
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]
# Put in Container
Set Field [ Watermark pages::OutputPDF ; $PDFData ]

```

Place an image centered on the page with border:

```

Set Variable [ $r ; Value: MBS("DynaPDF.AppendPage"; $pdf) ]
# put a background in
Set Variable [ $r ; Value: MBS("DynaPDF.SetFillColor"; $pdf; ,8; ,8; ,8) ]
Set Variable [ $r ; Value: MBS("DynaPDF.Rectangle"; $pdf; 0; 0; MBS( "DynaPDF.GetPageWidth"; $PDF
); MBS( "DynaPDF.GetPageHeight"; $PDF ); "fill") ]
# options for saving image
Set Variable [ $r ; Value: MBS("DynaPDF.SetSaveNewImageFormat"; $pdf; 0) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetResolution"; $pdf; 300) ]
# read size of image
Set Variable [ $r ; Value: MBS("DynaPDF.ReadImageFormat"; $pdf; Merge PDFs::InputImage) ]
Set Variable [ $ImageWidth ; Value: GetAsNumber (LeftValues ( $r ; 1 )) ]
Set Variable [ $ImageHeight ; Value: GetAsNumber (MiddleValues ( $r ; 2; 1 )) ]
# The destination area where to put PDF
Set Variable [ $TargetX ; Value: 50 ]
Set Variable [ $TargetY ; Value: 50 ]
Set Variable [ $TargetWidth ; Value: MBS( "DynaPDF.GetPageWidth"; $PDF ) - 100 ]
Set Variable [ $TargetHeight ; Value: MBS( "DynaPDF.GetPageHeight"; $PDF ) - 100 ]
# calculate scale factor
Set Variable [ $factor ; Value: Min( $TargetHeight / $ImageHeight; $TargetWidth / $ImageWidth) ]
# calculate output size
Set Variable [ $DestWidth ; Value: $ImageWidth * $factor ]
Set Variable [ $DestHeight ; Value: $ImageHeight * $factor ]
# Center in target area
Set Variable [ $DestX ; Value: $TargetX + ($TargetWidth-$DestWidth) / 2 ]
Set Variable [ $DestY ; Value: $TargetY + ($TargetHeight-$DestHeight) / 2 ]
# insert the image
Set Variable [ $r ; Value: MBS("DynaPDF.InsertImage"; $pdf; Merge PDFs::InputImage; $DestX; $DestY;
$DestWidth; $DestHeight) ]

```

70.276. *DYNAPDF.INSERTIMAGE* 2955
close page and move to next record
Set Variable [\$r ; Value: MBS("DynaPDF.EndPage"; \$pdf)]

See also

- 70.286 DynaPDF.ListImages 2974
- 70.324 DynaPDF.Save 3062
- 70.330 DynaPDF.SetAlpha 3074
- 70.354 DynaPDF.SetCompressionFilter 3107
- 70.384 DynaPDF.SetFillColor 3150
- 70.395 DynaPDF.SetJPEGQuality 3172
- 70.420 DynaPDF.SetResolution 3217
- 70.421 DynaPDF.SetSaveNewImageFormat 3219
- 70.436 DynaPDF.SetUseTransparency 3241
- 122.45 PDFKit.Watermark 6230

Example Databases

- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/PSD Conversion](#)
- [DynaPDF/Watermark pages](#)
- [OCR/OCR with DynaPDF](#)

70.276.1 Blog Entries

- [QR Codes for Invoices in Switzerland](#)
- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 18th August 2014, last changed 2nd December 2019.

70.277 DynaPDF.InsertImageFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.InsertImageFile"; PDF; FilePath; PosX; PosY; ScaleWidth; ScaleHeight { ; Index })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

FilePath

The native file path to the image file.

\$path

PosX

The X position (from left of page)

0

PosY

The Y position (from bottom of page)

0

ScaleWidth

The scaled width of the image.

\$width

ScaleHeight

The scaled height of the image.

\$height

Index

Optional

The index of the image for multi image files.

1

Result Returns image handle number or error message.

Description

The parameter Index specifies the image index of a multi- page image. The first image index is denoted by 1. If the image file is not a multi-page image, the parameter Index will be ignored. To determine the number of images stored in an image file call the function DynaPDF.GetImageCount.

See also DynaPDF Manual for pdfInsertImageEx function.

Positions and sizes are in PDF coordinates which normally is 72 dpi.

Please use DynaPDF.SetCompressionFilter to define the compression of your images. Use "flate" there for no jpeg compression. Use DynaPDF.SetJPEGQuality to define JPEG compression quality. also use DynaPDF.SetSaveNewImageFormat with parameter 0 to embed JPEGs to PDF without recompression. Also

you should turn off transparency by key color using `DynaPDF.SetUseTransparency`.
You can use `DynaPDF.SetAlpha` to set fill transparency to affect how images gain extra transparency.

Coordinates in PDF are by default in a 72dpi raster with lower left being 0/0 point. You can query page size by `DynaPDF.GetPageWidth` and `DynaPDF.GetPageHeight` functions.

Examples

Set a few options and insert image from file:

```
MBS( "DynaPDF.SetCompressionFilter"; $PDF; "flate" )
MBS( "DynaPDF.SetSaveNewImageFormat"; $PDF; 0 )
MBS( "DynaPDF.SetResolution"; $PDF; 300 )
MBS( "DynaPDF.SetUseTransparency"; $PDF; 0 )
MBS( "DynaPDF.InsertImageFile"; $PDF; "C:\test.jpg"; 72; 72; 300; 200; 1 )
```

Insert and reduce quality to save space:

```
MBS( "DynaPDF.SetJPEGQuality"; $PDF; 75 )
MBS( "DynaPDF.SetCompressionFilter"; $PDF; "jpeg" )
MBS( "DynaPDF.SetSaveNewImageFormat"; $PDF; 1 )
MBS( "DynaPDF.SetResolution"; $PDF; 100 )
MBS( "DynaPDF.SetUseTransparency"; $PDF; 0 )
MBS( "DynaPDF.InsertImageFile"; $PDF; "C:\test.jpg"; 72; 72; 300; 200; 1 )
```

See also

- 70.14 `DynaPDF.AppendImagePages` 2573
- 70.175 `DynaPDF.GetImage` 2812
- 70.176 `DynaPDF.GetImageCount` 2815
- 70.224 `DynaPDF.GetPageHeight` 2876
- 70.230 `DynaPDF.GetPageWidth` 2884
- 70.276 `DynaPDF.InsertImage` 2952
- 70.330 `DynaPDF.SetAlpha` 3074
- 70.354 `DynaPDF.SetCompressionFilter` 3107
- 70.421 `DynaPDF.SetSaveNewImageFormat` 3219
- 70.436 `DynaPDF.SetUseTransparency` 3241

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)

70.277.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 18th August 2014, last changed 1st February 2015.

70.278 DynaPDF.InsertMetafile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.InsertMetafile"; PDF; Filename; PosX; PosY; Width; Height { ; ViewLeft; ViewTop; ViewRight; ViewBottom })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Filename

The native file path to the EMF file.

"C:\test.wmf"

PosX

X-Coordinate of output rectangle

100

PosY

Y-Coordinate of output rectangle.

100

Width

Width of output rectangle.

Height

Height of output rectangle.

ViewLeft

Optional

The left coordinate of the view rectangle.

ViewTop

Optional

The top coordinate of the view rectangle.

ViewRight

Optional

The right coordinate of the view rectangle.

ViewBottom

Optional

The bottom coordinate of the view rectangle.

Result Returns OK or error.

Description

The function converts an Enhanced Meta File (EMF) or Windows Meta File (WMF) to native PDF vector

graphics.
EMF+ files do not work.

Requires DynaPDF Lite license.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer. See also [InsertMetafile](#) function in DynaPDF manual.

See also

- 70.258 `DynaPDF.GetWMFDefExtent` 2915
- 70.259 `DynaPDF.GetWMFPixelPerInch` 2916
- 70.273 `DynaPDF.Initialize` 2941
- 70.277 `DynaPDF.InsertImageFile` 2956
- 70.279 `DynaPDF.InsertMetafileEx` 2961
- 70.290 `DynaPDF.New` 2981
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 18th May 2017, last changed 27th July 2018.

70.279 DynaPDF.InsertMetafileEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.InsertMetafileEx"; PDF; Data; PosX; PosY; Width; Height { ; ViewLeft; ViewTop; ViewRight; ViewBottom })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Data

The container value with EMF or WMF file inside.

PosX

X-Coordinate of output rectangle
100

PosY

Y-Coordinate of output rectangle.
100

Width

Width of output rectangle.

Height

Height of output rectangle.

ViewLeft

Optional
The left coordinate of the view rectangle.

ViewTop

Optional
The top coordinate of the view rectangle.

ViewRight

Optional
The right coordinate of the view rectangle.

ViewBottom

Optional
The bottom coordinate of the view rectangle.

Result Returns OK or error.

Description

The function converts an Enhanced Meta File (EMF) or Windows Meta File (WMF) to native PDF vector graphics.

The view is optional, see `InsertMetafileExtEx` in DynaPDF help file.
EMF+ files do not work.

Requires DynaPDF Lite license.

See also [InsertMetafileEx](#) function in DynaPDF manual.

See also

- 70.273 `DynaPDF.Initialize` 2941
- 70.278 `DynaPDF.InsertMetafile` 2959
- 70.290 `DynaPDF.New` 2981

Created 18th May 2017, last changed 27th July 2018.

70.280 DynaPDF.IsColorPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.IsColorPage"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error.

Description

If the parameter GrayIsColor is true, gray shades are treated as color. The page which should be checked must be opened with the function DynaPDF.EditPage beforehand.

Complex color spaces such as Lab, Separation, DeviceN, Colored Tiling Patterns, and Shadings are always treated as color. The function does not return when a color is set, the color must be used by an object.

If an object of the page uses a color, the return value is 1. If no object uses a color the return value is 0.

See also [IsColorPage](#) function in DynaPDF manual.

Examples

Check if first page has color:

```
Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
# Load PDF from container
Set Variable [ $r ; Value: MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Start::SourcePDF) ]
Set Variable [ $r ; Value: MBS("DynaPDF.ImportPDFFile"; $pdf) ]
# Query image list
Set Variable [ $r ; Value: MBS("DynaPDF.EditPage"; $pdf; 1) ]
Show Custom Dialog [ MBS( "DynaPDF.IsColorPage"; $PDF ) ]
Set Variable [ $r ; Value: MBS("DynaPDF.EndPage"; $pdf) ]
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 70.44 DynaPDF.ConvertColors 2617
- 70.84 DynaPDF.EditPage 2686
- 70.90 DynaPDF.EndPage 2697
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.281 DynaPDF.IsEmptyPage 2965
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988

- [70.311 DynaPDF.Release](#)

70.280.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr4](#)

Created 6th February 2015, last changed 14th May 2019.

70.281 DynaPDF.IsEmptyPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.IsEmptyPage"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns 1, 0 or error.

Description

The page which should be checked must be opened with the function DynaPDF.EditPage beforehand. The function does not check whether the buffer size of a page is zero to determine whether a page is empty. Instead, the content stream will be parsed until a visible object can be found.

If no visible object can be found the return value is 1. If a visible object can be found the return value is 0. See also [IsEmptyPage](#) function in DynaPDF manual.

See also

- [70.84 DynaPDF.EditPage](#) 2686
- [70.280 DynaPDF.IsColorPage](#) 2963
- [70.290 DynaPDF.New](#) 2981

70.281.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr2](#)

Created 6th February 2015, last changed 5th October 2016.

70.282 DynaPDF.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.IsInitialized")

Result Returns 1 or 0.

Description

If value is 1, everything is okay.

If value is zero, the library is not initialized and you need to call DynaPDF.Initialize function.

On a hosted database this function is better than using a global variable, as the variable can't see if initialization was made on server or client side.

Examples

Initialize when needed:

```
# Initialize DynaPDF
If [ MBS( "DynaPDF.IsInitialized" ) = 1 ]
If [ Get ( SystemPlatform ) = -3 ]
# iOS
Exit Script [ ]
Else If [ Get ( SystemPlatform ) = -2 ]
# Windows
Set Variable [ $path; Value: "dynapdf.dll" ]
Else
# Mac
Set Variable [ $path; Value: "dynapdf.dylib" ]
End If
Set Variable [ $r; Value: MBS( "DynaPDF.Initialize"; $path; "12345..." ) ]
If [ $r = "OK" ]
Show Custom Dialog [ "DynaPDF failed to initialize"; $r ]
End If
End If
```

See also

- 70.88 DynaPDF.EnableEncryption 2693
- 70.273 DynaPDF.Initialize 2941
- 70.276 DynaPDF.InsertImage 2952
- 70.302 DynaPDF.Print 3017
- 70.316 DynaPDF.ReplaceImage 3043
- 70.456 DynaPDF.Table.Create 3270

70.282. <i>DYNAPDF.ISINITIALIZED</i>	2967
• 70.460 DynaPDF.Table.Draw	3276
• 70.499 DynaPDF.Uninitialize	3342
• 124.13 IsRegistered	6274
• 124.49 Register	6320

Example Databases

- [CURL/CURL Download PDF and add preview with DynaPDF](#)
- [DynaPDF/Create Form](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/DynaPDF Highlight Text](#)
- [DynaPDF/Form/Form](#)
- [DynaPDF/List Images](#)
- [DynaPDF/List Pages](#)
- [DynaPDF/Personalized PDFs](#)
- [DynaPDF/Split PDF](#)

70.282.1 Blog Entries

- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Properly register MBS FileMaker Plugin](#)
- [When to initialize plugin libraries](#)
- [MBS Filemaker Plugin, version 4.2pr6](#)

70.282.2 FileMaker Magazin

- [Ausgabe 3/2019, Seite 36](#)
- [Ausgabe 2/2019, Seite 27](#)
- [Ausgabe 2/2019, Seite 25](#)
- [Ausgabe 1/2018, Seite 24](#)

- Ausgabe 1/2018, Seite 23
- Ausgabe 6/2017, Seite 26
- Ausgabe 6/2016, Seite 24
- Ausgabe 6/2016, Seite 23

Created 18th August 2014, last changed 18th December 2015.

70.283 DynaPDF.LineAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.LineAnnot"; PDF; x1; y1; x2; y2; LineWidth; LineEndStyleStart; LineEndStyleEnd; FillColor; StrokeColor; ColorSpace; Author; Subject; Comment)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

x1

X-Coordinate of the start point

100

y1

Y-Coordinate of the start point

100

x2

X-Coordinate of the end point

100

y2

Y-Coordinate of the end point

100

LineWidth

Line width of the circle or ellipse

2

LineEndStyleStart

End line style of the start point. Can be None, Butt, Circle, ClosedArrow, Diamon, OpenArrow, RClosedArrow, ROpenArrow, Slash or Square.

"Circle"

LineEndStyleEnd

End line style of the end point.

"Circle"

FillColor

Fill color for line.

200

StrokeColor

Stroke color for line.

255

ColorSpace

Color space of the fill and stroke colors.
"RGB"

Author

The author name. Can be empty.
"Christian Schmitz"

Subject

The subject to use. Can be empty.

Comment

The comment. Can be empty.

Result Returns annotation handle or error.

Description

The simplest form of a line annotation represents a simple straight line that has an associated PopUp annotation to display the string Content in a floating window.

The initial window state of the associated PopUp annotation is closed by default but the state can be changed with `DynaPDF.SetAnnotOpenState` if necessary.

The coordinates are interpreted in current user space. Any transformation that was applied on the coordinate system will be taken into account.

The parameter `FillColor` is only used if the line end style of the start or end point has an interior that can be filled. The special constant `NO_COLOR` (4294967281) represents a transparent interior.

The stroke color is required and must not be set to `NO_COLOR` (4294967281).

Measure lines

A measure line is an extended line annotation that has additional properties. To create a measure line create first the line annotation and set then the measure line specific properties with `DynaPDF.SetLineAnnotParms`. The parameter `LineWidth` must be in the range 0 through 12 units. Values outside the valid range will be adjusted to the nearest allowed value. A zero line width produces a 1 pixel wide line.

The line end styles can be changed if necessary with `DynaPDF.SetAnnotLineEndStyle`.

See also [LineAnnot](#) function in DynaPDF manual.

See also

- 70.39 `DynaPDF.CircleAnnot` 2609
- 70.106 `DynaPDF.FindLinkAnnot` 2724
- 70.284 `DynaPDF.LineTo` 2971
- 70.290 `DynaPDF.New` 2981
- 70.339 `DynaPDF.SetAnnotLineEndStyle` 3088
- 70.341 `DynaPDF.SetAnnotOpenState` 3090
- 70.446 `DynaPDF.SquareAnnot` 3253
- 70.447 `DynaPDF.StampAnnot` 3255
- 70.495 `DynaPDF.TextAnnot` 3335

70.284 DynaPDF.LineTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.LineTo"; PDF; PosX; PosY)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

The x-coordinate.

\$x

PosY

The y-coordinate.

\$y

Result Returns OK or error.

Description

The start point must be set with another vector graphic function beforehand, such as DynaPDF.MoveTo or other functions which draw an open path segment.

In PDF all vector graphics are defined as paths, a path is invisible as long it was not stroked, filled or both. See also Path construction and Painting.

See also [LineTo](#) function in DynaPDF manual.

Examples

Draw two lines in black:

```
Set Variable [ $r; Value:MBS ( "DynaPDF.SetStrokeColor" ; $pdf ; 0; 0; 0 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.SetLineWidth" ; $pdf ; 1 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 20; 20 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 20; 40 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 30; 30 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 30; 50 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.StrokePath" ; $pdf ) ]
```

Draw triangle path:

```
# blue color
Set Variable [ $r ; Value: MBS("DynaPDF.SetFillColor"; $pdf; 0; 0; 1) ]
# go to start point
Set Variable [ $r ; Value: MBS("DynaPDF.MoveTo"; $pdf; 100; 100) ]
# add more points
Set Variable [ $r ; Value: MBS("DynaPDF.LineTo"; $pdf; 200; 100) ]
Set Variable [ $r ; Value: MBS("DynaPDF.LineTo"; $pdf; 100; 200) ]
```

and fill

```
Set Variable [ $r ; Value: MBS("DynaPDF.ClosePath"; $pdf; "fill") ]
```

See also

- 70.24 DynaPDF.Bezier123 2589
- 70.41 DynaPDF.ClipPath 2612
- 70.43 DynaPDF.ClosePath 2615
- 70.283 DynaPDF.LineAnnot 2969
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981
- 70.384 DynaPDF.SetFillColor 3150
- 70.399 DynaPDF.SetLineWidth 3178
- 70.423 DynaPDF.SetStrokeColor 3222
- 70.448 DynaPDF.StrokePath 3257

70.284.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 7th March 2020.

70.285 DynaPDF.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.List")

Result Returns list or error.

Description

Returns IDs for all DynaPDF objects in memory. If this list is growing, you may have forgotten to call DynaPDF.Release in your scripts.

Normally after all scripts are done, this list should be empty.

See also

- 70.176 DynaPDF.GetImageCount 2815
- 70.273 DynaPDF.Initialize 2941
- 70.302 DynaPDF.Print 3017
- 70.311 DynaPDF.Release 3033

70.285.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr3](#)

Created 12nd February 2018, last changed 12nd February 2018.

70.286 DynaPDF.ListImages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ListImages"; PDF { ; Flags; Page })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Flags

Optional

Optional, various flags for PDF parsing.

0

Page

Optional

The page number to look at. If missing or empty, we process all pages.

123

Result Returns list or error.

Description

This is similar to DynaPDF.ExtractImages, but does not write to disk, but returns information. For the flags, please check the pf flags in dynapdf manual.

The result is a list of values.

First value is the number of images.

Then for each image you get

- Index of image.
- Page Numbers this image is on separated by space.
- Type of image file we would write when extracting: TIFF, JPEG or JPEG2000.
- Size of image in bytes
- Bits per Pixel, e.g. 8
- Number of Components, e.g. 3 for RGB, 4 for CMYK
- Width in Pixel
- Height in Pixel
- 1 for inline graphic, else 0.

- 1 for interpolation enabled, else 0.
- 1 for transparency enabled, else 0.
- Rendering Intent, e.g. AbsoluteColorimetric, Perceptual, RelativeColorimetric, Saturation or None.
- Size of metadata stream (XMP)
- Color Space Type, e.g. DeviceRGB
- ICC Color Profile Type if one exists, else none.
- ICC Color Profile alternate color space.
- Size of ICC Profile data
- Number of input components
- Number of output components
- Number of colors (for palettes)
- Colorants Count
- Colorants names separated by tab.
- Horizontal resolution of JPEG if available.
- Vertical resolution of JPEG if available.
- Display Width
- Display Height

The ICC Profile is often not part of the PDF as most software converts to DeviceCMYK or uses current profile set in PDF. Display width and height is calculated by the plugin. That is the size of points on the page the PDF is drawn. If Display width and pixel width are the same, the image is displayed with 72 dpi.

This function uses the parser interface in DynaPDF and needs a Pro license.

See also

- 70.96 DynaPDF.ExtractImages 2705
- 70.175 DynaPDF.GetImage 2812
- 70.176 DynaPDF.GetImageCount 2815
- 70.273 DynaPDF.Initialize 2941
- 70.276 DynaPDF.InsertImage 2952
- 70.290 DynaPDF.New 2981

Example Databases

- [DynaPDF/List Images](#)

70.286.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr1](#)

Created 19th July 2016, last changed 19th March 2019.

70.287 DynaPDF.LockLayer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.LockLayer"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

The state of a locked layer cannot be changed through the user interface of a PDF viewer. However, the state of locked layers can still be changed via Javascript or DynaPDF.SetOCGState actions. See also [LockLayer](#) function in DynaPDF manual.

See also

- 70.21 DynaPDF.BeginLayer 2586
- 70.89 DynaPDF.EndLayer 2696
- 70.290 DynaPDF.New 2981
- 70.405 DynaPDF.SetOCGState 3188
- 70.498 DynaPDF.UnLockLayer 3341

Created 6th February 2015, last changed 6th February 2015.

70.288 DynaPDF.MovePage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.MovePage"; PDF; SourcePage; DestPage)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

SourcePage

Source page number. From 1 to DynaPDF.PageCount.

1

DestPage

Destination page number. From 1 to DynaPDF.PageCount.

2

Result Returns OK or error.

Description

Moving a page requires some processing time if the document contains many bookmarks or page links because the destinations of all links and bookmarks must be modified so that they refer still to the correct page. For example, if the first page of a document should be moved to the last page, all pages of the document must be reordered. If the document is large and if it contains a few thousands page links as well as bookmarks, this action can take a while.

The parameter Source must be a valid page number in the document. Page numbering starts at one. If the destination page is larger than the source page, the page number can be greater than the number of pages currently available in the document. The document is then filled with empty pages until the destination page becomes valid.

If the destination page is smaller than the source page number, both page numbers must already exist in the document.

It is also possible to exchange two pages with DynaPDF.ExchangePage.

See also [MovePage](#) function in DynaPDF manual.

See also

- 70.84 DynaPDF.EditPage 2686
- 70.90 DynaPDF.EndPage 2697
- 70.94 DynaPDF.ExchangePages 2702
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981

Created 2nd September 2014, last changed 16th December 2019.

70.289 DynaPDF.MoveTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.MoveTo"; PDF; PosX; PosY)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

The x-coordinate.

\$x

PosY

The y-coordinate.

\$y

Result Returns OK or error.

Description

This function must be called before a line or curved path segment can be drawn. See also DynaPDF.LineTo, DynaPDF.Bezier_1_2_3.

See also [MoveTo](#) function in DynaPDF manual.

Examples

Draw two lines in black:

```
Set Variable [ $r; Value:MBS ( "DynaPDF.SetStrokeColor" ; $pdf ; 0; 0; 0 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.SetLineWidth" ; $pdf ; 1 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 20; 20 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 20; 40 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 30; 30 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 30; 50 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.StrokePath" ; $pdf ) ]
```

Draw triangle path:

```
# blue color
Set Variable [ $r ; Value: MBS("DynaPDF.SetFillColor"; $pdf; 0; 0; 1) ]
# go to start point
Set Variable [ $r ; Value: MBS("DynaPDF.MoveTo"; $pdf; 100; 100) ]
# add more points
Set Variable [ $r ; Value: MBS("DynaPDF.LineTo"; $pdf; 200; 100) ]
Set Variable [ $r ; Value: MBS("DynaPDF.LineTo"; $pdf; 100; 200) ]
# and fill
Set Variable [ $r ; Value: MBS("DynaPDF.ClosePath"; $pdf; "fill") ]
```

See also

- 70.25 DynaPDF.Bezier13 2591
- 70.26 DynaPDF.Bezier23 2592
- 70.43 DynaPDF.ClosePath 2615
- 70.284 DynaPDF.LineTo 2971
- 70.288 DynaPDF.MovePage 2978
- 70.290 DynaPDF.New 2981
- 70.384 DynaPDF.SetFillColor 3150
- 70.399 DynaPDF.SetLineWidth 3178
- 70.423 DynaPDF.SetStrokeColor 3222
- 70.448 DynaPDF.StrokePath 3257

Example Databases

- [DynaPDF/Create PDF with Bezier Curves](#)

70.289.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 7th March 2020.

70.290 DynaPDF.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.New" { ; SerialNumber })

Parameters

SerialNumber

Optional

The DynaPDF serial number. If you don't provide a serial number, you run DynaPDF in demo mode. If you passed license key to DynaPDF.Initialize function already, you don't need to pass it here a second time.
\$serial

Result Returns reference number or error.

Description

This instance can only be used on one thread, so please don't use it in two scripts at the same time on a server.

Must be paired with call to DynaPDF.Release to avoid running out of memory.

If this function returns "OK", you have an older plugin version (before 3.5).

For DynaPDF, you need an extra license as this is not included in the MBS FileMaker Plugin license. You can order DynaPDF add-on for our plugin from Monkeybread Software.

Before you can create DynaPDF instances to work with the DynaPDF commands, you need to use DynaPDF.Initialize function to initialize the library.

DynaPDF context reference numbers are starting at 20000 and counting up for each new context.

Please use DynaPDF.AppendPage to create a new page.

Examples

Work with PDF:

```
$pdf = MBS("DynaPDF.New")
# do your work
$r = MBS( "DynaPDF.Release"; $pdf )
```

See also

- 70.302 DynaPDF.Print 3017
- 70.305 DynaPDF.Print.SetDevMode 3023
- 70.315 DynaPDF.RenderPage 3040
- 70.307 DynaPDF.RGB 3026

- 70.408 DynaPDF.SetOrientationEx 3192
- 70.504 DynaPDF.WriteFTextEx 3352
- 70.505 DynaPDF.WriteFTextExRotated 3356
- 70.507 DynaPDF.WriteStyledTextEx 3360
- 70.508 DynaPDF.WriteStyledTextExRotated 3362
- 70.509 DynaPDF.WriteText 3364

Example Databases

- [DynaPDF/Click Points](#)
- [DynaPDF/Create DeviceN ColorSpace](#)
- [DynaPDF/Create PDF with sum form field](#)
- [DynaPDF/Extract Text](#)
- [DynaPDF/List ColorSpaces](#)
- [DynaPDF/List XFA Fields](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Report](#)
- [DynaPDF/Styled Text](#)

70.290.1 Blog Entries

- [Merge PDF with table of contents](#)
- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Custom function to optimize PDF in FileMaker via DynaPDF](#)
- [Optimize PDF Script](#)
- [MBS Filemaker Plugin, version 3.5pr4](#)
- [MBS Filemaker Plugin, version 3.3pr6](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.290.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 36
- Ausgabe 2/2019, Seite 27
- Ausgabe 2/2019, Seite 26
- Ausgabe 2/2019, Seite 25
- Ausgabe 5/2018, Seite 28
- Ausgabe 1/2018, Seite 26
- Ausgabe 1/2018, Seite 24
- Ausgabe 6/2017, Seite 26
- Ausgabe 6/2016, Seite 24
- Ausgabe 6/2016, Seite 23

Created 18th August 2014, last changed 12nd October 2019.

70.291 DynaPDF.OpenOutputFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.OpenOutputFile"; PDF; Path)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Path

The file path to create the PDF. The file name should include pdf file extension.

"C:\Test.pdf"

Result Returns OK on success.

Description

The PDF file must be created in memory if this function should be used. This is the case if you called DynaPDF.New without a file path.

It is strongly recommended to check with DynaPDF.HaveOpenDocument whether a PDF file is still in memory before calling this function.

If you get back an error "Cannot open file!", please check if you didn't open the file before with DynaPDF.OpenPDFFromFile. In that case a call to DynaPDF.CloseImportFile may be needed.

See also [OpenOutputFile](#) function in DynaPDF manual.

Examples

Adds three picture pages:

```
Set Variable [ $r; Value:MBS( "DynaPDF.AppendImagePages"; $pdf; "/Users/cs/Desktop/Auto2.JPG$/Users/cs/Desktop/Auto4.JPG$/Users/cs/Desktop/Auto1.JPG" ) ]
```

Import selected pages from one PDF and write into a new one:

```
# New PDF
```

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
```

```
# Open existing PDF file (or use DynaPDF.OpenPDFFromContainer for container)
```

```
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromFile"; $pdf; $path ) ]
```

```
# Query page count
```

```
Set Variable [ $pageCount; Value:MBS( "DynaPDF.GetImportPageCount"; $pdf ) ]
```

```
# Import the pages you need
```

```

Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 1) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 2) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 3) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 1) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 2) ]

```

```

# Set output to this file path
# MBS( "DynaPDF.OpenOutputFile"; $pdf; "/Users/cs/Desktop/output.pdf" )

```

```

# Write PDF
Set Variable [ $r; Value:MBS("DynaPDF.Save"; $pdf) ]

```

```

# release memory
Set Variable [ $r1; Value:MBS("DynaPDF.Release"; $pdf) ]

```

See also

- [70.13 DynaPDF.AppendImagePage](#) 2571
- [70.14 DynaPDF.AppendImagePages](#) 2573
- [70.183 DynaPDF.GetImportPageCount](#) 2825
- [70.263 DynaPDF.HaveOpenDocument](#) 2921
- [70.269 DynaPDF.ImportPDFPage](#) 2931
- [70.290 DynaPDF.New](#) 2981
- [70.293 DynaPDF.OpenPDFFromContainer](#) 2988
- [70.294 DynaPDF.OpenPDFFromFile](#) 2992
- [70.311 DynaPDF.Release](#) 3033
- [70.324 DynaPDF.Save](#) 3062

Example Databases

- [DynaPDF/Form/Form](#)
- [DynaPDF/Merge PDFs to File](#)
- [DynaPDF/Merge PDFs](#)

70.291.1 Blog Entries

- [Optimize PDF Script](#)

Created 18th August 2014, last changed 9th January 2020.

70.292 DynaPDF.OpenOutputFileEncrypted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.OpenOutputFileEncrypted"; PDF; Path; OpenPwd; OwnerPwd; Encryption { ; RestrictFlags })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Path

The file path to create the PDF. The file name should include pdf file extension.

"C:\Test.pdf"

OpenPwd

Open password.

""

OwnerPwd

Owner password.

"Hello"

Encryption

Which encryption to use. Can be 40bit, 128bit, 128bitEx, AES128, AES256 or AESRev6.

"AES256"

RestrictFlags

Optional

What restrictions to apply. See above.

4+8

Result Returns OK or error.

Description

The PDF file must be created in memory if this function should be used. This is the case if you called DynaPDF.New without a file path.

It is strongly recommended to check with DynaPDF.HaveOpenDocument whether a PDF file is still in memory before calling this function.

See also [OpenOutputFileEncrypted](#) function in DynaPDF manual.

See also

- 70.263 DynaPDF.HaveOpenDocument 2921
- 70.290 DynaPDF.New 2981
- 70.324 DynaPDF.Save 3062

70.292.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr1](#)

Created 16th July 2016, last changed 9th April 2017.

70.293 DynaPDF.OpenPDFFromContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.OpenPDFFromContainer"; PDF; containerValue { ; PasswordType; Password })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

containerValue

The container value to use. Should contain a PDF file.

\$PDF

PasswordType

Optional

The password type and flags. Flag kann be 1 for owner password and 0 for open password. You can combine this with 2 to force repair.

0

Password

Optional

The password to decrypt the file.

\$password

Result Returns number or error message.

Description

Requires DynaPDF Lite license.

On success returns a number 0.

Examples

Opens PDF:

```
$r = MBS( "DynaPDF.OpenPDFFromContainer"; $PDF; $PDFFile )
```

```
$error = MBS( "DynaPDF.GetLastErrorMessage"; $PDF )
```

Load PDF and extract text of page 2:

```
# initialize DynaPDF before running this:
```

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
```

```
# load PDF from container
```

```
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer";$pdf; Test::data) ]
```

```
# import all pages
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile";$pdf) ]
```

```
# extra text of page 2
```

```
Set Field [ Test::PageText; MBS("DynaPDF.ExtractPageText"; $pdf; 2) ]
```



```
# Cleanup
```

```
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

Import a single page:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetImportFlags"; $pdf; "ImportAll ImportAsPage") ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Invoice::PDF Template) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 1) ]
```

Import selected pages from one PDF and write into a new one:

```
# New PDF
```

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
```

```
# Open existing PDF file (or use DynaPDF.OpenPDFFromContainer for container)
```

```
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromFile"; $pdf; $path ) ]
```

```
# Query page count
```

```
Set Variable [ $pageCount; Value:MBS( "DynaPDF.GetImportPageCount"; $pdf ) ]
```

```
# Import the pages you need
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 1) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 2) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 3) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 1) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 2) ]
```

```
# Set output to this file path
```

```
# MBS( "DynaPDF.OpenOutputFile"; $pdf; "/Users/cs/Desktop/output.pdf" )
```

```
# Write PDF
```

```
Set Variable [ $r; Value:MBS("DynaPDF.Save"; $pdf) ]
```

```
# release memory
```

```
Set Variable [ $r1; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 70.302 DynaPDF.Print 3017
- 70.311 DynaPDF.Release 3033
- 70.315 DynaPDF.RenderPage 3040
- 70.316 DynaPDF.ReplaceImage 3043
- 70.321 DynaPDF.RotateTemplate 3055
- 70.394 DynaPDF.SetImportFlags2 3170

- 70.402 DynaPDF.SetMetadata 3183
- 70.408 DynaPDF.SetOrientationEx 3192
- 70.501 DynaPDF.WebLink 3345
- 70.504 DynaPDF.WriteFTextEx 3352

Example Databases

- [DynaPDF/Convert to PDF/A](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Extract Images](#)
- [DynaPDF/Extract Text](#)
- [DynaPDF/List XFA Fields](#)
- [DynaPDF/PDF Crop](#)
- [DynaPDF/PDF Differences](#)
- [DynaPDF/PDF Library](#)
- [DynaPDF/Print PDF](#)
- [DynaPDF/Show PDF Fields](#)

70.293.1 Blog Entries

- [Merge PDF with table of contents](#)
- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Custom function to optimize PDF in FileMaker via DynaPDF](#)
- [Optimize PDF Script](#)
- [MBS Filemaker Plugin, version 4.1pr1](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.293.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 37
- Ausgabe 2/2019, Seite 27
- Ausgabe 2/2019, Seite 25
- Ausgabe 1/2018, Seite 26
- Ausgabe 1/2018, Seite 25
- Ausgabe 1/2018, Seite 24
- Ausgabe 6/2017, Seite 26
- Ausgabe 6/2016, Seite 24

Created 18th August 2014, last changed 12nd September 2016.

70.294 DynaPDF.OpenPDFFromFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.OpenPDFFromFile"; PDF; Path { ; PasswordType; Password })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Path

The path to use. Should contain a PDF file.

\$path

PasswordType

Optional

The password type and flags. Flag kann be 1 for owner password and 0 for open password. You can combine this with 2 to force repair.

0

Password

Optional

The password to decrypt the file.

\$password

Result Returns 0, file handle or error message.

Description

Use Path.FilemakerPathToNativePath to convert a FileMaker path to a native path if required.

Requires DynaPDF Lite license.

If the function succeeds the return value is zero or the file handle if the flag UseProxy is set (a value greater or equal zero). If the function fails the return value is an error message.

Examples

Import selected pages from one PDF and write into a new one:

```
# New PDF
```

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
```

```
# Open existing PDF file (or use DynaPDF.OpenPDFFromContainer for container)
```

```
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromFile"; $pdf; $path ) ]
```

```
# Query page count
```

```
Set Variable [ $pageCount; Value:MBS( "DynaPDF.GetImportPageCount"; $pdf ) ]
```

```
# Import the pages you need
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 1) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 2) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; 3) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 1) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFPage"; $pdf; $pagecount - 2) ]
```

```
# Set output to this file path
```

```
# MBS( "DynaPDF.OpenOutputFile"; $pdf; "/Users/cs/Desktop/output.pdf" )
```

```
# Write PDF
```

```
Set Variable [ $r; Value:MBS("DynaPDF.Save"; $pdf) ]
```

```
# release memory
```

```
Set Variable [ $r1; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 70.192 DynaPDF.GetInPrintSettings 2837
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.291 DynaPDF.OpenOutputFile 2984
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.433 DynaPDF.SetUseGlobalImpFiles 3236
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/Form/Form](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Tables](#)

70.294.1 Blog Entries

- [Merge PDF with table of contents](#)
- [Optimize PDF Script](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.294.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 25

Created 18th August 2014, last changed 12nd September 2016.

70.295 DynaPDF.Optimize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Optimize"; PDF { ; Flags; Min1BitRes; MinGrayRes; MinColorRes; Res1BitImages; ResGrayImages; ResColorImages; Filter1Bit; FilterGray; FilterColor; JPEGQuality; JP2KQuality; MinLineWidth })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Flags

Optional

The flags to use. Can be a number with values from dynapdf documentation, see table on this page.

"ConvertAllColors,ScaleImages"

Min1BitRes

Optional

Minimum resolution before scaling for one bit images. Default is 100. Can be zero to disable.

200

MinGrayRes

Optional

Minimum resolution before scaling for gray images. Default is 100. Can be zero to disable.

200

MinColorRes

Optional

Minimum resolution before scaling for color images. Default is 100. Can be zero to disable.

200

Res1BitImages

Optional

Resolution for 1 bit black & white images. Default is 150.

150

ResGrayImages

Optional

Resolution for gray images. Default is 150.

150

ResColorImages

Optional

Resolution for images with more than one color channel. Default is 150.

150

Filter1Bit

Optional

Filter for black & white images. Can be Flate, JPEG, CCITT3, CCITT4, LZW, FlateBW or JP2K. Default is JPEG.

"JPEG"

FilterGray

Optional

Filter for gray images. Can be Flate, JPEG, CCITT3, CCITT4, LZW, FlateBW or JP2K. Default is JPEG.

"JPEG"

FilterColor

Optional

Filter for multi-channel images. Can be Flate, JPEG, CCITT3, CCITT4, LZW, FlateBW or JP2K. Default is JPEG.

"JPEG"

JPEGQuality

Optional

JPEG quality. Default is 80.

80

JP2KQuality

Optional

JPEG 2000 quality Default is 80.

80

MinLineWidth

Optional

Minimum line width for lines. Zero means no hair line removal.

0

Result Returns OK or error.

Description

This repairs also a lot of errors in the PDF.

// If set, ignore line width operators with a value of zero (zero means one device unit).

// If set, change the line width of real hairlines only (a hairline is a one pixel width line ->LineWidth == 0).

// This flag is mainly a debug flag to compare the compression ratio with other JBIG2 implementations.

Optimizing can fix bug in FileMaker 14 with empty portals resulting in broken PDF files.

Added optimization parameters for version 4 of DynaPDF.

Requires a Pro license of DynaPDF.

Name	Value	Description
Default	0	Just rebuild the content streams.
InMemory	1	Optimize the file fully in memory. Only useful for small PDF files.
ConvertAllColors	2	If set, Separation, DeviceN, and NChannel color spaces will be converted to the device space.
IgnoreICCBased	4	If set, ICCBased color spaces will be left unchanged.
ScaleImages	8	Scale images as specified in the TOptimizeParams structure.
SkipMaskedImages	16	Meaningful only if ofScaleImages is set. If set, don't scale images with a color mask.
NewLinkNames	32	If set, rename all object links to short names like F1, F2 etc.
DeleteInvPaths	64	Delete invisible paths. An invisible path is a path that was finished with the no-op operator "n".
FlattenLayers	128	Flatten layers if any.
DeletePrivateData	256	Delete private data objects from pages, templates, and images.
DeleteThumbnails	512	Thumbnails can be deleted since PDF viewers can create thumbnails easily on demand.
DeleteAlternateImages	1024	If set, alternate images will be deleted.
NoImageSizeCheck	2048	Meaningful only if ofScaleImages is set. If set, do not check whether the scaled image is smaller as the original image.
IgnoreZeroLineWidth	4096	Meaningful only if the parameter MinLineWidth of the TOptimizeParams structure is greater zero.
AdjZeroLineWidthOnly	8192	Meaningful only if the parameter MinLineWidth of the TOptimizeParams structure is greater zero.

See also [Optimize](#) function in DynaPDF manual.

Examples

Optimize by scaling images:

```
MBS( "DynaPDF.Optimize"; $pdf; "ScaleImages,IgnoreICCBased" )
```

Optimize with defaults:

```
MBS( "DynaPDF.Optimize"; $pdf)
```

Merge PDFs and optimize:

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
End If
# Clear current PDF document
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# For writing to file instead of container, pass path here:
// Set Variable [ $r; Value:MBS("DynaPDF.OpenOutputFile"; $pdf; "/Users/cs/Desktop/test.pdf") ]
# Load PDF from container
```

CompressWithJBIG2	16384	If set, 1 bit images are compressed with JBIG2 if not already compressed with this filter.
NoFilterCheck	32768	Meaningful only, if the flag ofCompressWithJBIG2 is set. If set, re-compress all 1 bit images, also if already compressed with JBIG2.
ConvertGrayTo1Bit	65536	Useful for scanned faxes since many scanners create gray images for black & white input. Special color spaces like Separation, DeviceN, and NChannel are ignored unless the flag ConvertAllColors is set too.
ConvertToGray	131072	If set, images, text, and vector graphics are converted to DeviceGray.
ConvertToRGB	262144	If set, images, text, and vector graphics are converted to DeviceRGB.
ConvertToCMYK	524288	If set, images, text, and vector graphics are converted to DeviceCMYK.
ReplaceJP2KWithJPEG	1048576	Meaningful only, if the flag ofConvertToGray, ofConvertToRGB, or ofConvertToCMYK is set. If set, JPEG 2000 compressed images (which are converted to another color space) will be compressed with JPEG instead JPEG 2000. JPEG 2000 compression is very slow and requires much memory. JPEG compression is around 10 times faster and produces almost identical results.

```

Go to Record/Request/Page [ First ]
Set Variable [ $destPage; Value:1 ]
Loop
# Read from file
// Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromFile"; $pdf; "/Users/cs/Desktop/input.pdf") ]
# or container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Merge PDFs::InputPDF) ]
# Import all pages
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; $destpage) ]
If [ GetAsNumber($r) >0 ]
Set Variable [ $destPage; Value:$r+1 ]
End If
Go to Record/Request/Page [ Next; Exit after last ]
End Loop
# Repair & Optimize PDF
Set Variable [ $r; Value:MBS("DynaPDF.Optimize"; $pdf) ]
# Save to container
Set Field [ Merge PDFs::FinalPDF; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]

```

Custom function for easy optimization:

```

# Custom Function OptimizePDF(InputPDF)
#
# Optimizes PDF and returns either new one or old one in case of error.

```

```

Let ( [
PDF = MBS("DynaPDF.New");
OpenResult = MBS("DynaPDF.OpenPDFFromContainer"; PDF; InputPDF);

```

```

OpenError = MBS("IsError");
ImportResult = MBS("DynaPDF.ImportPDFFile"; PDF);
ImportError = MBS("IsError");
Options = "FlattenLayers DeleteInvPaths ScaleImages NewLinkNames DeletePrivateData IgnoreZeroLineWidth
DeleteAlternateImages DeleteThumbnails";
OptimizeResult = MBS("DynaPDF.Optimize"; PDF; Options; 50; 50; 50; 150; 150; 150; "JPEG"; "JPEG";
"JPEG");
OptimizeError = MBS("IsError");
OutputPDF = MBS("DynaPDF.Save"; PDF; GetAsText(InputPDF));
SaveError = MBS("IsError");
ReleaseError = MBS("DynaPDF.Release"; PDF);

Result = If(
// all okay?
OpenError = 0 and ImportError = 0 and OptimizeError = 0 and SaveError = 0 and MBS( "Container.Get-
Size"; OutputPDF; "PDF " ) >0;
// than return new PDF
OutputPDF;
// return old PDF
InputPDF)

];
result )

```

Optimizes with files input/output:

```

# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
End If
# Clear current PDF document
Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
# Load PDF from container
Set Variable [ $r ; Value: MBS("DynaPDF.OpenPDFFromFile"; $pdf; "C:\Users\Christian\Desktop\171206Y_C24555_An-
nie_PDFs\171206Y_C24555_Annie_WOprice.pdf") ]
Set Variable [ $r ; Value: MBS("DynaPDF.OpenOutputFile"; $pdf; "C:\Users\Christian\Desktop\171206Y_C24555_An-
nie_PDFs\171206Y_C24555_Annie_WOprice.optimized.pdf") ]
Set Variable [ $r ; Value: MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]
# Optimize
Set Variable [ $r ; Value: MBS("DynaPDF.Optimize"; $pdf; "FlattenLayers$DeleteInvPaths$ScaleImages$NewLinkNames$De-
vateData$IgnoreZeroLineWidth$DeleteAlternateImages$DeleteThumbnails"; 50; 50; 50; 150; 150; 150; "JPEG";
"JPEG"; "JPEG") ]
# Save
Set Field [ Optimize PDF::Output PDF ; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]

```

See also

- 55.19 Container.GetSize 1631
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.273 DynaPDF.Initialize 2941
- 70.282 DynaPDF.IsInitialized 2966
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 124.6 IsError 6266

Example Databases

- [DynaPDF/Optimize PDF](#)

70.295.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr5](#)
- [MBS FileMaker Plugin, version 9.0pr9](#)
- [MBS FileMaker Plugin, version 8.2pr2](#)
- [Custom function to optimize PDF in FileMaker via DynaPDF](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.0pr7](#)
- [Optimize PDF Script](#)

Created 18th January 2016, last changed 13th July 2019.

70.296 DynaPDF.PageLink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.PageLink"; PDF; PosX; PosY; Width; Height; DestPage)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of bounding rectangle

100

PosY

Y-Coordinate of bounding rectangle

100

Width

Width of bounding rectangle

100

Height

Height of bounding rectangle

20

DestPage

The destination page number.

5

Result Returns number or error.

Description

The parameter DestPage specifies the destination page which should be opened (the page number). The function does not check whether the destination page exists; it can be created later. If the destination page does not exist when the document is closed it will be set to the first page.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the bounding rectangle. If the coordinate system is top-down it defines the upper left corner.

The border of the link annotation is drawn by using the current line width, stroke color and line dash pattern. If the link should appear without a border set the line width to zero beforehand (with DynaPDF.SetLineWidth).

When clicking on a link annotation the rectangle is highlighted, that is a simple visual effect. Several highlight modes are supported, see DynaPDF.SetLinkHighlightMode for further information.

The destination page is always opened at the top corner. More precise destinations can be created with the function DynaPDF.PageLinkEx. Page links can also be used to execute an action. The destination page is ignored in the latter case, the annotation works then like a button.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the

function fails the return value is an error message.

Use `DynaPDF.WebLink` for web links, `DynaPDF.FileLink` for file links, `DynaPDF.PageLink` or `DynaPDF.PageLinkEx` for page links and `DynaPDF.FindText` can help to find the location where to place the link.

See also [PageLink](#) function in DynaPDF manual.

Examples

Add various links to a page:

```
# import page
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Add Page Numbers::Input) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]

# edit first page
Set Variable [ $r; Value:MBS("DynaPDF.EditPage"; $pdf; 1) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetFont"; $pdf; "Helvetica"; 0; 20) ]
# Add web link
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 100; 150; 20; "left"; "Go to MBS
Blog" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.Weblink"; $PDF; 100; 80; 150; 20; "http://www.mbs-plugins.com/"
) ]
# Add page link
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 150; 150; 20; "left"; "Jump to page
3" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.PageLink"; $PDF; 100; 130; 150; 20; 3) ]
# Add page link with more options
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 200; 200; 20; "left"; "Jump to Letter
D Zoomed" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.PageLinkEx"; $PDF; 100; 180; 200; 20; "FitRect"; 4; 60; 590;
135; 160) ]
# Close page
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
```

See also

- 70.102 `DynaPDF.FileLink` 2718
- 70.109 `DynaPDF.FindText` 2727
- 70.268 `DynaPDF.ImportPDFFile` 2928
- 70.290 `DynaPDF.New` 2981
- 70.293 `DynaPDF.OpenPDFFromContainer` 2988
- 70.297 `DynaPDF.PageLinkEx` 3004
- 70.386 `DynaPDF.SetFont` 3154
- 70.399 `DynaPDF.SetLineWidth` 3178

70.296. <i>DYNAPDF.PAGELINK</i>	3003
• 70.501 DynaPDF.WebLink	3345
• 70.504 DynaPDF.WriteFTextEx	3352

Example Databases

- [DynaPDF/Picture to PDF with navigation](#)

70.296.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

70.296.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 38

Created 18th December 2016, last changed 9th December 2019.

70.297 DynaPDF.PageLinkEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.PageLinkEx"; PDF; PosX; PosY; Width; Height; DestinationType; DestPage { ; a; b; c; d })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

PosX

X-Coordinate of bounding rectangle
100

PosY

Y-Coordinate of bounding rectangle
100

Width

Width of bounding rectangle
100

Height

Height of bounding rectangle
20

DestinationType

The destination type.

DestPage

The destination page number.
5

a

Optional
First parameter for destination type.

b

Optional
Second parameter for destination type.

c

Optional
Third parameter for destination type.

d

Optional
Forth parameter for destination type.

Result Returns OK or error.

Description

The parameter `DestPage` specifies the destination page which should be opened (the page number). The function does not check whether the destination page exists; it can be created later. If the destination page is not created before the document is closed, it will be set to the first page of the document.

If the coordinate system is bottom-up the point `PosX`, `PosY` defines the lower left corner of the bounding rectangle. If the coordinate system is top-down it defines the upper left corner.

The border of the link annotation is drawn by using the current line width, stroke color and line dash pattern. If the link should appear without a border set the line width to zero beforehand (with `DynaPDF.SetLineWidth`).

When clicking on a link annotation the rectangle is highlighted, that is a simple visual effect. Several highlight modes are supported, see `DynaPDF.SetLinkHighlightMode` for further information.

The destination created by this annotation allows jumping to a specific position in a document instead of simply opening the page such as `DynaPDF.PageLink` does.

Destination type	Description
<code>XYZZoom</code>	Display the page designated by page with the coordinates (left top) positioned at the top-left corner of the window and the contents of the page magnified by the factor <code>zoom</code> . A zero value for any of the parameters <code>left top</code> or <code>zoom</code> specifies that the current value of that parameter is to be retained unchanged.
<code>Fit</code>	Display the page designated by page with its contents magnified just enough to fit the entire page within the window both horizontally and vertically. If the required horizontal and vertical magnification factors are different, use the smaller of the two, centering the page within the window in the other dimension. This destination type has no parameters.
<code>FitHTop</code>	Display the page designated by page with the vertical coordinate top positioned at the top edge of the window and the contents of the page magnified just enough to fit the entire width of the page within the window.
<code>FitVLeft</code>	Display the page designated by page with the horizontal coordinate left positioned at the left edge of the window and the contents of the page magnified just enough to fit the entire height of the page within the window.
<code>FitRect</code>	Display the page designated by page with its contents magnified just enough to fit the rectangle specified by the coordinates <code>left bottom right</code> and <code>top</code> entirely within the window both horizontally and vertically. If the required horizontal and vertical magnification factors are different, use the smaller of the two, centering the rectangle within the window in the other dimension.

The destination types `FitB`, `FitBHTop` and `FitBVLeft` use the media box of the page to fit the page into the window. All other destination types use the crop box if any.

The destination types are the same as for a go-to actions and the function creates in fact a go-to action which is executed by the link annotation. However, the action is stored in a more compact format and cannot be shared with other objects.

If a destination should be used with multiple objects such as bookmarks, create a go-to action instead and add it to a normal page link (see `DynaPDF.PageLink`). The same action can then be added to other objects.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is an error message.

See also [PageLinkEx](#) function in DynaPDF manual.

Examples

Add various links to a page:

```
# import page
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Add Page Numbers::Input) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]

# edit first page
Set Variable [ $r; Value:MBS("DynaPDF.EditPage"; $pdf; 1) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetFont"; $pdf; "Helvetica"; 0; 20) ]
# Add web link
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 100; 150; 20; "left"; "Go to MBS
Blog" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.Weblink"; $PDF; 100; 80; 150; 20; "http://www.mbs-plugins.com/"
) ]
# Add page link
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 150; 150; 20; "left"; "Jump to page
3" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.PageLink"; $PDF; 100; 130; 150; 20; 3) ]
# Add page link with more options
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 200; 200; 20; "left"; "Jump to Letter
D Zoomed" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.PageLinkEx"; $PDF; 100; 180; 200; 20; "FitRect"; 4; 60; 590;
135; 160) ]
# Close page
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
```

See also

- 70.84 `DynaPDF.EditPage` 2686
- 70.90 `DynaPDF.EndPage` 2697
- 70.102 `DynaPDF.FileLink` 2718
- 70.290 `DynaPDF.New` 2981
- 70.293 `DynaPDF.OpenPDFFromContainer` 2988
- 70.386 `DynaPDF.SetFont` 3154

<i>70.297. DYNAPDF.PAGELINKEX</i>	3007
• 70.399 DynaPDF.SetLineWidth	3178
• 70.400 DynaPDF.SetLinkHighlightMode	3180
• 70.501 DynaPDF.WebLink	3345
• 70.504 DynaPDF.WriteFTextEx	3352

70.297.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

70.297.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 38

Created 18th December 2016, last changed 9th December 2019.

70.298 DynaPDF.PageStatistics

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.PageStatistics"; PDF; PageIndex)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PageIndex

The page to check. Range is from one to DynaPDF.GetPageCount.

1

Result Returns statistics.

Description

The statistics are returned as one value per line in a multi line text. The order of the values is:

- Number of patterns used.
- Number of templates
- Number of bezier curves
- Number of path clipping
- Number of path closing
- Number of shading drawings
- Number of images
- Number of lines
- Number of rectangles
- Number of texts
- Length of all texts together
- Number of layers
- Number of font loadings

This function uses the parser interface in DynaPDF and needs a Pro license.

Examples

Query page statistics:

```

# start new
Set Variable [ $PDF; Value:MBS("DynaPDF.New") ]

# open PDF
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $PDF; Test::data) ]

# import pages
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $PDF) ]

# if query page statistics
Set Variable [ $stat; Value:MBS("DynaPDF.PageStatistics"; $PDF; Test::PageIndex) ]

# split values:
Set Variable [ $Count; Value:ValueCount ( $stat ) ]
Set Variable [ $PatternCount; Value:MiddleValues ( $stat ; 1 ; 1 ) ]
Set Variable [ $TemplateCount; Value:MiddleValues ( $stat ; 2 ; 1 ) ]
Set Variable [ $BezierCount; Value:MiddleValues ( $stat ; 3 ; 1 ) ]
Set Variable [ $ClipPathCount; Value:MiddleValues ( $stat ; 4 ; 1 ) ]
Set Variable [ $ClosePathCount; Value:MiddleValues ( $stat ; 5 ; 1 ) ]
Set Variable [ $DrawShadingCount; Value:MiddleValues ( $stat ; 6 ; 1 ) ]
Set Variable [ $ImageCount; Value:MiddleValues ( $stat ; 7 ; 1 ) ]
Set Variable [ $LineCount; Value:MiddleValues ( $stat ; 8 ; 1 ) ]
Set Variable [ $RectangleCount; Value:MiddleValues ( $stat ; 9 ; 1 ) ]
Set Variable [ $TextCount; Value:MiddleValues ( $stat ; 10 ; 1 ) ]
Set Variable [ $TextLength; Value:MiddleValues ( $stat ; 11 ; 1 ) ]
Set Variable [ $LayerCount; Value:MiddleValues ( $stat ; 12 ; 1 ) ]
Set Variable [ $FontCount; Value:MiddleValues ( $stat ; 13 ; 1 ) ]

# show in text field
Set Field [ Test::PageStats; "PatternCount: " & $PatternCount &
"TemplateCount: " & $TemplateCount &
"BezierCount: " & $BezierCount &
"ClipPathCount: " & $ClipPathCount &
"ClosePathCount: " & $ClosePathCount &
"DrawShadingCount: " & $DrawShadingCount &
"ImageCount: " & $ImageCount &
"LineCount: " & $LineCount &
"RectangleCount: " & $RectangleCount &
"TextCount: " & $TextCount &
"TextLength: " & $TextLength &
"LayerCount: " & $LayerCount &
"FontCount: " & $FontCount ]

```

See also

- 70.222 DynaPDF.GetPageCount 2873
- 70.268 DynaPDF.ImportPDFFile 2928

- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988

Example Databases

- [DynaPDF/DynaPDF Test](#)

70.298.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr10](#)

Created 18th August 2014, last changed 19th March 2019.

70.299 DynaPDF.ParseContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ParseContent"; PDF; pageIndex)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PageIndex

The page to check. Range is from one to DynaPDF.GetPageCount.

1

Result Returns text or error.

Description

Returns a list of text representations of the various PDF commands founds.

Output shows entries like this:

SaveGraphicState

Rectangle X: 0.000000 Y: 0.000000 W: 842.000000 H: 595.000000

ClipPath EvenOdd: 0 PathFillMode: 10

SetFillColor IColorSpace: 0x843e34d0 ExtColorSpace: 6 NumComps: 1 Color [0] : 1.000000

MulMatrix Matrix: 1.000000 0.000000 0.000000 -1.000000 0.000000 595.000000

Rectangle X: 19.842520 Y: 19.637820 W: 240.944900 H: 555.690600

SetFont FontType: 1 Embedded: 1 FontName: Cochin Style: 419430400, FontSize: 1.000000, Font: 0x86131e00

ShowTextArray Count: 1 Width: 1.500000 Matrix: 13.000000 0.000000 0.000000 -13.000000 63.150010

237.000000 SourceAdvance [0] : 0.000000 SourceLength [0] : 3 SourceText [0] : SourceAdvance [0] :

0.000000 SourceLength [0] : 3 SourceText [0] : +49 KerningAdvance [0] : 0.000000 KerningLength [0]

: 3 KerningWidth [0] : 1.500000 KerningText [0] : +49

This function uses the parser interface in DynaPDF and needs a Pro license.

See also [ParseContent](#) function in DynaPDF manual.

Examples

Parse content of page 6:

MBS("DynaPDF.ParseContent"; \$pdf; 6)

See also

- 70.137 DynaPDF.GetContent 2767
- 70.222 DynaPDF.GetPageCount 2873

- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.356 DynaPDF.SetContent 3110

70.299.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 19th March 2019.

70.300 DynaPDF.PlaceTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.PlaceTemplate"; PDF; TemplateHandle; X; Y; W; H)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

TemplateHandle

The handle value returned from DynaPDF.ImportPageAsTemplate function.

\$template

X

The x coordinate.

\$x

Y

The y coordinate. Please notice that PDF coordinates start at bottom of page except you change that with DynaPDF.SetPageCoords functions.

\$y

W

The width of the destination rectangle.

\$w

H

The height of the destination rectangle.

\$h

Result Returns OK or error message.

Description

The parameter TemplateHandle must be a valid template handle that was returned by DynaPDF.BeginTemplate or DynaPDF.ImportPageAsTemplate.

Templates can be used multiple times on different pages or positions and with different sizes. Unlike images, a template can be scaled without losing quality as far as the template contains vector graphics and text objects only.

The calculation of the width and height is the same as for images:

- If Width or Height is -1 the function uses the mirrored original width or height from the template.
- If Width or Height is 0, the missing value is calculated in relation to the given value of Height or Width to preserve the template's aspect ratio. The resulting output is a template with exact proportions relative to its original size.

- If Width and Height are 0, the original size is used (same effect as -1 but the template is not mirrored).
- A negative value of Width or Height mirrors the template on the x- or y-axis.

Imported pages can contain non-normalized bounding boxes and the page can be rotated. The coordinate origin, crop box, and rotation angle of a page must be considered when placing a template on a page because templates do not support features like a crop box or individual orientation angles. The required calculations to find the correct coordinate origin and to de-rotate a template are relatively complex. Therefore, DynaPDF provides the function `DynaPDF.PlaceTemplateEx` which considers the, coordinate origin, orientation angle, and crop box automatically. `DynaPDF.PlaceTemplateEx` greatly simplifies the handling of templates. If possible, this function should be used when working with imported pages.

Remarks: A template is invisible as long it was not placed on a page, template, or pattern. Templates should not be used inside of patterns because this requires usually too much rendering time.

See also [PlaceTemplate](#) function in DynaPDF manual.

See also

- 70.77 `DynaPDF.DeleteTemplateEx` 2674
- 70.85 `DynaPDF.EditTemplate` 2688
- 70.86 `DynaPDF.EditTemplate2` 2690
- 70.92 `DynaPDF.EndTemplate` 2700
- 70.113 `DynaPDF.FlushPages` 2734
- 70.270 `DynaPDF.ImportPageAsTemplate` 2934
- 70.290 `DynaPDF.New` 2981
- 70.301 `DynaPDF.PlaceTemplateEx` 3015
- 70.321 `DynaPDF.RotateTemplate` 3055
- 70.411 `DynaPDF.SetPageCoords` 3199

70.300.1 Blog Entries

- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

Created 18th August 2014, last changed 26th May 2018.

70.301 DynaPDF.PlaceTemplateEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.PlaceTemplateEx"; PDF; TemplateHandle; X; Y; W; H)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

TemplateHandle

The handle value returned from DynaPDF.ImportPageAsTemplate function.

\$template

X

The x coordinate.

\$x

Y

The y coordinate. Please notice that PDF coordinates start at bottom of page except you change that with DynaPDF.SetPageCoords functions.

\$y

W

The width of the destination rectangle.

\$w

H

The height of the destination rectangle.

\$h

Result Returns OK or error message.

Description

The parameter TemplateHandle must be a valid template handle that was returned by DynaPDF.BeginTemplate, DynaPDF.ImportPageAsTemplate.

The function was specifically designed to work with templates which were created from imported pages. A PDF page is converted to a template if it was imported with DynaPDF.ImportPageAsTemplate outside of an open page.

The calculation of the width and height is the same as for images:

- If Width or Height is -1 the function uses the mirrored original width or height from the template.
- If Width or Height is 0, the missing value is calculated in relation to the given value of Height or Width to preserve the template's aspect ratio. The resulting output is a template with exact proportions

relative to its original size.

- If Width and Height are 0, the original size is used (same effect as -1 but the template is not mirrored).
- A negative value of Width or Height mirrors the template on the x- or y-axis.

A template does not support a crop box or orientation angle. When placing a template on a page that was created from a PDF page, the coordinate origin must be adjusted according to the original media or crop box. In addition, the template must maybe be drawn into a clipping path (if the original page contained a crop box), and the template must maybe also be rotated so that the original orientation can be preserved.

All these considerations complicate the handling of imported templates. To make the usage of imported templates easier the function considers the coordinate origin, it draws the template automatically into a clipping rectangle if required, and it rotates the template according to the original page orientation.

The only thing that must be considered is that the original size of the template must be calculated from the crop box if present. In addition, the so computed width and height must be exchanged if the original page orientation was 90, -90, 270, or -270 degrees.

See also [PlaceTemplateEx](#) function in DynaPDF manual.

See also

- 70.23 DynaPDF.BeginTemplate 2588
- 70.76 DynaPDF.DeleteTemplate 2673
- 70.77 DynaPDF.DeleteTemplateEx 2674
- 70.270 DynaPDF.ImportPageAsTemplate 2934
- 70.290 DynaPDF.New 2981
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.321 DynaPDF.RotateTemplate 3055
- 70.411 DynaPDF.SetPageCoords 3199

Example Databases

- [DynaPDF/Apply Letter Paper to PDF](#)
- [DynaPDF/Convert to 2 Pages](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Generate Previews](#)
- [DynaPDF/Shrink PDF pages](#)

Created 18th August 2014, last changed 22nd April 2015.

70.302 DynaPDF.Print

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.4	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.Print"; PDF { ; printerName; TempPath; DocName; PrintFlags; MarginLeft; MarginTop; MarginRight; MarginBottom; ShowDialog; MaxRes })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

printerName

Optional

Printer name. Ignored if dialog is shown. See Printer.PrinterNames function for printer names.

"myPrinter"

TempPath

Optional

The path to temporary folder. Can be empty for default folder.

""

DocName

Optional

The name of the print job.

"My PDF Print"

PrintFlags

Optional

The flags for printing. Can be Default, 1bit, Color, AutoRotateAndCenter, PrintAsImage or ShrinkToPrintArea. Can be just the text name of an option or the sum of the numbers.

"Color"

MarginLeft

Optional

The margin for the left for the page. Pass zero if you don't need an extra margin.

MarginTop

Optional

The margin for the top for the page.

MarginRight

Optional

The margin for the right for the page.

MarginBottom

Optional

The margin for the bottom for the page.

ShowDialog

Optional

Available in MBS FileMaker Plugin 6.5 or newer.

Whether to show dialog. Default is 0 as we want no dialog. Pass 1 to show a dialog here.

0

MaxRes

Optional

The maximum resolution to use. If value is zero or empty, we use default print resolution.

300

Result Returns OK or error.

Description

At time of publication the function is implemented on Windows only and pages are printed as image.

The parameter DocName is optional but should be set if possible. The document name is set to "out" if no name is provided.

Output color format

It is possible to determine which color formats a printer supports as input, but it is not possible to determine whether a printer outputs black & white, gray shades, or color. The default should be set to gray or 1 bit but the user should be able to configure the color format.

Maximum output resolution

The maximum output resolution is 600 DPI to restrict the memory usage and to reduce the amount of data that must be send to the printer.

Name	Value	Description
Default	0	Gray printing
1Bit	1	B/W printing. Recommended for b& w printers
Color	2	Color printing
AutoRotateAndCenter	4	Rotate and center pages if necessary
PrintAsImage	8	Default on Windows
ShrinkToPrintArea	16	Useful if a page contains no margins
PrintPageAsIs	256	Print page as is, ignoring paper size.

Please use PDFKit.Print for Mac OS X.

If you only want to print a selection of pages, please only import those pages via DynaPDF.ImportPDFPage function. Or use DynaPDF.DeletePage to remove the pages you don't want to print.

Requires DynaPDF Pro license.

Examples

Prints a PDF to printer

```
MBS( "DynaPDF.Print"; $PDF; "MyPrinter")
```

Import PDF and print:

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
End If
# Clear current PDF document
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# Load PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Print PDFs::InputPDF) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; $destpage) ]
# Print
Set Variable [ $r; Value:MBS("DynaPDF.Print"; $pdf; Print PDFs::Printer Name; 2+4+16) ]
# Cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

Print with dialog:

```
MBS("DynaPDF.Print";
$pdf;
""; // printer name
""; // temp path
""; // job name
"Default"; // options
""; // margins
"";
"";
"";
1) // show dialog
```

See also

- 70.73 DynaPDF.DeletePage 2670
- 70.269 DynaPDF.ImportPDFPage 2931
- 70.282 DynaPDF.IsInitialized 2966
- 70.285 DynaPDF.List 2973
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.303 DynaPDF.Print.GetDevMode 3021
- 70.305 DynaPDF.Print.SetDevMode 3023
- 70.311 DynaPDF.Release 3033

- 128.10 Printer.Print

Example Databases

- [DynaPDF/Print PDF with options](#)
- [DynaPDF/Print PDF](#)

70.302.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr3](#)
- [MBS FileMaker Plugin, version 8.4pr2](#)
- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS FileMaker Plugin, version 8.2pr2](#)
- [MBS FileMaker Plugin, version 7.6pr4](#)
- [MBS FileMaker Plugin, version 6.5pr6](#)
- [MBS FileMaker Plugin, version 5.4pr4](#)
- [PDF Printing in FileMaker on Windows without PDF Reader](#)

70.302.2 FileMaker Magazin

- [Ausgabe 6/2017, Seite 26](#)

Created 21st October 2015, last changed 14th February 2019.

70.303 DynaPDF.Print.GetDevMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	No	Yes	No	No	No

MBS("DynaPDF.Print.GetDevMode")

Result Returns hex text or error.

Description

This are the print settings for printing on Windows.
The data is hex encoded and should not be modified, just stored.
Only valid after you called DynaPDF.Print with showing dialog.

See also

- [70.302 DynaPDF.Print](#) 3017
- [70.304 DynaPDF.Print.GetDevNames](#) 3022
- [70.305 DynaPDF.Print.SetDevMode](#) 3023
- [70.306 DynaPDF.Print.SetDevNames](#) 3025

Example Databases

- [DynaPDF/Print PDF with options](#)

70.303.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr4](#)

70.303.2 FileMaker Magazin

- [Ausgabe 6/2017, Seite 26](#)

Created 16th January 2017, last changed 6th March 2017.

70.304 DynaPDF.Print.GetDevNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	No	Yes	No	No	No

MBS("DynaPDF.Print.GetDevNames")

Result Returns text or error.

Description

Contains the selected driver name, name of the device and physical output medium and a flag whether this is default printer.

Only valid after you called DynaPDF.Print with showing dialog.

See also

- [70.302 DynaPDF.Print](#) 3017
- [70.303 DynaPDF.Print.GetDevMode](#) 3021
- [70.305 DynaPDF.Print.SetDevMode](#) 3023
- [70.306 DynaPDF.Print.SetDevNames](#) 3025

Example Databases

- [DynaPDF/Print PDF with options](#)

70.304.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr4](#)

Created 16th January 2017, last changed 6th March 2017.

70.305 DynaPDF.Print.SetDevMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	No	Yes	No	No	No

MBS("DynaPDF.Print.SetDevMode"; DevMode)

Parameters

DevMode

The new device mode.

Result Returns OK or error.

Description

Sets the print settings for printing on Windows with DynaPDF.Print function.

Examples

Print with options

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
End If
# New PDF session
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# Load PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Print PDFs::InputPDF) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]
# Print
Set Variable [ $flags; Value:If ( Position ( Print PDFs::Options; "ShrinkToPrintArea"; 1; 1)>0; 16; 0) + If (
Position ( Print PDFs::Options; "AutoRotateAndCenter"; 1; 1)>0; 4; 0) + If ( Position ( Print PDFs::Op-
tions; "Color"; 1; 1)>0; 2; 0) + If ( ... ]
Set Variable [ $ShowDialog; Value:Position ( Print PDFs::Options ; "ShowDialog"; 1; 1)>0 ]
Set Variable [ $r; Value:MBS( "DynaPDF.Print.SetDevMode"; Print PDFs::Printer Device Mode) ]
Set Variable [ $r; Value:MBS( "DynaPDF.Print.SetDevNames"; Print PDFs::Printer Device Names) ]
Set Variable [ $r; Value:MBS("DynaPDF.Print"; $pdf; Print PDFs::Printer Name; ""; ""; $flags; ""; ""; "";
""; $ShowDialog) ]
Set Field [ Print PDFs::Printer Device Names; MBS( "DynaPDF.Print.GetDevNames" ) ]
Set Field [ Print PDFs::Printer Device Mode; MBS("DynaPDF.Print.GetDevMode") ]
# Cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 70.268 DynaPDF.ImportPDFFile 2928
- 70.282 DynaPDF.IsInitialized 2966

- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.302 DynaPDF.Print 3017
- 70.303 DynaPDF.Print.GetDevMode 3021
- 70.304 DynaPDF.Print.GetDevNames 3022
- 70.306 DynaPDF.Print.SetDevNames 3025
- 70.311 DynaPDF.Release 3033

Example Databases

- [DynaPDF/Print PDF with options](#)

70.305.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr2](#)
- [MBS FileMaker Plugin, version 7.0pr4](#)

70.305.2 FileMaker Magazin

- Ausgabe 6/2017, Seite 26

Created 16th January 2017, last changed 16th January 2017.

70.306 DynaPDF.Print.SetDevNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	No	Yes	No	No	No

MBS("DynaPDF.Print.SetDevNames"; DeviceNames)

Parameters

DeviceNames

The list of device names. First item in list is optional driver name. Second item is optional devicen name. Third item is optional output port name. Forth item is optional flags value.

Result Returns OK or error.

Description

Sets the printer for printing on Windows with DynaPDF.Print function.

Examples

Set PDF printer:

```
MBS( "DynaPDF.Print.SetDevNames"; "winspool$Microsoft Print to PDF" )
```

See also

- [70.302 DynaPDF.Print](#) 3017
- [70.303 DynaPDF.Print.GetDevMode](#) 3021
- [70.304 DynaPDF.Print.GetDevNames](#) 3022
- [70.305 DynaPDF.Print.SetDevMode](#) 3023

Example Databases

- [DynaPDF/Print PDF with options](#)

70.306.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr4](#)

Created 16th January 2017, last changed 16th January 2017.

70.307 DynaPDF.RGB

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RGB"; Red; Green; Blue)

Parameters**Red**

The red color component from 0 to 255.

0

Green

The green color component from 0 to 255.

255

Blue

The blue color component from 0 to 255.

255

Result Returns color value as number.

Description

For use with functions which take a color as a big number.

Calculation is Blue * 65536 + Green * 256 + Red.

Use it only if the color space is RGB.

Examples

Get a blue color value:

MBS("DynaPDF.RGB"; 0; 0; 255)

Example result: 16711680

Get a red color value:

MBS("DynaPDF.RGB"; 255)

Example result: 255

See also

- 70.266 DynaPDF.HighlightPattern 2925
- 70.290 DynaPDF.New 2981
- 70.346 DynaPDF.SetBookmarkStyle 3097
- 70.364 DynaPDF.SetFieldBackColor 3122
- 70.368 DynaPDF.SetFieldColor 3127

70.307. <i>DYNAPDF.RGB</i>	3027
• 70.382 DynaPDF.SetFieldTextColor	3148
• 70.446 DynaPDF.SquareAnnot	3253

Example Databases

- [DynaPDF/Form/Form](#)

70.307.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 11st December 2016.

70.308 DynaPDF.ReadImageFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ReadImageFormat"; PDF; Container { ; Index })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Container

The image container value. Pass the container field or a variable with the container content.

\$image

Index

Optional

The index of the image for multi image files.

1

Result Returns image format or error message.

Description

The function reads only the image header to improve processing speed. If the parameter BitsPerPixel is 32 the image is a CMYK image. Note that TIFF images support color depths up to 64 bits per pixel. The parameter Index specifies the array index of a multi-page image that should be read in; numbering starts at 1. The parameter is ignored for non-multi-page image formats.

Image format is returned as a text with width, height and bits per pixel separated by newline.

Examples

Place an image centered on the page with border:

```
Set Variable [ $r ; Value: MBS("DynaPDF.AppendPage"; $pdf) ]
# put a background in
Set Variable [ $r ; Value: MBS("DynaPDF.SetFillColor"; $pdf; ,8; ,8; ,8) ]
Set Variable [ $r ; Value: MBS("DynaPDF.Rectangle"; $pdf; 0; 0; MBS( "DynaPDF.GetPageWidth"; $PDF
); MBS( "DynaPDF.GetPageHeight"; $PDF ); "fill" ) ]
# options for saving image
Set Variable [ $r ; Value: MBS("DynaPDF.SetSaveNewImageFormat"; $pdf; 0) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetResolution"; $pdf; 300) ]
# read size of image
Set Variable [ $r ; Value: MBS("DynaPDF.ReadImageFormat"; $pdf; Merge PDFs::InputImage) ]
Set Variable [ $ImageWidth ; Value: GetAsNumber (LeftValues ( $r ; 1 )) ]
Set Variable [ $ImageHeight ; Value: GetAsNumber (MiddleValues ( $r ; 2; 1 )) ]
# The destination area where to put PDF
Set Variable [ $TargetX ; Value: 50 ]
Set Variable [ $TargetY ; Value: 50 ]
Set Variable [ $TargetWidth ; Value: MBS( "DynaPDF.GetPageWidth"; $PDF ) - 100 ]
```



```

Set Variable [ $TargetHeight ; Value: MBS( "DynaPDF.GetPageHeight"; $PDF ) - 100 ]
# calculate scale factor
Set Variable [ $factor ; Value: Min( $TargetHeight / $ImageHeight; $TargetWidth / $ImageWidth) ]
# calculate output size
Set Variable [ $DestWidth ; Value: $ImageWidth * $factor ]
Set Variable [ $DestHeight ; Value: $ImageHeight * $factor ]
# Center in target area
Set Variable [ $DestX ; Value: $TargetX + ($TargetWidth-$DestWidth) / 2 ]
Set Variable [ $DestY ; Value: $TargetY + ($TargetHeight-$DestHeight) / 2 ]
# insert the image
Set Variable [ $r ; Value: MBS("DynaPDF.InsertImage"; $pdf; Merge PDFs::InputImage; $DestX; $DestY;
$DestWidth; $DestHeight) ]
# close page and move to next record
Set Variable [ $r ; Value: MBS("DynaPDF.EndPage"; $pdf) ]

```

See also

- 70.13 DynaPDF.AppendImagePage 2571
- 70.14 DynaPDF.AppendImagePages 2573
- 70.15 DynaPDF.AppendPage 2575
- 70.90 DynaPDF.EndPage 2697
- 70.230 DynaPDF.GetPageWidth 2884
- 70.276 DynaPDF.InsertImage 2952
- 70.290 DynaPDF.New 2981
- 70.384 DynaPDF.SetFillColor 3150
- 70.412 DynaPDF.SetPageFormat 3201
- 70.421 DynaPDF.SetSaveNewImageFormat 3219

Example Databases

- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/PSD Conversion](#)
- [OCR/OCR with DynaPDF](#)

70.309 DynaPDF.ReadImageResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ReadImageResolution"; PDF; Container { ; Index })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Container

The image container value. Pass the container field or a variable with the container content.

\$image

Index

Optional

The index of the image for multi image files.

1

Result Returns the x and y resolution values as text separated by newline character.

Description

The image resolution is a user defined value that can be stored in certain image formats such as Bitmap or TIFF.

The function returns zero values if the image format does not support a resolution record or if no values are stored in the image file, the image resolution is then 72 DPI.

See also [ReadImageResolution](#) function in DynaPDF manual.

See also

- [70.13 DynaPDF.AppendImagePage](#) 2571
- [70.14 DynaPDF.AppendImagePages](#) 2573
- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [OCR/OCR with DynaPDF](#)

Created 18th August 2014, last changed 18th August 2014.

70.310 DynaPDF.Rectangle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Rectangle"; PDF; PosX; PosY; Width; Height; FillMode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of rectangle

\$x

PosY

Y-Coordinate of rectangle

\$y

Width

Width of the rectangle

\$w

Height

Height of the rectangle

\$h

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error message.

Description

See also [Rectangle](#) function in DynaPDF manual.

Examples

Fills a rectangle:

```
MBS( "DynaPDF.Rectangle"; $PDF; 100; 200; 200; 200; "fill" )
```

Draws a rectangle:

```
MBS( "DynaPDF.Rectangle"; $PDF; 100; 200; 200; 200; "stroke" )
```

See also

- 70.7 DynaPDF.AddDeviceNSeparations 2560
- 70.59 DynaPDF.CreateSeparationCS 2650
- 70.276 DynaPDF.InsertImage 2952
- 70.290 DynaPDF.New 2981
- 70.308 DynaPDF.ReadImageFormat 3028
- 70.321 DynaPDF.RotateTemplate 3055
- 70.329 DynaPDF.ScaleCoords 3072
- 70.384 DynaPDF.SetFillColor 3150
- 70.496 DynaPDF.TranslateCoords 3337
- 70.497 DynaPDF.Triangle 3339

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [DynaPDF/Create DeviceN ColorSpace](#)
- [DynaPDF/Create PDF with Bezier Curves](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/DynaPDF Coordinates](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Shrink PDF pages](#)

Created 18th August 2014, last changed 18th August 2014.

70.311 DynaPDF.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Release"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK.

Description

This will free all memory used for this PDF instance.

See also

- 70.290 DynaPDF.New 2981
- 70.326 DynaPDF.SaveAndSignFileWinCrypt 3067
- 70.393 DynaPDF.SetImportFlags 3166
- 70.394 DynaPDF.SetImportFlags2 3170
- 70.402 DynaPDF.SetMetadata 3183
- 70.408 DynaPDF.SetOrientationEx 3192
- 70.456 DynaPDF.Table.Create 3270
- 70.460 DynaPDF.Table.Draw 3276
- 70.485 DynaPDF.Table.SetColorFloat 3318
- 70.504 DynaPDF.WriteFTextEx 3352

Example Databases

- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/Extract Images](#)
- [DynaPDF/Extract Text](#)
- [DynaPDF/List Annotations](#)
- [DynaPDF/PDF Crop](#)
- [DynaPDF/PDF Differences](#)

- [DynaPDF/Place Picture](#)
- [DynaPDF/Split PDF](#)
- [DynaPDF/Tables](#)
- [Mac and iOS/PDFKit/Pictures to PDF](#)

70.311.1 Blog Entries

- [Merge PDF with table of contents](#)
- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Custom function to optimize PDF in FileMaker via DynaPDF](#)
- [Optimize PDF Script](#)
- [MBS Filemaker Plugin, version 3.5pr4](#)

70.311.2 FileMaker Magazin

- [Ausgabe 3/2019, Seite 39](#)
- [Ausgabe 2/2019, Seite 27](#)
- [Ausgabe 2/2019, Seite 26](#)
- [Ausgabe 5/2018, Seite 28](#)
- [Ausgabe 1/2018, Seite 26](#)
- [Ausgabe 1/2018, Seite 25](#)
- [Ausgabe 6/2017, Seite 26](#)
- [Ausgabe 6/2016, Seite 25](#)
- [Ausgabe 6/2016, Seite 24](#)

Created 18th August 2014, last changed 18th August 2014.

70.312 DynaPDF.RenameSpotColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RenameSpotColor"; PDF; Colorant { ; NewName })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Colorant

Colorant name to change.

"PANTONE 376 C"

NewName

Optional

New name or empty.

"Cyan"

Result Returns number or error.

Description

Renames the spot color Colorant to NewName in all Separation, DeviceN, and NChannel color spaces in which the colorant can be found. If the parameter NewName is set to empty, the function renames the colorant to the special value None which produces no visible output.

The representation of the colorant in the alternate color space is left unchanged, also if the colorant is set to the special value None or All.

The function returns the number of color spaces in which the colorant has been changed. If the function fails the return value is the error message.

See also [RenameSpotColor](#) function in DynaPDF manual.

See also

- [70.290 DynaPDF.New](#)

2981

Example Databases

- [DynaPDF/Change Separation Colorant](#)

70.312.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 22nd March 2017, last changed 22nd March 2017.

70.313 DynaPDF.RenderPDFFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RenderPDFFile"; PDF; DestPath; Resolution; Flags; PixelFormat; Filter; Format)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DestPath

A file path for storing images. Can be folder for multiple images files or file for one file. If a folder, it must exist.

"/Users/cs/Desktop/test.jpg"

Resolution

The resolution you'd like to have for the image. If you pass zero, we use default resolution (72).

150

Flags

Flags for rendering. Use 0 for the default flags. For other values, please look into dynapdf manual. With version 6.4 of our plugin, you can also specify this by passing in text string, e.g. "Rotate90\$ClipToTrimBox"

0

PixelFormat

The pixel format. Can be 1bit, gray, RGB, BGR, RGBA, BGRA, ARGB, ABGR, CMYK, CMYKA and GrayA. Default is RGB.

"RGB"

Filter

The compression filter to use. Can be Flate, JPEG, CCITT3, CCITT4, LZW or JP2K. Default is JPEG.

"JPEG"

Format

The image format to use. Can be TIFF, JPEG, PNG, BMP or JPC. Default is JPEG.

"JPEG"

Result Returns OK or error.

Description

You can choose the format and filter, but please make sure they match as not all combinations are valid. This can write multipage tiff files or a folder of image files.

Requires DynaPDF Pro license for the raster engine to create bitmaps from PDF pages.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Render PDF to desktop with several JPEG pages:

```
$result = MBS( "DynaPDF.RenderPDFFile"; $PDF; "/Users/cs/Desktop"; 150; 0; "RGB"; "JPEG"; "JPEG" )
```

Render TIFF with higher resolution:

```
$result = MBS( "DynaPDF.RenderPDFFile"; $PDF; "c:\test.tif"; 150; 0; "RGB"; "Flate"; "TIFF" )
```

See also

- 70.268 DynaPDF.ImportPDFFile 2928
- 70.272 DynaPDF.InitColorManagementEx 2939
- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.315 DynaPDF.RenderPage 3040
- 70.314 DynaPDF.RenderPDFFileEx 3038
- 70.405 DynaPDF.SetOCGState 3188
- 121.2 Path.FileMakerPathToNativePath 6139

70.313.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)
- [MBS FileMaker Plugin, version 5.3pr1](#)
- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 12nd December 2014, last changed 26th September 2019.

70.314 DynaPDF.RenderPDFFileEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RenderPDFFileEx"; PDF; DestPath; Resolution; Width; Height; Flags; PixelFormat; Filter; Format)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DestPath

A file path for storing images. Can be folder for multiple images files or file for one file. If a folder, it must exist.

"/Users/cs/Desktop/test.jpg"

Resolution

The resolution you'd like to have for the image. If you pass zero, we use default resolution (72).

150

Width

Desired width.

600

Height

Desired height.

800

Flags

Flags for rendering. Use 0 for the default flags. For other values, please look into dynapdf manual. With version 6.4 of our plugin, you can also specify this by passing in text string, e.g. "Rotate90\$ClipToTrimBox"

0

PixelFormat

The pixel format. Can be 1bit, gray, RGB, BGR, RGBA, BGRA, ARGB, ABGR, CMYK, CMYKA and GrayA. Default is RGB.

"RGB"

Filter

The compression filter to use. Can be Flate, JPEG, CCITT3, CCITT4, LZW or JP2K. Default is JPEG.

"JPEG"

Format

The image format to use. Can be TIFF, JPEG, PNG, BMP or JPC. Default is JPEG.

"JPEG"

Result Returns OK or error.

Description

The pages in memory could be imported from one or more external PDF files, e.g. with `ImportPDFFile()`, created with DynaPDF functions, or a combination of both.

The parameter `DestPath` can be a path to an existing directory or the file name of the output image. The latter type can be used with TIFF images because this format supports multi-page output. When a file path is used with a single page image format only the first page will be rendered.

The function checks whether the path is a directory or a file name.

The function can render pages in a specific resolution, or scale them to a given width or height.

Depending on which parameters are set the image size is calculated as follows:

- Resolution >0 and Width == 0 and Height == 0: Pages are rendered according to the given resolution. Note that PDF pages can be very large. Therefore, it is maybe not possible to render all pages in the wished resolution.
- Resolution >0 and Width <0 and or Height <0: Pages are rendered according to the given resolution. Negative values of Width and Height are interpreted as maximum width or height if Resolution is greater zero. Since PDF pages can be very large, it is recommended to set the maximum width and height to a value that is low enough so that no out of memory exception occurs, e.g. 5000 x 5000 pixels.
- Resolution == 0 and Width >0 or Height >0: Pages are scaled to the given Width or Height. If Width and Height are greater zero then pages are scaled to that size independent of the original page format (not recommended). It is usually best to set the width or height to zero so that the function can calculate the missing value to preserve the aspect ratio.

On a 32 bit system it is possible to render PDF pages in RGB with up to around 1200 DPI, depending on the page format and available memory. The resolution of gray images can be higher but the encoder must be able to handle such large images. The PNG and bitmap encoders accept images in almost arbitrary resolutions but all other encoders can fail when the resolution is larger than about 2000 DPI.

Requires DynaPDF Pro license for the raster engine to create bitmaps from PDF pages.

See also [RenderPDFFileEx](#) function in DynaPDF manual.

See also

- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.313 DynaPDF.RenderPDFFile 3036

70.314.1 Blog Entries

- [MBS FileMaker Plugin 8.0 - More than 5000 Functions In One Plugin](#)
- [MBS FileMaker Plug-in 8.0 - Über 5000 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin, version 7.6pr5](#)

Created 21st December 2017, last changed 26th September 2019.

70.315 DynaPDF.RenderPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RenderPage"; PDF; PageIndex; Resolution; Width; Height; Flags; PixelFormat; Filter; Format { ; Filename; DestPath })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PageIndex

The page number between 1 and DynaPDF.GetPageCount.

1

Resolution

The resolution you'd like to have for the image. If you pass zero, we use default resolution (72).

150

Width

The width of the output image. Can be zero to use page width or to scale based on height.

800

Height

The height of the output image. Can be zero to use page height or to scale based on width.

600

Flags

Flags for rendering. Use 0 for the default flags. For other values, please look into dynapdf manual. With version 6.4 of our plugin, you can also specify this by passing in text string, e.g. "Rotate90\$ClipToTrimBox"

0

PixelFormat

The pixel format. Can be 1bit, gray, RGB, BGR, RGBA, BGRA, ARGB, ABGR, CMYK, CMYKA and GrayA. Default is RGB.

"RGB"

Filter

The compression filter to use. Can be Flate, JPEG, CCITT3, CCITT4, LZW or JP2K. Default is JPEG.

"JPEG"

Format

The image format to use. Can be TIFF, JPEG, PNG, BMP or JPC. Default is JPEG.

"JPEG"

Filename

Optional

The file name to use for the container value. Default is page with right file extensions for image. Pass any value if you use DestPath parameter.

\$name

DestPath

Optional

Optional, a file path for storing image instead of a container.

"/Users/cs/Desktop/test.jpg"

Result Returns container value with image or error message.

Description

You can choose the format and filter, but please make sure they match as not all combinations are valid.

Requires DynaPDF Pro license for the raster engine to create bitmaps from PDF pages.

Examples

Render page 5 with default options:

```
$ImageData = MBS( "DynaPDF.RenderPage"; $PDF; 5 )
```

Render page 5 with higher resolution:

```
$ImageData = MBS( "DynaPDF.RenderPage"; $PDF; 5; 150 )
```

Render page 5 to file:

```
$result = MBS( "DynaPDF.RenderPage"; $PDF; 5; 150; 0; 0; 0; "RGB"; "JPEG"; "JPEG"; ""; "/Users/cs/Desktop/test.jpg" )
```

Open PDF and render page as image to container:

```
# Start new PDF workspace
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# Load PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Test::data) ]
# Import all pages
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf) ]
# Render one page as Picture
Set Variable [ $r; Value:MBS("DynaPDF.RenderPage"; $pdf; Test::PageIndex) ]
# Put in Container
Set Field [ Test::PageImage; $r ]
# cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

See also

- 55.6 Container.Export 1613
- 70.222 DynaPDF.GetPageCount 2873

• 70.268 DynaPDF.ImportPDFFile	2928
• 70.272 DynaPDF.InitColorManagementEx	2939
• 70.273 DynaPDF.Initialize	2941
• 70.293 DynaPDF.OpenPDFFromContainer	2988
• 70.311 DynaPDF.Release	3033
• 70.313 DynaPDF.RenderPDFFile	3036
• 70.405 DynaPDF.SetOCGState	3188
• 122.15 PDFKit.GetPDFPageImage	6177

Example Databases

- [DynaPDF/Change Separation Colorant](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/DynaPDF Highlight Text](#)
- [DynaPDF/DynaPDF Test](#)
- [DynaPDF/List Annotations](#)
- [DynaPDF/PDF Differences](#)
- [DynaPDF/PDF Library](#)
- [DynaPDF/PSD Conversion](#)
- [DynaPDF/Render Page](#)
- [DynaPDF/WMF Conversion](#)

70.315.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)
- [MBS FileMaker Plugin, version 5.3pr1](#)
- [MBS Filemaker Plugin, version 4.5pr4](#)
- [MBS Filemaker Plugin, version 4.2pr6](#)
- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.316 DynaPDF.ReplaceImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ReplaceImage"; PDF; ImageIndex; Image { ; ImageIndex; Colorspace; ColorSpaceHandle; Flags })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

ImageIndex

The index of the image to replace. From 0 to DynaPDF.GetImageCount-1.

\$index

Image

The new image. Can be container or native file path.

Images::ImageContainer

ImageIndex

Optional

The index of the image. This is for a multi picture tiff file to pick the image. Default is 1 for first image.

1

Colorspace

Optional

The color space to use. Can be DeviceRGB, DeviceCMYK, DeviceGray, CalGray, CalRGB, Lab, ICCBased, Pattern, Indexed, Separation, DeviceN or NChannel. Default is DeviceRGB.

"DeviceRGB"

ColorSpaceHandle

Optional

The color space handle. Can be empty if you want to use device colorspace.

""

Flags

Optional

The flags. Can be number or text with various flags. Can be set to DeleteAltImages, DeleteMetadata, DeleteOCG and/or DeleteSoftMask.

"DeleteAltImages\$DeleteMetadata"

Result Returns OK or error.

Description

The resolution, aspect ratio, color space and so on can be freely chosen. However, note that this function does not change the output position or size. If the aspect ratio of the new image is different, then it will be stretched or shrunken to fit into the output rectangle.

The parameter CS specifies the destination color space into which the image should be converted or saved,

if the image is already defined in that color space. CSHandle must be the handle of that color space if a non-device space is used. The will be ignored for devices spaces.

The function works in the very same way as DynaPDF.InsertImage with the following differences:

- The color of an image mask cannot be set or changed because this would require changes on the content stream in which the image is used. An image mask will be created if the image color depth is 1 bit and if color key masking is enabled (see SetUseTransparency()). SetUseTransparency() should normally be set to false before calling this function. * The image will never be downscaled, independent of the current resolution, because the size of the output rectangle is not known. If the image that should be replaced is a soft mask of another base image, then make sure that the destination color space is set to DeviceGray, CalGray, or to a one channel ICC based color space because a soft mask must not contain more than one color channel. The flags UseImageColorSpace, IgnoreICCProfiles, RealPassThrough, and NoBitmapAlpha are all supported. See DynaPDF.SetGStateFlags for further information.

See also [ReplaceImage](#) function in DynaPDF manual.

Examples

Replace image:

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
End If
# Start new PDF session
Set Variable [ $pdf ; Value: MBS("DynaPDF.New") ]
# Import pages
Set Variable [ $r ; Value: MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Replace Image::Input PDF) ]
Set Variable [ $r ; Value: MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]
# Replace Image
Set Variable [ $r ; Value: MBS("DynaPDF.ReplaceImage"; $pdf; 0; Replace Image::New Image) ]
# Save PDF
Set Field [ Replace Image::Output PDF ; MBS("DynaPDF.Save"; $pdf) ]
# Cleanup
Set Variable [ $r ; Value: MBS( "DynaPDF.Release"; $pdf ) ]
```

See also

- 70.175 DynaPDF.GetImage 2812
- 70.176 DynaPDF.GetImageCount 2815
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.276 DynaPDF.InsertImage 2952
- 70.282 DynaPDF.IsInitialized 2966
- 70.290 DynaPDF.New 2981

70.316. <i>DYNAPDF.REPLACEIMAGE</i>	3045
• 70.293 DynaPDF.OpenPDFFromContainer	2988
• 70.311 DynaPDF.Release	3033
• 70.324 DynaPDF.Save	3062
• 70.392 DynaPDF.SetGStateFlags	3164

Example Databases

- [DynaPDF/Replace Image](#)

70.316.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr1](#)
- [Replace Image in PDF](#)

Created 30th September 2017, last changed 30th September 2017.

70.317 DynaPDF.ReplacePattern

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "DynaPDF.ReplacePattern"; PDF; Text; NewText { ; Alignment; NewFontSize; NewFontStyle;
NewCharacterSpacing; NewTextScaling; NewTextRise; NewTextColor } )
```

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Text

The text to search.
"Hello"

NewText

The text to replace the found location with.
"World"

Alignment

Optional
The new alignment you want. 0 = Left, 1 = Center and 2 = Right. May not work with rotated text.
0

NewFontSize

Optional
The new font size to use. Use -1 to keep whatever it is. Due to matrix scaling in pdf, the size here may be far off.

NewFontStyle

Optional
The new font style. Use -1 to keep whatever it is. e.g. 4 for underline, 2 for bold, 1 for italic or a combination. See dynapdf manual for more values for font styles.
0

NewCharacterSpacing

Optional
The new character spacing value. See also DynaPDF.SetCharacterSpacing. If undefined, keeps current character spacing.
2

NewTextScaling

Optional
The text scaling to use.

NewTextRise

Optional
The text rise to use. In percent of text height as plugin multiplies y by given factor.

NewTextColor

Optional

Available in MBS FileMaker Plugin 9.1 or newer.

The new stroke & fill color. Pass negative number to keep existing color.

MBS("DynaPDF.RGB"; 0; 0; 255)

Result Returns number of locations found.**Description**

You need to have an open page. you can use DynaPDF.EditPage to edit an existing one.

Examples

Replace placeholder with text:

MBS("DynaPDF.ReplacePattern"; \$pdf; "«PLZ Ort»"; "56645 Nickenich")

Replace some texts with different alignment:

Set Variable [\$r1 ; Value: MBS("DynaPDF.ReplacePattern"; \$pdf; "Hello1"; "Hello World"; 0)]

Set Variable [\$r2 ; Value: MBS("DynaPDF.ReplacePattern"; \$pdf; "Hello3"; "Hello World"; 1)]

Set Variable [\$r3 ; Value: MBS("DynaPDF.ReplacePattern"; \$pdf; "Hello5"; "Hello World"; 2)]

Replace text, make it centered and underlined:

MBS("DynaPDF.ReplacePattern"; \$pdf; "Hello3"; "Hello World"; 1; -1; 4)

See also

- 70.84 DynaPDF.EditPage 2686
- 70.290 DynaPDF.New 2981
- 70.349 DynaPDF.SetCharacterSpacing 3101

Example Databases

- [DynaPDF/DynaPDF Replace Text](#)

70.317.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr1](#)
- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr2](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)

- MBS FileMaker Plugin, version 6.5pr6
- MBS FileMaker Plugin, version 5.5pr4
- MBS FileMaker Plugin, version 5.2pr1
- MBS Filemaker Plugin, version 3.4pr2

Created 18th August 2014, last changed 6th February 2019.

70.318 DynaPDF.ResetEncryptionSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ResetEncryptionSettings"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns 1, 0 or error.

Description

If the function succeeds the return value is 1. If the function fails the return value is 0.
See also [ResetEncryptionSettings](#) function in DynaPDF manual.

See also

- 70.267 DynaPDF.ImportEncryptionSettings 2927
- 70.290 DynaPDF.New 2981

Created 19th January 2017, last changed 19th January 2017.

70.319 DynaPDF.RestoreGraphicState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RestoreGraphicState"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error message.

Description

See also DynaPDF.SaveGraphicState.

See also [RestoreGraphicState](#) function in DynaPDF manual.

See also

- [70.41 DynaPDF.ClipPath](#) 2612
- [70.82 DynaPDF.DrawCircle](#) 2682
- [70.290 DynaPDF.New](#) 2981
- [70.320 DynaPDF.RotateCoords](#) 3052
- [70.324 DynaPDF.Save](#) 3062
- [70.328 DynaPDF.SaveGraphicState](#) 3071
- [70.329 DynaPDF.ScaleCoords](#) 3072
- [70.330 DynaPDF.SetAlpha](#) 3074
- [70.445 DynaPDF.SkewCoords](#) 3251
- [70.496 DynaPDF.TranslateCoords](#) 3337

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [Barcode/QRCode PDF](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/DynaPDF Coordinates](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)

- [DynaPDF/Watermark pages](#)

Created 18th August 2014, last changed 27th May 2017.

70.320 DynaPDF.RotateCoords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

```
MBS( "DynaPDF.RotateCoords"; PDF; a; x; y { ; RotateCoords } )
```

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

a

Angle alpha in degrees

30

x

Origin of the x-axis

\$x

y

Origin of the y-axis

\$y

RotateCoords

Optional

Whether to rotate coordinate system. This is now done by DynaPDF automatically, so for current version of the library, this must be zero. But older versions need the 1.

0

Result Returns OK on success and error on failure.

Description

It is highly recommended to save the graphics state beforehand, otherwise it is very difficult or impossible to restore the coordinate system later.

After the coordinate system was changed by the function, bottom-up coordinates are active. It is not possible to use top-down coordinates with a skewed coordinate system.

To rotate a page you can use DynaPDF.SetOrientation or DynaPDF.SetOrientationEx.

See also [RotateCoords](#) function in DynaPDF manual.

Examples

Rotate and draw rectangle:

```
MBS( "DynaPDF.SaveGraphicState"; $PDF )
MBS( "DynaPDF.RotateCoords"; $PDF; 30; 150; 450)
MBS( "DynaPDF.Rectangle"; $PDF; 0; 0; 200; 100; "stroke" )
MBS( "DynaPDF.RestoreGraphicState"; $PDF )
```


Rotate graphics system 270° for whole page:

```
MBS("DynaPDF.TranslateCoords"; $pdf; MBS("DynaPDF.GetPageWidth"; $pdf)/2; MBS("DynaPDF.GetPageHeight"; $pdf)/2)
MBS("DynaPDF.RotateCoords"; $pdf; 270; 0; 0)
MBS("DynaPDF.TranslateCoords"; $pdf; -MBS("DynaPDF.GetPageHeight"; $pdf)/2; -MBS("DynaPDF.GetPageWidth"; $pdf)/2)
```

Draw text rotated:

```
# save
Set Variable [ $r; Value: MBS("DynaPDF.SaveGraphicState"; $pdf) ]
# get page size
Set Variable [ $w; Value: MBS("DynaPDF.GetPageWidth"; $pdf) ]
Set Variable [ $h; Value: MBS("DynaPDF.GetPageHeight"; $pdf) ]
# move center to middle of page
Set Variable [ $r; Value: MBS("DynaPDF.TranslateCoords"; $PDF; $w/2; $h/2) ]
# rotate here by 30 degree
Set Variable [ $r; Value: MBS("DynaPDF.RotateCoords"; $PDF; 30; 0; 0) ]
# move center back
Set Variable [ $r; Value: MBS("DynaPDF.TranslateCoords"; $PDF; -$w/2; -$h/2) ]
# now draw some text
Set Variable [ $r; Value: MBS("DynaPDF.SetTextRect"; $pdf; 0; 500; MBS("DynaPDF.GetPageWidth"; $pdf); -1) ]
Set Variable [ $r; Value: MBS("DynaPDF.WriteFText"; $pdf; "center"; Watermark pages::WatermarkText ) ]
# restore
Set Variable [ $r; Value: MBS("DynaPDF.RestoreGraphicState"; $pdf) ]
```

See also

- 70.221 DynaPDF.GetPageCoords 2872
- 70.224 DynaPDF.GetPageHeight 2876
- 70.319 DynaPDF.RestoreGraphicState 3050
- 70.328 DynaPDF.SaveGraphicState 3071
- 70.329 DynaPDF.ScaleCoords 3072
- 70.407 DynaPDF.SetOrientation 3191
- 70.408 DynaPDF.SetOrientationEx 3192
- 70.427 DynaPDF.SetTextRect 3229
- 70.496 DynaPDF.TranslateCoords 3337
- 70.503 DynaPDF.WriteFText 3350

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [DynaPDF/DynaPDF Coordinates](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)

Created 18th August 2014, last changed 4th December 2018.

70.321 DynaPDF.RotateTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RotateTemplate"; PDF; Template; Rotation)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Template

The handle to the template of a page.

\$template

Rotation

The rotation angle. Can be 0, 90, 180 or 270.

90

Result Returns template handle or error.

Description

Returns a new template handle.

This is a convenience function which creates a new template and draws the existing template there with rotation.

Examples

Import, rotate and place:

```
# Create new PDF document
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# Load PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; DynaPDF PlaceTemplate::InputPDF) ]
# Import first page as template
Set Variable [ $template; Value:MBS("DynaPDF.ImportPageAsTemplate"; $pdf; 1) ]
# Create 4 rotations:
Set Variable [ $template0; Value:MBS("DynaPDF.RotateTemplate"; $pdf; $template; 0) ]
Set Variable [ $template90; Value:MBS("DynaPDF.RotateTemplate"; $pdf; $template; 90) ]
Set Variable [ $template180; Value:MBS("DynaPDF.RotateTemplate"; $pdf; $template; 180) ]
Set Variable [ $template270; Value:MBS("DynaPDF.RotateTemplate"; $pdf; $template; 270) ]
# Make new page and place PDF there in original size (0/0) in position (0/0)
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.PlaceTemplate"; $pdf; $template; 100; 100; 200; 300) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetStrokeColor"; $pdf; 255; 0; 0) ]
Set Variable [ $r; Value:MBS("DynaPDF.Rectangle"; $pdf; 100-1; 100-1; 200+2; 300+2; "Stroke") ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
```

```

Set Variable [ $r; Value:MBS("DynaPDF.PlaceTemplate"; $pdf; $template0; 100; 100; 200; 300) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetStrokeColor"; $pdf; 255; 0; 0) ]
Set Variable [ $r; Value:MBS("DynaPDF.Rectangle"; $pdf; 100-1; 100-1; 200+2; 300+2; "Stroke") ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.PlaceTemplate"; $pdf; $template90; 100; 100; 300; 200) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetStrokeColor"; $pdf; 255; 0; 0) ]
Set Variable [ $r; Value:MBS("DynaPDF.Rectangle"; $pdf; 100-1; 100-1; 300+2; 200+2; "Stroke") ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.PlaceTemplate"; $pdf; $template180; 100; 100; 200; 300) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetStrokeColor"; $pdf; 255; 0; 0) ]
Set Variable [ $r; Value:MBS("DynaPDF.Rectangle"; $pdf; 100-1; 100-1; 200+2; 300+2; "Stroke") ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.PlaceTemplate"; $pdf; $template270; 100; 100; 300; 200) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetStrokeColor"; $pdf; 255; 0; 0) ]
Set Variable [ $r; Value:MBS("DynaPDF.Rectangle"; $pdf; 100-1; 100-1; 300+2; 200+2; "Stroke") ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
# done, save to container
Set Field [ DynaPDF.PlaceTemplate::OutputPDF; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
# done, save to container
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]

```

See also

- 70.23 DynaPDF.BeginTemplate 2588
- 70.76 DynaPDF.DeleteTemplate 2673
- 70.77 DynaPDF.DeleteTemplateEx 2674
- 70.86 DynaPDF.EditTemplate2 2690
- 70.90 DynaPDF.EndPage 2697
- 70.270 DynaPDF.ImportPageAsTemplate 2934
- 70.300 DynaPDF.PlaceTemplate 3013
- 70.301 DynaPDF.PlaceTemplateEx 3015
- 70.324 DynaPDF.Save 3062
- 70.423 DynaPDF.SetStrokeColor 3222

Example Databases

- [DynaPDF/Generate Previews](#)

70.321.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.2pr3](#)
- [MBS FileMaker Plugin, version 8.6pr2](#)
- [MBS FileMaker Plugin, version 8.3pr1](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)
- [MBS FileMaker Plugin, version 7.0pr2](#)

Created 7th January 2017, last changed 7th January 2017.

70.322 DynaPDF.RoundRect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RoundRect"; PDF; PosX; PosY; Width; Height; Radius; FillMode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of rectangle

\$x

PosY

Y-Coordinate of rectangle

\$y

Width

Width of the rectangle

\$w

Height

Height of the rectangle

\$h

Radius

Radius of rounded corners.

20

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error.

Description

The radius must not be greater than the half with or height of the rectangle.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the rectangle. If the coordinate system is top-down it defines the upper left corner.

The draw direction can be changed with the function DynaPDF.SetDrawDirection.

A rectangle is a closed path that can be filled, stroked or both. It is also possible to draw a rectangle invisible to apply the filling rules nonzero winding number or even-odd. The filling rules are described under DynaPDF.ClipPath. The parameter FillMode is ignored if the rectangle is drawn inside a clipping path. The fill modes are described under DynaPDF.ClosePath.

See also [RoundRect](#) function in DynaPDF manual.

See also

<i>70.322. DYNAPDF.ROUNDRECT</i>	3059
• 70.41 DynaPDF.ClipPath	2612
• 70.43 DynaPDF.ClosePath	2615
• 70.290 DynaPDF.New	2981
• 70.323 DynaPDF.RoundRectEx	3060
• 70.359 DynaPDF.SetDrawDirection	3115

70.322.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.323 DynaPDF.RoundRectEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.RoundRectEx"; PDF; PosX; PosY; Width; Height; RadiusWidth; RadiusHeight; FillMode)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of rectangle

\$x

PosY

Y-Coordinate of rectangle

\$y

Width

Width of the rectangle

\$w

Height

Height of the rectangle

\$h

RadiusWidth

The radius for width.

20

RadiusHeight

The radius for height.

30

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error.

Description

The parameter RadiusWidth must not be greater than the half width of the rectangle and the parameter RadiusHeight must not be greater than the half height of the rectangle.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the rectangle. If the coordinate system is top-down it defines the upper left corner.

The draw direction can be changed with the function DynaPDF.SetDrawDirection.

A rectangle is a closed path that can be filled, stroked or both. It is also possible to draw a rectangle invisible to apply the filling rules nonzero winding number or even-odd. The filling rules are described under `DynaPDF.ClipPath`. The parameter `FillMode` is ignored if the rectangle is drawn inside a clipping path. The fill modes are described under `DynaPDF.ClosePath`.

See also [RoundRectEx](#) function in DynaPDF manual.

See also

- 70.41 `DynaPDF.ClipPath` 2612
- 70.43 `DynaPDF.ClosePath` 2615
- 70.290 `DynaPDF.New` 2981
- 70.322 `DynaPDF.RoundRect` 3058
- 70.359 `DynaPDF.SetDrawDirection` 3115

70.323.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.324 DynaPDF.Save

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Save"; PDF { ; filename; Preview })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

filename

Optional

Optionally the file name to be associated with the container value. The file name should include pdf file extension.

"hello.pdf"

Preview

Optional

Optional, whether to include a preview JPEG. Default is 1 for including one. Pass zero to disable preview.

1

Result Returns container value with PDF file.

Description

The plugin also renders a JPEG for preview and includes it (with DynaPDF Pro).

If you created PDF to a file path and not in memory, this method just returns OK after closing the file. Before you call this function, you can call DynaPDF.OpenOutputFile or DynaPDF.OpenOutputFileEncrypted to open a destination file for the PDF.

Examples

Save PDF:

```
Set Field [ MyTable::ContainerField; MBS( "DynaPDF.Save"; $PDF; "report.pdf" ) ]
```

See also

- 70.290 DynaPDF.New 2981
- 70.327 DynaPDF.SaveAndSignFileWinCryptDialog 3069
- 70.330 DynaPDF.SetAlpha 3074
- 70.393 DynaPDF.SetImportFlags 3166
- 70.408 DynaPDF.SetOrientationEx 3192
- 70.445 DynaPDF.SkewCoords 3251

70.324. DYNAPDF.SAVE	3063
• 70.460 DynaPDF.Table.Draw	3276
• 70.496 DynaPDF.TranslateCoords	3337
• 70.504 DynaPDF.WriteFTextEx	3352
• 70.506 DynaPDF.WriteStyledText	3358

Example Databases

- [DynaPDF/Convert to 2 Pages](#)
- [DynaPDF/Create PDF with Bezier Curves](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/DynaPDF Replace Text](#)
- [DynaPDF/Fill Form Fields](#)
- [DynaPDF/Generate Previews](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Personalized PDFs](#)
- [DynaPDF/Split PDF](#)
- [OCR/OCR with DynaPDF](#)

70.324.1 Blog Entries

- [Merge PDF with table of contents](#)
- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [MBS FileMaker Plugin, version 8.2pr2](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Custom function to optimize PDF in FileMaker via DynaPDF](#)
- [Optimize PDF Script](#)
- [MBS FileMaker Plugin, version 5.1pr9](#)
- [MBS Filemaker Plugin, version 3.0pr10](#)

70.324.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 39
- Ausgabe 2/2019, Seite 27
- Ausgabe 2/2019, Seite 26
- Ausgabe 5/2018, Seite 28
- Ausgabe 1/2018, Seite 25

Created 18th August 2014, last changed 9th April 2017.

70.325 DynaPDF.SaveAndSignFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SaveAndSignFile"; PDF; CertFilePath; Password { ; Reason; Location; filename; Preview })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

CertFilePath

File path to a PKCS# 12 certificate file.

"C:\test.pfx"

Password

Password to decrypt the cert's private key.

\$password

Reason

Optional

Optional reason string.

\$reason

Location

Optional

Optional signers location string

\$location

filename

Optional

Optionally the file name to be associated with the container value. The file name should include pdf file extension.

"hello.pdf"

Preview

Optional

Optional, whether to include a preview JPEG. Default is 1 for including one. Pass zero to disable preview.

1

Result Returns container value with PDF file.

Description

On success you either get back the PDF as container value (in memory PDF) or it returns OK after writing PDF to file (file based PDF).

The plugin also renders a JPEG for preview and includes it within the container value (with DynaPDF Pro).

On Windows you can use WinCrypt with DynaPDF.SaveAndSignFileWinCrypt function and optionally use dialog to pick the certificate with DynaPDF.SaveAndSignFileWinCryptDialog from the certificate store.

Examples

Save PDF:

```
Set Field [ MyTable::ContainerField; MBS( "DynaPDF.SaveAndSignFile"; $PDF; "/Users/cs/Desktop/test.pfx";  
$password; "Test"; ""; "report.pdf" ) ]
```

See also

- [70.290 DynaPDF.New](#) 2981
- [70.324 DynaPDF.Save](#) 3062
- [70.326 DynaPDF.SaveAndSignFileWinCrypt](#) 3067
- [70.327 DynaPDF.SaveAndSignFileWinCryptDialog](#) 3069

Example Databases

- [DynaPDF/Merge PDFs to File](#)

70.325.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr7](#)

Created 18th August 2014, last changed 31st January 2020.

70.326 DynaPDF.SaveAndSignFileWinCrypt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	10.1	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.SaveAndSignFileWinCrypt"; PDF; SignatureContainer { ; Password; ContactInfo; Location; Reason; filename; Preview })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

SignatureContainer

The container with the PKCS# 12 file.

Password

Optional

The password to read the signature. Leave empty if not encrypted.

"123456"

ContactInfo

Optional

Optional contact info.

Location

Optional

Optional signers location string

\$location

Reason

Optional

Optional reason string.

\$reason

filename

Optional

Optionally the file name to be associated with the container value. The file name should include pdf file extension.

"hello.pdf"

Preview

Optional

Optional, whether to include a preview JPEG. Default is 1 for including one. Pass zero to disable preview.

1

Result Returns OK or error.

Description

On success you either get back the PDF as container value (in memory PDF) or it returns OK after writing

PDF to file (file based PDF).

The plugin also renders a JPEG for preview and includes it within the container value (with DynaPDF Pro).

On Windows you can use WinCrypt with DynaPDF.SaveAndSignFileWinCrypt function and optionally use dialog to pick the certificate with DynaPDF.SaveAndSignFileWinCryptDialog from the certificate store.

Use DynaPDF.SaveAndSignFile for cross platform signing.

Examples

Save and sign a PDF after you assembled it:

```
Set Variable [ $PDFData ; Value: MBS("DynaPDF.SaveAndSignFileWinCrypt"; $pdf; "C:\Users\Chris-
tian\Desktop\test_cert.pfx"; "123456") ]
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]
# Put in Container
Set Field [ Create Text::PDF ; $PDFData ]
```

See also

- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.325 DynaPDF.SaveAndSignFile 3065
- 70.327 DynaPDF.SaveAndSignFileWinCryptDialog 3069

70.326.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr2](#)

Created 31st January 2020, last changed 31st January 2020.

70.327 DynaPDF.SaveAndSignFileWinCryptDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	10.1	No	Yes	No	No	No

MBS("DynaPDF.SaveAndSignFileWinCryptDialog"; PDF { ; StoreName; ContactInfo; Location; Reason; filename; Preview })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

StoreName

Optional

The name of the certificate store.

ContactInfo

Optional

Optional contact info.

Location

Optional

Optional signers location string

\$location

Reason

Optional

Optional reason string.

\$reason

filename

Optional

Optionally the file name to be associated with the container value. The file name should include pdf file extension.

"hello.pdf"

Preview

Optional

Optional, whether to include a preview JPEG. Default is 1 for including one. Pass zero to disable preview.

1

Result Returns OK or error.

Description

On success you either get back the PDF as container value (in memory PDF) or it returns OK after writing PDF to file (file based PDF).

The plugin also renders a JPEG for preview and includes it within the container value (with DynaPDF Pro).

On Windows you can use WinCrypt with DynaPDF.SaveAndSignFileWinCrypt function and optionally use dialog to pick the certificate with DynaPDF.SaveAndSignFileWinCryptDialog from the certificate store. Use DynaPDF.SaveAndSignFile for cross platform signing.

Examples

Save and sign a PDF after you assembled it:

```
Set Variable [ $PDFData ; Value: MBS("DynaPDF.SaveAndSignFileWinCryptDialog"; $pdf; "" ; "MY") ]
Set Variable [ $r ; Value: MBS("DynaPDF.Release"; $pdf) ]
# Put in Container
Set Field [ Create Text::PDF ; $PDFData ]
```

See also

- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.325 DynaPDF.SaveAndSignFile 3065
- 70.326 DynaPDF.SaveAndSignFileWinCrypt 3067

70.327.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr2](#)

Created 31st January 2020, last changed 31st January 2020.

70.328 DynaPDF.SaveGraphicState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SaveGraphicState"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error message.

Description

A saved graphics state must be restored before the page, template or pattern will be closed.

see also DynaPDF.RestoreGraphicState.

See also [SaveGraphicState](#) function in DynaPDF manual.

See also

- [70.41 DynaPDF.ClipPath](#) 2612
- [70.82 DynaPDF.DrawCircle](#) 2682
- [70.290 DynaPDF.New](#) 2981
- [70.319 DynaPDF.RestoreGraphicState](#) 3050
- [70.320 DynaPDF.RotateCoords](#) 3052
- [70.329 DynaPDF.ScaleCoords](#) 3072
- [70.330 DynaPDF.SetAlpha](#) 3074
- [70.445 DynaPDF.SkewCoords](#) 3251
- [70.496 DynaPDF.TranslateCoords](#) 3337

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/DynaPDF Coordinates](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Watermark pages](#)

Created 18th August 2014, last changed 27th May 2017.

70.329 DynaPDF.ScaleCoords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ScaleCoords"; PDF; x; y)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

x

Scale factor of the x-axis

\$x

y

Scale factor of the y-axis

\$y

Result Returns OK on success and error on failure.

Description

It is highly recommended to save the graphics state beforehand, otherwise it is very difficult or impossible to restore the coordinate system later.

After scaling the coordinate system, bottom-up coordinates are active. It is not possible to use top- down coordinates inside a scaled coordinate system.

Please do not try to scale/skew/translate back later. use DynaPDF.SaveGraphicState and DynaPDF.RestoreGraphicState.

See also [ScaleCoords](#) function in DynaPDF manual.

Examples

Scale and draw rectangle:

```
MBS( "DynaPDF.SaveGraphicState"; $PDF )
```

```
MBS( "DynaPDF.ScaleCoords"; $PDF; 2; 2)
```

```
MBS( "DynaPDF.Rectangle"; $PDF; 0; 0; 200; 100; "stroke" )
```

```
MBS( "DynaPDF.RestoreGraphicState"; $PDF )
```

See also

- 70.221 DynaPDF.GetPageCoords 2872
- 70.290 DynaPDF.New 2981
- 70.310 DynaPDF.Rectangle 3031
- 70.319 DynaPDF.RestoreGraphicState 3050
- 70.320 DynaPDF.RotateCoords 3052

70.329. <i>DYNAPDF.SCALECOORDS</i>	3073
• 70.324 DynaPDF.Save	3062
• 70.328 DynaPDF.SaveGraphicState	3071
• 70.411 DynaPDF.SetPageCoords	3199
• 70.445 DynaPDF.SkewCoords	3251

Example Databases

- [DynaPDF/DynaPDF Coordinates](#)

Created 18th August 2014, last changed 18th August 2014.

70.330 DynaPDF.SetAlpha

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAlpha"; PDF; FillAlpha; StrokeAlpha)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

FillAlpha

The new alpha between 0.0 and 1.0. Value of -1 will not change fill alpha.

0.5

StrokeAlpha

The new alpha between 0.0 and 1.0. Value of -1 will not change stroke alpha.

0.5

Result Returns OK or error message.

Description

See also DynaPDF.SaveGraphicState and DynaPDF.RestoreGraphicState.

Requires DynaPDF Lite license.

Examples

Make all drawings 50% transparent:

```
MBS( "DynaPDF.SetAlpha"; $PDF; 0.5; 0.5 )
```

Make just lines 50% transparent and don't change fill transparency:

```
MBS( "DynaPDF.SetAlpha"; $PDF; -1; 0.5 )
```

Make fill transparency 50% , so images draw half transparent:

```
MBS( "DynaPDF.SetAlpha"; $PDF; 0.5; -1 )
```

See also

- 70.273 DynaPDF.Initialize 2941
- 70.276 DynaPDF.InsertImage 2952
- 70.277 DynaPDF.InsertImageFile 2956
- 70.290 DynaPDF.New 2981

70.330. <i>DYNAPDF.SETALPHA</i>	3075
• 70.319 DynaPDF.RestoreGraphicState	3050
• 70.324 DynaPDF.Save	3062
• 70.328 DynaPDF.SaveGraphicState	3071
• 70.502 DynaPDF.WriteDemoText	3348
• 122.45 PDFKit.Watermark	6230

Example Databases

- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/Watermark pages](#)
- [OCR/OCR with DynaPDF](#)

Created 18th August 2014, last changed 27th July 2018.

70.331 DynaPDF.SetAnnotBorderStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotBorderStyle"; PDF; AnnotationHandle; BorderStyle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

BorderStyle

The new border style. Can be Solid, Bevelled, Inset, Underline, Dashed or UserDefined.

"Solid"

Result Returns OK or error.

Description

Note that the border style has no effect if the border width is set to zero or if the border color is set to NO_COLOR (=4294967281) (see DynaPDF.SetAnnotColor, DynaPDF.SetAnnotBorderWidth).

Note also that not all styles are meaningful for all annotation types. For example, while link annotations support all border styles, FreeText annotations support the styles Solid and Dashed only. File Attach, Sound, Stamp, or Text annotations for example support no border style because these annotation types contain no appearance on which a border style could be applied.

Setting the border style to an unsupported value causes no error; the value will be ignored instead.

When changing the border style of a Free Text annotation DynaPDF must rebuild the appearance stream of the annotation. The text position can slightly change especially if the border width was changed too. See also DynaPDF.FreeTextAnnot.

See also [SetAnnotBorderStyle](#) function in DynaPDF manual.

See also

- 70.115 DynaPDF.FreeTextAnnot 2738
- 70.126 DynaPDF.GetBorderStyle 2756
- 70.151 DynaPDF.GetFieldBorderStyle 2787
- 70.290 DynaPDF.New 2981
- 70.332 DynaPDF.SetAnnotBorderWidth 3078
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.339 DynaPDF.SetAnnotLineEndStyle 3088
- 70.341 DynaPDF.SetAnnotOpenState 3090

<i>70.331. DYNAPDF.SETANNOTBORDERSTYLE</i>	3077
• 70.347 DynaPDF.SetBorderStyle	3099
• 70.366 DynaPDF.SetFieldBorderStyle	3124

Created 25th November 2014, last changed 25th November 2014.

70.332 DynaPDF.SetAnnotBorderWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotBorderWidth"; PDF; AnnotationHandle; LineWidth)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

AnnotationHandle

The annotation index.
5

LineWidth

Line width of the border.
2

Result Returns OK or error.

Description

Although the line width can be set to any positive floating point number, it should be set to full integer values between 0 through 12.

If no border should be drawn set the line width to zero.

When changing the border width of a Free Text annotation DynaPDF must rebuild the appearance stream of the annotation. The text position depends on the line width of the border. Changing the border width changes also the position of the text. See also DynaPDF.FreeTextAnnot.

See also [SetAnnotBorderWidth](#) function in DynaPDF manual.

See also

- 70.115 DynaPDF.FreeTextAnnot 2738
- 70.152 DynaPDF.GetFieldBorderWidth 2788
- 70.290 DynaPDF.New 2981
- 70.331 DynaPDF.SetAnnotBorderStyle 3076
- 70.367 DynaPDF.SetFieldBorderWidth 3125
- 70.472 DynaPDF.Table.SetBorderWidth 3290

Created 25th November 2014, last changed 25th November 2014.

70.333 DynaPDF.SetAnnotColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotColor"; PDF; AnnotationHandle; ColorSelector; ColorSpace; ColorValue)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

ColorSelector

Which color to change. Can be BackColor, BorderColor or TextColor.

"TextColor"

ColorSpace

The color space to use. Can be DeviceRGB, DeviceCMYK or DeviceGray.

"DeviceRGB"

ColorValue

The color value as number.

255

Result Returns OK or error.

Description

The color can be defined in any device color space. However, at time of publication the function converts the color back to DeviceRGB.

Note that not all annotation types support a background or border color. For example, link annotations support a border color but no background or text color.

When changing a color of a Free Text annotation DynaPDF must rebuild the appearance stream of the annotation. This can cause slightly changes in the text position. See also DynaPDF.FreeTextAnnot.

See also [SetAnnotColor](#) function in DynaPDF manual.

See also

- 70.121 DynaPDF.GetAnnotation 2748
- 70.154 DynaPDF.GetFieldColor 2790
- 70.290 DynaPDF.New 2981
- 70.331 DynaPDF.SetAnnotBorderStyle 3076
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.335 DynaPDF.SetAnnotFlags 3083

- 70.342 DynaPDF.SetAnnotString 3091
- 70.368 DynaPDF.SetFieldColor 3127
- 70.384 DynaPDF.SetFillColor 3150
- 70.423 DynaPDF.SetStrokeColor 3222

Created 25th November 2014, last changed 25th November 2014.

70.334 DynaPDF.SetAnnotDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotDate"; PDF; AnnotationHandle; DateType; Value)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

AnnotationHandle

The annotation index.
5

DateType

The type of date. Can be CreationDate (Markup annotations only) or ModificationDate.
"ModificationDate"

Value

The new date value. Can be a timestamp or the number of seconds from 1st Jan 1970.
Get(CurrentHostTimeStamp)

Result Returns OK or error.

Description

The following annotation types are markup annotations:

- Care
- Circle, Square
- FileAttach
- FreeText
- Highlight, Squiggly, Strikeout, Underline
- Ink
- Line
- PolyLine, Polygon
- Projection
- Redact
- Sound

- Stamp
- Text

The function `DynaPDF.GetAnnotation` can also be used to determine whether an annotation is a markup annotation.

See also

- 70.121 `DynaPDF.GetAnnotation` 2748
- 70.118 `DynaPDF.GetAnnotFlags` 2744
- 70.119 `DynaPDF.GetAnnotLink` 2745
- 70.120 `DynaPDF.GetAnnotType` 2746
- 70.290 `DynaPDF.New` 2981
- 70.333 `DynaPDF.SetAnnotColor` 3079
- 70.335 `DynaPDF.SetAnnotFlags` 3083
- 70.340 `DynaPDF.SetAnnotOpacity` 3089
- 70.369 `DynaPDF.SetFieldDate` 3129
- 70.405 `DynaPDF.SetOCGState` 3188

Created 25th November 2014, last changed 25th November 2014.

70.335 DynaPDF.SetAnnotFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotFlags"; PDF; Flags)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Flags

The new flags value.

4

Result Returns OK or error.

Description

The parameter Flags is a bit mask; multiple flags can be set with a binary or operator (e.g. afPrint (4) + afReadOnly (64)). It is also possible to add each flag separately; the previous flags are only deleted if the flag afNone (=0) is used.

See also [SetAnnotFlags](#) function in DynaPDF manual.

See also

- 70.115 DynaPDF.FreeTextAnnot 2738
- 70.290 DynaPDF.New 2981
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.336 DynaPDF.SetAnnotFlagsEx 3085
- 70.338 DynaPDF.SetAnnotIcon 3087
- 70.340 DynaPDF.SetAnnotOpacity 3089
- 70.342 DynaPDF.SetAnnotString 3091
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.392 DynaPDF.SetGStateFlags 3164
- 70.394 DynaPDF.SetImportFlags2 3170

Created 25th November 2014, last changed 6th October 2015.

Flag	Description
afNone	No flags are set.
afInvisible	If set, do not display the annotation if it does not belong to one of the standard annotation types and no annotation handler is available.
afHidden	(PDF 1.2) If set, do not display or print the annotation or allow it to interact with the user, regardless of its annotation type or whether an annotation handler is available.
afPrint	(PDF 1.2) If set, print the annotation when the page is printed. If clear, never print the annotation, regardless of whether it is displayed on the screen. This can be useful, for example, for annotations representing interactive pushbuttons, which would serve no meaningful purpose on the printed page.
afNoZoom	(PDF 1.3) If set, do not scale the annotation's appearance to match the magnification of the page. The location of the annotation on the page (defined by the upper-left corner of its annotation rectangle) remains fixed, regardless of the page magnification.
afNoRotate	(PDF 1.3) If set, do not rotate the annotation's appearance to match the rotation of the page. The upper-left corner of the annotation rectangle remains in a fixed location on the page, regardless of the page rotation.
afNoView	(PDF 1.3) If set, do not display the annotation on the screen or allow it to interact with the user. The annotation may be printed (depending on the setting of the afPrint flag), but should be considered hidden for purposes of on-screen display and user interaction.
afReadOnly	(PDF 1.3) If set, do not allow the annotation to interact with the user. The annotation may be displayed or printed (depending on the settings of the afNoView and afPrint flags), but should not respond to mouse clicks or change its appearance in response to mouse motions.

70.336 DynaPDF.SetAnnotFlagsEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotFlagsEx"; PDF; AnnotationHandle; Flags)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

AnnotationHandle

The annotation index.
5

Flags

The new flags.
4

Result Returns OK or error.

Description

See also [SetAnnotFlagsEx](#) function in DynaPDF manual.

See also

- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.290 DynaPDF.New 2981
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.340 DynaPDF.SetAnnotOpacity 3089
- 70.393 DynaPDF.SetImportFlags 3166
- 70.394 DynaPDF.SetImportFlags2 3170

Created 25th November 2014, last changed 27th May 2017.

70.337 DynaPDF.SetAnnotHighlightMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotHighlightMode"; PDF; AnnotationHandle; Mode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

AnnotationHandle

The annotation index.
5

Mode

The new highlight mode. Can be None, Invert, Outline, Push or PushUpd.
"Invert"

Result Returns OK or error.

Description

The highlight mode is applied when clicking with the mouse on the annotation. Only link annotations support a highlight mode. However, setting the mode to other annotation types causes no error; the value will be ignored instead.

See also [SetAnnotHighlightMode](#) function in DynaPDF manual.

See also

- 70.161 DynaPDF.GetFieldHighlightMode 2798
- 70.204 DynaPDF.GetLinkHighlightMode 2849
- 70.290 DynaPDF.New 2981
- 70.376 DynaPDF.SetFieldHighlightMode 3141
- 70.400 DynaPDF.SetLinkHighlightMode 3180

Created 25th November 2014, last changed 25th November 2014.

70.338 DynaPDF.SetAnnotIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotIcon"; PDF; AnnotationHandle; Icon)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

Icon

The new icon. Can be Comment, Help, Insert, Key, NewParagraph, Note, Paragraph or UserDefined.

"Comment"

Result Returns OK or error.

Description

The parameter AnnotationHandle must be a valid handle of a Text annotation. See also DynaPDF.TextAnnot.

See also [SetAnnotIcon](#) function in DynaPDF manual.

See also

- 70.121 DynaPDF.GetAnnotation 2748
- 70.117 DynaPDF.GetAnnotCount 2743
- 70.119 DynaPDF.GetAnnotLink 2745
- 70.120 DynaPDF.GetAnnotType 2746
- 70.290 DynaPDF.New 2981
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.342 DynaPDF.SetAnnotString 3091
- 70.495 DynaPDF.TextAnnot 3335

Created 25th November 2014, last changed 25th November 2014.

70.339 DynaPDF.SetAnnotLineEndStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotLineEndStyle"; PDF; AnnotationHandle; StartPointLineEndStyle; EndPointLineEndStyle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

StartPointLineEndStyle

Can be None, Butt, Circle, ClosedArrow, Diamond, OpenArrow, RClosedArrow, ROpenArrow, Slash or Square.

"Diamond"

EndPointLineEndStyle

Can be None, Butt, Circle, ClosedArrow, Diamond, OpenArrow, RClosedArrow, ROpenArrow, Slash or Square.

"Diamond"

Result Returns OK or error.

Description

See also [SetAnnotLineEndStyle](#) function in DynaPDF manual.

See also

- 70.283 DynaPDF.LineAnnot 2969
- 70.290 DynaPDF.New 2981
- 70.331 DynaPDF.SetAnnotBorderStyle 3076
- 70.341 DynaPDF.SetAnnotOpenState 3090

Created 25th November 2014, last changed 25th November 2014.

70.340 DynaPDF.SetAnnotOpacity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotOpacity"; PDF; AnnotationHandle; Opacity)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

AnnotationHandle

The annotation index.
5

Opacity

The new opacity value.
1.0

Result Returns OK or error.

Description

The function DynaPDF.GetAnnotation can be used to determine whether an annotation is a markup annotation.

See also [SetAnnotOpacity](#) function in DynaPDF manual.

See also

- 70.121 DynaPDF.GetAnnotation 2748
- 70.290 DynaPDF.New 2981
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.336 DynaPDF.SetAnnotFlagsEx 3085
- 70.341 DynaPDF.SetAnnotOpenState 3090
- 70.342 DynaPDF.SetAnnotString 3091
- 70.406 DynaPDF.SetOpacity 3190

Created 27th January 2016, last changed 27th January 2016.

70.341 DynaPDF.SetAnnotOpenState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotOpenState"; PDF; AnnotationHandle; State)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

AnnotationHandle

The annotation index.
5

State

The new state. Can be 0 (closed) or 1 (open)
1.

Result Returns OK or error.

Description

Markup annotations can be connected with a PopUp annotation that displays additional comments in a window (like a Text annotation). The open state can only be changed if the base annotation is connected with a PopUp annotation. If the base annotation contains no PopUp annotation or if the handle refers to a non- markup annotation the function does nothing.

All annotation types with exception of 3D, Link, Movie, Screen, PrinterMark, TrapNet, and Watermark are markup annotations.

See also [SetAnnotOpenState](#) function in DynaPDF manual.

See also

- 70.283 DynaPDF.LineAnnot 2969
- 70.290 DynaPDF.New 2981
- 70.331 DynaPDF.SetAnnotBorderStyle 3076
- 70.339 DynaPDF.SetAnnotLineEndStyle 3088
- 70.340 DynaPDF.SetAnnotOpacity 3089

Created 25th November 2014, last changed 25th November 2014.

70.342 DynaPDF.SetAnnotString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotString"; PDF; AnnotationHandle; StringType; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

StringType

Which string to change. Can be Author, Comment, Name or Subject.

"Name"

Value

The new value.

"Joe Miller"

Result Returns OK or error.

Description

See also [SetAnnotString](#) function in DynaPDF manual.

See also

- 70.121 DynaPDF.GetAnnotation 2748
- 70.117 DynaPDF.GetAnnotCount 2743
- 70.119 DynaPDF.GetAnnotLink 2745
- 70.290 DynaPDF.New 2981
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.338 DynaPDF.SetAnnotIcon 3087
- 70.340 DynaPDF.SetAnnotOpacity 3089
- 70.343 DynaPDF.SetAnnotSubject 3092

Created 25th November 2014, last changed 25th November 2014.

70.343 DynaPDF.SetAnnotSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetAnnotSubject"; PDF; AnnotationHandle; Subject)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

AnnotationHandle

The annotation index.

5

Subject

The subject to be set.

"Hello World"

Result Returns OK or error.

Description

The subject is defined since PDF 1.5. The function adjusts the PDF version automatically if it is lower than PDF 1.5.

The annotation types FileLink, PageLink, PopUp and WebLink do not support a subject string. The function returns with an error when trying to set the subject on these annotation types.

If the parameter Value an empty string the subject string is deleted in the annotation.

See also [SetAnnotSubject](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.342 DynaPDF.SetAnnotString 3091

Created 25th November 2014, last changed 25th November 2014.

70.344 DynaPDF.SetBBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetBBox"; PDF; box; left; top; right; bottom)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

box

Which box to set. Can be Art, Bleed, Crop, Trim or Media.
"Media"

left

The lower left x value.

0

top

The lower left y.

0

right

The upper right x.

595

bottom

The upper right y.

895

Result Returns OK or error.

Description

A PDF page may be prepared either for a finished medium, such as a sheet of paper, or as part of a prepress process in which the content of the page is placed on an intermediate medium, such as film or an imposed reproduction plate.

See also SetBBox function in dynapdf_help.pdf.

See also [SetBBox](#) function in DynaPDF manual.

See also

- 70.123 DynaPDF.GetBBox 2751
- 70.253 DynaPDF.GetUseVisibleCoords 2909
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.407 DynaPDF.SetOrientation 3191

- 70.410 DynaPDF.SetPageBBox 3197
- 70.412 DynaPDF.SetPageFormat 3201
- 70.413 DynaPDF.SetPageHeight 3203
- 70.416 DynaPDF.SetPageWidth 3208
- 70.437 DynaPDF.SetUseVisibleCoords 3242

Example Databases

- [DynaPDF/List Annotations](#)
- [DynaPDF/PDF Crop](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Shrink PDF pages](#)

70.344.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)
- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 18th August 2014.

70.345 DynaPDF.SetBookmarkDest

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetBookmarkDest"; PDF; BookmarkHandle; DestType; a; b; c; d)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

BookmarkHandle

The reference number for the bookmark. Either returned by one of the add/insert functions or just counting from 0 to DynaPDF.GetBookmarkCount-1.

\$BookmarkHandle

DestType

The destination type. Must be XY_Zoom, Fit, FitH_Top, FitV_Left, Fit_Rect, FitB, FitBH_Top or FitBV_Left.

a

The first parameter.

\$a

b

The first parameter.

\$b

c

The first parameter.

\$c

d

The first parameter.

\$d

Result Returns OK or error.

Description

The parameter BookmarkHandle must be a valid bookmark handle. The destination page will not be changed by this function it must be set correctly with the function DynaPDF.AddBookmark. If it should be changed use the function DynaPDF.ChangeBookmark.

The destination created by this function allows jumping to a specific position in a document instead of simply opening a page such as a normal bookmark does.

See dynapdf_help.pdf manual file for details.

See also [SetBookmarkDest](#) function in DynaPDF manual.

See also

- 70.3 DynaPDF.AddBookmark

- 70.30 DynaPDF.ChangeBookmark 2597
- 70.124 DynaPDF.GetBookmark 2753
- 70.125 DynaPDF.GetBookmarkCount 2755
- 70.290 DynaPDF.New 2981
- 70.346 DynaPDF.SetBookmarkStyle 3097

Created 18th August 2014, last changed 18th August 2014.

70.346 DynaPDF.SetBookmarkStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetBookmarkStyle"; PDF; BookmarkHandle; Style; RGBColor)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

BookmarkHandle

The reference number for the bookmark. Either returned by one of the add/insert functions or just counting from 0 to DynaPDF.GetBookmarkCount-1.

\$BookmarkHandle

Style

The new style. Can be "none", "italic", "bold" or a numeric representation.

"italic"

RGBColor

The RGB color value.

MBS("DynaPDF.RGB"; 0; 0; 255)

Result Returns OK or error.

Description

Since Acrobat 5 bookmarks support a user defined color and the text style can be changed to italic, bold and so on. Older versions of Adobe's Acrobat ignore the style information. Bookmarks support RGB colors only. The parameter Style is a bit mask, the flags can be combined, e.g. to create a bolditalic bookmark.

You can use DynaPDF.RGB function to calculate RGB color value.

See also [SetBookmarkStyle](#) function in DynaPDF manual.

Examples

Set bold:

MBS("DynaPDF.SetBookmarkStyle"; \$PDF; 1; "bold"; 45*65536+144*256+54)

Set bold and italic:

MBS("DynaPDF.SetBookmarkStyle"; \$PDF; 1; 3; 45*65536+144*256+54)

See also

- 70.3 DynaPDF.AddBookmark 2553
- 70.124 DynaPDF.GetBookmark 2753

- 70.125 DynaPDF.GetBookmarkCount 2755
- 70.126 DynaPDF.GetBorderStyle 2756
- 70.290 DynaPDF.New 2981
- 70.307 DynaPDF.RGB 3026
- 70.345 DynaPDF.SetBookmarkDest 3095
- 70.347 DynaPDF.SetBorderStyle 3099

Created 18th August 2014, last changed 18th August 2014.

70.347 DynaPDF.SetBorderStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetBorderStyle"; PDF; BorderStyle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

BorderStyle

The new border style. Can be Solid, Bevelled, Inset, Underline or Dashed.

"Solid"

Result Returns OK or error.

Description

It is also possible to change the style of a specific form field, see DynaPDF.SetFieldBorderStyle for further information.

See also [SetBorderStyle](#) function in DynaPDF manual.

See also

- [70.46 DynaPDF.CreateButton](#) 2620
- [70.48 DynaPDF.CreateComboBox](#) 2625
- [70.58 DynaPDF.CreateRadioButton](#) 2648
- [70.60 DynaPDF.CreateSigField](#) 2653
- [70.126 DynaPDF.GetBorderStyle](#) 2756
- [70.151 DynaPDF.GetFieldBorderStyle](#) 2787
- [70.290 DynaPDF.New](#) 2981
- [70.331 DynaPDF.SetAnnotBorderStyle](#) 3076
- [70.346 DynaPDF.SetBookmarkStyle](#) 3097
- [70.366 DynaPDF.SetFieldBorderStyle](#) 3124

70.347.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

70.348 DynaPDF.SetCMapDir

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetCMapDir"; PDF; Path { ; Flags })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Path

Absolute native path to the folder.

\$path

Flags

Optional

The flags to use. Can be Default, Recursive or Delayed.

"Default"

Result Returns OK or error.

Description

You can use Path.FilemakerPathToNativePath to convert paths if needed.

Requires DynaPDF Pro license.

See also [SetCMapDir](#) function in DynaPDF manual.

See also

- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.373 DynaPDF.SetFieldFont 3136
- 70.431 DynaPDF.SetTrapped 3234
- 121.2 Path.FileMakerPathToNativePath 6139

Created 18th August 2014, last changed 27th May 2017.

70.349 DynaPDF.SetCharacterSpacing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetCharacterSpacing"; PDF; CharacterSpacing)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

CharacterSpacing

The new value for character spacing. Default is zero.
10

Result Returns OK or error.

Description

The function requires an open page, template or pattern.
See also [SetCharacterSpacing](#) function in DynaPDF manual.

Examples

Set character spacing to 5:

```
MBS( "DynaPDF.SetCharacterSpacing"; $PDF; 5 )
```

See also

- [70.128 DynaPDF.GetCharacterSpacing](#) 2758
- [70.290 DynaPDF.New](#) 2981
- [70.317 DynaPDF.ReplacePattern](#) 3046

70.349.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr6](#)

Created 18th August 2014, last changed 18th August 2014.

70.350 DynaPDF.SetCheckBoxChar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetCheckBoxChar"; PDF; CheckBoxChar)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

CheckBoxChar

The checkbox char to use: Check, Circle, Cross1, Cross2, Cross3, Cross4, Diamond, Square or Star.
"check"

Result Returns OK or error.

Description

Default is Check.

See also [SetCheckBoxChar](#) function in DynaPDF manual.

See also

- [70.129 DynaPDF.GetCheckBoxChar](#) 2759
- [70.130 DynaPDF.GetCheckBoxCharEx](#) 2760
- [70.290 DynaPDF.New](#) 2981
- [70.352 DynaPDF.SetCheckBoxState](#) 3104

70.350.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr10](#)

Created 5th November 2014, last changed 5th November 2014.

70.351 DynaPDF.SetCheckBoxDefState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetCheckBoxDefState"; PDF; Field; Checked)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Checked

The new default state.

1

Result Returns OK or error.

Description

It can differ from the current visible state of the check box. The default state is used when the form is reset with a Reset Form Action.

The default state of a new check box is always identical with the visible state.

See also [SetCheckBoxDefState](#) function in DynaPDF manual.

See also

- [70.131 DynaPDF.GetCheckBoxDefState](#) 2761
- [70.290 DynaPDF.New](#) 2981
- [70.352 DynaPDF.SetCheckBoxState](#) 3104

70.351.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr10](#)

Created 5th November 2014, last changed 5th November 2014.

70.352 DynaPDF.SetCheckBoxState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetCheckBoxState"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Result Returns OK or error.

Description

The parameter Field must be a valid check box handle.
See also [SetCheckBoxState](#) function in DynaPDF manual.

See also

- 70.129 DynaPDF.GetCheckBoxChar 2759
- 70.130 DynaPDF.GetCheckBoxCharEx 2760
- 70.131 DynaPDF.GetCheckBoxDefState 2761
- 70.290 DynaPDF.New 2981
- 70.350 DynaPDF.SetCheckBoxChar 3102
- 70.351 DynaPDF.SetCheckBoxDefState 3103

Example Databases

- [DynaPDF/Fill Form Fields](#)

70.352.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr10](#)

Created 5th November 2014, last changed 5th November 2014.

70.353 DynaPDF.SetColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetColorSpace"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The new colorspace. Can be DeviceRGB, DeviceCMYK or DeviceGray.
"DeviceGray"

Result Returns OK on success or error message.

Description

All color values must be defined in the current color space. Images or EMF graphics are automatically converted to the current color space. The default color conversion rules can be modified with the function DynaPDF.SetGStateFlags.

Extended color spaces can be set with DynaPDF.SetExtColorSpace, DynaPDF.SetExtFillColorSpace, and DynaPDF.SetExtStrokeColorSpace.

See also DynaPDF.GetColorSpace.

See also [SetColorSpace](#) function in DynaPDF manual.

Examples

Set to RGB:

```
MBS( "DynaPDF.SetColorSpace"; $PDF; "DeviceRGB" )
```

Set to CMYK:

```
MBS( "DynaPDF.SetColorSpace"; $PDF; "DeviceCMYK" )
```

Write in CMYK:

```
# switch to CMYK
Set Variable [ $r; Value:MBS( "DynaPDF.SetColorSpace"; $pdf; "DeviceCMYK" ) ]
# set color to Cyan
Set Variable [ $r; Value:MBS("DynaPDF.SetFillColor"; $pdf; 1; 0; 0; 0) ]
# Write some text
Set Variable [ $r; Value:MBS("DynaPDF.WriteText"; $pdf; 100; $x; "Some cyan text") ]
# now switch back to RGB
Set Variable [ $r; Value:MBS( "DynaPDF.SetColorSpace"; $pdf; "DeviceRGB" ) ]
```

See also

- 70.132 DynaPDF.GetColorSpace 2762
- 70.134 DynaPDF.GetColorSpaceInfo 2764
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.290 DynaPDF.New 2981
- 70.360 DynaPDF.SetExtColorSpace 3116
- 70.361 DynaPDF.SetExtFillColorSpace 3118
- 70.384 DynaPDF.SetFillColor 3150
- 70.392 DynaPDF.SetGStateFlags 3164
- 70.509 DynaPDF.WriteText 3364

Example Databases

- [DynaPDF/Create PDF with Bezier Curves](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/Watermark pages](#)

Created 18th August 2014, last changed 12nd November 2018.

70.354 DynaPDF.SetCompressionFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetCompressionFilter"; PDF; Filter)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Filter

The compression filter to use: Flate, JPEG, JP2K, CCITT3, CCITT4, LZW, LZWBW, FlateBW, JBIG2. "JPEG"

Result Returns OK on success.

Description

1 bit and 4 bit images are always compressed with Flate independent of the current compression filter. The filters are described in detail at InsertImage in DynaPDF help file.

See also [SetCompressionFilter](#) function in DynaPDF manual.

Examples

Compress images with 75% JPEG compression:

```
MBS( "DynaPDF.SetCompressionFilter"; $PDF; "jpeg" )
```

```
MBS( "DynaPDF.SetJPEGQuality"; $PDF; 75 )
```

Disable compression for best results:

```
MBS( "DynaPDF.SetCompressionFilter"; $PDF; "flate" )
```

See also

- 70.41 DynaPDF.ClipPath 2612
- 70.82 DynaPDF.DrawCircle 2682
- 70.135 DynaPDF.GetCompressionFilter 2765
- 70.136 DynaPDF.GetCompressionLevel 2766
- 70.276 DynaPDF.InsertImage 2952
- 70.277 DynaPDF.InsertImageFile 2956
- 70.290 DynaPDF.New 2981
- 70.355 DynaPDF.SetCompressionLevel 3109

- 70.395 DynaPDF.SetJPEGQuality

Example Databases

- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Watermark pages](#)

Created 18th August 2014, last changed 31st August 2018.

70.355 DynaPDF.SetCompressionLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetCompressionLevel"; PDF; CompressLevel)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

CompressLevel

The new compression level. Can be none, default, fastest or max.
"none"

Result Returns OK or error.

Description

If the compression level is None, content streams will be left uncompressed. This value is useful if a content stream must be debugged, the value will be ignored for image streams. The compression level is also used by certain image compression filters, see DynaPDF.InsertImage for further information.

See also DynaPDF.GetCompressionLevel.

See also [SetCompressionLevel](#) function in DynaPDF manual.

See also

- 70.135 DynaPDF.GetCompressionFilter 2765
- 70.136 DynaPDF.GetCompressionLevel 2766
- 70.276 DynaPDF.InsertImage 2952
- 70.290 DynaPDF.New 2981
- 70.354 DynaPDF.SetCompressionFilter 3107
- 53.38 ZipFile.SetCompressionLevel 1517

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)

70.355.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 30th November 2019.

70.356 DynaPDF.SetContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetContent"; PDF; Content)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Content

The new content data.

Result Returns OK or error.

Description

If the parameter Buffer is empty the content stream of the page or template will be deleted. In the latter case page resources such as fonts, images and so on will be deleted from the page object too.

Use this function in combination with DynaPDF.GetContent if you need to change a content stream in a manner that DynaPDF does not supports. Do never change a content stream when you don't know exactly what you are doing.

See also [SetContent](#) function in DynaPDF manual.

See also

- 70.122 DynaPDF.GetAscent 2750
- 70.137 DynaPDF.GetContent 2767
- 70.170 DynaPDF.GetFontCount 2807
- 70.290 DynaPDF.New 2981
- 70.299 DynaPDF.ParseContent 3011
- 70.386 DynaPDF.SetFont 3154
- 70.387 DynaPDF.SetFontEx 3156
- 70.391 DynaPDF.SetFontWeight 3162
- 70.427 DynaPDF.SetTextRect 3229

70.356.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 13th December 2016, last changed 13th December 2016.

70.357 DynaPDF.SetDocInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetDocInfo"; PDF; DocInfo; value)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

DocInfo

The key to set. Can be Author, Creator, Keywords, Producer, Subject, Title or Company.

"Author"

value

The new value.

"Hello"

Result Returns OK or error message.

Description

See also [SetDocInfo](#) function in DynaPDF manual.

Examples

Set author name:

```
MBS( "DynaPDF.SetDocInfo"; $PDF; "Author"; "Christian" )
```

Set title of document:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetDocInfo"; $pdf; "Title"; "Test PDF") ]
```

Set keywords:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetImportDocInfo"; $pdf; "keywords"; "test, dynapdf, filemaker") ]
```

See also

- 70.138 DynaPDF.GetDocInfo 2768
- 70.276 DynaPDF.InsertImage 2952
- 70.290 DynaPDF.New 2981
- 70.358 DynaPDF.SetDocInfoEx 3113
- 70.449 DynaPDF.SysFontInfo 3259

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [DynaPDF/Bookmarks](#)
- [DynaPDF/Create DeviceN ColorSpace](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/DynaPDF Test](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Watermark pages](#)
- [DynaPDF/WriteFText](#)
- [OCR/OCR with DynaPDF](#)

70.357.1 Blog Entries

- [Introducing DynaPDF to MBS Filemaker Plugin](#)

70.357.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 28](#)

Created 18th August 2014, last changed 28th April 2018.

70.358 DynaPDF.SetDocInfoEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetDocInfoEx"; PDF; DocInfo; Key; value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

DocInfo

The key to set. Can be Author, Creator, Keywords, Producer, Subject, Title or Company.

"Author"

Key

The key name for custom keys.

"OurID"

value

The new value.

"Hello"

Result Returns OK or error.

Description

The function sets or changes a document info entry. This function supports also user defined keys which can be created or changed if necessary. If the parameter DocInfo is set to Custom the parameter Key must contain a unique key.

The following keywords are reserved and must not be used as user defined keys:

- Author* CreationDate* GTS_PDFXVersion
- Keywords* ModifyDate* Producer* Subject* Title* Trapped

Note that the function does not check whether a reserved key is used. Using such a key causes maybe errors which are mostly not reported in viewer applications.

User defined keys should be defined as 7 bit ASCII string and the usage of special characters like /, \, #, or character codes higher than 127 should be avoided. The value of the document info entry should not contain binary data.

See also [SetDocInfoEx](#) function in DynaPDF manual.

Examples

Set modification date:

MBS("DynaPDF.SetDocInfoEx"; \$pdf; "ModifyDate"; ""; \$value)

See also

- 70.138 DynaPDF.GetDocInfo 2768
- 70.290 DynaPDF.New 2981
- 70.357 DynaPDF.SetDocInfo 3111
- 70.387 DynaPDF.SetFontEx 3156

70.358.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr5](#)

Created 28th April 2018, last changed 30th April 2018.

70.359 DynaPDF.SetDrawDirection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetDrawDirection"; PDF; Direction)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Direction

Draw direction. Can be CounterClockwise or Clockwise.

"Clockwise"

Result Returns OK or error message.

Description

The draw direction is important if a path should be filled with the nonzero winding number rule or even-odd rule. Both modes are described in detail under ClipPath().

See also [SetDrawDirection](#) function in DynaPDF manual.

See also

- 70.43 DynaPDF.ClosePath 2615
- 70.79 DynaPDF.DrawArc 2676
- 70.80 DynaPDF.DrawArcEx 2678
- 70.83 DynaPDF.DrawPie 2684
- 70.87 DynaPDF.Ellipse 2691
- 70.141 DynaPDF.GetDrawDirection 2772
- 70.290 DynaPDF.New 2981
- 70.322 DynaPDF.RoundRect 3058
- 70.323 DynaPDF.RoundRectEx 3060
- 70.497 DynaPDF.Triangle 3339

Created 18th August 2014, last changed 18th August 2014.

70.360 DynaPDF.SetExtColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetExtColorSpace"; PDF; Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

Handle of an extended color space.

Result Returns OK or error.

Description

An extended color spaces are non-device color spaces, such as ICCBased, Lab, Separation, DeviceN, and so on. The current fill and stroke color are initialised to black after the color space has been changed. Device color spaces can be set with DynaPDF.SetColorSpace. The fill and stroke color spaces can also be set separately with DynaPDF.SetExtFillColorSpace and DynaPDF.SetExtStrokeColorSpace.

Requires DynaPDF Pro license.

See also [SetExtColorSpace](#) function in DynaPDF manual.

Examples

Draw line in a separation color:

```
# draw line in Cut Color
Set Variable [ $cs ; Value: MBS("DynaPDF.CreateSeparationCS"; $pdf; "Through Cut"; "DeviceCMYK";
-1; MBS("DynaPDF.CMYK"; 0; 255; 0; 0)) ]
Set Variable [ $r ; Value: MBS("DynaPDF.SetExtColorSpace"; $pdf; $cs) ]
Set Variable [ $f ; Value: MBS("DynaPDF.SetFillColor"; $pdf; 1) ]
Set Variable [ $r ; Value: MBS( "DynaPDF.Rectangle"; $pdf; $x; $y; $w; $h; "Stroke" ) ]
```

See also

- 70.7 DynaPDF.AddDeviceNSeparations 2560
- 70.27 DynaPDF.CMYK 2593
- 70.59 DynaPDF.CreateSeparationCS 2650
- 70.132 DynaPDF.GetColorSpace 2762
- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981

70.360. <i>DYNAPDF.SETEXTCOLORSPACE</i>	3117
• 70.353 DynaPDF.SetColorSpace	3105
• 70.361 DynaPDF.SetExtFillColorSpace	3118
• 70.362 DynaPDF.SetExtStrokeColorSpace	3119
• 70.384 DynaPDF.SetFillColor	3150

Example Databases

- [DynaPDF/Create DeviceN ColorSpace](#)

70.360.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 27th August 2017, last changed 11st November 2018.

70.361 DynaPDF.SetExtFillColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetExtFillColorSpace"; PDF; Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Handle

Handle of an extended color space.

Result Returns OK or error.

Description

The fill color is initialized to black after the color space has been changed. See also Color Spaces.

Requires DynaPDF Pro license.

See also [SetExtFillColorSpace](#) function in DynaPDF manual.

See also

- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.353 DynaPDF.SetColorSpace 3105
- 70.360 DynaPDF.SetExtColorSpace 3116
- 70.362 DynaPDF.SetExtStrokeColorSpace 3119

70.361.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 27th August 2017, last changed 27th July 2018.

70.362 DynaPDF.SetExtStrokeColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetExtStrokeColorSpace"; PDF; Handle)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Handle

Handle of an extended color space.

Result Returns OK or error.

Description

The stroke color is initialized to black after the color space has been changed. See also Color Spaces.

Requires DynaPDF Pro license.

See also [SetExtStrokeColorSpace](#) function in DynaPDF manual.

See also

- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.353 DynaPDF.SetColorSpace 3105
- 70.360 DynaPDF.SetExtColorSpace 3116
- 70.361 DynaPDF.SetExtFillColorSpace 3118

70.362.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 27th August 2017, last changed 27th July 2018.

70.363 DynaPDF.SetFieldBBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldBBox"; PDF; Field; Left; Top; Right; Bottom)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Left

The top/left coordinate.

10

Top

The top/left coordinate.

10

Right

The right/bottom coordinate.

50

Bottom

The right/bottom coordinate.

30

Result Returns OK or error.

Description

The bounding box must be defined in bottom up coordinates. The Top member of the structure BBox must be larger than Bottom as well as Right must be larger than the Left member.

See also [SetFieldBBox](#) function in DynaPDF manual.

See also

- 70.169 DynaPDF.GetFieldType 2806
- 70.290 DynaPDF.New 2981
- 70.368 DynaPDF.SetFieldColor 3127
- 70.369 DynaPDF.SetFieldDate 3129
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.373 DynaPDF.SetFieldFont 3136

70.363. <i>DYNAPDF.SETFIELDBBOX</i>	3121
• 70.374 DynaPDF.SetFieldFontEx	3138
• 70.377 DynaPDF.SetFieldIndex	3142
• 70.384 DynaPDF.SetFillColor	3150
• 70.410 DynaPDF.SetPageBBox	3197

Created 18th August 2014, last changed 18th August 2014.

70.364 DynaPDF.SetFieldBackColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldBackColor"; PDF; Color)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Color

The new color value.

MBS("DynaPDF.RGB"; 0; 0; 255)

Result Returns OK or error.

Description

If the background should appear transparent set the color to NO_COLOR (4294967281).

Default value = NO_COLOR.

For RGB you can calculate color as $\text{Blue} * 65536 + \text{Green} * 256 + \text{Red}$ with color channels in range 0 to 255.

You can use DynaPDF.RGB function to calculate RGB color value.

See also [SetFieldBackColor](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.154 DynaPDF.GetFieldColor 2790
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.290 DynaPDF.New 2981
- 70.307 DynaPDF.RGB 3026
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.368 DynaPDF.SetFieldColor 3127
- 70.382 DynaPDF.SetFieldTextColor 3148

Example Databases

- [DynaPDF/Form/Form](#)

Created 18th August 2014, last changed 18th August 2014.

70.365 DynaPDF.SetFieldBorderColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldBorderColor"; PDF; Color)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Color

The new color value in current color space.

0

Result Returns OK or error.

Description

Normal annotations support RGB colors only. Form fields support the color spaces DeviceRGB, DeviceGray and DeviceCMYK. The color value must be defined in the current color space.

If the border should appear transparent set the color to NO_COLOR (4294967281).

Default value = 0 // Black

See also [SetFieldBorderColor](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.151 DynaPDF.GetFieldBorderStyle 2787
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.290 DynaPDF.New 2981
- 70.364 DynaPDF.SetFieldBackColor 3122
- 70.366 DynaPDF.SetFieldBorderStyle 3124
- 70.367 DynaPDF.SetFieldBorderWidth 3125
- 70.382 DynaPDF.SetFieldTextColor 3148

Example Databases

- [DynaPDF/Form/Form](#)

Created 18th August 2014, last changed 18th August 2014.

70.366 DynaPDF.SetFieldBorderStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldBorderStyle"; PDF; Field; BorderStyle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

BorderStyle

The new border style. Can be Solid, Bevelled, Inset, Underline or Dashed.
"Solid"

Result Returns OK or error.

Description

It is not possible to change the border style of imported button fields. The global border style which is used for newly created fields can be set with the function DynaPDF.SetBorderStyle.

See also [SetFieldBorderStyle](#) function in DynaPDF manual.

See also

- 70.48 DynaPDF.CreateComboBox 2625
- 70.56 DynaPDF.CreateListBox 2643
- 70.58 DynaPDF.CreateRadioButton 2648
- 70.60 DynaPDF.CreateSigField 2653
- 70.126 DynaPDF.GetBorderStyle 2756
- 70.152 DynaPDF.GetFieldBorderWidth 2788
- 70.290 DynaPDF.New 2981
- 70.331 DynaPDF.SetAnnotBorderStyle 3076
- 70.347 DynaPDF.SetBorderStyle 3099
- 70.365 DynaPDF.SetFieldBorderColor 3123

Example Databases

- [DynaPDF/Form/Form](#)

Created 18th August 2014, last changed 18th August 2014.

70.367 DynaPDF.SetFieldBorderWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldBorderWidth"; PDF; Field; LineWidth)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

LineWidth

Line width of the border.
4

Result Returns OK or error.

Description

The parameter LineWidth must not be negative and it should either be 0, 1, 2, or 3 units (no border, thin, medium, or thick). Note that Adobe's Acrobat supports only these values. It is possible to draw a field with any border width, but if the field is repainted due to a reset action or due to other changes, the field appearance will be changed in Adobe's Acrobat and the border width is adjusted to the nearest supported value.

See also [SetFieldBorderWidth](#) function in DynaPDF manual.

See also

- 70.1 DynaPDF.AddActionToObj 2549
- 70.55 DynaPDF.CreateJSAction 2640
- 70.150 DynaPDF.GetFieldBorderColor 2786
- 70.151 DynaPDF.GetFieldBorderStyle 2787
- 70.152 DynaPDF.GetFieldBorderWidth 2788
- 70.290 DynaPDF.New 2981
- 70.332 DynaPDF.SetAnnotBorderWidth 3078
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.366 DynaPDF.SetFieldBorderStyle 3124

Example Databases

- [DynaPDF/Create PDF with sum form field](#)

70.367.1 Blog Entries

- [Tip of the day: DynaPDF form creation with calculation with FileMaker](#)

Created 18th August 2014, last changed 18th August 2014.

70.368 DynaPDF.SetFieldColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldColor"; PDF; Field; ColorType; CS; Color)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

ColorType

The type of color. Can be BackColor, BorderColor or TextColor.

"TextColor"

CS

The color space. Can be DeviceRGB, DeviceCMYK or DeviceGray.

"DeviceRGB"

Color

The color value to use.

MBS("DynaPDF.RGB"; 0; 0; 255)

Result Returns OK or error.

Description

The background and border color of a form field must be defined in the same color space. The color space for the text color can be defined in a separate color space (e.g. DeviceGray for the text and DeviceRGB for the background and border).

If the border or background should appear transparent set the value to NO_COLOR (4294967281). The text color cannot be transparent.

You can use DynaPDF.RGB function to calculate RGB color value.

See also [SetFieldColor](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.155 DynaPDF.GetFieldCount 2791
- 70.290 DynaPDF.New 2981
- 70.307 DynaPDF.RGB 3026
- 70.374 DynaPDF.SetFieldFontEx 3138

- 70.377 DynaPDF.SetFieldIndex 3142
- 70.382 DynaPDF.SetFieldTextColor 3148
- 70.383 DynaPDF.SetFieldToolTip 3149
- 70.384 DynaPDF.SetFillColor 3150
- 70.423 DynaPDF.SetStrokeColor 3222

Created 18th August 2014, last changed 18th August 2014.

70.369 DynaPDF.SetFieldDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldDate"; PDF; Field; DateType; Value)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

DateType

The type of date. Must be ModificationDate.
"ModificationDate"

Value

The new date value. Can be a timestamp or the number of seconds from 1st Jan 1970.
Get(CurrentHostTimeStamp)

Result Returns OK or error.

Description**See also**

- 70.164 DynaPDF.GetFieldName 2801
- 70.290 DynaPDF.New 2981
- 70.334 DynaPDF.SetAnnotDate 3081
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.368 DynaPDF.SetFieldColor 3127
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.374 DynaPDF.SetFieldFontEx 3138
- 70.377 DynaPDF.SetFieldIndex 3142
- 70.378 DynaPDF.SetFieldMapName 3143
- 70.379 DynaPDF.SetFieldName 3144

Created 25th November 2014, last changed 25th November 2014.

70.370 DynaPDF.SetFieldExpValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldExpValue"; PDF; Field; ValIndex; Value; ExpValue; Selected)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

ValIndex

The value index or -1.

-1

Value

The new value.

"Hello"

ExpValue

The export value.

"World"

Selected

Whether to select the value?

Result Returns OK or error.

Description

In the latter case, the parameter ValIndex will be ignored. If the field handle refers to a radio button, ValIndex represents the index into the Kids array of the radio button.

To determine how many values are defined in a field call the function DynaPDF.GetFieldExpValCount or DynaPDF.GetFieldEx.

The parameter Value is ignored if the field is a check box or radio button. However, the parameter ExpValue is required for these field types.

If you don't need to change the value or export value then use the function DynaPDF.SetFieldExpValueEx instead.

If the field is either a combo box or list box, the parameter ExpValue is optional and can be empty. If the parameter Value is set to an empty string, the choice value will be deleted. Note that all choice values in a combo or list box must be unique. DynaPDF checks whether another choice value with the new name does already exist. If this is the case then the function will fail.

Combo boxes which have the field flag fEdit set accept a value that was directly typed into the field in a viewer. Such a value may or may not exist the list of choice values. In any case, a special handling is

required for this case because the value must be set as the field's value independent of whether it is already included in the list of choice value.

To achieve this, set the parameter ValIndex to PDF_MAX_INT (2147483647) or any index greater than the number of choice values in the field. The parameter Value can also be set to NULL or to an empty string to delete the field's value. If the string is set then it becomes the new field value but it is not added to the list of choice values if not included.

Note that the above handling is only valid for combo boxes which have the ffEdit field flag set.

To enumerate the choice values of a combo box, list box or radio button use the function DynaPDF.GetFieldExpValueEx.

See also [SetFieldExpValue](#) function in DynaPDF manual.

See also

- 70.48 DynaPDF.CreateComboBox 2625
- 70.148 DynaPDF.GetField 2783
- 70.153 DynaPDF.GetFieldChoiceValue 2789
- 70.156 DynaPDF.GetFieldExpValCount 2792
- 70.163 DynaPDF.GetFieldMapName 2800
- 70.371 DynaPDF.SetFieldExpValueEx 3132
- 70.375 DynaPDF.SetFieldFontSize 3140
- 70.378 DynaPDF.SetFieldMapName 3143
- 70.382 DynaPDF.SetFieldTextColor 3148
- 70.425 DynaPDF.SetTextFieldValue 3226

Example Databases

- [DynaPDF/Fill Form Fields](#)

Created 18th August 2014, last changed 18th August 2014.

70.371 DynaPDF.SetFieldExpValueEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldExpValueEx"; PDF; Field; ValIndex; Selected; DefSelected)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

ValIndex

The value index.
0

Selected

The new state. Pass 1 to set or 0 to clear.
0

DefSelected

New default state.
0

Result Returns OK or error.

Description

It can also be used to change the state of check boxes or the children of a radio button. The parameter ValIndex will be ignored if the field is a normal check box (no child of a radio button or field group).

To enumerate the choice values of a combo box, list box or radio button use the function DynaPDF.GetFieldExpValueEx.

See also [SetFieldExpValueEx](#) function in DynaPDF manual.

See also

- 70.148 DynaPDF.GetField 2783
- 70.156 DynaPDF.GetFieldExpValCount 2792
- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.158 DynaPDF.GetFieldExpValueEx 2794
- 70.290 DynaPDF.New 2981
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.426 DynaPDF.SetTextFieldValueEx 3228

70.371. *DYNAPDF.SETFIELDEXPVALUEEX*

3133

Created 18th August 2014, last changed 26th January 2016.

70.372 DynaPDF.SetFieldFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldFlags"; PDF; Field; Flags; Reset)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Flags

New field flags. You can pass a flag by name

1

Reset

Pass 1 to set flags to the ones you passed or pass 0 to add the flag.

1

Result Returns OK or error.

Description

The parameter Flags is a bit mask, multiple flags can be set by adding the values or use a bitwise Or operator, e.g. Print + Multiline (4096+32 = 4128). If the parameter Reset is 1 the flags of the field are set to the ones specified. If Reset is 0, the flags are added by using a bitwise Or operator.

Possible flag names: ReadOnly, Required, NoExport, Invisible, Hidden, Print, NoZoom, NoRotate, NoView, Multiline, Password, NoToggleToOff, RadioIsUnion, CommitOnSelCh, Edit, Sorted, FileSelect, MultiSelect, DoNotSpellCheck, DoNotScroll or Comb.

See Dynapdf_help.pdf for the meaning of the flags or their numerical value.

See also [SetFieldFlags](#) function in DynaPDF manual.

See also

- 70.11 DynaPDF.AddValToChoiceField 2567
- 70.56 DynaPDF.CreateListBox 2643
- 70.60 DynaPDF.CreateSigField 2653
- 70.159 DynaPDF.GetFieldFlags 2796
- 70.369 DynaPDF.SetFieldDate 3129
- 70.374 DynaPDF.SetFieldFontEx 3138

<i>70.372. DYNAPDF.SETFIELDFLAGS</i>	3135
• 70.378 DynaPDF.SetFieldMapName	3143
• 70.379 DynaPDF.SetFieldName	3144
• 70.383 DynaPDF.SetFieldToolTip	3149
• 70.392 DynaPDF.SetGStateFlags	3164

Example Databases

- [DynaPDF/Create PDF with sum form field](#)
- [DynaPDF/Form/Form](#)

70.372.1 Blog Entries

- [Tip of the day: DynaPDF form creation with calculation with FileMaker](#)

Created 18th August 2014, last changed 18th August 2014.

70.373 DynaPDF.SetFieldFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldFont"; PDF; Field; Name; Style; Size; Embed; CodePage)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Name

Font name for new font to set or empty text to deactivate current font.

"Arial"

Style

Font style value. Can be a combination of values 1 for italic, 2 for bold, 4 for underlined and 8 for striked.

3

Size

Font size in points.

12

Embed

Whether to embed font in PDF. Can be 1 to embed or 0 to not embed.

1

CodePage

The code page to use. Default is 1252 for Windows ANSI. Code page can be 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 8859-2, 8859-3, 8859-4, 8859-5, 8859-6, 8859-7, 8859-8, 8859-9, 8859-10, 8859-13, 8859-14, 8859-15, 8859-16, Symbol, 437, 737, 775, 850, 852, 855, 857, 860, 861, 862, 863, 864, 865, 866, 869, 874, Unicode

"Unicode"

Result Returns OK or error.

Description

Form fields support natively only the code pages 1252 and MacRoman.

See `dynapdf_help` manual for details.

You need to set CMap directory first with `DynaPDF.SetCMapDir`.

See also [SetFieldFont](#) function in DynaPDF manual.

Examples

Set unicode font:

```
Variable setzen [ $r ; Wert: MBS( "DynaPDF.SetCMapDir"; $pdf; "/Users/cs/Desktop/CMap"; "Recur-
```

sive")]

Variable setzen [\$r ; Wert: MBS("DynaPDF.SetFieldFont"; \$pdf; "Test"; "Arial"; 0; 12; 1; "Unicode")]

Variable setzen [\$r ; Wert: MBS("DynaPDF.SetTextFieldValue"; \$pdf; "Test"; ""; ""; "Left")]

See also

- 70.155 DynaPDF.GetFieldCount 2791
- 70.290 DynaPDF.New 2981
- 70.348 DynaPDF.SetCMapDir 3100
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.369 DynaPDF.SetFieldDate 3129
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.375 DynaPDF.SetFieldFontSize 3140
- 70.379 DynaPDF.SetFieldName 3144
- 70.425 DynaPDF.SetTextFieldValue 3226
- 70.434 DynaPDF.SetUseStdFonts 3237

70.373.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr2](#)

Created 19th March 2015, last changed 19th March 2015.

70.374 DynaPDF.SetFieldFontEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldFontEx"; PDF; Field; FontHandle; FontSize)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

FontHandle

The handle of the font returned from DynaPDF.SetFieldFont.

\$Font

FontSize

The desired font size.

12

Result Returns OK or error.

Description

The function requires a font handle that was returned by DynaPDF.SetFieldFont.

See also [SetFieldFontEx](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.369 DynaPDF.SetFieldDate 3129
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.373 DynaPDF.SetFieldFont 3136
- 70.375 DynaPDF.SetFieldFontSize 3140
- 70.377 DynaPDF.SetFieldIndex 3142
- 70.383 DynaPDF.SetFieldToolTip 3149
- 70.387 DynaPDF.SetFontEx 3156
- 70.434 DynaPDF.SetUseStdFonts 3237

70.374.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr2](#)

Created 19th March 2015, last changed 19th March 2015.

70.375 DynaPDF.SetFieldFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldFontSize"; PDF; Field; FontSize)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

FontSize

The new font size.
12

Result Returns OK or error.

Description

See also [SetFieldFontSize](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.373 DynaPDF.SetFieldFont 3136
- 70.374 DynaPDF.SetFieldFontEx 3138
- 70.381 DynaPDF.SetFieldTextAlign 3147
- 70.383 DynaPDF.SetFieldToolTip 3149

Created 18th August 2014, last changed 18th August 2014.

70.376 DynaPDF.SetFieldHighlightMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldHighlightMode"; PDF; Field; Mode)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Mode

The new highlight mode. Can be None, Invert, Outline, Push, PushUpd.

"Invert"

Result Returns OK or error.

Description

Supported field types are buttons, checkboxes, radio buttons, and signature fields. Other field types do not support this property.

See also [SetFieldHighlightMode](#) function in DynaPDF manual.

See also

- 70.161 DynaPDF.GetFieldHighlightMode 2798
- 70.204 DynaPDF.GetLinkHighlightMode 2849
- 70.290 DynaPDF.New 2981
- 70.337 DynaPDF.SetAnnotHighlightMode 3086
- 70.400 DynaPDF.SetLinkHighlightMode 3180

Created 18th August 2014, last changed 18th August 2014.

70.377 DynaPDF.SetFieldIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldIndex"; PDF; Field)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Result Returns OK or error.

Description

All fields, independently whether they are created with DynaPDF or imported from external documents, holds in internal index which can be used to reorder or sort the fields with this index.

The start index of a new field is not zero, it is 1000 instead. This makes it easier to set a field in front of all other fields without changing all field indices. However, changing a field index changes not the tab order directly, the fields of a page must be sorted before the page will be closed with the function DynaPDF.SortFieldByIndex.

The tab order of interactive form fields must be set for each page separately.

See also [SetFieldIndex](#) function in DynaPDF manual.

See also

- 70.162 DynaPDF.GetFieldIndex 2799
- 70.164 DynaPDF.GetFieldName 2801
- 70.169 DynaPDF.GetFieldType 2806
- 70.290 DynaPDF.New 2981
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.368 DynaPDF.SetFieldColor 3127
- 70.369 DynaPDF.SetFieldDate 3129
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.373 DynaPDF.SetFieldFont 3136
- 70.374 DynaPDF.SetFieldFontEx 3138

Created 18th August 2014, last changed 18th August 2014.

70.378 DynaPDF.SetFieldMapName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldMapName"; PDF; Field; Name)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Name

The new mapping name.
"FirstName1"

Result Returns OK or error.

Description

The mapping is used when exporting interactive form field data from the document.
If the mapping name of the field should be deleted set the parameter Name to empty string.
See also [SetFieldMapName](#) function in DynaPDF manual.

See also

- 70.157 DynaPDF.GetFieldExpValue 2793
- 70.163 DynaPDF.GetFieldMapName 2800
- 70.164 DynaPDF.GetFieldName 2801
- 70.290 DynaPDF.New 2981
- 70.369 DynaPDF.SetFieldDate 3129
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.379 DynaPDF.SetFieldName 3144

Created 18th August 2014, last changed 18th August 2014.

70.379 DynaPDF.SetFieldName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldName"; PDF; Field; NewName)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

NewName

The new name for the field.

"LastName"

Result Returns OK or error.

Description

Field names must sometimes be changed when multiple interactive forms with identical field names are imported. The resulting form will be damaged if the names of such fields are not changed.

The function SetFieldName() does not check whether a field name is already in use by another field. Such a checking would not be useful, because the usage of the function would be much more complicated. Use the function DynaPDF.CheckFieldNames to check the integrity of the form after field names were changed.

Changing of field names can cause problems if the field was used in JavaScript action or global JavaScript. The JavaScript(s) must also be changed to avoid error messages in Adobe's Acrobat. Global JavaScripts can be accessed with the function DynaPDF.GetJavaScript and changed with the function DynaPDF.ChangeJavaScript. A JavaScript Action can be accessed with the function DynaPDF.GetJavaScriptAction and changed with the function DynaPDF.ChangeJavaScriptAction.

See also [SetFieldName](#) function in DynaPDF manual.

See also

- 70.38 DynaPDF.CheckFieldNames 2608
- 70.164 DynaPDF.GetFieldName 2801
- 70.169 DynaPDF.GetFieldType 2806
- 70.290 DynaPDF.New 2981
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.368 DynaPDF.SetFieldColor 3127
- 70.369 DynaPDF.SetFieldDate 3129
- 70.372 DynaPDF.SetFieldFlags 3134

<i>70.379. DYNAPDF.SETFIELDNAME</i>	3145
• 70.373 DynaPDF.SetFieldFont	3136
• 70.377 DynaPDF.SetFieldIndex	3142

Created 18th August 2014, last changed 18th August 2014.

70.380 DynaPDF.SetFieldOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldOrientation"; PDF; Field; Value)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Value

The orientation value.
90

Result Returns OK or error.

Description

The parameter Value must a multiple of 90 or 0. Positive values rotate the field counter clockwise, negative values clockwise.

See also [SetFieldOrientation](#) function in DynaPDF manual.

See also

- 70.165 DynaPDF.GetFieldOrientation 2802
- 70.180 DynaPDF.GetImportOrientation 2821
- 70.214 DynaPDF.GetOrientation 2863
- 70.290 DynaPDF.New 2981
- 70.381 DynaPDF.SetFieldTextAlign 3147
- 70.407 DynaPDF.SetOrientation 3191
- 70.408 DynaPDF.SetOrientationEx 3192

Created 18th August 2014, last changed 18th August 2014.

70.381 DynaPDF.SetFieldTextAlign

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldTextAlign"; PDF; Field; Align)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Align

The text alignment. Can be Left, Center, Right or Justify.

"Justify"

Result Returns OK or error.

Description

The parameter Field must be a valid reference to a text field or button field.

See also [SetFieldTextAlign](#) function in DynaPDF manual.

See also

- 70.166 DynaPDF.GetFieldTextAlign 2803
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.290 DynaPDF.New 2981
- 70.375 DynaPDF.SetFieldFontSize 3140
- 70.380 DynaPDF.SetFieldOrientation 3146
- 70.382 DynaPDF.SetFieldTextColor 3148

Created 18th August 2014, last changed 18th August 2014.

70.382 DynaPDF.SetFieldTextColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldTextColor"; PDF; Color)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Color

The color value to use.
MBS("DynaPDF.RGB"; 0; 0; 255)

Result Returns OK or error.

Description

The color value must be defined in the current color space. The color space must not be changed before the fields are created which should use this color.

With RGB colorspace, you would pass 65536*blue+256*green+red as number.

You can use DynaPDF.RGB function to calculate RGB color value.

See also [SetFieldTextColor](#) function in DynaPDF manual.

See also

- 70.46 DynaPDF.CreateButton 2620
- 70.149 DynaPDF.GetFieldBackColor 2785
- 70.154 DynaPDF.GetFieldColor 2790
- 70.167 DynaPDF.GetFieldTextColor 2804
- 70.307 DynaPDF.RGB 3026
- 70.364 DynaPDF.SetFieldBackColor 3122
- 70.365 DynaPDF.SetFieldBorderColor 3123
- 70.368 DynaPDF.SetFieldColor 3127
- 70.370 DynaPDF.SetFieldExpValue 3130
- 70.381 DynaPDF.SetFieldTextAlign 3147

Created 18th August 2014, last changed 18th August 2014.

70.383 DynaPDF.SetFieldToolTip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFieldToolTip"; PDF; Field; Text)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Field

The field index or field name.
"FirstName"

Text

The tooltip text.
"Hello World"

Result Returns OK or error.

Description

See also [SetFieldToolTip](#) function in DynaPDF manual.

See also

- 70.154 DynaPDF.GetFieldColor 2790
- 70.168 DynaPDF.GetFieldToolTip 2805
- 70.290 DynaPDF.New 2981
- 70.368 DynaPDF.SetFieldColor 3127
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.374 DynaPDF.SetFieldFontEx 3138
- 70.375 DynaPDF.SetFieldFontSize 3140

Created 18th August 2014, last changed 18th August 2014.

70.384 DynaPDF.SetFillColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFillColor"; PDF; values)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

values

The values for the colors.
0

Result Returns OK or error message.

Description

The components of non-Lab color spaces must be in the range from 0 through 1. The *a and *b components of a Lab color space are typically in a range from -128 through 127. The *L component ranges from 0 through 100.

The number of components must match the number of components of the underlying color space. You can add an alpha value on the end.

For a grayscale color, please pass 3 times the gray level for a RGB color.

See also [SetFillColor](#) function in DynaPDF manual.

Examples

Sets color to red:

```
MBS( "DynaPDF.SetFillColor"; $PDF; 1.0; 0.0; 0.0 )
```

Sets color to blue:

```
MBS( "DynaPDF.SetFillColor"; $PDF; 0.0; 0.0; 1.0 )
```

Sets color to middle level gray:

```
MBS( "DynaPDF.SetFillColor"; $PDF; 0.5; 0.5; 0.5 )
```

Write in CMYK:

```
# switch to CMYK
Variable setzen [ $r; Wert:MBS( "DynaPDF.SetColorSpace"; $pdf; "DeviceCMYK" ) ]
# set color to Cyan
Variable setzen [ $r; Wert:MBS("DynaPDF.SetFillColor"; $pdf; 1; 0; 0; 0) ]
# Write some text
Variable setzen [ $r; Wert:MBS("DynaPDF.WriteText"; $pdf; 100; $x; "Some cyan text") ]
```

now switch back to RGB

Variable setzen [\$r; Wert:MBS("DynaPDF.SetColorSpace"; \$pdf; "DeviceRGB")]

Draw line in a separation color:

draw line in Cut Color

Set Variable [\$cs ; Value: MBS("DynaPDF.CreateSeparationCS"; \$pdf; "Through Cut"; "DeviceCMYK"; -1; MBS("DynaPDF.CMYK"; 0; 255; 0; 0))]

Set Variable [\$r ; Value: MBS("DynaPDF.SetExtColorSpace"; \$pdf; \$cs)]

Set Variable [\$r ; Value: MBS("DynaPDF.SetFillColor"; \$pdf; 1)]

Set Variable [\$r ; Value: MBS("DynaPDF.Rectangle"; \$pdf; \$x; \$y; \$w; \$h; "Stroke")]

Set RGB color:

Red 247 Green 162 Blue 53

MBS("DynaPDF.SetFillColor"; \$PDF; 247/255; 162/255; 53/255)

Set color to white for RGB:

MBS("DynaPDF.SetFillColor"; \$PDF; 1.0; 1.0; 1.0)

Set color with integer values in range of 0 to 255:

MBS("DynaPDF.SetFillColor"; \$PDF; \$red / 255.0; \$green / 255.0; /blue / 255.0)

See also

- 70.88 DynaPDF.EnableEncryption 2693
- 70.284 DynaPDF.LineTo 2971
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981
- 70.308 DynaPDF.ReadImageFormat 3028
- 70.310 DynaPDF.Rectangle 3031
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.360 DynaPDF.SetExtColorSpace 3116
- 70.363 DynaPDF.SetFieldBBox 3120
- 70.423 DynaPDF.SetStrokeColor 3222

Example Databases

- [Barcode/DynaPDF Barcode](#)

- [Barcode/QRCode PDF](#)
- [DynaPDF/Create DeviceN ColorSpace](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/Styled Text](#)
- [DynaPDF/WriteFText](#)
- [OCR/OCR with DynaPDF](#)

70.384.1 FileMaker Magazin

- Ausgabe 5/2018, Seite 28

Created 18th August 2014, last changed 6th September 2019.

70.385 DynaPDF.SetFloatPrecision

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFloatPrecision"; NumTextDecDigits; NumVectDecDigits)

Parameters

NumTextDecDigits

Number decimal digits for text object.

5

NumVectDecDigits

Number of decimal digits for vector objects.

5

Result Returns OK or error.

Description

The default precision for text and vector graphics is two decimal digits. This corresponds to 7200 DPI. The output precision of bezier curves is one higher as for vector graphics. The maximum output precision is 5 decimal digits.

Note that higher values increase the resulting file size.

See also [SetFloatPrecision](#) function in DynaPDF manual.

Created 23th November 2016, last changed 23th November 2016.

70.386 DynaPDF.SetFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFont"; PDF; Name; Style; Size; Embed; CodePage)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Font name for new font to set or empty text to deactivate current font.

"Arial"

Style

Font style value. Can be a combination of values 1 for italic, 2 for bold, 4 for underlined and 8 for striked.

3

Size

Font size in points.

12

Embed

Whether to embed font in PDF. Can be 1 to embed or 0 to not embed.

1

CodePage

The code page to use. Default is 1252 for Windows ANSI. Code page can be 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 8859-2, 8859-3, 8859-4, 8859-5, 8859-6, 8859-7, 8859-8, 8859-9, 8859-10, 8859-13, 8859-14, 8859-15, 8859-16, Symbol, 437, 737, 775, 850, 852, 855, 857, 860, 861, 862, 863, 864, 865, 866, 869, 874, Unicode

"Unicode"

Result Returns font handle or error message.

Description

See also [SetFont](#) function in DynaPDF manual.

Examples

Sets a font:

```
MBS("DynaPDF.SetFont"; $pdf; "Zapf Dingbats"; 0; 12)
```

Sets italic font:

```
MBS("DynaPDF.SetFont"; $pdf; "Times"; 1; 40; 1; "unicode")
```

70.386. *DYNAPDF.SETFONT* 3155

See also

- 70.290 DynaPDF.New 2981
- 70.356 DynaPDF.SetContent 3110
- 70.387 DynaPDF.SetFontEx 3156
- 70.411 DynaPDF.SetPageCoords 3199
- 70.434 DynaPDF.SetUseStdFonts 3237
- 70.435 DynaPDF.SetUseSystemFonts 3239
- 70.487 DynaPDF.Table.SetFont 3322
- 70.503 DynaPDF.WriteFText 3350
- 70.504 DynaPDF.WriteFTextEx 3352
- 70.507 DynaPDF.WriteStyledTextEx 3360

Example Databases

- [Barcode/QRCode PDF](#)
- [DynaPDF/Bookmarks](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/DynaPDF Highlight Text](#)
- [DynaPDF/PDF Library](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Report](#)
- [DynaPDF/Watermark pages](#)
- [DynaPDF/WriteFText](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)

70.386.1 FileMaker Magazin

- Ausgabe 3/2019, Seite 38
- Ausgabe 2/2019, Seite 27

Created 18th August 2014, last changed 27th May 2017.

70.387 DynaPDF.SetFontEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFontEx"; PDF; Name; Style; Size; Embed; CodePage)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Name

Font name for new font to set or empty text to deactivate current font.

"Arial"

Style

Font style value. Can be a combination of values 1 for italic, 2 for bold, 4 for underlined and 8 for striked.

3

Size

Font size in points.

12

Embed

Whether to embed font in PDF. Can be 1 to embed or 0 to not embed.

1

CodePage

The code page to use. Default is 1252 for Windows ANSI. Code page can be 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 8859-2, 8859-3, 8859-4, 8859-5, 8859-6, 8859-7, 8859-8, 8859-9, 8859-10, 8859-13, 8859-14, 8859-15, 8859-16, Symbol, 437, 737, 775, 850, 852, 855, 857, 860, 861, 862, 863, 864, 865, 866, 869, 874, Unicode

Result Returns font handle or error message.

Description

See also [SetFontEx](#) function in DynaPDF manual.

See also

- 70.31 DynaPDF.ChangeFont 2599
- 70.137 DynaPDF.GetContent 2767
- 70.290 DynaPDF.New 2981
- 70.356 DynaPDF.SetContent 3110
- 70.358 DynaPDF.SetDocInfoEx 3113
- 70.374 DynaPDF.SetFieldFontEx 3138

<i>70.387. DYNAPDF.SETFONTEX</i>	3157
• 70.386 DynaPDF.SetFont	3154
• 70.390 DynaPDF.SetFontSelMode	3161

Created 18th August 2014, last changed 27th May 2017.

70.388 DynaPDF.SetFontOrigin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFontOrigin"; PDF; Origin)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Origin

Which origin to use: DownLeft or TopLeft
"TopLeft"

Result Returns OK or error.

Description

The font origin is automatically set to "TopLeft" or "DownLeft" if the coordinate system will be changed (see DynaPDF.SetPageCoords for further information).

See also [SetFontOrigin](#) function in DynaPDF manual.

See also

- 70.20 DynaPDF.BeginContinueText 2584
- 70.171 DynaPDF.GetFontOrigin 2808
- 70.173 DynaPDF.GetFontWeight 2810
- 70.290 DynaPDF.New 2981
- 70.391 DynaPDF.SetFontWeight 3162
- 70.411 DynaPDF.SetPageCoords 3199

Created 21st October 2014, last changed 21st October 2014.

70.389 DynaPDF.SetFontSearchOrder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFontSearchOrder"; PDF { ; Type1; Type2; Type3; Type4 })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Type1

Optional

The first type.

"TrueType"

Type2

Optional

The second type.

"Type1"

Type3

Optional

The third type.

"OpenType"

Type4

Optional

The forth type.

"StdFont"

Result Returns OK or error.

Description

The default search order is:

- TrueType
- OpenType (OpenType fonts with PostScript outlines)
- Type1

* PDF Standard Fonts

Every font type can be disabled if necessary with the value "Disabled". You can pass no parameters, you reset the search order to the default order as described above. If you provide 4 types, you define a new search order.

See also [SetFontSearchOrder](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New

2981

Created 21st October 2014, last changed 21st October 2014.

70.390 DynaPDF.SetFontSelMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFontSelMode"; PDF; Mode)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Mode

The new mode. Can be FamilyName, PostScriptName or FullName.

"FamilyName"

Result Returns OK or error.

Description

Note that the font names that will be passed to DynaPDF.SetFont must correspond with the current font selection mode. If you don't know which font name you have in memory then use DynaPDF.SetFontEx to select fonts. The font selection mode can be changed at runtime whenever necessary.

See also [SetFontSelMode](#) function in DynaPDF manual.

See also

- 70.172 DynaPDF.GetFontSelMode 2809
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.387 DynaPDF.SetFontEx 3156
- 70.391 DynaPDF.SetFontWeight 3162
- 70.488 DynaPDF.Table.SetFontSelMode 3324

Created 21st October 2014, last changed 23th October 2014.

70.391 DynaPDF.SetFontWeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetFontWeight"; PDF; Weight)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Weight

The new weight value.

100

Result Returns OK or error.

Description

The font weight specifies the thickness or boldness of a font. Not all fonts are available in a bold style; such a font style can then be emulated only. The property `FontWeight` specifies the weight that should be emulated. The visual weight of a font depends on the base weight in that the font was defined. For example, the glyphs of an ultra-light font look also light if an extrabold weight will be emulated.

However, a bold font will never be emulated if the font is already available in a bold style. To disable the emulation of bold fonts set the property to 100 or 0.

Font weights:

- 100 - 300 // Ultra-light, Light
- 400 - 500 // Standard
- 600 - 1000 // Bold, Extrabold

See also [SetFontWeight](#) function in DynaPDF manual.

See also

- 70.171 DynaPDF.GetFontOrigin 2808
- 70.173 DynaPDF.GetFontWeight 2810
- 70.146 DynaPDF.GetFTextHeight 2779
- 70.224 DynaPDF.GetPageHeight 2876
- 70.290 DynaPDF.New 2981

<i>70.391. DYNAPDF.SETFONTWEIGHT</i>	3163
• 70.356 DynaPDF.SetContent	3110
• 70.388 DynaPDF.SetFontOrigin	3158
• 70.390 DynaPDF.SetFontSelMode	3161
• 70.413 DynaPDF.SetPageHeight	3203

Created 21st October 2014, last changed 23th October 2014.

70.392 DynaPDF.SetGStateFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetGStateFlags"; PDF; Value { ; Reset })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

The new value. Can be a number or a list including one or more of the following words: Compatible, RestorePageCoords, RealTopDownCoords, NativeBlackWhite, UseImageColorSpace, IgnoreICCProfiles, AnsiStringIsUTF8, RealPassThrough, NoBitmapAlpha or NoImageDuplCheck.

3

Reset

Optional

If the parameter Reset is true, the new flags replace current flags. If set to false, the flags are combined with the current flags.

0

Result Returns OK or error.

Description

If the parameter Reset is true, the new flags replace current flags. If set to false, the flags are combined with the current flags.

See also [SetGStateFlags](#) function in DynaPDF manual.

Examples

Set two options:

```
MBS( "DynaPDF.SetGStateFlags"; $pdf; "RealPassThrough, UseImageColorSpace" )
```

See also

- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.174 DynaPDF.GetGStateFlags 2811
- 70.290 DynaPDF.New 2981
- 70.316 DynaPDF.ReplaceImage 3043
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.353 DynaPDF.SetColorSpace 3105

Flag	Description
RestorePageCoords	If set, the current base coordinate system like bottom or top down is saved and restored with the graphics state.
RealTopDownCoords	This flag is reserved for future extensions. It is not implemented yet.
NativeBlackWhite	If set, RGB black or white is not converted to DeviceGray. This flag affects text and vector graphics but no images.
UseImageColorSpace	If set, the active color space is ignored when inserting an image. The color space is taken from the image file instead. See also "Color spaces and Images" in DynaPDF help file.
IgnoreICCPProfiles	If set, embedded ICC profiles in image files are ignored when inserting an image. The image is inserted in the base color space instead. This flag is not meaningful if the flag gfUseImageColorSpace is absent. See also "Color spaces and Images" in DynaPDF help file.
AnsiStringIsUTF8	If set, all Ansi functions interpret string parameters as UTF-8 encoded Unicode strings. Should not be used with MBS Plugin.
RealPassThrough	If set, JPEG images are inserted as is. JPEG images are normally rebuild, also in pass-through mode, to avoid issues with certain malformed JPEG images which cannot be displayed in Adobes Acrobat or Reader. If you know that your JPEG images work then set this flag to avoid unnecessary processing time.
NoBitmapAlpha	If set, the alpha channel in bitmaps files will be ignored. This is sometimes useful since many 32 bit bitmaps contain an invalid alpha channel that makes the image fully transparent.
NoImageDuplCheck	If set, no duplicate check for images will be performed. This can significantly improve processing speed especially for memory based images.
NoObjCompression	If set, object compression will be disabled.

- 70.372 DynaPDF.SetFieldFlags 3134
- 70.393 DynaPDF.SetImportFlags 3166
- 70.401 DynaPDF.SetMetaConvFlags 3181

Example Databases

- [DynaPDF/Place Picture](#)

70.392.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 21st August 2015, last changed 27th May 2017.

70.393 DynaPDF.SetImportFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetImportFlags"; PDF; Flags)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Flags

The new flags value.
268435454

Result Returns OK or error.

Description

By default the plugin uses ifImportAll combined with ifImportAsPage.

Flag Description

See also [SetImportFlags](#) function in DynaPDF manual.

Examples

Set import flags:

```
MBS( "DynaPDF.SetImportFlags"; $PDF; 268435454 + 2147483648 )
```

Set import flags with names:

```
MBS( "DynaPDF.SetImportFlags"; $pdf; "ImportAll$ImportAsPage$PrepareForPDFA" )
```

Import and Export PDF:

```
# Start new PDF
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# set import flags
Set Variable [ $r; Value:MBS( "DynaPDF.SetImportFlags"; $pdf; "ImportAll ImportAsPage PrepareForPDFA" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetImportFlags2"; $pdf; "DuplicateCheck" ) ]
# Import PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; MyTable::InputPDF) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]
# Save back
Set Field [ MyTable::OutputPDF; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
```

70.393. *DYNAPDF.SETIMPORTFLAGS* 3167
Set Variable [\$r; Value:MBS("DynaPDF.Release"; \$pdf)]

See also

- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.178 DynaPDF.GetImportFlags 2819
- 70.179 DynaPDF.GetImportFlags2 2820
- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.372 DynaPDF.SetFieldFlags 3134
- 70.392 DynaPDF.SetGStateFlags 3164
- 70.394 DynaPDF.SetImportFlags2 3170

Example Databases

- [DynaPDF/Add Page Numbers](#)
- [DynaPDF/Convert to PDF/A](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/List ColorSpaces](#)
- [DynaPDF/PDF Library](#)
- [DynaPDF/Personalized PDFs](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.393.1 Blog Entries

- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [MBS FileMaker Plugin, version 6.1pr2](#)
- [MBS Filemaker Plugin, version 4.1pr4](#)

70.393.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 36
- Ausgabe 2/2019, Seite 27
- Ausgabe 1/2018, Seite 24

Created 18th August 2014, last changed 27th May 2017.

ImportAll	268435454	If set, all objects of an external PDF file are imported.
ContentOnly	0	If set, interactive objects such as annotations, bookmarks or form fields are excluded from import.
NoContent	1	If set, the visual contents of external pages will not be imported. This flag can be used to copy interactive objects from one file into another, such as interactive form fields.
ImportAsPage	2147483648	If set, pages are not converted to templates. This flag is useful if an imported page must not be used multiple times. Conversion to templates is recommended if multiple imported pages should appear on the same page; such overlapping pages can cause resource conflicts which produces unpredictable output.
CatalogAction	2	If set, catalog actions will be imported if any. The documents catalog is the root object of a PDF file, which can trigger actions when the file will be opened, closed, or printed. See AddActionToObj() for further information.
PageActions	4	If set, page actions are imported if any. A page action is an action that was added to the page itself, not an object of a page.
Bookmarks	8	If set, bookmarks are imported if any.
Articles	16	If set, Articles are imported if any.
PageLabels	32	If set, page labels are imported if any. If multiple files are imported, DynaPDF imports the page labels of the first file only.
Thumbs	64	If set, thumb nail images are imported if any. Thumb nails can be dynamically created by Acrobat since Acrobat 5. The thumb nail images can be removed to reduce disk space.
TranspGroups	128	If set, transparency groups are imported if any. If transparency groups are removed the objects appear then opaque.
SeparationInfo	256	If set, the separation information dictionary will be imported if any.
BoxColorInfo	512	If set, the bounding boxes artbox, bleedbox and trimbox are shown in user defined color. Note that the cropbox represents the current page; the page is already cropped if a cropbox was defined.
StructureTree	1024	If set, structure trees are imported if any. A structure tree contains information about the logical structure of a document. This information can be used by screen readers and other accessibility plug-ins to enable certain features. The information of a structure tree is not required to view or print a PDF document.
Transition	2048	If set, transition settings are import. A transition dictionary contains information about how a presentation should be displayed. These settings can be removed if the document should not be used in presentation mode.
SearchIndex	4096	If set, the file path to an external search index will be imported if any.
JavaScript	8192	If set, global JavaScripts are imported if any. Note that JavaScript actions can use the functions defined in global JavaScripts. If these scripts are removed, JavaScript actions must normally also removed to avoid errors. However, it is often useful to remove the scripts for certain debug operations.
JSActions	16384	If set, JavaScript actions are imported if any. This flag is useful if an imported form contains JavaScripts which produces errors or warnings. For instance, a document can define certain scripts which may require specific settings such as a document info string and so on. It is then often difficult to determine which object produces the error or warning because it can be a JavaScript action or a global JavaScript. In such cases, JavaScript actions can be excluded temporarily to check whether the error still occurs.
DocInfo	32768	If set, document info entries are imported if any. Already existing entries are not overridden.
EmbeddedFiles	2097152	If set, embedded files are imported.
FileCollections	4194304	If set, the global definition of a collection is imported. The file attachments are still imported if the flag ifEmbeddedFiles is set. The PDF file is simply not longer marked as portable collection, also known as PDF Package. See also DynaPDF.CreateCollection.
AllAnnots	10420224	If set, all types of annotations are imported.
FreeText	65536	This flag is meaningful only if the flag ifAllAnnots is clear. If set, FreeText annotations are imported if any.
TextAnnot	131072	This flag is meaningful only if the flag ifAllAnnots is clear. If set, text annotations are imported if any.
Link	262144	This flag is meaningful only if the flag ifAllAnnots is clear. If set, link annotations are imported if any. This annotation type is used for weblinks, page links, and file links.
Stamp	524288	This flag is meaningful only if the flag ifAllAnnots is clear. If set, stamp annotations are imported if any.

70.394 DynaPDF.SetImportFlags2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetImportFlags2"; flags)

Parameters

flags

The new import flags.

16

Result Returns OK.

Description

Flags to pass:

MergeLayers	1	If set, layers with identical name are merged. If this flag is absent DynaPDF imports such layers separately so that each layer refers still to the pages where it was originally used.
Normalize	2	Replace LZW compression with Flate, apply limit checks, repair errors if possible
UseProxy	4	Not meaningful for PDF files which are loaded from a memory buffer. If set, all streams are loaded from the file on demand but they are never hold in memory. This reduces drastically the memory usage and enables the processing of almost arbitrary large PDF files with minimal memory usage. The corresponding PDF file must not be deleted before DynaPDF.CloseFile or DynaPDF.CloseFileEx was called.
NoMetadata	8	Ignore metadata streams which are attached to fonts, pages, images, and so on.
DuplicateCheck	16	Perform a duplicate check on color spaces, fonts, images, patterns, and templates when merging PDF files.

See also [SetImportFlags2](#) function in DynaPDF manual.

Examples

Activate duplicate check to reduce file size:

```
MBS("DynaPDF.SetImportFlags2"; $pdf; 16)
```

Activate normalization, duplicate check and layer merge:

```
MBS( "DynaPDF.SetImportFlags2"; $pdf; "MergeLayers$Normalize$DuplicateCheck" )
```

Import and Export PDF:

```

# Start new PDF
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# set import flags
Set Variable [ $r; Value:MBS( "DynaPDF.SetImportFlags"; $pdf; "ImportAll ImportAsPage PrepareFor-
PDFA" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetImportFlags2"; $pdf; "DuplicateCheck" ) ]
# Import PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; MyTable::InputPDF) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]
# Save back
Set Field [ MyTable::OutputPDF; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]

```

See also

- 70.118 DynaPDF.GetAnnotFlags 2744
- 70.178 DynaPDF.GetImportFlags 2819
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.335 DynaPDF.SetAnnotFlags 3083
- 70.336 DynaPDF.SetAnnotFlagsEx 3085
- 70.393 DynaPDF.SetImportFlags 3166
- 70.433 DynaPDF.SetUseGlobalImpFiles 3236

70.394.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr2](#)

Created 18th August 2014, last changed 27th May 2017.

70.395 DynaPDF.SetJPEGQuality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetJPEGQuality"; PDF; quality)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

quality

The new JPEG quality. From 0 to 100.
75

Result Returns OK on success.

Description

The function accepts also negative values. A negative value indicates that the pass-through mode for JPEG images should be disabled. Note that JPEG images are always recompressed if the pass-through mode is disabled.

If the JPEG2000 compression filter is used the value represents a divisor of the uncompressed image size to the wished compressed image size. The possible range is 0 to 1000. If the value is 0 or 1000 the loss-less variant of JPEG compression is used (see also DynaPDF.InsertImage). Lower values cause higher compression rates, however, worse image quality.

The default value is 70.

See also [SetJPEGQuality](#) function in DynaPDF manual.

Examples

sets quality level:

```
MBS( "DynaPDF.SetJPEGQuality"; $PDF; 75 )
```

Save JPEG image to container as script:

```
Set Variable [ $Image ; Value: MBS("GMImage.NewFromContainer"; MyTable::BMPContainer) ]
Set Variable [ $r ; Value: MBS("GMImage.SetQuality";$Image; 90) ]
Set Field [ MyTable::JPEGContainer ; MBS("GMImage.WriteToJPEGContainer"; $Image) ]
Set Variable [ $r ; Value: MBS("GMImage.Release";$Image) ]
```

See also

- 70.41 DynaPDF.ClipPath 2612
- 70.82 DynaPDF.DrawCircle 2682
- 70.196 DynaPDF.GetJPEGQuality 2841

70.395. <i>DYNAPDF.SETJPEGQUALITY</i>	3173
• 70.276 DynaPDF.InsertImage	2952
• 70.277 DynaPDF.InsertImageFile	2956
• 70.290 DynaPDF.New	2981
• 70.354 DynaPDF.SetCompressionFilter	3107
• 85.191 GImage.New	4580
• 85.193 GImage.NewFromContainer	4584
• 85.214 GImage.Release	4612

Example Databases

- [DynaPDF/PDF Differences](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)

Created 18th August 2014, last changed 21st December 2018.

70.396 DynaPDF.SetLanguage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetLanguage"; PDF; Language)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Language

The new language tag.
"en-US"

Result Returns OK or error.

Description

The document's language should always be set when creating Tagged PDF files or Interactive Forms. The spell check feature in Adobe's Acrobat depends on the properly defined document language. See [dynapdf_help.pdf](#) manual for details.

See also [SetLanguage](#) function in DynaPDF manual.

Examples

Set language:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetLanguage"; $pdf; "en-US") ]
```

See also

- [70.198 DynaPDF.GetLanguage](#) 2843
- [70.210 DynaPDF.GetOCGContUsage](#) 2858
- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/Convert to PDF/A](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.396.1 Blog Entries

- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)
- [Creating PDF/A in FileMaker with ZUGFeRD standard](#)

70.396.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 24

Created 4th November 2014, last changed 18th June 2016.

70.397 DynaPDF.SetLeading

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetLeading"; PDF; leading)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

leading

New leading size or zero.
0

Result Returns OK or error message.

Description

The function sets the leading that is used by the functions DynaPDF.AddContinueText and DynaPDF.WriteF-Text to calculate the distance between two text lines. The default leading in PDF is the font size. A value of 0 determines that the font size should be used as leading, this is the default behavior.

See also [SetLeading](#) function in DynaPDF manual.

Examples

Set line height:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetLeading"; $pdf; 18) ]
```

See also

- [70.5 DynaPDF.AddContinueText](#) 2557
- [70.20 DynaPDF.BeginContinueText](#) 2584
- [70.202 DynaPDF.GetLeading](#) 2847
- [70.290 DynaPDF.New](#) 2981
- [70.402 DynaPDF.SetMetadata](#) 3183
- [70.406 DynaPDF.SetOpacity](#) 3190
- [70.503 DynaPDF.WriteFText](#) 3350

Example Databases

- [DynaPDF/Invoice/Invoice](#)

Created 18th August 2014, last changed 27th May 2017.

70.398 DynaPDF.SetLineJoinStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetLineJoinStyle"; PDF; Style)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Style

The new line join style. Can be MiterJoin, RoundJoin or BevelJoin

Result Returns OK or error.

Description

The function sets the line join style which specifies how two line segments are connected. The property must be applied inside an open page, template or pattern.

See also SetLineJoinStyle function in dynapdf_help.pdf.

See also [SetLineJoinStyle](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New

2981

70.398.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 18th August 2014.

70.399 DynaPDF.SetLineWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetLineWidth"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The new line width value.
3

Result Returns OK or error message.

Description

The line width is also used to specify the thickness of the border of annotations and interactive form fields. In the latter case, the line width should be a multiple of one (or zero) and not exceed 3 units. Larger values are still correctly rendered by Adobe's Acrobat but the appearance can be changed when a Reset Form Action is executed or when other changes are made to the document.

See also [SetLineWidth](#) function in DynaPDF manual.

Examples

Draw two lines in black:

```
Set Variable [ $r; Value:MBS ( "DynaPDF.SetStrokeColor" ; $pdf ; 0; 0; 0 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.SetLineWidth" ; $pdf ; 1 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 20; 20 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 20; 40 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 30; 30 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 30; 50 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.StrokePath" ; $pdf ) ]
```

See also

- 70.102 DynaPDF.FileLink 2718
- 70.203 DynaPDF.GetLineWidth 2848
- 70.284 DynaPDF.LineTo 2971
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981
- 70.296 DynaPDF.PageLink 3001

70.399. <i>DYNAPDF.SETLINEWIDTH</i>	3179
• 70.297 DynaPDF.PageLinkEx	3004
• 70.423 DynaPDF.SetStrokeColor	3222
• 70.448 DynaPDF.StrokePath	3257
• 70.501 DynaPDF.WebLink	3345

Example Databases

- [DynaPDF/Create PDF with Bezier Curves](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Shrink PDF pages](#)

Created 18th August 2014, last changed 1st January 2017.

70.400 DynaPDF.SetLinkHighlightMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetLinkHighlightMode"; PDF; Mode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Mode

The new highlight mode. Can be None, Invert, Outline, Push or PushUpd.

"Invert"

Result Returns OK or error.

Description

The highlight mode applies a visual effect when moving the mouse over a link annotation.

See also [SetLinkHighlightMode](#) function in DynaPDF manual.

See also

- 70.102 DynaPDF.FileLink 2718
- 70.161 DynaPDF.GetFieldHighlightMode 2798
- 70.204 DynaPDF.GetLinkHighlightMode 2849
- 70.290 DynaPDF.New 2981
- 70.296 DynaPDF.PageLink 3001
- 70.297 DynaPDF.PageLinkEx 3004
- 70.337 DynaPDF.SetAnnotHighlightMode 3086
- 70.376 DynaPDF.SetFieldHighlightMode 3141
- 70.501 DynaPDF.WebLink 3345

70.400.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 18th December 2016, last changed 18th December 2016.

70.401 DynaPDF.SetMetaConvFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.SetMetaConvFlags"; PDF; Flags)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Flags

The flags.
"Default"

Result Returns OK or error.

Description

You can pass flags as text list of flag names or calculate the flag values.

See also [SetMetaConvFlags](#) function in DynaPDF manual.

See also

- 70.207 DynaPDF.GetMetaConvFlags 2852
- 70.290 DynaPDF.New 2981
- 70.392 DynaPDF.SetGStateFlags 3164

Created 18th May 2017, last changed 18th May 2017.

Flag name	Hex Number value	Description
Default	00000000	Default conversion
Debug	00000001	Write debug information into the content stream
ShowBounds	00000002	Show the bounding boxes of text strings
NoTextScaling	00000004	Do not scale text
ClipView	00000008	Draw the file into a clipping rectangle
UseRclBounds	00000010	Use rclBounds instead of rclFrame
NoClippingRgn	00000040	Disables SelectClippingRegion, IntersectClipRect, and SelectClipPath
NoFontEmbedding	00000080	Do not embed fonts ->Fonts should be embedded!!!
NoImages	00000100	Ignore image records
NoStdPatterns	00000200	Ignore standard patterns
NoBmpPatterns	00000400	Ignore bitmap patterns
NoText	00000800	Ignore text records
UseUnicode	00001000	Ignore ANSI_CHARSET
UseTextScaling	00004000	Scale text instead of using the intercharacter spacing array
NoUnicode	00008000	Avoid usage of Unicode fonts ->recommended to enable PDF 1.2 compability
FullScale	00010000	Recommended if 32 bit coordinates are used
UseRclFrame	00020000	This flag should be set if the rclFrame rectangle is not properly set
DefBkModeTransp	00040000	Initialize the background mode to transparent (SetBkMode() overrides this state).
ApplyBidiAlgo	00080000	Apply the bidirectional algorithm on Unicode strings
GDIFontSelection	00100000	Use the GDI to select fonts
RclFrameEx	00200000	If set, and if the rclBounds rectangle is larger than rclFrame, the function extends the output rectangle according to rclBounds and uses the resulting bounding box to calculate the image size (rclBounds represents the unscaled image size). This is probably the correct way to calculate the image size. However, to preserve backward compatibility the default calculation cannot be changed.
NoTextClipping	00400000	If set, the ETO_CLIPPED flag in text records is ignored.
SrcCopy_Only	00800000	If set, images which use a ROP code other than SRCCOPY are ignored. This is useful when processing Excel 2007 spool files.
ClipRclBounds	01000000	If set, the graphic is drawn into a clipping path with the size of rclBounds. This flag is useful if the graphic contains content outside of its bounding box.
DisableRasterEMF	02000000	If set, EMF files which use unsupported ROP codes are not rastered.
NoBBoxCheck	04000000	If set, the rclBounds and rclFrame rectangles are used as is. DynaPDF uses normally the rclBounds rectangle to calculate the picture size if the resolution of the EMF file seems to be larger than 1800 DPI since this is mostly an indication that the rclFrame rectangle was incorrectly calculated. If you process EMF files in such a high resolution then this flag must be set. The flag can be set by default.
IgnoreEmbFonts	08000000	If set, embedded fonts in GDIComment records will be ignored. This flag must be set if the fonts of an EMF spool file were pre-loaded with ConvertEMF-Spool(). Spool fonts must always be loaded in a pre-processing step since required fonts are not necessarily embedded in the EMF files.

70.402 DynaPDF.SetMetadata

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetMetadata"; PDF; ObjType; Handle; XMP)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

ObjType

The object type. Can be Catalog, Font, Image, Page or Template.

"Catalog"

Handle

Object handle or -1 for the catalog object.

-1

XMP

The XMP metadata as text.

Result Returns OK or error.

Description

The function deletes the XMP stream if no buffer will be provided.

If the global XMP stream of the Catalog object should be replaced then proceed as follows:

- Set the wished output PDF version with DynaPDF.SetPDFVersion.
- Get a preview of the XMP stream with DynaPDF.GetMetadata.
- Modify the returned stream as needed and save it with DynaPDF.SetMetadata, finished!

The above steps make sure that the XMP metadata and document info contain the same values. This is especially important for PDF standards like PDF/A or PDF/X. DynaPDF makes sure that the creation and modification date will not be changed when closing the file.

See also [SetMetadata](#) function in DynaPDF manual.

Examples

Read, change and write XMP metadata:

```
Variable setzen [ $pdf ; Wert: MBS("DynaPDF.New") ]
# Load PDF from container
Variable setzen [ $r ; Wert: MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Merge PDFs::InputPDF) ]
Variable setzen [ $r ; Wert: MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]
#
# get current XMP
```

```

Variable setzen [ $xmp ; Wert: MBS("DynaPDF.GetMetaData"; $pdf; "catalog"; -1) ]
#
# delete XMP metadata
// Variable setzen [ $r ; Wert: MBS("DynaPDF.SetMetaData"; $pdf; "") ]
#
# or write new XMP metadata
Variable setzen [ $r ; Wert: MBS("DynaPDF.SetMetaData"; $pdf; "catalog"; -1; $XMP) ]
#
# save
Feldwert setzen [ Merge PDFs::FinalPDF ; MBS("DynaPDF.Save"; $pdf; "Merged.pdf") ]
Variable setzen [ $r ; Wert: MBS("DynaPDF.Release"; $pdf) ]

```

See also

- 70.191 DynaPDF.GetInMetadata 2835
- 70.208 DynaPDF.GetMetadata 2853
- 70.268 DynaPDF.ImportPDFFile 2928
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.397 DynaPDF.SetLeading 3176
- 70.409 DynaPDF.SetPDFVersion 3195

70.402.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 29th July 2015, last changed 7th March 2019.

70.403 DynaPDF.SetMiterLimit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetMiterLimit"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The new miter limit.
10.0

Result Returns OK or error.

Description

When two line segments meet at a sharp angle and mitered joins have been specified as the line join style (see `SetLineJoinStyle()`), it is possible for the miter to extend far beyond the thickness of the line stroking the path. The miter limit imposes a maximum on the ratio of the miter length to the line width (see Figure below). When the limit is exceeded, the join is converted from a miter to a bevel.

Default value = 10.0

See also `SetMiterLimit` function in `dynapdf_help.pdf`.

See also [SetMiterLimit](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New

2981

70.403.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 18th August 2014.

70.404 DynaPDF.SetNumberFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetNumberFormat"; PDF; Field; Sep; DecPlaces; NegStyle { ; CurrStr; Prepend })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Sep

The decimal separator. Can be CommaDot, NoneDot, DotComma or NoneComma.

"CommaDot"

DecPlaces

Number of decimal places

2

NegStyle

Negative number format. Can be MinusBlack, Red, ParensBlack or ParensRed.

"ParensRed"

CurrStr

Optional

The currency string. Or empty for no currency.

"€"

Prepend

Optional

Position of Currency string. Pass 1 to prepend or 0 to append.

0

Result Returns OK or error.

Description

The function restricts the allowed input characters of a text field to numbers and formats the resulting string as specified. A number format is represented as two separate JavaScript Actions in PDF which are automatically created and added to the text field by this function.

The same formats can also be applied manually by creating two JavaScript actions: one for the OnKeyStroke event, and one for the OnFormat event of the text field. See DynaPDF.AddActionToObj() for a description of the events.

DynaPDF uses the JavaScript functions AFDate_Keystroke() / AFDate_KeystrokeEx() or AFDate_Format() / AFDate_FormatEx() to apply a number or date format. The functions are described in the JavaScript scripting reference which is available at <http://www.adobe.com>.

See also [SetNumberFormat](#) function in DynaPDF manual.

Examples

Create field for numbers:

```
Set Variable [ $f; Value:MBS("DynaPDF.CreateTextField"; $pdf; Create Form::Name; -1; Create Form::Multiline; Create Form::MaxLen; Create Form::PosX; Create Form::PosY; Create Form::Width; Create Form::Height) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetTextFieldValue"; $pdf; $f; Create Form::Value; Create Form::DefaultValue) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetNumberFormat"; $pdf; $f; "CommaDot"; 2; "Red"; "€"; 0) ]
```

See also

- [70.1 DynaPDF.AddActionToObj](#) 2549
- [70.55 DynaPDF.CreateJSAction](#) 2640
- [70.56 DynaPDF.CreateListBox](#) 2643
- [70.63 DynaPDF.CreateTextField](#) 2659
- [70.290 DynaPDF.New](#) 2981
- [70.412 DynaPDF.SetPageFormat](#) 3201
- [70.425 DynaPDF.SetTextFieldValue](#) 3226

Example Databases

- [DynaPDF/Create PDF with sum form field](#)

70.404.1 Blog Entries

- [Tip of the day: DynaPDF form creation with calculation with FileMaker](#)

Created 16th August 2016, last changed 16th August 2016.

70.405 DynaPDF.SetOCGState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetOCGState"; PDF; Handle; On { ; SaveState })

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Handle

The OCG handle. Index from 0 to DynaPDF.GetOCGCount-1.
\$OCG

On

Wished state: 1 = visible, 0 = invisible
1

SaveState

Optional
Whether to save the state in the PDF file? Pass 1 to save or 0 to only switch temporarily. Default 0.
1

Result Returns OK or error.

Description

If the parameter SaveState is 1, the new state is also saved in the PDF file. Otherwise, the state is only changed temporarily so that the wished state can be rendered with DynaPDF.RenderPage or DynaPDF.RenderPDFFile for example.

Note that only the new state of the current OCG will be saved. If the state of other OCGs were changed beforehand, while SaveState was set to 0, then these changes will not be considered.

See also [SetOCGState](#) function in DynaPDF manual.

See also

- 70.209 DynaPDF.GetOCG 2855
- 70.211 DynaPDF.GetOCGCount 2860
- 70.287 DynaPDF.LockLayer 2977
- 70.290 DynaPDF.New 2981
- 70.315 DynaPDF.RenderPage 3040
- 70.313 DynaPDF.RenderPDFFile 3036
- 70.334 DynaPDF.SetAnnotDate 3081

70.405.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 18th February 2019, last changed 18th February 2019.

70.406 DynaPDF.SetOpacity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetOpacity"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The new value. 1.0 = opaque, 0.0 = invisible.
0.5

Result Returns OK or error.

Description

The parameter Value must be in the range 0.0 to 1.0. If Value is zero the annotation is invisible, if Value is 1.0, the annotation is completely opaque.

At time of publication the opacity property is used for text annotations only. Later versions of DynaPDF use this property may be for other PDF objects too.

Default value = 1.0

See also [SetOpacity](#) function in DynaPDF manual.

See also

- 70.213 DynaPDF.GetOpacity 2862
- 70.290 DynaPDF.New 2981
- 70.340 DynaPDF.SetAnnotOpacity 3089
- 70.397 DynaPDF.SetLeading 3176

Created 18th August 2014, last changed 18th August 2014.

70.407 DynaPDF.SetOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetOrientation"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

The new roatation value. From -360 to 360 in 90 degree steps.

90

Result Returns OK or error message.

Description

The function sets the orientation of a page. The parameter Value must be a multiple of 90 or 0. Positive values rotate the page clockwise, negative counter counter clockwise.

Note that the page will be rotated entirely incl. all objects. The width and height of the page are left unchanged, including the coordinates. Creating landscape paper formats require further such as changing the coordinate system. This can be done with DynaPDF.SetOrientationEx. Another way to create a landscape paper format is to change the bounding box of the page, see DynaPDF.SetBBox.

Default is 0.

See also DynaPDF.SetOrientationEx.

See also [SetOrientation](#) function in DynaPDF manual.

See also

- 70.121 DynaPDF.GetAnnotation 2748
- 70.165 DynaPDF.GetFieldOrientation 2802
- 70.214 DynaPDF.GetOrientation 2863
- 70.290 DynaPDF.New 2981
- 70.320 DynaPDF.RotateCoords 3052
- 70.344 DynaPDF.SetBBox 3093
- 70.380 DynaPDF.SetFieldOrientation 3146
- 70.408 DynaPDF.SetOrientationEx 3192

Created 18th August 2014, last changed 22nd January 2015.

70.408 DynaPDF.SetOrientationEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetOrientationEx"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The new roatation value. From -360 to 360 in 90 degree steps.
90

Result Returns OK or error message.

Description

The function changes the orientation of a page, incl. important page properties such as the width and height, and the coordinate system. The parameter Value must be a multiple of 90 or 0. Positive values rotate the page clockwise, negative values counter clockwise.

The zero point of the coordinate system is set to the upper left or down left point depending on the current page coordinate system (top down or bottom up).

When using a landscape paper format the functions DynaPDF.GetPageWidth and DynaPDF.GetPageHeight return the logical width and height of the page. While the real paper format is not changed the functions return the paper format as if the page would have a landscape paper format (the width and height are exchanged).

The coordinate system is also changed so that you can work with the page as if it were not rotated. Form fields and annotations are automatically rotated with the page; there is no need to rotate them manually.

Pages which are rotated with this function appear in a viewer application always in the right orientation. Also if the page is rotated, e.g. by 180 degrees the page is shown as if it were not rotated.

Notice:

Since landscape or rotated paper formats require a changed coordinate system, care must be taken into account if further coordinate transformations must be applied. DynaPDF makes sure that one transformation can be applied without causing errors, e.g. rotating or translating the coordinate system, but coordinate transformations must not be nested.

See also DynaPDF.SetOrientation.

See also [SetOrientationEx](#) function in DynaPDF manual.

Examples

Rotate page 1 of current PDF:

```
Set Variable [ $r; Value:MBS("DynaPDF.EditPage"; $pdf; 1) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetOrientationEx"; $pdf; 180) ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
```

Rotate a PDF to 90°:

```

Let ( [
# start new PDF
PDF = MBS("DynaPDF.New");
# read in existing PDF
OpenResult = MBS("DynaPDF.OpenPDFFromContainer"; PDF; Test::InputPDF);
OpenError = MBS("IsError");
ImportResult = MBS("DynaPDF.ImportPDFFile"; PDF );
ImportError = MBS("IsError");

# edit page and rotate
r = MBS("DynaPDF.EditPage"; PDF; 1) ;
r = MBS("DynaPDF.SetOrientationEx"; PDF; 90) ;
r = MBS("DynaPDF.EndPage"; PDF) ;

# save PDF
OutputPDF = MBS("DynaPDF.Save"; PDF; GetAsText(Test::InputPDF));
SaveError = MBS("IsError");
ReleaseError = MBS("DynaPDF.Release"; PDF);

Result = If(
// all okay?
OpenError = 0 and ImportError = 0 and /*rotateError = 0 UND*/ SaveError = 0 and MBS( "Con-
tainer.GetSize"; OutputPDF; "PDF " ) >0;
// than return new PDF
OutputPDF;
// return old PDF
Test::InputPDF)

];
result )

```

See also

- 55.19 Container.GetSize 1631
- 70.90 DynaPDF.EndPage 2697
- 70.224 DynaPDF.GetPageHeight 2876
- 70.230 DynaPDF.GetPageWidth 2884
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.324 DynaPDF.Save 3062
- 70.380 DynaPDF.SetFieldOrientation 3146
- 70.407 DynaPDF.SetOrientation 3191

- 124.6 IsError

Created 18th August 2014, last changed 5th January 2017.

70.409 DynaPDF.SetPDFVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPDFVersion"; PDF; version)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

version

The version number. Can be 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, PDF/X-1a:2001, PDF/X-1a:2003, PDF/X-3:2002, PDF/X-3:2003, PDF/A-1b and other values.

"1.3"

Result Returns OK or error message.

Description

The function changes the output PDF file version. The default output version is PDF 1.4. If a PDF 1.5 or higher file will be opened for import, the output version will be changed if necessary to the version that the file requires.

Possible values in plugin version 4.4: 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 2.0, PDF/X-1a:2001, PDF/X-1a:2002, PDF/X-3:2002, PDF/X-3:2003, PDF/A-1b 2005, PDF/X-4, PDF/A 1a 2005, PDF/A 2a, PDF/A 2b, PDF/A 2u, PDF/A 3a, PDF/A 3b or PDF/A 3u.

DynaPDF Version 4.0 also supports ZUGFeRD Basic, ZUGFeRD Comfort and ZUGFeRD Extended.

DynaPDF Version 4.0.28.81 defines new formats: FacturX Minimum, FacturX Basic, FacturX Basic WL, FacturX Comfort, FacturX Extended, ZUGFeRD2 Minimum, ZUGFeRD2 Basic, ZUGFeRD2 Basic WL, ZUGFeRD2 Comfort and ZUGFeRD2 Extended.

Requires DynaPDF Lite license for PDF/A and PDF/X versions.

See also [SetPDFVersion](#) function in DynaPDF manual.

Examples

Set PDF Version 1.3:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetPDFVersion"; $pdf; "1.3") ]
```

Set basic ZUGFeRD version:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetPDFVersion"; $pdf; "ZUGFeRD Basic") ]
```

with PDF/A 3b

See also

- 70.142 DynaPDF.GetDynaPDFVersion 2773
- 70.217 DynaPDF.GetPDFVersion 2867
- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.402 DynaPDF.SetMetadata 3183

Example Databases

- [DynaPDF/Convert to PDF/A](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Scan with WIA to PDF](#)

70.409.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr1](#)

Created 18th August 2014, last changed 30th May 2019.

70.410 DynaPDF.SetPageBBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	8.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPageBBox"; PDF; PageIndex; Box; Left; Bottom; Right; Top)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PageIndex

The page index in range from 1 to DynaPDF.GetPageCount.

1

Box

Optional, which box to use. Default is Mediabox. You can pass MediaBox, CropBox, ArtBox, BleedBox or TrimBox.

"MediaBox"

Left

The left coordinate of the rectangle.

0

Bottom

The bottom coordinate of the page.

0

Right

The right coordinate of the page.

595

Top

The top coordinate of the page.

842

Result Returns OK or error.

Description

This function is intended to be fast as possible. It requires no open page like DynaPDF.SetBBox, it does not change the default media or crop box, and it does not adjust the current coordinate system if the media box will be changed.

The function is useful if only one or more bounding boxes must be changed, without editing a page, or when a specific area of a page should be rendered. In the latter case change the crop box and restore it to the previous value when finish.

To delete a bounding box set the bounding box to 0, 0, 0, 0.

See also [SetPageBBox](#) function in DynaPDF manual.

See also

• 70.220 DynaPDF.GetPageBBox	2870
• 70.222 DynaPDF.GetPageCount	2873
• 70.228 DynaPDF.GetPageMode	2882
• 70.290 DynaPDF.New	2981
• 70.344 DynaPDF.SetBBox	3093
• 70.363 DynaPDF.SetFieldBBox	3120
• 70.411 DynaPDF.SetPageCoords	3199
• 70.414 DynaPDF.SetPageLayout	3206
• 70.415 DynaPDF.SetPageMode	3207
• 70.416 DynaPDF.SetPageWidth	3208

70.410.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr6](#)

Created 4th May 2018, last changed 4th May 2018.

70.411 DynaPDF.SetPageCoords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPageCoords"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

The new setting. Can be BottomUp or TopDown.

"TopDown"

Result Returns OK on success or error message.

Description

The native coordinate system of the Portable Document Format is bottom-up. However, DynaPDF supports also top-down coordinates to make the usage of the library easier. Top-down coordinates are then converted to bottom-up coordinates by DynaPDF, the coordinate system in the PDF file will not be changed by this function.

When changing the coordinate system to top-down, the coordinate origin of text (font origin) will also be changed to the top-left corner (see also DynaPDF.SetFontOrigin()). If the coordinate system will be changed to bottom-up, the font origin is also changed to the down-left corner too.

Default value is BottomUp.

The property PageCoords is a global property which can be changed at any time. When transforming the coordinate system, bottom-up coordinates must be used.

See also DynaPDF.GetPageCoords.

See also [SetPageCoords](#) function in DynaPDF manual.

Examples

Set to top down:

MBS("DynaPDF.SetPageCoords"; \$PDF; "TopDown")

See also

- 70.221 DynaPDF.GetPageCoords 2872
- 70.228 DynaPDF.GetPageMode 2882
- 70.301 DynaPDF.PlaceTemplateEx 3015
- 70.329 DynaPDF.ScaleCoords 3072
- 70.386 DynaPDF.SetFont 3154
- 70.388 DynaPDF.SetFontOrigin 3158

- 70.410 DynaPDF.SetPageBBox 3197
- 70.413 DynaPDF.SetPageHeight 3203
- 70.456 DynaPDF.Table.Create 3270
- 70.504 DynaPDF.WriteFTextEx 3352

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [DynaPDF/Create PDF with sum form field](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)
- [DynaPDF/WMF Conversion](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.411.1 Blog Entries

- [Merge PDF with table of contents](#)

70.411.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 37
- Ausgabe 2/2019, Seite 27
- Ausgabe 5/2018, Seite 28

Created 18th August 2014, last changed 18th August 2014.

70.412 DynaPDF.SetPageFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPageFormat"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The new value.
"DIN A4"

Result Returns OK on success or error message.

Description

If an open page can be detected the format of the page will be changed, the new format will also be used for newly created pages. If no open page is detected, the default format for new pages will be set only. This function changes the media box of a page (see DynaPDF.SetBBox for further information).

Valid values are: DIN A3, DIN A4, DIN A5, DIN B4, DIN B5, DIN B6, DIN C3, DIN C4, DIN C5, DIN C6, DIN C65, DIN DL, DIN E4, DIN E5, DIN E6, DIN E65, DIN M5, DIN M65, US Legal or US Letter.

See also DynaPDF.GetPageWidth, DynaPDF.GetPageHeight, DynaPDF.SetPageHeight and DynaPDF.SetPageWidth.

Common paper formats and sizes in points:

See also [SetPageFormat](#) function in DynaPDF manual.

Examples

Set to DIN A3:

```
MBS( "DynaPDF.SetPageFormat"; $PDF; "A3" )
```

Set to US letter:

```
MBS( "DynaPDF.SetPageFormat"; $PDF; "US Letter" )
```

See also

- 70.15 DynaPDF.AppendPage 2575
- 70.222 DynaPDF.GetPageCount 2873
- 70.224 DynaPDF.GetPageHeight 2876

Format	Size in units (Width x Height)
DIN A3	842.0 x 1191.0
DIN A4	595.0 x 842.0
DIN A5	419.0 x 595.0
DIN B4	709.0 x 1001.0
DIN B5	499.0 x 709.0
DIN B6	354.0 x 499.0
DIN C3	918.0 x 1298.0
DIN C4	649.0 x 918.0
DIN C5	459.0 x 649.0
DIN C6	323.0 x 459.0
DIN C65	323.0 x 649.0
DIN DL	312.0 x 624.0
DIN E4	623.0 x 879.0
DIN E5	439.0 x 624.0
DIN E6	312.0 x 439.0
DIN E65	312.0 x 624.0
DIN M5	439.0 x 632.0
DIN M65	317.0 x 632.0
US Legal	612.0 x 1008.0
US Letter	612.0 x 792.0

- 70.227 DynaPDF.GetPageLayout 2881
- 70.230 DynaPDF.GetPageWidth 2884
- 70.344 DynaPDF.SetBBox 3093
- 70.404 DynaPDF.SetNumberFormat 3186
- 70.413 DynaPDF.SetPageHeight 3203
- 70.415 DynaPDF.SetPageMode 3207
- 70.416 DynaPDF.SetPageWidth 3208

Example Databases

- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th August 2014.

70.413 DynaPDF.SetPageHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPageHeight"; PDF; Height)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Height

The new page height.

1000

Result Returns OK on success or error.

Description

The function changes the height of the currently open page if any, or the default height for newly created pages. This function changes the media box of a page (see also DynaPDF.SetBBox). The page height must be greater zero. You can change the page of current page or outside a page the size of new pages.

10cm is about 283 points, unless you changed units (DynaPDF.SetUserUnit). Calculate with cm value divided by 2.54 cm/inch and multiplied with 72 points per inch.

See also DynaPDF.SetPageFormat and DynaPDF.SetPageWidth.

Common paper formats and sizes in points:

See also [SetPageHeight](#) function in DynaPDF manual.

Examples

Sets page size:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetPageWidth"; $pdf; 500) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.SetPageHeight"; $pdf; 500) ]
```

See also

- 70.15 DynaPDF.AppendPage 2575
- 70.173 DynaPDF.GetFontWeight 2810
- 70.227 DynaPDF.GetPageLayout 2881
- 70.230 DynaPDF.GetPageWidth 2884
- 70.290 DynaPDF.New 2981
- 70.344 DynaPDF.SetBBox 3093

Format	Size in units (Width x Height)
DIN A3	842.0 x 1191.0
DIN A4	595.0 x 842.0
DIN A5	419.0 x 595.0
DIN B4	709.0 x 1001.0
DIN B5	499.0 x 709.0
DIN B6	354.0 x 499.0
DIN C3	918.0 x 1298.0
DIN C4	649.0 x 918.0
DIN C5	459.0 x 649.0
DIN C6	323.0 x 459.0
DIN C65	323.0 x 649.0
DIN DL	312.0 x 624.0
DIN E4	623.0 x 879.0
DIN E5	439.0 x 624.0
DIN E6	312.0 x 439.0
DIN E65	312.0 x 624.0
DIN M5	439.0 x 632.0
DIN M65	317.0 x 632.0
US Legal	612.0 x 1008.0
US Letter	612.0 x 792.0

- 70.411 DynaPDF.SetPageCoords 3199
- 70.412 DynaPDF.SetPageFormat 3201
- 70.414 DynaPDF.SetPageLayout 3206
- 70.416 DynaPDF.SetPageWidth 3208

Example Databases

- [DynaPDF/Convert to 2 Pages](#)
- [DynaPDF/Generate Previews](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/PSD Conversion](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/WMF Conversion](#)
- [OCR/OCR with DynaPDF](#)

70.413.1 Blog Entries

- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

Created 18th August 2014, last changed 18th October 2016.

70.414 DynaPDF.SetPageLayout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPageLayout"; PDF; Layout)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Layout

The page layout can be SinglePage, OneColumn, TwoColumnLeft, TwoColumnRight, TwoPageLeft, TwoPageRight or Default.
"Default"

Result Returns OK or error message.

Description

See also [SetPageLayout](#) function in DynaPDF manual.

See also

- 70.222 DynaPDF.GetPageCount 2873
- 70.224 DynaPDF.GetPageHeight 2876
- 70.225 DynaPDF.GetPageLabel 2878
- 70.226 DynaPDF.GetPageLabelCount 2880
- 70.227 DynaPDF.GetPageLayout 2881
- 70.290 DynaPDF.New 2981
- 70.410 DynaPDF.SetPageBBox 3197
- 70.411 DynaPDF.SetPageCoords 3199
- 70.412 DynaPDF.SetPageFormat 3201
- 70.415 DynaPDF.SetPageMode 3207

Created 18th August 2014, last changed 18th August 2014.

70.415 DynaPDF.SetPageMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPageMode"; PDF; Mode)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Mode

The mode to use. Can be UseMode, UseOutlines, UseThumbs, Fullscreen, UseOC or UseAttachments.
"Fullscreen"

Result Returns OK on success or error message.

Description

See also [SetPageMode](#) function in DynaPDF manual.

See also

- 70.3 DynaPDF.AddBookmark 2553
- 70.4 DynaPDF.AddBookmarkEx 2555
- 70.225 DynaPDF.GetPageLabel 2878
- 70.228 DynaPDF.GetPageMode 2882
- 70.229 DynaPDF.GetPageNum 2883
- 70.274 DynaPDF.InsertBookmark 2948
- 70.410 DynaPDF.SetPageBBox 3197
- 70.412 DynaPDF.SetPageFormat 3201
- 70.414 DynaPDF.SetPageLayout 3206
- 70.416 DynaPDF.SetPageWidth 3208

Created 18th August 2014, last changed 18th August 2014.

70.416 DynaPDF.SetPageWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPageWidth"; PDF; Width)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Width

The new page width.

800

Result Returns OK on success or error.

Description

The function changes the width of the currently open page if any, or the default width for newly created pages. This function changes the media box of a page (see also DynaPDF.SetBBox). The page width must be greater zero. You can change the page of current page or outside a page the size of new pages.

10cm is about 283 points, unless you changed units (DynaPDF.SetUserUnit). Calculate with cm value divided by 2.54 cm/inch and multiplied with 72 points per inch.

See also DynaPDF.SetPageFormat and DynaPDF.SetPageHeight.

Common paper formats and sizes in points:

See also [SetPageWidth](#) function in DynaPDF manual.

Examples

Sets page size:

```
Set Variable [ $r; Value:MBS("DynaPDF.SetPageWidth"; $pdf; 500) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.SetPageHeight"; $pdf; 500) ]
```

See also

- 70.15 DynaPDF.AppendPage 2575
- 70.203 DynaPDF.GetLineWidth 2848
- 70.224 DynaPDF.GetPageHeight 2876
- 70.245 DynaPDF.GetTextWidth 2900
- 70.290 DynaPDF.New 2981
- 70.344 DynaPDF.SetBBox 3093

Format	Size in units (Width x Height)
DIN A3	842.0 x 1191.0
DIN A4	595.0 x 842.0
DIN A5	419.0 x 595.0
DIN B4	709.0 x 1001.0
DIN B5	499.0 x 709.0
DIN B6	354.0 x 499.0
DIN C3	918.0 x 1298.0
DIN C4	649.0 x 918.0
DIN C5	459.0 x 649.0
DIN C6	323.0 x 459.0
DIN C65	323.0 x 649.0
DIN DL	312.0 x 624.0
DIN E4	623.0 x 879.0
DIN E5	439.0 x 624.0
DIN E6	312.0 x 439.0
DIN E65	312.0 x 624.0
DIN M5	439.0 x 632.0
DIN M65	317.0 x 632.0
US Legal	612.0 x 1008.0
US Letter	612.0 x 792.0

- 70.410 DynaPDF.SetPageBBox 3197
- 70.413 DynaPDF.SetPageHeight 3203
- 70.415 DynaPDF.SetPageMode 3207
- 70.438 DynaPDF.SetUserUnit 3243

Example Databases

- [DynaPDF/Convert to 2 Pages](#)
- [DynaPDF/Generate Previews](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/PSD Conversion](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/WMF Conversion](#)
- [OCR/OCR with DynaPDF](#)

70.416.1 Blog Entries

- [Normalize PDF orientation with MBS Plugins and DynaPDF](#)

Created 18th August 2014, last changed 18th October 2016.

70.417 DynaPDF.SetPrintSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetPrintSettings"; PDF; DuplexMode; PickTrayByPDFSize; NumCopies; PrintScaling; PrintRanges)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

DuplexMode

The duplex mode. Can be FlipShortEdge, FlipLongEdge, Simplex or None.
"FlipLongEdge"

PickTrayByPDFSize

Whether to pick tray by PDF size. Can be 1 = true, 0 = false or -1 = app default.
1

NumCopies

The number of copies between 1 and 5. 0 is app default.
2

PrintScaling

Can be None or AppDefault currently.
"None"

PrintRanges

Defines the print ranges. For this pass one parameter for start number and one for end number with as many parameters as you want to pass arguments.

Result Returns OK or error.

Description

Viewer applications use the print settings to initialize the print dialog. Print ranges, if set, consist of two numbers which define the start and end page number that should be printed.
See also DynaPDF.GetPrintSettings and DynaPDF.GetInPrintSettings.

This settings are for Adobe Reader, not for printing the PDF in FileMaker!
See also [SetPrintSettings](#) function in DynaPDF manual.

Examples

Set to print duplex and from page 3 to 8 and 12 to 15.

```
MBS( "DynaPDF.SetPrinterSettings"; $PDF; "FlipLongEdge"; -1; 1; "None"; 3; 8; 12; 15 )
```

See also

- 70.192 DynaPDF.GetInPrintSettings 2837
- 70.231 DynaPDF.GetPrintSettings 2886
- 70.290 DynaPDF.New 2981

70.417.1 Blog Entries

- [Tip of the day: PDF print settings](#)

Created 14th March 2015, last changed 13th February 2019.

70.418 DynaPDF.SetReplaceICCProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetReplaceICCProfile"; PDF; ICCProfileType; Path)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

ICCProfileType

The profile type. Can be Gray, RGB, CMYK or Lab.
"Gray"

Path

The new native path.
"c:/Windows/System32/spool/drivers/color/gray_gamma2.2.icm"

Result Returns OK or error.

Description

The plugin manages a list of replacement profiles which the DynaPDF library can query with the OnReplaceICCProfile callback. Needed for DynaPDF.CheckConformance.

This function fills the list, so the plugin can return the right profile for the right type when needed.

Examples

Set gray profile:

```
MBS( "DynaPDF.SetReplaceICCProfile"; $pdf; "gray"; "c:/Windows/System32/spool/drivers/color/gray_gamma2.2.icm" )
```

Set RGB profile:

```
MBS( "DynaPDF.SetReplaceICCProfile"; $pdf; "RGB"; "c:/Windows/System32/spool/drivers/color/sRGB Color Space Profile.icm" )
```

Set CMYK profile:

```
MBS( "DynaPDF.SetReplaceICCProfile"; $pdf; "gray"; "c:/Windows/System32/spool/drivers/color/EuropeISOCoatedFOGRA27.icc" )
```

See also

- 70.37 DynaPDF.CheckConformance 2605
- 70.232 DynaPDF.GetReplaceICCProfile 2887

- 70.233 DynaPDF.GetReplaceICCProfileData 2888
- 70.290 DynaPDF.New 2981
- 70.419 DynaPDF.SetReplaceICCProfileData 3215

70.418.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr6](#)
- [MBS FileMaker Plugin, version 6.2pr10](#)

70.418.2 FileMaker Magazin

- Ausgabe 1/2018, Seite 24

Created 8th March 2016, last changed 30th September 2017.

70.419 DynaPDF.SetReplaceICCProfileData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetReplaceICCProfileData"; PDF; ICCProfileType; ProfileData)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

ICCProfileType

The profile type. Can be Gray, RGB, CMYK or Lab.

"Gray"

ProfileData

The container value with the profile data.

MyTable::RGBProfile

Result Returns OK or error.

Description

The plugin manages a list of replacement profiles which the DynaPDF library can query with the OnReplaceICCProfile callback. Needed for DynaPDF.CheckConformance.

This function fills the list, so the plugin can return the right profile for the right type when needed.

Examples

Set replacements for missing ICC profiles:

```
Set Variable [ $r ; Value: MBS("DynaPDF.SetReplaceICCProfileData"; $pdf; "rgb"; Create Text::RGB ICC Profile) ]
```

```
Set Variable [ $r ; Value: MBS("DynaPDF.SetReplaceICCProfile"; $pdf; "gray"; Create Text::Gray ICC Profile) ]
```

```
Set Variable [ $r ; Value: MBS("DynaPDF.SetReplaceICCProfileData"; $pdf; "cmyk"; Create Text::CMYK ICC Profile) ]
```

See also

- 70.37 DynaPDF.CheckConformance 2605
- 70.232 DynaPDF.GetReplaceICCProfile 2887
- 70.233 DynaPDF.GetReplaceICCProfileData 2888
- 70.234 DynaPDF.GetReplaceICCProfilesCounter 2889
- 70.290 DynaPDF.New 2981
- 70.418 DynaPDF.SetReplaceICCProfile 3213

Example Databases

- [DynaPDF/Convert to PDF/A](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.419.1 Blog Entries

- [ZUGFeRD 2.0 and Factur-X for FileMaker](#)
- [MBS FileMaker Plugin, version 7.5pr1](#)

Created 30th September 2017, last changed 30th September 2017.

70.420 DynaPDF.SetResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetResolution"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

Image resolution in DPI.
150

Result Returns OK on success.

Description

The function sets the resolution in DPI (Dots per Inch), in which images are stored by DynaPDF. The property will be ignored if the property SaveNewImageFormat was set to false. 1 bit images are always stored in the original resolution. The image resolution must be in the range 72 to 2048 DPI.

Default value = 150 (DPI)

See also [SetResolution](#) function in DynaPDF manual.

Examples

Limit images to a maximum of 300 dpi:

MBS("DynaPDF.SetResolution"; \$PDF; 300)

See also

- [70.121 DynaPDF.GetAnnotation](#) 2748
- [70.235 DynaPDF.GetResolution](#) 2890
- [70.276 DynaPDF.InsertImage](#) 2952
- [70.277 DynaPDF.InsertImageFile](#) 2956
- [70.290 DynaPDF.New](#) 2981
- [70.308 DynaPDF.ReadImageFormat](#) 3028
- [70.421 DynaPDF.SetSaveNewImageFormat](#) 3219

Example Databases

- [DynaPDF/Picture to PDF with navigation](#)

- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th August 2014.

70.421 DynaPDF.SetSaveNewImageFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetSaveNewImageFormat"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

Whether to recompress images. Value can be 0 or 1.

0

Result Returns OK on success.

Description

The property SaveNewImageFormat specifies whether images should be downscaled if the original resolution of the image is higher than the value of the property resolution (see also DynaPDF.SetResolution). If the property SaveNewImageFormat is false, JPEG compressed images will be inserted in pass-through mode as long as the image is not a CMYK JPEG (such images must be converted because Acrobat viewer require another byte order).

Default value = true

See also [SetSaveNewImageFormat](#) function in DynaPDF manual.

Examples

Pass through JPEGs if possible:

MBS("DynaPDF.SetSaveNewImageFormat"; \$PDF; 0)

See also

- 70.41 DynaPDF.ClipPath 2612
- 70.82 DynaPDF.DrawCircle 2682
- 70.236 DynaPDF.GetSaveNewImageFormat 2891
- 70.276 DynaPDF.InsertImage 2952
- 70.277 DynaPDF.InsertImageFile 2956
- 70.290 DynaPDF.New 2981
- 70.308 DynaPDF.ReadImageFormat 3028
- 70.420 DynaPDF.SetResolution 3217

Example Databases

- [DynaPDF/DynaPDF PlaceTemplate](#)
- [DynaPDF/Picture to PDF with navigation](#)
- [DynaPDF/Picture to PDF](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/PSD Conversion](#)
- [DynaPDF/Tables](#)
- [DynaPDF/Watermark pages](#)
- [OCR/OCR with DynaPDF](#)

Created 18th August 2014, last changed 28th November 2019.

70.422 DynaPDF.SetSeparationInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetSeparationInfo"; PDF; Handle)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

Separation color space handle.

Result Returns OK or error.

Description

The parameter Handle must be a valid handle of a Separation color space.

In high-end printing workflows, pages are ultimately produced as sets of separations, one per colorant. Ordinarily, each page in a PDF file is treated as a composite page that paints graphics objects using all the process colorants and perhaps some spot colorants as well. In other words, all separations for a page are generated from a single PDF description of that page.

In some workflows, however, pages are pre-separated before generating the PDF file. In a pre-separated PDF file, the separations for a page are described as separate page objects, each painting only a single colorant (usually specified in the DeviceGray color space). When this is done, additional information is needed to identify the actual colorant associated with each separation and to group together the page objects representing all the separations for a given page. This information is contained in the separation info of each page object.

See also [SetSeparationInfo](#) function in DynaPDF manual.

See also

- 70.75 DynaPDF.DeleteSeparationInfo 2672
- 70.177 DynaPDF.GetImportDocInfo 2817
- 70.290 DynaPDF.New 2981

70.422.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 27th August 2017, last changed 27th August 2017.

70.423 DynaPDF.SetStrokeColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetStrokeColor"; PDF; values)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

values

The values for the colors.
0

Result Returns OK or error message.

Description

The components of non-Lab color spaces must be in the range from 0 through 1. The *a and *b components of a Lab color space are typically in a range from -128 though 127. The *L component ranges from 0 through 100.

The number of components must match the number of components of the underlying color space.

See also DynaPDF.SetFillColor.

See also [SetStrokeColor](#) function in DynaPDF manual.

Examples

Sets color to red:

```
MBS( "DynaPDF.SetStrokeColor"; $PDF; 1.0; 0.0; 0.0 )
```

Sets color to blue:

```
MBS( "DynaPDF.SetStrokeColor"; $PDF; 0.0; 0.0; 1.0 )
```

Draw two lines in black:

```
Set Variable [ $r; Value:MBS ( "DynaPDF.SetStrokeColor" ; $pdf ; 0; 0; 0 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.SetLineWidth" ; $pdf ; 1 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 20; 20 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 20; 40 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 30; 30 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 30; 50 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.StrokePath" ; $pdf ) ]
```

Set color with integer values in range of 0 to 255:

70.423. *DYNAPDF.SETSTROKECOLOR* 3223
MBS("DynaPDF.SetStrokeColor"; \$PDF; \$red / 255.0; \$green / 255.0; /blue / 255.0)

See also

- 70.59 DynaPDF.CreateSeparationCS 2650
- 70.284 DynaPDF.LineTo 2971
- 70.289 DynaPDF.MoveTo 2979
- 70.290 DynaPDF.New 2981
- 70.321 DynaPDF.RotateTemplate 3055
- 70.333 DynaPDF.SetAnnotColor 3079
- 70.368 DynaPDF.SetFieldColor 3127
- 70.384 DynaPDF.SetFillColor 3150
- 70.448 DynaPDF.StrokePath 3257
- 70.502 DynaPDF.WriteDemoText 3348

Example Databases

- [DynaPDF/Create PDF with Bezier Curves](#)
- [DynaPDF/DynaPDF Coordinates](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Shrink PDF pages](#)
- [DynaPDF/Watermark pages](#)

Created 18th August 2014, last changed 6th September 2019.

70.424 DynaPDF.SetTextDrawMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetTextDrawMode"; PDF; Mode)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Mode

The new text draw mode.

"Invisible"

Result Returns OK or error.

Description

The text draw mode specifies how text should be rendered. Texts can be used as clipping paths such as normal vector graphics; however, the usage is not the same. To use a text as clipping path save the graphics state, set the text draw mode to a clipping mode, paint the objects which should be clipped into the path and restore the graphics state.

Note that the functions DynaPDF.BeginClipPath and DynaPDF.ClipPath can not be used to define a text as clipping path.

Default value = Normal

See also [SetTextDrawMode](#) function in DynaPDF manual.

Examples

Set stroke draw text mode:

```
MBS( "DynaPDF.SetTextDrawMode"; $pdf; "Stroke" )
```

See also

- [70.41 DynaPDF.ClipPath](#) 2612
- [70.240 DynaPDF.GetTextDrawMode](#) 2895
- [70.290 DynaPDF.New](#) 2981

70.424.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr8](#)

Created 22nd January 2016, last changed 22nd January 2016.

Draw Mode	Description
Normal	Default, render the text in the usual way. The fill color is used as the text's color.
Stroke	Tread the glyph outlines as path to be stroked. The current line width and stroke color are used to paint the path.
FillStroke	Tread the glyph outlines as path to be stroked and filled. The current line width, fill color, and stroke color are used to paint the path.
Invisible	Neither fill nor stroke the text, the text is invisible.
FillClip	Tread the glyph outlines as path to be filled and add this path to the current clipping path. The settings of the current line width and fill color are used to paint the path.
StrokeClip	Tread the glyph outlines as path to be stroked and add this path to the current clipping path. The settings of the current line width and stroke color are used to paint the path.
FillStrokeClip	Tread the glyph outlines as path to be stroked and filled and add this path to the current clipping path. The settings of the current line width, fill color and stroke color are used to paint the path.
Clipping	Tread the glyph outlines as path and add this path to the current clipping path.

70.425 DynaPDF.SetTextFieldValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetTextFieldValue"; PDF; Field; Value; DefValue; Align)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Value

The new text field value.

"Andreas"

DefValue

The new default text field value.

""

Align

The text alignment. Can be Left, Center, Right or Justify.

"Justify"

Result Returns OK or error.

Description

The parameters Value and DefValue can both be empty, if both values should be deleted. The parameter DefValue defines the default value of the field, this value is shown in Adobe's Acrobat as long as the field has no value; it will be hidden when entering the field.

The strings are drawn with the font that is associated with the field. The font size is taken from the field settings. If set to "auto", the font size is computed from the field's bounding box.

See also [SetTextFieldValue](#) function in DynaPDF manual.

Examples

Sets text field value:

```
MBS( "DynaPDF.SetTextFieldValue"; $PDF; "FirstName"; "Geoff"; ""; "Left" )
```

See also

- 70.1 DynaPDF.AddActionToObj 2549
- 70.55 DynaPDF.CreateJSAction 2640
- 70.242 DynaPDF.GetTextFieldValue 2897

70.425. <i>DYNAPDF.SETTEXTFIELDVALUE</i>	3227
• 70.290 DynaPDF.New	2981
• 70.370 DynaPDF.SetFieldExpValue	3130
• 70.373 DynaPDF.SetFieldFont	3136
• 70.404 DynaPDF.SetNumberFormat	3186
• 70.426 DynaPDF.SetTextFieldValueEx	3228

Example Databases

- [DynaPDF/Create Form](#)
- [DynaPDF/Create PDF with sum form field](#)
- [DynaPDF/Fill Form Fields](#)
- [DynaPDF/Form/Form](#)

70.425.1 Blog Entries

- [Tip of the day: DynaPDF form creation with calculation with FileMaker](#)
- [MBS Filemaker Plugin, version 4.1pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.426 DynaPDF.SetTextFieldValueEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetTextFieldValueEx"; PDF; Field; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Field

The field index or field name.

"FirstName"

Value

New value or "" to delete it.

"Andreas"

Result Returns OK or error.

Description

If the value is set to empty, the field's value will be deleted.

The strings are drawn with the font that is associated with the field. The font size is taken from the field settings. If set to "auto", the font size is computed from the field's bounding box.

See also [SetTextFieldValueEx](#) function in DynaPDF manual.

Examples

Sets text field value:

```
MBS( "DynaPDF.SetTextFieldValueEx"; $PDF; "FirstName"; "Jack" )
```

See also

- [70.242 DynaPDF.GetTextFieldValue](#) 2897
- [70.290 DynaPDF.New](#) 2981
- [70.371 DynaPDF.SetFieldExpValueEx](#) 3132
- [70.425 DynaPDF.SetTextFieldValue](#) 3226

70.426.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr4](#)

Created 18th August 2014, last changed 18th August 2014.

70.427 DynaPDF.SetTextRect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetTextRect"; PDF; PosX; PosY; Width; Height)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of output rectangle

\$x

PosY

Y-Coordinate of output rectangle

\$y

Width

Width of output rectangle

\$w

Height

Height of output rectangle or -1.

\$h

Result Returns OK or error message.

Description

See also [SetTextRect](#) function in DynaPDF manual.

Examples

Write some text in a rectangle area:

```
# Add page with some text
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetTextRect"; $pdf; 100; 100; 400; 200) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetFont"; $pdf; "Times"; 1; 40; 1; "cp1252") ]
Set Variable [ $r; Value:MBS("DynaPDF.WriteFText"; $pdf; "Center"; "Just a test PDF.") ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
```

See also

- 70.15 DynaPDF.AppendPage 2575
- 70.90 DynaPDF.EndPage 2697
- 70.146 DynaPDF.GetFTextHeight 2779

- 70.245 DynaPDF.GetTextWidth 2900
- 70.290 DynaPDF.New 2981
- 70.356 DynaPDF.SetContent 3110
- 70.386 DynaPDF.SetFont 3154
- 70.428 DynaPDF.SetTextRise 3231
- 70.503 DynaPDF.WriteFText 3350
- 70.506 DynaPDF.WriteStyledText 3358

Example Databases

- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Styled Text](#)
- [DynaPDF/Watermark pages](#)
- [DynaPDF/WriteFText](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factur-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

Created 18th August 2014, last changed 27th May 2017.

70.428 DynaPDF.SetTextRise

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetTextRise"; PDF; Value)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The Text rise in units.
10

Result Returns OK or error.

Description

Text rise specifies the distance, to move the baseline up or down from its default location. Positive values of text rise move the baseline up. Adjustments to the baseline are useful for drawing superscripts or subscripts. The default location of the baseline can be restored by setting the text rise to 0. The figure below illustrates the effect of the text rise. Text rise always applies to the vertical coordinate in text space. The text moves around the baseline.
Default value = 0

See also DynaPDF.GetTextRise.

See also [SetTextRise](#) function in DynaPDF manual.

Examples

Set text rise:

MBS("DynaPDF.SetTextRise"; \$PDF; 10)

See also

- 70.243 DynaPDF.GetTextRise 2898
- 70.245 DynaPDF.GetTextWidth 2900
- 70.290 DynaPDF.New 2981
- 70.427 DynaPDF.SetTextRect 3229

Created 18th August 2014, last changed 18th August 2014.

70.429 DynaPDF.SetTextScaling

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetTextScaling"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The Horizontal text scaling.
100

Result Returns OK or error.

Description

The scaling value adjusts the width of glyphs by stretching or compressing them in the horizontal direction. Its value is specified as a percentage of the normal width of the glyphs, with 100 being the normal width. Default value = 100

See also DynaPDF.GetTextScaling.

See also [SetTextScaling](#) function in DynaPDF manual.

Examples

Set scaling to 200%

MBS("DynaPDF.SetTextScaling"; \$PDF; 200)

See also

- 70.244 DynaPDF.GetTextScaling 2899
- 70.290 DynaPDF.New 2981
- 70.442 DynaPDF.SetWordSpacing 3247

Created 18th August 2014, last changed 18th August 2014.

70.430 DynaPDF.SetTransparentColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetTransparentColor"; PDF; ColorValue)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

ColorValue

Color value defined in current color space

MBS("DynaPDF.RGB"; 255; 0; 0)

Result Returns OK or error.

Description

Due to color interpolation during decompression of JPEG images, it not always possible to mask JPEG compressed images correctly.

Default value = 16777215 (RGB White)

See also [SetTransparentColor](#) function in DynaPDF manual.

See also

- 70.246 DynaPDF.GetTransparentColor 2902
- 70.252 DynaPDF.GetUseTransparency 2908
- 70.290 DynaPDF.New 2981
- 70.436 DynaPDF.SetUseTransparency 3241

Created 6th February 2015, last changed 6th February 2015.

70.431 DynaPDF.SetTrapped

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetTrapped"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

1 or 0 to enable or disable.

1

Result Returns OK or error.

Description

Trapping is a technique to avoid unwanted visual artifacts such as brightly colored gaps or bands around the edges of printed objects. In high- quality reproduction of color documents, such artifacts are commonly avoided by creating an overlap, called a trap, between areas of adjacent color.

The trapped key determines whether the document was trapped. The default value is unknown that means no value is written to the file. The trapped key should be set if possible.

See also [SetTrapped](#) function in DynaPDF manual.

See also

- 70.189 DynaPDF.GetInIsTrapped 2833
- 70.247 DynaPDF.GetTrapped 2903
- 70.290 DynaPDF.New 2981
- 70.348 DynaPDF.SetCMapDir 3100

Created 6th February 2015, last changed 6th February 2015.

70.432 DynaPDF.SetUseExactPwd

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetUseExactPwd"; PDF; Value)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Value

The new setting. Pass 1 or 0.

1

Result Returns OK or error.

Description

If the property UseExactPwd is false, an encrypted PDF file can always be decrypted, if either the open or owner password in the file is an empty string. If 1, the open or owner password must be known to open the PDF file.

Default value = 1

If your application should allow the modification of encrypted PDF files, you may check the access permissions to grant user rights, if the file was opened with the open password instead of the owner password (see also DynaPDF.GetUserRights).

Due to the license agreement of Adobe, all manufacturers of applications which make the treatment of encrypted PDF files possible, must respect the access permissions of a PDF file, if the file was opened with the open password.

Only if the file was opened with the owner password, all rights should be granted. See PDF Reference 1.5 for further information. This document is available at www.adobe.com.

The property UseExactPwd should be 1, if the application is a commercial product.

See also [SetUseExactPwd](#) function in DynaPDF manual.

See also

- 70.248 DynaPDF.GetUseExactPwd 2904
- 70.254 DynaPDF.GetUserRights 2910
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.433 DynaPDF.SetUseGlobalImpFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetUseGlobalImpFiles"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

The property can be used to load one or more external PDF files permanent into memory, e.g. to split a large PDF file into smaller pieces. The next PDF file that will be opened with the function DynaPDF.OpenPDFFromFile or DynaPDF.OpenPDFFromContainer will not be closed when DynaPDF.CloseFile or DynaPDF.FreePDF is called. When creating a new PDF file the previously opened import file is still open and it is possible to import pages from this file without loading the file again.

If more than one file should be loaded permanent into memory then set also the flag if2UseProxy with DynaPDF.SetImportFlags2. PDF files which are no longer needed can be closed with DynaPDF.CloseImportFile or DynaPDF.CloseImportFileEx.

Requires DynaPDF Pro license.

See also [SetUseGlobalImpFiles](#) function in DynaPDF manual.

See also

- 70.42 DynaPDF.CloseImportFile 2614
- 70.249 DynaPDF.GetUseGlobalImpFiles 2905
- 70.273 DynaPDF.Initialize 2941
- 70.290 DynaPDF.New 2981
- 70.293 DynaPDF.OpenPDFFromContainer 2988
- 70.294 DynaPDF.OpenPDFFromFile 2992
- 70.393 DynaPDF.SetImportFlags 3166
- 70.394 DynaPDF.SetImportFlags2 3170

Created 6th February 2015, last changed 1st April 2015.

70.434 DynaPDF.SetUseStdFonts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetUseStdFonts"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

the new setting. Can be 0 to turn off or 1 to turn on.
1

Result Return OK or error.

Description

PDF viewer applications support 14 standard fonts, these fonts are not embedded by default, also if the parameter Embed of the function DynaPDF.SetFont is true.

If certain standard fonts are available on the system, then they have typically a higher search priority but it is still possible to select a standard font. This can occur, for example, when the font weight of the system font does not exactly match the requested weight. If a standard font represents a better match, then this font would be selected.

To avoid unwanted font selections it is possible to disable the standard fonts from font selection. The value can be changed whenever necessary.

Default value = 1 (on)

See also DynaPDF.GetUseStdFonts.

See also [SetUseStdFonts](#) function in DynaPDF manual.

Examples

Enable standard fonts:

MBS("DynaPDF.SetUseStdFonts"; \$PDF; 1)

See also

- 70.250 DynaPDF.GetUseStdFonts 2906
- 70.251 DynaPDF.GetUseSystemFonts 2907
- 70.290 DynaPDF.New 2981
- 70.373 DynaPDF.SetFieldFont 3136
- 70.374 DynaPDF.SetFieldFontEx 3138

- 70.386 DynaPDF.SetFont 3154
- 70.435 DynaPDF.SetUseSystemFonts 3239

Created 18th August 2014, last changed 18th August 2014.

70.435 DynaPDF.SetUseSystemFonts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetUseSystemFonts"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

The new setting, can be 0 or 1.

1

Result Returns OK or error.

Description

On Windows all fonts in the Windows/Fonts directory will be loaded as well as shared fonts listed in the Registry. On Mac OS X the following font paths will be added to the list of font search paths:

/System/Library/Fonts

/Library/Fonts

~/Library/Fonts

Additional font paths can be added with DynaPDF.AddFontSearchPath. Default value = 1 (true)

The fonts are loaded when DynaPDF.SetFont is called the first time. The property is ignored on Linux or UNIX.

Please note that the internal font list is not automatically updated when the system's font pool changes. Windows operating systems send a WM_FONTCHANGE message if the font pool was modified. In this case, the application should call DynaPDF.ClearHostFonts before calling SetFont() the next time so that the list of available system fonts can be updated.

On Mac OS X there is no notification when the font database changes. Mac OS X applications need to use functions of the font manager to determine whether font database has been modified.

See also DynaPDF.GetUseSystemFonts.

See also [SetUseSystemFonts](#) function in DynaPDF manual.

Examples

Enable system fonts

```
MBS( "DynaPDF.SetUseSystemFonts"; $PDF; 1 )
```

See also

- 70.8 DynaPDF.AddFontSearchPath 2563
- 70.40 DynaPDF.Clear 2611
- 70.250 DynaPDF.GetUseStdFonts 2906
- 70.251 DynaPDF.GetUseSystemFonts 2907
- 70.290 DynaPDF.New 2981
- 70.386 DynaPDF.SetFont 3154
- 70.434 DynaPDF.SetUseStdFonts 3237

Created 18th August 2014, last changed 18th August 2014.

70.436 DynaPDF.SetUseTransparency

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetUseTransparency"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

Whether to use transparency. Can be 0 to 1.

1

Result Returns OK on success or error.

Description

The default transparent color is white. Please note that the color is changed to the appropriate value when changing the color space.

Alpha based transparency can be applied with an extended graphics state that must be active before inserting an image. See [CreateExtGState](#) for further information.

Default value = 1 (true)

Requires DynaPDF Lite license.

See also [SetUseTransparency](#) function in DynaPDF manual.

Examples

Don't try to apply transparency by key color:

MBS("DynaPDF.SetUseTransparency"; \$PDF; 0)

See also

- 70.140 DynaPDF.GetDocUsesTransparency 2771
- 70.256 DynaPDF.GetUsesTransparency 2912
- 70.252 DynaPDF.GetUseTransparency 2908
- 70.276 DynaPDF.InsertImage 2952
- 70.277 DynaPDF.InsertImageFile 2956
- 70.290 DynaPDF.New 2981
- 70.430 DynaPDF.SetTransparentColor 3233

Created 18th August 2014, last changed 9th February 2015.

70.437 DynaPDF.SetUseVisibleCoords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetUseVisibleCoords"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

The new setting. Can be 1 or 0.

1

Result Returns OK or error.

Description

The crop box crops a page, but the paper format (media box) is left unchanged. To move the coordinates into the visible area, set the property to true. Coordinates can then be used as if no crop box were defined.

The bounding boxes are described in detail under DynaPDF.SetBBox.

Default value = 0

See also [SetUseVisibleCoords](#) function in DynaPDF manual.

See also

- 70.253 DynaPDF.GetUseVisibleCoords 2909
- 70.290 DynaPDF.New 2981
- 70.344 DynaPDF.SetBBox 3093

Created 6th February 2015, last changed 28th November 2019.

70.438 DynaPDF.SetUserUnit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetUserUnit"; PDF; Value)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The new scale.
10.0

Result Returns OK on success or error message.

Description

A user unit is a scaling factor. The page format and all page coordinates are multiplied with this factor in a viewer application. The default size of a PDF unit is 1/72 inch. User units can be useful if the page format would be too large to be expressed in standard PDF units. The largest page format in PDF is limited to 14,400 units or 200 inches. This limit can be extended with the user unit.

The largest value that is supported is 75.0 which results in a maximum page format of 15,000 x 15,000 inches or 1,800,000 units. Note that all functions which return page coordinates or page properties do not consider the user unit.

The page format must still be in the range 3..14400 units. It is also strongly recommended to set the user unit only if necessary. This is only the case if the required page format is larger 14400 units.

Default value = 1.0

See also [SetUserUnit](#) function in DynaPDF manual.

See also

- 70.255 DynaPDF.GetUserUnit 2911
- 70.290 DynaPDF.New 2981
- 70.413 DynaPDF.SetPageHeight 3203
- 70.416 DynaPDF.SetPageWidth 3208

70.438.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr2](#)

Created 18th August 2014, last changed 18th August 2014.

70.439 DynaPDF.SetViewerPreferences

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.2	Yes	Yes	Yes	Yes	Yes

```
MBS( "DynaPDF.SetViewerPreferences"; PDF; Value { ; AddVal } )
```

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Value

The preference to set. Can be number value or list of names.

"HideToolBar, HideMenuBar"

AddVal

Optional

Additional value for the preference.

Result Returns OK or error.

Description

This controls certain features in PDF viewers, such as hiding the toolbar or menu bar.

The parameters Value and AddVal are both bitmasks or lists. Multiple values can be set by using a Math.BitwiseOR. It is also possible to call the function multiple times to set each preference separately; the flags are combined with already existing one in this case. Already defined flags can be deleted with the flag UseNone (0). A few flags require an additional parameter that must be added to AddVal.

See DynaPDF help for possible values.

See also [SetViewerPreferences](#) function in DynaPDF manual.

Examples

Remove toolbar:

```
MBS( "DynaPDF.SetViewerPreferences"; $PDF; "HideToolBar" )
```

See also

- 70.257 DynaPDF.GetViewerPreferences 2914
- 70.290 DynaPDF.New 2981
- 108.3 Math.BitwiseOR 5756

70.439.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 19th March 2019, last changed 20th March 2019.

70.440 DynaPDF.SetWMFDefExtent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.SetWMFDefExtent"; PDF; Width; Height)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Width

Width in 0.01 millimetres

Height

Height in 0.01 millimetres

Result Returns OK or error.

Description

DynaPDF uses a corrected value to get exact proportions. See `InsertMetafile()` for further information. The value must be in the range 2000 to 3000.

Default value = 2400

See also [SetWMFDefExtent](#) function in DynaPDF manual.

See also

- 70.205 DynaPDF.GetLogMetafileSize 2850
- 70.258 DynaPDF.GetWMFDefExtent 2915
- 70.290 DynaPDF.New 2981

Created 18th May 2017, last changed 29th May 2017.

70.441 DynaPDF.SetWMFPixelPerInch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.3	No	Yes	Yes, Windows only	No	No

MBS("DynaPDF.SetWMFPixelPerInch"; PDF; Value)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Value

Pixels per inch of the y-axis

Result Returns OK or error.

Description

DynaPDF uses a corrected value to get exact proportions. See `InsertMetafile()` for further information. The value must be in the range 2000 to 3000.

Default value = 2400

See also [SetWMFPixelPerInch](#) function in DynaPDF manual.

See also

- 70.259 DynaPDF.GetWMFPixelPerInch 2916
- 70.290 DynaPDF.New 2981

Created 29th May 2017, last changed 29th May 2017.

70.442 DynaPDF.SetWordSpacing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetWordSpacing"; PDF; Value)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Value

The new value.
0

Result Returns Ok or error.

Description

See also DynaPDF.GetWordSpacing.
See also [SetWordSpacing](#) function in DynaPDF manual.

See also

- 70.260 DynaPDF.GetWordSpacing 2917
- 70.290 DynaPDF.New 2981
- 70.429 DynaPDF.SetTextScaling 3232

Created 18th August 2014, last changed 18th August 2014.

70.443 DynaPDF.SetXFASStream

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SetXFASStream"; PDF; Index; XML)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

Index

The index for the stream. From 0 to DynaPDF.GetXFASStreamCount-1.
0

XML

The XML to use.

Result Returns OK or error.

Description

Index must be a valid XFA resource index. XFA streams can be enumerated with DynaPDF.GetXFASStream / DynaPDF.GetXFASStreamCount.

The function does not check whether the provided XFA buffer is valid. The buffer is written to the stream as is.

See also

- 70.64 DynaPDF.CreateXFASStream 2661
- 70.261 DynaPDF.GetXFASStream 2918
- 70.262 DynaPDF.GetXFASStreamCount 2920
- 70.290 DynaPDF.New 2981

70.443.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr4](#)

Created 20th October 2019, last changed 20th October 2019.

70.444 DynaPDF.ShowDifferences

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.3	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.ShowDifferences"; PDF; pageIndex1; OtherPDF; pageIndex2 { ; CheckMoving; HighlightColor; Scale; ColorTolerance; Debug })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

pageIndex1

The page index in first PDF context.

1

OtherPDF

The other PDF reference. Can be same as PDF parameter, but allows you to use PDF imported in other PDF context.

\$pdf2

pageIndex2

The page index in second PDF context.

1

CheckMoving

Optional

Whether to check for moving parts, e.g. the big part of the page shifted up one line. Default is zero.

1

HighlightColor

Optional

Default is 65535 for yellow (Full red and green).

Scale

Optional

Scale of the raster. Default is to compare at 72dpi. If you pass 2 here, we use 144dpi.

1

ColorTolerance

Optional

The tolerance for color comparison. Colors where red, green or blue components are within given tolerance are considered equal. So FFFFFFF and FFFFFD are equal. Default is 3.

3

Debug

Optional

Whether to write debug images to temp folder. If 1, we write png files to temp folder. One image is before the check, one with all similar lines removed and one with result of comparison. Red pixels show you the

raster, green equal pixels.

0

Result Returns number of annotations or error.

Description

Returns OK on success which means that highlight annotations have been added to both pages.

You can then render a page to show differences to user.

Requires a DynaPDF Pro license. Without a license, the DynaPDF watermark will reduce the accuracy.

See also

- [70.290 DynaPDF.New](#) 2981

Example Databases

- [DynaPDF/PDF Differences](#)

70.444.1 Blog Entries

- [DynaPDF Screenshot](#)
- [MBS FileMaker Plugin, version 7.3pr2](#)
- [MBS FileMaker Plugin, version 6.2pr4](#)
- [MBS FileMaker Plugin, version 5.4pr5](#)
- [MBS FileMaker Plugin, version 5.3pr4](#)

Created 22nd September 2015, last changed 23th July 2016.

70.445 DynaPDF.SkewCoords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SkewCoords"; PDF; a; b; x; y)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

a

Angle alpha in degrees

10

b

Angle beta in degrees

10

x

Origin of the x-axis

\$x

y

Origin of the y-axis

\$y

Result Returns OK on success and error on failure.

Description

It is highly recommended to save the graphics state beforehand, otherwise it is very difficult or impossible to restore the coordinate system later.

After the coordinate system was changed by the function, bottom-up coordinates are active. It is not possible to use top-down coordinates with a skewed coordinate system.

Please do not try to scale/skew/translate back later. use DynaPDF.SaveGraphicState and DynaPDF.RestoreGraphicState.

See also [SkewCoords](#) function in DynaPDF manual.

Examples

Skew and draw rectangle:

```
MBS( "DynaPDF.SaveGraphicState"; $PDF )
MBS( "DynaPDF.SkewCoords"; $PDF; 20; 20; 200;200)
MBS( "DynaPDF.Rectangle"; $PDF; 0; 0; 200; 100; "stroke" )
MBS( "DynaPDF.RestoreGraphicState"; $PDF )
```

See also

- 70.81 DynaPDF.DrawChord 2680
- 70.290 DynaPDF.New 2981
- 70.310 DynaPDF.Rectangle 3031
- 70.319 DynaPDF.RestoreGraphicState 3050
- 70.324 DynaPDF.Save 3062
- 70.328 DynaPDF.SaveGraphicState 3071
- 70.329 DynaPDF.ScaleCoords 3072

Example Databases

- [DynaPDF/DynaPDF Coordinates](#)

Created 18th August 2014, last changed 18th August 2014.

70.446 DynaPDF.SquareAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SquareAnnot"; PDF; PosX; PosY; Width; Height; LineWidth; FillColor; StrokeColor; ColorSpace; Author; Subject; Comment)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-coordinate of the annotation

100

PosY

Y-coordinate of the annotation

100

Width

Width of the annotation

100

Height

Height of the annotation

100

LineWidth

Line width of the circle or ellipse

2

FillColor

Fill color for square.

200

StrokeColor

Stroke color for square.

255

ColorSpace

Color space of the fill and stroke colors.

"RGB"

Author

The author name. Can be empty.

"Christian Schmitz"

Subject

The subject to use. Can be empty.

Comment

The comment. Can be empty.

Result Returns annotation handle or error.

Description

If the parameters `Width` and `Height` are equal the function draws a square, a rectangle otherwise. If the annotation should be drawn without a border, set the parameter `LineWidth` to zero or `StrokeColor` to the special constant `NO_COLOR` (4294967281).

If the interior should be transparent set `FillColor` to the special constant `NO_COLOR` (4294967281).

Although the line width can be set to any positive floating point value, Adobe's Acrobat or Reader restrict the line width to 0 through 12 units. The line width should be restricted in the same way to avoid issues in Adobe viewer products.

See also [SquareAnnot](#) function in DynaPDF manual.

Examples

Add a rectangle annotation:

```
Set Variable [ $r ; Value: MBS("DynaPDF.EditPage"; $pdf;1) ]
Set Variable [ $r ; Value: MBS( "DynaPDF.SquareAnnot"; /* Draws a square annotation on the current
open page. */
$PDF; /* The PDF reference returned from DynaPDF.New. */
100; /* X-coordinate of the annotation.e.g. 100 */
100; /* Y-coordinate of the annotation.e.g. 100 */
300; /* Width of the annotation.e.g. 100 */
200; /* Height of the annotation.e.g. 100 */
5; /* Line width of the circle or ellipse.e.g. 2 */
4294967281; /* Fill color for square.e.g. 200 */
MBS( "DynaPDF.RGB"; 255; 0; 0 ); /* Stroke color for square.e.g. 255 */
"RGB"; /* Color space of the fill and stroke colors.e.g. "RGB" */
"Christian Schmitz"; /* The author name. Can be empty. */
"Hello World"; /* The subject to use. Can be empty. */
"Just testing") /* The comment. Can be empty. */ ]
```

See also

- 70.39 DynaPDF.CircleAnnot 2609
- 70.84 DynaPDF.EditPage 2686
- 70.283 DynaPDF.LineAnnot 2969
- 70.290 DynaPDF.New 2981
- 70.307 DynaPDF.RGB 3026
- 70.447 DynaPDF.StampAnnot 3255

Created 28th November 2014, last changed 19th October 2019.

70.447 DynaPDF.StampAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.StampAnnot"; PDF; PosX; PosY; Width; Height; Author; Subject; Comment; SubType)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

x-coordinate

100

PosY

y-coordinate

100

Width

Stamp width

100

Height

Stamp height

100

Author

The author name. Can be empty.

"Christian Schmitz"

Subject

The subject to use. Can be empty.

Comment

The comment. Can be empty.

SubType

The type of stamp. Can be Approved, AsIs, Confidential, Departmental, Draft, Experimental, Expired, Final, ForComment, ForPublicRelease, NotApproved, NotForPublicRelease, Sold, TopSecret or UserDefined.

"Approved"

Result Returns annotation handle or error.

Description

PDF viewers support a large set of predefined stamp types but it is also possible to create user defined stamps. A user defined stamp can be created as follows:

- Create the stamp with the SubType UserDefined.

- Call `DynaPDF.CreateAnnotAP` with the handle of the stamp annotation to create a user defined appearance stream.
- Draw arbitrary contents to the appearance stream and close it finally with `EndTemplate`, finish!

See also [StampAnnot](#) function in DynaPDF manual.

See also

- 70.283 `DynaPDF.LineAnnot` 2969
- 70.290 `DynaPDF.New` 2981
- 70.446 `DynaPDF.SquareAnnot` 3253
- 70.495 `DynaPDF.TextAnnot` 3335

Created 28th November 2014, last changed 2nd October 2019.

70.448 DynaPDF.StrokePath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.StrokePath"; PDF)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error.

Description

If no open path can be detected the function returns with a warning.

See also [StrokePath](#) function in DynaPDF manual.

Examples

Draw two lines in black:

```
Set Variable [ $r; Value:MBS ( "DynaPDF.SetStrokeColor" ; $pdf ; 0; 0; 0 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.SetLineWidth" ; $pdf ; 1 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 20; 20 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 20; 40 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.MoveTo" ; $pdf ; 30; 30 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.LineTo" ; $pdf ; 30; 50 ) ]
Set Variable [ $r; Value:MBS ( "DynaPDF.StrokePath" ; $pdf ) ]
```

See also

- [70.43 DynaPDF.ClosePath](#) 2615
- [70.284 DynaPDF.LineTo](#) 2971
- [70.289 DynaPDF.MoveTo](#) 2979
- [70.290 DynaPDF.New](#) 2981
- [70.399 DynaPDF.SetLineWidth](#) 3178
- [70.423 DynaPDF.SetStrokeColor](#) 3222

Example Databases

- [DynaPDF/Create PDF with Bezier Curves](#)

70.448.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 1st January 2017.

70.449 DynaPDF.SysFontInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.SysFontInfo"; PDF; Handle; Selector)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Handle

Font Handle or zero for first call

0

Selector

Which value to return. Can be Result, BaseType, CIDOrdering, CIDRegistry, CIDSupplement, DataOffset, FamilyName, FilePath, FileSize, Flags, Embeddable, Editable, FullName, Length1, Length2, PostScriptName, Index, IsFixedPitch, Style, UnicodeRange1, UnicodeRange2, UnicodeRange3 or UnicodeRange4. "FamilyName"

Result Returns value or error.

Description

For first call, please use zero for the handle. Than you can get with Selector "Result" the handle of the next font. Loop until this next handle is zero.

Embeddable returns 1 or 0 depending on whether the font can be embedded or not.

FamilyName, FullName, FilePath and PostScriptName are returned in unicode text if possible.

Examples

Get Family name of first font:

```
MBS( "DynaPDF.SysFontInfo"; $pdf; 0; "FamilyName" )
```

List System Fonts by adding records to a table with font names:

```
Set Variable [ $Handle; Value:0 ]
```

```
Loop
```

```
# Get values
```

```
Set Variable [ $NextHandle; Value:MBS("DynaPDF.SysFontInfo"; $pdf; $Handle; "Result") ]
```

```
Exit Loop If [ $NextHandle = 0 ]
```

```
New Record/Request
```

```
Set Field [ System Font Info::FamilyName; MBS("DynaPDF.SysFontInfo"; $pdf; $Handle; "FamilyName") ]
```

```
Set Field [ System Font Info::Embeddable; MBS("DynaPDF.SysFontInfo"; $pdf; $Handle; "Embeddable") ]
```

```
Commit Records/Requests [ Skip data entry validation; No dialog ]
```

```
# Next
```

```
Set Variable [ $Handle; Value:$NextHandle ]
```

End Loop

See also

- [70.114 DynaPDF.FontInfo](#) 2736
- [70.290 DynaPDF.New](#) 2981
- [70.357 DynaPDF.SetDocInfo](#) 3111

Example Databases

- [DynaPDF/System Font Info](#)

70.449.1 Blog Entries

- [Strange looking PDF in Microsoft Edge and Apple Preview](#)
- [MBS FileMaker Plugin, version 5.1pr2](#)

Created 21st March 2015, last changed 23th March 2015.

70.450 DynaPDF.Table.AddColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.AddColumn"; Table; Left; Width)

Parameters**Table**

The identifier for the table.

\$Table

Left

Add the column on the left or right side?

0

Width

The new column width.

100

Result Returns number of columns or error.

Description

In most cases it is required to change the table width and the widths of the remaining columns after a new column was added. This can be done with DynaPDF.Table.SetTableWidth and DynaPDF.Table.SetColWidth.

If possible, create the table directly with the required number of columns.

If the function succeeds, the return value is new number of columns. If the function fails, the return value is a negative error code.

See also

- 70.451 DynaPDF.Table.AddRow 3262
- 70.452 DynaPDF.Table.AddRows 3264
- 70.453 DynaPDF.Table.ClearColumn 3265
- 70.484 DynaPDF.Table.SetColor 3316
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.494 DynaPDF.Table.SetTableWidth 3333

Created 18th August 2014, last changed 18th August 2014.

70.451 DynaPDF.Table.AddRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.AddRow"; Table; Height)

Parameters

Table

The identifier for the table.

\$Table

Height

Minimum height or -1 for default height.

10

Result Returns error or new row index.

Description

The parameter Height can be set to a negative value to indicate that the default row height should be used. The default row height was specified in DynaPDF.Table.Create.

The specified height represents the minimum height of the row. If the height of a foreground object is larger than the height will be adjusted.

The height is sometimes required. This is the case when a cell is rotated by 90 or a multiple of 90 degrees and if the height cannot be computed from the cell contents, e.g. if a cell contains text and if the flag NoLineBreak is absent. See DynaPDF.Table.SetCellOrientation for further information.

If the function succeeds, the return value is the row index, a value greater or equal zero. If the function fails, the return value is a negative error code.

Examples

Adds a row:

```
MBS("DynaPDF.Table.AddRow"; $table)
```

Adds a header row:

```
# Add header row
Set Variable [ $row; Value:MBS("DynaPDF.Table.AddRow"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 0; "right"; "top"; "Index") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 1; "left"; "top"; "Product") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 2; "right"; "top"; "Price") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 3; "right"; "top"; "Quantity") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 4; "right"; "top"; "Total Price") ]
]
# set flag for header row
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetFlags"; $table; $row; -1; "HeaderRow") ]
# make row bold
```

70.451. *DYNAPDF.TABLE.ADDROW* 3263

Set Variable [\$r; Value:MBS("DynaPDF.Table.SetFont"; \$table; \$row; -1; "Helvetica"; 2; 1; "unicode")]

See also

- 70.452 DynaPDF.Table.AddRows 3264
- 70.455 DynaPDF.Table.ClearRow 3268
- 70.456 DynaPDF.Table.Create 3270
- 70.460 DynaPDF.Table.Draw 3276
- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.477 DynaPDF.Table.SetCellOrientation 3301
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.486 DynaPDF.Table.SetFlags 3320
- 70.487 DynaPDF.Table.SetFont 3322
- 79.41 FM.Loop 3968

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

70.451.1 Blog Entries

- [Merge PDF with table of contents](#)
- [New FM.Loop function](#)

Created 18th August 2014, last changed 2nd August 2018.

70.452 DynaPDF.Table.AddRows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.AddRows"; Table; Count; Height)

Parameters

Table

The identifier for the table.

\$Table

Count

Number of rows.

1

Height

The default height of the row. or -1 to

-1

Result If the function succeeds, the return value is new number of rows in the table. If the function fails, the return value is a negative error code.

Description

The parameter Height can be set to a negative value to indicate that the default row height should be used. The default row height was specified in DynaPDF.Table.Create.

The specified height represents the minimum height of each row. If the height of a foreground object is larger, then the row height will be adjusted.

The height is sometimes required. This is the case if a cell is rotated by 90 or a multiple of 90 degrees and if the height cannot be computed from the cell contents, e.g. if a cell contains text and if the flag NoLineBreak is absent. See DynaPDF.Table.SetCellOrientation for further information.

See also

- 70.450 DynaPDF.Table.AddColumn 3261
- 70.451 DynaPDF.Table.AddRow 3262
- 70.455 DynaPDF.Table.ClearRow 3268
- 70.456 DynaPDF.Table.Create 3270
- 70.459 DynaPDF.Table.DeleteRows 3275
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.477 DynaPDF.Table.SetCellOrientation 3301
- 70.487 DynaPDF.Table.SetFont 3322

Created 18th August 2014, last changed 18th August 2014.

70.453 DynaPDF.Table.ClearColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.ClearColumn"; Table; Col; Types)

Parameters**Table**

The identifier for the table.

\$Table

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1.

0

Types

What to clear. Can be Text, Template, Action, Table, ForeGround, BackGround, AllCont or Both. Or you pass numeric values combined from the hex values in the table below.

"AllCont"

Description

The parameter Types is described in DynaPDF.Table.ClearContent below.

Type	Hex Number	Description
Text	0x00000001	Text is always a foreground object
Image	0x00000002	Images
Template	0x00000004	Templates
Table	0x00000008	Sub tables are always foreground objects
AllCont	0x0000001F	Delete all content types
ForeGround	0x10000000	Only foreground objects?
BackGround	0x20000000	Only background objects?
Both	0x30000000	Delete both fore- and background objects

See also

- 70.450 DynaPDF.Table.AddColumn 3261
- 70.454 DynaPDF.Table.ClearContent 3266
- 70.455 DynaPDF.Table.ClearRow 3268
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.486 DynaPDF.Table.SetFlags 3320

Created 18th August 2014, last changed 22nd February 2019.

70.454 DynaPDF.Table.ClearContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.ClearContent"; Table; Types)

Parameters

Table

The identifier for the table.

\$Table

Types

What to clear. Can be Text, Template, Table, Action, ForeGround, BackGround, AllCont or Both. Or you pass numeric values combined from the hex values in the table below.

"AllCont"

Result Returns OK or error.

Description

The parameter Types is a bit mask. The content types and the fore- and background flags can be combined with a binary or operator. If the foreground and background flags are both absent, then nothing will be deleted!

Other programming languages require no type cast.

Note that it is not required to explicitly clear the contents of a table. Existing contents can be overridden at any time. However, when it is not known whether all cells get new values, then it is recommended to clear the table beforehand.

It is also possible to clear the contents of specific rows or columns only. See DynaPDF.Table.ClearColumn and DynaPDF.Table.ClearRow for further information.

Type	Hex Number	Description
Text	0x00000001	Text is always a foreground object
Image	0x00000002	Images
Template	0x00000004	Templates
Table	0x00000008	Sub tables are always foreground objects
AllCont	0x0000001F	Delete all content types
ForeGround	0x10000000	Only foreground objects?
BackGround	0x20000000	Only background objects?
Both	0x30000000	Delete both fore- and background objects

See also

- 70.453 DynaPDF.Table.ClearColumn 3265
- 70.455 DynaPDF.Table.ClearRow 3268

70.454. *DYNAPDF.TABLE.CLEARCONTENT*

3267

- 70.486 DynaPDF.Table.SetFlags

3320

Created 18th August 2014, last changed 22nd February 2019.

70.455 DynaPDF.Table.ClearRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.ClearRow"; Table; Row; Types)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1.

0

Types

What to clear. Can be Text, Template, Table, Action, ForeGround, BackGround, AllCont or Both. Or you pass numeric values combined from the hex values in the table below.

"AllCont"

Result Returns OK or error.

Description

The parameter Types is described in DynaPDF.Table.ClearContent.

Type	Hex Number	Description
Text	0x00000001	Text is always a foreground object
Image	0x00000002	Images
Template	0x00000004	Templates
Table	0x00000008	Sub tables are always foreground objects
AllCont	0x0000001F	Delete all content types
ForeGround	0x10000000	Only foreground objects?
BackGround	0x20000000	Only background objects?
Both	0x30000000	Delete both fore- and background objects

See also

- 70.451 DynaPDF.Table.AddRow 3262
- 70.452 DynaPDF.Table.AddRows 3264
- 70.453 DynaPDF.Table.ClearColumn 3265
- 70.456 DynaPDF.Table.Create 3270
- 70.457 DynaPDF.Table.DeleteCol 3273

70.455. <i>DYNAPDF.TABLE.CLEARROW</i>	3269
• 70.459 DynaPDF.Table.DeleteRows	3275
• 70.464 DynaPDF.Table.GetNextRow	3282
• 70.466 DynaPDF.Table.GetNumRows	3284
• 70.471 DynaPDF.Table.Release	3289
• 70.486 DynaPDF.Table.SetFlags	3320

Created 18th August 2014, last changed 22nd February 2019.

70.456 DynaPDF.Table.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.Create"; PDF; AllocRows; NumCols; Width; DefRowHeight)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

AllocRows

The number of rows to preallocate.
10

NumCols

The number of columns.
5

Width

The width of table.
500

DefRowHeight

The default row height for a new row.
30

Result Returns table identifier or error.

Description

The parameter AllocRows specifies the number of rows which should be pre-allocated. The value should be large enough to avoid unnecessary memory reallocations. Note that this is just the size of the array that holds the rows which will be added later. Unused rows require 4 or 8 bytes memory (32 bit / 64 bit).

The default row height is used if the parameter Height of AddRow() or AddRows() is set to a negative value.

The widths of the columns is set to the table width divided by the number of columns (Width / NumCols).

The table must be deleted with DynaPDF.Table.Release when finish to avoid a memory leak.

DynaPDF table reference numbers are starting at 21000 and counting up for each new table.

Examples

Create table with 10 preallocated rows, 2 columns, 500 point width and 10 point default row height:

```
MBS("DynaPDF.Table.Create"; $pdf; 10; 2; 500; 10)
```

Create table and set some properties:

```
Set Variable [ $table; Value:MBS("DynaPDF.Table.Create"; $pdf; 10; 2; 500; 10) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetBorderWidth"; $table; -1; -1; 1; 1; 1; 1) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetRGBColor"; $table; -1; -1; "BorderColor"; 255; 255; 255) ]
```

```

Set Variable [ $r; Value:MBS("DynaPDF.Table.SetRGBColor"; $table; -1; -1; "GridHorzColor"; 255; 255; 255) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetRGBColor"; $table; -1; -1; "GridVertColor"; 255; 255; 255) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetRGBColor"; $table; -1; -1; "TextColor"; 0; 0; 0) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetGridWidth"; $table; 10; 10) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetColWidth"; $table; 0; 200;1) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetColWidth"; $table; 1; 300;1) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetFont"; $table; -1; -1; "Helvetica"; 0; 1; "unicode") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetFontSize"; $table; -1; -1; 10) ]

```

Complete example using a simple table on one page:

```

# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
End If

# Clear current PDF document
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# coordinates top down instead the default Bottom Up
Set Variable [ $r; Value:MBS("DynaPDF.SetPageCoords"; $pdf; "TopDown") ]

# Create Table
Set Variable [ $table; Value:MBS("DynaPDF.Table.Create"; $pdf; 3; 3; 500; 100) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetBorderWidth"; $table; -1; -1; 1; 1; 1) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetGridWidth"; $table; 1; 1) ]

# Add Rows
Set Variable [ $text; Value:"The cell alignment can be set for text, images, and templates..." ]
Set Variable [ $rowNum; Value:MBS("DynaPDF.Table.AddRow"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 0; "left"; "top"; $text) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 1; "center"; "top"; $text) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 2; "right"; "top"; $text) ]
Set Variable [ $rowNum; Value:MBS("DynaPDF.Table.AddRow"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 0; "left"; "center"; $text) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 1; "center"; "center"; $text) ]
]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 2; "right"; "center"; $text) ]
]
Set Variable [ $rowNum; Value:MBS("DynaPDF.Table.AddRow"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 0; "left"; "bottom"; $text) ]
]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 1; "center"; "bottom"; $text) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 2; "right"; "bottom"; $text) ]
]

```

```

# Draw Table (just one page without loop)
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.Draw"; $table; 50; 50; 742) ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]

# Cleanup
Set Field [ Tables::OutputPDF; MBS("DynaPDF.Save"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.Release"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]

```

See also

- [70.324 DynaPDF.Save](#) 3062
- [70.411 DynaPDF.SetPageCoords](#) 3199
- [70.452 DynaPDF.Table.AddRows](#) 3264
- [70.471 DynaPDF.Table.Release](#) 3289
- [70.472 DynaPDF.Table.SetBorderWidth](#) 3290
- [70.482 DynaPDF.Table.SetCellText](#) 3312
- [70.487 DynaPDF.Table.SetFont](#) 3322
- [70.489 DynaPDF.Table.SetFontSize](#) 3325
- [70.490 DynaPDF.Table.SetGridWidth](#) 3327
- [70.492 DynaPDF.Table.SetRGBColor](#) 3330

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

70.456.1 Blog Entries

- [Merge PDF with table of contents](#)
- [DynaPDF Screenshot](#)
- [MBS FileMaker Plugin, version 8.4pr2](#)

70.457 DynaPDF.Table.DeleteCol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.DeleteCol"; Table; Col)

Parameters**Table**

The identifier for the table.

\$Table

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1.

0

Result Returns OK or error.

Description

The new table width is the table width minus the width of the deleted column. It is not possible to delete all columns. One column must be left in the table.

If the column index is invalid or if the table contains only one column then the function does nothing.

See also

- 70.455 DynaPDF.Table.ClearRow 3268
- 70.458 DynaPDF.Table.DeleteRow 3274
- 70.459 DynaPDF.Table.DeleteRows 3275
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.471 DynaPDF.Table.Release 3289
- 70.484 DynaPDF.Table.SetColor 3316

Created 18th August 2014, last changed 18th August 2014.

70.458 DynaPDF.Table.DeleteRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.DeleteRow"; Table; Row)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1.

0

Result Returns OK or error.

Description

If the row index is invalid then the function does nothing.

See also

- 70.455 DynaPDF.Table.ClearRow 3268
- 70.457 DynaPDF.Table.DeleteCol 3273
- 70.459 DynaPDF.Table.DeleteRows 3275
- 70.464 DynaPDF.Table.GetNextRow 3282
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.471 DynaPDF.Table.Release 3289

Created 18th August 2014, last changed 18th August 2014.

70.459 DynaPDF.Table.DeleteRows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.DeleteRows"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns OK or error.

Description**See also**

- 70.452 DynaPDF.Table.AddRows 3264
- 70.455 DynaPDF.Table.ClearRow 3268
- 70.457 DynaPDF.Table.DeleteCol 3273
- 70.458 DynaPDF.Table.DeleteRow 3274
- 70.464 DynaPDF.Table.GetNextRow 3282
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284

Created 18th August 2014, last changed 18th August 2014.

70.460 DynaPDF.Table.Draw

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.Draw"; Table; x; y; MaxHeight)

Parameters**Table**

The identifier for the table.

\$Table

x

The x position where to draw the table.

100

y

The y position where to draw the table.

100

MaxHeight

The maximum height to use for the table.

600

Result Returns height or error.

Description

The x/y-coordinates specify the top left corner of the table. The table flows always from top to bottom.

The function must be executed in a while statement if the parameter MaxHeight is set to a value greater zero:

The function draws the header rows if any and at least one row to avoid an endless loop if the maximum height would be smaller as the first row height.

If the function succeeds the return value is the height of the table that was drawn so that additional contents can be drawn below the table if necessary. If the function fails the return value is -1.

Examples

Loop to draw table and add pages as needed:

```
Set Variable [ $h; Value:300 ]
```

```
Set Variable [ $y; Value:200 ]
```

```
Loop
```

```
# Draw something on page
```

```
Set Variable [ $r; Value:MBS("DynaPDF.Table.Draw"; $table; 58; $y; $h) ]
```

```
Set Variable [ $y; Value:$y + $r + 5 ]
```

```
# Add another page
```

```
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
```

```
Set Variable [ $h; Value:580 ]
```



```
Set Variable [ $y; Value:120 ]
End Loop
```

Complete example using a simple table on one page:

```
# Initialize DynaPDF if needed
If [ MBS("DynaPDF.IsInitialized") 1 ]
Perform Script [ "InitDynaPDF" ]
End If

# Clear current PDF document
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# coordinates top down instead of the default Bottom Up
Set Variable [ $r; Value:MBS("DynaPDF.SetPageCoords"; $pdf; "TopDown") ]

# Create Table
Set Variable [ $table; Value:MBS("DynaPDF.Table.Create"; $pdf; 3; 3; 500; 100) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetBorderWidth"; $table; -1; -1; 1; 1; 1) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetGridWidth"; $table; 1; 1) ]

# Add Rows
Set Variable [ $text; Value:"The cell alignment can be set for text, images, and templates..." ]
Set Variable [ $rowNum; Value:MBS("DynaPDF.Table.AddRow"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 0; "left"; "top"; $text) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 1; "center"; "top"; $text) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 2; "right"; "top"; $text) ]
Set Variable [ $rowNum; Value:MBS("DynaPDF.Table.AddRow"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 0; "left"; "center"; $text) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 1; "center"; "center"; $text) ]
]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 2; "right"; "center"; $text) ]
]
Set Variable [ $rowNum; Value:MBS("DynaPDF.Table.AddRow"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 0; "left"; "bottom"; $text) ]
]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 1; "center"; "bottom"; $text) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $rowNum; 2; "right"; "bottom"; $text) ]
]

# Draw Table (just one page without loop)
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.Draw"; $table; 50; 50; 742) ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]

# Cleanup
Set Field [ Tables::OutputPDF; MBS("DynaPDF.Save"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.Release"; $table) ]
```

Set Variable [\$r; Value:MBS("DynaPDF.Release"; \$pdf)]

See also

- [70.90 DynaPDF.EndPage](#) 2697
- [70.282 DynaPDF.IsInitialized](#) 2966
- [70.290 DynaPDF.New](#) 2981
- [70.311 DynaPDF.Release](#) 3033
- [70.411 DynaPDF.SetPageCoords](#) 3199
- [70.461 DynaPDF.Table.GetFirstRow](#) 3279
- [70.464 DynaPDF.Table.GetNextRow](#) 3282
- [70.470 DynaPDF.Table.HaveMore](#) 3288
- [70.472 DynaPDF.Table.SetBorderWidth](#) 3290
- [70.482 DynaPDF.Table.SetCellText](#) 3312

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

70.460.1 Blog Entries

- [Merge PDF with table of contents](#)

Created 18th August 2014, last changed 17th January 2019.

70.461 DynaPDF.Table.GetFirstRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetFirstRow"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns row number or error.

Description

The function returns the index of the first row that was drawn in the previous DrawTable() call. DynaPDF.Table.GetNextRow returns the next row index that will be drawn in the next DynaPDF.Table.Draw call. If the next row index equals the number of rows then the table was fully drawn.

See also

- 70.460 DynaPDF.Table.Draw 3276
- 70.464 DynaPDF.Table.GetNextRow 3282
- 70.466 DynaPDF.Table.GetNumRows 3284

Example Databases

- [DynaPDF/Invoice/Invoice](#)

Created 18th August 2014, last changed 18th August 2014.

70.462 DynaPDF.Table.GetNextHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetNextHeight"; Table; MaxHeight)

Parameters

Table

The identifier for the table.

\$Table

MaxHeight

Maximum height for the table.

500

Result Returns calculated height or error.

Description

If the parameter MaxHeight is zero, then the full height will be returned. If MaxHeight is greater zero, then the height of the table is calculated that fits into the output height. This is the same height that DrawTable() would produce when drawing the table with the same parameters. This function can be useful if the height of the table must be known before it can be drawn. The function caches the result so that multiple calls with a different max height can be computed fast as possible.

The function must be called within an open page.

See also

- 70.463 DynaPDF.Table.GetNextHeightRow 3281
- 70.464 DynaPDF.Table.GetNextRow 3282
- 70.468 DynaPDF.Table.GetTableHeight 3286
- 70.469 DynaPDF.Table.GetTableWidth 3287
- 70.493 DynaPDF.Table.SetRowHeight 3332

Created 18th August 2014, last changed 18th August 2014.

70.463 DynaPDF.Table.GetNextHeightRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetNextHeightRow"; Table; MaxHeight)

Parameters**Table**

The identifier for the table.

\$Table

MaxHeight

Maximum height for the table.

500

Result Returns next row or error.

Description

If the parameter MaxHeight is zero, then the full height will be returned. If MaxHeight is greater zero, then the height of the table is calculated that fits into the output height. This is the same height that DrawTable() would produce when drawing the table with the same parameters. This function can be useful if the height of the table must be known before it can be drawn. The function caches the result so that multiple calls with a different max height can be computed fast as possible.

The function must be called within an open page.

This function can be used together with DynaPDF.Table.GetNextHeight. While DynaPDF.Table.GetNextHeight returns the height, this function will return the next row after the given height has been used.

See also

- 70.462 DynaPDF.Table.GetNextHeight 3280
- 70.464 DynaPDF.Table.GetNextRow 3282
- 70.468 DynaPDF.Table.GetTableHeight 3286

Created 18th August 2014, last changed 18th August 2014.

70.464 DynaPDF.Table.GetNextRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetNextRow"; Table)

Parameters

Table

The identifier for the table.

\$Table

Result Returns row number or error.

Description

The function returns the index of the next row that will be drawn when DynaPDF.Table.Draw is called the next time. DynaPDF.Table.GetFirstRow returns the first row index that was drawn in the previous DynaPDF.Table.Draw call. If the next row index equals the number of rows then the table was fully drawn.

See also

- 70.455 DynaPDF.Table.ClearRow 3268
- 70.458 DynaPDF.Table.DeleteRow 3274
- 70.459 DynaPDF.Table.DeleteRows 3275
- 70.460 DynaPDF.Table.Draw 3276
- 70.461 DynaPDF.Table.GetFirstRow 3279
- 70.462 DynaPDF.Table.GetNextHeight 3280
- 70.463 DynaPDF.Table.GetNextHeightRow 3281
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284

Example Databases

- [DynaPDF/Invoice/Invoice](#)

Created 18th August 2014, last changed 18th August 2014.

70.465 DynaPDF.Table.GetNumCols

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetNumCols"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns column count or error.

Description

See also DynaPDF.Table.GetNumRows

See also

- 70.457 DynaPDF.Table.DeleteCol 3273
- 70.459 DynaPDF.Table.DeleteRows 3275
- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.476 DynaPDF.Table.SetCellImageEx 3299
- 70.477 DynaPDF.Table.SetCellOrientation 3301
- 70.478 DynaPDF.Table.SetCellPadding 3303
- 70.479 DynaPDF.Table.SetCellSpacing 3305
- 70.484 DynaPDF.Table.SetColor 3316
- 70.487 DynaPDF.Table.SetFont 3322
- 70.492 DynaPDF.Table.SetRGBColor 3330

Created 18th August 2014, last changed 18th August 2014.

70.466 DynaPDF.Table.GetNumRows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetNumRows"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns row count or error.

Description

See also DynaPDF.Table.GetNumCols

See also

- 70.459 DynaPDF.Table.DeleteRows 3275
- 70.461 DynaPDF.Table.GetFirstRow 3279
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.477 DynaPDF.Table.SetCellOrientation 3301
- 70.478 DynaPDF.Table.SetCellPadding 3303
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.484 DynaPDF.Table.SetColor 3316
- 70.488 DynaPDF.Table.SetFontSelMode 3324
- 70.492 DynaPDF.Table.SetRGBColor 3330
- 70.493 DynaPDF.Table.SetRowHeight 3332

Created 18th August 2014, last changed 18th August 2014.

70.467 DynaPDF.Table.GetPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetPDF"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns number or error.

Description**See also**

- 70.487 DynaPDF.Table.SetFont 3322
- 70.491 DynaPDF.Table.SetPDF 3329

Created 18th August 2014, last changed 18th August 2014.

70.468 DynaPDF.Table.GetTableHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetTableHeight"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns height or error.

Description

The function must be called within an open page.

See also

- 70.462 DynaPDF.Table.GetNextHeight 3280
- 70.463 DynaPDF.Table.GetNextHeightRow 3281
- 70.469 DynaPDF.Table.GetTableWidth 3287
- 70.493 DynaPDF.Table.SetRowHeight 3332
- 70.494 DynaPDF.Table.SetTableWidth 3333

Created 18th August 2014, last changed 18th August 2014.

70.469 DynaPDF.Table.GetTableWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.GetTableWidth"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns width or error.

Description

The function must be called within an open page.

If the function succeeds the return value is the width of the table. If the function fails the return value is -1.

See also

- 70.462 DynaPDF.Table.GetNextHeight 3280
- 70.468 DynaPDF.Table.GetTableHeight 3286
- 70.472 DynaPDF.Table.SetBorderWidth 3290
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.490 DynaPDF.Table.SetGridWidth 3327
- 70.494 DynaPDF.Table.SetTableWidth 3333

Created 18th August 2014, last changed 18th August 2014.

70.470 DynaPDF.Table.HaveMore

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.HaveMore"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns 1, 0 or error.

Description

The return value is always false if the MaxHeight parameter of DynaPDF.Table.Draw was set to zero.

Result is 1 if more rows need to be drawn.

See also

- [70.460 DynaPDF.Table.Draw](#) 3276
- [70.471 DynaPDF.Table.Release](#) 3289

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th August 2014.

70.471 DynaPDF.Table.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.Release"; Table)

Parameters**Table**

The identifier for the table.

\$Table

Result Returns OK or error.

Description

You need to call this to free memory.

See also

- 70.455 DynaPDF.Table.ClearRow 3268
- 70.456 DynaPDF.Table.Create 3270
- 70.457 DynaPDF.Table.DeleteCol 3273
- 70.458 DynaPDF.Table.DeleteRow 3274
- 70.460 DynaPDF.Table.Draw 3276
- 70.470 DynaPDF.Table.HaveMore 3288
- 70.486 DynaPDF.Table.SetFlags 3320
- 70.487 DynaPDF.Table.SetFont 3322

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th August 2014.

70.472 DynaPDF.Table.SetBorderWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetBorderWidth"; Table; Row; Col; Left; Right; Top; Bottom)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Left

Value for the left side.

0

Right

Value for the right side.

0

Top

Value for the top side.

0

Bottom

Value for the bottom side.

0

Result Returns OK or error.

Description

The properties can be set to the table, rows, columns, and cells as follows:

Row	Col	Applies to
-1	-1	Table
-1	>=0	Column
>=0	-1	Row
>=0	>=0	Cell

The border with is inherited from columns and rows (in this order), but not from the table since the table has its own border.

Individual values can be set to each side of a cell. Note that the properties will be not be rotated with a cell. The left side is always left, independent of the cell orientation.

Examples

Set border width to 1 point:

```
MBS("DynaPDF.Table.SetBorderWidth"; $table; -1; -1; 1; 1; 1; 1)
```

See also

- 70.332 [DynaPDF.SetAnnotBorderWidth](#) 3078
- 70.456 [DynaPDF.Table.Create](#) 3270
- 70.465 [DynaPDF.Table.GetNumCols](#) 3283
- 70.466 [DynaPDF.Table.GetNumRows](#) 3284
- 70.469 [DynaPDF.Table.GetTableWidth](#) 3287
- 70.473 [DynaPDF.Table.SetBoxProperty](#) 3292
- 70.483 [DynaPDF.Table.SetColWidth](#) 3314
- 70.490 [DynaPDF.Table.SetGridWidth](#) 3327
- 70.493 [DynaPDF.Table.SetRowHeight](#) 3332
- 70.494 [DynaPDF.Table.SetTableWidth](#) 3333

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th August 2014.

70.473 DynaPDF.Table.SetBoxProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetBoxProperty"; Table; Row; Col; Type; Left; Right; Top; Bottom)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Type

Can be BorderWidth, CellSpacing or CellPadding.

"CellPadding"

Left

Value for the left side.

0

Right

Value for the right side.

0

Top

Value for the top side.

0

Bottom

Value for the bottom side.

0

Result Returns OK or error.

Description

The properties can be set to the table, rows, columns, and cells as follows:

Cell padding and cell spacing are inherited from the table, columns, and rows, in this order.

The border with is inherited from columns and rows (in this order), but not from the table since the table has its own border.

Individual values can be set to each side of a cell. Note that the properties will be not be rotated with a cell. The left side is always left, independent of the cell orientation.

70.473. *DYNAPDF.TABLE.SETBOXPROPERTY*

3293

Row	Col	Applies to
-1	-1	Table
-1	≥ 0	Column
≥ 0	-1	Row
≥ 0	≥ 0	Cell

See also

- 70.465 *DynaPDF.Table.GetNumCols* 3283
- 70.466 *DynaPDF.Table.GetNumRows* 3284
- 70.472 *DynaPDF.Table.SetBorderWidth* 3290
- 70.485 *DynaPDF.Table.SetColorFloat* 3318

Created 18th August 2014, last changed 18th August 2014.

70.474 DynaPDF.Table.SetCellAction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	9.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellAction"; Table; Row; Col; ActionHandle; Mode)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

ActionHandle

The action handle

\$action

Mode

The new highlight mode. Can be None, Invert, Outline, Push or PushUpd.

"Invert"

Result Returns OK or error.

Description

Creates an invisible link annotation for the specified cell or table and associates the provided action with that annotation. The result is an interactive area that executes the action if the user clicks on cell or table. A cell action is always a background object that is created in the size of the background area when the table is drawn.

Unlike other cell objects like images, text, and so on, a cell link is no persistent object because the action will be deleted when then PDF file in memory will be closed or when DynaPDF.Release will be called.

If the table should be drawn into more than one PDF file then re-create the actions and cell action before drawing the table into the next PDF file.

Actions can be created with functions like DynaPDF.CreateGoToAction, DynaPDF.CreateGoToRAction, and so on.

Examples

Adds a go-to action for a cell in the table:

```
Set Variable [ $NamedDest ; Value: MBS( "DynaPDF.CreateNamedDest"; $pdf; "test"; 2; "Fit" ) ]
```

```
Set Variable [ $Action ; Value: MBS( "DynaPDF.CreateGoToActionEx"; $PDF; $NamedDest ) ]
```

```
Set Variable [ $r ; Value: MBS( "DynaPDF.Table.SetCellAction"; $Table; $rowNum; 0; $action; "Invert" ) ]
```

70.474. *DYNAPDF.TABLE.SETCELLACTION* 3295

See also

- 70.51 DynaPDF.CreateGoToActionEx 2632
- 70.52 DynaPDF.CreateGoToRAction 2634
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.476 DynaPDF.Table.SetCellImageEx 3299
- 70.477 DynaPDF.Table.SetCellOrientation 3301
- 70.479 DynaPDF.Table.SetCellSpacing 3305
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.483 DynaPDF.Table.SetColWidth 3314

Example Databases

- [DynaPDF/Merge PDFs](#)

70.474.1 Blog Entries

- [Merge PDF with table of contents](#)
- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 22nd February 2019, last changed 5th December 2019.

70.475 DynaPDF.Table.SetCellImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellImage"; Table; Row; Col; ForeGround; HAlign; VAlign; Width; Height; ImagePath { ; Index })

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

ForeGround

If 1, the cell will be expanded if necessary.

1

HAlign

The horizontal alignment. Can be left, center or right.

"center"

VAlign

The vertical alignment. Can be bottom, center or top.

"center"

Width

The image width. Must be greater or equal zero.

50

Height

The image height. Must be greater or equal zero.

50

ImagePath

The native path to the image file.

\$Path

Index

Optional

The index of the image in the file.

1

Result Returns OK or error.

Description

The image will be loaded when the table is drawn. Therefore, please use an absolute path.

If the image is inserted as a background object, then it will be clipped if it does not fit into the cell boundary.

A cell can contain a background and a foreground object.

An image can also be added to the table as background object.

Foreground objects have a strong width and height. That means the cell will be expanded if necessary.

Image formats which support no transparency are inserted opaque. Transparent GIF images are inserted transparent and alpha channels in images will be considered. Images should normally be inserted in the native image color space. To achieve this, set the flag `UseImageCS` with `DynaPDF.Table.SetFlags`.

Images can be scaled into the cell as follows:

- Width = 0 and Height = 0 ->The image is scaled to the cell width or height depending on the cell orientation. The aspect ratio will be preserved. If the flag `tfScaleToRect` is set, the image is scaled so that both sides fit into the cell width and height. The row height must be greater zero to achieve a meaningful result.
- Width >0 and Height = 0 or Width = 0 and Height >0 ->The image is scaled to the given width or height. The aspect ratio will be preserved. If the flag `tfScaleToRect` is set, the image is scaled so that both sides fit into the given width or height and into cell width or height depending on which side is missing. If the parameter Height and the row height are zero then the flag `tfScaleToRect` has no effect.
- Width >0 and Height >0 ->The image is scaled to the given width and height. The aspect ratio is not preserved. If the flag `tfScaleToRect` is set, the image is scaled so that both sides fit into the given width and height and the aspect ratio is preserved.

The parameters Width and Height are not exchanged if the cell uses a landscape orientation.

This function needs a native path. Please use `Path.FileMakerPathToNativePath` function in order to convert a FileMaker style path to a native path.

Examples

Add row and insert picture:

```
Set Variable [ $subrow; Value:MBS("DynaPDF.Table.AddRow"; $subtable) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellImageEx"; $subtable; $subrow; 0; 1; "left"; "top"; 200; 0; Images::Image) ]
```

See also

- 70.451 `DynaPDF.Table.AddRow` 3262
- 70.465 `DynaPDF.Table.GetNumCols` 3283
- 70.476 `DynaPDF.Table.SetCellImageEx` 3299
- 70.478 `DynaPDF.Table.SetCellPadding` 3303
- 70.479 `DynaPDF.Table.SetCellSpacing` 3305

- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.486 DynaPDF.Table.SetFlags 3320
- 121.2 Path.FileMakerPathToNativePath 6139

Created 18th August 2014, last changed 18th October 2016.

70.476 DynaPDF.Table.SetCellImageEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellImageEx"; Table; Row; Col; ForeGround; HAlign; VAlign; Width; Height; Image { ; Index })

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

ForeGround

If 1, the cell will be expanded if necessary.

1

HAlign

The horizontal alignment. Can be left, center or right.

"center"

VAlign

The vertical alignment. Can be bottom, center or top.

"center"

Width

The image width. Must be greater or equal zero.

50

Height

The image height. Must be greater or equal zero.

50

Image

The container with the image.

\$Path

Index

Optional

The index of the image in the file.

1

Result Returns OK or error.

Description

Like DynaPDF.Table.SetCellImage.

See also

- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.474 DynaPDF.Table.SetCellAction 3294
- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.478 DynaPDF.Table.SetCellPadding 3303
- 70.479 DynaPDF.Table.SetCellSpacing 3305
- 70.480 DynaPDF.Table.SetCellTable 3307
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th August 2014.

70.477 DynaPDF.Table.SetCellOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellOrientation"; Table; Row; Col; Orientation)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Orientation

The new orientation.

90

Result Returns OK or error.

Description

The cell orientation is inherited from the table, column, row, and finally from the cell. The contents in a cell can be rotated in 90 degrees steps. Positive values rotate the cell content counter clockwise and negative values clockwise.

The row height should be set to value greater zero if a cell uses a landscape orientation. This is important if the height cannot be computed from the cell contents. This is the case if a cell contains text and if the flag NoLineBreak was not set.

The orientation can be set to the table, rows, columns, and cells as follows:

Row	Col	Applies to
-1	-1	Table
-1	>= 0	Column
>= 0	-1	Row
>= 0	>= 0	Cell

See also

- 70.451 DynaPDF.Table.AddRow 3262
- 70.452 DynaPDF.Table.AddRows 3264

- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.474 DynaPDF.Table.SetCellAction 3294

Created 18th August 2014, last changed 18th August 2014.

70.478 DynaPDF.Table.SetCellPadding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellPadding"; Table; Row; Col; Left; Right; Top; Bottom)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Left

Value for the left side.

0

Right

Value for the right side.

0

Top

Value for the top side.

0

Bottom

Value for the bottom side.

0

Result Returns OK or error.

Description

The properties can be set to the table, rows, columns, and cells as follows:

Row	Col	Applies to
-1	-1	Table
-1	>=0	Column
>=0	-1	Row
>=0	>=0	Cell

Cell padding and cell spacing are inherited from the table, columns, and rows, in this order. Individual values can be set to each side of a cell. Note that the properties will be not be rotated with a cell. The left side is always left, independent of the cell orientation.

Examples

Set the cell padding for the whole table:

```
MBS("DynaPDF.Table.SetCellPadding"; $dtable; -1; -1; 1; 1; 1; 1)
```

See also

- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.474 DynaPDF.Table.SetCellAction 3294
- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.476 DynaPDF.Table.SetCellImageEx 3299
- 70.479 DynaPDF.Table.SetCellSpacing 3305
- 70.480 DynaPDF.Table.SetCellTable 3307
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th August 2014.

70.479 DynaPDF.Table.SetCellSpacing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellSpacing"; Table; Row; Col; Left; Right; Top; Bottom)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Left

Value for the left side.

0

Right

Value for the right side.

0

Top

Value for the top side.

0

Bottom

Value for the bottom side.

0

Result Returns OK or error.

Description

The properties can be set to the table, rows, columns, and cells as follows:

Row	Col	Applies to
-1	-1	Table
-1	>=0	Column
>=0	-1	Row
>=0	>=0	Cell

Cell padding and cell spacing are inherited from the table, columns, and rows, in this order.

Individual values can be set to each side of a cell. Note that the properties will be not be rotated with a cell. The left side is always left, independent of the cell orientation.

See also

- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.474 DynaPDF.Table.SetCellAction 3294
- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.476 DynaPDF.Table.SetCellImageEx 3299
- 70.478 DynaPDF.Table.SetCellPadding 3303
- 70.480 DynaPDF.Table.SetCellTable 3307
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312

Example Databases

- [DynaPDF/Report](#)

Created 18th August 2014, last changed 18th August 2014.

70.480 DynaPDF.Table.SetCellTable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellTable"; Table; Row; Col; HAlign; VAlign; SubTable)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1.

0

HAlign

The horizontal alignment. Can be left, center or right.

"center"

VAlign

The vertical alignment. Can be bottom, center or top.

"center"

SubTable

The identifier for the subtable.

\$SubTable

Result Returns OK or error.

Description

Note that the function creates no copy of the table. But the plugin keeps a reference from subtable attached to parent table.

Examples

Sets a table to be used as content of a bigger table:

MBS("DynaPDF.Table.SetCellTable"; \$table; \$row; \$col; "left"; "top"; \$subtable)

See also

- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.474 DynaPDF.Table.SetCellAction 3294

- 70.475 DynaPDF.Table.SetCellImage 3296
- 70.476 DynaPDF.Table.SetCellImageEx 3299
- 70.478 DynaPDF.Table.SetCellPadding 3303
- 70.479 DynaPDF.Table.SetCellSpacing 3305
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.483 DynaPDF.Table.SetColWidth 3314

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Report](#)

Created 18th August 2014, last changed 18th August 2014.

70.481 DynaPDF.Table.SetCellTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellTemplate"; Table; Row; Col; ForeGround; HAlign; VAlign; TmplHandle { ; Width; Height })

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Or -1 for whole table.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Or -1 for whole table.

0

ForeGround

1 = foreground, 0 = background.

1

HAlign

The horizontal alignment. Can be left, center or right.

"center"

VAlign

The vertical alignment. Can be bottom, center or top.

"center"

TmplHandle

The template handle as returned by DynaPDF.ImportPageAsTemplate function.

\$template

Width

Optional

The desired width.

0

Height

Optional

The desired height

0

Result Returns OK or error.

Description

A template can contain contents from external sources like PDF or EMF pages as well as anything that can

be drawn on a page (with exception of interactive objects like form fields or annotations).

Please note that the table creates no copy of the template. Template handles are bound on the PDF instance in which they were created and all templates will be deleted when the PDF file in memory is closed or when `DynaPDF.Release` will be called.

Therefore, it is not possible to draw a table with templates into different PDF files.

If the template is inserted as a background object, then it will be clipped if it does not fit into the cell boundary. A cell can contain a background and a foreground object.

A template can also be added to the table as background object.

Foreground objects have a strong width and height. That means the cell will be expanded if necessary.

Templates can be scaled into the cell as follows:

- Width = 0 and Height = 0 ->The template is scaled to the cell width or height depending on the cell orientation. The aspect ratio will be preserved. If the flag `tfScaleToRect` is set, the template is scaled so that both sides fit into the cell width and height. The row height must be greater zero to achieve a meaningful result.
- Width >0 and Height = 0 or Width = 0 and Height >0 ->The template is scaled to the given width or height. The aspect ratio will be preserved. If the flag `tfScaleToRect` is set, the template is scaled so that both sides fit into the given width or height and into cell width or height depending on which side is missing. If the parameter Height and the row height are zero then the flag `tfScaleToRect` has no effect.
- Width >0 and Height >0 ->The template is scaled to the given width and height. The aspect ratio is not preserved. If the flag `tfScaleToRect` is set, the template is scaled so that both sides fit into the given width and height and the aspect ratio is preserved.

The parameters Width and Height are not exchanged if the cell uses a landscape orientation.

Examples

Import a page as template and use it as content in a table:

```
Set Variable [ $tmpl; Value:MBS("DynaPDF.ImportPageAsTemplate"; $pdf; $i) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellTemplate"; $table; $rowNum; $x; 1; "center"; "center"; $tmpl; 0; 0) ]
```

See also

- 70.270 `DynaPDF.ImportPageAsTemplate` 2934
- 70.311 `DynaPDF.Release` 3033
- 70.465 `DynaPDF.Table.GetNumCols` 3283
- 70.474 `DynaPDF.Table.SetCellAction` 3294
- 70.475 `DynaPDF.Table.SetCellImage` 3296
- 70.476 `DynaPDF.Table.SetCellImageEx` 3299
- 70.478 `DynaPDF.Table.SetCellPadding` 3303

70.481. <i>DYNAPDF.TABLE.SETCELLTEMPLATE</i>	3311
• 70.479 DynaPDF.Table.SetCellSpacing	3305
• 70.480 DynaPDF.Table.SetCellTable	3307
• 70.482 DynaPDF.Table.SetCellText	3312

Example Databases

- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th October 2016.

70.482 DynaPDF.Table.SetCellText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetCellText"; Table; Row; Col; HAlign; VAlign; Text)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1.

0

HAlign

The horizontal alignment. Can be left, center or right.

"center"

VAlign

The vertical alignment. Can be bottom, center or top.

"center"

Text

The text for the cell.

"Hello World"

Result Returns OK or error.

Description

Text is always a foreground object. The cell will be expanded if necessary.

Text can be processed in different ways. By default the text is output with WriteFText. WriteFText supports a lot of format tags. These tags are also supported in a table with exception of a page break tag.

To avoid line breaks it is possible to set the flag NoLineBreak with DynaPDF.Table.SetFlags. The flag is inherited from the table, column, row, and cell, in this order. If set, the text is output with WriteText instead. Since this function doesn't support format tags, the text is processed as plain text.

The font and font size can be set with DynaPDF.Table.SetFont and with DynaPDF.Table.SetFontSize. Note that a table has its own versions of these functions.

If the cell uses a landscape orientation then the text flows to left or to right depending on the orientation and if the flag NoLineBreak is not set. The row height must be set to value greater zero in this case. If the text does not fit into the cell then the column width will be expanded. If the flag NoLineBreak is set, then the height of the row will be expanded if necessary.

If the cell uses a portrait orientation and if the flag NoLineBreak is not set, then text flows from top to

70.482. *DYNAPDF.TABLE.SETCELLTEXT* 3313

bottom or bottom to top, depending on the orientation. The row height will be expanded if necessary. If the flag NoLineBreak is set, then the column width will be expanded if necessary.

Examples

Sets the cell text:

```
MBS("DynaPDF.Table.SetCellText"; $table; $row; $col; "left"; "top"; Articles::Description1)
```

See also

- 70.474 DynaPDF.Table.SetCellAction 3294
- 70.476 DynaPDF.Table.SetCellImageEx 3299
- 70.480 DynaPDF.Table.SetCellTable 3307
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.484 DynaPDF.Table.SetColor 3316
- 70.485 DynaPDF.Table.SetColorFloat 3318
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.486 DynaPDF.Table.SetFlags 3320
- 70.487 DynaPDF.Table.SetFont 3322
- 79.41 FM.Loop 3968

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

70.482.1 Blog Entries

- [Merge PDF with table of contents](#)
- [New FM.Loop function](#)

Created 18th August 2014, last changed 18th August 2014.

70.483 DynaPDF.Table.SetColWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetColWidth"; Table; Col; Width; ExtTable)

Parameters

Table

The identifier for the table.

\$Table

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1.

0

Width

The new width.

100

ExtTable

Extend the table or adjust the other columns?

0

Result Returns OK or error.

Description

The width of a column can be changed in two different ways. If the parameter ExtTable is set to 1, then the difference of the current and new column width is added to the table width and the widths of all other columns is left unchanged.

If ExtTable is set to 0, the difference is subtracted from the next columns until the gap is zero. If the width of the column is larger as the table width then the table width is adjusted too. All other columns get a zero width in this case.

The column widths should be set from lower to higher indexes and no value should be set for the last column. No column width should exceed the table width if ExtTable is set to false. Otherwise the widths of all other columns must be changed again. Change first the table width and then the column widths in such a case.

Examples

Sets the column width for first column to 200 point:

```
MBS("DynaPDF.Table.SetColWidth"; $table; 0; 200; 1)
```

See also

- 70.450 DynaPDF.Table.AddColumn 3261
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.475 DynaPDF.Table.SetCellImage 3296

70.483. <i>DYNAPDF.TABLE.SETCOLWIDTH</i>	3315
• 70.480 DynaPDF.Table.SetCellTable	3307
• 70.484 DynaPDF.Table.SetColor	3316
• 70.485 DynaPDF.Table.SetColorFloat	3318
• 70.489 DynaPDF.Table.SetFontSize	3325
• 70.490 DynaPDF.Table.SetGridWidth	3327
• 70.493 DynaPDF.Table.SetRowHeight	3332
• 70.494 DynaPDF.Table.SetTableWidth	3333

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)

70.483.1 Blog Entries

- [Merge PDF with table of contents](#)

Created 18th August 2014, last changed 18th August 2014.

70.484 DynaPDF.Table.SetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetColor"; Table; Row; Col; Type; CS; Color)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Type

Which table color. Can be BackColor, BorderColor, GridHorzColor, GridVertColor, ImageColor or TextColor.

"TextColor"

CS

The colorspace to use. Can be DeviceRGB, DeviceCMYK, DeviceGray.

"DeviceRGB"

Color

The color value.

255

Result Returns OK or error.

Description

Colors of an extended color space can be set with DynaPDF.Table.SetColorFloat.

The text color is inherited from the table, column, and row, in this order. The border color is inherited from columns and rows but not from the table since the table has its own border.

Examples

Set green text color:

```
MBS( "DynaPDF.Table.SetColor"; $table; $Row; $Col; "TextColor"; "DeviceRGB"; 255*256 )
```

See also

- 70.450 DynaPDF.Table.AddColumn 3261
- 70.466 DynaPDF.Table.GetNumRows 3284

70.484. <i>DYNAPDF.TABLE.SETCOLOR</i>	3317
• 70.482 DynaPDF.Table.SetCellText	3312
• 70.485 DynaPDF.Table.SetColorFloat	3318
• 70.483 DynaPDF.Table.SetColWidth	3314
• 70.486 DynaPDF.Table.SetFlags	3320
• 70.487 DynaPDF.Table.SetFont	3322
• 70.490 DynaPDF.Table.SetGridWidth	3327
• 70.491 DynaPDF.Table.SetPDF	3329
• 70.492 DynaPDF.Table.SetRGBColor	3330

Created 18th August 2014, last changed 18th August 2014.

70.485 DynaPDF.Table.SetColorFloat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetColorFloat"; Table; Row; Col; Type; CS; Colors)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Type

Which table color. Can be BackColor, BorderColor, GridHorzColor, GridVertColor, ImageColor or TextColor.

"TextColor"

CS

The colorspace to use. Can be DeviceRGB, DeviceCMYK, DeviceGray.

"DeviceRGB"

Colors

Color values. Pass as many parameters as needed. Range from 0 to 1.

0

Result Returns OK or error.

Description

The number of color components must match the number of components of the color space. The text color is inherited from the table, column, and row, in this order. The border color is inherited from columns and rows but not from the table since the table has its own border.

Extended color spaces will be deleted when the PDF file in memory is closed or when DynaPDF.Release was called. The color spaces must be recreated when the table should be drawn in another PDF file. Color space handles may change when recreated in another PDF file. All such colors should be set again to avoid issues with invalid color space handles.

Width exception of Lab colors, color values are in the range 0 through 1. Lab colors support different ranges for the L*, a*, and b* components:

L* -> 0..100

a* -> -128 .. 127

b* -> -128 .. 127

Examples

70.485. *DYNAPDF.TABLE.SETCOLORFLOAT* 3319

Set green text color:

```
MBS( "DynaPDF.Table.SetColorFloat"; $table; $Row; $Col; "TextColor"; "DeviceRGB"; 0; 1; 0 )
```

See also

- 70.311 DynaPDF.Release 3033
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.473 DynaPDF.Table.SetBoxProperty 3292
- 70.474 DynaPDF.Table.SetCellAction 3294
- 70.481 DynaPDF.Table.SetCellTemplate 3309
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.484 DynaPDF.Table.SetColor 3316
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.488 DynaPDF.Table.SetFontSelMode 3324
- 70.490 DynaPDF.Table.SetGridWidth 3327

Created 18th August 2014, last changed 18th August 2014.

70.486 DynaPDF.Table.SetFlags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetFlags"; Table; Row; Col; Flags)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Flags

The flags to set. Can be string identifier or the numerical values.

"HeaderRow"

Result Returns OK or error message.

Description

Flags are inherited from the table, column, and rows, in this order.

Static	This flag avoids the deletion of cell contents when DynaPDF.Table.ClearContent, DynaPDF.Table.ClearColumn or DynaPDF.Table.ClearRow is called. The flag can be set to rows, columns, and cells.
HeaderRow	Header rows are the first rows which are drawn after a page break occurred. It is possible to mark more than one row as header row.
NoLineBreak	This flag avoids line breaks in cells which contain text. The flag is inherited from the table, columns, and rows. Text is output with WriteText() if this flag is set. See DynaPDF.Table.SetCellText for further information.
ScaleToRect	If set, images and templates are scaled into the cell so that both sides fit into the given width and height. The aspect ratio will be preserved. The flag is inherited from the table, columns, and rows.
UseImageCS	If set, images are inserted in the native image color space and embedded ICC profiles will be considered. The flag is inherited from the table, columns, and rows.

Examples

Sets the HeaderRow flag for a row:

```
MBS("DynaPDF.Table.SetFlags"; $table; $row; -1; "HeaderRow")
```

Adds a header row:

```
# Add header row
Set Variable [ $row; Value:MBS("DynaPDF.Table.AddRow"; $table) ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 0; "right"; "top"; "Index") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 1; "left"; "top"; "Product") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 2; "right"; "top"; "Price") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 3; "right"; "top"; "Quantity") ]
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetCellText"; $table; $row; 4; "right"; "top"; "Total Price") ]
]
# set flag for header row
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetFlags"; $table; $row; -1; "HeaderRow") ]
# make row bold
Set Variable [ $r; Value:MBS("DynaPDF.Table.SetFont"; $table; $row; -1; "Helvetica"; 2; 1; "unicode") ]
```

See also

- 70.451 *DynaPDF.Table.AddRow* 3262
- 70.453 *DynaPDF.Table.ClearColumn* 3265
- 70.454 *DynaPDF.Table.ClearContent* 3266
- 70.455 *DynaPDF.Table.ClearRow* 3268
- 70.465 *DynaPDF.Table.GetNumCols* 3283
- 70.466 *DynaPDF.Table.GetNumRows* 3284
- 70.471 *DynaPDF.Table.Release* 3289
- 70.475 *DynaPDF.Table.SetCellImage* 3296
- 70.482 *DynaPDF.Table.SetCellText* 3312
- 70.487 *DynaPDF.Table.SetFont* 3322

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th June 2016.

70.487 DynaPDF.Table.SetFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetFont"; Table; Row; Col; Name; Style; Embed; CodePage)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Name

The font name.

"Arial"

Style

The font style.

0

Embed

Whether to embed font. Can be 1 to embed or 0 to not embed font.

1

CodePage

The code page to use.

"Unicode"

Result Returns OK or error message.

Description

The font is inherited from the table, column, and row, in this order. The font will be loaded when the table is drawn. The default font size is 10 units. It can be changed with DynaPDF.Table.SetFontSize. The default font selection mode is FamilyName. It can be changed with DynaPDF.Table.SetFontSelMode.

See also DynaPDF.SetFont for more details.

Examples

Sets font for all cells to Helvetica:

```
MBS("DynaPDF.Table.SetFont"; $table; -1; -1; "Helvetica"; 0; 1; "unicode")
```

Sets row to bold:

70.487. *DYNAPDF.TABLE.SETFONT*

3323

Set Variable [\$r; Value:MBS("DynaPDF.Table.SetFont"; \$table; \$row; -1; "Helvetica"; 2; 1; "unicode")]

See also

- 70.451 DynaPDF.Table.AddRow 3262
- 70.452 DynaPDF.Table.AddRows 3264
- 70.456 DynaPDF.Table.Create 3270
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.467 DynaPDF.Table.GetPDF 3285
- 70.471 DynaPDF.Table.Release 3289
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.486 DynaPDF.Table.SetFlags 3320
- 70.488 DynaPDF.Table.SetFontSelMode 3324
- 70.489 DynaPDF.Table.SetFontSize 3325

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)

70.487.1 Blog Entries

- [Merge PDF with table of contents](#)

Created 18th August 2014, last changed 18th June 2016.

70.488 DynaPDF.Table.SetFontSelMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetFontSelMode"; Table; Row; Col; FontSelMode)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

FontSelMode

The font selection mode. Can be FamilyName, PostscriptName or FullName.

"FamilyName"

Result Returns OK or error.

Description

The font names used in the corresponding DynaPDF.Table.SetFont calls must coincide with the font selection mode. The font selection mode is inherited from the table, column, and row, in this order.

See also

- 70.390 DynaPDF.SetFontSelMode 3161
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.485 DynaPDF.Table.SetColorFloat 3318
- 70.487 DynaPDF.Table.SetFont 3322
- 70.489 DynaPDF.Table.SetFontSize 3325

Created 18th August 2014, last changed 18th August 2014.

70.489 DynaPDF.Table.SetFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetFontSize"; Table; Row; Col; Value)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Value

The new font size.

14

Result Returns OK or error.

Description

The font size is inherited from the table, column, and row, in this order.

Examples

Sets the font size to 10 for all cells:

```
MBS("DynaPDF.Table.SetFontSize"; $table; -1; -1; 10)
```

See also

- 70.456 DynaPDF.Table.Create 3270
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.482 DynaPDF.Table.SetCellText 3312
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.487 DynaPDF.Table.SetFont 3322
- 70.488 DynaPDF.Table.SetFontSelMode 3324
- 70.493 DynaPDF.Table.SetRowHeight 3332

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)

70.489.1 Blog Entries

- [Merge PDF with table of contents](#)

Created 18th August 2014, last changed 18th August 2014.

70.490 DynaPDF.Table.SetGridWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetGridWidth"; Table; Horz; Vert)

Parameters

Table

The identifier for the table.

\$Table

Horz

Horizontal grid width or zero.

0

Vert

Vertical grid width or zero.

0

Result Returns OK or error.

Description

The table grid consists of horizontal and vertical lines which are drawn in the middle of two rows or columns. The grid lines cover always the entire width or height of the table. The line widths can be set to different values for the horizontal and vertical lines. If no lines should be drawn then set the value to zero. The colors of horizontal and vertical grid lines can be set with DynaPDF.Table.SetRGBColor, DynaPDF.Table.SetColor or DynaPDF.Table.SetColorFloat.

Only the table supports grid lines. The parameters Row and Col of DynaPDF.Table.SetRGBColor, DynaPDF.Table.SetColor or DynaPDF.Table.SetColorFloat must be set to -1.

Examples

Set grid width:

```
MBS("DynaPDF.Table.SetGridWidth"; $table; 1; 1)
```

See also

- 70.456 DynaPDF.Table.Create 3270
- 70.460 DynaPDF.Table.Draw 3276
- 70.469 DynaPDF.Table.GetTableWidth 3287
- 70.472 DynaPDF.Table.SetBorderWidth 3290
- 70.484 DynaPDF.Table.SetColor 3316
- 70.485 DynaPDF.Table.SetColorFloat 3318

- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.492 DynaPDF.Table.SetRGBColor 3330
- 70.493 DynaPDF.Table.SetRowHeight 3332
- 70.494 DynaPDF.Table.SetTableWidth 3333

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Report](#)
- [DynaPDF/Tables](#)

Created 18th August 2014, last changed 18th August 2014.

70.491 DynaPDF.Table.SetPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetPDF"; Table; PDF)

Parameters**Table**

The identifier for the table.

\$Table

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Result Returns OK or error.

Description

The PDF instance must be changed if the table should be drawn into another PDF instance as the one for which the table was created.

Note that extended color spaces and templates depend on the PDF instance in which these objects were created. If the table contains such objects then it is normally not possible to change the PDF instance.

See also

- 70.290 DynaPDF.New 2981
- 70.467 DynaPDF.Table.GetPDF 3285
- 70.484 DynaPDF.Table.SetColor 3316
- 70.486 DynaPDF.Table.SetFlags 3320
- 70.487 DynaPDF.Table.SetFont 3322

Created 18th August 2014, last changed 18th August 2014.

70.492 DynaPDF.Table.SetRGBColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetRGBColor"; Table; Row; Col; Type; Red; Green; Blue)

Parameters**Table**

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1. Pass -1 for all rows.

0

Col

The column number. Range from 0 to DynaPDF.Table.GetNumCols-1. Pass -1 for all columns.

0

Type

Which table color. Can be BackColor, BorderColor, GridHorzColor, GridVertColor, ImageColor or TextColor.

"TextColor"

Red

The red color component. Range is from 0 to 255.

0

Green

The green color component. Range is from 0 to 255.

0

Blue

The blue color component. Range is from 0 to 255.

0

Result Returns OK or error.

Description

See also DynaPDF.Table.SetColorFloat.

Examples

Set green text color:

```
MBS( "DynaPDF.Table.SetRGBColor"; $table; $Row; $Col; "TextColor"; 0; 255; 0 )
```

Set white border color:

```
MBS("DynaPDF.Table.SetRGBColor"; $table; -1; -1; "BorderColor"; 255; 255; 255)
```

See also

- 70.456 DynaPDF.Table.Create 3270
- 70.465 DynaPDF.Table.GetNumCols 3283
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.484 DynaPDF.Table.SetColor 3316
- 70.485 DynaPDF.Table.SetColorFloat 3318
- 70.490 DynaPDF.Table.SetGridWidth 3327

Example Databases

- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Report](#)

Created 18th August 2014, last changed 18th August 2014.

70.493 DynaPDF.Table.SetRowHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetRowHeight"; Table; Row; Height)

Parameters

Table

The identifier for the table.

\$Table

Row

The row number. Range from 0 to DynaPDF.Table.GetNumRows-1.

0

Height

The new height.

20

Result Returns OK or error.

Description

The value must be greater or equal zero. Foreground objects expand the height if necessary. The height must be greater zero if a cell uses a landscape orientation and if the height cannot be computed from the cell content. This is the case if a cell contains text and if the flag ScaleToRect is not set.

See also

- 70.462 DynaPDF.Table.GetNextHeight 3280
- 70.466 DynaPDF.Table.GetNumRows 3284
- 70.468 DynaPDF.Table.GetTableHeight 3286
- 70.472 DynaPDF.Table.SetBorderWidth 3290
- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.489 DynaPDF.Table.SetFontSize 3325
- 70.490 DynaPDF.Table.SetGridWidth 3327
- 70.494 DynaPDF.Table.SetTableWidth 3333

Created 18th August 2014, last changed 18th August 2014.

70.494 DynaPDF.Table.SetTableWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Table.SetTableWidth"; Table; Value; AdjustType; MinColWidth)

Parameters**Table**

The identifier for the table.

\$Table

Value

The new value for the table width.

500

AdjustType

The adjustment type. Can be UniqueWidth, AdjLeft or AdjRight.

"AdjLeft"

MinColWidth

The optional minimum column width.

100

Result Returns OK on succes.

Description

At least one column must be modified when the width will be changed. The parameter AdjustType specifies how the column widths should be modified. If the new width is larger, then the difference can be added to the left or right column, or all columns can get a unique width (TableWidth / NumColumns). The parameter MinColWidth is ignored in this case.

If the new width is smaller, then the difference must be subtracted from the columns. The parameter MinColWidth specifies in this case the minimum width of columns that must be adjusted. It is only used if AdjustType is not set to coaUniqueWidth. The column widths are adjusted starting from the left or right side as specified. If the width of the first column is not large enough to subtract the entire difference, then the minimum width is set to the column and the adjustment continues with the next column until the gap is zero.

If the new table width is smaller as MinColWidth * NumColumns then the widths of the remaining columns will be set to zero. Such cases should be avoided since the column widths must be adjusted again when the table is drawn.

See also

- 70.450 DynaPDF.Table.AddColumn 3261
- 70.468 DynaPDF.Table.GetTableHeight 3286
- 70.469 DynaPDF.Table.GetTableWidth 3287
- 70.472 DynaPDF.Table.SetBorderWidth 3290

- 70.483 DynaPDF.Table.SetColWidth 3314
- 70.490 DynaPDF.Table.SetGridWidth 3327
- 70.493 DynaPDF.Table.SetRowHeight 3332

Created 18th August 2014, last changed 18th August 2014.

70.495 DynaPDF.TextAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.TextAnnot"; PDF; PosX; PosY; Width; Height; Author; Text; Icon; Open)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of the annotation

100

PosY

Y-Coordinate of the annotation

100

Width

Width of the window in open state

100

Height

Height of the window in open state

100

Author

The author name. Can be empty.

"Christian Schmitz"

Text

The text for the annotation.

"Hello World"

Icon

Which icon to use. Can be Help, Insert, Key, NewParagraph, Note, Paragraph or UserDefined.

"Help"

Open

Should the annotation appear open or closed? Pass 1 for open or 0 for close.

1

Result Returns annotation handle or error.

Description

The parameters Width and Height define the size of the annotation's window. The window is shown in the open state of the annotation.

If the parameter Open is true, the annotation appears in its open state when opening the document. If the annotation is closed, the annotation's icon appears on screen.

The parameters Author and Text are optional, they can be empty. DynaPDF does not embed the annotation icon. However, since Acrobat 5 they are available in Adobe's Acrobat or Reader.

See also [TextAnnot](#) function in DynaPDF manual.

Examples

Add text annotation:

```
Set Variable [ $r ; Value: MBS( "DynaPDF.TextAnnot"; $pdf; 50; 50; 300; 200; "Christian Schmitz"; "Hello World"; "Help"; 1) ]
```

See also

- 70.115 DynaPDF.FreeTextAnnot 2738
- 70.283 DynaPDF.LineAnnot 2969
- 70.290 DynaPDF.New 2981
- 70.338 DynaPDF.SetAnnotIcon 3087
- 70.447 DynaPDF.StampAnnot 3255

Created 28th November 2014, last changed 13th February 2018.

70.496 DynaPDF.TranslateCoords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.TranslateCoords"; PDF; x; y)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

x

New coordinate origin of the x-axis

\$x

y

New coordinate origin of the y-axis

\$y

Result Returns OK on success and error on failure.

Description

Save the graphics state beforehand and restore it when finish.

After the coordinate system was changed by the function, bottom-up coordinates are active. It is not possible to use top-down coordinates with a transformed coordinate system.

Please do not try to scale/skew/translate back later. use DynaPDF.SaveGraphicState and DynaPDF.RestoreGraphicState.

See also [TranslateCoords](#) function in DynaPDF manual.

Examples

Translate and draw rectangle:

```
MBS( "DynaPDF.SaveGraphicState"; $PDF )
```

```
MBS( "DynaPDF.TranslateCoords"; $PDF; 200;200)
```

```
MBS( "DynaPDF.Rectangle"; $PDF; 0; 0; 200; 100; "stroke" )
```

```
MBS( "DynaPDF.RestoreGraphicState"; $PDF )
```

See also

- 70.290 DynaPDF.New 2981
- 70.310 DynaPDF.Rectangle 3031
- 70.319 DynaPDF.RestoreGraphicState 3050
- 70.320 DynaPDF.RotateCoords 3052
- 70.324 DynaPDF.Save 3062

- 70.328 DynaPDF.SaveGraphicState

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [DynaPDF/DynaPDF Coordinates](#)
- [DynaPDF/DynaPDF PlaceTemplate](#)

Created 18th August 2014, last changed 18th August 2014.

70.497 DynaPDF.Triangle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.2	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Triangle"; PDF; x1; y1; x2; y2; x3; y3; FillMode)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

x1

X-Coordinate of the first point

y1

Y-Coordinate of the first point

x2

X-Coordinate of the second point

y2

y-Coordinate of the second point

x3

X-Coordinate of the third point

y3

Y-Coordinate of the third point

FillMode

Fill mode. Can be FillNoClose, StrokeNoClose, FillStrokeNoClose, Fill, Stroke, FillStroke, FillEvOdd, FillStrokeEvOdd, FillEvOddNoClose, FillStrokeEvOddNoClose, NoFill or Close.

"fill"

Result Returns OK or error message.

Description

The draw direction can be changed with the function DynaPDF.SetDrawDirection.

A triangle is a closed path that can be filled, stroked or both. It is also possible to draw a triangle invisible to apply the filling rules nonzero winding number or even-odd. The filling rules are described under ClipPath(). The parameter FillMode is ignored if the triangle is drawn inside a clipping path. The fill modes are described under ClosePath().

See also [Triangle](#) function in DynaPDF manual.

See also

- 70.290 DynaPDF.New 2981
- 70.310 DynaPDF.Rectangle 3031
- 70.359 DynaPDF.SetDrawDirection 3115

70.498 DynaPDF.UnlockLayer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.UnlockLayer"; PDF)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.
\$pdf

Result Returns OK or error.

Description

See also DynaPDF.LockLayer for further information.
See also [UnlockLayer](#) function in DynaPDF manual.

See also

- 70.287 DynaPDF.LockLayer 2977
- 70.290 DynaPDF.New 2981

Created 6th February 2015, last changed 6th February 2015.

70.499 DynaPDF.Uninitialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	10.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.Uninitialize")

Result Returns OK or error.

Description

This will clear all DynaPDF objects, clear all function pointers and free the library. You only need to call this if you like to replace the Library file and load another version. The library is automatically unloaded when FileMaker quits.

See also

- 70.273 DynaPDF.Initialize 2941
- 70.282 DynaPDF.IsInitialized 2966

70.499.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)

Created 28th February 2020, last changed 28th February 2020.

70.500 DynaPDF.WatermarkAnnot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WatermarkAnnot"; PDF; PosX; PosY; Width; Height)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

The x position.

PosY

The y position.

Width

The width of the watermark annotation.

Height

The height of the watermark annotation.

Result Returns annotation index or error.

Description

Watermark annotations have no interactive elements like other annotation types. This property is useful in many cases because it is usually not possible to select or change the contents of a watermark annotation in viewer applications.

The annotation has no appearance after it was created. Call DynaPDF.CreateAnnotAP to create an appearance template for the annotation. After the appearance template was created you can draw text, images or vector graphics into it. The template must be closed with DynaPDF.EndTemplate when finished. It is also possible to import an external page or EMF contents into the template.

Watermark annotations can be shared on multiple pages. To place the annotation on other pages call DynaPDF.AddAnnotToPage.

If the function succeeds the return value is the annotation handle, a value greater or equal zero.

If the function fails the function returns an error.

See also [WatermarkAnnot](#) function in DynaPDF manual.

See also

- 70.2 DynaPDF.AddAnnotToPage 2552
- 70.92 DynaPDF.EndTemplate 2700
- 70.290 DynaPDF.New 2981

70.500.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 13th December 2016, last changed 13th December 2016.

70.501 DynaPDF.WebLink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	4.0	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WebLink"; PDF; PosX; PosY; Width; Height; URL)

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of bounding rectangle

100

PosY

Y-Coordinate of bounding rectangle

100

Width

Width of bounding rectangle

100

Height

Height of bounding rectangle

20

URL

URL defined as null-terminated 7 bit ASCII string.

"http://www.mbsplugins.de"

Result Returns new handle or error.

Description

The parameter URL holds the URL defined as 7 bit ASCII string. A uniform resource locator (URL) is a string that resolves to a resource on the internet - typically a file that is the destination of a hypertext link, although it can also resolve to a query or other entity. A web link opens the standard browser to view the resource by default. The full version of Adobes Acrobat enables you also to embed a reverenced html resource in your document.

If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the bounding rectangle. If the coordinate system is top-down it defines the upper left corner.

The border of the link annotation is drawn by using the current line width, stroke color and line dash pattern. If the link should appear without a border set the line width to zero beforehand (with DynaPDF.SetLineWidth).

When clicking on a link annotation the rectangle is highlighted, that is a simple visual effect. Several highlight modes are supported, see `DynaPDF.SetLinkHighlightMode` for further information.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is an error.

Please use `DynaPDF.WriteText` if you first want to add text to the page before you make it a clickable link.

Use `DynaPDF.WebLink` for web links, `DynaPDF.FileLink` for file links, `DynaPDF.PageLink` or `DynaPDF.PageLinkEx` for page links and `DynaPDF.FindText` can help to find the location where to place the link.

See also [WebLink](#) function in DynaPDF manual.

Examples

Add a link to MBS Blog:

```
MBS( "DynaPDF.WebLink"; $PDF; 100; 100; 100; 20; "http://www.mbsplugins.de" )
```

Add various links to a page:

```
# import page
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; Add Page Numbers::Input) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf; 1) ]

# edit first page
Set Variable [ $r; Value:MBS("DynaPDF.EditPage"; $pdf; 1) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetFont"; $pdf; "Helvetica"; 0; 20) ]
# Add web link
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 100; 150; 20; "left"; "Go to MBS
Blog" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.Weblink"; $PDF; 100; 80; 150; 20; "http://www.mbs-plugins.com/"
) ]
# Add page link
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 150; 150; 20; "left"; "Jump to page
3" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.PageLink"; $PDF; 100; 130; 150; 20; 3) ]
# Add page link with more options
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 200; 200; 20; "left"; "Jump to Letter
D Zoomed" ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.PageLinkEx"; $PDF; 100; 180; 200; 20; "FitRect"; 4; 60; 590;
135; 160) ]
# Close page
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
```

See also

- 70.84 `DynaPDF.EditPage`

<i>70.501. DYNAPDF.WEBLINK</i>	3347
• 70.102 DynaPDF.FileLink	2718
• 70.109 DynaPDF.FindText	2727
• 70.268 DynaPDF.ImportPDFFile	2928
• 70.290 DynaPDF.New	2981
• 70.386 DynaPDF.SetFont	3154
• 70.399 DynaPDF.SetLineWidth	3178
• 70.400 DynaPDF.SetLinkHighlightMode	3180
• 70.503 DynaPDF.WriteFText	3350
• 70.504 DynaPDF.WriteFTextEx	3352

70.501.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr5](#)

70.501.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 38

Created 18th August 2014, last changed 9th December 2019.

70.502 DynaPDF.WriteDemoText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	5.0	Yes	Yes	Yes	Yes	Yes

```
MBS( "DynaPDF.WriteDemoText"; PDF; Text { ; Font } )
```

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Text

The text to use.

"Hello World"

Font

Optional

The font to use. If the font used does not support all characters, the text may not show. Default is Helvetica.

"Arial Unicode MS"

Result Returns OK or error.

Description

This allows you to watermark PDFs with a text like "Confidential".

If you use DynaPDF.SetAlpha, you can change the transparency. With DynaPDF.SetStrokeColor you can change the color.

Examples

Add chinese text:

```
Set Variable [ $r ; Value: MBS("DynaPDF.WriteDemoText"; $pdf; "" ; "Arial Unicode MS" ) ]
```

See also

- 70.290 DynaPDF.New 2981
- 70.330 DynaPDF.SetAlpha 3074
- 70.423 DynaPDF.SetStrokeColor 3222
- 70.503 DynaPDF.WriteFText 3350
- 70.506 DynaPDF.WriteStyledText 3358
- 70.509 DynaPDF.WriteText 3364

Example Databases

- [DynaPDF/Watermark pages](#)

70.502.1 Blog Entries

- [DynaPDF Screenshot](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)
- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 12nd November 2014, last changed 15th October 2018.

70.503 DynaPDF.WriteFText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WriteFText"; PDF; Align; Text { ; PlainText })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

Align

The text alignment. Can be left, center, right or justify.

"left"

Text

The text to write.

"Hello World"

PlainText

Optional

Available in MBS FileMaker Plugin 9.1 or newer.

Pass 1 to ignore formatting commands and treat text as plain text. Default is 0 to interpret commands in text.

0

Result Returns OK or error message.

Description

Use DynaPDF.GetFTextHeightEx or DynaPDF.GetFTextHeight to calculate the space needed for the text if you want to create a matching text rectangle for vertical alignment.

See DynaPDF.AllowPageBreak for whether to do page breaks or not.

Please set a font first with DynaPDF.SetFont function before you write on the page.

See DynaPDF.WriteStyledText and DynaPDF.WriteStyledTextEx to convert FileMaker styles to DynaPDF commands.

See also [WriteFText](#) function in DynaPDF manual.

Examples

Writes some text:

```
MBS( "DynaPDF.WriteFText"; $PDF; "center"; "Hello World" )
```

Write text with font changing:

```
# Write some formatted text
```

70.503. DYNAPDF.WRITEFTEXT

3351

Set Variable [\$text ; Value: "Some text. \FT [Times-Bold] Now Times in bold!\FT [Times-Roman] and back to normal Times."]

Set Variable [\$r ; Value: MBS("DynaPDF.SetTextRect"; \$pdf; 200; 200; 150; -1)]

Set Variable [\$r ; Value: MBS("DynaPDF.WriteFText"; \$pdf; "left"; \$text)]

See also

- 70.296 DynaPDF.PageLink 3001
- 70.320 DynaPDF.RotateCoords 3052
- 70.386 DynaPDF.SetFont 3154
- 70.397 DynaPDF.SetLeading 3176
- 70.501 DynaPDF.WebLink 3345
- 70.502 DynaPDF.WriteDemoText 3348
- 70.504 DynaPDF.WriteFTextEx 3352
- 70.505 DynaPDF.WriteFTextExRotated 3356
- 70.507 DynaPDF.WriteStyledTextEx 3360
- 70.509 DynaPDF.WriteText 3364

Example Databases

- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)
- [DynaPDF/Place Picture](#)
- [DynaPDF/Watermark pages](#)
- [DynaPDF/WriteFText](#)
- [DynaPDF/ZUGFeRD/ZUGFeRD Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/Factor-X Invoice](#)
- [DynaPDF/ZUGFeRD 2.0/ZUGFeRD 2.0 Invoice](#)

70.503.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr2](#)
- [DynaPDF and Styled Text, Xojo vs. FileMaker](#)

Created 18th August 2014, last changed 6th February 2019.

70.504 DynaPDF.WriteFTextEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WriteFTextEx"; PDF; PosX; PosY; Width; Height; Align; Text { ; PlainText })

Parameters**PDF**

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of output rectangle

\$x

PosY

Y-Coordinate of output rectangle

\$y

Width

Width of output rectangle

\$w

Height

Height of output rectangle or -1.

\$h

Align

The text alignment. Can be left, center, right or justify.

"left"

Text

The text to write.

"Hello World"

PlainText

Optional

Available in MBS FileMaker Plugin 9.1 or newer.

Pass 1 to ignore formatting commands and treat text as plain text. Default is 0 to interpret commands in text.

0

Result Returns OK or error message.

Description

Use DynaPDF.GetFTextHeightEx or DynaPDF.GetFTextHeight to calculate the space needed for the text if you want to create a matching text rectangle for vertical alignment.

See DynaPDF.AllowPageBreak for whether to do page breaks or not.

Please set a font first with DynaPDF.SetFont function before you write on the page.
 See DynaPDF.WriteStyledTextEx to convert FileMaker styles to DynaPDF commands.
 See also [WriteFTextEx](#) function in DynaPDF manual.

Examples

Write text in a rectangle:

```
MBS( "DynaPDF.WriteFTextEx"; $PDF; 100; 500; 100; 100; "left"; "Hello World" )
```

Loop over pages and add page numbers:

```
Set Variable [ $PageCount; Value:MBS( "DynaPDF.GetPageCount"; $pdf ) ]
Set Variable [ $PageNumber; Value:1 ]
Set Variable [ $pageWidth; Value:MBS("DynaPDF.GetPageWidth"; $pdf) ]
Set Variable [ $pageHeight; Value:MBS("DynaPDF.GetPageHeight"; $pdf) ]
Loop
Set Variable [ $r; Value:MBS("DynaPDF.EditPage"; $pdf; $PageNumber) ]
Set Variable [ $r; Value:MBS( "DynaPDF.SetFont"; $pdf; "Helvetica"; 0; 12) ]
Set Variable [ $r; Value:MBS( "DynaPDF.WriteFTextEx"; $pdf; 50; $pageHeight - 50; $pageWidth-100; 30;
"right"; GetAsText($PageNumber) & " of " & $PageCount) ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
Set Variable [ $PageNumber; Value:$PageNumber + 1 ]
Exit Loop If [ $PageNumber >$PageCount ]
End Loop
```

Annotate PDF page with text on top center:

```
# make pdf
Set Field [ PDF::Annotated PDF; PDF::Original PDF ]
# Clear current PDF document
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# Load PDF from container
Set Variable [ $r; Value:MBS("DynaPDF.OpenPDFFromContainer"; $pdf; PDF::Original PDF) ]
Set Variable [ $r; Value:MBS("DynaPDF.ImportPDFFile"; $pdf) ]
# write on each page a header
Set Variable [ $index; Value:1 ]
Set Variable [ $count; Value:MBS("DynaPDF.GetPageCount"; $pdf) ]
Loop
Set Variable [ $r; Value:MBS("DynaPDF.EditPage"; $pdf; $index) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetPageCoords"; $pdf; "topdown") ]
Set Variable [ $r; Value:MBS("DynaPDF.SetFont"; $pdf; "Arial"; 0; 10; 1; "unicode") ]
Set Variable [ $pageWidth; Value:MBS("DynaPDF.GetPageWidth"; $pdf) ]
Set Variable [ $print; Value:MBS("DynaPDF.WriteFTextEx"; $pdf; 0; 20; $pageWidth; -1; "center"; "Doc
- " & PDF::PK & "" ) ]
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index >$count ]
```

```

End Loop
# save
Set Field [ PDF::Annotated PDF; MBS( "DynaPDF.Save"; $PDF; "print.pdf" ) ]
# Cleanup
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]

```

See also

- [70.268 DynaPDF.ImportPDFFile](#) 2928
- [70.290 DynaPDF.New](#) 2981
- [70.293 DynaPDF.OpenPDFFromContainer](#) 2988
- [70.296 DynaPDF.PageLink](#) 3001
- [70.324 DynaPDF.Save](#) 3062
- [70.386 DynaPDF.SetFont](#) 3154
- [70.411 DynaPDF.SetPageCoords](#) 3199
- [70.501 DynaPDF.WebLink](#) 3345
- [70.503 DynaPDF.WriteFText](#) 3350
- [70.506 DynaPDF.WriteStyledText](#) 3358

Example Databases

- [Barcode/DynaPDF Barcode](#)
- [DynaPDF/Add Page Numbers](#)
- [DynaPDF/Catalog with tables](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Personalized PDFs](#)
- [DynaPDF/Report](#)
- [DynaPDF/Shrink PDF pages](#)

70.504.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr2](#)

70.504.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 38
- Ausgabe 2/2019, Seite 27

Created 18th August 2014, last changed 6th February 2019.

70.505 DynaPDF.WriteFTextExRotated

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WriteFTextExRotated"; PDF; PosX; PosY; Width; Height; Align; Text; Alpha { ; PlainText })

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of output rectangle

\$x

PosY

Y-Coordinate of output rectangle

\$y

Width

Width of output rectangle

\$w

Height

Height of output rectangle or -1.

\$h

Align

The text alignment. Can be left, center, right or justify.

"left"

Text

The text to write.

"Hello World"

Alpha

The rotation angle in degrees. From 0 to 360 degrees.

90

PlainText

Optional

Available in MBS FileMaker Plugin 9.1 or newer.

Pass 1 to ignore formatting commands and treat text as plain text. Default is 0 to interpret commands in text.

0

Result Returns OK or error message.

Description

70.505. *DYNAPDF.WRITEFTEXTEXROTATED* 3357

Same as DynaPDF.WriteFTextEx, but with additional rotation in center of box.

See DynaPDF.WriteStyledTextExRotated to convert FileMaker styles to DynaPDF commands.

See also

- 70.290 DynaPDF.New 2981
- 70.503 DynaPDF.WriteFText 3350
- 70.504 DynaPDF.WriteFTextEx 3352
- 70.506 DynaPDF.WriteStyledText 3358
- 70.507 DynaPDF.WriteStyledTextEx 3360
- 70.508 DynaPDF.WriteStyledTextExRotated 3362

70.505.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr2](#)
- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 10th August 2017, last changed 6th February 2019.

70.506 DynaPDF.WriteStyledText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WriteStyledText"; PDF; Align; Text)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

Align

The text alignment. Can be left, center, right or justify.

"left"

Text

The text to write.

"Hello World"

Result Returns OK or error.

Description

Converts for you the styled text to the formatted text commands from DynaPDF.

Use DynaPDF.GetFTextHeightEx or DynaPDF.GetFTextHeight to calculate the space needed for the text if you want to create a matching text rectangle for vertical alignment.

See DynaPDF.AllowPageBreak for whether to do page breaks or not.

Please set a font first with DynaPDF.SetFont function before you write on the page. As this function uses font settings from FileMaker field, it may ignore whatever font or style you loaded before.

Examples

Write some styled text on a PDF page:

```
Set Variable [ $pdf; Value:MBS("DynaPDF.New") ]
# Add page
Set Variable [ $r; Value:MBS("DynaPDF.AppendPage"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetFont"; $pdf; "Helvetica"; 0; 12) ]
# Write some text
Set Variable [ $pw; Value:MBS("DynaPDF.GetPageWidth"; $pdf) ]
Set Variable [ $ph; Value:MBS("DynaPDF.GetPageHeight"; $pdf) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetFillColor"; $pdf; 0; 0; 0) ]
Set Variable [ $r; Value:MBS("DynaPDF.SetTextRect"; $pdf; 100; $ph-100; $pw-200; $ph-200) ]
Set Variable [ $r; Value:MBS("DynaPDF.WriteStyledText"; $pdf; "left"; Create Text::Text) ]
# End page
Set Variable [ $r; Value:MBS("DynaPDF.EndPage"; $pdf) ]
# Render one page as Picture
```

70.506. *DYNAPDF.WRITESTYLEDTEXT* 3359

```
Set Variable [ $PDFData; Value:MBS("DynaPDF.Save"; $pdf; "hello.pdf") ]
```

```
Set Variable [ $r; Value:MBS("DynaPDF.Release"; $pdf) ]
```

```
# Put in Container
```

```
Set Field [ Create Text::PDF; $PDFData ]
```

See also

- 70.290 DynaPDF.New 2981
- 70.311 DynaPDF.Release 3033
- 70.324 DynaPDF.Save 3062
- 70.384 DynaPDF.SetFillColor 3150
- 70.386 DynaPDF.SetFont 3154
- 70.427 DynaPDF.SetTextRect 3229
- 70.503 DynaPDF.WriteFText 3350
- 70.505 DynaPDF.WriteFTextExRotated 3356
- 70.507 DynaPDF.WriteStyledTextEx 3360
- 70.508 DynaPDF.WriteStyledTextExRotated 3362

Example Databases

- [DynaPDF/Styled Text](#)

70.506.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 13th October 2016, last changed 8th January 2018.

70.507 DynaPDF.WriteStyledTextEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	6.5	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WriteStyledTextEx"; PDF; PosX; PosY; Width; Height; Align; Text)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of output rectangle

\$x

PosY

Y-Coordinate of output rectangle

\$y

Width

Width of output rectangle

\$w

Height

Height of output rectangle or -1.

\$h

Align

The text alignment. Can be left, center, right or justify.

"left"

Text

The text to write.

"Hello World"

Result Returns OK or error.

Description

Converts for you the styled text to the formatted text commands from DynaPDF.

Use DynaPDF.GetFTextHeightEx or DynaPDF.GetFTextHeight to calculate the space needed for the text if you want to create a matching text rectangle for vertical alignment.

See DynaPDF.AllowPageBreak for whether to do page breaks or not.

Please set a font first with DynaPDF.SetFont function before you write on the page. As this function uses font settings from FileMaker field, it may ignore whatever font or style you loaded before.

See also

<i>70.507. DYNAPDF.WRITESTYLEDTEXTEX</i>	3361
• 70.12 DynaPDF.AllowPageBreak	2569
• 70.146 DynaPDF.GetFTextHeight	2779
• 70.147 DynaPDF.GetFTextHeightEx	2781
• 70.290 DynaPDF.New	2981
• 70.386 DynaPDF.SetFont	3154
• 70.503 DynaPDF.WriteFText	3350
• 70.504 DynaPDF.WriteFTextEx	3352
• 70.505 DynaPDF.WriteFTextExRotated	3356
• 70.506 DynaPDF.WriteStyledText	3358
• 70.508 DynaPDF.WriteStyledTextExRotated	3362

70.507.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 13th October 2016, last changed 8th January 2018.

70.508 DynaPDF.WriteStyledTextExRotated

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	7.4	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WriteStyledTextExRotated"; PDF; PosX; PosY; Width; Height; Align; Text; Alpha)

Parameters

PDF

The PDF reference returned from DynaPDF.New.

\$pdf

PosX

X-Coordinate of output rectangle

\$x

PosY

Y-Coordinate of output rectangle

\$y

Width

Width of output rectangle

\$w

Height

Height of output rectangle or -1.

\$h

Align

The text alignment. Can be left, center, right or justify.

"left"

Text

The text to write.

"Hello World"

Alpha

The rotation angle in degrees. From 0 to 360 degrees.

90

Result Returns OK or error message.

Description

Same as DynaPDF.WriteStyledTextEx, but with additional rotation in center of box.

See also

- 70.290 DynaPDF.New 2981
- 70.505 DynaPDF.WriteFTextExRotated 3356
- 70.506 DynaPDF.WriteStyledText 3358

70.508. *DYNAPDF.WRITESTYLEDTEXTEXROTATED*

3363

- 70.507 DynaPDF.WriteStyledTextEx

3360

70.508.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 10th August 2017, last changed 10th August 2017.

70.509 DynaPDF.WriteText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
70 DynaPDF	3.1	Yes	Yes	Yes	Yes	Yes

MBS("DynaPDF.WriteText"; PDF; PosX; PosY; Text)

Parameters

PDF

The PDF reference returned from DynaPDF.New.
\$pdf

PosX

X-Coordinate of the text
\$x

PosY

Y-Coordinate of the text
\$y

Text

The text to write.
"Hello World"

Result Returns OK or error message.

Description

Please set a font first with DynaPDF.SetFont function before you write on the page.
See also [WriteText](#) function in DynaPDF manual.

Examples

Write something:

MBS("DynaPDF.WriteText"; \$pdf; 111; 323; Invoice::Invoice ID)

See also

- 70.88 DynaPDF.EnableEncryption 2693
- 70.109 DynaPDF.FindText 2727
- 70.290 DynaPDF.New 2981
- 70.353 DynaPDF.SetColorSpace 3105
- 70.384 DynaPDF.SetFillColor 3150
- 70.386 DynaPDF.SetFont 3154
- 70.501 DynaPDF.WebLink 3345

70.509. <i>DYNAPDF.WRITETEXT</i>	3365
• 70.502 DynaPDF.WriteDemoText	3348
• 70.503 DynaPDF.WriteFText	3350
• 70.504 DynaPDF.WriteFTextEx	3352

Example Databases

- [DynaPDF/Bookmarks](#)
- [DynaPDF/Create Text as PDF/A](#)
- [DynaPDF/Create Text](#)

Created 18th August 2014, last changed 27th May 2017.

Chapter 71

EIDSDK

Functions to read eID cards with zetes bluetooth card reader on iOS.

71.1 EIDSDK.Address

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Address")

Result Returns text or error.

Description

String containing street and number.

Created 13th November 2019, last changed 13th November 2019.

71.2 EIDSDK.BeginTransaction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.BeginTransaction")

Result Returns OK or error.

Description

See also

- 71.12 EIDSDK.EndTransaction

3378

Created 13th November 2019, last changed 13th November 2019.

71.3 EIDSDK.CardDeliveryMunicipality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.CardDeliveryMunicipality")

Result Returns text or error.

Description

This method reads the address data file from card and decodes municipality of delivery of the card.
Created 13th November 2019, last changed 13th November 2019.

71.4 EIDSDK.CardNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.CardNumber")

Result Returns text or error.

Description

This method reads eID data file from card and decodes cardnumber.

See also

- 71.7 EIDSDK.ChipNumber 3373
- 71.18 EIDSDK.NatNumber 3384

Created 13th November 2019, last changed 13th November 2019.

71.5 EIDSDK.CardValidFrom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.CardValidFrom")

Result Returns text or error.

Description

String containing start of validity period for eID card data.

See also

- 71.6 EIDSDK.CardValidTo

3372

Created 13th November 2019, last changed 13th November 2019.

71.6 EIDSDK.CardValidTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.CardValidTo")

Result Returns text or error.

Description

String containing end of validity period for eID card data.

See also

- 71.5 EIDSDK.CardValidFrom

3371

Created 13th November 2019, last changed 13th November 2019.

71.7 EIDSDK.ChipNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.ChipNumber")

Result Returns text or error.

Description

String containing chipnumber of eID card.

See also

- 71.4 EIDSDK.CardNumber 3370
- 71.18 EIDSDK.NatNumber 3384

Created 13th November 2019, last changed 13th November 2019.

71.8 EIDSDK.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Close")

Result Returns OK or error.

Description

Created 13th November 2019, last changed 13th November 2019.

71.9 EIDSDK.DateOfBirth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.DateOfBirth" { ; asDate })

Parameters

asDate

Optional

Whether to return as date or text. Pass 1 for date (default). Pass 0 for text.

1

Result Returns OK or error.

Description

String containing the date of birth of eID Card owner. This string contains the string data as it is encoded on card.

See also

- 71.24 EIDSDK.PlaceOfBirth

3390

Created 13th November 2019, last changed 28th November 2019.

71.10 EIDSDK.DocTypeInt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

```
MBS( "EIDSDK.DocTypeInt" { ; asText } )
```

Parameters

asText

Optional

Whether to return as text instead of numeric value. Pass 1 for text or 0 for number. Default is 0.

1

Result Returns number, text or error.

Description

Created 13th November 2019, last changed 13th November 2019.

71.11 EIDSDK.Duplicate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Duplicate")

Result Returns 1, 0 or error.

Description

Returns 1 if flag is set.

Created 13th November 2019, last changed 13th November 2019.

71.12 EIDSDK.EndTransaction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.EndTransaction")

Result Returns OK or error.

Description

See also

- 71.2 EIDSDK.BeginTransaction

3368

Created 13th November 2019, last changed 13th November 2019.

71.13 EIDSDK.FirstName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.FirstName")

Result Returns text or error.

Description

This method reads the ID data file from card and decodes the first name of the eID.

Examples

Query full name:

```
Set Variable [ $Name ; Value: MBS( "EIDSDK.FirstName" ) & " from " & MBS( "EIDSDK.LastName" ) ]
```

See also

- 71.15 EIDSDK.LastName 3381
- 71.35 EIDSDK.ThirdName 3401

Created 13th November 2019, last changed 13th November 2019.

71.14 EIDSDK.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Initialize")

Result Returns OK or error.

Description

This is for Zetes bluetooth card reader.

Please embed libeID-SDK.a into your FileMaker iOS SDK project.

Add bluetooth accessory devices to the provision profile, NSBluetoothPeripheralUsageDescription to info.plist as well as UISupportedExternalAccessoryProtocols with entry for "com.zetes.sipirom".

If needed we could add more functions to read certificates and raw ID files.

Examples

Initialize in start script:

```
Set Variable [ $r ; Value: MBS( "EIDSDK.Initialize" ) ]
```

See also

- 76.60 Events.Initialize

3571

Created 13th November 2019, last changed 13th November 2019.

71.15 EIDSDK.LastName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.LastName")

Result Returns text or error.

Description

This method reads the ID data file from card and decodes the last name of the eID.

Examples

Query full name:

Set Variable [\$Name ; Value: MBS("EIDSDK.FirstName") & " from " & MBS("EIDSDK.LastName")]

See also

- 71.13 EIDSDK.FirstName

3379

Created 13th November 2019, last changed 13th November 2019.

71.16 EIDSDK.MemberOfFamily

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.MemberOfFamily")

Result Returns text or error.

Description

Created 13th November 2019, last changed 13th November 2019.

71.17 EIDSDK.Municipality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Municipality")

Result Returns text or error.

Description

String containing the municipality of the eID card owner.
Created 13th November 2019, last changed 13th November 2019.

71.18 EIDSDK.NatNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.NatNumber")

Result Returns text or error.

Description

The National security number should be used with caution.

Special permission from Belgian government is needed to use/store this number in databases related applications!

Returns string containing the national security number of the eID card owner.

See also

- 71.4 EIDSDK.CardNumber 3370
- 71.7 EIDSDK.ChipNumber 3373

Created 13th November 2019, last changed 13th November 2019.

71.19 EIDSDK.Nationality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Nationality")

Result Returns text or error.

Description

This method reads the id data of eID card and decodes the nationality of eID card owner. This string can be encoded in different languages, mostly depending on card delivery municipality. (e.g. België - België - Belgique)
Created 13th November 2019, last changed 13th November 2019.

71.20 EIDSDK.NobleCondition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.NobleCondition")

Result Returns text or error.

Description

Created 13th November 2019, last changed 13th November 2019.

71.21 EIDSDK.Open

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Open")

Result Returns OK or error.

Description

Created 13th November 2019, last changed 13th November 2019.

71.22 EIDSDK.PhotoDigest

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.PhotoDigest")

Result Returns text or error.

Description

Digest is returned base64 encoded.

Created 13th November 2019, last changed 13th November 2019.

71.23 EIDSDK.Picture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Picture")

Result Returns container or error.

Description

This is a JPEG picture returned as container value.

If no picture exists, we return empty result.

Picture in black and white is stored on eID card and is around 3kb in size.

Created 13th November 2019, last changed 13th November 2019.

71.24 EIDSDK.PlaceOfBirth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.PlaceOfBirth")

Result Returns text or error.

Description

String containing place of birth of eID card owner.

See also

- 71.9 EIDSDK.DateOfBirth

3375

Created 13th November 2019, last changed 13th November 2019.

71.25 EIDSDK.PostalCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.PostalCode")

Result Returns text or error.

Description

String containing the postal code of the eID card owner.
Created 13th November 2019, last changed 13th November 2019.

71.26 EIDSDK.SDKReleaseDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.SDKReleaseDate")

Result Returns text or error.

Description

Examples

Query version:

```
Set Variable [ $Version ; Value: MBS( "EIDSDK.SDKVersion" ) & " from " & MBS( "EIDSDK.SDKReleaseDate" ) ]
```

See also

- 71.27 EIDSDK.SDKVersion

3393

Created 13th November 2019, last changed 13th November 2019.

71.27 EIDSDK.SDKVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.SDKVersion")

Result Returns text or error.

Description**Examples**

Query version:

```
Set Variable [ $Version ; Value: MBS( "EIDSDK.SDKVersion" ) & " from " & MBS( "EIDSDK.SDKReleaseDate" ) ]
```

See also

- 71.26 EIDSDK.SDKReleaseDate 3392
- 71.36 EIDSDK.Version 3402

Created 13th November 2019, last changed 13th November 2019.

71.28 EIDSDK.SetTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.SetTrigger"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK or error.

Description

Parameter to the script is CardFound, CardGone, ReaderFound or ReaderGone.

Created 13th November 2019, last changed 13th November 2019.

71.29 EIDSDK.Sex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Sex")

Result Returns text or error.

Description

String containing sex of eID card owner.

Created 13th November 2019, last changed 13th November 2019.

71.30 EIDSDK.SpecialOrganisation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.SpecialOrganisation")

Result Returns text or error.

Description

Created 13th November 2019, last changed 13th November 2019.

71.31 EIDSDK.SpecialStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.SpecialStatus")

Result Returns 1, 0 or error.

Description

Returns 1 if flag is set.

Created 13th November 2019, last changed 13th November 2019.

71.32 EIDSDK.StartScan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.StartScan")

Result Returns OK or error.

Description

See also

- 71.33 EIDSDK.StopScan

3399

Created 13th November 2019, last changed 13th November 2019.

71.33 EIDSDK.StopScan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.StopScan")

Result Returns OK or error.

Description

See also

- 71.32 EIDSDK.StartScan

3398

Created 13th November 2019, last changed 13th November 2019.

71.34 EIDSDK.SupportsPinPad

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.SupportsPinPad")

Result Returns 1, 0 or error.

Description

Returns 1 if supported, otherwise 0.

Created 13th November 2019, last changed 28th November 2019.

71.35 EIDSDK.ThirdName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.ThirdName")

Result Returns text or error.

Description

This method reads the ID data file from card and decodes the first character of the third name of the eID.

See also

- 71.13 EIDSDK.FirstName

3379

Created 13th November 2019, last changed 13th November 2019.

71.36 EIDSDK.Version

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
71 EIDSDK	10.0	No	No	No	No	Yes

MBS("EIDSDK.Version")

Result Returns text or error.

Description

See also

- 71.27 EIDSDK.SDKVersion

3393

Created 13th November 2019, last changed 13th November 2019.

Chapter 72

EmailParser

Functions to parse emails and extract text, addresses and attachments.

Use CURL functions to query POP and IMAP servers to obtain the email content or load it from eml/emlx files.

You can send or receive emails with our CURL functions. For sending the SendMail functions help to build an email and send it, while EmailParser functions help to parse an email.

72.1 EmailParser.Address

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Address"; EmailID; Index; Selector)

Parameters

EmailID

The ID fo the email parser.

\$Email

Index

The index from 0 to EmailParser.AddressCount-1.

0

Selector

Which value to return. Can be type, name or email.

"name"

Result Returns value or error.

Description

An address has a type which can be TO, CC, BCC, ReplyTo, Sender or From.
Name is the label which can be empty. Email is the email address.

Examples

Copy all addresses into records:

```
# find all addresses
Set Variable [ $EmailRecordID; Value:Get(RecordID) ]
Set Variable [ $i; Value:0 ]
Set Variable [ $c; Value:MBS("EmailParser.AddressCount"; $email) ]
If [ $c >0 ]
Go to Related Record [ Show only related records; From table: "Address"; Using layout: "Address" (Address) ]
Go to Layout [ "Address" (Address) ]
Delete All Records [ No dialog ]
Loop
Set Variable [ $Name; Value:MBS("EmailParser.Address"; $email; $i; "name") ]
Set Variable [ $EmailAddress; Value:MBS("EmailParser.Address"; $email; $i; "email") ]
Set Variable [ $type; Value:MBS("EmailParser.Address"; $email; $i; "type") ]
New Record/Request
Set Field [ Address::Type; $type ]
Set Field [ Address::Email; $EmailAddress ]
Set Field [ Address::Name; $name ]
Set Field [ Address::EmailID; $EmailRecordID ]
Commit Records/Requests [ Skip data entry validation; No dialog ]
# next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i = $c ]
End Loop
End If
```

See also

- 72.2 EmailParser.AddressCount 3406
- 72.18 EmailParser.Parse 3427

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)

- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

Created 24th September 2015, last changed 16th October 2015.

72.2 EmailParser.AddressCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.AddressCount"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns number or error.

Description

This includes TO, CC, BCC, FROM, Reply-To and Sender entries.

See also

- [72.1 EmailParser.Address](#) 3403
- [72.12 EmailParser.HeaderCount](#) 3420
- [72.18 EmailParser.Parse](#) 3427

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

Created 24th September 2015, last changed 24th September 2015.

72.3 EmailParser.AttachedEmails

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	9.4	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.AttachedEmails"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns list or error.

Description

Sometimes Outlook may embed one email into another and this function returns the reference numbers for any email we got while parsing the email.

The list is empty usually, but may have one or more entries, if there are embedded emails with mime type message/rfc822.

If eml files are attached, they may show up as normal attachments.

Example Databases

- [CURL/Email/IMAP Email](#)

72.3.1 Blog Entries

- [Neue Funktionen des MBS FileMaker Plugin 9.4](#)
- [MBS FileMaker Plugin, version 9.4pr8](#)

Created 12nd September 2019, last changed 12nd September 2019.

72.4 EmailParser.Attachment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Attachment"; EmailID; Index; Selector { ; Extra })

Parameters

EmailID

The ID fo the email parser.

\$Email

Index

The index from 0 to EmailParser.AttachmentCount-1.

0

Selector

Which value to return. Can be Filename, MimeType, MimeVersion, ContentType, ContentTransferEncoding, ContentDisposition, ContentDescription, contentId, text or container.

"Filename"

Extra

Optional

For selector = container, you can pass an alternative file name. For selector = text, you can pass text encoding here.

Result Returns value or error.

Description

You can query for example the file name or the mime type.

For storing in a container, you can query the container property. The attachment is decoded by the plugin.

If you need to directly write to a file, you can use the EmailParser.WriteAttachment function.

You can use Text.MimeTypeToFileExtension to find the file extension for mime type.

Examples

Copy all attachments into records:

```
# find all attachments
Set Variable [ $i; Value:0 ]
Set Variable [ $c; Value:MBS("EmailParser.AttachmentCount"; $email) ]
If [ $c >0 ]
Go to Related Record [ Show only related records; From table: "Attachment"; Using layout: "Attachment"
(Attachment) ]
Go to Layout [ "Attachment" (Attachment) ]
Delete All Records [ No dialog ]
Loop
Set Variable [ $Name; Value:MBS("EmailParser.attachment"; $email; $i; "filename") ]
Set Variable [ $content; Value:MBS("EmailParser.attachment"; $email; $i; "container") ]
```

72.4. EMAILPARSER.ATTACHMENT

3409

New Record/Request

Set Field [Attachment::Content; \$content]

Set Field [Attachment::FileName; \$name]

Set Field [Attachment::EmailID; \$EmailRecordID]

Commit Records/Requests [Skip data entry validation; No dialog]

next

Set Variable [\$i; Value:\$i + 1]

Exit Loop If [\$i = \$c]

End Loop

End If

See also

- 72.5 EmailParser.AttachmentCount 3410
- 72.18 EmailParser.Parse 3427
- 72.28 EmailParser.WriteAttachment 3442
- 164.47 Text.MimeTypeToFileExtension 7841

Example Databases

- [Drag and Drop/DragTest](#)

72.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 24th September 2015, last changed 14th July 2019.

72.5 EmailParser.AttachmentCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.AttachmentCount"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns number or error.

Description

See also

- [72.4 EmailParser.Attachment](#) 3408
- [72.18 EmailParser.Parse](#) 3427
- [72.28 EmailParser.WriteAttachment](#) 3442

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [Drag and Drop/DragTest](#)

Created 24th September 2015, last changed 24th September 2015.

72.6 EmailParser.Free

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Free"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns OK or error.

Description

Please call this function always with the reference numbers you got from `CURL.GetResultAsEmail` or `EmailParser.Parse`.

Examples

Parse Subject, PlainText and HTMLText from email:

```
Set Variable [ $email; Value:MBS("EmailParser.Parse"; Email Parser::Input) ]
If [ MBS("IsError") = 1 ]
Show Custom Dialog [ "Failed to parse email."; Middle($email; 7; Length($email)) ]
Exit Script [ ]
End If
# Show text:
Set Field [ Email Parser::Subject; MBS("EmailParser.Subject"; $email) ]
Set Field [ Email Parser::PlainText; MBS("EmailParser.plainText"; $email) ]
Set Field [ Email Parser::HTMLText; MBS("EmailParser.HTMLText"; $email) ]
# cleanup
Set Variable [ $r; Value:MBS("EmailParser.Free"; $email) ]
```

See also

- 61.115 `CURL.GetResultAsEmail` 1914
- 61.118 `CURL.GetResultAsMime` 1920
- 72.10 `EmailParser.Hash` 3417
- 72.16 `EmailParser.List` 3425
- 72.18 `EmailParser.Parse` 3427
- 72.19 `EmailParser.ParseContainer` 3431
- 72.21 `EmailParser.PlainText` 3433
- 72.25 `EmailParser.Source` 3438

- [72.27 EmailParser.Subject](#) 3440
- [124.6 IsError](#) 6266

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [Drag and Drop/for Mac/DragTest Email](#)

Created 24th September 2015, last changed 16th October 2015.

72.7 EmailParser.HTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.HTMLText"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns text or error.

Description

May be empty for text only emails.

Examples

Parse Subject, PlainText and HTMLText from email:

```
Set Variable [ $email; Value:MBS("EmailParser.Parse"; Email Parser::Input) ]
If [ MBS("IsError") = 1 ]
Show Custom Dialog [ "Failed to parse email."; Middle($email; 7; Length($email)) ]
Exit Script [ ]
End If
# Show text:
Set Field [ Email Parser::Subject; MBS("EmailParser.Subject"; $email) ]
Set Field [ Email Parser::PlainText; MBS("EmailParser.plainText"; $email) ]
Set Field [ Email Parser::HTMLText; MBS("EmailParser.HTMLText"; $email) ]
# cleanup
Set Variable [ $r; Value:MBS("EmailParser.Free"; $email) ]
```

See also

- [72.6 EmailParser.Free](#) 3411
- [72.18 EmailParser.Parse](#) 3427
- [72.21 EmailParser.PlainText](#) 3433
- [72.27 EmailParser.Subject](#) 3440
- [124.6 IsError](#) 6266

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)

- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

Created 24th September 2015, last changed 16th October 2015.

72.8 EmailParser.HTMLToPlainText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.HTMLToPlainText"; HTML)

Parameters

HTML

The HTML text to convert.

"<p>Hello World</p>"

Result Returns text or error.

Description

This is used internally for HTML only emails.

Does not convert formatting. Just removes html tags, adds new line characters and translates html entities.

See also `Text.DecodeFromHTML` for just removing html entities.

See also

- [72.21 EmailParser.PlainText](#) 3433
- [164.16 Text.DecodeFromHTML](#) 7798

72.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)

Created 24th September 2015, last changed 22nd August 2018.

72.9 EmailParser.HasHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	7.4	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.HasHeader"; EmailID; HeaderName)

Parameters

EmailID

The ID fo the email parser.

\$Email

HeaderName

The name of the header to look for.

"X-Priority"

Result Returns 1, 0 or error.

Description

See also

- [72.11 EmailParser.Header](#)

3418

72.9.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 22nd August 2017, last changed 22nd August 2017.

72.10 EmailParser.Hash

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.4	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Hash"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns text or error.

Description

You can use this hash to identify an email and check for duplicates.

See also

- [72.6 EmailParser.Free](#) 3411
- [72.11 EmailParser.Header](#) 3418
- [72.16 EmailParser.List](#) 3425
- [72.18 EmailParser.Parse](#) 3427

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

72.10.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr1](#)

Created 2nd October 2015, last changed 2nd October 2015.

72.11 EmailParser.Header

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Header"; EmailID; Index; Selector)

Parameters

EmailID

The ID fo the email parser.

\$Email

Index

The index from 0 to EmailParser.HeaderCount-1.

0

Selector

Which value to return. Can be "name" or "value".

"name"

Result Returns text or error.

Description

Common header values include Date, Subject, From and X-Mailer.

Examples

Query first header entry:

```
$name = MBS( "EmailParser.Header"; $EmailID; 0; "name" )
```

```
$value = MBS( "EmailParser.Header"; $EmailID; 0; "value" )
```

Find a header value by name:

```
Set Variable [ $i; Value:0 ]
```

```
Set Variable [ $c; Value:MBS("EmailParser.HeaderCount"; $email) ]
```

```
If [ $c >0 ]
```

```
Loop
```

```
Set Variable [ $HeaderName; Value:MBS("EmailParser.Header"; $email; $i; "name") ]
```

```
If [ $HeaderName = "X-Mailer" ]
```

```
Set Variable [ $HeaderValue; Value:MBS("EmailParser.Header"; $email; $i; "value") ]
```

```
Set Field [ Email Parser::Mailer; $HeaderValue ]
```

```
End If
```

```
# next
```

```
Set Variable [ $i; Value:$i + 1 ]
```

```
Exit Loop If [ $i = $c ]
```

```
End Loop
```

```
End If
```

Copy all headers into records:

```

Set Variable [ $i ; Value: 0 ]
Set Variable [ $c ; Value: MBS("EmailParser.HeaderCount"; $email) ]
If [ $c >0 ]
Loop
Set Variable [ $HeaderName ; Value: MBS("EmailParser.Header"; $email; $i; "name") ]
Set Variable [ $HeaderValue ; Value: MBS("EmailParser.Header"; $email; $i; "value") ]
New Record/Request
Set Field [ EmailHeaders::EmailID ; $EmailRecordID ]
Set Field [ EmailHeaders::HeaderName ; $HeaderName ]
Set Field [ EmailHeaders::HeaderValue ; $HeaderValue ]
Commit Records/Requests [ With dialog: Off ]
# next
Set Variable [ $i ; Value: $i + 1 ]
Exit Loop If [ $i = $c ]
End Loop
End If

```

See also

- [72.10 EmailParser.Hash](#) 3417
- [72.9 EmailParser.HasHeader](#) 3416
- [72.12 EmailParser.HeaderCount](#) 3420
- [72.13 EmailParser.HeaderValue](#) 3421
- [72.18 EmailParser.Parse](#) 3427

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

Created 24th September 2015, last changed 9th June 2017.

72.12 EmailParser.HeaderCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.HeaderCount"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns number or error.

Description

See also

- [72.2 EmailParser.AddressCount](#) 3406
- [72.11 EmailParser.Header](#) 3418
- [72.13 EmailParser.HeaderValue](#) 3421
- [72.15 EmailParser.InlineCount](#) 3424
- [72.18 EmailParser.Parse](#) 3427

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

Created 24th September 2015, last changed 24th September 2015.

72.13 EmailParser.HeaderValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	7.4	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.HeaderValue"; EmailID; HeaderName)

Parameters

EmailID

The ID fo the email parser.

\$Email

HeaderName

The name of the header to look for.

"X-Priority"

Result Returns value or error.

Description

Returns empty value if header is not found.

Queries of course only first value in case the header is there multiple times!

Examples

Query priority:

```
Set Variable [ $HeaderValue ; Value: MBS("EmailParser.HeaderValue"; $email; "X-Priority") ]
Show Custom Dialog [ "Subject" ; $HeaderValue ]
```

See also

- [72.11 EmailParser.Header](#) 3418
- [72.12 EmailParser.HeaderCount](#) 3420

72.13.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 22nd August 2017, last changed 22nd August 2017.

72.14 EmailParser.Inline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Inline"; EmailID; Index; Selector { ; Extra })

Parameters

EmailID

The ID fo the email parser.

\$Email

Index

The index from 0 to EmailParser.InlineCount-1.

0

Selector

Which value to return. Can be Filename, MimeType, MimeVersion, ContentType, ContentTransferEncoding, ContentDisposition, ContentDescription, contentId, text or container.

"Filename"

Extra

Optional

For selector = container, you can pass an alternative file name. For selector = text, you can pass text encoding here.

Result Returns value or error.

Description

You can query for example the file name or the mime type.

For storing in a container, you can query the container property. The inline graphics is decoded by the plugin.

You can use Text.MimeTypeToFileExtension to find the file extension for mime type.

Examples

Copy all inline graphics into records:

```
# find all inline graphics
Set Variable [ $i; Value:0 ]
Set Variable [ $c; Value:MBS("EmailParser.InlineCount"; $email) ]
If [ $c >0 ]
Go to Related Record [ Show only related records; From table: "InlineGraphics"; Using layout: "Inline-
Graphics" (InlineGraphics) ]
Go to Layout [ "InlineGraphics" (InlineGraphics) ]
Delete All Records [ No dialog ]
Loop
Set Variable [ $Name; Value:MBS("EmailParser.inline"; $email; $i; "filename") ]
Set Variable [ $content; Value:MBS("EmailParser.Inline"; $email; $i; "container") ]
New Record/Request
```

72.14. EMAILPARSER.INLINE

3423

```
Set Field [ InlineGraphics::Content; $content ]
Set Field [ InlineGraphics::FileName; $name ]
Set Field [ InlineGraphics::EmailID; $EmailRecordID ]
Commit Records/Requests [ Skip data entry validation; No dialog ]
# next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i = $c ]
End Loop
End If
```

See also

- [61.118 CURL.GetResultAsMime](#) 1920
- [72.15 EmailParser.InlineCount](#) 3424
- [72.18 EmailParser.Parse](#) 3427
- [72.25 EmailParser.Source](#) 3438
- [72.29 EmailParser.WriteLine](#) 3443
- [164.47 Text.MimeTypeToFileExtension](#) 7841

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

72.14.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 24th September 2015, last changed 14th July 2019.

72.15 EmailParser.InlineCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.InlineCount"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns number or error.

Description

Inline graphics are stored by plugin as inlines while attachments are stored separately.

See also

- [72.12 EmailParser.HeaderCount](#) 3420
- [72.14 EmailParser.Inline](#) 3422
- [72.18 EmailParser.Parse](#) 3427
- [72.29 EmailParser.WriteInline](#) 3443

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

Created 24th September 2015, last changed 24th September 2015.

72.16 EmailParser.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.List")

Result Returns list of reference numbers or error.

Description

See also

- 72.6 EmailParser.Free 3411
- 72.10 EmailParser.Hash 3417
- 72.18 EmailParser.Parse 3427

Created 24th September 2015, last changed 24th September 2015.

72.17 EmailParser.MessageID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.MessageID"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns message ID or error.

Description

Created 24th September 2015, last changed 24th September 2015.

72.18 EmailParser.Parse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Parse"; EmailSource { ; Encoding })

Parameters

EmailSource

The source code of an email as text. e.g. as downloaded via IMAP/POP3 functions in CURL.

\$EmailContent

Encoding

Optional

The text encoding for text parameter. Default is native.

UTF8

Result Returns Reference number or error.

Description

If no error occurs, the parser will separate subject, html and plain text, attachments and inline graphics, all addresses and header entries. You can then use other functions to query values.

If you expect UTF-8 and you have the text in a field already, you may want to pass UTF-8 here for encoding.

If you have EMLX files, please use Text.ReadEMLXFile function first to unpack them and pass the email source to EmailParser.Parse function.

Examples

Parse an email and copy data into records:

```
Set Variable [ $email; Value:MBS("EmailParser.Parse"; Email Parser::Input) ]
If [ MBS("IsError") = 1 ]
Show Custom Dialog [ "Failed to parse email."; Middle($email; 7; Length($email)) ]
Exit Script [ ]
End If
# Show text:
Set Field [ Email Parser::Subject; MBS("EmailParser.Subject"; $email) ]
Set Field [ Email Parser::PlainText; MBS("EmailParser.plainText"; $email) ]
Set Field [ Email Parser::HTMLText; MBS("EmailParser.HTMLText"; $email) ]
# find all addresses
Set Variable [ $EmailRecordID; Value:Get(RecordID) ]
Set Variable [ $i; Value:0 ]
Set Variable [ $c; Value:MBS("EmailParser.AddressCount"; $email) ]
If [ $c >0 ]
Go to Related Record [ Show only related records; From table: "Address"; Using layout: "Address" (Address) ]
```

```

Go to Layout [ "Address" (Address) ]
Delete All Records [ No dialog ]
Loop
Set Variable [ $Name; Value:MBS("EmailParser.Address"; $email; $i; "name") ]
Set Variable [ $emailAddress; Value:MBS("EmailParser.Address"; $email; $i; "email") ]
Set Variable [ $type; Value:MBS("EmailParser.Address"; $email; $i; "type") ]
New Record/Request
Set Field [ Address::Type; $type ]
Set Field [ Address::Email; $emailAddress ]
Set Field [ Address::Name; $name ]
Set Field [ Address::EmailID; $EmailRecordID ]
Commit Records/Requests [ Skip data entry validation; No dialog ]
# next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i = $c ]
End Loop
End If
# find all attachments
Set Variable [ $i; Value:0 ]
Set Variable [ $c; Value:MBS("EmailParser.AttachmentCount"; $email) ]
If [ $c >0 ]
Go to Related Record [ Show only related records; From table: "Attachment"; Using layout: "Attachment"
(Attachment) ]
Go to Layout [ "Attachment" (Attachment) ]
Delete All Records [ No dialog ]
Loop
Set Variable [ $Name; Value:MBS("EmailParser.attachment"; $email; $i; "filename") ]
Set Variable [ $content; Value:MBS("EmailParser.attachment"; $email; $i; "container") ]
New Record/Request
Set Field [ Attachment::Content; $content ]
Set Field [ Attachment::FileName; $name ]
Set Field [ Attachment::EmailID; $EmailRecordID ]
Commit Records/Requests [ Skip data entry validation; No dialog ]
# next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i = $c ]
End Loop
End If
# find all inline graphics
Set Variable [ $i; Value:0 ]
Set Variable [ $c; Value:MBS("EmailParser.InlineCount"; $email) ]
If [ $c >0 ]
Go to Related Record [ Show only related records; From table: "InlineGraphics"; Using layout: "Inline-
Graphics" (InlineGraphics) ]
Go to Layout [ "InlineGraphics" (InlineGraphics) ]
Delete All Records [ No dialog ]
Loop
Set Variable [ $Name; Value:MBS("EmailParser.inline"; $email; $i; "filename") ]

```



```

Set Variable [ $content; Value:MBS("EmailParser.Inline"; $email; $i; "container") ]
New Record/Request
Set Field [ InlineGraphics::Content; $content ]
Set Field [ InlineGraphics::FileName; $name ]
Set Field [ InlineGraphics::EmailID; $EmailRecordID ]
Commit Records/Requests [ Skip data entry validation; No dialog ]
# next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i = $c ]
End Loop
End If
Go to Layout [ original layout ]
# find a header
Set Variable [ $i; Value:0 ]
Set Variable [ $c; Value:MBS("EmailParser.HeaderCount"; $email) ]
If [ $c >0 ]
Loop
Set Variable [ $HeaderName; Value:MBS("EmailParser.Header"; $email; $i; "name") ]
If [ $HeaderName = "X-Mailer" ]
Set Variable [ $HeaderValue; Value:MBS("EmailParser.Header"; $email; $i; "value") ]
Set Field [ Email Parser::Mailer; $HeaderValue ]
End If
# next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i = $c ]
End Loop
End If
# cleanup
Set Variable [ $r; Value:MBS("EmailParser.Free"; $email) ]

```

Extract email text:

```

Set Variable [ $EmailID; Value:MBS( "EmailParser.Parse"; email::raw) ]
Set Field [ email::raw_plainText; MBS( "EmailParser.PlainText"; $EmailID ) ]
Set Field [ email::raw_htmltext; MBS( "EmailParser.HTMLText"; $EmailID ) ]
Set Variable [ $r; Value:MBS( "EmailParser.Free"; $EmailID) ]

```

See also

- 72.1 EmailParser.Address 3403
- 72.6 EmailParser.Free 3411
- 72.11 EmailParser.Header 3418
- 72.12 EmailParser.HeaderCount 3420
- 72.16 EmailParser.List 3425

- 72.19 EmailParser.ParseContainer 3431
- 72.20 EmailParser.ParseFile 3432
- 72.25 EmailParser.Source 3438
- 124.6 IsError 6266
- 164.48 Text.ReadEMLXFile 7842

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)

72.18.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr1](#)

Created 24th September 2015, last changed 15th November 2019.

72.19 EmailParser.ParseContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	6.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.ParseContainer"; EmailSource)

Parameters

EmailSource

The container field that holds the EML file to be parsed.

The container value, which embeds the email text as FILE data. e.g. you imported the eml file into the container with our plugin or Filemaker's import script step.

MyTable::myContainer

Result Returns OK or error.

Description

Parses an email file stored in container and returns a reference that can be used by other EmailParser functions to extract specific data elements (e.g. EmailParser.subject to extract the email subject).

This function applies only to EML files. For EMLX files, please use the Text.ReadEMLXFile function to extract the source of the email file and then use the EmailParser.Parse function to get a reference for further parsing).

Be sure to use EmailParser.Free to release the reference once you have finished processing the email file. This frees up memory that is holding the parsed email.

If no error occurs, the parser will separate subject, html and plain text, attachments and inline graphics, all addresses and header entries. You can then use other EmailParser functions to query values.

See also

- 72.6 EmailParser.Free 3411
- 72.18 EmailParser.Parse 3427
- 72.27 EmailParser.Subject 3440
- 164.48 Text.ReadEMLXFile 7842

72.19.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr2](#)

Created 4th June 2016, last changed 15th November 2019.

72.20 EmailParser.ParseFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.ParseFile"; Path)

Parameters

Path

Native file path.

"C:\Documents\Test.eml"

Result Returns Reference number or error.

Description

This is for emails stored as text file with eml file name extension.

If no error occurs, the parser will separate subject, html and plain text, attachments and inline graphics, all addresses and header entries. You can then use other functions to query values.

If you have EMLX files, please use Text.ReadEMLXFile function first to unpack them and pass the email source to EmailParser.Parse function.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- 72.18 EmailParser.Parse 3427
- 121.2 Path.FileMakerPathToNativePath 6139
- 164.48 Text.ReadEMLXFile 7842

Example Databases

- [CURL/Email/IMAP Email](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest Email](#)

Created 24th September 2015, last changed 15th November 2019.

72.21 EmailParser.PlainText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.PlainText"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns text or error.

Description

For HTML only email, the plugin will extract text. This text may be okay for full text search, but not necessarily good to display to user.

Examples

Parse Subject, PlainText and HTMLText from email:

```
Set Variable [ $email; Value:MBS("EmailParser.Parse"; Email Parser::Input) ]
If [ MBS("IsError") = 1 ]
Show Custom Dialog [ "Failed to parse email."; Middle($email; 7; Length($email)) ]
Exit Script [ ]
End If
# Show text:
Set Field [ Email Parser::Subject; MBS("EmailParser.Subject"; $email) ]
Set Field [ Email Parser::PlainText; MBS("EmailParser.plainText"; $email) ]
Set Field [ Email Parser::HTMLText; MBS("EmailParser.HTMLText"; $email) ]
# cleanup
Set Variable [ $r; Value:MBS("EmailParser.Free"; $email) ]
```

See also

- 72.6 EmailParser.Free 3411
- 72.7 EmailParser.HTMLText 3413
- 72.8 EmailParser.HTMLToPlainText 3415
- 72.18 EmailParser.Parse 3427
- 72.27 EmailParser.Subject 3440
- 124.6 IsError 6266

Example Databases

- [Drag and Drop/for Mac/DragTest Email](#)

Created 24th September 2015, last changed 16th October 2015.

72.22 EmailParser.ProcessImageReferences

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	6.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.ProcessImageReferences"; HTMLText)

Parameters

HTMLText

The HTML text from the email containing image references with "cid:" in the address.

Result Returns html or error.

Description

All cid: links are found. : and / are replaced with dash.

You can write all inline graphics files to a directory with html and rename the files the same way.

Now you can point a webviewer to the html file and load it.

(see example database)

Example Databases

- [CURL/Email/Email Parser and Preview](#)

Created 3th July 2016, last changed 4th July 2016.

72.23 EmailParser.ReceiveDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	6.4	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.ReceiveDate"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns timestamp or error.

Description

Can be empty. This is for received time at server.

The plugin looks in email headers for a receive: header and parses the date.

The returned date is normalized to current time zone.

Examples

Show dates:

```
Set Field [ Email Parser::Date1; MBS("EmailParser.SentDate"; $email) ]
```

```
Set Field [ Email Parser::Date2; MBS("EmailParser.ReceiveDate"; $email) ]
```

See also

- [72.24 EmailParser.SentDate](#)

3437

Example Databases

- [CURL/Email/IMAP Email](#)

72.23.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr2](#)

Created 25th July 2016, last changed 25th July 2016.

72.24 EmailParser.SentDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.4	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.SentDate"; EmailID)

(old name: EmailParser.Date)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns timestamp or error.

Description

Can be empty. This is the sent date from email client.

The plugin looks in email headers for a Date: header and parses the date.

The returned date is normalized to current time zone.

Examples

Show dates:

```
Set Field [ Email Parser::Date1; MBS("EmailParser.SentDate"; $email) ]
```

```
Set Field [ Email Parser::Date2; MBS("EmailParser.ReceiveDate"; $email) ]
```

See also

- [72.23 EmailParser.ReceiveDate](#)

3436

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/IMAP Email](#)

72.24.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr2](#)

Created 3th October 2015, last changed 7th February 2019.

72.25 EmailParser.Source

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.4	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Source"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns text or error.

Description

See also

- [72.6 EmailParser.Free](#) 3411
- [72.14 EmailParser.Inline](#) 3422
- [72.18 EmailParser.Parse](#) 3427
- [72.27 EmailParser.Subject](#) 3440

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

72.25.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr1](#)

Created 2nd October 2015, last changed 2nd October 2015.

72.26 EmailParser.SourceWithoutAttachments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.4	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.SourceWithoutAttachments"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns text or error.

Description

The plugin passes the email, removes attachments and produces this source for you.

Can be useful to archive emails without attachments.

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

72.26.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr8](#)
- [MBS FileMaker Plugin, version 5.4pr1](#)

Created 2nd October 2015, last changed 2nd October 2015.

72.27 EmailParser.Subject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.Subject"; EmailID)

Parameters

EmailID

The ID fo the email parser.

\$Email

Result Returns text or error.

Description

Examples

Parse Subject, PlainText and HTMLText from email:

```
Set Variable [ $email; Value:MBS("EmailParser.Parse"; Email Parser::Input) ]
If [ MBS("IsError") = 1 ]
Show Custom Dialog [ "Failed to parse email."; Middle($email; 7; Length($email)) ]
Exit Script [ ]
End If
# Show text:
Set Field [ Email Parser::Subject; MBS("EmailParser.Subject"; $email) ]
Set Field [ Email Parser::PlainText; MBS("EmailParser.plainText"; $email) ]
Set Field [ Email Parser::HTMLText; MBS("EmailParser.HTMLText"; $email) ]
# cleanup
Set Variable [ $r; Value:MBS("EmailParser.Free"; $email) ]
```

See also

- 72.6 EmailParser.Free 3411
- 72.7 EmailParser.HTMLText 3413
- 72.18 EmailParser.Parse 3427
- 72.19 EmailParser.ParseContainer 3431
- 72.21 EmailParser.PlainText 3433
- 72.25 EmailParser.Source 3438
- 124.6 IsError 6266

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/Email Parser](#)
- [CURL/Email/IMAP Email](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)

Created 24th September 2015, last changed 16th October 2015.

72.28 EmailParser.WriteAttachment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.WriteAttachment"; EmailID; Index; Path)

Parameters

EmailID

The ID fo the email parser.

\$Email

Index

The index from 0 to EmailParser.AttachmentCount-1.

0

Path

Native file path.

C:\Documents\Test.Txt

Result Returns OK or error.

Description

Our plugin decodes attachments for you, so the file should be directly useable.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- 72.4 EmailParser.Attachment 3408
- 72.5 EmailParser.AttachmentCount 3410
- 121.2 Path.FileMakerPathToNativePath 6139

Created 24th September 2015, last changed 24th September 2015.

72.29 EmailParser.WriteInline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
72 EmailParser	5.3	Yes	Yes	Yes	Yes	Yes

MBS("EmailParser.WriteInline"; EmailID; Index; Path)

Parameters

EmailID

The ID fo the email parser.

\$Email

Index

The index from 0 to EmailParser.InlineCount-1.

0

Path

Native file path.

C:\Documents\Test.Txt

Result Returns OK or error.

Description

Our plugin decodes inline graphics for you, so the file should be directly useable.

See also

- [72.14 EmailParser.Inline](#) 3422
- [72.15 EmailParser.InlineCount](#) 3424

72.29.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr5](#)

Created 24th September 2015, last changed 24th September 2015.

Chapter 73

Encryption

Encrypt or Decrypt with AES or Blowfish

73.1 Encryption.Cipher

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.Cipher"; Direction; Algorithm; KeyType; KeyData; KeyEncoding; InputType; InputData; InputEncoding; OutputType { ; OutputInfo; IVType; IVData; IVEncoding; Padding })

Parameters

Direction

Whether to encrypt or decrypt. Pass encrypt or decrypt.
"encrypt"

Algorithm

Which algorithm to use. Can be for example RC2, blowfish, AES128, AES192, AES256.
"AES-128-CFB"

KeyType

The type of input for key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes. If the key is text, please check what type of line ending you use and whether to trim the key.
"Hello World"

KeyEncoding

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

InputType

The type of input. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

InputData

The actual input data. Text, container or file path.

"Hello World"

InputEncoding

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

OutputType

The output type. Can be Base64, Hex, Text, File, Path. Can be Auto in plugin version 7.3 to detect type for container from OutputInfo parameter.

"Hex"

OutputInfo

Optional

The addition info for output. For text it is the text encoding, for file container the file name and for path the actual native file path.

""

IVType

Optional

The type of input. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex. In version 6.0 and newer you can pass Input here to take IV from input data.

"Text"

IVData

Optional

The actual input data for the IV. Text, container or file path. Must not be longer than the maximum IV length of the given algorithm. If IV is too short, we pad it with zero bytes.

"Hello World"

IVEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

Padding

Optional

Whether to use padding. Pass 1 to enable padding (default). Pass 0 to disable.

0

Result Returns encrypted/decrypted value or text.

Description

Input can be one of different types:

- Text, you pass "text", your text and the text encoding. If no or invalid encoding name is passed, the native one is used. The encoding can be one of the following strings: ansi, windows, mac, latin1, utf8, dos or native.
- PDF, you pass the container with the PDF file inside.
- Image, you pass the container with an image file.
- Data, you pass container and plugin looks for the file data inside.
- Hex, you pass a hex encoded text.
- Base64, you pass a base64 encoded text.
- Path, you pass the file path to a file to read.
- Container, you pass a container which is serialized with all its content.
- JPEG, a container with a JPEG image.
- GIF, a container with a GIF image.
- TIFF, a container with a TIFF image.
- PNG, a container with a PNG image.

Now for output we can return the data in various ways:

- Text, we return the data as text in the encoding. This is not recommended for encrypted data. OutputInfo parameter is text encoding.
- Base64, the data is returned as base64 encoded text.
- Hex, the data is returned as hex encoded text.
- File, the data is returned as a container value with a file inside containing the data. OutputInfo parameter is the filename to be stored in the container value.
- Path, the data is written to a file. In the OutputInfo parameter you provide a native file path.
- Container, the data is unpacked as a container value (serialized container).
- GIF, the data is returned as a container with GIF image inside.
- TIFF, the data is returned as a container with TIFF image inside.
- JPEG, the data is returned as a container with JPEG image inside.
- PNG, the data is returned as a container with PNG image inside.
- PDF, the data is returned as a container with PDF document inside.
- Auto, only for returning data and detecting type by provided file name. (new in 7.3)

Encrypt with AES 256bit Counter (CTR) mode:

```
# Make a 256 bit key with a hash
Set Variable [ $hash; Value:MBS( "Hash.Digest"; "SHA256"; "Text"; "My Secret Password"; "UTF-8";
"Hex" ) ]
# now encrypt some text
Set Variable [ $encrypted; Value:MBS( "Encryption.Cipher"; "encrypt"; "AES-256-CTR"; "Hex"; $hash; "";
"Text"; "Hello World"; "UTF-8"; "Hex"; "" ) ]
# and show encrypted text
Show Custom Dialog [ $encrypted ]
```

Encrypt Umsatzzähler für Registrierkasse mit AES ICM/CTR:

```
MBS( "Encryption.Cipher"; "encrypt"; "AES-128-CTR"; "TEXT"; $Schlüssel; "UTF-8"; "Hex"; $KodierterUm-
satzzählers; ""; "Hex"; ""; "Text"; $Kassenidentifikationsnummer & $Belegnummer; "UTF-8" )
```

Decrypt Blowfish ECB:

```
MBS( "Encryption.Cipher"; "decrypt"; "bf-ecb"; "TEXT"; "strunzhasensalat"; "UTF-8"; "base64"; "TkfrF-
BRE0pkp3lzEX7YibCVnz+S79ckp"; ""; "Text"; "UTF-8" )
```

See also

- [73.2 Encryption.CipherNames](#) 3451
- [73.3 Encryption.DecryptAES](#) 3452
- [73.4 Encryption.DecryptBlowfish](#) 3454
- [73.5 Encryption.DecryptContainerAES](#) 3456
- [73.6 Encryption.DecryptContainerBlowfish](#) 3458
- [73.8 Encryption.EncryptAES](#) 3461
- [73.9 Encryption.EncryptBlowfish](#) 3463
- [73.10 Encryption.EncryptContainerAES](#) 3465
- [86.2 Hash.Digest](#) 4787
- [149.13 RSA.GeneratePrivateKey](#) 7075

Example Databases

- [Encryption and Hash/AES with PHP/AES with PHP](#)
- [Encryption and Hash/Encryption Cipher](#)
- [Third Party/FileMaker Snippet Storage](#)

73.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr4](#)
- [MBS FileMaker Plugin, version 9.5pr5](#)
- [MBS FileMaker Plugin, version 9.4pr3](#)
- [MBS FileMaker Plugin, version 7.3pr2](#)
- [MBS FileMaker Plugin, version 7.3pr1](#)
- [MBS FileMaker Plugin, version 6.1pr3](#)
- [AES in FileMaker and PHP](#)
- [New universal Hash and Encrypt functions for MBS FileMaker Plugin](#)
- [MBS Filemaker Plugin, version 4.1pr2](#)

Created 18th August 2014, last changed 19th December 2019.

73.2 Encryption.CipherNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	8.5	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.CipherNames")

Result Returns list or error.

Description

The list is not the same for Mac/iOS, Windows and Linux.

See also

- [73.1 Encryption.Cipher](#) 3445
- [73.7 Encryption.DigestNames](#) 3460

73.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)

Created 25th September 2018, last changed 25th September 2018.

73.3 Encryption.DecryptAES

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.DecryptAES"; key; text { ; iv })

Parameters

key

The key you want to use.

"Hello"

text

The text to decrypt. Should be hex encoded bytes from Encryption.EncryptAES.

"1234567809ABCDEF"

iv

Optional

The initial vector as a text with up to 16 bytes length.

"1234567890ABCDEF"

Result Returns decrypted text.

Description

This function uses UTF-8 for key, text and iv parameters.

Keys shorter than 128 bit, 192 bit or 256 bit length are padded with null bytes to right size. This means that only the first 32 characters are used at most.

The plugin has no idea to verify if the key is correct. You need to make sure that you check if result is correct, e.g. by using a hash to verify if result is the expected value.

Deprecated. Please move to Encryption.Cipher for new projects.

Examples

Simply decrypt a text:

MBS("Encryption.DecryptAES"; \$key; \$encrypted)

See also

- [73.1 Encryption.Cipher](#) 3445
- [73.8 Encryption.EncryptAES](#) 3461

Example Databases

- [Encryption and Hash/AES](#)

73.3.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr4](#)

Created 18th August 2014, last changed 24th October 2018.

73.4 Encryption.DecryptBlowfish

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.DecryptBlowfish"; key; text { ; iv })

Parameters

key

The key you want to use.

"Hello"

text

The text to decrypt. Should be hex encoded bytes from Encryption.EncryptAES.

"1234567809ABCDEF"

iv

Optional

The initial vector as a text with up to 16 bytes length.

"1234567890ABCDEF"

Result Returns decrypted text.

Description

This function uses UTF-8 for key, text and iv parameters.

For blowfish the key length is limited to 72 characters.

The plugin has no idea to verify if the key is correct. You need to make sure that you check if result is correct, e.g. by using a hash to verify if result is the expected value.

Deprecated. Please move to Encryption.Cipher for new projects.

Examples

Simply decrypt a text:

MBS("Encryption.DecryptBlowfish"; \$key; \$encrypted)

See also

- [73.1 Encryption.Cipher](#) 3445
- [73.8 Encryption.EncryptAES](#) 3461
- [73.9 Encryption.EncryptBlowfish](#) 3463

Example Databases

- [Encryption and Hash/Blowfish](#)

73.4.1 **Blog Entries**

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr4](#)

Created 18th August 2014, last changed 24th October 2018.

73.5 Encryption.DecryptContainerAES

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.DecryptContainerAES"; key; value { ; iv })

Parameters

key

The key you want to use.

"Hello"

value

The container value to use.

\$inputData

iv

Optional

The initial vector as a text with up to 16 bytes length.

"1234567890ABCDEF"

Result Returns error or decrypted container value.

Description

The function expects you to use the same key as encryption and a container value produced by the Encryption.EncryptContainerAES function. The function does not store the key, but once the data is decrypted it can decide if they make sense and return an error about a wrong key if data is looking strange.

Keys shorter than 128 bit, 192 bit or 256 bit length are padded with null bytes to right size. This means that only the first 32 characters are used at most.

The plugin has no idea to verify if the key is correct. You need to make sure that you check if result is correct, e.g. by using a hash to verify if result is the expected value.

Deprecated. Please move to Encryption.Cipher for new projects.

Examples

Encrypt and Decrypt:

```
set variable $key to "Hello"
```

```
set variable $encryptedData to MBS( "Encryption.EncryptContainerAES"; $key; $inputData )
```

```
set variable $decryptedData to MBS( "Encryption.DecryptContainerAES"; $key; $encryptedData )
```

See also

- 73.1 Encryption.Cipher 3445
- 73.6 Encryption.DecryptContainerBlowfish 3458
- 73.10 Encryption.EncryptContainerAES 3465

Example Databases

- [Encryption and Hash/Encrypt Containers](#)

73.5.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr7](#)

Created 18th August 2014, last changed 11st September 2015.

73.6 Encryption.DecryptContainerBlowfish

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.DecryptContainerBlowfish"; key; value { ; iv })

Parameters

key

The key you want to use.
"Hello"

value

The container value to use.
\$inputData

iv

Optional
The initial vector as a text with up to 16 bytes length.
"1234567890ABCDEF"

Result Returns error or decrypted container value.

Description

The function expects you to use the same key as encryption and a container value produced by the Encryption.EncryptContainerBlowfish function. The function does not store the key, but once the data is decrypted it can decide if they make sense and return an error about a wrong key if data is looking strange.

For blowfish the key length is limited to 72 characters.

The plugin has no idea to verify if the key is correct. You need to make sure that you check if result is correct, e.g. by using a hash to verify if result is the expected value.

Deprecated. Please move to Encryption.Cipher for new projects.

Examples

Encrypt and Decrypt:

```
set variable $key to "Hello"
set variable $encryptedData to MBS( "Encryption.EncryptContainerBlowfish"; $key; $inputData )
set variable $decryptedData to MBS( "Encryption.DecryptContainerBlowfish"; $key; $encryptedData )
```

See also

- 73.1 Encryption.Cipher 3445
- 73.5 Encryption.DecryptContainerAES 3456
- 73.11 Encryption.EncryptContainerBlowfish 3467

Example Databases

- [Encryption and Hash/Encrypt Containers](#)

73.6.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr7](#)

Created 18th August 2014, last changed 11st July 2018.

73.7 Encryption.DigestNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	8.5	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.DigestNames")

Result Returns list or error.

Description

The list is not the same for Mac/iOS, Windows and Linux.

See also

- 73.2 Encryption.CipherNames

3451

73.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)

Created 25th September 2018, last changed 25th September 2018.

73.8 Encryption.EncryptAES

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.EncryptAES"; key; text { ; iv })

Parameters

key

The key you want to use.

"Hello"

text

The text to encrypt.

"Hello World"

iv

Optional

The initial vector as a text with up to 16 bytes length.

"1234567890ABCDEF"

Result Returns encrypted text encoded as hex.

Description

This function uses UTF-8 for key, text and iv parameters.

Keys shorter than 128 bit, 192 bit or 256 bit length are padded with null bytes to right size. This means that only the first 32 characters are used at most.

Deprecated. Please move to Encryption.Cipher for new projects.

Examples

Simply encrypt a text:

MBS("Encryption.EncryptAES"; \$key; \$text)

See also

- [73.1 Encryption.Cipher](#) 3445
- [73.3 Encryption.DecryptAES](#) 3452
- [73.4 Encryption.DecryptBlowfish](#) 3454

Example Databases

- [Encryption and Hash/AES](#)

73.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr4](#)

Created 18th August 2014, last changed 24th October 2018.

73.9 Encryption.EncryptBlowfish

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.EncryptBlowfish"; key; text { ; iv })

Parameters

key

The key you want to use.

"Hello"

text

The text to encrypt.

"Hello World"

iv

Optional

The initial vector as a text with up to 16 bytes length.

"1234567890ABCDEF"

Result Returns encrypted text encoded as hex.

Description

This function uses UTF-8 for key, text and iv parameters.

For blowfish the key length is limited to 72 characters.

Deprecated. Please move to Encryption.Cipher for new projects.

Examples

Simply encrypt a text:

MBS("Encryption.EncryptBlowfish"; \$key; \$text)

See also

- [73.1 Encryption.Cipher](#) 3445
- [73.4 Encryption.DecryptBlowfish](#) 3454

Example Databases

- [Encryption and Hash/Blowfish](#)
- [Utility functions/Generate and Verify License Key](#)

73.9.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)

- [MBS Filemaker Plugin, version 2.7pr4](#)

Created 18th August 2014, last changed 12nd May 2015.

73.10 Encryption.EncryptContainerAES

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.EncryptContainerAES"; key; value { ; iv })

Parameters

key

The key you want to use.

"Hello"

value

The container value to use.

\$inputData

iv

Optional

The initial vector as a text with up to 16 bytes length.

"1234567890ABCDEF"

Result Returns error or encrypted container value.

Description

Input must be a container value (picture, file, PDF, movie or whatever you have). The encrypted data is returned as container value without file name.

Keys shorter than 128 bit, 192 bit or 256 bit length are padded with null bytes to right size. This means that only the first 32 characters are used at most.

Deprecated. Please move to Encryption.Cipher for new projects.

Examples

Encrypt and Decrypt:

```
set variable $key to "Hello"
```

```
set variable $encryptedData to MBS( "Encryption.EncryptContainerAES"; $key; $inputData )
```

```
set variable $decryptedData to MBS( "Encryption.DecryptContainerAES"; $key; $encryptedData )
```

See also

- [73.1 Encryption.Cipher](#) 3445
- [73.5 Encryption.DecryptContainerAES](#) 3456
- [73.11 Encryption.EncryptContainerBlowfish](#) 3467

Example Databases

- [Encryption and Hash/Encrypt Containers](#)

73.10.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr7](#)

Created 18th August 2014, last changed 12nd May 2015.

73.11 Encryption.EncryptContainerBlowfish

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Encryption.EncryptContainerBlowfish"; key; value { ; iv })

Parameters

key

The key you want to use.

"Hello"

value

The container value to use.

\$inputData

iv

Optional

The initial vector as a text with up to 16 bytes length.

"1234567890ABCDEF"

Result Returns error or encrypted container value.

Description

Input must be a container value (picture, file, PDF, movie or whatever you have). The encrypted data is returned as container value without file name.

For blowfish the key length is limited to 72 characters.

Deprecated. Please move to Encryption.Cipher for new projects.

Examples

Encrypt and Decrypt:

```
set variable $key to "Hello"
```

```
set variable $encryptedData to MBS( "Encryption.EncryptContainerBlowfish"; $key; $inputData )
```

```
set variable $decryptedData to MBS( "Encryption.DecryptContainerBlowfish"; $key; $encryptedData )
```

See also

- [73.1 Encryption.Cipher](#) 3445
- [73.6 Encryption.DecryptContainerBlowfish](#) 3458
- [73.10 Encryption.EncryptContainerAES](#) 3465

Example Databases

- [Encryption and Hash/Encrypt Containers](#)

73.11.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr7](#)

Created 18th August 2014, last changed 12nd May 2015.

73.12 RSA.DecryptPrivateKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	7.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "RSA.DecryptPrivateKey"; KeyType; KeyData; KeyEncoding; PasswordType; PasswordData { ; PasswordEncoding } )
```

Parameters

KeyType

The type of input for private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Path"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"/Users/cs/desktop/test.pem"

KeyEncoding

The text encoding for text input for the key. Parameter is ignored for other cases.

PasswordType

The type of input for optional password. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

PasswordData

The actual input data for the password. Text, container or file path.
"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.
"UTF-8"

Result Returns key as text or error.

Description

Returns error if key could not be read, e.g. due to invalid password.

Examples

Encrypt private key and decrypt it:

```
Set Variable [ $key1 ; Value: MBS( "RSA.GeneratePrivateKey" ) ]
Set Variable [ $key2 ; Value: MBS( "RSA.EncryptPrivateKey"; "Text"; $key1; "UTF-8"; "AES-128-CFB"; "text"; "Hello" ) ]
Set Variable [ $key3 ; Value: MBS( "RSA.DecryptPrivateKey"; "Text"; $key1; "UTF-8"; "text"; "Hello" ) ]
```

See also

- 73.13 RSA.EncryptPrivateKey

- 149.13 RSA.GeneratePrivateKey

73.12.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)

Created 15th October 2017, last changed 16th October 2017.

73.13 RSA.EncryptPrivateKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	7.5	Yes	Yes	Yes	Yes	Yes

MBS("RSA.EncryptPrivateKey"; KeyType; KeyData; KeyEncoding; Algorithm; PasswordType; PasswordData { ; PasswordEncoding })

Parameters

KeyType

The type of input for private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Path"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.

"/Users/cs/desktop/test.pem"

KeyEncoding

The text encoding for text input for the key. Parameter is ignored for other cases.

Algorithm

Which algorithm to use. Can be for example RC2, blowfish, AES128, AES192, AES256. See Encryption.Cipher.

"AES-128-CFB"

PasswordType

The type of input for optional password. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

PasswordData

The actual input data for the password. Text, container or file path.

"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

Result Returns key as text or error.

Description

Returns error if key could not be read, e.g. because it is already encrypted.

Examples

Encrypt private key and decrypt it:

```
Set Variable [ $key1 ; Value: MBS( "RSA.GeneratePrivateKey" ) ]
Set Variable [ $key2 ; Value: MBS( "RSA.EncryptPrivateKey"; "Text"; $key1; "UTF-8"; "AES-128-CFB";
"text"; "Hello" ) ]
Set Variable [ $key3 ; Value: MBS( "RSA.DecryptPrivateKey"; "Text"; $key1; "UTF-8"; "text"; "Hello" ) ]
```

See also

- 73.1 Encryption.Cipher 3445
- 73.12 RSA.DecryptPrivateKey 3469
- 149.13 RSA.GeneratePrivateKey 7075

73.13.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)

Created 15th October 2017, last changed 16th October 2017.

73.14 RSA.PrivateDecrypt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	6.2	Yes	Yes	Yes	Yes	Yes

MBS("RSA.PrivateDecrypt"; InputType; InputData; InputEncoding; KeyType; KeyData; KeyEncoding; OutputType { ; OutputInfo; PasswordType; PasswordData; PasswordEncoding; Padding })

Parameters

InputType

The type of input data. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"base64"

InputData

The actual input data. Text, container or file path.
\$EncryptedData

InputEncoding

The text encoding for text input. Parameter is ignored for other cases.
""

KeyType

The type of input for private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Path"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"/Users/cs/desktop/test.pem"

KeyEncoding

The text encoding for text input for the key. Parameter is ignored for other cases.

OutputType

The output type. Can be Base64, Hex, Text, File, Path.
"Text"

OutputInfo

Optional

The addition info for output. For text it is the text encoding, for file container the file name and for path the actual native file path.
"UTF-8"

PasswordType

Optional

The type of input for the password of the private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

PasswordData

Optional

The actual input data for the password of the private key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.
"UTF-8"

Padding

Optional

Which padding to use. 1: PKCS # 1 v1.5 padding. This currently is the most widely used mode. 2: PKCS # 1 v1.5 padding with an SSL-specific modification that denotes that the server is SSL3 capable. 3: Raw RSA encryption. This mode should only be used to implement cryptographically sound padding modes in the application code. Encrypting user data directly with RSA is insecure. 4: EME-OAEP as defined in PKCS # 1 v2.0 with SHA-1, MGF1 and an empty encoding parameter. This mode is recommended for all new applications. 5: X931 padding. Default if not specified is 1.

1

Result Returns decrypted data or error.

Description

Using RSA keys with any key size.
Password is optional for decrypting encrypted keys.

You can decrypt the data here after encrypting it with `RSA.PublicEncrypt`.
You can create a new private key using `RSA.GeneratePrivateKey` function.

Examples

Decrypt with private key:

```
Set Variable [ $r; Value:MBS( "RSA.PrivateDecrypt"; "base64"; RSA Public Private Encryption::EncryptedText; ""; "Text"; RSA Public Private Encryption::PrivateKey; "UTF-8"; "Text"; "UTF-8" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
Else
Set Field [ RSA Public Private Encryption::DecryptedText; $r ]
End If
```

See also

- 124.6 IsError 6266
- 149.13 RSA.GeneratePrivateKey 7075
- 73.15 RSA.PrivateEncrypt 3476
- 73.17 RSA.PublicEncrypt 3482

Example Databases

- [Encryption and Hash/RSA Public Private Encryption](#)

73.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 21st April 2016, last changed 30th May 2016.

73.15 RSA.PrivateEncrypt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	6.2	Yes	Yes	Yes	Yes	Yes

MBS("RSA.PrivateEncrypt"; InputType; InputData; InputEncoding; KeyType; KeyData; KeyEncoding; OutputType { ; OutputInfo; PasswordType; PasswordData; PasswordEncoding; Padding })

Parameters

InputType

The type of input data. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

InputData

The actual input data. Text, container or file path.
"Hello World"

InputEncoding

The text encoding for text input. Parameter is ignored for other cases.
"UTF-8"

KeyType

The type of input for private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Path"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"/Users/cs/desktop/test.pem"

KeyEncoding

The text encoding for text input for the key. Parameter is ignored for other cases.

OutputType

The output type. Can be Base64, Hex, Text, File, Path.
"Hex"

OutputInfo

Optional

The addition info for output. For text it is the text encoding, for file container the file name and for path the actual native file path.
""

PasswordType

Optional

The type of input for the password of the private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

PasswordData

Optional

The actual input data for the password of the private key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.
"UTF-8"

Padding

Optional

Which padding to use. 1: PKCS # 1 v1.5 padding. This currently is the most widely used mode. 2: PKCS # 1 v1.5 padding with an SSL-specific modification that denotes that the server is SSL3 capable. 3: Raw RSA encryption. This mode should only be used to implement cryptographically sound padding modes in the application code. Encrypting user data directly with RSA is insecure. 4: EME-OAEP as defined in PKCS # 1 v2.0 with SHA-1, MGF1 and an empty encoding parameter. This mode is recommended for all new applications. 5: X931 padding. Default if not specified is 1.

1

Result Returns encrypted data or error.

Description

Using RSA keys with any key size.
Password is optional for decrypting encrypted keys.

You can encrypt the data here and later decrypt with `RSA.PublicDecrypt`.
You can create a new private key using `RSA.GeneratePrivateKey` function.

Examples

Encrypt with private key:

```
Set Variable [ $r; Value:MBS( "RSA.PrivateEncrypt"; "Text"; RSA Public Private Encryption::InputText;
"UTF-8"; "Text"; RSA Public Private Encryption::PrivateKey; "UTF-8"; "Base64" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
Else
Set Field [ RSA Public Private Encryption::EncryptedText; $r ]
End If
```

See also

- 124.6 IsError 6266
- 149.13 RSA.GeneratePrivateKey 7075
- 73.14 RSA.PrivateDecrypt 3473
- 73.16 RSA.PublicDecrypt 3479

Example Databases

- [Encryption and Hash/RSA Public Private Encryption](#)

73.15.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 21st April 2016, last changed 30th May 2016.

73.16 RSA.PublicDecrypt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	6.2	Yes	Yes	Yes	Yes	Yes

MBS("RSA.PublicDecrypt"; InputType; InputData; InputEncoding; KeyType; KeyData; KeyEncoding; OutputType { ; OutputInfo; PasswordType; PasswordData; PasswordEncoding; Padding })

Parameters

InputType

The type of input data. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Base64"

InputData

The actual input data. Text, container or file path.
\$EncryptedData

InputEncoding

The text encoding for text input. Parameter is ignored for other cases.
""

KeyType

The type of input for private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Path"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"/Users/cs/desktop/test.pem"

KeyEncoding

The text encoding for text input for the key. Parameter is ignored for other cases.

OutputType

The output type. Can be Base64, Hex, Text, File, Path.
"Text"

OutputInfo

Optional

The addition info for output. For text it is the text encoding, for file container the file name and for path the actual native file path.
"UTF-8"

PasswordType

Optional

The type of input for the password of the private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

PasswordData

Optional

The actual input data for the password of the private key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.

"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

Padding

Optional

Which padding to use. 1: PKCS # 1 v1.5 padding. This currently is the most widely used mode. 2: PKCS # 1 v1.5 padding with an SSL-specific modification that denotes that the server is SSL3 capable. 3: Raw RSA encryption. This mode should only be used to implement cryptographically sound padding modes in the application code. Encrypting user data directly with RSA is insecure. 4: EME-OAEP as defined in PKCS # 1 v2.0 with SHA-1, MGF1 and an empty encoding parameter. This mode is recommended for all new applications. 5: X931 padding. Default if not specified is 1.

1

Result Returns decrypted data or error.

Description

Using RSA keys with any key size.

Password is optional for decrypting encrypted keys.

You can decrypt the data here after encrypting it with `RSA.PrivateEncrypt`.

You can create a new private key using `RSA.GeneratePrivateKey` function. The `RSA.GetPublicKey` function extracts the public key from a private key.

Examples

Decrypt with public key:

```
Set Variable [ $r; Value:MBS( "RSA.PublicDecrypt"; "base64"; RSA Public Private Encryption::EncryptedText; ""; "Text"; RSA Public Private Encryption::PublicKey; "UTF-8"; "Text"; "UTF-8" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
Else
Set Field [ RSA Public Private Encryption::DecryptedText; $r ]
End If
```

See also

- 124.6 IsError 6266
- 149.13 RSA.GeneratePrivateKey 7075
- 149.14 RSA.GetPublicKey 7077
- 73.15 RSA.PrivateEncrypt 3476

73.16. *RSA.PUBLICDECRYPT*

3481

- 73.17 RSA.PublicEncrypt

3482

Example Databases

- [Encryption and Hash/RSA Public Private Encryption](#)

73.16.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 21st April 2016, last changed 30th May 2016.

73.17 RSA.PublicEncrypt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
73 Encryption	6.2	Yes	Yes	Yes	Yes	Yes

MBS("RSA.PublicEncrypt"; InputType; InputData; InputEncoding; KeyType; KeyData; KeyEncoding; OutputType { ; OutputInfo; PasswordType; PasswordData; PasswordEncoding; Padding })

Parameters

InputType

The type of input data. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

InputData

The actual input data. Text, container or file path.
"Hello World"

InputEncoding

The text encoding for text input. Parameter is ignored for other cases.
"UTF-8"

KeyType

The type of input for private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Path"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"/Users/cs/desktop/test.pem"

KeyEncoding

The text encoding for text input for the key. Parameter is ignored for other cases.

OutputType

The output type. Can be Base64, Hex, Text, File, Path.
"Hex"

OutputInfo

Optional

The addition info for output. For text it is the text encoding, for file container the file name and for path the actual native file path.
""

PasswordType

Optional

The type of input for the password of the private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

PasswordData

Optional

The actual input data for the password of the private key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.
"UTF-8"

Padding

Optional

Which padding to use. 1: PKCS # 1 v1.5 padding. This currently is the most widely used mode. 2: PKCS # 1 v1.5 padding with an SSL-specific modification that denotes that the server is SSL3 capable. 3: Raw RSA encryption. This mode should only be used to implement cryptographically sound padding modes in the application code. Encrypting user data directly with RSA is insecure. 4: EME-OAEP as defined in PKCS # 1 v2.0 with SHA-1, MGF1 and an empty encoding parameter. This mode is recommended for all new applications. 5: X931 padding. Default if not specified is 1.

1

Result Returns encrypted data or error.

Description

Using RSA keys with any key size.
Password is optional for decrypting encrypted keys.

You can encrypt the data here and later decrypt with `RSA.PrivateDecrypt`.

You can create a new private key using `RSA.GeneratePrivateKey` function. The `RSA.GetPublicKey` function extracts the public key from a private key.

Examples

Encrypt with public key:

```
Set Variable [ $r; Value:MBS( "RSA.PublicEncrypt"; "Text"; RSA Public Private Encryption::InputText;
"UTF-8"; "Text"; RSA Public Private Encryption::PublicKey; "UTF-8"; "Base64" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
Else
Set Field [ RSA Public Private Encryption::EncryptedText; $r ]
End If
```

See also

- 124.6 IsError 6266
- 149.13 RSA.GeneratePrivateKey 7075
- 149.14 RSA.GetPublicKey 7077
- 73.14 RSA.PrivateDecrypt 3473

- 73.16 RSA.PublicDecrypt

Example Databases

- [Encryption and Hash/RSA Public Private Encryption](#)

73.17.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 21st April 2016, last changed 30th May 2016.

Chapter 74

Environment Variables

Set and query environment variables from operation system.

74.1 EnvironmentVariables.ClearValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
74 EnvironmentVariables	5.1	Yes	Yes	Yes	Yes	Yes

MBS("EnvironmentVariables.ClearValue"; Name)

Parameters

Name

The name of the environment variable.

"test"

Result Returns OK or error.

Description

Only visible within FileMaker application and subprocesses launched after the change.

Examples

Clear a variable:

MBS("EnvironmentVariables.ClearValue"; "test")

See also

- 74.5 EnvironmentVariables.SetValue 3490
- 74.6 EnvironmentVariables.Value 3491

Example Databases

- [Utility functions/Environment Variables](#)

Created 8th April 2015, last changed 8th April 2015.

74.2 EnvironmentVariables.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
74 EnvironmentVariables	5.1	Yes	Yes	Yes	Yes	Yes

MBS("EnvironmentVariables.Count")

Result Returns number or error.

Description

Examples

Query count:

Set Variable [\$count; Value:MBS("EnvironmentVariables.Count")]

See also

- [74.3 EnvironmentVariables.Name](#) 3488
- [74.4 EnvironmentVariables.Names](#) 3489
- [74.6 EnvironmentVariables.Value](#) 3491

Example Databases

- [Utility functions/Environment Variables](#)

Created 8th April 2015, last changed 8th April 2015.

74.3 EnvironmentVariables.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
74 EnvironmentVariables	5.1	Yes	Yes	Yes	Yes	Yes

MBS("EnvironmentVariables.Name"; Index)

Parameters

Index

The zero based index of the environment variable in range 0 to EnvironmentVariables.Count-1.

0

Result Returns text or error.

Description

Examples

Query name of first variable:

```
Set Variable [ $name; Value:MBS("EnvironmentVariables.Name"; 0) ]
```

See also

- [74.2 EnvironmentVariables.Count](#) 3487
- [74.4 EnvironmentVariables.Names](#) 3489
- [74.5 EnvironmentVariables.SetValue](#) 3490
- [74.6 EnvironmentVariables.Value](#) 3491

Example Databases

- [Utility functions/Environment Variables](#)

Created 8th April 2015, last changed 8th April 2015.

74.4 EnvironmentVariables.Names

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
74 EnvironmentVariables	5.1	Yes	Yes	Yes	Yes	Yes

MBS("EnvironmentVariables.Names")

Result Returns list or error.

Description

Returns empty list on Linux as the environment variables are not publicly listable. You can still query some, if you know the names.

Examples

Query list of names:

MBS("EnvironmentVariables.Names")

See also

- [74.2 EnvironmentVariables.Count](#) 3487
- [74.3 EnvironmentVariables.Name](#) 3488
- [74.5 EnvironmentVariables.Set Value](#) 3490
- [74.6 EnvironmentVariables.Value](#) 3491

74.4.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)
- [FileMaker Cloud Tipps & Tricks](#)

Created 8th April 2015, last changed 10th December 2017.

74.5 EnvironmentVariables.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
74 EnvironmentVariables	5.1	Yes	Yes	Yes	Yes	Yes

MBS("EnvironmentVariables.SetValue"; Name; Value)

Parameters

Name

The name of the environment variable.

"test"

Value

The new value as text.

"Hello"

Result Returns OK or error.

Description

Only visible within FileMaker application and subprocesses launched after the change.

Examples

Set a new Variable:

MBS("EnvironmentVariables.SetValue"; "test"; "Hello World")

See also

- [74.1 EnvironmentVariables.ClearValue](#) 3485
- [74.3 EnvironmentVariables.Name](#) 3488
- [74.4 EnvironmentVariables.Names](#) 3489
- [74.6 EnvironmentVariables.Value](#) 3491
- [123.6 PHP.Init](#) 6253

Example Databases

- [Utility functions/Environment Variables](#)

Created 8th April 2015, last changed 8th April 2015.

74.6 EnvironmentVariables.Value

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
74 EnvironmentVariables	5.1	Yes	Yes	Yes	Yes	Yes

MBS("EnvironmentVariables.Value"; Name)

Parameters

Name

The name of the environment variable.

"test"

Result Returns text or error.

Description

Examples

Query user name on Mac:

MBS("EnvironmentVariables.Value"; "USER")

Query user name on Windows:

MBS("EnvironmentVariables.Value"; "USERNAME")

Query app data path on Windows:

MBS("EnvironmentVariables.Value"; "APPDATA")

Query language on FileMaker Cloud:

MBS("EnvironmentVariables.Value"; "LANG")

See also

- [74.1 EnvironmentVariables.ClearValue](#) 3485
- [74.2 EnvironmentVariables.Count](#) 3487
- [74.3 EnvironmentVariables.Name](#) 3488
- [74.4 EnvironmentVariables.Names](#) 3489
- [74.5 EnvironmentVariables.SetValue](#) 3490

Example Databases

- [Utility functions/Environment Variables](#)

74.6.1 Blog Entries

- [FileMaker Cloud Tipps & Tricks](#)

Created 8th April 2015, last changed 10th December 2017.

Chapter 75

EventMonitor

Watch events and query mouse button of last mouse click.

75.1 EventMonitor.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	5.2	Yes	Yes	No	No	No

MBS("EventMonitor.Clear")

Result Returns OK or error.

Description

You should not need to call this, except maybe on the end of the script to make sure you clear the last event for next script call.

This includes which button was last clicked. Plugin version 9.4 also forgets whether it was a double click.

See also

- [75.2 EventMonitor.ClearCardWindow](#) 3494
- [75.9 EventMonitor.SetCardWindow](#) 3501

75.1.1 Blog Entries

- [EventMonitor](#)

Created 21st June 2015, last changed 24th July 2019.

75.2 EventMonitor.ClearCardWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	7.3	Yes	Yes	No	No	No

MBS("EventMonitor.ClearCardWindow")

Result Returns OK or error.

Description

Please call in close trigger for the card layout and in script triggered by EventMonitor.SetCardWindow.

Examples

Close script:

Close Window [Name: "Card" ; Current file]

Set Variable [\$r ; Value: MBS("EventMonitor.ClearCardWindow")]

See also

- [75.1 EventMonitor.Clear](#) 3493
- [75.9 EventMonitor.SetCardWindow](#) 3501

Example Databases

- [Window/Card Window Test](#)
- [Window/Popover CardWindow](#)

75.2.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)
- [FileMaker 16 Card Window hacks with MBS Plugin](#)

Created 2nd June 2017, last changed 2nd June 2017.

75.3 EventMonitor.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	6.3	Yes	Yes	Yes	No	No

MBS("EventMonitor.GetEnabled")

Result Returns value or error.

Description

Returns 1 if enabled and 0 if disabled.

See also

- [75.10 EventMonitor.SetEnabled](#)

3504

Example Databases

- [Window/Popover CardWindow](#)

75.3.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr1](#)

Created 30th May 2016, last changed 30th May 2016.

75.4 EventMonitor.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	5.2	Yes	Yes	No	No	No

MBS("EventMonitor.Install")

Result Returns OK or error.

Description

This allows the plugin to keep track of mouse events, so the EventMonitor.LastMouseClickedButton function can know what mouse button was pressed.

See also

- [75.5 EventMonitor.LastMouseClickedButton](#) 3497
- [75.6 EventMonitor.LastMouseClickedIsDoubleClick](#) 3498
- [75.9 EventMonitor.SetCardWindow](#) 3501
- [75.10 EventMonitor.SetEnabled](#) 3504
- [161.10 SystemInfo.IdleTime](#) 7661

Example Databases

- [EventMonitor DoubleClick](#)
- [Window/Card Window Test](#)
- [Window/Popover CardWindow](#)

75.4.1 Blog Entries

- [EventMonitor](#)

Created 21st June 2015, last changed 21st June 2015.

75.5 EventMonitor.LastMouseClickedButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	5.2	Yes	Yes	No	No	No

MBS("EventMonitor.LastMouseClickedButton")

Result Returns number or error.

Description

Returns 1 for left, 2 for right and 3 for other. (other is Mac only currently)

Please call EventMonitor.Install earlier in your scripts once on startup of solution.

Call this function in a script triggered by a mouse click (e.g. on a button) to see if mouse event triggering the script was using right or left mouse button.

See also

- [75.4 EventMonitor.Install](#) 3496
- [75.7 EventMonitor.LastMousePositionX](#) 3499
- [75.8 EventMonitor.LastMousePositionY](#) 3500
- [112.22 Menu.PopUp](#) 5882

Example Databases

- [EventMonitor DoubleClick](#)

75.5.1 Blog Entries

- [EventMonitor](#)

Created 21st June 2015, last changed 29th July 2015.

75.6 EventMonitor.LastMouseClickedIsDoubleClick

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	5.2	Yes	Yes	No	No	No

MBS("EventMonitor.LastMouseClickedIsDoubleClick")

Result Returns 0, 1 or error.

Description

Returns 0 for single click and 1 for double click.

Please call EventMonitor.Install earlier in your scripts once on startup of solution.

Call this function in a script triggered by a mouse click (e.g. on a button) to see if mouse event triggering the script was a double click.

See also

- [75.4 EventMonitor.Install](#) 3496

Example Databases

- [EventMonitor DoubleClick](#)

75.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 29th July 2015, last changed 29th July 2015.

75.7 EventMonitor.LastMousePositionX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	7.3	Yes	Yes	No	No	No

MBS("EventMonitor.LastMousePositionX"; PerWindow)

Parameters

PerWindow

Pass 1 to get coordinates relative to the window at mouse position (Mac) or front window (Win). Or pass 0 to get screen coordinates. (default)

1

Result Returns value or error.

Description

Relative to top/left of main screen.

See also RemoteControl.MouseX.

See also

- [75.5 EventMonitor.LastMouseClickedButton](#) 3497
- [75.8 EventMonitor.LastMousePositionY](#) 3500
- [137.5 RemoteControl.MouseX](#) 6698

75.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr2](#)
- [MBS FileMaker Plugin, version 7.3pr3](#)

Created 19th June 2017, last changed 20th December 2018.

75.8 EventMonitor.LastMousePositionY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	7.3	Yes	Yes	No	No	No

MBS("EventMonitor.LastMousePositionY"; PerWindow)

Parameters

PerWindow

Pass 1 to get coordinates relative to the window at mouse position (Mac) or front window (Win). Or pass 0 to get screen coordinates. (default)

1

Result Returns value or error.

Description

Relative to top/left of main screen.

See also RemoteControl.MouseY.

See also

- [75.5 EventMonitor.LastMouseClickedButton](#) 3497
- [75.7 EventMonitor.LastMousePositionX](#) 3499
- [137.6 RemoteControl.MouseY](#) 6699

75.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr2](#)
- [MBS FileMaker Plugin, version 7.3pr3](#)

Created 19th June 2017, last changed 20th December 2018.

75.9 EventMonitor.SetCardWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	7.3	Yes	Yes	No	No	No

MBS("EventMonitor.SetCardWindow"; WindowRef; X; Y; Width; Height; FileName; ScriptName { ; ScriptParameter; ScriptControl })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

X

X position of the card in the parent window. Can be negative for automatic center position.

-1

Y

Y position of the card in the parent window. Can be negative for automatic center position. You may need to include space for formatting, status toolbar and menu bar (inside window on Windows).

-1

Width

The width of the card window.

600

Height

The height of the card window.

400

FileName

The file name where to find the script.

Get(FileName)

ScriptName

The name of the script to trigger when a click is received outside the card area.

"Close Card Script"

ScriptParameter

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The text parameter to pass to the script.

"Close"

ScriptControl

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The script control mode. Can be Pause, Halt, Exit or Resume. Default is Pause.

"pause"

Result Returns OK or error.

Description

You can show a card and have the MBS Plugin watch for mouse clicks outside the card area. The plugin can trigger a script. As script triggers are queued up, please make sure you handle various cases like several clicks queue up.

Please call `EventMonitor.Install` once before and make sure it's enabled.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Install trigger:

```
Set Variable [ $r ; Value: MBS( "EventMonitor.Install" ) ]
Set Variable [ $$cardShowing ; Value: 1 ]
Set Variable [ $r ; Value: MBS( "EventMonitor.SetCardWindow"; Get(WindowName); -1; -1; 600; 400;
Get(FileName); "Close Script" ) ]
New Window [ Style: Card ; Name: "Card" ; Using layout: "Tabelle" ; Height: 400 ; Width: 600 ]
```

Close script:

```
If [ $$cardShowing ]
Set Variable [ $$cardShowing ; Value: 0 ]
Close Window [ Name: "Card" ; Current file ]
Set Variable [ $r ; Value: MBS("EventMonitor.ClearCardWindow") ]
End If
```

See also

- [75.1 EventMonitor.Clear](#) 3493
- [75.2 EventMonitor.ClearCardWindow](#) 3494
- [75.4 EventMonitor.Install](#) 3496
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

Example Databases

- [Window/Card Window Test](#)
- [Window/Popover CardWindow](#)

75.9.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr1](#)
- [MBS FileMaker Plugin, version 7.3pr1](#)
- [FileMaker 16 Card Window hacks with MBS Plugin](#)

Created 2nd June 2017, last changed 11st June 2019.

75.10 EventMonitor.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
75 EventMonitor	6.3	Yes	Yes	Yes	No	No

MBS("EventMonitor.SetEnabled"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

0

Result Returns OK or error.

Description

This way you can temporary disable it and later enable it again.

You also need to call EventMonitor.Install once.

Examples

Enable event monitor:

```
MBS("EventMonitor.SetEnabled"; 1)
```

Disable event monitor:

```
MBS("EventMonitor.SetEnabled"; 0)
```

See also

- [75.3 EventMonitor.GetEnabled](#) 3495
- [75.4 EventMonitor.Install](#) 3496

75.10.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr1](#)

Created 30th May 2016, last changed 30th May 2016.

Chapter 76

Events

Newer OS X event functions to work with events and reminders.

You may have events or todo items in your FileMaker database. Our plugin can help you sync them into the calendar database on Mac, e.g. create events and reminders into specific calendars. If one Mac has a calendar subscribed for each member of staff and those sync via iCloud/Google/Exchange to their mobile phones, your solution can push events or reminders to your staff on one central routine.

Require 64-bit application, so use with FileMaker 14 and newer.

On Server you can only use calendar functions if you got a calendar for the user account where the server runs. Normally the server user account has no calendars.

Use this functions to sync events to iCal/Calendar app.

Please do not mix Calendar and Events calls as they use different IDs.

76.1 Events.Alarm.Copy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.Copy"; EKAlarm)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns alarm ID or error.

Description

3506

CHAPTER 76. EVENTS

Returns a new alarm's ID.

See also

- 76.17 Events.Alarm.Type

3524

Created 10th March 2016, last changed 12nd March 2016.

76.2 Events.Alarm.GetAbsoluteDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.GetAbsoluteDate"; EKAlarm)

Parameters**EKAlarm**

The reference to the alarm.

\$Alarm

Result Returns timestamp or error.

Description**Examples**

Queries absolute date:

MBS("Events.Alarm.GetAbsoluteDate"; \$r)

See also

- 76.9 Events.Alarm.SetAbsoluteDate 3514
- 76.90 Events.NewAlarmWithAbsoluteDate 3609

Created 10th March 2016, last changed 10th March 2016.

76.3 Events.Alarm.GetEmailAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.GetEmailAddress"; EKAlarm)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns text or error.

Description

An email address that is the recipient of an email alarm, which is an alarm that triggers an email message.

See also

- 47.5 Calendar.Alarm.GetEmailAddress 1234
- 47.13 Calendar.Alarm.SetEmailAddress 1242
- 76.10 Events.Alarm.SetEmailAddress 3515

Created 10th March 2016, last changed 13th August 2016.

76.4 Events.Alarm.GetProximity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.GetProximity"; EKAlarm)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns OK or error.

Description

Defines whether this alarm triggers via entering/exiting a geofence as defined by structuredLocation.

Examples

Query proximity:

MBS("Events.Alarm.GetProximity"; "56001")

See also

- 76.11 Events.Alarm.SetProximity

3516

Created 10th March 2016, last changed 13th March 2016.

76.5 Events.Alarm.GetRelativeOffset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.GetRelativeOffset"; EKAlarm)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns number or error.

Description

Value is in seconds.

Examples

Query relative offset:

MBS("Events.Alarm.GetRelativeOffset"; \$alarm)

See also

- 76.12 Events.Alarm.SetRelativeOffset 3517
- 76.91 Events.NewAlarmWithRelativeOffset 3610

Created 10th March 2016, last changed 10th March 2016.

76.6 Events.Alarm.GetSound

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.GetSound"; EKAlarm)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns text or error.

Description

See also

- 47.8 Calendar.Alarm.GetSound 1237
- 76.8 Events.Alarm.GetURL 3513
- 76.13 Events.Alarm.SetSound 3518

Created 10th March 2016, last changed 13th August 2016.

76.7 Events.Alarm.GetStructuredLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.GetStructuredLocation"; EKAlarm)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns structured location reference number or error.

Description

Allows you to set a structured location (a location with a potential geo-coordinate) on an alarm. This is used in conjunction with proximity to do geofence-based triggering of reminders.

See also

- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.45 Events.Event.GetStructuredLocation 3554
- 76.53 Events.Event.SetStructuredLocation 3564

Created 10th March 2016, last changed 10th March 2016.

76.8 Events.Alarm.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.GetURL"; EKAlarm)

Parameters**EKAlarm**

The reference to the alarm.

\$Alarm

Result Returns URL or error.

Description**See also**

- 76.6 Events.Alarm.GetSound 3511
- 76.15 Events.Alarm.SetURL 3522
- 76.73 Events.Item.GetURL 3586
- 76.86 Events.Item.SetURL 3603

Created 10th March 2016, last changed 13th August 2016.

76.9 Events.Alarm.SetAbsoluteDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.SetAbsoluteDate"; EKAlarm; TimeStamp)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

TimeStamp

The timestamp to fire the alarm.

Get(CurrentHostTimeStamp) + 24 * 60 * 60

Result Returns OK or error.

Description

Set this property to a date to establish an absolute alarm trigger. Setting this clears any relative interval trigger.

See also

- 76.2 Events.Alarm.GetAbsoluteDate 3507
- 76.90 Events.NewAlarmWithAbsoluteDate 3609

Created 10th March 2016, last changed 10th March 2016.

76.10 Events.Alarm.SetEmailAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.SetEmailAddress"; EKAlarm; Email)

Parameters**EKAlarm**

The reference to the alarm.

\$Alarm

Email

The new email address.

"alarm@test.test"

Result Returns OK or error.

Description

An email address that is the recipient of an email alarm, which is an alarm that triggers an email message. When you set the emailAddress, the type is set to Email, and the soundName and url are cleared.

See also

- 47.5 Calendar.Alarm.GetEmailAddress 1234
- 47.13 Calendar.Alarm.SetEmailAddress 1242
- 76.3 Events.Alarm.GetEmailAddress 3508

Created 10th March 2016, last changed 13th August 2016.

76.11 Events.Alarm.SetProximity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.SetProximity"; EKAlarm; Proximity)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Proximity

The proximity. Can be None, Leave or Enter.

"Leave"

Result Returns OK or error.

Description

Defines whether this alarm triggers via entering/exiting a geofence as defined by structuredLocation.

See also

- 76.4 Events.Alarm.GetProximity 3509
- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.61 Events.Item.AddAlarm 3572
- 76.89 Events.NewAlarm 3607
- 76.94 Events.NewReminder 3614
- 76.155 Events.SaveReminder 3684
- 76.167 Events.StructuredLocation.NewLocationWithTitle 3699

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 10th March 2016.

76.12 Events.Alarm.SetRelativeOffset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.SetRelativeOffset"; EKAlarm)

Parameters**EKAlarm**

The reference to the alarm.

\$Alarm

Result Returns OK or error.

Description

Set this property to an appropriate negative value to establish an alarm trigger relative to the start date/time of an event. Setting this clears any existing date trigger.

Value is in seconds.

See also

- 76.5 Events.Alarm.GetRelativeOffset 3510
- 76.91 Events.NewAlarmWithRelativeOffset 3610

Created 10th March 2016, last changed 10th March 2016.

76.13 Events.Alarm.SetSound

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.SetSound"; EKAlarm; Sound)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Sound

The name of the sound file. See /Library/Sounds and /System/Library/Sounds folders.

"Submarine"

Result Returns OK or error.

Description

The value of this property is the name of a system sound. When you set the soundName property, the action property is set to Audio, and the emailAddress and url properties are cleared.

Examples

Add alarm with sound 15 minutes before event:

```
Set Variable [ $alarm2; Value:MBS( "Events.NewAlarmWithRelativeOffset"; -15*60 ) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetSound"; $alarm2; "Submarine" ) ]
Set Variable [ $r; Value:MBS("Events.Item.AddAlarm"; $c; $alarm2) ]
```

See also

- 47.16 Calendar.Alarm.SetSound 1245
- 76.6 Events.Alarm.GetSound 3511
- 76.15 Events.Alarm.SetURL 3522
- 76.61 Events.Item.AddAlarm 3572
- 76.89 Events.NewAlarm 3607
- 76.91 Events.NewAlarmWithRelativeOffset 3610
- 76.94 Events.NewReminder 3614
- 76.155 Events.SaveReminder 3684

Example Databases

- [Mac and iOS/Events/Events Create Event](#)

- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th August 2016.

76.14 Events.Alarm.SetStructuredLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.SetStructuredLocation"; EKAlarm; EKStructuredLocation)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

EKStructuredLocation

The reference to the structured location.

\$StructuredLocation

Result Returns OK or error.

Description

Examples

Create structured location for alarm:

```
Set Variable [ $l; Value:MBS( "Events.StructuredLocation.NewLocationWithTitle"; Events Create Reminder::Alarm-LocationTitle ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetRadius"; $l; Events Create Reminder::Alarm-LocationRadius ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetGeoLocation"; $l; Events Create Reminder::Alarm-LocationGeoLat; Events Create Reminder::AlarmLocationGeoLong ) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetStructuredLocation"; $alarm; $l) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetProximity"; $alarm; Events Create Reminder::AlarmProximity ) ]
```

See also

- 76.7 Events.Alarm.GetStructuredLocation 3512
- 76.11 Events.Alarm.SetProximity 3516
- 76.45 Events.Event.GetStructuredLocation 3554
- 76.61 Events.Item.AddAlarm 3572
- 76.89 Events.NewAlarm 3607
- 76.94 Events.NewReminder 3614
- 76.155 Events.SaveReminder 3684
- 76.167 Events.StructuredLocation.NewLocationWithTitle 3699

76.14. <i>EVENTS.ALARM.SETSTRUCTUREDLOCATION</i>	3521
• 76.168 Events.StructuredLocation.SetGeoLocation	3701
• 76.169 Events.StructuredLocation.SetRadius	3702

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.15 Events.Alarm.SetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.SetURL"; EKAlarm)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns OK or error.

Description

When you set the url property, the action property is set to Procedure, and the emailAddress and soundName properties are cleared.

Note: Starting with OS X 10.9, it is not possible to create new procedure alarms or view URLs for existing procedure alarms.

Trying to save or modify a procedure alarm will result in a save error.

Editing other aspects of events or reminders that have existing procedure alarms is allowed as long as the alarm isn't modified.

See also

- 76.8 Events.Alarm.GetURL 3513
- 76.13 Events.Alarm.SetSound 3518
- 76.73 Events.Item.GetURL 3586
- 76.86 Events.Item.SetURL 3603

Created 10th March 2016, last changed 13th August 2016.

76.16 Events.Alarm.TriggerDateRelativeTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.TriggerDateRelativeTo"; EKAlarm { ; Timestamp })

Parameters**EKAlarm**

The reference to the alarm.

\$Alarm

Timestamp

Optional

The timestamp to use for finding next trigger time. Default is now.

Get(CurrentHostTimeStamp)

Result Returns OK or error.

Description

You can pass a timestamp to calculate relative to it.

Examples

Query next alarm time:

MBS("Events.Alarm.TriggerDateRelativeTo"; "56004"; Get(CurrentHostTimeStamp))

See also

- 47.18 Calendar.Alarm.TriggerDateRelativeTo

1247

Created 10th March 2016, last changed 10th March 2016.

76.17 Events.Alarm.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Alarm.Type"; EKAlarm)

Parameters

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns text or error.

Description

Can be Display, Email, Procedure or Sound.

Display The alarm displays a message.

Sound The alarm plays a sound.

URL The alarm opens a URL.

Email The alarm sends an email.

This field is read-only; to change the type of alarm, set emailAddress, sound or URL.

Setting all of those to empty text will change it to type Display.

See also

- 76.1 Events.Alarm.Copy 3505
- 76.161 Events.Source.Type 3693

Created 10th March 2016, last changed 13th August 2016.

76.18 Events.AuthorizationStatusForEntityType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.AuthorizationStatusForEntityType"; Type)

Parameters**Type**

Which entity type you like to check: Event or Reminder.

"Event"

Result Returns status or error.

Description

You can check and see if your solution is allowed to use the calendar.

Value is NotDetermined, Restricted, Denied or Authorized.

You can use Events.requestAccessToEntityType to request access.

Examples

Query authorization:

```

Set Variable [ $r; Value:MBS("Events.AuthorizationStatusForEntityType"; "Reminder") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "We have a problem"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Else If [ $r = "NotDetermined" ]
Set Variable [ $r; Value:MBS( "Events.requestAccessToEntityType"; "Reminder" ) ]
If [ $r = "Wait" ]
# dialog is showing.
Else If [ $r = "OK" ]
Show Custom Dialog [ "Success"; "We are authorized and ready to go." ]
Else
Show Custom Dialog [ "We have a problem"; $r ]
End If
Else If [ $r = "Restricted" ]
Show Custom Dialog [ "Success"; "We are authorized for a restricted access and ready to go." ]
Else If [ $r = "Denied" ]
Show Custom Dialog [ "Problem"; "We are denied for calendar access. Please go to system preferences and enable us." ]
Else If [ $r = "Authorized" ]
Show Custom Dialog [ "Success"; "We are authorized and ready to go." ]
Else
Show Custom Dialog [ "We have a problem"; $r ]
End If

```

See also

- 76.60 Events.Initialize 3571
- 76.173 Events.requestAccessToEntityType 3706
- 124.6 IsError 6266
- 164.57 Text.RemovePrefix 7854

Example Databases

- [Mac and iOS/Events/Events Changes](#)
- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)
- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

76.18.1 Blog Entries

- [Calendar access in FileMaker 18](#)

Created 10th March 2016, last changed 13th March 2016.

76.19 Events.Calendar.AllowsContentModifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.AllowsContentModifications"; EKCalendar)

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

Result Returns 1, 0 or error.

Description

Returns 1 if you can modify the calendar.

Created 10th March 2016, last changed 12nd March 2016.

76.20 Events.Calendar.CalendarIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.CalendarIdentifier"; EKCalendar)

Parameters

EKCalendar

The id of the calendar to query.

\$calendar

Result Returns ID or error.

Description

It is not sync-proof in that a fullsync will lose this identifier, so you should always have a back up plan for dealing with a calendar that is no longer fetchable by this property, e.g. by title, type, color, etc.

This function should not needed unless you want to map a plugin given ID to a real calendar ID.

Examples

Query ID by name:

MBS("Events.Calendar.CalendarIdentifier"; "Firma")

Created 10th March 2016, last changed 22nd May 2016.

76.21 Events.Calendar.Duplicate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.Duplicate"; EKCalendar)

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

Result Returns ID or error.

Description

Returns a new ID for the new calendar.

See also

- 47.22 Calendar.Calendar.Duplicate 1251
- 76.24 Events.Calendar.GetTitle 3533
- 76.29 Events.Calendar.SetTitle 3538

Created 10th March 2016, last changed 12nd March 2016.

76.22 Events.Calendar.GetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.GetColor"; EKCalendar { ; ReturnAsNumbers })

Parameters

EKCalendar

The id of the calendar to query.

\$calendar

ReturnAsNumbers

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

Pass 1 to return color as list of red, green and blue, e.g. "123§234§56" Pass 0 (default) for return as hex value, e.g. "7788FF".

0

Result Returns color value or error.

Description

Examples

Returns color for calendar:

```
MBS( "Events.Calendar.GetColor"; "Firma" )
```

Returns for calendar identified by ID:

```
MBS( "Events.Calendar.GetColor"; "51AC6CC1-C4AB-40D0-BB30-A8AAFB280ABD")
```

See also

- 47.23 Calendar.Calendar.GetColor 1252
- 47.29 Calendar.Calendar.SetColor 1260
- 76.23 Events.Calendar.GetSource 3532
- 76.24 Events.Calendar.GetTitle 3533
- 76.25 Events.Calendar.GetType 3534
- 76.27 Events.Calendar.SetColor 3536
- 76.28 Events.Calendar.SetSource 3537
- 76.29 Events.Calendar.SetTitle 3538

76.22.1 **Blog Entries**

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 10th March 2016, last changed 13th June 2018.

76.23 Events.Calendar.GetSource

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.GetSource"; EKCalendar)

Parameters

EKCalendar

The id of the calendar to query.

\$calendar

Result Returns OK or error.

Description

The source representing the 'account' this calendar belongs to.

This is only settable when initially creating a calendar and then effectively read-only after that. That is, you can create a calendar, but you cannot move it to another source.

Examples

Query source title for calendar:

```
MBS( "Events.Source.Title"; MBS( "Events.Calendar.GetSource"; "Firma" ) )
```

See also

- 76.22 Events.Calendar.GetColor 3530
- 76.24 Events.Calendar.GetTitle 3533
- 76.25 Events.Calendar.GetType 3534
- 76.27 Events.Calendar.SetColor 3536
- 76.28 Events.Calendar.SetSource 3537
- 76.29 Events.Calendar.SetTitle 3538
- 76.160 Events.Source.Title 3692

Example Databases

- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 22nd May 2016.

76.24 Events.Calendar.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.GetTitle"; EKCalendar)

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

Result Returns text or error.

Description**See also**

- 47.25 Calendar.Calendar.GetTitle 1255
- 47.31 Calendar.Calendar.SetTitle 1262
- 76.21 Events.Calendar.Duplicate 3529
- 76.22 Events.Calendar.GetColor 3530
- 76.23 Events.Calendar.GetSource 3532
- 76.25 Events.Calendar.GetType 3534
- 76.28 Events.Calendar.SetSource 3537
- 76.29 Events.Calendar.SetTitle 3538
- 76.171 Events.defaultCalendarForNewEvents 3704
- 76.172 Events.defaultCalendarForNewReminders 3705

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.25 Events.Calendar.GetType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.GetType"; EKCalendar)

Parameters

EKCalendar

The id of the calendar to query.

\$calendar

Result Returns text or error.

Description

This is actually based on what source the calendar is in, as well as whether it is a subscribed calendar.

CalDAV subscribed calendars have type CalDAV with isSubscribed being true.

Type can be: Local, CalDAV, Exchange, Birthday or Subscription.

Examples

Query calendar type by ID:

MBS("Events.Calendar.GetType"; "51AC6CC1-C4AB-40D0-BB30-A8AAFB280ABD")

See also

- [47.26 Calendar.Calendar.GetType](#) 1257
- [76.22 Events.Calendar.GetColor](#) 3530
- [76.23 Events.Calendar.GetSource](#) 3532
- [76.24 Events.Calendar.GetTitle](#) 3533
- [76.27 Events.Calendar.SetColor](#) 3536
- [76.28 Events.Calendar.SetSource](#) 3537
- [76.29 Events.Calendar.SetTitle](#) 3538

Example Databases

- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 22nd May 2016.

76.26 Events.Calendar.Immutable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.Immutable"; EKCalendar)

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

Result Returns 0, 1 or error.

Description

If this is set to 1, it means you cannot modify any attributes of the calendar or delete it. It does NOT imply that you cannot add events or reminders to the calendar.

Examples

Query immutable status:

MBS("Events.Calendar.Immutable"; "51AC6CC1-C4AB-40D0-BB30-A8AAFB280ABD")

See also

- 76.24 Events.Calendar.GetTitle 3533
- 76.29 Events.Calendar.SetTitle 3538

Created 10th March 2016, last changed 22nd May 2016.

76.27 Events.Calendar.SetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.SetColor"; EKCalendar; Color)

Parameters

EKCalendar

The id of the calendar to query.

\$calendar

Color

The color to use. Can be a color name or hex notation like in HTML.

"red"

Result Returns OK or error.

Description

You need to save the changes to be persistent.

See also

- 47.23 Calendar.Calendar.GetColor 1252
- 47.29 Calendar.Calendar.SetColor 1260
- 76.22 Events.Calendar.GetColor 3530
- 76.23 Events.Calendar.GetSource 3532
- 76.24 Events.Calendar.GetTitle 3533
- 76.25 Events.Calendar.GetType 3534
- 76.28 Events.Calendar.SetSource 3537
- 76.29 Events.Calendar.SetTitle 3538

Created 10th March 2016, last changed 6th June 2019.

76.28 Events.Calendar.SetSource

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.SetSource"; EKCalendar; EKSource)

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

EKSource

The reference to the source.

\$Source

Result Returns OK or error.

Description

You need to save the changes to be persistent.

See also

- 76.22 Events.Calendar.GetColor 3530
- 76.23 Events.Calendar.GetSource 3532
- 76.24 Events.Calendar.GetTitle 3533
- 76.25 Events.Calendar.GetType 3534
- 76.27 Events.Calendar.SetColor 3536
- 76.29 Events.Calendar.SetTitle 3538

Created 12nd March 2016, last changed 12nd March 2016.

76.29 Events.Calendar.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.SetTitle"; EKCalendar)

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

Result Returns OK or error.

Description

You need to save the changes to be persistent.

See also

- 47.25 Calendar.Calendar.GetTitle 1255
- 47.31 Calendar.Calendar.SetTitle 1262
- 76.21 Events.Calendar.Duplicate 3529
- 76.22 Events.Calendar.GetColor 3530
- 76.23 Events.Calendar.GetSource 3532
- 76.24 Events.Calendar.GetTitle 3533
- 76.25 Events.Calendar.GetType 3534
- 76.26 Events.Calendar.Immutable 3535
- 76.27 Events.Calendar.SetColor 3536
- 76.28 Events.Calendar.SetSource 3537

Created 10th March 2016, last changed 12nd March 2016.

76.30 Events.Calendar.Subscribed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.Subscribed"; EKCalendar)

Parameters

EKCalendar

The id of the calendar to query.

\$calendar

Result Returns 0, 1 or error.

Description

Returns 1 if this calendar is a subscribed calendar.

Created 10th March 2016, last changed 12nd March 2016.

76.31 Events.Calendar.allowedEntityTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.allowedEntityTypes"; EKCalendar)

Parameters

EKCalendar

The id of the calendar to query.

\$calendar

Result Returns value or error.

Description

While Apple API only allows creation of single-entity calendars, other servers might allow mixed-entity calendars.

Returns list which can contain Event and/or Reminder.

Examples

Queries entities types by ID:

MBS("Events.Calendar.allowedEntityTypes"; "51AC6CC1-C4AB-40D0-BB30-A8AAFB280ABD")

Created 10th March 2016, last changed 22nd May 2016.

76.32 Events.Calendar.supportedEventAvailabilities

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendar.supportedEventAvailabilities"; EKCalendar)

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

Result Returns list or error.

Description

Returns empty list if this calendar does not support setting availability on an event.

Values include: Busy, Free, Tentative and Unavailable.

Created 10th March 2016, last changed 12nd March 2016.

76.33 Events.CalendarCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.CalendarCount"; entityType)

Parameters

entityType

The entity type that this calendar may support. Event or Reminder
"Event"

Result Returns number or error.

Description

Examples

Query all calendar count:

```
MBS( "Events.CalendarCount"; "events" ) + MBS( "Events.CalendarCount"; "reminder" )
```

Created 10th March 2016, last changed 24th March 2016.

76.34 Events.CalendarItemsWithExternalIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.CalendarItemsWithExternalIdentifier"; externalIdentifier)

Parameters**externalIdentifier**

The external identifier. As returned by Events.Item.CalendarItemExternalIdentifier.
\$identifier

Result Returns list or error.

Description

Returns either matching items or the first occurrences of any events matching the given external identifier. There may be more than one matching calendar item.

See also

- 76.65 Events.Item.CalendarItemExternalIdentifier

3577

Example Databases

- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 10th March 2016.

76.35 Events.Calendars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Calendars" { ; Type })

Parameters

Type

Optional

Which entity type you like to check: Event or Reminder.

"Event"

Result Returns list of calendar identifiers or error.

Description

Type can be Event or Reminder.

Examples

Get list of all calendars for events:

```
MBS( "Events.calendars" ; "Events" )
```

Get list of all calendars for reminders:

```
MBS( "Events.calendars" ; "Reminder" )
```

See also

- [76.92 Events.NewCalendar](#)

3611

Example Databases

- [Mac and iOS/Events/Events Changes](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 4th January 2018.

76.36 Events.ClearNotification

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.ClearNotification")

Result Returns OK or error.

Description

See also

- 76.157 Events.SetNotification

3688

Created 10th March 2016, last changed 12nd March 2016.

76.37 Events.Commit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Commit")

Result Returns OK or error.

Description

If you use saveCalendar/saveEvent/removeCalendar/removeEvent, etc. and you pass 0 to their commit parameter, you are batching changes for a later commit. This method does that commit. This allows you to save the database only once for many additions or changes. If you pass 1 to methods' commit parameter, then you don't need to call this method.

This method will return OK as long as nothing went awry, even if nothing was actually committed. Else it returns an error.

See also

- 76.149 Events.RemoveCalendar 3677
- 76.150 Events.RemoveEvent 3678
- 76.151 Events.RemoveReminder 3679
- 76.153 Events.SaveCalendar 3681
- 76.154 Events.SaveEvent 3682
- 76.155 Events.SaveReminder 3684

Created 10th March 2016, last changed 10th March 2016.

76.38 Events.CompletedReminders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.CompletedReminders" { ; StartDate; EndDate; Calendars })

Parameters**StartDate**

Optional

The start date to search from. Can be empty.

EndDate

Optional

The end date to search before.

Calendars

Optional

The identifier for the calendar you want to search. Leave empty to search all.

Result Returns list of reminder IDs or error.

Description

You can use this method to search for reminders completed between a range of dates.

You can pass nothing for start date to find all reminders completed before endDate.

You can pass nothing for both start and end date to get all completed reminders in the specified calendars.

You can pass nothing for calendars to fetch from all available calendars.

See also

- 76.59 Events.IncompleteReminders

3570

Created 10th March 2016, last changed 13th March 2016.

76.39 Events.DelegateSources

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.DelegateSources")

Result Returns list or error.

Description

By default, delegates are not included in an event store's sources. To work with delegates, you can create a new event store and pass in the sources, including sources returned from this method, that you're interested in.

Created 10th March 2016, last changed 13th August 2016.

76.40 Events.Event.BirthdayPersonUniqueID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.BirthdayPersonUniqueID"; EKEvent)

Parameters

EKEvent

The reference to the event.

\$event

Result Returns ID or error.

Description

This property is only valid for events in the built-in Birthdays calendar. It specifies the Address Book unique ID of the person this event was created for. For any other type of event, this property returns nothing.

Created 10th March 2016, last changed 12nd March 2016.

76.41 Events.Event.GetAllDay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.GetAllDay"; EKEvent)

Parameters

EKEvent

The reference to the event.

\$event

Result Returns 0, 1 or error.

Description

See also

- [76.43 Events.Event.GetEndDate](#) 3552
- [76.49 Events.Event.SetAllDay](#) 3558
- [76.51 Events.Event.SetEndDate](#) 3560

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.42 Events.Event.GetAvailability

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.GetAvailability"; EKEvent)

Parameters**EKEvent**

The reference to the event.

\$event

Result Returns value or error.

Description

Can be NotSupported, Busy, Free, Tentative or Unavailable.

See also

- 76.50 Events.Event.SetAvailability

3559

Example Databases

- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.43 Events.Event.GetEndDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.GetEndDate"; EKEvent)

Parameters

EKEvent

The reference to the event.

\$event

Result Returns timestamp or error.

Description

See also

- [76.41 Events.Event.GetAllDay](#) 3550
- [76.44 Events.Event.GetStartDate](#) 3553
- [76.49 Events.Event.SetAllDay](#) 3558
- [76.51 Events.Event.SetEndDate](#) 3560
- [76.52 Events.Event.SetStartDate](#) 3562

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.44 Events.Event.GetStartDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.GetStartDate"; EKEvent)

Parameters**EKEvent**

The reference to the event.

\$event

Result Returns timestamp or error.

Description

This property represents the start date for this event. Floating events (such as all-day events) are currently always returned in the default time zone.

See also

- [76.43 Events.Event.GetEndDate](#) 3552
- [76.51 Events.Event.SetEndDate](#) 3560
- [76.52 Events.Event.SetStartDate](#) 3562
- [76.139 Events.Reminder.GetStartDate](#) 3662

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.45 Events.Event.GetStructuredLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.GetStructuredLocation"; EKEvent)

Parameters

EKEvent

The reference to the event.

\$event

Result Returns structured location ID or error.

Description

Allows you to set a structured location (a location with a potential geo-coordinate) on an event. The getter for Event's location property just returns the structured location's title. The setter for event's location property is equivalent to creating a new structured location with just a title.

Requires OS X 10.11 or newer.

See also

- 76.7 Events.Alarm.GetStructuredLocation 3512
- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.53 Events.Event.SetStructuredLocation 3564

Created 10th March 2016, last changed 12nd March 2016.

76.46 Events.Event.IsDetached

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.IsDetached"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.

\$item

Result Returns 1, 0 or error.

Description

If this event is an instance of a repeating event, and an attribute of this event has been changed from the default value generated by the repeating event, `isDetached` will return 1. If the `EKEvent` is unchanged from its default state, or is not a repeating event, `isDetached` returns 0.

Created 10th March 2016, last changed 12nd March 2016.

76.47 Events.Event.OccurrenceDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.OccurrenceDate"; EKEvent)

Parameters

EKEvent

The reference to the event.

\$event

Result Returns OK or error.

Description

This is only set if the event is part of a recurring series. It returns the date on which this event was originally scheduled to occur. For occurrences that are unmodified from the recurring series, this is the same as the start date. This value will remain the same even if the event has been detached and its start date has changed. Floating events (such as all-day events) are currently returned in the default time zone.

Created 10th March 2016, last changed 12nd March 2016.

76.48 Events.Event.Refresh

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.Refresh"; EKEvent)

Parameters**EKEvent**

The reference to the event.

\$event

Result Returns 1, 0 or error.

Description

When the database changes, your application is sent an notification note and the plugin may trigger the notification script. You should generally consider all event instances to be invalid as soon as you receive the notification. However, for events you truly care to keep around, you can call this method. It ensures the record is still valid by ensuring the event and start date are still valid. It also attempts to refresh all properties except those you might have modified. If this method returns 0, the record has been deleted or is otherwise invalid. You should not continue to use it. If it returns 1, all is still well, and the record is ready for continued use. You should only call this method on events that are more critical to keep around if possible, such as an event that is being actively edited, as this call is fairly heavyweight. Do not use it to refresh the entire selected range of events you might have had selected. It is mostly pointless anyway, as recurrence information may have changed.

See also

- 76.97 Events.Object.Refresh

3618

Created 10th March 2016, last changed 12nd March 2016.

76.49 Events.Event.SetAllDay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.SetAllDay"; EKEEvent; Value)

Parameters

EKEEvent

The reference to the event.

\$event

Value

Pass 1 for all day, else 0.

1

Result Returns OK or error.

Description

See also

- [76.41 Events.Event.GetAllDay](#) 3550
- [76.43 Events.Event.GetEndDate](#) 3552
- [76.51 Events.Event.SetEndDate](#) 3560
- [76.93 Events.NewEvent](#) 3612
- [76.154 Events.SaveEvent](#) 3682

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Sync](#)

76.49.1 Blog Entries

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 13th March 2016.

76.50 Events.Event.SetAvailability

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.SetAvailability"; EKEvent; availability)

Parameters

EKEvent

The reference to the event.

\$event

availability

The availability setting. Pass Busy, Free, Tentative or Unavailable.

"Busy"

Result Returns OK or error.

Description

Examples

Set busy:

Set Variable [\$r; Value:MBS("Events.Event.SetAvailability"; \$c; "busy")]

See also

- [76.42 Events.Event.GetAvailability](#) 3551
- [76.93 Events.NewEvent](#) 3612
- [76.154 Events.SaveEvent](#) 3682

Example Databases

- [Mac and iOS/Events/Events Sync](#)

76.50.1 Blog Entries

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 4th February 2019.

76.51 Events.Event.SetEndDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.SetEndDate"; EKEvent; Date)

Parameters

EKEvent

The reference to the event.

\$event

Date

The time stamp for end date.

Get(CurrentHostTimeStamp) + 3600

Result Returns OK or error.

Description

Examples

Update dates:

```
Set Variable [ $c; Value:CalendarTest::ItemUID ]
```

```
Set Variable [ $r; Value:MBS("Events.Event.SetEndDate"; $c; CalendarTest::ItemEndDate) ]
```

```
Set Variable [ $r; Value:MBS("Events.Event.SetStartDate"; $c; CalendarTest::ItemStartDate) ]
```

```
Set Variable [ $r; Value:MBS("Events.SaveEvent"; $c; "this"; 1 ) ]
```

See also

- 76.41 Events.Event.GetAllDay 3550
- 76.43 Events.Event.GetEndDate 3552
- 76.44 Events.Event.GetStartDate 3553
- 76.49 Events.Event.SetAllDay 3558
- 76.52 Events.Event.SetStartDate 3562
- 76.93 Events.NewEvent 3612
- 76.154 Events.SaveEvent 3682

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Sync](#)

76.51.1 **Blog Entries**

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 24th March 2016.

76.52 Events.Event.SetStartDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.SetStartDate"; EKEvent; StartDate)

Parameters

EKEvent

The reference to the event.

\$event

StartDate

The new start date for the event.

Get(CurrentHostTimeStamp)

Result Returns OK or error.

Description

Examples

Update dates:

```
Set Variable [ $c; Value:CalendarTest::ItemUID ]
```

```
Set Variable [ $r; Value:MBS("Events.Event.SetEndDate"; $c; CalendarTest::ItemEndDate) ]
```

```
Set Variable [ $r; Value:MBS("Events.Event.SetStartDate"; $c; CalendarTest::ItemStartDate) ]
```

```
Set Variable [ $r; Value:MBS("Events.SaveEvent"; $c; "this"; 1 ) ]
```

See also

- [76.43 Events.Event.GetEndDate](#) 3552
- [76.44 Events.Event.GetStartDate](#) 3553
- [76.51 Events.Event.SetEndDate](#) 3560
- [76.93 Events.NewEvent](#) 3612
- [76.146 Events.Reminder.SetStartDate](#) 3672
- [76.154 Events.SaveEvent](#) 3682

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Sync](#)

76.52.1 **Blog Entries**

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 24th March 2016.

76.53 Events.Event.SetStructuredLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.SetStructuredLocation"; EKEvent; EKStructuredLocation)

Parameters

EKEvent

The reference to the event.

\$event

EKStructuredLocation

The reference to the structured location.

\$StructuredLocation

Result Returns OK or error.

Description

This allows you to pass title and geo coordinates with a radius to describe location exactly.

See also Events.Item.SetLocation.

Requires OS X 10.11 or newer.

See also

- 76.7 Events.Alarm.GetStructuredLocation 3512
- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.45 Events.Event.GetStructuredLocation 3554
- 76.82 Events.Item.SetLocation 3596
- 76.167 Events.StructuredLocation.NewLocationWithTitle 3699

Created 10th March 2016, last changed 12nd March 2016.

76.54 Events.Event.Status

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.Status"; EKEvent)

Parameters

EKEvent

The reference to the event.

\$event

Result Returns value or error.

Description

While the status offers four different values in the enumeration, in practice, the only actionable and reliable status is canceled. Any other status should be considered informational at best. You cannot set this property. If you wish to cancel an event, you should simply remove it using `removeEvent`.

Value can be None, Confirmed, Tentative or Canceled.

Created 10th March 2016, last changed 12nd March 2016.

76.55 Events.Event.compareStartDateWithEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.compareStartDateWithEvent"; EKEvent; OtherEvent)

Parameters

EKEvent

The reference to the event.

\$event

OtherEvent

The reference to the event.

\$otherEvent

Result Returns -1, 0, 1 or error.

Description

Allows you to sort events.

Returns 1 if one second event is bigger, -1 if smaller or 0 if equal.

Created 10th March 2016, last changed 12nd March 2016.

76.56 Events.Event.organizer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Event.organizer"; EKEvent)

Parameters**EKEvent**

The reference to the event.

\$event

Result Returns participant ID or error.

Description

Returns a participant ID or nothing.

The plugin can't set the organizer as Apple doesn't provide API for this.

Created 10th March 2016, last changed 12nd March 2016.

76.57 Events.EventStoreIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.EventStoreIdentifier")

Result Returns identifier or error.

Description

If this changes, your database got moved to a different Mac or the user started with a new calendar database. So existing identifiers for events are invalidated.

Created 10th March 2016, last changed 10th March 2016.

76.58 Events.Events

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Events" { ; StartDate; EndDate; Calendars })

Parameters

StartDate

Optional

The start date to search from. Can be empty.

EndDate

Optional

The end date to search before.

Calendars

Optional

The identifier for the calendar you want to search. Leave empty to search all.

Result Returns OK or error.

Description

You can use this function to search for events between a range of dates.

You can pass nothing for start date to find all events before endDate.

You can pass nothing for both start and end date to get all events in the specified calendars.

You can pass nothing for calendars to fetch from all available calendars.

OS X Only: For performance reasons, this method will only return events within a four year timespan.

If the date range between the startDate and endDate is greater than four years, then it will be shortened to the first four years.

See also

- [76.157 Events.SetNotification](#) 3688
- [76.158 Events.SetNotificationEvaluate](#) 3690

Example Databases

- [Mac and iOS/Events/Events Changes](#)
- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 13th March 2016.

76.59 Events.IncompleteReminders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.IncompleteReminders" { ; StartDate; EndDate; Calendars })

Parameters

StartDate

Optional

The start date to search from. Can be empty.

EndDate

Optional

The end date to search before.

Calendars

Optional

The identifier for the calendar you want to search. Leave empty to search all.

Result Returns list of reminder IDs or error.

Description

You can use this method to search for reminders uncompleted between a range of dates.

You can pass nothing for start date to find all reminders due before endDate.

You can pass nothing for both start and end date to get all uncompleted reminders in the specified calendars.

You can pass nothing for calendars to fetch from all available calendars.

See also

- 76.38 Events.CompletedReminders

3547

Created 10th March 2016, last changed 13th March 2016.

76.60 Events.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Initialize"; Types)

Parameters**Types**

What entity types to use. Can be "Events", "Reminder" or both.
"Events, Reminders"

Result Returns OK or error.

Description

This is done internally automatically for reminders and events.
You can here initialize it for only reminder or events.

Users are able to grant or deny access to event and reminder data on a per-app basis. To request access to event and/or reminder data, instantiate an event store using this method. This call will not block the program while the user is being asked to grant or deny access. Until access has been granted for an entity type, this event store will not contain any calendars for that entity type, and any attempt to save entities of that entity type will fail. If access is later granted or declined, the event store will broadcast a notification. You can check the current access status for an entity type using `Events.AuthorizationStatusForEntityType`. The user will only be prompted the first time access is requested; any subsequent instantiations of event store will use the existing permissions.

See also

- 71.14 `EIDSDK.Initialize` 3380
- 76.18 `Events.AuthorizationStatusForEntityType` 3525

Created 10th March 2016, last changed 13th March 2016.

76.61 Events.Item.AddAlarm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.AddAlarm"; EKCalendarItem; EKAlarm)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.

\$item

EKAlarm

The reference to the alarm.

\$Alarm

Result Returns OK or error.

Description

This function add an alarm to an item. Be warned that some calendars can only allow a certain maximum number of alarms. When this item is saved, it will truncate any extra alarms from the array.

Examples

Add alarm:

```
Set Variable [ $alarm; Value:MBS( "Events.NewAlarm" ) ]
If [ not IsEmpty(Events Create Reminder::AlarmSound) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetSound"; $alarm; Events Create Reminder::AlarmSound ) ]
End If
If [ not IsEmpty(Events Create Reminder::AlarmLocationTitle) ]
Set Variable [ $l; Value:MBS( "Events.StructuredLocation.NewLocationWithTitle"; Events Create Reminder::Alarm-
LocationTitle ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetRadius"; $l; Events Create Reminder::Alarm-
LocationRadius ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetGeoLocation"; $l; Events Create Reminder::Alarm-
LocationGeoLat; Events Create Reminder::AlarmLocationGeoLong ) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetStructuredLocation"; $alarm; $l) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetProximity"; $alarm; Events Create Reminder::AlarmProx-
imity ) ]
End If
Set Variable [ $r; Value:MBS( "Events.Item.AddAlarm"; $reminder; $alarm ) ]
```

See also

- 76.11 Events.Alarm.SetProximity 3516
- 76.13 Events.Alarm.SetSound 3518
- 76.14 Events.Alarm.SetStructuredLocation 3520

76.61. <i>EVENTS.ITEM.ADDALARM</i>	3573
• 76.63 Events.Item.Alarms	3575
• 76.74 Events.Item.HasAlarms	3587
• 76.94 Events.NewReminder	3614
• 76.155 Events.SaveReminder	3684
• 76.167 Events.StructuredLocation.NewLocationWithTitle	3699
• 76.168 Events.StructuredLocation.SetGeoLocation	3701
• 76.169 Events.StructuredLocation.SetRadius	3702

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.62 Events.Item.AddRecurrenceRule

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.AddRecurrenceRule"; EKCalendarItem; EKRecurrenceRule)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

EKRecurrenceRule

The reference to the recurrence rule.
\$RecurrenceRule

Result Returns OK or error.

Description

See also

- 76.77 Events.Item.HasRecurrenceRules 3590
- 76.78 Events.Item.RecurrenceRules 3591
- 76.80 Events.Item.RemoveRecurrenceRule 3593

Created 10th March 2016, last changed 12nd March 2016.

76.63 Events.Item.Alarms

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.Alarms"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns list or error.

Description

Can be empty.

See also

- 76.61 Events.Item.AddAlarm 3572
- 76.74 Events.Item.HasAlarms 3587

Created 10th March 2016, last changed 12nd March 2016.

76.64 Events.Item.Attendees

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.Attendees"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns list or error.

Description

Can be empty.

See also

- 76.75 Events.Item.HasAttendees

3588

Created 10th March 2016, last changed 12nd March 2016.

76.65 Events.Item.CalendarItemExternalIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.CalendarItemExternalIdentifier"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.

\$item

Result Returns ID or error.

Description

This identifier, provided by the server, allows you to reference the same event or reminder across multiple devices. For calendars stored locally on the device, including the birthday calendar, it simply passes through to `calendarItemIdentifier`.

This identifier is unique as of creation for every calendar item. However, there are some cases where duplicate copies of a calendar item can exist in the same database, including:

- A calendar item was imported from an ICS file into multiple calendars
- An event was created in a calendar shared with the user and the user was also invited to the event
- The user is a delegate of a calendar that also has this event
- A subscribed calendar was added to multiple accounts In such cases, you should choose between calendar items based on other factors, such as the calendar or source.

This identifier is the same for all occurrences of a recurring event. If you wish to differentiate between occurrences, you may want to use the start date.

In addition, there are two caveats for Exchange-based calendars:

- This identifier will be different between EventKit on iOS versus OS X
- This identifier will be different between devices for Reminders

See also

- 76.34 `Events.CalendarItemsWithExternalIdentifier` 3543
- 76.66 `Events.Item.CalendarItemIdentifier` 3579

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.66 Events.Item.CalendarItemIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.CalendarItemIdentifier"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.

\$item

Result Returns ID or error.

Description

Item identifiers are not sync-proof in that a full sync will lose this identifier, so you should always have a back up plan for dealing with a reminder that is no longer fetchable by this property, e.g. by title, etc..

You only need this function to match a reference number from our plugin to the UUID used by calendar identifier.

See also [Events.Item.CalendarItemExternalIdentifier](#).

See also

- [76.65 Events.Item.CalendarItemExternalIdentifier](#) 3577
- [76.93 Events.NewEvent](#) 3612
- [76.154 Events.SaveEvent](#) 3682

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

76.66.1 Blog Entries

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 11st January 2019.

76.67 Events.Item.Duplicate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.Duplicate"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns ID or error.

Description

Returns the new reference ID.

See also

- 47.36 Calendar.Item.Duplicate

1268

Created 10th March 2016, last changed 12nd March 2016.

76.68 Events.Item.GetCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.GetCalendar"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

Result Returns calendar identifier or error.

Description**See also**

- 47.44 [Calendar.Item.GetCalendar](#) 1276
- 76.81 [Events.Item.SetCalendar](#) 3594
- 76.149 [Events.RemoveCalendar](#) 3677

Example Databases

- [Mac and iOS/Events/Events Import](#)

Created 10th March 2016, last changed 12nd March 2016.

76.69 Events.Item.GetLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.GetLocation"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns text or error.

Description

See also

- [47.50 Calendar.Item.GetLocation](#) 1282
- [76.82 Events.Item.SetLocation](#) 3596

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.70 Events.Item.GetNotes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.GetNotes"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

Result Returns text or error.

Description**Examples**

Query notes:

MBS("Events.Item.GetNotes"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")

See also

- [76.72 Events.Item.GetTitle](#) 3585
- [76.73 Events.Item.GetURL](#) 3586
- [76.76 Events.Item.HasNotes](#) 3589
- [76.83 Events.Item.SetNotes](#) 3598
- [76.85 Events.Item.SetTitle](#) 3601

Example Databases

- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 13th March 2016.

76.71 Events.Item.GetTimeZone

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.GetTimeZone"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns text or error.

Description

See also

- 76.72 Events.Item.GetTitle 3585
- 76.84 Events.Item.SetTimeZone 3600

Created 10th March 2016, last changed 12nd March 2016.

76.72 Events.Item.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.GetTitle"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

Result Returns text or error.

Description**Examples**

Query title:

MBS("Events.Item.GetTitle"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")

See also

- [76.70 Events.Item.GetNotes](#) 3583
- [76.71 Events.Item.GetTimeZone](#) 3584
- [76.73 Events.Item.GetURL](#) 3586
- [76.83 Events.Item.SetNotes](#) 3598
- [76.85 Events.Item.SetTitle](#) 3601
- [112.71 MenuItem.GetTitle](#) 5939

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 13th March 2016.

76.73 Events.Item.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.GetURL"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns URL or error.

Description

See also

- [76.8 Events.Alarm.GetURL](#) 3513
- [76.15 Events.Alarm.SetURL](#) 3522
- [76.70 Events.Item.GetNotes](#) 3583
- [76.72 Events.Item.GetTitle](#) 3585
- [76.86 Events.Item.SetURL](#) 3603

Example Databases

- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.74 Events.Item.HasAlarms

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.HasAlarms"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

Result Returns 1, 0 or error.

Description

Returns 1 if alarms exists, else 0.

See also

- 76.61 Events.Item.AddAlarm 3572
- 76.63 Events.Item.Alarms 3575
- 76.76 Events.Item.HasNotes 3589

Created 10th March 2016, last changed 12nd March 2016.

76.75 Events.Item.HasAttendees

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.HasAttendees"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns 1, 0 or error.

Description

Returns 1 if attendees exists, else 0.

See also

- 76.64 Events.Item.Attendees

3576

Created 10th March 2016, last changed 12nd March 2016.

76.76 Events.Item.HasNotes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.HasNotes"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

Result Returns 1, 0 or error.

Description

Returns 1 if notes exists, else 0.

See also

- 76.70 Events.Item.GetNotes 3583
- 76.74 Events.Item.HasAlarms 3587
- 76.83 Events.Item.SetNotes 3598

Created 10th March 2016, last changed 12nd March 2016.

76.77 Events.Item.HasRecurrenceRules

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.HasRecurrenceRules"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns 1, 0 or error.

Description

Returns 1 if recurrence rules exists, else 0.

See also

- 76.62 Events.Item.AddRecurrenceRule 3574
- 76.78 Events.Item.RecurrenceRules 3591
- 76.80 Events.Item.RemoveRecurrenceRule 3593

Created 10th March 2016, last changed 12nd March 2016.

76.78 Events.Item.RecurrenceRules

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.RecurrenceRules"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

Result Returns list or error.

Description

Can be empty.

See also

- 76.62 Events.Item.AddRecurrenceRule 3574
- 76.77 Events.Item.HasRecurrenceRules 3590
- 76.80 Events.Item.RemoveRecurrenceRule 3593

Created 10th March 2016, last changed 12nd March 2016.

76.79 Events.Item.RemoveAlarm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.RemoveAlarm"; EKCalendarItem; EKAlarm)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

EKAlarm

The reference to the alarm.
\$Alarm

Result Returns OK or error.

Description**See also**

- 47.61 Calendar.Item.RemoveAlarm

1294

Created 10th March 2016, last changed 12nd March 2016.

76.80 Events.Item.RemoveRecurrenceRule

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.RemoveRecurrenceRule"; EKCalendarItem; EKRecurrenceRule)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

EKRecurrenceRule

The reference to the recurrence rule.
\$RecurrenceRule

Result Returns OK or error.

Description**See also**

- 76.62 [Events.Item.AddRecurrenceRule](#) 3574
- 76.77 [Events.Item.HasRecurrenceRules](#) 3590
- 76.78 [Events.Item.RecurrenceRules](#) 3591

Created 10th March 2016, last changed 12nd March 2016.

76.81 Events.Item.SetCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.SetCalendar"; EKCalendarItem; EKCalendar)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.

\$item

EKCalendar

The id of the calendar.

\$calendar

Result Returns OK or error.

Description

You can pass calendar by ID or by name.

Examples

Set calendar:

```
Set Variable [ $r; Value:MBS( "Events.Item.SetCalendar"; $reminder; $calendar ) ]
```

See also

- [47.63 Calendar.Item.SetCalendar](#) 1297
- [76.68 Events.Item.GetCalendar](#) 3581
- [76.93 Events.NewEvent](#) 3612
- [76.94 Events.NewReminder](#) 3614
- [76.149 Events.RemoveCalendar](#) 3677
- [76.154 Events.SaveEvent](#) 3682
- [76.155 Events.SaveReminder](#) 3684

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)
- [Mac and iOS/Events/Events Sync](#)

76.81.1 **Blog Entries**

- [MBS FileMaker Plugin, version 8.0pr7](#)
- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 13th March 2016.

76.82 Events.Item.SetLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.SetLocation"; EKCalendarItem; Location)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Location

The text for the location field.
"Hamburg, Germany"

Result Returns OK or error.

Description

Examples

Set location:

```
Set Variable [ $r; Value:MBS( "Events.Item.SetLocation"; $reminder; Events Create Reminder::Location ) ]
```

See also

- 47.68 Calendar.Item.SetLocation 1303
- 76.53 Events.Event.SetStructuredLocation 3564
- 76.69 Events.Item.GetLocation 3582
- 76.93 Events.NewEvent 3612
- 76.94 Events.NewReminder 3614
- 76.154 Events.SaveEvent 3682
- 76.155 Events.SaveReminder 3684

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)
- [Mac and iOS/Events/Events Sync](#)

76.82.1 Blog Entries

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 13th March 2016.

76.83 Events.Item.SetNotes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.SetNotes"; EKCalendarItem; Notes)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Notes

The new notes text.

"Don't forget wife's birthday!"

Result Returns OK or error.

Description

Examples

Set notes:

```
Set Variable [ $r; Value:MBS( "Events.Item.SetNotes"; $reminder; Events Create Reminder::Notes ) ]
```

See also

- [76.70 Events.Item.GetNotes](#) 3583
- [76.72 Events.Item.GetTitle](#) 3585
- [76.76 Events.Item.HasNotes](#) 3589
- [76.85 Events.Item.SetTitle](#) 3601
- [76.86 Events.Item.SetURL](#) 3603
- [76.93 Events.NewEvent](#) 3612
- [76.94 Events.NewReminder](#) 3614
- [76.154 Events.SaveEvent](#) 3682
- [76.155 Events.SaveReminder](#) 3684

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)
- [Mac and iOS/Events/Events Sync](#)

76.83.1 **Blog Entries**

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 13th March 2016.

76.84 Events.Item.SetTimeZone

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.SetTimeZone"; EKCalendarItem; TimeZone)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.

\$item

TimeZone

The new Timezone. Value of "System" sets to system time zone. Value of "Default" sets to default time zone.

"GMT"

Result Returns OK or error.

Description

Examples

Set time zone:

```
If [ IsEmpty(Events Create Reminder::TimeZone) ]
# we don't set it
Else
Set Variable [ $r; Value:MBS( "Events.Item.SetTimezone"; $reminder; Events Create Reminder::TimeZone
) ]
End If
```

See also

- 76.71 Events.Item.GetTimeZone 3584
- 76.85 Events.Item.SetTitle 3601
- 76.94 Events.NewReminder 3614
- 76.155 Events.SaveReminder 3684

Created 10th March 2016, last changed 13th March 2016.

76.85 Events.Item.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.SetTitle"; EKCalendarItem; Title)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

Title

The new title.
"Joe's birthday"

Result Returns OK or error.

Description**Examples**

Set Title:

Set Variable [\$r; Value:MBS("Events.Item.SetTitle"; \$reminder; Events Create Reminder::Title)]

See also

- 76.70 Events.Item.GetNotes 3583
- 76.72 Events.Item.GetTitle 3585
- 76.83 Events.Item.SetNotes 3598
- 76.84 Events.Item.SetTimeZone 3600
- 76.86 Events.Item.SetURL 3603
- 76.93 Events.NewEvent 3612
- 76.94 Events.NewReminder 3614
- 76.154 Events.SaveEvent 3682
- 76.155 Events.SaveReminder 3684
- 112.108 MenuItem.SetTitle 5987

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)
- [Mac and iOS/Events/Events Sync](#)

76.85.1 Blog Entries

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 13th March 2016.

76.86 Events.Item.SetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.SetURL"; EKCalendarItem; URL)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.

\$item

URL

The new URL.

"http://www.mbsplugins.de"

Result Returns OK or error.

Description**Examples**

Set URL:

Set Variable [\$r; Value:MBS("Events.Item.SetURL"; \$reminder; Events Create Reminder::URL)]

See also

- 76.8 Events.Alarm.GetURL 3513
- 76.15 Events.Alarm.SetURL 3522
- 76.73 Events.Item.GetURL 3586
- 76.83 Events.Item.SetNotes 3598
- 76.85 Events.Item.SetTitle 3601
- 76.93 Events.NewEvent 3612
- 76.94 Events.NewReminder 3614
- 76.154 Events.SaveEvent 3682
- 76.155 Events.SaveReminder 3684

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)
- [Mac and iOS/Events/Events Sync](#)

76.86.1 Blog Entries

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 13th March 2016.

76.87 Events.Item.creationDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.creationDate"; EKCalendarItem)

Parameters**EKCalendarItem**

The reference to the calendar item: an event or reminder.
\$item

Result Returns timestamp or error.

Description

Can be empty for never saved calendar items.
Created 10th March 2016, last changed 12nd March 2016.

76.88 Events.Item.lastModifiedDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Item.lastModifiedDate"; EKCalendarItem)

Parameters

EKCalendarItem

The reference to the calendar item: an event or reminder.
\$item

Result Returns timestamp or error.

Description

Can be empty for never saved calendar items.

Example Databases

- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 12nd March 2016.

76.89 Events.NewAlarm

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.NewAlarm")

Result Returns reference number or error.

Description**Examples**

Add alarm:

```

Set Variable [ $alarm; Value:MBS( "Events.NewAlarm" ) ]
If [ not IsEmpty(Events Create Reminder::AlarmSound) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetSound"; $alarm; Events Create Reminder::AlarmSound ) ]
End If
If [ not IsEmpty(Events Create Reminder::AlarmLocationTitle) ]
Set Variable [ $l; Value:MBS( "Events.StructuredLocation.NewLocationWithTitle"; Events Create Reminder::Alarm-
LocationTitle ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetRadius"; $l; Events Create Reminder::Alarm-
LocationRadius ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetGeoLocation"; $l; Events Create Reminder::Alarm-
LocationGeoLat; Events Create Reminder::AlarmLocationGeoLong ) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetStructuredLocation"; $alarm; $l) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetProximity"; $alarm; Events Create Reminder::AlarmProx-
imity ) ]
End If
Set Variable [ $r; Value:MBS( "Events.Item.AddAlarm"; $reminder; $alarm ) ]

```

See also

- 76.11 Events.Alarm.SetProximity 3516
- 76.13 Events.Alarm.SetSound 3518
- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.61 Events.Item.AddAlarm 3572
- 76.91 Events.NewAlarmWithRelativeOffset 3610
- 76.94 Events.NewReminder 3614
- 76.155 Events.SaveReminder 3684
- 76.167 Events.StructuredLocation.NewLocationWithTitle 3699
- 76.168 Events.StructuredLocation.SetGeoLocation 3701

- 76.169 Events.StructuredLocation.SetRadius

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.90 Events.NewAlarmWithAbsoluteDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.NewAlarmWithAbsoluteDate"; EndDate)

Parameters**EndDate**

The timestamp the alarm should fire.

Result Returns reference number or error.

Description**Examples**

Create a new alarm:

MBS("Events.NewAlarmWithAbsoluteDate"; "03.04.2016 13:45:00")

See also

- 76.2 Events.Alarm.GetAbsoluteDate 3507
- 76.9 Events.Alarm.SetAbsoluteDate 3514
- 76.89 Events.NewAlarm 3607

Created 10th March 2016, last changed 10th March 2016.

76.91 Events.NewAlarmWithRelativeOffset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.NewAlarmWithRelativeOffset"; Offset)

Parameters

Offset

The offset from the event start that the alarm should fire. in Seconds.

3*60

Result Returns reference number or error.

Description

Examples

New alarm in 3 minutes:

```
MBS( "Events.NewAlarmWithRelativeOffset"; 3 * 60 )
```

Add display alarm:

```
Set Variable [ $alarm1; Value:MBS( "Events.NewAlarmWithRelativeOffset"; 0 ) ]
```

```
Set Variable [ $r; Value:MBS("Events.Item.AddAlarm"; $c; $alarm1) ]
```

Add alarm with sound 15 minutes before event:

```
Set Variable [ $alarm2; Value:MBS( "Events.NewAlarmWithRelativeOffset"; -15*60 ) ]
```

```
Set Variable [ $r; Value:MBS( "Events.Alarm.SetSound"; $alarm2; "Submarine" ) ]
```

```
Set Variable [ $r; Value:MBS("Events.Item.AddAlarm"; $c; $alarm2) ]
```

See also

- 76.5 Events.Alarm.GetRelativeOffset 3510
- 76.12 Events.Alarm.SetRelativeOffset 3517
- 76.13 Events.Alarm.SetSound 3518
- 76.61 Events.Item.AddAlarm 3572
- 76.89 Events.NewAlarm 3607

Created 10th March 2016, last changed 24th March 2016.

76.92 Events.NewCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.NewCalendar"; entityType)

Parameters**entityType**

The entity type that this calendar may support. Event or Reminder
"Event"

Result Returns calendar reference number or error.

Description

You can only create calendars that accept either reminders or events via our API. However, other servers might allow mixing the two (though it is not common).

See also

- 76.35 Events.Calendars 3544
- 76.94 Events.NewReminder 3614
- 76.149 Events.RemoveCalendar 3677
- 76.153 Events.SaveCalendar 3681

Created 10th March 2016, last changed 12nd March 2016.

76.93 Events.NewEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.NewEvent")

Result Returns event ID or error.

Description

Examples

Create event:

```

Set Variable [ $c; Value:MBS("Events.NewEvent") ]
Set Variable [ $r; Value:MBS("Events.Item.SetTitle"; $c; CalendarTest::ItemTitle) ]
Set Variable [ $r; Value:MBS("Events.Item.SetNotes"; $c; CalendarTest::ItemNotes) ]
Set Variable [ $r; Value:MBS("Events.Item.SetURL"; $c; CalendarTest::ItemURL) ]
Set Variable [ $r; Value:MBS("Events.Item.SetLocation"; $c;CalendarTest::ItemLocation) ]
Set Variable [ $r; Value:MBS("Events.Event.SetStartDate"; $c; CalendarTest::ItemStartDate) ]
Set Variable [ $r; Value:MBS("Events.Event.SetEndDate"; $c; CalendarTest::ItemEndDate) ]
Set Variable [ $r; Value:MBS("Events.Event.SetAllDay"; $c;CalendarTest::ItemAllDay) ]
Set Variable [ $r; Value:MBS("Events.Event.SetAvailability"; $c; "busy") ]
Set Variable [ $r; Value:MBS("Events.Item.SetCalendar"; $c; CalendarTest::CalendarUID) ]
Set Variable [ $r; Value:MBS("Events.SaveEvent"; $c; "this"; 1 ) ]
Set Field [ CalendarTest::ItemUID; MBS("Events.Item.CalendarItemIdentifier"; $c) ]

```

See also

- 76.49 Events.Event.SetAllDay 3558
- 76.50 Events.Event.SetAvailability 3559
- 76.51 Events.Event.SetEndDate 3560
- 76.52 Events.Event.SetStartDate 3562
- 76.81 Events.Item.SetCalendar 3594
- 76.83 Events.Item.SetNotes 3598
- 76.85 Events.Item.SetTitle 3601
- 76.86 Events.Item.SetURL 3603
- 76.154 Events.SaveEvent 3682
- 83.17 FSEvents.NextEvent 4224

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Sync](#)

76.93.1 Blog Entries

- [MBS FileMaker iOS SDK Extension 0.2](#)
- [MBS FileMaker iOS SDK Extension 0.1](#)
- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 24th March 2016.

76.94 Events.NewReminder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.NewReminder")

Result Returns reminder ID or error.

Description

Examples

Create Reminder:

```

Set Variable [ $reminder; Value:MBS( "Events.NewReminder" ) ]
Set Variable [ $calendar; Value:Events Create Reminder::Calendar ]
If [ IsEmpty(Events Create Reminder::Calendar) ]
Set Variable [ $calendar; Value:MBS( "Events.defaultCalendarForNewReminders" ) ]
End If
Set Variable [ $r; Value:MBS( "Events.Item.SetCalendar"; $reminder; $calendar ) ]
Set Variable [ $r; Value:MBS( "Events.Item.SetLocation"; $reminder; Events Create Reminder::Location ) ]
Set Variable [ $r; Value:MBS( "Events.Item.SetTitle"; $reminder; Events Create Reminder::Title ) ]
Set Variable [ $r; Value:MBS( "Events.Item.SetURL"; $reminder; Events Create Reminder::URL ) ]
Set Variable [ $r; Value:MBS( "Events.Item.SetNotes"; $reminder; Events Create Reminder::Notes ) ]
If [ IsEmpty(Events Create Reminder::TimeZone) ]
# we don't set it
Else
Set Variable [ $r; Value:MBS( "Events.Item.SetTimezone"; $reminder; Events Create Reminder::TimeZone
) ]
End If
Set Variable [ $r; Value:MBS( "Events.Item.SetNotes"; $reminder; Events Create Reminder::Notes ) ]
Set Variable [ $r; Value:MBS( "Events.Reminder.SetPriority"; $reminder; Events Create Reminder::Priority
) ]
If [ not IsEmpty(Events Create Reminder::StartDate) ]
Set Variable [ $r; Value:MBS( "Events.Reminder.SetStartDate"; $reminder; Events Create Reminder::Start-
Date ) ]
End If
If [ not IsEmpty(Events Create Reminder::DueDate) ]
Set Variable [ $r; Value:MBS( "Events.Reminder.SetDueDate"; $reminder; Events Create Reminder::Due-
Date ) ]
End If
If [ not IsEmpty(Events Create Reminder::AlarmSound) or not IsEmpty(Events Create Reminder::Alarm-
LocationTitle) or not IsEmpty(Events Create Reminder::AlarmLocationGeoLat) ]
Set Variable [ $alarm; Value:MBS( "Events.NewAlarm" ) ]
If [ not IsEmpty(Events Create Reminder::AlarmSound) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetSound"; $alarm; Events Create Reminder::AlarmSound ) ]
End If
If [ not IsEmpty(Events Create Reminder::AlarmLocationTitle) ]

```

```

Set Variable [ $l; Value:MBS( "Events.StructuredLocation.NewLocationWithTitle"; Events Create Reminder::Alarm-
LocationTitle ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetRadius"; $l; Events Create Reminder::Alarm-
LocationRadius ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetGeoLocation"; $l; Events Create Reminder::Alarm-
LocationGeoLat; Events Create Reminder::AlarmLocationGeoLong ) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetStructuredLocation"; $alarm; $l) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetProximity"; $alarm; Events Create Reminder::AlarmProx-
imity ) ]
End If
Set Variable [ $r; Value:MBS( "Events.Item.AddAlarm"; $reminder; $alarm ) ]
End If
Set Variable [ $r; Value:MBS( "Events.SaveReminder"; $reminder ;1 ) ]
Show Custom Dialog [ "Saved Reminder"; $r ]

```

See also

- 76.84 *Events.Item.SetTimeZone* 3600
- 76.89 *Events.NewAlarm* 3607
- 76.92 *Events.NewCalendar* 3611
- 76.143 *Events.Reminder.SetDueDate* 3666
- 76.145 *Events.Reminder.SetPriority* 3670
- 76.146 *Events.Reminder.SetStartDate* 3672
- 76.148 *Events.Reminders* 3676
- 76.155 *Events.SaveReminder* 3684
- 76.167 *Events.StructuredLocation.NewLocationWithTitle* 3699
- 76.169 *Events.StructuredLocation.SetRadius* 3702

Example Databases

- [Mac and iOS/Events/Events Create Reminder](#)

76.94.1 Blog Entries

- [MBS FileMaker iOS SDK Extension 0.2](#)
- [MBS FileMaker iOS SDK Extension 0.1](#)

Created 10th March 2016, last changed 13th March 2016.

76.95 Events.Object.HasChanges

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Object.HasChanges"; EKObject)

Parameters

EKObject

The reference to the object. This can be an alarm, source, participant, structured location, recurrence rule, calendar or calendar item.

\$item

Result Returns 1, 0 or error.

Description

Returns 1 if this object or any sub-object (alarm, etc.) has uncommitted changes.

Created 10th March 2016, last changed 13th March 2016.

76.96 **Events.Object.IsNew**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Object.IsNew"; EKObject)

Parameters

EKObject

The reference to the object. This can be an alarm, source, participant, structured location, recurrence rule, calendar or calendar item.

\$item

Result Returns 1, 0 or error.

Description

Examples

Check if an alarm is new:

MBS("Events.Object.IsNew"; "56001")

See also

- 76.98 Events.Object.Reset

3619

Created 10th March 2016, last changed 13th March 2016.

76.97 Events.Object.Refresh

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Object.Refresh"; EKObject)

Parameters

EKObject

The reference to the object. This can be an alarm, source, participant, structured location, recurrence rule, calendar or calendar item.

\$item

Result Returns 1, 0 or error.

Description

Determines if the object is still valid (i.e. it still exists in the database), and unloads all properties that have not been modified. If this ever returns 0, it indicates the record was deleted and this instance should be discarded and no longer referenced.

Returns 1 if still valid.

Examples

Refresh an object:

MBS("Events.Object.Refresh"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")

See also

- 76.48 Events.Event.Refresh 3557
- 76.98 Events.Object.Reset 3619
- 76.157 Events.SetNotification 3688
- 76.158 Events.SetNotificationEvaluate 3690

Created 10th March 2016, last changed 13th March 2016.

76.98 Events.Object.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Object.Reset"; EKObject)

Parameters**EKObject**

The reference to the object. This can be an alarm, source, participant, structured location, recurrence rule, calendar or calendar item.

\$item

Result Returns OK or error.

Description

If this object is not new, this method will unload all loaded properties and clear any dirty state

See also

- 76.96 Events.Object.IsNew 3617
- 76.97 Events.Object.Refresh 3618

Created 10th March 2016, last changed 13th March 2016.

76.99 Events.Object.Rollback

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Object.Rollback"; EKObject)

Parameters

EKObject

The reference to the object. This can be an alarm, source, participant, structured location, recurrence rule, calendar or calendar item.

\$item

Result Returns OK or error.

Description

If this object is not new, this method will unload dirty state only.

Created 10th March 2016, last changed 13th March 2016.

76.100 Events.Participant.GetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.GetName"; EKParticipant)

Parameters**EKParticipant**

The reference to the participant.

\$Participant

Result Returns text or error.

Description**See also**

- 76.101 Events.Participant.GetStatus 3622
- 76.103 Events.Participant.Name 3624
- 76.104 Events.Participant.Person 3625
- 76.105 Events.Participant.Role 3626
- 76.106 Events.Participant.Status 3627
- 76.107 Events.Participant.Type 3628

Created 10th March 2016, last changed 13th March 2016.

76.101 Events.Participant.GetStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.GetStatus"; EKParticipant)

Parameters

EKParticipant

The reference to the participant.

\$Participant

Result Returns value or error.

Description

Can be Unknown, Pending, Accepted, Declined, Tentative, Delegated, Completed or InProcess.

See also

- 76.100 Events.Participant.GetName 3621
- 76.106 Events.Participant.Status 3627

Created 10th March 2016, last changed 13th March 2016.

76.102 Events.Participant.IsCurrentUser

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.IsCurrentUser"; EKParticipant)

Parameters**EKParticipant**

The reference to the participant.

\$Participant

Result Returns 1, 0 or error.

Description

A boolean indicating whether this participant represents the owner of this account.

Returns 1 if true or 0 if not.

Created 10th March 2016, last changed 13th March 2016.

76.103 Events.Participant.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.Name"; EKParticipant)

Parameters

EKParticipant

The reference to the participant.

\$Participant

Result Returns name or error.

Description

See also

- 76.100 Events.Participant.GetName 3621
- 76.104 Events.Participant.Person 3625
- 76.105 Events.Participant.Role 3626
- 76.106 Events.Participant.Status 3627
- 76.107 Events.Participant.Type 3628
- 76.108 Events.Participant.URL 3629

76.103.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)

Created 10th March 2016, last changed 13th March 2016.

76.104 Events.Participant.Person

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.Person"; EKParticipant)

Parameters**EKParticipant**

The reference to the participant.

\$Participant

Result Returns person identifier or error.

Description

This method returns the ABPerson that represents this participant, if a match can be found based on email address in the shared address book passed. If we cannot find the participant, empty result is returned.

See also

- 76.100 Events.Participant.GetName 3621
- 76.103 Events.Participant.Name 3624
- 76.105 Events.Participant.Role 3626
- 76.106 Events.Participant.Status 3627
- 76.107 Events.Participant.Type 3628
- 76.108 Events.Participant.URL 3629

Created 10th March 2016, last changed 13th March 2016.

76.105 Events.Participant.Role

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.Role"; EKParticipant)

Parameters

EKParticipant

The reference to the participant.

\$Participant

Result Returns role or error.

Description

Values include Required, Optional, Chair, NonParticipant or Unknown.

See also

- 76.100 Events.Participant.GetName 3621
- 76.103 Events.Participant.Name 3624
- 76.104 Events.Participant.Person 3625
- 76.106 Events.Participant.Status 3627
- 76.107 Events.Participant.Type 3628
- 76.108 Events.Participant.URL 3629

Created 10th March 2016, last changed 13th March 2016.

76.106 Events.Participant.Status

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.Status"; EKParticipant)

Parameters**EKParticipant**

The reference to the participant.

\$Participant

Result Returns value or error.

Description

Possible status values are Unknown, Pending, Accepted, Declined, Tentative, Delegated, Completed and InProcess.

See also

- 76.100 Events.Participant.GetName 3621
- 76.101 Events.Participant.GetStatus 3622
- 76.103 Events.Participant.Name 3624
- 76.104 Events.Participant.Person 3625
- 76.105 Events.Participant.Role 3626
- 76.107 Events.Participant.Type 3628
- 76.108 Events.Participant.URL 3629

Created 10th March 2016, last changed 13th March 2016.

76.107 Events.Participant.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.Type"; EKParticipant)

Parameters

EKParticipant

The reference to the participant.

\$Participant

Result Returns value or error.

Description

Can be Person, Room, Resource, Group or Unknown.

See also

- 76.100 Events.Participant.GetName 3621
- 76.103 Events.Participant.Name 3624
- 76.104 Events.Participant.Person 3625
- 76.105 Events.Participant.Role 3626
- 76.106 Events.Participant.Status 3627
- 76.108 Events.Participant.URL 3629

Created 10th March 2016, last changed 13th March 2016.

76.108 Events.Participant.URL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Participant.URL"; EKParticipant)

Parameters**EKParticipant**

The reference to the participant.

\$Participant

Result Returns URL or error.

Description**See also**

- 76.103 Events.Participant.Name 3624
- 76.104 Events.Participant.Person 3625
- 76.105 Events.Participant.Role 3626
- 76.106 Events.Participant.Status 3627
- 76.107 Events.Participant.Type 3628

Created 10th March 2016, last changed 13th March 2016.

76.109 Events.RecurrenceDayOfWeek.Copy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceDayOfWeek.Copy"; EKRecurrenceDayOfWeek)

Parameters

EKRecurrenceDayOfWeek

The reference to the recurrence day of week.

\$RecurrenceDayOfWeek

Result Returns new identifier or error.

Description

You can create a copy to use the same day of week setting with a new recurrence rule.

Created 10th March 2016, last changed 13th March 2016.

76.110 Events.RecurrenceDayOfWeek.DayOfTheWeek

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceDayOfWeek.DayOfTheWeek"; EKRecurrenceDayOfWeek)

Parameters**EKRecurrenceDayOfWeek**

The reference to the recurrence day of week.

\$RecurrenceDayOfWeek

Result Returns number or error.

Description**See also**

- 76.111 Events.RecurrenceDayOfWeek.NewWithDayOfWeek 3632
- 76.112 Events.RecurrenceDayOfWeek.WeekNumber 3633
- 76.121 Events.RecurrenceRule.DaysOfTheWeek 3642
- 76.124 Events.RecurrenceRule.FirstDayOfTheWeek 3645

Created 10th March 2016, last changed 13th March 2016.

76.111 Events.RecurrenceDayOfWeek.NewWithDayOfWeek

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceDayOfWeek.NewWithDayOfWeek"; dayOfTheWeek { ; WeekNumber })

Parameters

dayOfTheWeek

The day of the week.

1

WeekNumber

Optional

The number of the week.

5

Result Returns day of week reference ID or error.

Description

EKRecurrenceDayOfWeek specifies either a simple day of the week, or the nth instance of a particular day of the week, such as the third Tuesday of every month. The week number is only valid when used with monthly or yearly recurrences, since it would be otherwise meaningless.

Valid values for dayOfTheWeek are integers 1-7, which correspond to days of the week with Sunday = 1. Valid values for weekNumber portion are (+/-)1-53, where a negative value indicates a value from the end of the range. For example, in a yearly event -1 means last week of the year. -1 in a Monthly recurrence indicates the last week of the month.

The value 0 also indicates the weekNumber is irrelevant (every Sunday, etc.).

Day-of-week weekNumber values that are out of bounds for the recurrence type will result in an exception when trying to initialize the recurrence. In particular, weekNumber must be zero when passing EKRecurrenceDayOfWeek objects to initialize a weekly recurrence.

Examples

Pick Sunday:

MBS("Events.RecurrenceDayOfWeek.NewWithDayOfWeek"; 1)

See also

- 76.110 Events.RecurrenceDayOfWeek.DayOfTheWeek 3631
- 76.129 Events.RecurrenceRule.NewWithFrequency 3650

Created 10th March 2016, last changed 14th March 2017.

76.112 **Events.RecurrenceDayOfWeek.WeekNumber**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceDayOfWeek.WeekNumber"; EKRecurrenceDayOfWeek)

Parameters

EKRecurrenceDayOfWeek

The reference to the recurrence day of week.

\$RecurrenceDayOfWeek

Result Returns number or error.

Description

See also

- 76.110 [Events.RecurrenceDayOfWeek.DayOfTheWeek](#)

3631

Created 10th March 2016, last changed 13th March 2016.

76.113 Events.RecurrenceEnd.Copy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceEnd.Copy"; EKRecurrenceEnd)

Parameters**EKRecurrenceEnd**

The reference to the recurrence end.

\$RecurrenceEnd

Result Returns recurrence end ID or error.

Description

You can make a copy to assign it to a new event.

See also

- 76.114 Events.RecurrenceEnd.EndDate 3635
- 76.119 Events.RecurrenceRule.Copy 3640

Created 10th March 2016, last changed 13th March 2016.

76.114 Events.RecurrenceEnd.EndDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceEnd.EndDate"; EKRecurrenceEnd)

Parameters**EKRecurrenceEnd**

The reference to the recurrence end.

\$RecurrenceEnd

Result Returns value or error.

Description

The end date of this recurrence, or empty if it's count-based.

See also

- 76.113 Events.RecurrenceEnd.Copy 3634
- 76.115 Events.RecurrenceEnd.NewWithEndDate 3636

Created 10th March 2016, last changed 13th March 2016.

76.115 Events.RecurrenceEnd.NewWithEndDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceEnd.NewWithEndDate"; EndDate)

Parameters

EndDate

The new end date as timestamp or date.

Get(CurrentHostTimeStamp) + 3600

Result Returns recurrence end ID or error.

Description

EKRecurrenceEnd is an attribute of EKRecurrenceRule that defines how long the recurrence is scheduled to repeat. The recurrence can be defined either with a number that indicates the total number times it repeats, or with a date, after which it no longer repeats. An event which is set to never end should have its EKRecurrenceEnd set to empty. If the end of the pattern is defined with a date, the client must pass a valid date. If the end of the pattern is defined as terms of a number of occurrences, the occurrenceCount passed to the initializer must be positive, it cannot be 0.

See also

- 76.114 Events.RecurrenceEnd.EndDate

3635

Created 10th March 2016, last changed 13th March 2016.

76.116 Events.RecurrenceEnd.NewWithOccurrenceCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceEnd.NewWithOccurrenceCount"; Count)

Parameters**Count**

The new occurrence count.

5

Result Returns recurrence end ID or error.

Description

EKRecurrenceEnd is an attribute of EKRecurrenceRule that defines how long the recurrence is scheduled to repeat. The recurrence can be defined either with a number that indicates the total number times it repeats, or with a date, after which it no longer repeats. An event which is set to never end should have its EKRecurrenceEnd set to empty. If the end of the pattern is defined with a date, the client must pass a valid date. If the end of the pattern is defined as terms of a number of occurrences, the occurrenceCount passed to the initializer must be positive, it cannot be 0.

See also

- 76.117 Events.RecurrenceEnd.OccurrenceCount

3638

Created 10th March 2016, last changed 13th March 2016.

76.117 Events.RecurrenceEnd.OccurrenceCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceEnd.OccurrenceCount"; EKRecurrenceEnd)

Parameters**EKRecurrenceEnd**

The reference to the recurrence end.

\$RecurrenceEnd

Result Returns value or error.

Description

The maximum occurrence count, or 0 if it's date-based.

See also

- 76.116 Events.RecurrenceEnd.NewWithOccurrenceCount

3637

Created 10th March 2016, last changed 13th March 2016.

76.118 Events.RecurrenceRule.CalendarIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.CalendarIdentifier"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns identifier or error.

Description

Created 10th March 2016, last changed 13th March 2016.

76.119 Events.RecurrenceRule.Copy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.Copy"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns recurrence rule ID or error.

Description

You can make a copy to assign an existing rule to a new event.

See also

- 76.113 Events.RecurrenceEnd.Copy

3634

Created 10th March 2016, last changed 13th March 2016.

76.120 Events.RecurrenceRule.DaysOfTheMonth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.DaysOfTheMonth"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns list or error.

Description

This property is valid for rules whose frequency is monthly, and that were initialized with one or more specific days of the month (not with a day of the week and week of the month). This property can be accessed as an list containing one or more numbers corresponding to the days of the month the event recurs. For all other rules, this property is empty. This property corresponds to BYMONTHDAY in the iCalendar specification.

See also

- 76.121 Events.RecurrenceRule.DaysOfTheWeek 3642
- 76.122 Events.RecurrenceRule.DaysOfTheYear 3643
- 76.128 Events.RecurrenceRule.MonthsOfTheYear 3649
- 76.132 Events.RecurrenceRule.WeeksOfTheYear 3655

Created 10th March 2016, last changed 13th March 2016.

76.121 Events.RecurrenceRule.DaysOfTheWeek

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.DaysOfTheWeek"; EKRecurrenceRule)

Parameters

EKRecurrenceRule

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns list or error.

Description

This property is valid for rules whose frequency is weekly, monthly, or yearly. This property can be accessed as an list containing one or more DayOfWeek objects corresponding to the days of the week the event recurs. For all other rules, this property is empty. The property corresponds to BYDAY in the iCalendar specification.

See also

- 76.110 Events.RecurrenceDayOfWeek.DayOfTheWeek 3631
- 76.120 Events.RecurrenceRule.DaysOfTheMonth 3641
- 76.122 Events.RecurrenceRule.DaysOfTheYear 3643
- 76.124 Events.RecurrenceRule.FirstDayOfTheWeek 3645
- 76.128 Events.RecurrenceRule.MonthsOfTheYear 3649
- 76.132 Events.RecurrenceRule.WeeksOfTheYear 3655

Created 10th March 2016, last changed 13th March 2016.

76.122 Events.RecurrenceRule.DaysOfTheYear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.DaysOfTheYear"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns list or error.

Description

This property is valid for rules whose frequency is yearly. This property can be accessed as an list containing one or more numbers corresponding to the days of the year the event recurs. For all other rules, this property is empty. This property corresponds to BYYEARDAY in the iCalendar specification. It should contain values between 1 to 366 or -366 to -1.

See also

- 76.120 Events.RecurrenceRule.DaysOfTheMonth 3641
- 76.121 Events.RecurrenceRule.DaysOfTheWeek 3642
- 76.124 Events.RecurrenceRule.FirstDayOfTheWeek 3645
- 76.128 Events.RecurrenceRule.MonthsOfTheYear 3649
- 76.132 Events.RecurrenceRule.WeeksOfTheYear 3655

Created 10th March 2016, last changed 13th March 2016.

76.123 Events.RecurrenceRule.Description

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	7.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.Description"; EKRecurrenceRule)

Parameters

EKRecurrenceRule

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns text or error.

Description

Examples

Query details for a recurrence rule:

MBS("Events.RecurrenceRule.Description"; "56001")

Example result: "FREQ=WEEKLY;INTERVAL=1;BYDAY=TU,WE"

See also

- 76.130 Events.RecurrenceRule.SetPositions

3653

76.123.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 14th March 2017, last changed 14th March 2017.

76.124 Events.RecurrenceRule.FirstDayOfTheWeek

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.FirstDayOfTheWeek"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns number or error.

Description

Recurrence patterns can specify which day of the week should be treated as the first day. Possible values for this property are integers 0 and 1-7, which correspond to days of the week with Sunday = 1. Zero indicates that the property is not set for this recurrence. The first day of the week only affects the way the recurrence is expanded for weekly recurrence patterns with an interval greater than 1. For those types of recurrence patterns, the Calendar framework will set `firstDayOfTheWeek` to be 2 (Monday). In all other cases, this property will be set to zero. The iCalendar spec stipulates that the default value is Monday if this property is not set.

See also

- 76.110 `Events.RecurrenceDayOfWeek.DayOfTheWeek` 3631
- 76.121 `Events.RecurrenceRule.DaysOfTheWeek` 3642
- 76.122 `Events.RecurrenceRule.DaysOfTheYear` 3643
- 76.128 `Events.RecurrenceRule.MonthsOfTheYear` 3649

Created 10th March 2016, last changed 13th March 2016.

76.125 Events.RecurrenceRule.Frequency

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.Frequency"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns value or error.

Description

This property designates the unit of time used to describe the recurrence pattern.

Value is Daily, Weekly, Monthly or Yearly.

See also

- 76.129 Events.RecurrenceRule.NewWithFrequency

3650

Created 10th March 2016, last changed 13th March 2016.

76.126 Events.RecurrenceRule.GetRecurrenceEnd

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.GetRecurrenceEnd"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns recurrence end id, empty or error.

Description

Can be empty.

See also

- 76.131 Events.RecurrenceRule.SetRecurrenceEnd

3654

Created 10th March 2016, last changed 13th March 2016.

76.127 Events.RecurrenceRule.Interval

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.Interval"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns number or error.

Description

The interval of a rules is an integer value which specifies how often the recurrence rule repeats over the unit of time described by the frequency. For example, if the frequency is weekly, then an interval of 1 means the pattern is repeated every week. A value of 2 indicates it is repeated every other week, 3 means every third week, and so on. The value must be a positive integer; 0 is not a valid value, and nil will be returned if the client attempts to initialize a rule with a negative or zero interval.

Created 10th March 2016, last changed 13th March 2016.

76.128 Events.RecurrenceRule.MonthsOfTheYear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.MonthsOfTheYear"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns list or error.

Description

This property is valid for rules whose frequency is yearly. This property can be accessed as an list containing one or more numbers corresponding to the months of the year the event recurs. For all other EKRecurrenceRules, this property is empty. This property corresponds to BYMONTH in the iCalendar specification.

See also

- 76.120 Events.RecurrenceRule.DaysOfTheMonth 3641
- 76.121 Events.RecurrenceRule.DaysOfTheWeek 3642
- 76.122 Events.RecurrenceRule.DaysOfTheYear 3643
- 76.124 Events.RecurrenceRule.FirstDayOfTheWeek 3645
- 76.132 Events.RecurrenceRule.WeeksOfTheYear 3655

Created 10th March 2016, last changed 13th March 2016.

76.129 Events.RecurrenceRule.NewWithFrequency

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.NewWithFrequency"; Frequency; Interval; EKRecurrenceEnd { ; daysOfTheWeek; daysOfTheMonth; monthsOfTheYear; weeksOfTheYear; daysOfTheYear; setPositions })

Parameters

Frequency

The frequency. Can be Yearly, Monthly, Daily or Weekly.
"Weekly"

Interval

The interval to use. Must be >0
1

EKRecurrenceEnd

The reference to the recurrence end. Can be empty.
\$RecurrenceEnd

daysOfTheWeek

Optional

The days of the week list. An list of EKRecurrenceDayOfWeek object identifiers. Valid for all recurrence types except daily. Ignored otherwise. Corresponds to the BYDAY value in the iCalendar specification. Version 7.1 accepts here also week days, not just RecurrenceDayOfWeek IDs returned from Events.RecurrenceDayOfWeek.NewWithDayOfWeek.

daysOfTheMonth

Optional

The days of the month. An list of numbers ([+/-] 1 to 31). Negative numbers infer counting from the end of the month. For example, -1 means the last day of the month. Valid only for monthly recurrences. Ignored otherwise. Corresponds to the BYMONTHDAY value in the iCalendar specification.

monthsOfTheYear

Optional

The list of months in the year. An list of numbers (1 to 12). Valid only for yearly recurrences. Ignored otherwise. Corresponds to the BYMONTH value in the iCalendar specification.

weeksOfTheYear

Optional

The list of weeks in the year. An list of numbers ([+/-] 1 to 53). Negative numbers infer counting from the end of the year. For example, -1 means the last week of the year. Valid only for yearly recurrences. Ignored otherwise. Corresponds to the BYWEEKNO value in the iCalendar specification.

daysOfTheYear

Optional

The days of the year. An list of numbers ([+/-] 1 to 366). Negative numbers infer counting from the end of the year. For example, -1 means the last day of the year. Valid only for yearly recurrences. Ignored otherwise. Corresponds to the BYYEARDAY value in the iCalendar specification.

setPositions

Optional

The list of set positions. An list of numbers ([+/1] 1 to 366). Used at the end of recurrence computation to filter the list to the positions specified. Negative numbers indicate starting at the end, i.e. -1 indicates taking the last result of the set. Valid when daysOfTheWeek, daysOfTheMonth, monthsOfTheYear, weeksOfTheYear, or daysOfTheYear is passed. Ignored otherwise. Corresponds to the BYSETPOS value in the iCalendar specification.

Result Returns OK or error.

Description

This can be used to build any kind of recurrence rule. But be aware that certain combinations make no sense and will be ignored. For example, if you pass daysOfTheWeek for a daily recurrence, they will be ignored.

Examples

Create rule to repeat each year:

```
MBS( "Events.RecurrenceRule.NewWithFrequency"; "Yearly";"1" )
```

Create rule to repeat each week:

```
MBS( "Events.RecurrenceRule.NewWithFrequency"; "Weekly";"1"; "" ; MBS( "Events.RecurrenceDayOfWeek.NewWithDayOfWeek"; 1) )
```

Create event in summer only:

```
MBS( "Events.RecurrenceRule.NewWithFrequency";
"Monthly"; // by mont
"1"; // every
""; // no end date
"";
"";
"45678910" ) // only this months
```

Every week Tuesday and Wednesday:

```
MBS( "Events.RecurrenceRule.NewWithFrequency"; "Weekly";"1"; "" ; "34" )
```

See also

- 76.111 Events.RecurrenceDayOfWeek.NewWithDayOfWeek 3632
- 76.125 Events.RecurrenceRule.Frequency 3646

76.129.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

76.130 Events.RecurrenceRule.SetPositions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.SetPositions"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns list or error.

Description

This property is valid for rules which have a valid `daysOfTheWeek`, `daysOfTheMonth`, `weeksOfTheYear`, or `monthsOfTheYear` property. It allows you to specify a set of ordinal numbers to help choose which objects out of the set of selected events should be included. For example, setting the `daysOfTheWeek` to Monday-Friday and including a value of -1 in the array would indicate the last weekday in the recurrence range (month, year, etc). This value corresponds to the iCalendar BYSETPOS property.

See also

- 76.123 `Events.RecurrenceRule.Description`

3644

Created 10th March 2016, last changed 13th March 2016.

76.131 Events.RecurrenceRule.SetRecurrenceEnd

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.SetRecurrenceEnd"; EKRecurrenceRule; EKRecurrenceEnd)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

EKRecurrenceEnd

The reference to the recurrence end.

\$RecurrenceEnd

Result Returns OK or error.

Description

This property defines when the the repeating event is scheduled to end. The end date can be specified by a number of occurrences, or with an end date.

See also

- 76.126 Events.RecurrenceRule.GetRecurrenceEnd

3647

Created 10th March 2016, last changed 13th March 2016.

76.132 Events.RecurrenceRule.WeeksOfTheYear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RecurrenceRule.WeeksOfTheYear"; EKRecurrenceRule)

Parameters**EKRecurrenceRule**

The reference to the recurrence rule.

\$RecurrenceRule

Result Returns list or error.

Description

This property is valid for rules whose frequency is yearly. This property can be accessed as an list containing one or more numbers corresponding to the weeks of the year the event recurs. For all other rules, this property is empty. This property corresponds to BYWEEK in the iCalendar specification. It should contain integers from 1 to 53 or -1 to -53.

See also

- 76.120 Events.RecurrenceRule.DaysOfTheMonth 3641
- 76.121 Events.RecurrenceRule.DaysOfTheWeek 3642
- 76.122 Events.RecurrenceRule.DaysOfTheYear 3643
- 76.128 Events.RecurrenceRule.MonthsOfTheYear 3649

Created 10th March 2016, last changed 13th March 2016.

76.133 Events.RefreshSourcesIfNecessary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RefreshSourcesIfNecessary")

Result Returns OK or error.

Description

You can call this method to pull new data from remote sources. This only updates the event store's data. If you want to update your objects after refreshing the sources, you should call refresh on each of them afterwards. On iOS, this sync only occurs if deemed necessary. On OS X, this will occur regardless of necessity, but may change in a future release to match the iOS behavior. On WatchOS, initiating sync is not available. Sync will occur automatically with the paired iOS device.

76.133.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr1](#)

Created 10th March 2016, last changed 10th March 2016.

76.134 Events.Reminder.GetCompleted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.GetCompleted"; EKReminder)

Parameters**EKReminder**

The reference to the reminder.

\$Reminder

Result Returns 1, 0 or error.

Description

Returns 1 if completed, else 0.

Examples

Query completed status for a given reminder:

MBS("Events.Reminder.GetCompleted"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")

See also

- 76.135 Events.Reminder.GetCompletionDate 3658
- 76.136 Events.Reminder.GetDueDate 3659
- 76.138 Events.Reminder.GetPriority 3661
- 76.139 Events.Reminder.GetStartDate 3662
- 76.141 Events.Reminder.SetCompleted 3664
- 76.142 Events.Reminder.SetCompletionDate 3665

Created 10th March 2016, last changed 13th March 2016.

76.135 Events.Reminder.GetCompletionDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.GetCompletionDate"; EKReminder)

Parameters

EKReminder

The reference to the reminder.

\$Reminder

Result Returns timestamp or error.

Description

Note, you may encounter the case where Events.Reminder.GetCompleted is 1, but completionDate is empty, if the reminder was completed using a different client.

Examples

Query completion date for a given reminder:

MBS("Events.Reminder.GetCompletionDate"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")

See also

- 76.134 Events.Reminder.GetCompleted 3657
- 76.141 Events.Reminder.SetCompleted 3664
- 76.142 Events.Reminder.SetCompletionDate 3665

Created 10th March 2016, last changed 13th March 2016.

76.136 Events.Reminder.GetDueDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.GetDueDate"; EKReminder)

Parameters**EKReminder**

The reference to the reminder.

\$Reminder

Result Returns list or error.

Description

This may include a date and a time.

Returns a list with key=value list of the defined date components.

Examples

Query due date:

MBS("Events.Reminder.GetDueDate"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")

See also

- 76.134 Events.Reminder.GetCompleted 3657
- 76.138 Events.Reminder.GetPriority 3661
- 76.139 Events.Reminder.GetStartDate 3662
- 76.143 Events.Reminder.SetDueDate 3666
- 76.146 Events.Reminder.SetStartDate 3672

Created 10th March 2016, last changed 7th June 2019.

76.137 Events.Reminder.GetDueTimestamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	9.3	Yes	No	No	No	Yes

MBS("Events.Reminder.GetDueTimestamp"; EKReminder)

Parameters

EKReminder

The reference to the reminder.

\$Reminder

Result Returns timestamp, empty or error.

Description

Only if there is a real date entered and not just a few date components like 2nd Tuesday.

See also

- 76.140 Events.Reminder.GetStartTimestamp

3663

76.137.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr2](#)

Created 7th June 2019, last changed 7th June 2019.

76.138 Events.Reminder.GetPriority

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.GetPriority"; EKReminder)

Parameters**EKReminder**

The reference to the reminder.

\$Reminder

Result Returns number or error.

Description

Priorities run from 1 (highest) to 9 (lowest). A priority of 0 means no priority.

Examples

Query priority:

MBS("Events.Reminder.GetPriority"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")

See also

- 76.134 Events.Reminder.GetCompleted 3657
- 76.136 Events.Reminder.GetDueDate 3659
- 76.139 Events.Reminder.GetStartDate 3662
- 76.145 Events.Reminder.SetPriority 3670

Created 10th March 2016, last changed 13th March 2016.

76.139 Events.Reminder.GetStartDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.GetStartDate"; EKReminder)

Parameters

EKReminder

The reference to the reminder.

\$Reminder

Result Returns list or error.

Description

This may include a date and a time.

Returns a list with key=value list of the defined date components.

See also

- 76.44 Events.Event.GetStartDate 3553
- 76.134 Events.Reminder.GetCompleted 3657
- 76.136 Events.Reminder.GetDueDate 3659
- 76.138 Events.Reminder.GetPriority 3661
- 76.140 Events.Reminder.GetStartTimestamp 3663
- 76.143 Events.Reminder.SetDueDate 3666
- 76.146 Events.Reminder.SetStartDate 3672

Created 10th March 2016, last changed 7th June 2019.

76.140 Events.Reminder.GetStartTimestamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	9.3	Yes	No	No	No	Yes

MBS("Events.Reminder.GetStartTimestamp"; EKReminder)

Parameters**EKReminder**

The reference to the reminder.

\$Reminder

Result Returns timestamp, empty or error.

Description

Only if there is a real date entered and not just a few date components like 2nd Tuesday.

See also

- 76.137 Events.Reminder.GetDueTimestamp 3660
- 76.139 Events.Reminder.GetStartDate 3662

76.140.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr2](#)

Created 7th June 2019, last changed 7th June 2019.

76.141 Events.Reminder.SetCompleted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.SetCompleted"; EKReminder; Completed)

Parameters

EKReminder

The reference to the reminder.

\$Reminder

Completed

Pass 1 for completed or 0 if not.

1

Result Returns OK or error.

Description

Setting it to 1 will set the completed date to the current date.

Setting it to 0 will set the completed date to undefined.

See also

- 76.134 Events.Reminder.GetCompleted 3657
- 76.135 Events.Reminder.GetCompletionDate 3658
- 76.142 Events.Reminder.SetCompletionDate 3665
- 76.143 Events.Reminder.SetDueDate 3666
- 76.145 Events.Reminder.SetPriority 3670
- 76.146 Events.Reminder.SetStartDate 3672

Created 10th March 2016, last changed 13th March 2016.

76.142 Events.Reminder.SetCompletionDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.SetCompletionDate"; EKReminder; CompletionDate)

Parameters**EKReminder**

The reference to the reminder.

\$Reminder

CompletionDate

The completion timestamp.

Get(CurrentHostTimeStamp)

Result Returns OK or error.

Description**See also**

- 76.134 Events.Reminder.GetCompleted 3657
- 76.135 Events.Reminder.GetCompletionDate 3658
- 76.141 Events.Reminder.SetCompleted 3664

Created 10th March 2016, last changed 13th March 2016.

76.143 Events.Reminder.SetDueDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.SetDueDate"; EKReminder; DueDate)

Parameters

EKReminder

The reference to the reminder.

\$Reminder

DueDate

The new due date as timestamp.

Get(CurrentHostTimeStamp)

Result Returns OK or error.

Description

Examples

Set due date in an hour and save:

```
MBS( "Events.Reminder.SetStartDate"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31"; Get(CurrentHost-
TimeStamp) + 3600 ) &
```

```
MBS( "Events.SaveReminder"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")
```

Set due date:

```
If [ not IsEmpty(Events Create Reminder::DueDate) ]
```

```
Set Variable [ $r; Value:MBS( "Events.Reminder.SetDueDate"; $reminder; Events Create Reminder::Due-
Date ) ]
```

```
End If
```

See also

- 47.66 Calendar.Item.SetDueDate 1301
- 76.94 Events.NewReminder 3614
- 76.136 Events.Reminder.GetDueDate 3659
- 76.139 Events.Reminder.GetStartDate 3662
- 76.141 Events.Reminder.SetCompleted 3664
- 76.145 Events.Reminder.SetPriority 3670
- 76.146 Events.Reminder.SetStartDate 3672

76.143. *EVENTS.REMINDER.SETDUEDATE*

3667

- 76.155 Events.SaveReminder

3684

Example Databases

- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.144 Events.Reminder.SetDueDateComponents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.SetDueDateComponents"; EKReminder { ; Year; Month; Day; Hour; Minute; Second; TimeZone })

Parameters

EKReminder

The reference to the reminder.

\$Reminder

Year

Optional

The year number. If missing or negative, no year is defined.

2016

Month

Optional

The month number. If missing or negative, no month is defined.

12

Day

Optional

The day number. If missing or negative, no day is defined.

12

Hour

Optional

The hour number. If missing or negative, no hour is defined.

16

Minute

Optional

The minute number. If missing or negative, no minute is defined.

12

Second

Optional

The second number. If missing or negative, no second is defined.

0

TimeZone

Optional

The time zone to use. Value of "System" sets to system time zone. Value of "Default" sets to default time zone.

"GMT"

Result Returns OK or error.

Description

The use of date components allows the due date and its time zone to be represented in a single property. A undefined time zone represents a floating date. Setting a date component without a hour, minute and second component will set allDay to true.

See also

- 76.147 Events.Reminder.SetStartDateComponents 3674

Created 10th March 2016, last changed 13th March 2016.

76.145 Events.Reminder.SetPriority

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.SetPriority"; EKReminder; Priority)

Parameters

EKReminder

The reference to the reminder.

\$Reminder

Priority

The new priority. Number from 0 to 9. Or texts high, medium, low or none.

"medium"

Result Returns OK or error.

Description

Priorities run from 1 (highest) to 9 (lowest). A priority of 0 means no priority.

Saving a reminder with any other priority will fail.

Per RFC 5545, priorities of 1-4 are considered "high," a priority of 5 is "medium," and priorities of 6-9 are "low."

Examples

Set priority:

```
Set Variable [ $r; Value:MBS( "Events.Reminder.SetPriority"; $reminder; Events Create Reminder::Priority ) ]
```

Set high priority:

```
MBS( "Events.Reminder.SetPriority"; $Reminder; "high" )
```

See also

- 76.94 Events.NewReminder 3614
- 76.138 Events.Reminder.GetPriority 3661
- 76.141 Events.Reminder.SetCompleted 3664
- 76.143 Events.Reminder.SetDueDate 3666
- 76.146 Events.Reminder.SetStartDate 3672
- 76.155 Events.SaveReminder 3684

Example Databases

76.145. *EVENTS.REMINDER.SETPRIORITY*

3671

- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.146 Events.Reminder.SetStartDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.SetStartDate"; EKReminder; StartDate)

Parameters

EKReminder

The reference to the reminder.

\$Reminder

StartDate

The new start date as timestamp.

Get(CurrentHostTimeStamp)

Result Returns OK or error.

Description

Examples

Set start date and save:

```
MBS( "Events.Reminder.SetStartDate"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31"; Get(CurrentHost-
TimeStamp) ) &
MBS( "Events.SaveReminder"; "3E802BF6-BE7C-42EA-BA4A-16CCF824AA31")
```

Set Start Date:

```
If [ not IsEmpty(Events Create Reminder::StartDate) ]
Set Variable [ $r; Value:MBS( "Events.Reminder.SetStartDate"; $reminder; Events Create Reminder::Start-
Date ) ]
End If
```

See also

- 76.52 Events.Event.SetStartDate 3562
- 76.94 Events.NewReminder 3614
- 76.136 Events.Reminder.GetDueDate 3659
- 76.139 Events.Reminder.GetStartDate 3662
- 76.141 Events.Reminder.SetCompleted 3664
- 76.143 Events.Reminder.SetDueDate 3666
- 76.145 Events.Reminder.SetPriority 3670

76.146. *EVENTS.REMINDER.SETSTARTDATE*

3673

- 76.155 Events.SaveReminder

3684

Example Databases

- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.147 Events.Reminder.SetStartDateComponents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminder.SetStartDateComponents"; EKReminder { ; Year; Month; Day; Hour; Minute; Second; TimeZone })

Parameters

EKReminder

The reference to the reminder.

\$Reminder

Year

Optional

The year number. If missing or negative, no year is defined.

2016

Month

Optional

The month number. If missing or negative, no month is defined.

12

Day

Optional

The day number. If missing or negative, no day is defined.

12

Hour

Optional

The hour number. If missing or negative, no hour is defined.

16

Minute

Optional

The minute number. If missing or negative, no minute is defined.

12

Second

Optional

The second number. If missing or negative, no second is defined.

0

TimeZone

Optional

The time zone to use. Value of "System" sets to system time zone. Value of "Default" sets to default time zone.

"GMT"

Result Returns OK or error.

Description

The use of date components allows the start date and its time zone to be represented in a single property. A undefined time zone represents a floating date. Setting a date component without a hour, minute and second component will set allDay to true.

See also

- 76.144 Events.Reminder.SetDueDateComponents 3668

Created 10th March 2016, last changed 13th March 2016.

76.148 Events.Reminders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reminders" { ; Calendars })

Parameters

Calendars

Optional

The identifier for the calendar you want to search. Leave empty to search all.

Result Returns list of reminder identifiers or error.

Description

You can pass nothing for calendars to fetch from all available calendars.

Examples

Query all reminders from all calendars:

```
MBS( "Events.Reminders" )
```

See also

- [76.94 Events.NewReminder](#)

3614

Example Databases

- [Mac and iOS/Events/Events Changes](#)

Created 10th March 2016, last changed 13th March 2016.

76.149 Events.RemoveCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RemoveCalendar"; EKCalendar { ; Commit })

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

Commit

Optional

Whether to commit. Pass 1 to commit or 0 to not commit. Default is 1. Pass 0 to batch changes together and commit with Events.Commit later.

1

Result Returns OK or error.

Description

This function attempts to delete the given calendar from the calendar database. It returns OK if successful and error otherwise.

If the calendar supports multiple entity types (allowedEntityTypes), but the user has not granted you access to all those entity types, then we will delete all of the entity types for which you have access and remove that entity type from the allowedEntityTypes. For example: If a calendar supports both events and reminders, but you only have access to reminders, we will delete all the reminders and make the calendar only support events.

If you have access to all of its allowedEntityTypes, then it will delete the calendar and all of the events and reminders in the calendar.

See also

- 47.89 Calendar.RemoveCalendar 1330
- 76.37 Events.Commit 3546
- 76.68 Events.Item.GetCalendar 3581
- 76.81 Events.Item.SetCalendar 3594
- 76.92 Events.NewCalendar 3611
- 76.151 Events.RemoveReminder 3679
- 76.153 Events.SaveCalendar 3681

Created 10th March 2016, last changed 10th March 2016.

76.150 Events.RemoveEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RemoveEvent"; EKEvent; Span { ; Commit })

Parameters

EKEvent

The reference to the event.

\$event

Span

The span to use. This event, or this and future events. Pass "This" or "Future" here.

"This"

Commit

Optional

Whether to commit. Pass 1 to commit or 0 to not commit. Default is 1. Pass 0 to batch changes together and commit with Events.Commit later.

1

Result Returns OK or error.

Description

This function attempts to remove the event from the calendar database. It returns OK if successful and error otherwise. It's possible for this function to return failed. This occurs if the event wasn't ever added and didn't need removing.

After an event is removed, it is no longer tied to this calendar store, and all data in the event is cleared except for the eventIdentifier.

Examples

Remove event:

```
Set Variable [ $r; Value:MBS("Events.RemoveEvent"; CalendarTest::ItemUID; "this"; 1) ]
```

See also

- [76.37 Events.Commit](#) 3546
- [76.154 Events.SaveEvent](#) 3682
- [76.156 Events.SelectEvent](#) 3687

Example Databases

- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 24th March 2016.

76.151 Events.RemoveReminder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.RemoveReminder"; EKReminder { ; Commit })

Parameters**EKReminder**

The reference to the reminder.

\$Reminder

Commit

Optional

Whether to commit. Pass 1 to commit or 0 to not commit. Default is 1. Pass 0 to batch changes together and commit with Events.Commit later.

1

Result Returns OK or error.

Description

This function attempts to remove the reminder from the event store database. It returns OK if successful and Failed otherwise.

After a reminder is removed, it is no longer tied to this event store.

See also

- 47.91 Calendar.RemoveReminder 1332
- 76.37 Events.Commit 3546
- 76.94 Events.NewReminder 3614
- 76.149 Events.RemoveCalendar 3677
- 76.155 Events.SaveReminder 3684

Created 10th March 2016, last changed 10th March 2016.

76.152 Events.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Reset")

Result Returns OK or error.

Description

You can use this method to forget ALL changes made to the event store (all additions, all fetched objects, etc.). It essentially is as if you released the store and then created a new one. It brings it back to its initial state. All objects ever created/fetched, etc. using this store are no longer connected to it and are considered invalid.

Example Databases

- [Mac and iOS/Events/Events Sync](#)

76.152.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr7](#)

Created 10th March 2016, last changed 10th March 2016.

76.153 Events.SaveCalendar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.SaveCalendar"; EKCalendar { ; Commit })

Parameters**EKCalendar**

The id of the calendar to query.

\$calendar

Commit

Optional

Whether to commit. Pass 1 to commit or 0 to not commit. Default is 1. Pass 0 to batch changes together and commit with Events.Commit later.

1

Result Returns OK or error.

Description

This functions attempts to save the given calendar to the calendar database. It returns OK if successful and an error otherwise.

See also

- 76.37 Events.Commit 3546
- 76.92 Events.NewCalendar 3611
- 76.149 Events.RemoveCalendar 3677
- 76.155 Events.SaveReminder 3684

Created 10th March 2016, last changed 10th March 2016.

76.154 Events.SaveEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.SaveEvent"; EKEvent; Span { ; Commit })

Parameters

EKEvent

The reference to the event.

\$event

Span

The span to use. This event, or this and future events. Pass "This" or "Future" here.

"This"

Commit

Optional

Whether to commit. Pass 1 to commit or 0 to not commit. Default is 1. Pass 0 to batch changes together and commit with Events.Commit later.

1

Result Returns OK or error.

Description

This function attempts to save the event to the calendar database. It returns OK if successful and error otherwise. It's possible for this function to return failed. This occurs if the event wasn't dirty and didn't need saving.

After an event is successfully saved, it is also put into sync with the database, meaning that all fields you did not change will be updated to the latest values. If you save the event, but it was deleted by a different store/process, you will effectively recreate the event as a new event.

Examples

Update dates:

```
Set Variable [ $c; Value:CalendarTest::ItemUID ]
Set Variable [ $r; Value:MBS("Events.Event.SetEndDate"; $c; CalendarTest::ItemEndDate) ]
Set Variable [ $r; Value:MBS("Events.Event.SetStartDate"; $c; CalendarTest::ItemStartDate) ]
Set Variable [ $r; Value:MBS("Events.SaveEvent"; $c; "this"; 1 ) ]
```

Create event:

```
Set Variable [ $c; Value:MBS("Events.NewEvent") ]
Set Variable [ $r; Value:MBS("Events.Item.SetTitle"; $c; CalendarTest::ItemTitle) ]
Set Variable [ $r; Value:MBS("Events.Item.SetNotes"; $c; CalendarTest::ItemNotes) ]
Set Variable [ $r; Value:MBS("Events.Item.SetURL"; $c; CalendarTest::ItemURL) ]
Set Variable [ $r; Value:MBS("Events.Item.SetLocation"; $c; CalendarTest::ItemLocation) ]
Set Variable [ $r; Value:MBS("Events.Event.SetStartDate"; $c; CalendarTest::ItemStartDate) ]
Set Variable [ $r; Value:MBS("Events.Event.SetEndDate"; $c; CalendarTest::ItemEndDate) ]
```

76.154. *EVENTS.SAVEEVENT*

3683

```
Set Variable [ $r; Value:MBS("Events.Event.SetAllDay"; $c;CalendarTest::ItemAllDay) ]  
Set Variable [ $r; Value:MBS("Events.Event.SetAvailability"; $c; "busy") ]  
Set Variable [ $r; Value:MBS("Events.Item.SetCalendar"; $c; CalendarTest::CalendarUID) ]  
Set Variable [ $r; Value:MBS("Events.SaveEvent"; $c; "this"; 1 ) ]  
Set Field [ CalendarTest::ItemUID; MBS("Events.Item.CalendarItemIdentifier"; $c) ]
```

See also

- [76.37 Events.Commit](#) 3546
- [76.50 Events.Event.SetAvailability](#) 3559
- [76.51 Events.Event.SetEndDate](#) 3560
- [76.81 Events.Item.SetCalendar](#) 3594
- [76.82 Events.Item.SetLocation](#) 3596
- [76.83 Events.Item.SetNotes](#) 3598
- [76.85 Events.Item.SetTitle](#) 3601
- [76.93 Events.NewEvent](#) 3612
- [76.150 Events.RemoveEvent](#) 3678
- [76.156 Events.SelectEvent](#) 3687

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Sync](#)

76.154.1 Blog Entries

- [FileMaker and Calendar \(iCal\)](#)

Created 10th March 2016, last changed 24th March 2016.

76.155 Events.SaveReminder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.SaveReminder"; EKReminder { ; Commit })

Parameters

EKReminder

The reference to the reminder.

\$Reminder

Commit

Optional

Whether to commit. Pass 1 to commit or 0 to not commit. Default is 1. Pass 0 to batch changes together and commit with Events.Commit later.

1

Result Returns OK or error.

Description

This function attempts to save the reminder to the event store database. It returns OK if successful and error otherwise.

After a reminder is successfully saved, its fields are updated to the latest values in the database.

Examples

Create Reminder:

```
Set Variable [ $reminder; Value:MBS( "Events.NewReminder" ) ]
Set Variable [ $calendar; Value:Events Create Reminder::Calendar ]
If [ IsEmpty(Events Create Reminder::Calendar) ]
Set Variable [ $calendar; Value:MBS( "Events.defaultCalendarForNewReminders" ) ]
End If
Set Variable [ $r; Value:MBS( "Events.Item.SetCalendar"; $reminder; $calendar ) ]
Set Variable [ $r; Value:MBS( "Events.Item.SetLocation"; $reminder; Events Create Reminder::Location ) ]
Set Variable [ $r; Value:MBS( "Events.Item.SetTitle"; $reminder; Events Create Reminder::Title ) ]
Set Variable [ $r; Value:MBS( "Events.Item.SetURL"; $reminder; Events Create Reminder::URL ) ]
Set Variable [ $r; Value:MBS( "Events.Item.SetNotes"; $reminder; Events Create Reminder::Notes ) ]
If [ IsEmpty(Events Create Reminder::TimeZone) ]
# we don't set it
Else
Set Variable [ $r; Value:MBS( "Events.Item.SetTimezone"; $reminder; Events Create Reminder::TimeZone
) ]
End If
Set Variable [ $r; Value:MBS( "Events.Item.SetNotes"; $reminder; Events Create Reminder::Notes ) ]
Set Variable [ $r; Value:MBS( "Events.Reminder.SetPriority"; $reminder; Events Create Reminder::Priority
) ]
```



```

If [ not IsEmpty(Events Create Reminder::StartDate) ]
Set Variable [ $r; Value:MBS( "Events.Reminder.SetStartDate"; $reminder; Events Create Reminder::StartDate ) ]
End If
If [ not IsEmpty(Events Create Reminder::DueDate) ]
Set Variable [ $r; Value:MBS( "Events.Reminder.SetDueDate"; $reminder; Events Create Reminder::DueDate ) ]
End If
If [ not IsEmpty(Events Create Reminder::AlarmSound) or not IsEmpty(Events Create Reminder::AlarmLocationTitle) or not IsEmpty(Events Create Reminder::AlarmLocationGeoLat) ]
Set Variable [ $alarm; Value:MBS( "Events.NewAlarm" ) ]
If [ not IsEmpty(Events Create Reminder::AlarmSound) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetSound"; $alarm; Events Create Reminder::AlarmSound ) ]
End If
If [ not IsEmpty(Events Create Reminder::AlarmLocationTitle) ]
Set Variable [ $l; Value:MBS( "Events.StructuredLocation.NewLocationWithTitle"; Events Create Reminder::AlarmLocationTitle ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetRadius"; $l; Events Create Reminder::AlarmLocationRadius ) ]
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetGeoLocation"; $l; Events Create Reminder::AlarmLocationGeoLat; Events Create Reminder::AlarmLocationGeoLong ) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetStructuredLocation"; $alarm; $l ) ]
Set Variable [ $r; Value:MBS( "Events.Alarm.SetProximity"; $alarm; Events Create Reminder::AlarmProximity ) ]
End If
Set Variable [ $r; Value:MBS( "Events.Item.AddAlarm"; $reminder; $alarm ) ]
End If
Set Variable [ $r; Value:MBS( "Events.SaveReminder"; $reminder ;1 ) ]
Show Custom Dialog [ "Saved Reminder"; $r ]

```

See also

- 76.172 Events.defaultCalendarForNewReminders 3705
- 76.83 Events.Item.SetNotes 3598
- 76.86 Events.Item.SetURL 3603
- 76.89 Events.NewAlarm 3607
- 76.94 Events.NewReminder 3614
- 76.145 Events.Reminder.SetPriority 3670
- 76.146 Events.Reminder.SetStartDate 3672
- 76.167 Events.StructuredLocation.NewLocationWithTitle 3699
- 76.168 Events.StructuredLocation.SetGeoLocation 3701
- 76.169 Events.StructuredLocation.SetRadius 3702

Example Databases

- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.156 Events.SelectEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.SelectEvent"; ID)

Parameters**ID**

the ID for the calendar entry.

Result Returns ID or error.

Description

This function takes a calendar ID, either internal or external identifier for events or reminders and finds it. Returns the internal ID. Result is empty if nothing is found.

Examples

Select an event by ID:

MBS("Events.SelectEvent"; "2D8DD2DD-766C-4E1D-A9FB-A36C6082CED2")

See also

- 76.150 Events.RemoveEvent 3678
- 76.154 Events.SaveEvent 3682

Created 10th March 2016, last changed 30th May 2016.

76.157 Events.SetNotification

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.SetNotification"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fp7"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK or error.

Description

This script is called whenever something in the calendar database changed.

Notification is sent out when the database is changed by either an external process, another event store in the same process, or by calling `saveEvent:` or `removeEvent:` on a store you are managing. When you receive this notification, you should consider all objects instances you have to be invalid. If you had selected events for a date range using `Events.Events`, etc. for display, you should release them and re-fetch the events again. If you have an event you are actively using (e.g. you are currently viewing details for it or editing it), you can call `Events.Object.Refresh` to try to revalidate it against the latest state of the database. If that method returns 1, you can continue to use the event, otherwise, you should release it and abandon what you were doing with it.

This script trigger will also be posted if access to events or reminders is changed by the user.

Examples

Installs notification script:

MBS("Events.SetNotification"; "test.fmp12"; "MyScript")

See also

- 76.36 Events.ClearNotification 3545
- 76.58 Events.Events 3569
- 76.97 Events.Object.Refresh 3618

Example Databases

- [Mac and iOS/Events/Events Changes](#)

Created 10th March 2016, last changed 29th March 2016.

76.158 Events.SetNotificationEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.SetNotificationEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

This expression is evaluated whenever something in the calendar database changed.

Notification is sent out when the database is changed by either an external process, another event store in the same process, or by calling `saveEvent:` or `removeEvent:` on a store you are managing. When you receive this notification, you should consider all objects instances you have to be invalid. If you had selected events for a date range using `Events.Events`, etc. for display, you should release them and re-fetch the events again. If you have an event you are actively using (e.g. you are currently viewing details for it or editing it), you can call `Events.Object.Refresh` to try to revalidate it against the latest state of the database. If that method returns 1, you can continue to use the event, otherwise, you should release it and abandon what you were doing with it.

This expression will also be evaluated if access to events or reminders is changed by the user.

See also

- [76.58 Events.Events](#) 3569
- [76.97 Events.Object.Refresh](#) 3618

76.158.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 29th March 2016.

76.159 Events.Source.Calendars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Source.Calendars"; EKSource { ; Type })

Parameters**EKSource**

The reference to the source.

\$Source

Type

Optional

Which entity type you like to check: Event or Reminder. Default is event

"Event"

Result Returns list or error.

Description

Returns list of calendar identifiers.

Examples

Queries list of calendars:

MBS("Events.Source.Calendars"; \$source)

Created 10th March 2016, last changed 10th March 2016.

76.160 Events.Source.Title

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Source.Title"; EKSource)

Parameters**EKSource**

The reference to the source.

\$Source

Result Returns text or error.

Description**Examples**

Queries title of source:

MBS("Events.Source.Title"; \$source)

Query source title for calendar:

MBS("Events.Source.Title"; MBS("Events.Calendar.GetSource"; "Firma"))

See also

- [76.23 Events.Calendar.GetSource](#) 3532
- [76.161 Events.Source.Type](#) 3693

Example Databases

- [Mac and iOS/Events/Events Sync](#)

Created 10th March 2016, last changed 22nd May 2016.

76.161 Events.Source.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Source.Type"; EKSource)

Parameters**EKSource**

The reference to the source.

\$Source

Result Returns text or error.

Description

Can be Local, Exchange, CalDAV, MobileMe, Subscribed or Birthdays.

Examples

Queries type of source:

MBS("Events.Source.Type"; \$source)

See also

- 76.17 Events.Alarm.Type 3524
- 76.160 Events.Source.Title 3692
- 76.162 Events.SourceWithType 3694

Created 10th March 2016, last changed 10th March 2016.

76.162 Events.SourceWithType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.SourceWithType"; Type)

Parameters**Type**

The type of source. Can be Birthdays, Local, MobileMe, Exchange, CalDAV or Subscribed.
"Local"

Result Returns source identifier, empty or error.

Description

This is a convenient way to find local or iCloud source.

Examples

Query local source:

MBS("Events.SourceWithType"; "Local")

See also

- 76.161 Events.Source.Type

3693

Created 24th March 2016, last changed 24th March 2016.

76.163 Events.Sources

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.Sources")

Result Returns list or error.

Description**Examples**

Query list of sources:

MBS("Events.Sources")

Created 10th March 2016, last changed 10th March 2016.

76.164 Events.StructuredLocation.Copy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.StructuredLocation.Copy"; EKStructuredLocation)

Parameters**EKStructuredLocation**

The reference to the structured location.

\$StructuredLocation

Result Returns reference ID or error.

Description

Returns a new reference ID for the copy.

See also

- 76.170 Events.StructuredLocation.Title

3703

Created 10th March 2016, last changed 12nd March 2016.

76.165 Events.StructuredLocation.GetGeoLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.StructuredLocation.GetGeoLocation"; EKStructuredLocation)

Parameters**EKStructuredLocation**

The reference to the structured location.

\$StructuredLocation

Result Returns coordinates or error.

Description

Returned as two numbers with a §between. First is latitude, second longitude.

See also

- 76.166 Events.StructuredLocation.GetRadius 3698
- 76.168 Events.StructuredLocation.SetGeoLocation 3701
- 76.169 Events.StructuredLocation.SetRadius 3702

Created 10th March 2016, last changed 12nd March 2016.

76.166 Events.StructuredLocation.GetRadius

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.StructuredLocation.GetRadius"; EKStructuredLocation)

Parameters

EKStructuredLocation

The reference to the structured location.

\$StructuredLocation

Result Returns number or error.

Description

0 = use default, unit is meters

See also

- 76.165 Events.StructuredLocation.GetGeoLocation 3697
- 76.168 Events.StructuredLocation.SetGeoLocation 3701
- 76.169 Events.StructuredLocation.SetRadius 3702
- 76.170 Events.StructuredLocation.Title 3703

Created 10th March 2016, last changed 12nd March 2016.

76.167 Events.StructuredLocation.NewLocationWithTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.StructuredLocation.NewLocationWithTitle"; Title)

Parameters**Title**

The new title of location.

"Hamburg, Germany"

Result Returns reference ID or error.

Description

Returns reference ID which you can pass to Events.Event.SetStructuredLocation function.

Examples

Create structured location for alarm:

```
Set Variable [ $!; Value:MBS( "Events.StructuredLocation.NewLocationWithTitle"; Events Create Reminder::Alarm-LocationTitle ) ]
```

```
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetRadius"; $!; Events Create Reminder::Alarm-LocationRadius ) ]
```

```
Set Variable [ $r; Value:MBS( "Events.StructuredLocation.SetGeoLocation"; $!; Events Create Reminder::Alarm-LocationGeoLat; Events Create Reminder::AlarmLocationGeoLong ) ]
```

```
Set Variable [ $r; Value:MBS( "Events.Alarm.SetStructuredLocation"; $alarm; $! ) ]
```

```
Set Variable [ $r; Value:MBS( "Events.Alarm.SetProximity"; $alarm; Events Create Reminder::AlarmProximity ) ]
```

See also

- 76.11 Events.Alarm.SetProximity 3516
- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.53 Events.Event.SetStructuredLocation 3564
- 76.61 Events.Item.AddAlarm 3572
- 76.89 Events.NewAlarm 3607
- 76.94 Events.NewReminder 3614
- 76.155 Events.SaveReminder 3684
- 76.168 Events.StructuredLocation.SetGeoLocation 3701
- 76.169 Events.StructuredLocation.SetRadius 3702

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.168 Events.StructuredLocation.SetGeoLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.StructuredLocation.SetGeoLocation"; EKStructuredLocation; latitude; longitude)

Parameters**EKStructuredLocation**

The reference to the structured location.

\$StructuredLocation

latitude

The latitude value for the geo coordinate.

51.50939

longitude

The longitude value for the geo coordinate.

-0.11832

Result Returns OK or error.

Description**See also**

- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.61 Events.Item.AddAlarm 3572
- 76.89 Events.NewAlarm 3607
- 76.94 Events.NewReminder 3614
- 76.155 Events.SaveReminder 3684
- 76.165 Events.StructuredLocation.GetGeoLocation 3697
- 76.166 Events.StructuredLocation.GetRadius 3698
- 76.167 Events.StructuredLocation.NewLocationWithTitle 3699
- 76.169 Events.StructuredLocation.SetRadius 3702

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 12nd March 2016.

76.169 Events.StructuredLocation.SetRadius

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.StructuredLocation.SetRadius"; EKStructuredLocation; Radius)

Parameters

EKStructuredLocation

The reference to the structured location.

\$StructuredLocation

Radius

The new radius value.

0

Result Returns OK or error.

Description

0 = use default, unit is meters

See also

- 76.14 Events.Alarm.SetStructuredLocation 3520
- 76.61 Events.Item.AddAlarm 3572
- 76.89 Events.NewAlarm 3607
- 76.94 Events.NewReminder 3614
- 76.155 Events.SaveReminder 3684
- 76.165 Events.StructuredLocation.GetGeoLocation 3697
- 76.166 Events.StructuredLocation.GetRadius 3698
- 76.167 Events.StructuredLocation.NewLocationWithTitle 3699
- 76.168 Events.StructuredLocation.SetGeoLocation 3701
- 76.170 Events.StructuredLocation.Title 3703

Example Databases

- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 12nd March 2016.

76.170 **Events.StructuredLocation.Title**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.StructuredLocation.Title"; EKStructuredLocation)

Parameters

EKStructuredLocation

The reference to the structured location.

\$StructuredLocation

Result Returns text or error.

Description

See also

- 76.164 [Events.StructuredLocation.Copy](#) 3696
- 76.166 [Events.StructuredLocation.GetRadius](#) 3698
- 76.169 [Events.StructuredLocation.SetRadius](#) 3702

Created 10th March 2016, last changed 12nd March 2016.

76.171 Events.defaultCalendarForNewEvents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.defaultCalendarForNewEvents")

Result Returns calendar identifier or error.

Description**Examples**

Query name of default calendar:

```
MBS("Events.Calendar.GetTitle"; MBS( "Events.defaultCalendarForNewEvents" ))
```

See also

- 76.24 Events.Calendar.GetTitle 3533
- 76.172 Events.defaultCalendarForNewReminders 3705

Example Databases

- [Mac and iOS/Events/Events Create Event](#)

Created 10th March 2016, last changed 10th March 2016.

76.172 Events.defaultCalendarForNewReminders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.defaultCalendarForNewReminders")

Result Returns calendar identifier or error.

Description**Examples**

Query title of calendar for new reminders:

```
MBS("Events.Calendar.GetTitle"; MBS( "Events.defaultCalendarForNewReminders" ))
```

Get calendar:

```
Set Variable [ $calendar; Value:Events Create Reminder::Calendar ]
If [ IsEmpty(Events Create Reminder::Calendar) ]
Set Variable [ $calendar; Value:MBS( "Events.defaultCalendarForNewReminders" ) ]
End If
```

See also

- [76.24 Events.Calendar.GetTitle](#) 3533
- [76.171 Events.defaultCalendarForNewEvents](#) 3704
- [76.94 Events.NewReminder](#) 3614
- [76.155 Events.SaveReminder](#) 3684

Example Databases

- [Mac and iOS/Events/Events Create Reminder](#)

Created 10th March 2016, last changed 13th March 2016.

76.173 Events.requestAccessToEntityType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
76 Events	6.2	Yes	No	No	No	Yes

MBS("Events.requestAccessToEntityType"; Type)

Parameters

Type

Which entity type you like to request: Event or Reminder.
"Event"

Result Returns Wait, OK or error.

Description

Users are able to grant or deny access to event and reminder data on a per-app basis. To request access to event and/or reminder data, call `Events.requestAccessToEntityType`. This will not block the app while the user is being asked to grant or deny access.

Until access has been granted for an entity type, the event store will not contain any calendars for that entity type, and any attempt to save will fail. The user will only be prompted the first time access is requested; any subsequent instantiations of `EKEventStore` will use the existing permissions.

You can later check status with `Events.AuthorizationStatusForEntityType`.

The function may return OK if access is granted directly or Wait if user will be asked.

Examples

Request access for reminder:

```
MBS( "Events.requestAccessToEntityType"; "Reminder" )
```

Query authorization:

```
Set Variable [ $r; Value:MBS("Events.AuthorizationStatusForEntityType"; "Reminder") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "We have a problem"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Else If [ $r = "NotDetermined" ]
Set Variable [ $r; Value:MBS( "Events.requestAccessToEntityType"; "Reminder" ) ]
If [ $r = "Wait" ]
# dialog is showing.
Else If [ $r = "OK" ]
Show Custom Dialog [ "Success"; "We are authorized and ready to go." ]
Else
Show Custom Dialog [ "We have a problem"; $r ]
End If
Else If [ $r = "Restricted" ]
Show Custom Dialog [ "Success"; "We are authorized for a restricted access and ready to go." ]
Else If [ $r = "Denied" ]
```

76.173. *EVENTS.REQUESTACCESSTOENTITYTYPE*

3707

```
Show Custom Dialog [ "Problem"; "We are denied for calendar access. Please go to system preferences and enable us." ]
Else If [ $r = "Authorized" ]
Show Custom Dialog [ "Success"; "We are authorized and ready to go." ]
Else
Show Custom Dialog [ "We have a problem"; $r ]
End If
```

See also

- 76.18 *Events.AuthorizationStatusForEntityType* 3525
- 124.6 *IsError* 6266
- 164.57 *Text.RemovePrefix* 7854

Example Databases

- [Mac and iOS/Events/Events Changes](#)
- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)
- [Mac and iOS/Events/Events Import](#)
- [Mac and iOS/Events/Events Sync](#)

76.173.1 **Blog Entries**

- [Calendar access in FileMaker 18](#)

Created 10th March 2016, last changed 13th March 2016.

Chapter 77

FileDialog

Show dialogs to select files or folders.

77.1 DocumentPicker.Dismiss

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.Dismiss")

Result Returns OK or error.

Description

Does nothing if dialog is not visible.

See also

- 77.5 DocumentPicker.Files

3713

Created 28th January 2019, last changed 28th January 2019.

77.2 DocumentPicker.Export

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.Export"; Paths)

Parameters

Paths

Native file path list for the documents to pass.

"/Containers/testApp/Documents/test.txt"

Result Returns OK or error.

Description

The user selects an external destination. The document picker copies the document, leaving the original unchanged.

On success, we store the list of file paths and trigger script. Script is trigger with parameter "Pick" or "Cancel".

The file paths refer to new copies of the exported documents at the selected destination.

Warning: Function returns immediately and dialog shows after function returned asynchronously.

See also

- 77.6 DocumentPicker.Import 3714
- 77.8 DocumentPicker.Move 3716
- 77.9 DocumentPicker.Open 3717

Created 28th January 2019, last changed 28th January 2019.

77.3 DocumentPicker.File

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.File"; Index)

Parameters

Index

The index of the file to query.

0

Result Returns file path or error.

Description

Pass index from 0 to DocumentPicker.FileCount-1.

Example path you may see for import:

"/Containers/Data/Application/2E993ED8-F5AA-4A18-877C-F0CB72485337/tmp/de.monkeybreadsoftware.test-Inbox/IMG_0005.JPG"

And for open without inbox:

"/Containers/Data/Application/2E993ED8-F5AA-4A18-877C-F0CB72485337/Documents/IMG_0005.JPG"

See also

- [77.4 DocumentPicker.FileCount](#) 3712
- [77.5 DocumentPicker.Files](#) 3713
- [77.8 DocumentPicker.Move](#) 3716
- [77.9 DocumentPicker.Open](#) 3717

Created 28th January 2019, last changed 28th January 2019.

77.4 DocumentPicker.FileCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.FileCount")

Result Returns number or error.

Description

See also

- 77.3 DocumentPicker.File 3711
- 77.5 DocumentPicker.Files 3713

Created 28th January 2019, last changed 28th January 2019.

77.5 DocumentPicker.Files

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.Files")

Result Returns list or error.

Description

See also

- [77.1 DocumentPicker.Dismiss](#) 3709
- [77.3 DocumentPicker.File](#) 3711
- [77.4 DocumentPicker.FileCount](#) 3712
- [77.8 DocumentPicker.Move](#) 3716
- [77.9 DocumentPicker.Open](#) 3717

Example Databases

- [iOS/DocumentPicker iOS](#)

Created 28th January 2019, last changed 29th January 2019.

77.6 DocumentPicker.Import

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.Import"; AllowedUTIs; allowsMultipleSelection)

Parameters

AllowedUTIs

The list of allowed universal types.

"public.jpeg\$public.png"

allowsMultipleSelection

Whether to allow multiple files to be selected. Pass 1 to allow and 0 to disallow.

1

Result Returns OK or error.

Description

The user selects an external document. The document picker copies the document, leaving the original unchanged.

On success, we store the list of file paths and trigger script. Script is trigger with parameter "Pick" or "Cancel".

The path list refers to a copy of the selected documents. These documents are temporary files. They remain available only until your application terminates. To keep a permanent copy, move these files to a permanent location inside your sandbox.

Warning: Function returns immediately and dialog shows after function returned asynchronously.

See also

- [77.2 DocumentPicker.Export](#) 3710
- [77.8 DocumentPicker.Move](#) 3716
- [77.9 DocumentPicker.Open](#) 3717

Example Databases

- [iOS/DocumentPicker iOS](#)

Created 28th January 2019, last changed 28th January 2019.

77.7 DocumentPicker.IsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.IsVisible")

Result Returns 1, 0 or error.

Description

Returns 1 if visible or 0 if not.

Created 28th January 2019, last changed 28th January 2019.

77.8 DocumentPicker.Move

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.Move"; Paths)

Parameters

Paths

Native file path list for the documents to pass.

"/Containers/testApp/Documents/test.txt"

Result Returns OK or error.

Description

The user selects an external destination. The document picker moves the document; however, the user can still access the document as an external document, and the user can edit the document in place.

On success, we store the list of file paths and trigger script. Script is trigger with parameter "Pick" or "Cancel".

The path list refers to the documents' new locations.

Warning: Function returns immediately and dialog shows after function returned asynchronously.

See also

- 77.2 DocumentPicker.Export 3710
- 77.3 DocumentPicker.File 3711
- 77.5 DocumentPicker.Files 3713
- 77.6 DocumentPicker.Import 3714
- 77.9 DocumentPicker.Open 3717

Created 28th January 2019, last changed 28th January 2019.

77.9 DocumentPicker.Open

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.Open"; AllowedUTIs; allowsMultipleSelection)

Parameters

AllowedUTIs

The list of allowed universal types.

"public.jpeg\$public.png"

allowsMultipleSelection

Whether to allow multiple files to be selected. Pass 1 to allow and 0 to disallow.

1

Result Returns OK or error.

Description

The user selects an external document. The document picker provides access to the document, and the user can edit the document in place.

On success, we store the list of file paths and trigger script. Script is trigger with parameter "Pick" or "Cancel".

The paths list refers to the selected documents.

Warning: Function returns immediately and dialog shows after function returned asynchronously.

For FileMaker database files, please use com.filemaker.doc.fmp12 as UTI or simply public.data.

See also

- 77.2 DocumentPicker.Export 3710
- 77.3 DocumentPicker.File 3711
- 77.5 DocumentPicker.Files 3713
- 77.6 DocumentPicker.Import 3714
- 77.8 DocumentPicker.Move 3716

Example Databases

- [iOS/DocumentPicker iOS](#)

Created 28th January 2019, last changed 22nd February 2019.

77.10 DocumentPicker.SetTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	9.1	No	No	No	No	Yes

MBS("DocumentPicker.SetTrigger"; FileName; ScriptName)

Parameters

FileName

The file name of the script.

Get(FileName)

ScriptName

The script to trigger.

"FilesSelected"

Result Returns OK or error.

Description

Example Databases

- [iOS/DocumentPicker iOS](#)

Created 28th January 2019, last changed 28th January 2019.

77.11 FileDialog.GetAllowMulti

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetAllowMulti")

Result Returns 0 or 1.

Description

See also

- 77.32 FileDialog.SetAllowMulti

3749

Created 18th August 2014, last changed 18th August 2014.

77.12 FileDialog.GetAllowsOtherFileTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	4.3	Yes	No	No	No	No

MBS("FileDialog.GetAllowsOtherFileTypes")

Result Returns value.

Description

See also

- 77.33 FileDialog.SetAllowsOtherFileTypes

3751

Created 18th August 2014, last changed 17th June 2018.

77.13 FileDialog.GetCanSelectHiddenExtension

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	No	No	No	No

MBS("FileDialog.GetCanSelectHiddenExtension")

Result Returns 1 when the panel allows the user to hide or show extensions; otherwise, 0.

Description

See also

- 77.34 FileDialog.SetCanSelectHiddenExtension

3752

Created 18th August 2014, last changed 18th August 2014.

77.14 FileDialog.GetFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	4.3	Yes	Yes	No	No	No

MBS("FileDialog.GetFilter"; Selector)

Parameters

Selector

Which value to query. Can be MacFilter, WinFilter or WinLabels.
"MacFilter"

Result Returns filter or error.

Description

See also

- [77.19 FileDialog.GetPath](#) 3727
- [77.35 FileDialog.SetFilter](#) 3753

Created 18th August 2014, last changed 18th August 2014.

77.15 FileDialog.GetInitialDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetInitialDirectory")

Result Returns path for initial directory.

Description

Use Path.NativePathToFileMakerPath to convert to a FileMaker path if required.

See also

- 77.36 FileDialog.SetInitialDirectory 3755
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 29th April 2016.

77.16 FileDialog.GetMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetMessage")

Result Returns the message text.

Description

See also

- 63.14 Dialog.GetMessage 2353
- 63.38 Dialog.SetMessage 2379
- 77.25 FileDialog.GetUseSheet 3735
- 77.37 FileDialog.SetMessage 3757

Created 18th August 2014, last changed 17th June 2018.

77.17 FileDialog.GetNameFieldLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetNameFieldLabel")

Result Returns initial text for the name field.

Description

See also

- 77.38 FileDialog.SetNameFieldLabel

3759

Created 18th August 2014, last changed 24th May 2018.

77.18 FileDialog.GetNameFieldStringValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetNameFieldStringValue")

Result Returns the text.

Description

See also

- [77.39 FileDialog.SetNameFieldStringValue](#) 3760

77.18.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

77.19 FileDialog.GetPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetPath" { ; index })

Parameters

index

Optional

The index of the path.

0

Result Returns native path.

Description

Use Path.NativePathToFileMakerPath to convert to a FileMaker path if required.

Please note that in sheet mode (FileDialog.SetUseSheet with 1), you need to wait for the trigger to be called before you can query paths.

Examples

Export all containers to one folder:

```
# Ask for folder?
Set Variable [ $r; Value:MBS("FileDialog.Reset") ]
Set Variable [ $r; Value:MBS("FileDialog.SetMessage"; "Export folder?" ) ]
Set Variable [ $r; Value:MBS("FileDialog.SelectFolderDialog") ]
If [ $r = "OK" ]
# get path from dialog:
Set Variable [ $npath; Value:MBS( "FileDialog.GetPath"; 0 ) ]
# convert to FileMaker path for Export Field Contents
Set Variable [ $fpath; Value:MBS( "Path.NativePathToFilemakerPath"; $npath ) ]
# Loop over all records:
Go to Record/Request/Page [ First ]
Loop
# Export files from this record
# figure out file name
Set Variable [ $name; Value:GetAsText ( Container Batch Export::Test1 ) ]
Set Variable [ $name; Value:GetValue($name; 1) ]
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $name ) ]
Set Variable [ $dpath; Value:MBS( "Path.AddPathComponent"; $fpath; $name ) ]
Export Field Contents [ Container Batch Export::Test1; "$dpath" ]
# Next record
Go to Record/Request/Page [ Next; Exit after last ]
End Loop
End If
```

Select folder in one expression:

```
Let( [
r = MBS("FileDialog.Reset");
r = MBS("FileDialog.SelectFolderDialog");
folder = If ( r = "OK" ; MBS("FileDialog.GetPath"; 0); "" )
] ; folder)
```

See also

- [63.27 Dialog.Reset](#) 2366
- [63.38 Dialog.SetMessage](#) 2379
- [77.14 FileDialog.GetFilter](#) 3722
- [77.21 FileDialog.GetPrompt](#) 3731
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747
- [77.45 FileDialog.SetUseSheet](#) 3767
- [121.5 Path.LastPathComponent](#) 6144
- [121.7 Path.NativePathToFileMakerPath](#) 6147

Example Databases

- [Containers/Container Batch Export](#)
- [CURL/Email/IMAP Email](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/Form/Form](#)
- [DynaPDF/Merge PDFs](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Speech Recognition](#)
- [Mac only/Icon and QuickLook/SetIcon](#)
- [Mac only/Movies/AVAsset Export Session](#)
- [Win Only/Windows Player](#)

77.19.1 FileMaker Magazin

- Ausgabe 4/2018, Seite 16
- Ausgabe 3/2012, Seite 31
- Ausgabe 3/2012, Seite 30

Created 18th August 2014, last changed 27th April 2019.

77.20 FileDialog.GetPathCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetPathCount")

Result Returns number of available file paths.

Description

If multiple selection is enabled, this value can be bigger than one.

If dialog was cancelled, this value is zero.

See also

- [77.19 FileDialog.GetPath](#) 3727
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747

Example Databases

- [CURL/Email/IMAP Email](#)
- [DynaPDF/PDF Library](#)
- [Files/FileDialog](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [SQL in FileMaker/ImageGallery](#)

77.20.1 FileMaker Magazin

- Ausgabe 4/2018, Seite 16
- Ausgabe 3/2012, Seite 30

Created 18th August 2014, last changed 18th August 2014.

77.21 FileDialog.GetPrompt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetPrompt")

Result Returns the prompt text.

Description

See also

- 77.19 FileDialog.GetPath 3727
- 77.40 FileDialog.SetPrompt 3761
- 104.16 ListDialog.GetPrompt 5579
- 104.37 ListDialog.SetPrompt 5600

Created 18th August 2014, last changed 24th May 2018.

77.22 FileDialog.GetResolvesAliases

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetResolvesAliases")

Result Returns 1 if alias files are resolved or 0 if not.

Description

See also

- 77.41 FileDialog.SetResolvesAliases

3763

Created 18th August 2014, last changed 18th August 2014.

77.23 FileDialog.GetShowHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetShowHidden")

Result Returns 1 if hidden files are visible and 0 if not.

Description

See also

- 77.43 FileDialog.SetShowHidden

3765

Created 18th August 2014, last changed 18th August 2014.

77.24 FileDialog.GetTreatsFilePackagesAsDirectories

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	No	No	No	No

MBS("FileDialog.GetTreatsFilePackagesAsDirectories")

Result Returns 1 if enabled or 0 if disabled.

Description

See also

- 77.44 FileDialog.SetTreatsFilePackagesAsDirectories

3766

Created 18th August 2014, last changed 18th August 2014.

77.25 FileDialog.GetUseSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	8.5	Yes	No	No	No	No

MBS("FileDialog.GetUseSheet")

Result Returns 1, 0 or error.

Description

See also

- [77.16 FileDialog.GetMessage](#) 3724
- [77.45 FileDialog.SetUseSheet](#) 3767

77.25.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr7](#)

Created 9th November 2018, last changed 9th November 2018.

77.26 FileDialog.GetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.GetWindowTitle")

Result Returns the title string.

Description

See also

- 63.26 Dialog.GetWindowTitle 2365
- 63.48 Dialog.SetWindowTitle 2391
- 77.46 FileDialog.SetWindowTitle 3768
- 104.21 ListDialog.GetWindowTitle 5584
- 104.42 ListDialog.SetWindowTitle 5605

Created 18th August 2014, last changed 18th August 2014.

77.27 FileDialog.OpenFileDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.OpenFileDialog")

Result Returns "OK", "Cancel" or an error.

Description

If dialog finishes well, you can query paths.

Examples

Run Open Dialog:

```

Delete All Records [ No dialog ]
Set Variable [ $r; Value:MBS("FileDialog.Reset") ]
Set Variable [ $r; Value:MBS("FileDialog.SetShowHidden"; FileDialog::ShowHidden) ]
Set Variable [ $r; Value:MBS("FileDialog.SetAllowMulti"; FileDialog::AllowMulti) ]
Set Variable [ $r; Value:MBS("FileDialog.SetResolvesAliases"; FileDialog::ResolvesAliases) ]
Set Variable [ $r; Value:MBS("FileDialog.SetTreatsFilePackagesAsDirectories"; FileDialog::TreatsFilePack-
agesAsDirectories) ]
Set Variable [ $r; Value:MBS("FileDialog.SetCanSelectHiddenExtension"; FileDialog::CanSelectHiddenEx-
tension) ]
Set Variable [ $r; Value:MBS("FileDialog.SetWindowTitle"; FileDialog::WindowTitle) ]
Set Variable [ $r; Value:MBS("FileDialog.SetInitialDirectory"; FileDialog::InitialDirectory) ]
Set Variable [ $r; Value:MBS("FileDialog.SetNameFieldLabel"; FileDialog::NameFieldLabel) ]
Set Variable [ $r; Value:MBS("FileDialog.SetPrompt"; FileDialog::Prompt) ]
Set Variable [ $r; Value:MBS("FileDialog.SetMessage"; FileDialog::Message) ]
Set Variable [ $r; Value:MBS("FileDialog.SetNameFieldStringValue"; FileDialog::NameFieldStringValue) ]
Set Variable [ $r; Value:MBS("FileDialog.OpenFileDialog") ]
If [ $r = "OK" ]
Set Variable [ $index; Value:0 ]
Set Variable [ $count; Value:MBS("FileDialog.GetPathCount") ]
Loop
New Record/Request
Set Field [ FileDialog::Path; MBS("FileDialog.GetPath"; $index) ]
Commit Records/Requests [ ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index = $count ]
End Loop
End If

```

Select a video file:

```

Set Variable [ $r; Value:MBS("FileDialog.Reset") ]
Set Variable [ $r; Value:MBS("FileDialog.SetMessage"; "Please select video:") ]
Set Variable [ $r; Value:MBS( "FileDialog.SetFilter"; "public.video" ) ]

```

```

Set Variable [ $r; Value:MBS("FileDialog.OpenFileDialog") ]
If [ $r = "OK" ]
Set Field [ AVAsset Export Session::Input File Path; MBS("FileDialog.GetPath"; 0) ]
End If

```

See also

- [77.28 FileDialog.Reset](#) 3740
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.31 FileDialog.SelectItemDialog](#) 3747
- [77.32 FileDialog.SetAllowMulti](#) 3749
- [77.36 FileDialog.SetInitialDirectory](#) 3755
- [77.37 FileDialog.SetMessage](#) 3757
- [77.38 FileDialog.SetNameFieldLabel](#) 3759
- [77.39 FileDialog.SetNameFieldStringValue](#) 3760
- [77.40 FileDialog.SetPrompt](#) 3761
- [77.43 FileDialog.SetShowHidden](#) 3765

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [DynaPDF/Merge PDFs](#)
- [Files/Audio File Tags](#)
- [Files/FileDialog](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Speech Recognition](#)
- [Mac only/Movies/AVAsset Export Session](#)
- [Win Only/Send Email via Email Application](#)
- [Win Only/Windows Player](#)
- [Zip/Show Zip File Content](#)

77.27.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)
- [MBS FileMaker Plugin, version 8.3pr1](#)
- [Open Dialog upgraded](#)

77.27.2 FileMaker Magazin

- Ausgabe 4/2018, Seite 16
- Ausgabe 3/2012, Seite 30

Created 18th August 2014, last changed 27th February 2017.

77.28 FileDialog.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.Reset")

Result Returns OK.

Description

Clears all text values and sets boolean values to false except ResolvesAliases which is set to true.

Examples

Resets file dialog options:

```
Set Variable [ $r; Value:MBS("FileDialog.Reset") ]
```

See also

- [63.27 Dialog.Reset](#) 2366
- [77.19 FileDialog.GetPath](#) 3727
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747
- [104.25 ListDialog.Reset](#) 5588

Example Databases

- [Containers/Container Batch Export](#)
- [CURL/Email/IMAP Email](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [DynaPDF/Merge PDFs](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [Mac only/Movies/QTMovieExporter](#)
- [SQL in FileMaker/ImageGallery](#)
- [Win Only/Send Email via Email Application](#)
- [Win Only/Windows Player](#)

77.28.1 FileMaker Magazin

- Ausgabe 4/2018, Seite 16
- Ausgabe 3/2012, Seite 31
- Ausgabe 3/2012, Seite 30

Created 18th August 2014, last changed 18th October 2016.

77.29 FileDialog.SaveFileDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SaveFileDialog")

Result Returns "OK", "Cancel" or an error.

Description

If dialog finishes well, you can query paths.

Examples

Run Save Dialog:

```

Delete All Records [ No dialog ]
Set Variable [ $r; Value:MBS("FileDialog.Reset") ]
Set Variable [ $r; Value:MBS("FileDialog.SetShowHidden"; FileDialog::ShowHidden) ]
Set Variable [ $r; Value:MBS("FileDialog.SetAllowMulti"; FileDialog::AllowMulti) ]
Set Variable [ $r; Value:MBS("FileDialog.SetResolvesAliases"; FileDialog::ResolvesAliases) ]
Set Variable [ $r; Value:MBS("FileDialog.SetTreatsFilePackagesAsDirectories"; FileDialog::TreatsFilePack-
agesAsDirectories) ]
Set Variable [ $r; Value:MBS("FileDialog.SetCanSelectHiddenExtension"; FileDialog::CanSelectHiddenEx-
tension) ]
Set Variable [ $r; Value:MBS("FileDialog.SetWindowTitle"; FileDialog::WindowTitle) ]
Set Variable [ $r; Value:MBS("FileDialog.SetInitialDirectory"; FileDialog::InitialDirectory) ]
Set Variable [ $r; Value:MBS("FileDialog.SetNameFieldLabel"; FileDialog::NameFieldLabel) ]
Set Variable [ $r; Value:MBS("FileDialog.SetPrompt"; FileDialog::Prompt) ]
Set Variable [ $r; Value:MBS("FileDialog.SetMessage"; FileDialog::Message) ]
Set Variable [ $r; Value:MBS("FileDialog.SetNameFieldStringValue"; FileDialog::NameFieldStringValue) ]
Set Variable [ $r; Value:MBS("FileDialog.SaveFileDialog") ]
If [ $r = "OK" ]
Set Variable [ $index; Value:0 ]
Set Variable [ $count; Value:MBS("FileDialog.GetPathCount") ]
Loop
New Record/Request
Set Field [ FileDialog::Path; MBS("FileDialog.GetPath"; $index) ]
Commit Records/Requests [ ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index = $count ]
End Loop
End If

```

See also

- 77.27 FileDialog.OpenFileDialog 3737
- 77.30 FileDialog.SelectFolderDialog 3744

77.29. FILEDIALOG.SAVEFILEDIALOG	3743
• 77.32 FileDialog.SetAllowMulti	3749
• 77.34 FileDialog.SetCanSelectHiddenExtension	3752
• 77.36 FileDialog.SetInitialDirectory	3755
• 77.37 FileDialog.SetMessage	3757
• 77.38 FileDialog.SetNameFieldLabel	3759
• 77.39 FileDialog.SetNameFieldStringValue	3760
• 77.40 FileDialog.SetPrompt	3761
• 77.43 FileDialog.SetShowHidden	3765

Example Databases

- [DynaPDF/Form/Form](#)
- [Files/FileDialog](#)

77.29.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)
- [MBS FileMaker Plugin, version 8.3pr1](#)
- [Open Dialog upgraded](#)

Created 18th August 2014, last changed 26th February 2016.

77.30 FileDialog.SelectFolderDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SelectFolderDialog")

Result Returns "OK", "Cancel" or an error.

Description

If dialog finishes well, you can query paths.

Added support for multiple selection on Windows with plugin version for 6.4.

Examples

Run Select Folder Dialog:

```

Delete All Records [ No dialog ]
Set Variable [ $r; Value:MBS("FileDialog.Reset") ]
Set Variable [ $r; Value:MBS("FileDialog.SetShowHidden"; FileDialog::ShowHidden) ]
Set Variable [ $r; Value:MBS("FileDialog.SetAllowMulti"; FileDialog::AllowMulti) ]
Set Variable [ $r; Value:MBS("FileDialog.SetResolvesAliases"; FileDialog::ResolvesAliases) ]
Set Variable [ $r; Value:MBS("FileDialog.SetTreatsFilePackagesAsDirectories"; FileDialog::TreatsFilePack-
agesAsDirectories) ]
Set Variable [ $r; Value:MBS("FileDialog.SetCanSelectHiddenExtension"; FileDialog::CanSelectHiddenEx-
tension) ]
Set Variable [ $r; Value:MBS("FileDialog.SetWindowTitle"; FileDialog::WindowTitle) ]
Set Variable [ $r; Value:MBS("FileDialog.SetInitialDirectory"; FileDialog::InitialDirectory) ]
Set Variable [ $r; Value:MBS("FileDialog.SetNameFieldLabel"; FileDialog::NameFieldLabel) ]
Set Variable [ $r; Value:MBS("FileDialog.SetPrompt"; FileDialog::Prompt) ]
Set Variable [ $r; Value:MBS("FileDialog.SetMessage"; FileDialog::Message) ]
Set Variable [ $r; Value:MBS("FileDialog.SetNameFieldStringValue"; FileDialog::NameFieldStringValue) ]
Set Variable [ $r; Value:MBS("FileDialog.SelectFolderDialog") ]
If [ $r = "OK" ]
Set Variable [ $index; Value:0 ]
Set Variable [ $count; Value:MBS("FileDialog.GetPathCount") ]
Loop
New Record/Request
Set Field [ FileDialog::Path; MBS("FileDialog.GetPath"; $index) ]
Commit Records/Requests [ ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index = $count ]
End Loop
End If

```

Export all containers to one folder:

```
# Ask for folder?
```

```

Set Variable [ $r; Value:MBS("FileDialog.Reset") ]
Set Variable [ $r; Value:MBS("FileDialog.SetMessage"; "Export folder?") ]
Set Variable [ $r; Value:MBS("FileDialog.SelectFolderDialog") ]
If [ $r = "OK" ]
# get path from dialog:
Set Variable [ $npath; Value:MBS( "FileDialog.GetPath"; 0 ) ]
# convert to FileMaker path for Export Field Contents
Set Variable [ $fpath; Value:MBS( "Path.NativePathToFilemakerPath"; $npath ) ]
# Loop over all records:
Go to Record/Request/Page [ First ]
Loop
# Export files from this record
# figure out file name
Set Variable [ $name; Value:GetAsText ( Container Batch Export::Test1 ) ]
Set Variable [ $name; Value:GetValue($name; 1) ]
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $name ) ]
Set Variable [ $dpath; Value:MBS( "Path.AddPathComponent"; $fpath; $name ) ]
Export Field Contents [ Container Batch Export::Test1; "$dpath" ]
# Next record
Go to Record/Request/Page [ Next; Exit after last ]
End Loop
End If

```

Select folder in one expression:

```

Let( [
r = MBS("FileDialog.Reset");
r = MBS("FileDialog.SelectFolderDialog");
folder = If ( r = "OK" ; MBS("FileDialog.GetPath"; 0); "" )
] ; folder)

```

See also

- 77.29 FileDialog.SaveFileDialog 3742
- 77.31 FileDialog.SelectItemDialog 3747
- 77.37 FileDialog.SetMessage 3757
- 77.38 FileDialog.SetNameFieldLabel 3759
- 77.39 FileDialog.SetNameFieldStringValue 3760
- 77.40 FileDialog.SetPrompt 3761
- 77.43 FileDialog.SetShowHidden 3765
- 77.46 FileDialog.SetWindowTitle 3768

- 121.1 Path.AddPathComponent 6135
- 121.5 Path.LastPathComponent 6144

Example Databases

- [Containers/Container Batch Export](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [Files/FileDialog](#)
- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [SQL in FileMaker/ImageGallery](#)

77.30.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)
- [MBS FileMaker Plugin, version 8.3pr1](#)
- [Open Dialog upgraded](#)
- [MBS FileMaker Plugin, version 6.4pr9](#)
- [MBS Filemaker Plugin, version 4.3pr3](#)

77.30.2 FileMaker Magazin

- [Ausgabe 3/2012, Seite 31](#)

Created 18th August 2014, last changed 21st June 2017.

77.31 FileDialog.SelectItemDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SelectItemDialog")

Result Returns "OK", "Cancel" or an error.

Description

If dialog finishes well, you can query paths.

To select just a file, please use FileDialog.OpenFileDialog function.

Calls FileDialog.OpenFileDialog on Windows.

Examples

Run Select Item Dialog:

```

Delete All Records [ No dialog ]
Set Variable [ $r; Value:MBS("FileDialog.Reset") ]
Set Variable [ $r; Value:MBS("FileDialog.SetShowHidden"; FileDialog::ShowHidden) ]
Set Variable [ $r; Value:MBS("FileDialog.SetAllowMulti"; FileDialog::AllowMulti) ]
Set Variable [ $r; Value:MBS("FileDialog.SetResolvesAliases"; FileDialog::ResolvesAliases) ]
Set Variable [ $r; Value:MBS("FileDialog.SetTreatsFilePackagesAsDirectories"; FileDialog::TreatsFilePack-
agesAsDirectories) ]
Set Variable [ $r; Value:MBS("FileDialog.SetCanSelectHiddenExtension"; FileDialog::CanSelectHiddenEx-
tension) ]
Set Variable [ $r; Value:MBS("FileDialog.SetWindowTitle"; FileDialog::WindowTitle) ]
Set Variable [ $r; Value:MBS("FileDialog.SetInitialDirectory"; FileDialog::InitialDirectory) ]
Set Variable [ $r; Value:MBS("FileDialog.SetNameFieldLabel"; FileDialog::NameFieldLabel) ]
Set Variable [ $r; Value:MBS("FileDialog.SetPrompt"; FileDialog::Prompt) ]
Set Variable [ $r; Value:MBS("FileDialog.SetMessage"; FileDialog::Message) ]
Set Variable [ $r; Value:MBS("FileDialog.SetNameFieldStringValue"; FileDialog::NameFieldStringValue) ]
Set Variable [ $r; Value:MBS("FileDialog.SelectItemDialog") ]
If [ $r = "OK" ]
Set Variable [ $index; Value:0 ]
Set Variable [ $count; Value:MBS("FileDialog.GetPathCount") ]
Loop
New Record/Request
Set Field [ FileDialog::Path; MBS("FileDialog.GetPath"; $index) ]
Commit Records/Requests [ ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index = $count ]
End Loop
End If

```

See also

- 77.28 FileDialog.Reset 3740
- 77.29 FileDialog.SaveFileDialog 3742
- 77.30 FileDialog.SelectFolderDialog 3744
- 77.32 FileDialog.SetAllowMulti 3749
- 77.36 FileDialog.SetInitialDirectory 3755
- 77.37 FileDialog.SetMessage 3757
- 77.38 FileDialog.SetNameFieldLabel 3759
- 77.39 FileDialog.SetNameFieldStringValue 3760
- 77.40 FileDialog.SetPrompt 3761
- 77.46 FileDialog.SetWindowTitle 3768

Example Databases

- [Files/FileDialog](#)
- [Mac only/Icon and QuickLook/SetIcon](#)

77.31.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 18th August 2014, last changed 17th June 2018.

77.32 FileDialog.SetAllowMulti

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetAllowMulti"; value)

Parameters

value

Whether to allow multiple selection. Set to 0 to disallow and 1 to allow.

1

Result Returns OK.

Description

Default is disallowed (0).

Selecting folder may not allow multiple selection.

But selection files or items may do.

Examples

Allow multi file selection:

```
Set Variable [ $r; Value:MBS("FileDialog.SetAllowMulti"; 1) ]
```

See also

- [77.11 FileDialog.GetAllowMulti](#) 3719
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/Email/IMAP Email](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/PDF Library](#)
- [Files/FileDialog](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

- [Win Only/Windows Player](#)
- [Zip/Show Zip File Content](#)

77.32.1 FileMaker Magazin

- Ausgabe 4/2018, Seite 16
- Ausgabe 3/2012, Seite 30

Created 18th August 2014, last changed 18th October 2016.

77.33 FileDialog.SetAllowsOtherFileTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	4.3	Yes	Yes	No	No	No

MBS("FileDialog.SetAllowsOtherFileTypes"; value)

Parameters

value

The new setting. Pass 1 to enable other file types or 0 to disable.

1

Result Returns OK.

Description

Only for save panel to allow saving in other file types.

Added Windows support in plugin version 8.3 for Windows Vista or newer.

See also

- 77.12 FileDialog.GetAllowsOtherFileTypes

3720

Created 18th August 2014, last changed 12nd January 2019.

77.34 FileDialog.SetCanSelectHiddenExtension

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	No	No	No	No

MBS("FileDialog.SetCanSelectHiddenExtension"; value)

Parameters

value

The new setting.

1

Result Returns OK.

Description

See also

- [77.13 FileDialog.GetCanSelectHiddenExtension](#) 3721
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747

Example Databases

- [Files/FileDialog](#)

Created 18th August 2014, last changed 18th August 2014.

77.35 FileDialog.SetFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	4.3	Yes	Yes	No	No	No

MBS("FileDialog.SetFilter"; MacFilter; WinFilter; WinLabels)

Parameters

MacFilter

The filter specification for Mac. Can be file extension (Without dot) or UTI (Uniform Type Identifier). Can be a list.

"jpg"

WinFilter

The filter specification for Windows. This is normally star dot file extension and can be a list.

"*.JPG"

WinLabels

The list of labels for the file types.

"JPEG files"

Result Returns OK or error.

Description

Mac filter works in FileMaker 12 or newer, but seems not to work in FileMaker 11.

If you like to select any file, please don't define a filter at all.

Examples

Set Mac filter with file extension as filter

```
MBS("FileDialog.SetFilter"; "jpg"; "*.JPG"; "JPEG files")
```

Set Mac filter with UTI as filter:

```
MBS("FileDialog.SetFilter"; "public.jpeg"; "*.JPG"; "JPEG files")
```

Select only FileMaker files:

```
MBS("FileDialog.SetFilter"; "fmp12"; "*.FMP12"; "FileMaker files")
```

Select tiff or jpeg files with various extensions:

```
MBS("FileDialog.SetFilter"; "tif$jpg$jpeg$stiff"; "*.TIF;*.TIFF$*.JPG;*.JPEG"; "Tiff files$JPEG files")
```

Allow PNG and JPEG:

```
MBS("FileDialog.SetFilter"; "jpg$png"; "*.JPG$*.PNG"; "JPEG files$PNG Files")
```

Allow text files:

```
MBS("FileDialog.SetFilter"; "public.text"; "*.TXT"; "TXT files")
```

See also

- [77.14 FileDialog.GetFilter](#) 3722
- [77.27 FileDialog.OpenFileDialog](#) 3737

Example Databases

- [CURL/Email/IMAP Email](#)
- [Mac only/Movies/AVAsset Export Session](#)
- [Mac only/Movies/QTMovieExporter](#)

77.35.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr1](#)

Created 18th August 2014, last changed 28th April 2016.

77.36 FileDialog.SetInitialDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetInitialDirectory"; path)

Parameters**path**

The new path.

"/Users/Shared"

Result Returns OK.

Description

The path argument must be an absolute native path.

Use Path.FilemakerPathToNativePath to convert a FileMaker path to a native path if required.

Examples

Sets path on Mac:

MBS("FileDialog.SetInitialDirectory"; "/Users/cs/Desktop")

Set path with space inside:

MBS("FileDialog.SetInitialDirectory"; "/Users/cs/Desktop/Test Folder")

Sets path on Mac with extra volume:

MBS("FileDialog.SetInitialDirectory"; "/Volumes/Daten/Test Folder/Images")

Sets path on Windows:

MBS("FileDialog.SetInitialDirectory"; "d:\Test Daten\Bilder")

See also

- 77.15 FileDialog.GetInitialDirectory 3723
- 77.27 FileDialog.OpenFileDialog 3737
- 77.29 FileDialog.SaveFileDialog 3742
- 77.30 FileDialog.SelectFolderDialog 3744
- 77.31 FileDialog.SelectItemDialog 3747
- 121.2 Path.FilemakerPathToNativePath 6139

Example Databases

- [Files/FileDialog](#)
- [Win Only/Windows Player](#)

Created 18th August 2014, last changed 18th August 2014.

77.37 FileDialog.SetMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetMessage"; text)

Parameters

text

The new message text.

"Please select folder to store backups."

Result Returns OK.

Description

This prompt appears on all Mac dialogs, but not on Windows.

The default message text is an empty string.

Examples

Sets name:

MBS("FileDialog.SetMessage"; "Where to put backup files?")

See also

- [63.14 Dialog.GetMessage](#) 2353
- [63.38 Dialog.SetMessage](#) 2379
- [77.16 FileDialog.GetMessage](#) 3724
- [77.19 FileDialog.GetPath](#) 3727
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747
- [77.45 FileDialog.SetUseSheet](#) 3767

Example Databases

- [Containers/Container Batch Export](#)
- [CURL/Amazon S3 Upload File](#)
- [CURL/Email/IMAP Email](#)

- DynaPDF/Form/Form
- Files/FileDialog
- Mac and iOS/Machine Learning/Core ML Photos
- Mac and iOS/Speech Recognition
- Mac only/Movies/AVAsset Export Session
- Mac only/Movies/QTMovieExporter
- Win Only/Windows Player

Created 18th August 2014, last changed 12nd September 2018.

77.38 FileDialog.SetNameFieldLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetNameFieldLabel"; text)

Parameters

text

String to set as the text displayed in front of the panel's text field.

"Save file as:"

Result Returns OK.

Description

By default the label is "Save As:".

Added Windows support in plugin version 8.3 for Windows Vista or newer.

Examples

Sets name label:

```
MBS( "FileDialog.SetNameFieldLabel"; "Database name:" )
```

See also

- [77.17 FileDialog.GetNameFieldLabel](#) 3725
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747

Example Databases

- [Files/FileDialog](#)

Created 18th August 2014, last changed 24th May 2018.

77.39 FileDialog.SetNameFieldStringValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetNameFieldStringValue"; text)

Parameters

text

The initial text for the name field.

Result Returns OK.

Description

This value is only used for save dialogs.

Added Windows support in plugin version 8.3 for Windows Vista or newer.

Examples

Sets name:

```
MBS( "FileDialog.SetNameFieldStringValue"; "test.txt" )
```

See also

- [77.18 FileDialog.GetNameFieldStringValue](#) 3726
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747

Example Databases

- [DynaPDF/Form/Form](#)
- [Files/FileDialog](#)

Created 18th August 2014, last changed 24th May 2018.

77.40 FileDialog.SetPrompt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetPrompt"; text)

Parameters

text

String to set as the prompt of the panel's default button.

"Use"

Result Returns OK.

Description

This prompt appears on all dialogs in your application. By default, the text in the default button is "Open" for an Open panel and "Save" for a Save panel.

It is intended that short words or phrases, such as "Open", "Save", "Set", or "Choose", be used on the button. The button is not resized to accommodate long prompts.

Added Windows support in plugin version 8.3 for Windows Vista or newer.

Examples

Sets name:

MBS("FileDialog.SetPrompt"; "Export")

See also

- [77.21 FileDialog.GetPrompt](#) 3731
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747
- [104.16 ListDialog.GetPrompt](#) 5579
- [104.37 ListDialog.SetPrompt](#) 5600

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/Email/IMAP Email](#)
- [Files/FileDialog](#)

- [Mac and iOS/Machine Learning/Core ML Photos](#)

Created 18th August 2014, last changed 24th May 2018.

77.41 FileDialog.SetResolvesAliases

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetResolvesAliases"; value)

Parameters**value**

Whether to resolve alias files. Pass 0 to disable alias resolving or 1 to enable it.

1

Result Returns OK.

Description

If 1, the dialog will resolve alias files on Mac OS X and Link files (*.lnk) on Windows for you.

Default is enabled (1).

Examples

Set to resolve aliases:

Set Variable [\$r; Value:MBS("FileDialog.SetResolvesAliases"; 1)]

See also

- [77.22 FileDialog.GetResolvesAliases](#) 3732
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747

Example Databases

- [Files/FileDialog](#)
- [Mac and iOS/Speech Recognition](#)
- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th October 2016.

77.42 FileDialog.SetSheetScriptTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	8.5	Yes	No	No	No	No

MBS("FileDialog.SetSheetScriptTrigger"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker file that contains the script
Get(FileName)

ScriptName

The name of the script to run

Result Returns OK or error.

Description

Trigger is only for Mac and you need to enable it with FileDialog.SetUseSheet.

See also

- [77.45 FileDialog.SetUseSheet](#)

3767

Example Databases

- [Files/FileDialog](#)

77.42.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr7](#)
- [File dialogs with sheets for FileMaker](#)

Created 9th November 2018, last changed 9th November 2018.

77.43 FileDialog.SetShowHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetShowHidden"; value)

Parameters

value

Whether to show hidden files. Pass 0 to hide invisible files and 1 to show invisible files.

1

Result Returns OK.

Description

Default is 0.

Available in Mac OS X v10.6 and later. The flag is ignored on older Mac OS X versions.

Examples

Show hidden files:

```
Set Variable [ $r; Value:MBS("FileDialog.SetShowHidden"; 1) ]
```

See also

- [77.23 FileDialog.GetShowHidden](#) 3733
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747

Example Databases

- [Files/FileDialog](#)
- [Mac only/Icon and QuickLook/SetIcon](#)
- [Zip/Show Zip File Content](#)

Created 18th August 2014, last changed 18th October 2016.

77.44 FileDialog.SetTreatsFilePackagesAsDirectories

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	No	No	No	No

MBS("FileDialog.SetTreatsFilePackagesAsDirectories"; value)

Parameters

value

If 1, the panel will display file packages as directories; if 0, it will not.

1

Result Returns OK.

Description

Default is off (0).

This setting has no effect on Windows.

Examples

Look inside of bundles:

```
Set Variable [ $r; Value:MBS("FileDialog.SetTreatsFilePackagesAsDirectories"; 1) ]
```

See also

- [77.24 FileDialog.GetTreatsFilePackagesAsDirectories](#) 3734
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747

Example Databases

- [Files/FileDialog](#)

Created 18th August 2014, last changed 18th October 2016.

77.45 FileDialog.SetUseSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	8.5	Yes	No	No	No	No

MBS("FileDialog.SetUseSheet"; Value)

Parameters

Value

The new sheet setting.

1

Result Returns OK or error.

Description

See FileDialog.SetSheetScriptTrigger for setting script name to trigger.

See also

- [77.19 FileDialog.GetPath](#) 3727
- [77.25 FileDialog.GetUseSheet](#) 3735
- [77.37 FileDialog.SetMessage](#) 3757
- [77.42 FileDialog.SetSheetScriptTrigger](#) 3764

Example Databases

- [Files/FileDialog](#)

77.45.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr7](#)
- [File dialogs with sheets for FileMaker](#)

Created 9th November 2018, last changed 9th November 2018.

77.46 FileDialog.SetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.7	Yes	Yes	No	No	No

MBS("FileDialog.SetWindowTitle"; text)

Parameters

text

The new window title.

"Select database"

Result Returns OK.

Description

Keep empty or don't assign a title to use the default text.

Not used for Select Folder Dialog on Windows, but in all other dialogs.

Examples

Sets window title:

```
Set Variable [ $r; Value:MBS("FileDialog.SetWindowTitle"; "Please select picture") ]
```

See also

- [63.26 Dialog.GetWindowTitle](#) 2365
- [63.48 Dialog.SetWindowTitle](#) 2391
- [77.26 FileDialog.GetWindowTitle](#) 3736
- [77.27 FileDialog.OpenFileDialog](#) 3737
- [77.29 FileDialog.SaveFileDialog](#) 3742
- [77.30 FileDialog.SelectFolderDialog](#) 3744
- [77.31 FileDialog.SelectItemDialog](#) 3747
- [104.21 ListDialog.GetWindowTitle](#) 5584
- [104.42 ListDialog.SetWindowTitle](#) 5605

Example Databases

- [Files/FileDialog](#)
- [Win Only/Send Email via Email Application](#)

Created 18th August 2014, last changed 18th October 2016.

77.47 FileDialogWatcher.GetLastPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.6	Yes	No	No	No	No

MBS("FileDialogWatcher.GetLastPath")

Result Returns OK or error.

Description

This returns native path like `"/Users/cs/Desktop/test.jpg"`.

Use `Path.NativePathToFileMakerPath` to convert to a FileMaker path if you plan to use `"filemac:"` for an insert file script step.

Does not work with FileMaker 8.5, 9 or 10. Works with FileMaker 11 and 12.

See also

- [77.48 FileDialogWatcher.Install](#) 3770
- [121.7 Path.NativePathToFileMakerPath](#) 6147

Example Databases

- [Files/FileDialogWatcher \(Mac\)](#)

77.47.1 Blog Entries

- [New cool things for Filemaker](#)
- [MBS Filemaker Plugin, version 2.6pr7](#)

Created 18th August 2014, last changed 22nd March 2019.

77.48 FileDialogWatcher.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
77 FileDialog	2.6	Yes	No	No	No	No

MBS("FileDialogWatcher.Install")

Result Returns OK or error.

Description

You need to call this method before FileDialogWatcher.GetLastPath reports something useful. Does not work with FileMaker 8.5, 9 or 10. Works with FileMaker 11 and 12.

See also

- [77.47 FileDialogWatcher.GetLastPath](#)

3769

Example Databases

- [Files/FileDialogWatcher \(Mac\)](#)

77.48.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr4](#)
- [MBS Filemaker Plugin, version 2.9pr7](#)
- [MBS Filemaker Plugin, version 2.6pr7](#)

Created 18th August 2014, last changed 22nd March 2019.

Chapter 78

Files

Functions to work with files and folders.

78.1 Files.AccessDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.9	Yes	Yes	Yes	Yes	Yes

```
MBS( "Files.AccessDate"; Path )
```

Parameters

Path

Native path to the file to check.

```
"C:\test\me.jpg"
```

Result Returns timestamp or error.

Description

Although the function is named date, it does return the time, too. Result is a timestamp.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Queries access date of a file

```
MBS( "Files.AccessDate"; "C:\test.txt" )
```

Show files Dates:

MBS("Files.CreationDate"; "C:\Users\Christian\Desktop\ddd.rtf") & " created" & §&

MBS("Files.ModificationDate"; "C:\Users\Christian\Desktop\ddd.rtf") & " modified" & §&

MBS("Files.AccessDate"; "C:\Users\Christian\Desktop\ddd.rtf") & " accessed"

See also

- 78.13 Files.CreationDate 3790
- 78.40 Files.ModificationDate 3834
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [Files/FileInfo](#)

78.1.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr3](#)

Created 18th August 2014, last changed 17th July 2017.

78.2 Files.AddedToDirectoryDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.4	Yes	No	Yes, macOS only	No	No

MBS("Files.AddedToDirectoryDate"; Path)

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Result Returns timestamp or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Query date:

MBS("Files.AddedToDirectoryDate"; "/Users/cs/Desktop/Image Scaling.fmp12")

See also

- [121.2 Path.FileMakerPathToNativePath](#)

6139

78.2.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 29th July 2016, last changed 29th July 2016.

78.3 Files.AppPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Files.AppPath")

Result The application path.

Description

So either the path to FileMaker application or path to your runtime solution.

Use Path.NativePathToFileMakerPath to convert to a FileMaker path if you plan to use "filemac:" on a built in FileMaker function.

Returns on FileMaker Cloud (Linux) usually this path: "/opt/FileMaker/FileMaker Server/Database Server/bin/fm-sased"

Examples

Shows app path:

Show Custom Dialog ["App Path"; MBS("Files.AppPath")]

See also

- [78.35 Files.Launch](#) 3823
- [121.7 Path.NativePathToFileMakerPath](#) 6147

Example Databases

- [Files/Open Database](#)

78.3.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr1](#)

Created 18th August 2014, last changed 13th November 2019.

78.4 Files.AudioTags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	9.4	Yes	Yes	Yes	No	No

MBS("Files.AudioTags"; FilePath)

Parameters

FilePath

The native file path to the audio file.

"/Users/cs/Desktop/test.mp3"

Result Returns JSON or error.

Description

Returns JSON object with usual two sub objects. One is AudioProperties with length (in seconds), bitrate (in bits per second), sampleRate (in Hz) and channels as numbers.

The Properties object contains all the properties with various tags. Values are texts for the given keys.

Uses TagLib, an open source library to read metadata from audio files, e.g. ID3 tags.

Currently it supports both ID3v1 and ID3v2 for MP3 files, Ogg Vorbis comments and ID3 tags and Vorbis comments in FLAC, MPC, Speex, WavPack, TrueAudio, WAV, AIFF, MP4 and ASF files.

List of ID3v2 tag names:

ALBUM, ALBUMARTIST, ALBUMARTISTSORT, ALBUMSORT, ARTIST, ARTISTSORT, ARTISTWEBPAGE, AUDIOSOURCEWEBPAGE, BPM, COMMENT, COMPOSER, CONDUCTOR, CONTENTGROUP, COPYRIGHT, COPYRIGHTURL, DATE, DISCNUMBER, ENCODEDBY, ENCODING, ENCODINGTIME, FILETYPE, FILEWEBPAGE, GENRE, INITIALKEY, INVOLVEDPEOPLE, ISRC, LABEL, LANGUAGE, LENGTH, LYRICIST, LYRICS, MEDIA, MOOD, MUSICIANCREDITS, ORIGINALALBUM, ORIGINALARTIST, ORIGINALDATE, ORIGINALFILENAME, ORIGINALLYRICIST, OWNER, PAYMENTWEBPAGE, PLAYLISTDELAY, PODCAST, PODCASTCATEGORY, PODCASTDESC, PODCASTID, PODCASTURL, PRODUCEDNOTICE, PUBLISHERWEBPAGE, RADIOSTATION, RADIOSTATIONOWNER, RADIOSTATIONWEBPAGE, RELEASEDATE, REMIXER, SUBTITLE, TAGGINGDATE, TITLE, TITLESORT, TRACKNUMBER, URL.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Query MP3 tags:

MBS("Files.AudioTags"; "/Users/cs/Desktop/test.mp3")

Example result: {
"AudioProperties": {

```

"length": 282,
"bitrate": 128,
"sampleRate": 44100,
"channels": 2
},
"Tags": {
"ARTIST": "John Doe",
"COMMENT": "test comment",
"TITLE": "Hello World"
}
}

```

Read tags and show JSON in field:

```

If [ Length ( AudioTags::FilePath ) >0 ]
Set Variable [ $r ; Value: MBS("Files.AudioTags"; AudioTags::FilePath) ]
If [ MBS("IsError") = 0 ]
Set Field [ AudioTags::JSON ; MBS("JSON.Colorize"; MBS("JSON.Format"; $r)) ]
End If
End If

```

See also

- [78.53 Files.SetAudioTags](#) 3860
- [124.6 IsError](#) 6266
- [100.15 JSON.Colorize](#) 5261
- [100.39 JSON.Format](#) 5295
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Files/Audio File Tags](#)

78.4.1 Blog Entries

- [Neue Funktionen des MBS FileMaker Plugin 9.4](#)
- [MBS FileMaker Plugin 9.4, second release](#)
- [Neues MBS FileMaker Plugin 9.4](#)
- [MBS FileMaker Plugin 9.4 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.4pr8](#)
- [TagLib to read and write ID3v2 Tags in FileMaker](#)

Created 12nd September 2019, last changed 20th September 2019.

78.5 Files.CanOpenFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Files.CanOpenFile"; Path)

Parameters

Path

The native file path to the file.

\$path

Result Returns 1, 0 or error.

Description

The plugin tries to open file exclusive. If that fails another application or FileMaker has the file open. Returns 1 if open was okay, 0 if file is busy or an error like permissions denied.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Check if file exists:

```
Show Custom Dialog [ "File exists"; MBS( "Files.CanOpenFile"; "/Users/cs/Desktop/test.rtf" ) ]
```

See also

- 121.2 Path.FileMakerPathToNativePath

6139

78.5.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr2](#)

Created 20th October 2015, last changed 18th October 2016.

78.6 Files.CopyFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.8	Yes	Yes	Yes	Yes	Yes

```
MBS( "Files.CopyFile"; SourcePath; DestPath { ; Overwrite; SkipSourcePermissionErrors; ProgressTitle }
)
```

Parameters

SourcePath

The native path to the file or folder to be copied.

"/Users/John/Desktop/test.txt"

DestPath

The native path to the destination folder or file.

"/Users/John/Desktop/Backup/"

Overwrite

Optional

Mac only: Whether to allow overwriting existing files. Default is off. Pass 1 to enable and 0 to disable. (ignored on other platforms)

1

SkipSourcePermissionErrors

Optional

Mac only: Whether to skip files with permission errors. Default is off. Pass 1 to enable and 0 to disable.

1

ProgressTitle

Optional

Title for the progress window. For Windows only and the text may not be visible in your version of Windows.

"Copying FileMake files"

Result Returns OK or error message.

Description

SourcePath and DestPath must be valid and exist. So pass destination folder for the destination.

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

The Linux implementation copies file to dest. You need to have read permissions for source file. We try to preserve extended attributes and file permissions.

On Windows the 5th parameter can be 1 to use alternative copy function from Windows. This one is for copying one file only, but may be more successful in some cases.

Examples

Copy a file:

78.6. FILES.COPYFILE

3779

MBS("Files.CopyFile"; "/Users/cs/Desktop/test.pdf"; "/Users/cs/Desktop/copy.pdf")

Copy file on Windows with alternative copy method:

MBS("Files.CopyFile"; "D:\Arbeitsunterlagen\Problemloesungsbericht_SDAG_WM.xlsx"; "D:\Files_for_ZIP/CC__8D__0; 0; 1)

Copy a file from desktop to a network volume:

MBS("Files.CopyFile"; "C:\Users\Christian\Desktop\test.mov"; "Z:\Files\test.mov")

See also

- 78.7 Files.CopyFiles 3780
- 78.43 Files.MoveFile 3840
- 78.45 Files.ReadFile 3844
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [Files/FileOperation](#)

78.6.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)
- [MBS FileMaker Plugin, version 8.5pr7](#)
- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS FileMaker Plugin, version 7.0pr3](#)
- [MBS FileMaker Plugin, version 6.4pr9](#)
- [Tip of the day: Mount drive on FileMaker Server](#)
- [MBS Filemaker Plugin, version 2.8pr1](#)

Created 18th August 2014, last changed 3th January 2020.

78.7 Files.CopyFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	10.0	Yes	No	Yes, macOS only	No	Yes

MBS("Files.CopyFiles"; SourcePaths; DestPaths; Overwrite)

Parameters

SourcePaths

The list of native paths to the file or folder to be copied.

"/Users/John/Desktop/test.txt"

DestPaths

The list of native paths to the destination folder or file.

"/Users/John/Desktop/Backup/"

Overwrite

Mac only: Whether to allow overwriting existing files. Default is off. Pass 1 to enable and 0 to disable. (ignored on other platforms)

1

Result Returns OK or error.

Description

Please avoid this for spinning hard disk as it may be slower to copy in parallel compared to serial.

Examples

Copy files:

```
MBS("Files.CopyFiles";
```

```
"/Users/cs/Downloads/Filme/testE04.mp4$/Users/cs/Downloads/Filme/testE02.mp4$/Users/cs/Downloads/Filme/testE03.mp4$";
```

```
"/Users/cs/Desktop/testE04.mp4$/Users/cs/Desktop/testE02.mp4$/Users/cs/Desktop/testE03.mp4$/Users/cs/Desktop/testE01.mp4$";
```

```
1)
```

See also

- [78.6 Files.CopyFile](#) 3778
- [78.43 Files.MoveFile](#) 3840

78.7.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 10.0pr7](#)
- [MBS FileMaker Plugin, version 9.6pr3](#)

Created 14th December 2019, last changed 14th December 2019.

78.8 Files.CreateAlias

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	8.4	Yes	Yes	Yes	No	Yes

```
MBS( "Files.CreateAlias"; AliasFilePath; TargetPath { ; RelativeTo or WorkingPath; IconPathAndIndex }
)
```

Parameters

AliasFilePath

The path for the alias file path.

```
"/Users/cs/Desktop/test"
```

TargetPath

The target path to have the alias point to.

```
"/Users/cs/Desktop"
```

RelativeTo or WorkingPath

Optional

The folder path to use relative resolution for Mac or the working directory for Windows.

```
"/Users/cs"
```

IconPathAndIndex

Optional

The icon file path to use. Optionally with an index as second item in a value list.

For Windows must reference an exe, ico, dll or similar file containing resources with icons.

For MacOS a path to an image file where we load image and use it for the icon.

```
"C:\Program Files\Mozilla Firefox\firefox.exe$4"
```

Result Returns OK or error.

Description

If relative path is provided, the alias will include the relative path from that folder to the target item. When resolved later and the full path is invalid, the relative path may find it.

See Files.CreateSymbolicLink for creating symbol links and Files.CreateHardLink for hard links.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Create Alias:

```
MBS( "Files.CreateAlias"; "/Users/cs/Desktop/test"; "/Users/cs/Desktop" )
```

Creates link files on Windows:

```
MBS("Files.CreateAlias"; "C:\Users\Christian\Desktop\test.lnk"; "cmd.exe")
```

Create link for image file:

```
MBS("Files.CreateAlias"; "C:\Users\Christian\Desktop\test.lnk"; "C:\Users\Christian\Pictures\test.jpg")
```

Create link file with icon:

```
MBS("Files.CreateAlias"; "C:\Users\Christian\Desktop\test.lnk"; "cmd.exe"; ""; "C:\Program Files\Mozilla Firefox\firefox.exe$4")
```

See also

- [78.11 Files.CreateHardLink](#) 3787
- [78.12 Files.CreateSymbolicLink](#) 3789
- [78.50 Files.ResolveAlias](#) 3855
- [121.2 Path.FileMakerPathToNativePath](#) 6139

78.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)
- [MBS FileMaker Plugin, version 8.4pr8](#)

Created 9th September 2018, last changed 14th March 2019.

78.9 Files.CreateBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.1	Yes	No	Yes, macOS only	No	Yes

MBS("Files.CreateBookmark"; Path { ; RelativePath; PreferFileIDResolution; MinimalBookmark })

Parameters

Path

The native path to file or folder where the bookmark refers to.

\$path

RelativePath

Optional

Optional the path of a file/folder being the relative path. This can be the native path to your database. This way you can later find the file again if database and target file moved together.

"/Data/ImageFiles"

PreferFileIDResolution

Optional

Optional, whether you prefer FileID resolution later over path resolution. Can be 1 or 0. Default is 0.

1

MinimalBookmark

Optional

Optional, whether to request a minimal bookmark. Creates bookmark data with "less" information, which may be smaller but still be able to resolve in certain ways.

1

Result Returns bookmark data text or error message.

Description

This is like an alias file in Finder, but as text, so you can store it in a text field in your database.

See also

- 78.51 Files.ResolveBookmark

3857

Example Databases

- [Files/Alias and NodeID](#)

78.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr3](#)
- [MBS FileMaker Plugin 3.1 for OS X/Windows - More than 1400 Functions In One Plugin](#)

Created 18th August 2014, last changed 28th November 2019.

78.10 Files.CreateDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Files.CreateDirectory"; Path)

(old name: Files.CreateFolder)

Parameters

Path

Native path to the new directory to be created.

"C:\Test"

Result Returns "OK" or error message.

Description

Returns "OK" if the directory already exists.

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

For MacOS & iOS creates folders recursively as needed.

In the Mac world we call it a folder, in the Windows world a directory. This function works cross platform and got the name with Directory years ago.

You can use Files.DeleteFolder to delete a folder with its content.

Examples

Create folder on Desktop:

```
Set Variable [ $folder; Value:MBS( "Folders.UserDesktop" ) ]
If [ IsEmpty(Container Export::Name) ]
Set Field [ Container Export::Name; "Record " & Get(RecordID) ]
End If
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; Container Export::Name ) ]
Set Variable [ $r; Value:MBS("Files.CreateDirectory"; $path) ]
```

Creates directory and shows error:

```
Set Variable [ $r; Value:MBS("Files.CreateDirectory"; $path) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create directory"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ ]
End If
```

Create a folder:

MBS("Files.CreateDirectory"; "/"Users/cs/Documents/FolderName")

See also

- 78.14 Files.Delete 3792
- 78.15 Files.DeleteFolder 3794
- 81.8 Folders.UserDesktop 4177
- 81.9 Folders.UserDocuments 4179
- 81.10 Folders.UserDownloads 4181
- 124.6 IsError 6266
- 121.1 Path.AddPathComponent 6135
- 121.2 Path.FileMakerPathToNativePath 6139
- 164.57 Text.RemovePrefix 7854
- 181.10 WIA.ImageDialog 8508

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/IMAP Email](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

78.10.1 Blog Entries

- [Storing files for download on FileMaker Server with download URLs](#)

78.10.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 31
- Ausgabe 6/2018, Seite 30
- Ausgabe 2/2017, Seite 41
- Ausgabe 2/2017, Seite 39
- Ausgabe 2/2017, Seite 38
- Ausgabe 1/2017, Seite 10

78.11 Files.CreateHardLink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.3	Yes	Yes	Yes	Yes	Yes

MBS("Files.CreateHardLink"; DestPath; TargetPath)

Parameters

DestPath

The path where to create the hard link file.

"/Users/cs/Desktop/test.rtf"

TargetPath

The target path for the link.

"/Users/cs/Desktop/todo.rtf"

Result Returns OK or error.

Description

On success, you get two directory entries which point to same data on disk.

For Macs works with file and folders.

Be aware that not all applications are aware to handle hard links for folders correctly!

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Creates a hard link:

```
MBS( "Files.CreateHardLink"; "/Users/cs/Desktop/test.rtf"; "/Users/cs/Desktop/todo.rtf" )
```

Creates a hard link on Windows:

```
MBS( "Files.CreateHardLink"; "C:\Users\Christian\Desktop\other.jpg"; "C:\Users\Christian\Desktop\test.jpg"
```

See also

- 78.8 Files.CreateAlias 3782
- 78.50 Files.ResolveAlias 3855
- 121.2 Path.FileMakerPathToNativePath 6139

78.11.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr2](#)

78.12 Files.CreateSymbolicLink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.3	Yes	Yes	Yes	Yes	Yes

MBS("Files.CreateSymbolicLink"; DestPath; TargetPath)

Parameters

DestPath

The path where to create the symbolic link file.

"/Users/cs/Desktop/test.rtf"

TargetPath

The target path for the link.

"/Users/cs/Desktop/todo.rtf"

Result Returns OK or error.

Description

For Macs works with file and folders.

On success, you get a new link file which point to other file.

Examples

Creates symbolic link:

MBS("Files.CreateSymbolicLink"; "/Users/cs/Desktop/test.rtf"; "/Users/cs/Desktop/todo.rtf")

See also

- 78.8 Files.CreateAlias 3782
- 78.50 Files.ResolveAlias 3855

78.12.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr2](#)

Created 7th June 2016, last changed 7th June 2016.

78.13 Files.CreationDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Files.CreationDate"; Path)

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Result Returns timestamp or error.

Description

Although the function is named date, it does return the time, too. Result is a timestamp.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Queries creation date of a file

```
MBS( "Files.CreationDate"; "C:\test.txt" )
```

Show files Dates:

```
MBS( "Files.CreationDate"; "C:\Users\Christian\Desktop\ddd.rtf" ) & " created" & $&
```

```
MBS( "Files.ModificationDate"; "C:\Users\Christian\Desktop\ddd.rtf" ) & " modified" & $&
```

```
MBS( "Files.AccessDate"; "C:\Users\Christian\Desktop\ddd.rtf" ) & " accessed"
```

See also

- 78.1 Files.AccessDate 3771
- 78.40 Files.ModificationDate 3834
- 78.55 Files.SetCreationDate 3863
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [DynaPDF/PDF Library](#)
- [Files/File Listing With Icons](#)
- [Files/FileInfo](#)

78.13.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr3](#)

Created 18th August 2014, last changed 17th July 2017.

78.14 Files.Delete

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.3	Yes	Yes	Yes	Yes	Yes

MBS("Files.Delete"; Path)

Parameters

Path

The native file path to the file to be deleted.

"/Users/John/Desktop/test.txt"

Result Returns OK or error message.

Description

Works also for directories and can easily remove whole directory hierarchies! Be careful and make backups.

Use Files.MoveToTrash to move files to trash which is often better as it allows users to undo the operation. Also Files.MoveToTrash usually works on files in use.

It is possible that the OS decides to not delete the file and fail (e.g. due to permission errors).

Version 6.3 and newer support deleting a list of files. So you can pass a list of paths instead of just one. Stops at the first error.

Warning: If you pass path to a folder hierarchy, the whole folder hierarchy gets deleted!

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Delete a file on desktop on Mac:

```
$r = MBS("Files.Delete"; "/Users/cs/Desktop/testing.fp7")
```

Delete a file on desktop on Windows:

```
$r = MBS("Files.Delete"; "C:\Users\Christian\Desktop\testing.fp7")
```

Delete two files:

```
MBS("Files.Delete"; "/Users/cs/Desktop/test1.txt$/Users/cs/Desktop/test2.txt")
```

Delete two files on Windows:

78.14. *FILES.DELETE* 3793
MBS("Files.Delete"; "C:\Users\Christian\Desktop\test1.txt&C:\Users\Christian\Desktop\test2.txt")

See also

- 78.10 Files.CreateDirectory 3785
- 78.15 Files.DeleteFolder 3794
- 78.44 Files.MoveToTrash 3842
- 91.75 ImageCapture.ImagePaths 5006
- 91.86 ImageCapture.RequestScan 5018
- 91.91 ImageCapture.SetParameter 5026
- 121.2 Path.FileMakerPathToNativePath 6139
- 124.31 Plugin.LimitFunction 6297
- 124.40 Plugin.SetFunctions 6309

Example Databases

- [Mac only/ImageCapture/ImageCapture](#)

78.14.1 Blog Entries

- [FileMaker Server Security and plugins](#)
- [MBS FileMaker Plugin, version 6.4pr9](#)
- [ImageCapture functions for Mac OS X](#)
- [MBS FileMaker Plugin 6.3 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.3pr5](#)
- [Shared FileMaker Server Hosting and Plugin Security](#)

78.14.2 FileMaker Magazin

- [Ausgabe 1/2017, Seite 10](#)

Created 18th August 2014, last changed 3th June 2019.

78.15 Files.DeleteFolder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	4.2	Yes	Yes	Yes	Yes	Yes

MBS("Files.DeleteFolder"; Path)

Parameters

Path

The native folder path to the item to be deleted.

"/Users/John/Desktop/test"

Result Returns OK or error message.

Description

Use Files.MoveToTrash to move files to trash which is often better as it allows users to undo the operation. Also Files.MoveToTrash usually works on files in use.

It is possible that the OS decides to not delete the file and fail (e.g. due to permission errors).

Folders are deleted recursively.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Delete a folder on desktop on Mac:

```
$r = MBS("Files.Delete"; "/Users/cs/Desktop/testing")
```

Delete a folder on desktop on Windows:

```
$r = MBS("Files.Delete"; "C:\Users\Christian\Desktop\testing")
```

See also

- 78.10 Files.CreateDirectory 3785
- 78.14 Files.Delete 3792
- 78.44 Files.MoveToTrash 3842
- 121.2 Path.FileMakerPathToNativePath 6139

78.15.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr8](#)

78.15.2 FileMaker Magazin

- Ausgabe 2/2017, Seite 41

Created 18th August 2014, last changed 12nd August 2015.

78.16 Files.DirectoryExists

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Files.DirectoryExists"; Path)

Parameters

Path

Native path to the item to check.

"C:\Windows"

Result Returns 1 if directory exists and 0 if not.

Description

If item exists at the path Files.itemExists returns 1. If it's a directory, Files.DirectoryExists also returns 1 and Files.FileExists returns 0. With a file, Files.FileExists returns 1 and Files.DirectoryExists returns 0. This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

Examples

Checks whether directory exists:

```
Set Variable [ $r; Value:MBS( "Files.DirectoryExists"; "/Users/cs/Desktop" ) ]
```

See also

- [78.19 Files.FileExists](#) 3801
- [78.34 Files.ItemExists](#) 3822
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Files/File Exists](#)

78.16.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr3](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr2](#)

78.16.2 FileMaker Magazin

- Ausgabe 2/2017, Seite 39
- Ausgabe 2/2017, Seite 38

Created 18th August 2014, last changed 18th October 2016.

78.17 Files.DiskInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Files.DiskInfo"; Mode; PathToVolume)

Parameters

Mode

What to return. Can be totalBytes or freeBytes. On Windows you can also pass DriveType for type or FreeBytesAvailable to learn available space for current user. On Mac OS X you can query also fileCount, folderCount, blockSize, totalBlocks or freeBlocks.

"freeBytes"

PathToVolume

The path to volume. e.g. C:\, \\MyServer\MyDisk\ or /Volumes/testDisk/ or / for root volume on OS X.
/

Result Returns value or error.

Description

Please pass native path to volume.

For Windows network volumes with \\syntax, please include trailing backslash.

DriveType	Description
Unknown	The drive type cannot be determined.
Removable	The drive has removable media; for example, a floppy drive, thumb drive, or flash card reader.
Fixed	The drive has fixed media; for example, a hard disk drive or flash drive.
Remote	The drive is a remote (network) drive.
CDROM	The drive is a CD-ROM drive.
RAMDisk	The drive is a RAM disk.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Query free bytes on Mac OS X root volume:

```
MBS("Files.DiskInfo"; "FreeBytes"; "/" )
```

Query total size of a mounted volume on Mac:

```
MBS("Files.DiskInfo"; "TotalBytes"; "/Volumes/Ablage1" )
```

Query number of files and folders on Mac:

```
MBS("Files.DiskInfo"; "FileCount"; "/" ) & " files and " & MBS("Files.DiskInfo"; "FolderCount"; "/" ) & " folders."
```

Query available free bytes on C: for Windows:

```
MBS("Files.DiskInfo"; "FreeBytesAvailable"; "C:")
```

Queries size of shared folder in VMWare on Windows:

```
MBS("Files.DiskInfo"; "TotalBytes"; "\\vmware-host\Shared Folders\Downloads\")  
// please note the double quoting for backslashes in string constants!
```

Check drive type on Windows:

```
MBS( "Files.DiskInfo"; "DriveType"; "C:" )
```

See also

- [78.21 Files.FileInfo](#) 3804
- [121.2 Path.FileMakerPathToNativePath](#) 6139

78.17.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr4](#)
- [MBS FileMaker Plugin 5.0 for OS X/Windows - More than 3000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 3th February 2015, last changed 27th June 2017.

78.18 Files.FileDisplayName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Files.FileDisplayName"; Path)

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Description

This name may be localized and may not include file extension. Only for displaying.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Queries display name of a file

MBS("Files.FileDisplayName"; "C:\test.txt")

Query localized name for desktop folder:

MBS("Files.FileDisplayName" ; "/Users/cs/Desktop")

Example result: "Schreibtisch"

See also

- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Files/FileInfo](#)
- [Mac only/MetaDataQuery/Search Applications](#)

78.18.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)
- [MBS Filemaker Plugin, version 2.9pr3](#)

Created 18th August 2014, last changed 25th September 2019.

78.19 Files.FileExists

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Files.FileExists"; Path)

Parameters

Path

Native path to the file to check.

"C:\Windows"

Result Returns 1 if file exists and 0 if not.

Description

If item exists at the path Files.itemExists returns 1. If it's a directory, Files.DirectoryExists also returns 1 and Files.FileExists returns 0. With a file, Files.FileExists returns 1 and Files.DirectoryExists returns 0. This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

For applications on Mac OS X, this function returns 0 as those are directories.

Examples

Checks whether file exists:

```
Set Variable [ $r; Value:MBS( "Files.FileExists"; "/Users/cs/Desktop/test.rtf" ) ]
```

Test relative folder path by passing relative path after setting starting folder:

```
MBS("Process.SetCurrentDirectory"; "C:\Program Files (x86)\FileMaker\FileMaker Pro 18 Advanced/Extensions") &
MBS( "Files.FileExists"; "../Extensions/MBS.fmx")
```

See also

- 61.179 CURL.SetOptionCAINFO 2022
- 69.22 DragDrop.GetPath 2507
- 69.23 DragDrop.GetPathCount 2510
- 78.16 Files.DirectoryExists 3796
- 78.34 Files.ItemExists 3822
- 121.2 Path.FilemakerPathToNativePath 6139
- 129.9 Process.SetCurrentDirectory 6485

- 181.8 WIA.Image 8505
- 181.9 WIA.ImageCount 8507

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL with certificates included with FileMaker](#)
- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest File](#)
- [Drag and Drop/for Mac/DragTest multiple picture files](#)
- [Files/File Exists](#)
- [Win Only/WIA Scan](#)

78.19.1 Blog Entries

- [Use root certificates included with FileMaker](#)
- [MBS Filemaker Plugin, version 4.1pr3](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr2](#)

Created 18th August 2014, last changed 16th October 2019.

78.20 Files.FileExtension

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Files.FileExtension"; Path)

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Result Returns text or error.

Description

Returns file extension without dot.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Queries file extension of a file

MBS("Files.FileExtension"; "C:\test.txt")

See also

- 105.1 MailComposer.AddAttachmentContainer 5609
- 114.1 MessageComposer.AddAttachmentContainer 6005
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [iOS/iOS Email Sending](#)
- [iOS/iOS Message Sending](#)

78.20.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr1](#)

Created 25th May 2015, last changed 2nd June 2015.

78.21 Files.FileInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	4.3	Yes	Yes	Yes	No	Yes

MBS("Files.FileInfo"; Path; Selector)

Parameters

Path

The native file path to the application.

\$Path

Selector

Which value to query.

"Version"

Result Returns value or error.

Description

This is intended for bundled app/plugin/framework files on Mac and on Windows for EXE/DLL files.

Possible selectors on Mac:

Version	Version
ShortVersion	Short version
MinimumSystemVersion	Minimum OS X version required to launch app.
InfoString	Finder Info string.
ExecutableName	Name of executable file in bundle.
Identifier	Bundle Identifier

Possible selectors on Win:

Description	The file description.
Version	The file version.
InternalName	The internal name.
CompanyName	The company name.
LegalCopyright	The legal copyright string.
OriginalFilename	The original filename.
ProductName	The product name.
ProductVersion	The product version.
Copyright	Human readable copyright string. (New in 7.5)

The file information is cached to queries with same file path will not reload values from file.

Examples

Queries information about FileMaker on Mac:

```
MBS("Files.FileInfo"; "/Applications/FileMaker Pro 13 Advanced/FileMaker Pro Advanced.app"; "Version")
```

```
MBS("Files.FileInfo"; "/Applications/FileMaker Pro 13 Advanced/FileMaker Pro Advanced.app"; "MinimumSystemVersion")
```

```
MBS("Files.FileInfo"; "/Applications/FileMaker Pro 13 Advanced/FileMaker Pro Advanced.app"; "ExecutableName")
```

```
MBS("Files.FileInfo"; "/Applications/FileMaker Pro 13 Advanced/FileMaker Pro Advanced.app"; "Identifier")
```

Queries some information about DebugView on Windows:

```
MBS("Files.FileInfo"; "C:\Users\Christian\Desktop\Dbgview.exe"; "Version")
```

```
MBS("Files.FileInfo"; "C:\Users\Christian\Desktop\Dbgview.exe"; "Description")
```

See also

- [78.17 Files.DiskInfo](#) 3798
- [78.22 Files.FileKind](#) 3806
- [78.23 Files.FileName](#) 3807
- [78.24 Files.FileSize](#) 3808
- [124.62 Version](#) 6338

78.21.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)
- [MBS Filemaker Plugin, version 4.3pr6](#)

Created 18th August 2014, last changed 11st October 2017.

78.22 Files.FileKind

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.9	Yes	Yes	Yes	No	No

MBS("Files.FileKind"; Path)

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Result Returns file kind text or error.

Description

This is the file type displayed by the Finder or Explorer. Like "FileMaker Pro Database" for a .fp7 file. This string can be localized.

Examples

Queries file kind of a file

MBS("Files.FileKind"; "C:\test.txt")

See also

- [78.21 Files.FileInfo](#) 3804
- [78.23 Files.FileName](#) 3807
- [78.24 Files.FileSize](#) 3808

Example Databases

- [Files/File Listing With Icons](#)
- [Files/FileInfo](#)

78.22.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr5](#)
- [MBS Filemaker Plugin, version 2.9pr3](#)

Created 18th August 2014, last changed 25th February 2017.

78.23 Files.FileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Files.FileName"; Path)

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Result Returns file name as text or error.

Description

Examples

Queries file name of a file

MBS("Files.FileName"; "C:\test.txt")

See also

- [78.21 Files.FileInfo](#) 3804
- [78.22 Files.FileKind](#) 3806
- [78.24 Files.FileSize](#) 3808
- [85.281 GImage.SetResolutionUnits](#) 4700

Example Databases

- [CURL/Email/Batch Emailer](#)
- [Files/FileInfo](#)
- [GraphicsMagick/SVG to PNG](#)

78.23.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr5](#)
- [MBS Filemaker Plugin, version 2.9pr3](#)

Created 18th August 2014, last changed 18th August 2014.

78.24 Files.FileSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Files.FileSize"; Path { ; Options })

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Options

Optional

Optionally specifies on Mac OS X what size is returned. Default is total logical file size. Pass datafork or resourcefork to limit query to only size of given fork. And pass physical or logical to query logical size or the physical size, defined by blocks used on Disk.

"physical datafork"

Result Returns file size in bytes.

Description

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

With 2.9 plugins you can set parameter to query only size of resource fork or data fork on Mac OS X. And you can define if you want to query size on disk (rounded up to block size) or the logical size.

Examples

Queries file size of a file

```
MBS( "Files.FileSize"; "C:\test.txt" )
```

Queries logical data fork size of a file on Mac OS X:

```
MBS( "Files.FileSize"; "/Users/Shared/Test.txt"; "datafork" )
```

Queries physical size of a file on Mac OS X:

```
MBS( "Files.FileSize"; "/Users/Shared/Test.txt"; "physical" )
```

Queries physical resource fork size of a file on Mac OS X:

```
MBS( "Files.FileSize"; "/Users/Shared/Test.txt"; "physical-resourcefork" )
```

Queries physical data fork size of a file on Mac OS X:

```
MBS( "Files.FileSize"; "/Users/Shared/Test.txt"; "physical datafork" )
```

78.24. *FILES.FILESIZE* 3809

See also

- 78.21 Files.FileInfo 3804
- 78.22 Files.FileKind 3806
- 78.23 Files.FileName 3807
- 78.26 Files.FolderSize 3811
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [DynaPDF/PDF Library](#)
- [Files/FileInfo](#)

78.24.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr2](#)
- [MBS Filemaker Plugin, version 2.9pr3](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr7](#)

Created 18th August 2014, last changed 18th August 2014.

78.25 Files.FileUTITypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.9	Yes	No	Yes, macOS only	No	No

MBS("Files.FileUTITypes"; Path)

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Result Returns file types as text or error.

Description

For example a rtf file has the type public.rtf and going up the chain of types, it also has "public.text, public.data, public.item and public.content. A jpg image has types public.jpeg, public.image, public.data, public.item and public.content. So if you look for "public.image" in the types, you can identify that the file is an image file.

Examples

Queries types of a file

MBS("Files.FileUTITypes"; "C:\test.txt")

Example Databases

- [Files/FileInfo](#)

78.25.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr3](#)

Created 18th August 2014, last changed 18th August 2014.

78.26 Files.FolderSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.2	Yes	Yes	Yes	Yes	Yes

MBS("Files.FolderSize"; Path { ; RecursionLimit; IgnoreHiddenFolderContent; CountBundlesAsItem })

Parameters

Path

Native file path to folder.

"C:\Test"

RecursionLimit

Optional

The limit for the recursion. Default is -1 for no limit. Pass zero to only look in files in that folder and not subfolders.

0

IgnoreHiddenFolderContent

Optional

Do not count items in hidden subfolders. Pass 1 to ignore or 0 to count. Default is 0.

0

CountBundlesAsItem

Optional

Count bundles as items. Default is 0 to look inside those bundles, e.g. apps. Pass 1 to count bundles as files.

1

Result Returns values or error.

Description

On success returns a list of values. Please calculate ones, save result in variable and pick the values you need. It's quite efficient for us to query all those values in one run as disk access is the slowest part here, not summing up the values.

Windows doesn't know about resource fork, so the resource fork sizes are zero there always.

Currently block size calculation for Windows is not done, so logical and physical sizes are identical.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Calculate my desktop size:

```
MBS( "Files.FolderSize"; "/Users/cs/Desktop" )
```

Caluclate on Windows:

Name	Position	Description	Example
ItemCount	1	Total number of items	153
FilesCount	2	Total number of files	140
FolderCount	3	Total number of folders.	13
VisibleItemCount	4	Number of visible items.	143
HiddenItemCount	5	Number of hidden items.	10
VisibleFilesCount	6	Number of visible files.	130
HiddenFilesCount	7	Number of hidden files.	10
VisibleFolderCount	8	Number of visible folders.	13
HiddenFolderCount	9	Number of hidden folders.	0
PhysicalTotalSize	10	Total physical byte size.	186777600
LogicalTotalSize	11	Total logical byte size.	186581344
VisiblePhysicalTotalSize	12	Total physical byte size for visible files.	186679296
VisibleLogicalTotalSize	13	Total logical byte size for visible files.	186507445
HiddenPhysicalTotalSize	14	Total physical byte size for hidden files.	98304
HiddenLogicalTotalSize	15	Total logical byte size for hidden files.	73899
PhysicalDataForkSize	16	Total physical byte size.	172150784
LogicalDataForkSize	17	Total logical byte size.	171970091
VisiblePhysicalDataForkSize	18	Total physical data fork byte size for visible files.	172052480
VisibleLogicalDataForkSize	19	Total logical data fork byte size for visible files.	171896192
HiddenPhysicalDataForkSize	20	Total physical data fork byte size for hidden files.	98304
HiddenLogicalDataForkSize	21	Total logical data fork byte size for hidden files.	73899
PhysicalResourceForkSize	22	Total physical resource fork byte size.	14626816
LogicalResourceForkSize	23	Total logical resource fork byte size.	14611253
VisiblePhysicalResourceForkSize	24	Total physical resource fork byte size for visible files.	14626816
VisibleLogicalResourceForkSize	25	Total logical resource fork byte size for visible files.	14611253
HiddenPhysicalResourceForkSize	26	Total physical resource fork byte size for hidden files.	0
HiddenLogicalResourceForkSize	27	Total logical resource fork byte size for hidden files.	0
RecursionMaxLevel	28	Maximum recursion level we had.	3

MBS("Files.FolderSize"; "/Users/cs/Desktop")

See also

- 78.24 Files.FileSize 3808
- 121.2 Path.FileMakerPathToNativePath 6139

78.26.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr1](#)
- [New functions for MBS FileMaker Plugin coming soon](#)
- [Calculating folder size](#)

78.26.2 FileMaker Magazin

- Ausgabe 2/2017, Seite 38

Created 11st March 2016, last changed 11st March 2016.

78.27 Files.GetComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.2	Yes	No	Yes, macOS only	No	No

MBS("Files.GetComment"; Path)

Parameters

Path

The native path to the file.

"/Users/John/Desktop/test.txt"

Result Returns OK or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Queries file comment:

MBS("Files.GetComment"; "/Users/cs/Desktop/Wifi.rtf")

See also

- 78.54 Files.SetComment 3862
- 121.2 Path.FileMakerPathToNativePath 6139

78.27.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 25th April 2016, last changed 4th July 2016.

78.28 Files.GetFinderLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.2	Yes	No	Yes, macOS only	No	No

MBS("Files.GetFinderLabel"; Path)

Parameters

Path

The native path to the file.

"/Users/cs/Desktop/test.txt"

Result Returns number or error.

Description

Value is 0 for no label or 1 to 7 for different colors.

Please use Files.GetTagNames to query tag names.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Query color:

MBS("Files.GetFinderLabel"; "/Users/cs/Desktop/test.rtf")

See also

- 78.32 Files.GetTagNames 3820
- 78.56 Files.SetFinderLabel 3864
- 121.2 Path.FileMakerPathToNativePath 6139

78.28.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 17th May 2016, last changed 17th May 2016.

78.29 Files.GetNodeID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.1	Yes	Yes	Yes	No	No

MBS("Files.GetNodeID"; Path)

Parameters

Path

The native file/folder path.

\$path

Result Returns file ID as number.

Description

On Mac OS X, every file usually has an unique ID on the hard disk.

Not all volumes support NodeIDs, but if they do, you can later find the file back on that volume using Files.GetPathFromNodeID.

Added Windows support in plugin version 8.5.

While node id is currently a 64-bit integer, it could change in future to an UUID or 128bit number.

Examples

Queries node ID:

```
Set Variable [ $r; Value:MBS( "Files.GetNodeID"; "/Users/cs/Desktop/todo.rtf" ) ]
```

Test ID functions:

```
Set Variable [ $path ; Value: "/Users/cs/Desktop/test.rtf" ]
Set Variable [ $id ; Value: MBS( "Files.GetNodeID"; $Path ) ]
Set Variable [ $NewPath ; Value: MBS( "Files.GetPathFromNodeID"; "/" ; $id ) ]
Show Custom Dialog [ "Both Paths should be same" ; $Path & $& $newPath ]
```

Test on Windows:

```
Set Variable [ $node ; Value: MBS( "Files.GetNodeID"; "C:\Users\Christian\Desktop\DbgView.exe" ) ]
Set Variable [ $path ; Value: MBS( "Files.GetPathFromNodeID"; "C:" ; $node ) ]
Show Custom Dialog [ "NodeID" ; $node & $& $path ]
```

See also

- 78.30 Files.GetPathFromNodeID

3817

Example Databases

- [Files/Alias and NodeID](#)

78.29.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.5 - Über 5500 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.5 - More than 5500 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.5pr4](#)
- [MBS FileMaker Plugin, version 8.4pr3](#)

Created 18th August 2014, last changed 25th October 2018.

78.30 Files.GetPathFromNodeID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.1	Yes	Yes	Yes	No	No

MBS("Files.GetPathFromNodeID"; VolumePath; NodeID)

Parameters

VolumePath

The native path to the volume.

"/"

NodeID

The node ID for the file, a number.

\$nodeID

Result Returns the path for the file or error message.

Description

You need to pass the path to the volume where this NodeID belongs to.

This does not work well for most network mounts.

The plugin may run a search which can take a while.

Added Windows support in plugin version 8.5.

Examples

Resolve node on system volume:

```
MBS( "Files.GetPathFromNodeID"; "/" ; $NodeID )
```

Resolve node on mounted volume named USBStick:

```
MBS( "Files.GetPathFromNodeID"; "/Volumes/USBStick"; $NodeID )
```

Test ID functions:

```
Set Variable [ $path ; Value: "/Users/cs/Desktop/test.rtf" ]
Set Variable [ $id ; Value: MBS( "Files.GetNodeID"; $Path ) ]
Set Variable [ $NewPath ; Value: MBS( "Files.GetPathFromNodeID"; "/" ; $id ) ]
Show Custom Dialog [ "Both Paths should be same" ; $Path & $& $newPath ]
```

Test on Windows:

```
Set Variable [ $node ; Value: MBS( "Files.GetNodeID"; "C:\Users\Christian\Desktop\DbgView.exe" ) ]
Set Variable [ $path ; Value: MBS( "Files.GetPathFromNodeID"; "C:" ; $node ) ]
Show Custom Dialog [ "NodeID" ; $node & $& $path ]
```

See also

- [78.29 Files.GetNodeID](#)

3815

Example Databases

- [Files/Alias and NodeID](#)

78.30.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.5 - Über 5500 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.5 - More than 5500 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.5pr4](#)
- [MBS FileMaker Plugin, version 8.4pr3](#)
- [MBS FileMaker Plugin, version 5.1pr4](#)

Created 18th August 2014, last changed 25th October 2018.

78.31 Files.GetPosixPermissions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	4.3	Yes	No	Yes	Yes	Yes

MBS("Files.GetPosixPermissions"; Path)

Parameters

Path

The native path to the file or folder.

"/Users/John/Desktop/test.txt"

Result Returns OK or error message.

Description

Path must be valid and exist.

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

See chmod command manual page. The plugin converts parameter to string and parses it as octal number.

This way you can pass 777 as number and it's interpreted as expected.

Examples

Query permissions:

MBS("Files.GetPosixPermissions"; "/Users/cs/Desktop/test")

shows for example 755

See also

- [78.59 Files.SetPosixPermissions](#) 3867
- [121.2 Path.FilemakerPathToNativePath](#) 6139

78.31.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 29th May 2017.

78.32 Files.GetTagNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.5	Yes	No	Yes, macOS only	No	No

MBS("Files.GetTagNames"; Path)

Parameters

Path

The native path to the file.

"/Users/cs/Desktop/test.txt"

Result Returns OK or error.

Description

Requires Mac OS X 10.9.

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

Please note that some tags may include chr(10) followed by a number to indicate which label color is used for compatibility to older OS X versions. Those appear escaped as \n in the result.

You can use Files.GetFinderLabel to read label number.

Examples

Queries tag names:

```
Set Variable [ $r; Value:MBS( "Files.GetTagNames"; "/Users/cs/Desktop/todo.rtf" ) ]
```

See also

- 78.28 Files.GetFinderLabel 3814
- 78.60 Files.SetTagNames 3869
- 121.2 Path.FilemakerPathToNativePath 6139

78.32.1 Blog Entries

- [MBS Filemaker Plugin, version 3.5pr2](#)

Created 18th August 2014, last changed 18th October 2016.

78.33 Files.IsHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	7.1	Yes	Yes	Yes	No	No

MBS("Files.IsHidden"; Path)

Parameters

Path

The native path to the file or folder to be checked.

"/Users/John/Desktop/test.txt"

Result Returns 1, 0 or error.

Description

See also

- 78.57 Files.SetHidden

3865

78.33.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr4](#)

Created 1st March 2017, last changed 1st March 2017.

78.34 Files.ItemExists

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Files.ItemExists"; Path)

Parameters

Path

Native path to the item to check.

"C:\Windows"

Result Returns 1 if item exists and 0 if not.

Description

If item exists at the path Files.itemExists returns 1. If it's a directory, Files.DirectoryExists also returns 1 and Files.FileExists returns 0. With a file, Files.FileExists returns 1 and Files.DirectoryExists returns 0.

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

Examples

Checks whether item exists:

```
Set Variable [ $r; Value:MBS( "Files.ItemExists"; "/Users/cs/Desktop/test.rtf" ) ]
```

See also

- [78.16 Files.DirectoryExists](#) 3796
- [78.19 Files.FileExists](#) 3801
- [121.2 Path.FilemakerPathToNativePath](#) 6139

Example Databases

- [Files/File Exists](#)

78.34.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr3](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr2](#)

Created 18th August 2014, last changed 18th October 2016.

78.35 Files.Launch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	Yes	No	No

```
MBS( "Files.Launch"; AppPath { ; DocPath; NewInstance } )
```

Parameters

AppPath

Native path to the application to launch.

```
"/Applications/TextEdit.app"
```

DocPath

Optional

Optional, Native path to the document to pass as argument. Must be text to distinguish from flag, which are numbers.

```
"/Users/cs/Desktop/Notes.rtf"
```

NewInstance

Optional

Available in MBS FileMaker Plugin 7.2 or newer.

Whether to launch new app instance on Mac. Default is 0.

```
1
```

Result Returns "OK" or error.

Description

The OS will lookup what application is associated with the file type and launch the application asking it to open the document.

You can use this function to open a database file with FileMaker or your runtime solution. Query with Files.AppPath the path to your application. Then call Launch with that application path and your database file path.

Please use Files.LaunchFile to open a file and Files.Launch to open a file in a specific application.

Version 5.3 supports passing several DocPath parameters.

With version 7.2 the last parameter can be a number with 0 or 1 to define whether to run a new app instance.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Launch two text files in Textedit:

```
MBS( "Files.Launch"; "/Applications/TextEdit.app"; "/Users/cs/Desktop/filme.rtf"; "/Users/cs/Desktop/test.rtf" )
```

Run notepad on Windows with a text file:

```
MBS( "Files.Launch"; "notepad.exe"; "C:\Users\Christian\Desktop\test2.txt")
```

Launch iMessages app:

```
MBS( "Files.Launch"; "/Applications/Messages.app")
```

Launch Mail application:

```
MBS( "Files.Launch"; "/Applications/Mail.app")
```

Restart FileMaker with same database:

```
Set Variable [ $dbpath; Value:Get ( FilePath ) ]
Set Variable [ $dbpath; Value:MBS( "Path.FileMakerPathToNativePath"; $dbpath ) ]
Set Variable [ $apppath; Value:MBS( "App.GetProcessPath" ) ]
Set Variable [ $r; Value:MBS( "Files.Launch"; $apppath; $dbpath; 1 ) ]
Exit Application
```

Open Website in Firefox on Windows:

```
MBS( "Files.Launch"; "C:\Program Files\Mozilla Firefox\Firefox.exe"; "http://www.mbsplugins.de" )
```

Open website in Google Chrome on Windows:

```
MBS( "Files.Launch"; "C:\Program Files (x86)\Google\Chrome\Application\Chrome.exe"; "http://www.mbsplugins.de" )
```

See also

- 34.10 App.OpenFile 918
- 78.3 Files.AppPath 3774
- 78.62 Files.WriteFile 3871
- 81.7 Folders.SystemTemporary 4175
- 121.1 Path.AddPathComponent 6135
- 121.2 Path.FileMakerPathToNativePath 6139
- 122.28 PDFKit.Open 6198
- 148.9 Shell.Execute 7011
- 189.3 WordFile.AppendTableRow 8816

78.35. *FILES.LAUNCH*

3825

- 189.18 WordFile.ReplaceTag

8835

Example Databases

- [Files/Launch](#)
- [Files/Open Database](#)

78.35.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr1](#)
- [MBS FileMaker Plugin, version 7.2pr4](#)
- [Restart FileMaker with same database](#)
- [MBS FileMaker Plugin, version 5.3pr1](#)
- [MBS Filemaker Plugin, version 4.2pr12](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr1](#)

Created 18th August 2014, last changed 7th March 2019.

78.36 Files.LaunchFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	Yes	No	No

```
MBS( "Files.LaunchFile"; Path { ; NewInstance } )
```

Parameters

Path

Native path to the item to reveal.

```
"/Users/cs/Desktop/Notes.rtf"
```

NewInstance

Optional

Available in MBS FileMaker Plugin 7.2 or newer.

Whether to launch new app instance on Mac. Default is 0.

```
1
```

Result Returns "OK" or error.

Description

The OS will lookup what application is associated with the file type and launch the application asking it to open the document.

See also Files.Launch if you need to pass application and document.

If you launch a folder path, the folder will open in Finder/Explorer.

Please use Files.LaunchFile to open a file and Files.Launch to open a file in a specific application.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Shows a folder in Finder on Mac:

```
MBS( "Files.LaunchFile"; "/Users" )
```

Write container to temp file and launch:

```
# get temp folder
Set Variable [ $TempFolder; Value:MBS( "Folders.SystemTemporary" ) ]
# and file name from container
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; test::myContainer ) ]
# add name to folder path
Set Variable [ $TempPath; Value:MBS( "Path.AddPathComponent"; $TempFolder; $name ) ]
# now write temp file
```

```
Set Variable [ $r; Value:MBS( "Files.WriteFile"; test::myContainer; $TempPath) ]  
# and launch file  
Set Variable [ $r; Value:MBS( "Files.LaunchFile"; $TempPath) ]
```

Launch new copy of same app:

```
MBS("Files.LaunchFile"; "/Applications/FileMaker Pro 15 Advanced/FileMaker Pro Advanced.app"; 1)
```

See also

- [34.10 App.OpenFile](#) 918
- [78.35 Files.Launch](#) 3823
- [78.62 Files.WriteFile](#) 3871
- [81.5 Folders.System](#) 4173
- [81.7 Folders.SystemTemporary](#) 4175
- [121.1 Path.AddPathComponent](#) 6135
- [121.5 Path.LastPathComponent](#) 6144
- [122.28 PDFKit.Open](#) 6198
- [189.3 WordFile.AppendTableRow](#) 8816
- [189.18 WordFile.ReplaceTag](#) 8835

Example Databases

- [DynaPDF/Shrink PDF pages](#)
- [Files/Launch](#)
- [WordFile/WordFile Fields](#)
- [WordFile/WordFile](#)

78.36.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr4](#)
- [MBS Filemaker Plugin, version 4.2pr12](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr1](#)

Created 18th August 2014, last changed 11st July 2017.

78.37 Files.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.8	Yes	Yes	Yes	Yes	Yes

MBS("Files.List"; Path { ; filter; ExtensionFilter })

Parameters

Path

Native path to the directory.

"C:\Test"

filter

Optional

Optional, limits what is returned. Default is 0 to report all files. Pass a combination of 1 for showing only files, 2 for showing only directories and 4 for showing only visible items. Add 8 if the path includes the file name specification with wildcards.

5

ExtensionFilter

Optional

Optional, a filter for getting only files with matching file extension.

".txt"

Result Returns list of files separated by return.

Description

The list of names is separated by new line character.

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

With filter parameter being 8 on Windows, you can pass a path with wildcards directly and ExtensionFilter parameter is ignored. This is not supported on Mac OS X.

See also Files.ListRecursive. You can filter result with List.MatchesPostfix to get list with one file extension only.

If you need sorting, please check List.Sort function.

Examples

Queries files in Users folder on Mac:

```
$files = MBS("Files.List"; "/Users")
```

Queries visible files in windows folder:

```
$files = MBS("Files.List"; "c:\\Windows\\"; 5)
```


78.37. FILES.LIST

3829

Queries DLL files in windows folder:

```
$files = MBS("Files.List"; "c:\\Windows\\"; 0; ".dll")
```

Queries Applications with name starting with e in windows folder:

```
$files = MBS("Files.List"; "c:\\Windows\\e*.exe"; 8)
```

Find FileMaker databases in a folder:

```
MBS("Files.List"; "c:\\Users\\Christian\\Desktop"; 0; ".fmp12")
```

See also

- [78.38 Files.ListRecursive](#) 3831
- [78.39 Files.ListVolumes](#) 3833
- [103.18 List.MatchesPostfix](#) 5441
- [103.29 List.RemovePrefix](#) 5457
- [103.34 List.Sort](#) 5464
- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553
- [164.49 Text.ReadTextFile](#) 7843
- [53.35 ZipFile.CompressFiles](#) 1511

Example Databases

- [CURL/WebServices/WeatherBit.io test](#)
- [DynaPDF/DynaPDF Batch Preview](#)
- [Files/File Listing With Icons](#)
- [Files/File listing](#)
- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [SQL in FileMaker/ImageGallery](#)

78.37.1 Blog Entries

- [Parsing VCard file](#)
- [MBS FileMaker Plugin, version 6.5pr1](#)
- [MBS FileMaker Plugin, version 6.4pr4](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)
- [MBS Filemaker Plugin, version 3.1pr10](#)
- [MBS Filemaker Plugin, version 3.1pr4](#)
- [MBS FileMaker Plugin 2.8 for OS X/Windows - More than 1100 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 2.8pr2](#)

78.37.2 FileMaker Magazin

- [Ausgabe 1/2017, Seite 10](#)

Created 18th August 2014, last changed 4th January 2020.

78.38 Files.ListRecursive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Files.ListRecursive"; Path { ; filter; Timeout })

Parameters

Path

Native path to the directory.

"C:\Test\"

filter

Optional

Optional, limits what is returned. Default is 0 to report all files. Pass a combination of 1 for showing only files, 2 for showing only directories and 4 for showing only visible files. Add 16 to include package file content on Mac. Add 32 to treat packages as files. In v7.3 you can add 64 to not list content of invisible directories.
5

Timeout

Optional

the timeout in seconds. Default is 5.

5.0

Result Returns list of files separated by return.

Description

This function is recursive and will look in all subfolders. Due to very large file systems you can pass a timeout. Default is 5 seconds. FileMaker will not respond to user input while the query runs.

The list of names is separated by new line character.

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

You can decide on Mac on whether files inside a package (e.g. application) are listed or not. By default we ignore those files, but you can include package content with adding 16 to the filter parameter.

See also Files.List.

If input path ends with / on Windows, we use slash for adding path components in v8.4 or newer. Otherwise we use the default on Windows, which is a backslash.

Examples

Queries files in Users folder on Mac:

```
$files = MBS("Files.List"; "/Users")
```

Queries visible files in windows folder:

```
$files = MBS("Files.List"; "c:\Windows\"; 5)
```

Queries visible files in windows folder, limit for 10 seconds:

```
$files = MBS("Files.List"; "c:\Windows\"; 5; 10)
```

List only visible files in visible directories:

```
MBS("Files.ListRecursive"; "/Users/shared"; 64+4)
```

See also

- [78.37 Files.List](#) 3828
- [103.29 List.RemovePrefix](#) 5457
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Files/File listing recursive](#)

78.38.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr10](#)
- [MBS FileMaker Plugin, version 7.3pr2](#)
- [MBS FileMaker Plugin, version 7.1pr4](#)
- [MBS FileMaker Plugin, version 6.4pr4](#)
- [MBS FileMaker Plugin, version 6.2pr9](#)
- [MBS Filemaker Plugin, version 4.1pr5](#)

78.38.2 FileMaker Magazin

- [Ausgabe 2/2017, Seite 39](#)

Created 18th August 2014, last changed 18th September 2018.

78.39 Files.ListVolumes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.5	Yes	Yes	Yes	No	No

MBS("Files.ListVolumes" { ; ShowMore })

Parameters

ShowMore

Optional

Whether to show volumes we'd normally not show. e.g. invisible volumes on Mac or drives on Windows without disk.

0

Result Returns paths or error.

Description

Returns a list of paths to mounted volumes.

e.g. on Mac: `"/§/Volumes/MBSFMPlugin64"`, so first volume is normally `/` for the boot volume.

Examples

List volumes:

```
MBS("Files.ListVolumes")
```

List all volumes:

```
MBS("Files.ListVolumes";1)
```

See also

- [78.37 Files.List](#)

3828

78.39.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

Created 17th November 2016, last changed 17th November 2016.

78.40 Files.ModificationDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Files.ModificationDate"; Path)

Parameters

Path

Native path to the file to check.

"C:\test\me.jpg"

Result Returns timestamp or error.

Description

Although the function is named date, it does return the time, too. Result is a timestamp.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Queries modification date of a file

```
MBS( "Files.ModificationDate"; "C:\test.txt" )
```

Show files Dates:

```
MBS( "Files.CreationDate"; "C:\Users\Christian\Desktop\ddd.rtf" ) & " created" & §&
```

```
MBS( "Files.ModificationDate"; "C:\Users\Christian\Desktop\ddd.rtf" ) & " modified" & §&
```

```
MBS( "Files.AccessDate"; "C:\Users\Christian\Desktop\ddd.rtf" ) & " accessed"
```

See also

- 78.1 Files.AccessDate 3771
- 78.13 Files.CreationDate 3790
- 78.58 Files.SetModificationDate 3866
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [Files/File Listing With Icons](#)
- [Files/FileInfo](#)

78.40.1 **Blog Entries**

- [MBS Filemaker Plugin, version 2.9pr3](#)

Created 18th August 2014, last changed 17th July 2017.

78.41 Files.Mount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	5.1	Yes	Yes	Yes	Yes	No

MBS("Files.Mount"; URL { ; Dest; Username; Password; Interactive; Prompt })

Parameters

URL

The URL for the network resource.

Dest

Optional

The destination path to mount to. If you leave this empty, the system decides. On Mac this can be the path to a folder where to mount new disk inside, e.g. to make a private mount.

""

Username

Optional

The user name. If none is provided, system can take credentials from keychain.

"test"

Password

Optional

The password to use.

"test"

Interactive

Optional

Default is 0 for no dialogs. But you can pass 1 to have a dialog show up.

1

Prompt

Optional

Pass 1 on Windows to show dialog always to enter password.

0

Result Returns path or error.

Description

Use on Server may require extra work as server runs with a different user account than you being logged in on the server machine. Permissions don't always allow things to be done.

When used on Linux the parameters are a little bit different:

Please pass source (URL), target (Dest), type (Username) and data (Password).

The dest path may need to be created first as new folder.

Examples

Mount Ablage1 on Mac:


```
MBS("Files.Mount"; "afp://Ablage1.local"; ""; ""; "")
```

Mount Ablage1 on Mac with password:

```
MBS("Files.Mount"; "afp://Ablage1.local"; ""; "root"; "xxx")
```

Mount something on Windows:

```
MBS("Files.Mount"; "\\myServer\public"; "X:"; ""; "")
```

Mount Ablage 2 on Windows:

```
MBS( "Files.Mount"; "\\Ablage2.local\Ablage2"; "H:" )
# password already known to Windows
```

Mount Ablage 2 on Windows with password:

```
MBS( "Files.Mount"; "\\Ablage2.local\Ablage2"; "H:"; "root"; "xxx" )
```

Unmount drive:

```
MBS("Files.Unmount"; "H:")
```

Mounts AFP volume with space in name:

```
MBS( "Files.Mount"; "afp://192.168.168.250/Customer% 20Data" )
```

Mount on Linux:

```
MBS( "Files.Mount"; "//192.168.101.100/sales"; "/mnt/test"; "cifs"; "username=shareuser,password=sharepass-
word,domain=nixcraft")
```

Mount SMB share from Windows Server 2012:

```
MBS("Files.Mount"; "\\192.168.0.242\ERP"; ""; "SRV2012\bob"; "test")
```

please note the SRV2012\prefix for the user name for this Windows server.

See also

- 78.42 Files.MountPath 3839
- 78.61 Files.Unmount 3870

78.41.1 Blog Entries

- [Network share access from script on FileMaker Server](#)
- [Adding Bonjour functions for MBS FileMaker Plugin](#)
- [Tip of the day: Mount drive on FileMaker Server](#)
- [MBS FileMaker Plugin, version 5.2pr1](#)
- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 10th May 2015, last changed 16th May 2017.

78.42 Files.MountPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	8.3	Yes	Yes	Yes	No	No

MBS("Files.MountPath"; Disk)

Parameters

Disk

Path native path to disk drive.

"E:"

Result Returns mount URL, empty or error.

Description

For a network mounted disk, you can query the original mount point.

May not work on Mac for AFP shares, but for SMB shares.

Returns empty path if no path is known.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Query mount path on MacOS:

MBS("Files.MountPath"; "/Volumes/Macbook Pro")

Example result: "smb://cs@Server._smb._tcp.local/Macbook% 20Pro"

Query mount path on Windows:

MBS("Files.MountPath"; "Z:")

Example result: "\\vmware-host\Shared Folders"

See also

- 78.41 Files.Mount 3836
- 121.2 Path.FileMakerPathToNativePath 6139

78.42.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)

Created 1st June 2018, last changed 2nd June 2018.

78.43 Files.MoveFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.8	Yes	Yes	Yes	Yes	Yes

```
MBS( "Files.MoveFile"; SourcePath; DestPath { ; Overwrite; SkipSourcePermissionErrors; ProgressTitle }
)
```

Parameters

SourcePath

The native path to the file or folder to be moved.

"/Users/John/Desktop/test.txt"

DestPath

The native path to the destination folder or file.

"/Users/John/Desktop/Backup/"

Overwrite

Optional

Mac only: Whether to allow overwriting existing files. Default is off. Pass 1 to enable and 0 to disable. On Windows, it overwrites always.

1

SkipSourcePermissionErrors

Optional

Mac only: Whether to skip files with permission errors. Default is off. Pass 1 to enable and 0 to disable.

1

ProgressTitle

Optional

Title for the progress window. For Windows only and the text may not be visible in your version of Windows.

"Copying FileMake files"

Result Returns OK or error message.

Description

SourcePath and DestPath must be valid and exist. So pass destination folder for the destination.

The Linux implementation does only move files within the same file system.

On Mac you may get error -43 for file not found if you refer to a file in a folder, where you don't have file permissions to look inside the folder.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Move a file:

78.43. *FILES.MOVEFILE*

3841

MBS("Files.MoveFile"; "C:\Users\Christian\Desktop\test1.txt"; "C:\Users\Christian\Desktop\test2.txt")

See also

- 78.6 Files.CopyFile 3778
- 78.7 Files.CopyFiles 3780
- 78.45 Files.ReadFile 3844
- 78.52 Files.RevealFile 3858
- 78.62 Files.WriteFile 3871
- 121.2 Path.FileMakerPathToNativePath 6139
- 180.12 WebDownloadDelegate.Path 8292
- 180.16 WebDownloadDelegate.SetFolder 8297

Example Databases

- [Files/FileOperation](#)

78.43.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)
- [MBS FileMaker Plugin, version 8.5pr7](#)
- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS FileMaker Plugin, version 7.0pr3](#)
- [MBS Filemaker Plugin, version 2.8pr1](#)

78.43.2 FileMaker Magazin

- Ausgabe 2/2017, Seite 40

Created 18th August 2014, last changed 20th August 2018.

78.44 Files.MoveToTrash

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.8	Yes	Yes	Yes	Yes	Yes

MBS("Files.MoveToTrash"; Path)

Parameters

Path

The native file path to the file or folder to be deleted.

"/Users/John/Desktop/test.txt"

Result Returns OK or error message.

Description

Use this functions to move files and folders to the trash.

It is possible that the OS decides to not delete the file and fail (e.g. due to permission errors) or that the medium does not have a trash, so the file is deleted right away.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Delete a file on desktop on Mac by moving it to trash:

```
$r = MBS("Files.MoveToTrash"; "/Users/cs/Desktop/testing.fp7")
```

Delete a file on desktop on Windows by moving it to trash:

```
$r = MBS("Files.MoveToTrash"; "C:\Users\Christian\Desktop\testing.fp7")
```

Delete a file to trash with path in variable:

```
$r = MBS("Files.MoveToTrash"; $Path)
```

See also

- 70.273 DynaPDF.Initialize 2941
- 78.14 Files.Delete 3792
- 78.15 Files.DeleteFolder 3794
- 121.2 Path.FileMakerPathToNativePath 6139

78.44. *FILES.MOVETOTRASH*

3843

- 124.35 Plugin.Path

6302

Example Databases

- [Files/FileOperation](#)
- [RunTask/RunTask](#)

78.44.1 Blog Entries

- [Adobe PDFViewer crashes in FileMaker](#)
- [MBS FileMaker Plugin, version 5.3pr1](#)
- [MBS Filemaker Plugin, version 2.8pr1](#)

Created 18th August 2014, last changed 23th November 2019.

78.45 Files.ReadFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Files.ReadFile"; FilePath { ; mode; filename })

Parameters

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac.
`"test.txt"`

mode

Optional

Can be `base64` to encode data first to base64 encoding. Or can be `Hex` to encode to hex encoding. If filter is `"container"`, the result is returned as a container with a FILE stream inside. Version 5.3 supports filter `"auto"` to auto detect the type of container.

`"Base64"`

filename

Optional

If filter is container, this defines the file name to use.

`"test.txt"`

Result Returns container value or error.

Description

Reads the data in the file and returns as text with native encoding. This may truncate the string at the first null byte.

You can optionally define a mode like `base64` or `Hex` to read any bytes including null bytes.

See also `Text.ReadTextFile` for reading text files with specific encoding.

Reading files over 1 GB is not supported.

Added new modes with version 5.3: `auto`, `compressed`, `pdf`, `png`, `jpg`, `tif`, `gif`, `bmp` or `psd`.

For reading simple text files, please use `Text.ReadTextFile`.

See also `Files.ReadJPEG`, `Files.ReadPDF`, `Files.ReadPNG`, `Text.ReadTextFile` and `RichText.ReadFile`.

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read file with some data:


```
MBS("Files.ReadFile"; $Path )
```

Read file with some data and encode base64:

```
MBS("Files.ReadFile"; "/Users/cs/Desktop/test.txt"; "base64")
```

Read as compressed container:

```
Set Field [ Container Compression::SomeContainer; MBS("Files.ReadFile"; "/Users/cs/Desktop/test.jpg";  
"compressed"; "test.jpg") ]
```

Read file on Server:

```
MBS( "Files.ReadFile"; "C:\Programs\FileMaker Server\Data\Documents\test.pdf")
```

See also

- 70.116 [DynaPDF.GeneratePreview](#) 2740
- 78.46 [Files.ReadJPEG](#) 3847
- 78.47 [Files.ReadPDF](#) 3849
- 78.48 [Files.ReadPNG](#) 3851
- 78.52 [Files.RevealFile](#) 3858
- 91.69 [ImageCapture.Download](#) 4998
- 121.2 [Path.FileMakerPathToNativePath](#) 6139
- 122.7 [PDFKit.GeneratePreview](#) 6164
- 138.9 [RichText.ReadContainer](#) 6722
- 164.49 [Text.ReadTextFile](#) 7843

Example Databases

- [CURL/WebServices/WeatherBit.io test](#)
- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [Drag and Drop/for Mac/DragTest multiple picture files](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac only/ImageCapture/Camera Import](#)

78.45.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [\[ANN \] MBS FileMaker Plugin 5.3 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.3pr4](#)
- [Compressed Containers](#)
- [MBS Filemaker Plugin, version 4.4pr6](#)
- [MBS Filemaker Plugin, version 3.5pr7](#)

Created 18th August 2014, last changed 17th August 2018.

78.46 Files.ReadJPEG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Files.ReadJPEG"; Path { ; FileName })

Parameters

Path

The native file system path to the file.

"/Users/cs/Desktop/test.jpg"

FileName

Optional

Optional the file name to use.

"test.jpg"

Result Returns container value or error.

Description

This function does not verify if the file you ask to load is actually a valid JPEG image.

Reading files over 1 GB is not supported.

See also Files.ReadFile, Files.ReadPDF, Files.ReadPNG, Text.ReadTextFile and RichText.ReadFile.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read JPEG file:

```
MBS( "Files.ReadJPEG"; "/Users/cs/Desktop/test.jpg"; "test.jpg")
```

See also

- 55.28 Container.ReadFile 1645
- 78.45 Files.ReadFile 3844
- 78.47 Files.ReadPDF 3849
- 78.48 Files.ReadPNG 3851
- 121.2 Path.FileMakerPathToNativePath 6139
- 138.10 RichText.ReadFile 6724
- 164.49 Text.ReadTextFile 7843

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)

78.46.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [MBS Filemaker Plugin, version 4.3pr4](#)

Created 18th August 2014, last changed 4th August 2016.

78.47 Files.ReadPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Files.ReadPDF"; Path { ; FileName; DontRenderPreview })

Parameters

Path

The native file system path to the file.

"/Users/cs/Desktop/test.pdf"

FileName

Optional

Optional the file name to use.

"test.pdf"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result Returns container value or error.

Description

This function does not verify if the file you ask to load is actually a valid PDF.

Reading files over 1 GB is not supported.

See also Files.ReadJPEG, Files.ReadFile, Files.ReadPNG, Text.ReadTextFile and RichText.ReadFile.

If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read a PDF file:

```
Set Variable [ $r; Value:MBS( "Files.ReadPDF"; "/Users/cs/Desktop/todo.pdf" ) ]
```

See also

- 55.28 Container.ReadFile 1645
- 78.45 Files.ReadFile 3844

- 78.46 Files.ReadJPEG 3847
- 78.48 Files.ReadPNG 3851
- 121.2 Path.FileMakerPathToNativePath 6139
- 138.10 RichText.ReadFile 6724
- 164.49 Text.ReadTextFile 7843
- 180.102 WebView.PrintToFile 8413

Example Databases

- [WebView/Custom WebView](#)

78.47.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 4.3pr4](#)

Created 18th August 2014, last changed 17th August 2018.

78.48 Files.ReadPNG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Files.ReadPNG"; Path { ; FileName })

Parameters

Path

The native file system path to the file.

"/Users/cs/Desktop/test.png"

FileName

Optional

Optional the file name to use.

"test.png"

Result Returns container value or error.

Description

This function does not verify if the file you ask to load is actually a valid PNG image.

Reading files over 1 GB is not supported.

See also Files.ReadJPEG, Files.ReadPDF, Files.ReadFile, Text.ReadTextFile and RichText.ReadFile.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read a png file:

```
Set Variable [ $r; Value:MBS( "Files.ReadPNG"; "/Users/cs/Desktop/todo.png" ) ]
```

See also

- 55.28 Container.ReadFile 1645
- 78.45 Files.ReadFile 3844
- 78.46 Files.ReadJPEG 3847
- 78.47 Files.ReadPDF 3849
- 121.2 Path.FileMakerPathToNativePath 6139
- 138.10 RichText.ReadFile 6724
- 164.49 Text.ReadTextFile 7843

78.48.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [MBS Filemaker Plugin, version 4.3pr4](#)

Created 18th August 2014, last changed 18th October 2016.

78.49 Files.RenameFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.8	Yes	Yes	Yes	Yes	Yes

MBS("Files.RenameFile"; Path; NewName)

Parameters

Path

The native path to the file or folder to be renamed.

"/Users/John/Desktop/test.txt"

NewName

The new name.

"testfile.txt"

Result Returns OK or error message.

Description

Path must be valid and exist.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Rename file on Windows with full path:

```
MBS( "Files.RenameFile"; "\\FileServer\Dokumente\VK\123456\RG249388345.pdf"; "\\FileServer\Dokumente\VK\123456\Rechnung_249388345.pdf" )
```

Rename file on OS X:

```
MBS( "Files.RenameFile"; "/Users/cs/Desktop/test"; "Hello World, just a test!" )
```

Rename on Windows:

```
MBS( "Files.RenameFile"; "C:\Users\Administrator\Desktop\alt.fmp12"; "neu.fmp12" )
```

See also

- 78.45 Files.ReadFile 3844
- 78.52 Files.RevealFile 3858
- 121.2 Path.FileMakerPathToNativePath 6139

78.49.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr4](#)
- [MBS FileMaker Plugin, version 8.2pr3](#)
- [MBS FileMaker Plugin, version 7.4pr2](#)
- [MBS Filemaker Plugin, version 2.8pr8](#)

Created 18th August 2014, last changed 5th August 2017.

78.50 Files.ResolveAlias

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	8.4	Yes	Yes	Yes	No	Yes

MBS("Files.ResolveAlias"; AliasFilePath { ; RelativeTo })

Parameters

AliasFilePath

The path for the alias file path.

"/Users/cs/Desktop/test"

RelativeTo

Optional

The folder path to use relative resolution.

"/Users/cs"

Result Returns file path or error.

Description

See Files.CreateAlias to create alias files on Mac or link files on Windows, Files.CreateHardLink and Files.CreateSymbolicLink for creating links in file system.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Resolve Alias:

```
MBS( "Files.ResolveAlias"; "/Users/cs/Desktop/test")
```

Resolve link file on Windows:

```
MBS("Files.ResolveAlias"; "C:\Users\Christian\Desktop\test.lnk")
```

See also

- 78.8 Files.CreateAlias 3782
- 78.11 Files.CreateHardLink 3787
- 78.12 Files.CreateSymbolicLink 3789
- 121.2 Path.FileMakerPathToNativePath 6139

78.50.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr8](#)

Created 9th September 2018, last changed 9th September 2018.

78.51 Files.ResolveBookmark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.1	Yes	No	Yes, macOS only	No	Yes

MBS("Files.ResolveBookmark"; Bookmark { ; RelativePath; NoUI; NoMounting })

Parameters

Bookmark

The bookmark data created by Files.CreateBookmark function.

\$data

RelativePath

Optional

Optional the path of a file/folder being the relative path. This can be the native path to your database. This way you can later find the file again if database and target file moved together.

"/Data/ImageFiles"

NoUI

Optional

If 1 the plugin doesn't show any dialogs or progress windows.

1

NoMounting

Optional

If 1 the plugin will not mount a volume during bookmark resolution.

1

Result Returns the native file path resolved from bookmark.

Description

Use this function to find the file/folder back where you stored a reference in the database.

See also

- 78.9 Files.CreateBookmark

3784

Example Databases

- [Files/Alias and NodeID](#)

Created 18th August 2014, last changed 18th August 2014.

78.52 Files.RevealFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	2.7	Yes	Yes	No	No	No

MBS("Files.RevealFile"; Path)

Parameters

Path

Native path to the item to reveal.

"C:\Windows"

Result Returns "OK" or error.

Description

Shows file or folder in Finder or opens directory in Explorer.

With version 6.3 the Mac plugin can take a list of paths here.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Reveal 3 items:

```
MBS( "Files.RevealFile"; "/Users/cs/Public$/Users/cs/Music$/Users/cs/Library" )
```

Open desktop folder on Windows:

```
MBS("Files.RevealFile"; "C:\Users\Administrator\Desktop")
```

See also

- [78.43 Files.MoveFile](#) 3840
- [78.45 Files.ReadFile](#) 3844
- [78.49 Files.RenameFile](#) 3853
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Files/Launch](#)

78.52.1 Blog Entries

- [MBS FileMaker Plugin 6.3 for OS X/Windows](#)

- [MBS FileMaker Plugin, version 6.3pr1](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr1](#)

Created 18th August 2014, last changed 13th September 2017.

78.53 Files.SetAudioTags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	9.4	Yes	Yes	Yes	Yes	No

MBS("Files.SetAudioTags"; FilePath; JSON)

Parameters

FilePath

The native file path to the audio file.

"/Users/cs/Desktop/test.mp3"

JSON

The JSON object with new properties.

Result Returns OK or error.

Description

Please provide JSON object with new tags. If tags are NULL values, we remove them. If they are text values, we update the texts.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Write tags back to field:

```
Set Variable [ $r ; Value: MBS("Files.SetAudioTags"; AudioTags::FilePath; AudioTags::JSON) ]
Show Custom Dialog [ "Tags written" ; $r ]
```

See also

- [78.4 Files.AudioTags](#) 3775
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Files/Audio File Tags](#)

78.53.1 Blog Entries

- [Neue Funktionen des MBS FileMaker Plugin 9.4](#)
- [Neues MBS FileMaker Plugin 9.4](#)

- [MBS FileMaker Plugin 9.4 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.4pr8](#)
- [TagLib to read and write ID3v2 Tags in FileMaker](#)

Created 12nd September 2019, last changed 12nd September 2019.

78.54 Files.SetComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.2	Yes	No	Yes, macOS only	No	No

MBS("Files.SetComment"; Path; Comment)

Parameters

Path

The native path to the file.

"/Users/John/Desktop/test.txt"

Comment

The new comment text.

"Hello World"

Result Returns OK or error.

Description

The comment text is used by Spotlight when searching, so you can place useful information there.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Set comment:

```
MBS( "Files.SetComment"; "/Users/cs/Desktop/Wifi.rtf"; "Hello World")
```

See also

- 78.27 Files.GetComment 3813
- 121.2 Path.FileMakerPathToNativePath 6139

78.54.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 25th April 2016, last changed 22nd May 2016.

78.55 Files.SetCreationDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	7.2	Yes	Yes	Yes	No	Yes

MBS("Files.SetCreationDate"; Path; TimeStamp)

Parameters

Path

The native path to the file.

"/Users/cs/Desktop/test.txt"

TimeStamp

The new creation date and time.

Get(CurrentTimeStamp)

Result Returns OK or error.

Description

Examples

Set timestamp to now:

MBS("Files.SetCreationDate"; "C:\Users\Administrator\Desktop\test.png"; Get(CurrentHostTimeStamp))

See also

- 78.13 Files.CreationDate

3790

78.55.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr4](#)

Created 19th April 2017, last changed 19th April 2017.

78.56 Files.SetFinderLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	6.2	Yes	No	Yes, macOS only	No	No

MBS("Files.SetFinderLabel"; Path; Label)

Parameters

Path

The native path to the file.

"/Users/cs/Desktop/test.txt"

Label

The new label number. 0 = no label 1 to 7 give different colors.

1

Result Returns OK or error.

Description

Value is from 0 to 7. Zero is no label. Numbers 1 to 7 are mapped to colors and tags.

Currently the list is 1 = gray, 2 = green, 3 = purple, 4 = blue, 5 = yellow, 6 = red, 7 = orange.

Please use Files.SetTagNames to set tag names if needed.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Set color to green:

```
MBS("Files.SetFinderLabel"; "/Users/cs/Desktop/test.rtf"; 2)
```

See also

- 78.28 Files.GetFinderLabel 3814
- 78.60 Files.SetTagNames 3869
- 121.2 Path.FileMakerPathToNativePath 6139

78.56.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 17th May 2016, last changed 29th August 2016.

78.57 Files.SetHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	7.1	Yes	Yes	Yes	No	No

MBS("Files.SetHidden"; Path; Value)

Parameters

Path

The native path to the file or folder to be checked.

"/Users/John/Desktop/test.txt"

Value

The new state. Pass 1 to hide file or 0 to unhide file.

1

Result Returns OK or error.

Description

If a file is hidden due to having a "." at the beginning of a name on macOS, you can't unhide it by this function. You need to rename the file in this case.

Examples

Hide a file:

MBS("Files.SetHidden"; "/Users/cs/Desktop/Changes.rtf"; 1)

See also

- 78.33 Files.IsHidden

3821

78.57.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr4](#)

Created 1st March 2017, last changed 2nd March 2017.

78.58 Files.SetModificationDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	7.2	Yes	Yes	Yes	Yes	Yes

MBS("Files.SetModificationDate"; Path; TimeStamp)

Parameters

Path

The native path to the file.

"/Users/cs/Desktop/test.txt"

TimeStamp

The new modification date and time.

Get(CurrentTimeStamp)

Result Returns OK or error.

Description

Examples

Set time to now minus 24h:

```
MBS( "Files.SetModificationDate"; "/Users/cs/Desktop/test.rtf"; Hole ( HostZeitstempel ) - 24*3600 )
```

Set timestamp to now:

```
MBS( "Files.SetModificationDate"; "C:\Users\Administrator\Desktop\logo.png"; Get(CurrentHostTimeS-  
tamp))
```

See also

- [78.40 Files.ModificationDate](#) 3834

78.58.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr3](#)

Created 19th April 2017, last changed 19th April 2017.

78.59 Files.SetPosixPermissions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	4.3	Yes	No	Yes	Yes	Yes

MBS("Files.SetPosixPermissions"; Path; Mode)

Parameters

Path

The native path to the file or folder.

"/Users/John/Desktop/test.txt"

Mode

The new mode.

"777"

Result Returns OK or error message.

Description

Path must be valid and exist.

See chmod command man page in Terminal. The plugin converts parameter to string and parses it as octal number. This way you can pass 777 as number and it's interpreted as expected.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Set permissions

MBS("Files.SetPosixPermissions"; "/Users/cs/Desktop/test"; 777)

See also

- 78.31 Files.GetPosixPermissions 3819
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [RunTask/Run Shell Script on Mac](#)

78.59.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr1](#)

78.60 Files.SetTagNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.5	Yes	No	Yes, macOS only	No	No

MBS("Files.SetTagNames"; Path; Taglist)

Parameters

Path

The native path to the file.

"/Users/cs/Desktop/test.txt"

Taglist

The list of tags names, separated by newline character.

"Hello World"

Result Returns OK or error.

Description

Requires Mac OS X 10.9.

This function needs a native path. Please use Path.FilemakerPathToNativePath function in order to convert a FileMaker style path to a native path.

Please note that some tags may include chr(10) followed by a number to indicate which label color is used for compatibility to older OS X versions. Those should appear escaped as \n in the taglist.

See also

- 78.32 Files.GetTagNames 3820
- 78.56 Files.SetFinderLabel 3864
- 121.2 Path.FileMakerPathToNativePath 6139

78.60.1 Blog Entries

- [MBS Filemaker Plugin, version 3.5pr2](#)

Created 18th August 2014, last changed 18th August 2014.

78.61 Files.Unmount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	5.1	Yes	Yes	Yes	Yes	No

MBS("Files.Unmount"; Path { ; Force })

Parameters

Path

The local path of the volume.

"/Volumes/Test"

Force

Optional

Pass 1 to force unmount, even if files are still open.

0

Result Returns OK or error.

Description

Use on Server may require extra work as server runs with a different user account than you being logged in on the server machine. Permissions don't always allow things to be done.

Examples

Unmounts Ablage1 on Mac:

```
MBS("Files.Unmount"; "/Volumes/Ablage1")
```

Unmount Y: on Windows:

```
MBS("Files.Unmount"; "Y:")
```

See also

- [78.41 Files.Mount](#)

3836

78.61.1 Blog Entries

- [Network share access from script on FileMaker Server](#)
- [Tip of the day: Mount drive on FileMaker Server](#)
- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 10th May 2015, last changed 18th March 2017.

78.62 Files.WriteFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	3.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "Files.WriteFile"; Data; FilePath { ; filter } )
```

Parameters

Data

The data to save. Can be text or container.

```
"Hello World"
```

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac.

```
"test.txt"
```

filter

Optional

Can be base64 to decode text first from base64 encoding. Or can be Hex to decode from hex encoding.

```
"Base64"
```

Result Returns "OK" or an error message.

Description

You provide either a container value or some text. For text you can optionally define a filter like base64 or Hex.

See also `Text.WriteTextFile` for writing text files with specific encoding.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Write file with some text:

```
MBS("Files.WriteFile"; "Hello World"; $Path )
```

Write file with some text and decode base64:

```
MBS("Files.WriteFile"; "SGVsbG8gV29ybGQ="; "/Users/cs/Desktop/test.txt"; "base64")
```

Write container to temp file and launch:

```
# get temp folder
```

```
Set Variable [ $TempFolder; Value:MBS( "Folders.SystemTemporary" ) ]
```

```
# and file name from container
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; test::myContainer ) ]
# add name to folder path
Set Variable [ $TempPath; Value:MBS( "Path.AddPathComponent"; $TempFolder; $name ) ]
# now write temp file
Set Variable [ $r; Value:MBS( "Files.WriteFile"; test::myContainer; $TempPath) ]
# and launch file
Set Variable [ $r; Value:MBS( "Files.LaunchFile"; $TempPath) ]
```

Write PDF to disk:

```
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ); Invoice::Invoice ID & ".pdf" ) ]
Set Variable [ $r; Value:MBS("Files.WriteFile"; Invoice::PDF Output; $path) ]
```

Write DynaPDF Library to disk and use it:

```
Set Variable [ $path; Value:MBS( "Plugin.Path" ) ]
Set Variable [ $folderpath; Value:MBS( "Path.RemoveLastPathComponent"; $path ) ]
Set Variable [ $libPath; Value:MBS( "Path.AddPathComponent"; $folderpath; "dynapdf.dll" ) ]
Set Variable [ $r; Value:MBS( "Files.WriteFile"; test::DynaPDFContainer; $libPath ) ]
Set Variable [ $r; Value:MBS( "DynaPDF.Initialize"; $libPath ) ]
```

See also

- 70.144 DynaPDF.GetEmbeddedFileAsContainer 2776
- 78.36 Files.LaunchFile 3826
- 78.43 Files.MoveFile 3840
- 81.5 Folders.System 4173
- 81.7 Folders.SystemTemporary 4175
- 121.2 Path.FileMakerPathToNativePath 6139
- 121.8 Path.RemoveLastPathComponent 6149
- 124.35 Plugin.Path 6302
- 164.68 Text.WriteTextFile 7871
- 53.41 ZipFile.WriteFile 1521

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [DynaPDF/Invoice/Invoice](#)

- [DynaPDF/Shrink PDF pages](#)
- [Files/WriteFile](#)
- [SmartCard/SmartCard Signatures](#)

78.62.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [MBS Filemaker Plugin, version 3.5pr6](#)

Created 18th August 2014, last changed 6th September 2016.

78.63 Icon.ClearIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook 78 Files	2.7	Yes	No	Yes, macOS only	No	No

MBS("Icon.ClearIcon"; Path)

Parameters

Path

The path to the file or folder.
"/Applications"

Result Returns OK on success.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Clears icon of a file on the desktop:

```
MBS("Icon.ClearIcon"; "/Users/Christian/Desktop/test.pdf")
```

See also

- [121.2 Path.FileMakerPathToNativePath](#)

6139

Example Databases

- [Mac only/Icon and QuickLook/SetIcon](#)

78.63.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr8](#)

Created 18th August 2014, last changed 24th May 2017.

78.64 Icon.GetIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook 78 Files	2.3	Yes	Yes	Yes	No	No

MBS("Icon.GetIcon"; Path; Size)

Parameters**Path**

The path to the file or folder.

"/Applications"

Size

The size of the icon picture you'd like to have. Suggested range is from 16 to 512 pixel.

512

Result Container value.

Description

Size specifies the icon size from 16 to 512 pixel. The container value returned includes PNG data with alpha, JPEG preview, filename and size.

Added Windows support in plugin version 4.2.

On Mac Server this may not work well as the Server user account has no icon database.

See also [Icon.GetIconWithQuickLook](#).

Examples

Queries icon of iPhoto app:

MBS("Icon.GetIcon"; "/Applications/iPhoto.app"; 512)

See also

- [134.3 Icon.GetIconWithQuickLook](#) 6619
- [134.4 Icon.SetIcon](#) 6621
- [134.22 QLPreviewPanel.Show](#) 6641

Example Databases

- [Files/File Listing With Icons](#)
- [Mac only/Icon and QuickLook/Icons](#)
- [Mac only/MetaDataQuery/Search Applications](#)

78.64.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)
- [MBS Filemaker Plugin, version 4.3pr5](#)
- [MBS Filemaker Plugin, version 4.2pr12](#)
- [MBS Filemaker Plugin, version 2.3pr3](#)
- [MBS Filemaker Plugin, version 2.3pr2](#)
- [Getting icons from Files](#)

Created 18th August 2014, last changed 29th October 2018.

78.65 Icon.GetIconWithQuickLook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook 78 Files	2.3	Yes	Yes	Yes	No	No

MBS("Icon.GetIconWithQuickLook"; Path; Size)

Parameters**Path**

The path to the file or folder.
"/Applications"

Size

The size of the icon picture you'd like to have. Suggested range is from 16 to 512 pixel.
512

Result Container value.

Description

This method tries first to get QuickLook preview for the file, before it tries the icon. QuickLook requires Mac OS X 10.5. Size specifies the icon size from 16 to 512 pixel. The container value returned includes PNG data with alpha, JPEG preview, filename and size.

Version 4.3 adds support for Windows. We now query same thumbnail as explorer uses.
See also Icon.GetIcon.

Examples

Queries preview on iPhoto app:

MBS("Icon.GetIconWithQuickLook"; "/Applications/iPhoto.app"; 512)

See also

- [134.2 Icon.GetIcon](#) 6617
- [134.22 QLPreviewPanel.Show](#) 6641

Example Databases

- [Mac only/Icon and QuickLook/Icons](#)

78.65.1 Blog Entries

- [MBS Filemaker Plugin, version 2.3pr3](#)
- [MBS Filemaker Plugin, version 2.3pr2](#)

- [Getting icons from Files](#)

Created 18th August 2014, last changed 17th June 2018.

78.66 Icon.SetIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook 78 Files	2.7	Yes	No	Yes, macOS only	No	No

MBS("Icon.SetIcon"; Path; image)

Parameters**Path**

The path to the file or folder.

"/Applications"

image

A container value with some picture. Can be JPEG, GIF, BMP, PNG or TIFF.

\$image

Result Returns OK on success.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Sets icon of a file on the desktop:

```
MBS("Icon.SetIcon"; "/Users/Christian/Desktop/test.pdf"; Data::image)
```

See also

- [134.2 Icon.GetIcon](#) 6617
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Mac only/Icon and QuickLook/SetIcon](#)

78.66.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr8](#)

Created 18th August 2014, last changed 24th May 2017.

78.67 MountNotification.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	5.0	Yes	Yes	No	No	No

MBS("MountNotification.Install"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fp7"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK or error.

Description

Parameter to the script will contain details in a list with several values.

First value is typ of call, "mount" or "unmount".

Second value is native path, on Mac e.g. "/Volumes/TestDisk" and on Windows a drive letter like "E:\".

On Mac third value is user visible name and forth parameter is URL for mount point.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Installs notification script:

MBS("MountNotification.Install"; "test.fp7"; "MyScript")

See also

- [78.68 MountNotification.Uninstall](#)

3882

Example Databases

- [Files/Mount Events](#)

78.67.1 Blog Entries

- [MBS FileMaker Plugin 5.0 for OS X/Windows - More than 3000 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 4.5pr1](#)

78.67. *MOUNTNOTIFICATION.INSTALL*

3881

Created 24th November 2014, last changed 27th January 2016.

78.68 MountNotification.Uninstall

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
78 Files	5.0	Yes	Yes	No	No	No

MBS("MountNotification.Uninstall")

Result Returns OK or error.

Description

See also

- [78.67 MountNotification.Install](#)

3880

78.68.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 24th November 2014, last changed 24th November 2014.

Chapter 79

FM

Functions for FileMaker core functions like running scripts.

79.1 FM.AllowFileDragDrop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	7.0	Yes	No	No	No	No

MBS("FM.AllowFileDragDrop"; Enable { ; TempFolder; DeleteTempFiles })

Parameters

Enable

Whether to enable or disable. Pass 1 to enable or 0 to disable. Default if no parameter is given is enable.

1

TempFolder

Optional

Available in MBS FileMaker Plugin 8.1 or newer.

The native path of temp folder to use. Leave empty for standard one.

MBS("Folders.UserDesktop")

DeleteTempFiles

Optional

Available in MBS FileMaker Plugin 8.1 or newer.

Whether to delete temp files. Default is 1 to delete last file then when next file is to be dragged.

1

Result Returns OK or error.

Description

When we have a container in FileMaker with e.g. a zip file and drag the file content to the Finder, nothing

happens. This plugin functions installs some code which intercepts those file drags and makes them work. Internally the file data is obtained and written to temporary folder. The finder can copy the file there and our plugin can later delete the temp file.

Works better with non interactive containers.
This does not change drag & drop of images.

With plugin version 7.1, PDF drag and drop is also supported.

Examples

Allow file drops from container to Finder:

```
Set Variable [ $r; Value:MBS( "FM.AllowFileDragDrop" ) ]
```

Example Databases

- [Mac only/Allow File Drags](#)
- [Mac only/Drag File Fix](#)

79.1.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)
- [MBS FileMaker Plugin 7.0 - More than 4400 Functions In One Plugin](#)
- [MBS FileMaker Plugin 7.0 - 4400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin, version 7.0pr3](#)
- [MBS FileMaker Plugin, version 7.0pr2](#)
- [Allow file drag and drop from FileMaker container field to Finder](#)

Created 8th January 2017, last changed 26th January 2018.

79.2 FM.Argument

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.Argument"; index)

Parameters

index

The index of the argument to retrieve. From 0 to FM.ArgumentCount-1.

0

Result Returns text or error.

Description

You can pass arguments to FileMaker when launching it from command line. Or on Windows pass them from a link to FileMaker on desktop or in the start menu. This way you can query argument from your scripts and react on them, e.g. decide to set more buttons visible for a debug or advanced mode.

The arguments can include on Windows file path to a database which was opened to launch FileMaker.

See also

- [79.3 FM.ArgumentCount](#)

3886

Example Databases

- [Utility functions/Command Line Arguments](#)

79.2.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 1st March 2015, last changed 1st March 2015.

79.3 FM.ArgumentCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.ArgumentCount")

Result Returns number or error.

Description

Those arguments are passed when FileMaker is launched from command line, a batch file or a link on windows.

See also

- [79.2 FM.Argument](#)

3885

Example Databases

- [Utility functions/Command Line Arguments](#)

79.3.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 1st March 2015, last changed 1st March 2015.

79.4 FM.Beep

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.2	Yes	Yes	Yes	No	No

MBS("FM.Beep")

Result Returns OK.

Description

Plays standard system sound or beep.

79.4.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 27th March 2018, last changed 27th March 2018.

79.5 FM.ChooseDictionary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	9.4	Yes	No	No	No	No

MBS("FM.ChooseDictionary" { ; DictionaryName })

Parameters

DictionaryName

Optional

The dictionary to pick. Pass empty text to just let the plugin show dialog and query current settings.

Result Returns OK or error.

Description

The plugin runs menu command to show spelling dialog, changes menu and presses OK button for you. After this function run, you can check FM.GetDictionary to get current selection or FM.GetDictionaryList to get the list of dictionaries available.

See also

- [79.25 FM.GetDictionary](#) 3932
- [79.26 FM.GetDictionaryList](#) 3933

79.5.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.4](#)
- [MBS FileMaker Plugin 9.4 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.4pr4](#)
- [Choose spelling dictionary in FileMaker automatically](#)

Created 24th August 2019, last changed 24th August 2019.

79.6 FM.CompareTables

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	9.3	Yes	Yes	Yes	Yes	Yes

```
MBS( "FM.CompareTables"; FileName1; TableName1; IDField1; FileName2; TableName2; IDField2 { ;
Options } )
```

Parameters

FileName1

The file name of where the table is inside. Can be empty to look for the table in all files. File extension is optional for file name.

Get(FileName)

TableName1

The name of the first table (newer). Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the ID field in first table. Can be a text or numeric field.

"Identifier"

FileName2

The file name of where the table is inside. Can be empty to look for the table in all files.

"other.fmp12"

TableName2

The name of the second table (older). Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField2

The name of the ID field in second table. Can be a text or numeric field.

"Identifier"

Options

Optional

Pass options. Add 1 to include details. Add 2 to include all the IDs found in both.

1+2

Result Returns JSON or error.

Description

We compare the field names for both tables and report added, removed and common field names.

Then we check the record identifiers to report added, changed and common IDs.

If IDField1 and IDField2 names are the same in both tables, we compare the common records to report the changed record identifiers.

Does not compare the internal FileMaker row IDs.

Records are compared in 100 records block to limit memory usage.

Examples

Compares two tables in two files:

```
MBS( "FM.CompareTables"; "Anlagen1.fmp12"; "Anlagen"; "Primärschlüssel"; "Anlagen2.fmp12"; "Anlagen"; "Primärschlüssel" )
```

Compare tables:

```
Show Custom Dialog [ MBS( "FM.CompareTables"; "Anlagen1.fmp12"; "Anlagen"; "Primärschlüssel"; "Anlagen2.fmp12"; "Anlagen"; "Primärschlüssel"; 1 ) ]
```

Example result: {

```
"Messages": [ ] ,
"TableName1": "Anlagen",
"TableName2": "Anlagen",
"FileName1": "Anlagen1.fmp12",
"FileName2": "Anlagen2.fmp12",
"RemovedFields": [ "Anlage1feld" ] ,
"Fields": [ "Anbieter", "Beschreibung", "Bild", "ErstelltVon", "Erstellungszeitstempel", "Gesamt", "GeändertVon", "Kaufdatum", "Name", "Preis", "Primärschlüssel", "Seriennummer", "Typ", "Änderungszeitstempel" ] ,
"AddedFields": [ "Anlage2feld" ] ,
"RemovedIDs": [ "00E5BB4E-3BB1-43D8-95DD-60E5C7E6153E", "149E3A95-89CC-4633-A576-C977831ED15E" ] ,
"IDs": [ "CFBA0CA0-3480-4560-B138-4FE605F1A666", "5AED71F4-D78F-490D-A842-CD623E25C118" ] ,
"AddedIDs": [ "04430FBE-C3AA-4D1B-B451-1B41AA703A96", "37E7E4AA-F5D0-4E96-BB24-BB720E808357" ] ,
"ChangedRecords": {
"CFBA0CA0-3480-4560-B138-4FE605F1A666": [ {
"Field": "Seriennummer",
"OldValue": "123a",
"NewValue": "123"
} , {
"Field": "Änderungszeitstempel",
"OldValue": "2019-06-15 20:13:21",
"NewValue": "2019-06-15 17:54:25"
} ] ,
"5AED71F4-D78F-490D-A842-CD623E25C118": [ {
"Field": "Kaufdatum",
"OldValue": "",
"NewValue": "2019-06-18"
} , {
"Field": "Änderungszeitstempel",
"OldValue": "2019-06-15 17:54:28",
"NewValue": "2019-06-16 05:47:24"
} ]
}
}
```

Compare and show results:

```

Set Variable [ $r ; Value: MBS("ProgressDialog.SetBottomText"; "") ]
Set Variable [ $r ; Value: MBS("ProgressDialog.SetTopText"; "Compare Table") ]
Set Variable [ $r ; Value: MBS("ProgressDialog.SetTitle"; "Compare..") ]
Set Variable [ $r ; Value: MBS("ProgressDialog.SetButtonCaption"; "Cancel") ]
Set Variable [ $r ; Value: MBS("ProgressDialog.SetProgress"; -1) ]
Set Variable [ $r ; Value: MBS("ProgressDialog.Show") ]
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $$r ; Value: MBS( "FM.CompareTables"; "test1.fmp12"; "Import2PropertyVal"; "_RecordU-
UID"; "test2.fmp12"; "Import2PropertyVal"; "_RecordUUID"; 1 ) ]
Pause/Resume Script [ Duration (seconds): ,1 ]
# Cleanup progress bar
Set Variable [ $r ; Value: MBS("ProgressDialog.Hide") ]
Show Custom Dialog [ $$r ]

```

```

Example result: {
  "Messages": [ ] ,
  "TableName1": "Import2PropertyVal",
  "TableName2": "Import2PropertyVal",
  "FileName1": "test1.fmp12",
  "FileName2": "test2.fmp12",
  "RemovedFields": [ ] ,
  "Fields": [ "Hex", "Hex.bytes", "PropertyVal.Name", "_CreationTimeStamp", "_ParentRecordUUID", "_Record-
dUUID", "test" ] ,
  "AddedFields": [ ] ,
  "RemovedIDs": [ ] ,
  "AddedIDs": [ ] ,
  "ChangedRecords": {
    "B92DB7FE-2506-4070-A384-BE99AE829EB8": [ {
      "Field": "Hex.bytes",
      "OldValue": "",
      "NewValue": "3"
    } , {
      "Field": "test",
      "OldValue": "Hello",
      "NewValue": "World"
    } ] ,
    "8D9BD00C-C31B-401B-B18C-0BCB0CC9EC73": [ {
      "Field": "Hex.bytes",
      "OldValue": "1",
      "NewValue": "2"
    } ] ,
    "2FED79CC-1BBF-4C5D-96E4-5E42C8454C3A": [ {
      "Field": "Hex.bytes",
      "OldValue": "1",
      "NewValue": "2"
    } ]
  }
}

```

See also

- [63.31 Dialog.SetButton](#) 2371
- [63.47 Dialog.SetTop](#) 2389
- [130.14 ProgressDialog.Hide](#) 6508
- [130.16 ProgressDialog.SetBottomText](#) 6511
- [130.17 ProgressDialog.SetButtonCaption](#) 6513
- [130.25 ProgressDialog.SetProgress](#) 6525
- [130.27 ProgressDialog.SetTitle](#) 6529
- [130.29 ProgressDialog.SetTopText](#) 6533
- [130.30 ProgressDialog.Show](#) 6535

79.6.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr4](#)
- [MBS FileMaker Plugin, version 9.3pr3](#)
- [Introducing FM.CompareTables function](#)

Created 15th June 2019, last changed 17th January 2020.

79.7 FM.CurrentScriptID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.CurrentScriptID")

Result Returns number or error.

Description

See also FM.CurrentScriptName.

Examples

Query ID for current script:

```
MBS( "FM.CurrentScriptID" )
```

Query script name and ID:

```
MBS( "FM.CurrentScriptName" ) & " " & MBS( "FM.CurrentScriptID" )
```

See also

- [79.8 FM.CurrentScriptName](#) 3894
- [79.9 FM.CurrentThreadID](#) 3895

79.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)
- [MBS FileMaker Plugin, version 5.1pr2](#)

Created 23th March 2015, last changed 23th March 2015.

79.8 FM.CurrentScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.CurrentScriptName")

Result Returns script name.

Description

Result is empty if no script is running.

Examples

Query script name and ID:

```
MBS( "FM.CurrentScriptName" ) & " " & MBS( "FM.CurrentScriptID" )
```

See also

- 79.7 FM.CurrentScriptID

3893

Created 23th March 2015, last changed 23th March 2015.

79.9 FM.CurrentThreadID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.CurrentThreadID")

Result Returns number or error.

Description

See also

- 79.7 FM.CurrentScriptID

3893

79.9.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr3](#)

Created 26th March 2015, last changed 26th March 2015.

79.10 FM.DataType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	6.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.DataType"; Value)

Parameters

Value

The value to check.

\$test

Result Returns type or error.

Description

The type can be container, boolean, date, empty, number, text, time, timestamp or unknown.

Empty variables show as text.

You should never see unknown. Empty is really rare as it would be a value without anything, not even empty text.

Examples

Checks variable data type:

```
MBS( "FM.DataType"; "Hello" )
```

Checks data type for timestamp:

```
MBS( "FM.DataType"; get(CurrentTimeStamp) )
```

See also

- 109.15 Matrix.GetValue 5795

79.10.1 Blog Entries

- [JSON Functions, MBS vs. FM16](#)

Created 9th February 2016, last changed 9th February 2016.

79.11 FM.DataViewerContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	6.3	Yes	No	No	No	No

MBS("FM.DataViewerContent")

Result Returns text or error.

Description

This is useful to capture values from data viewer automatically while debugging and storing it somewhere, e.g. a log file.

Examples

Sets variables and copies their content:

```
Set Variable [ $r; Value:"Hello" ]
Set Variable [ $$r; Value:"Hello global" ]
Set Variable [ $l; Value:MBS( "FM.DataViewerContent" ) ]
Show Custom Dialog [ "Data Viewer"; $l ]
```

Write to log file:

```
MBS( "Text.AppendTextFile"; Get ( CurrentTimeStamp ) & ": " & MBS( "FM.DataViewerContent" ) &
$; "/tmp/dataviewer.log"; "UTF8" )
```

See also

- [88.13 HotKey.Register](#) 4843
- [88.15 HotKey.SetEvaluate](#) 4848
- [164.2 Text.AppendTextFile](#) 7769

79.11.1 Blog Entries

- [Define hot keys for functions in the FileMaker development](#)
- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 18th June 2016, last changed 18th June 2016.

79.12 FM.DeleteRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.DeleteRecord"; FileName; TableName; IDField; IDValue { ; IDField2; IDValue2; IDField3; IDValue3 })

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to delete record from. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField

The name of the first field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue

The value for the first ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The name of the second field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"PersonID"

IDValue2

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The value for second ID field to identify the record. Data type of parameter must match the data type of the field.

\$PersonID

IDField3

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The name of the third field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"CompanyID"

IDValue3

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The value for third ID field to identify the record. Data type of parameter must match the data type of the field.

\$CompanyID

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Please note that FM.DeleteRecord and FM.DeleteRecords are nearly identical. Just FM.DeleteRecord provides the check to make sure only one record matches while FM.DeleteRecords allows several records to be deleted. So with FM.DeleteRecords you can easily erase a lot of data if you pass wrong ID!

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime.

Version 8.2 allows to specify up to 3 ID parameters.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Delete a record based on values:

```
Set Variable [ $r ; Value: MBS( "FM.DeleteRecord"; Get(FileName); "Contacts"; "First"; "Christian";
"Last"; "Schmitz"; "Company"; "Test Inc." ) ]
```

See also

- 80.5 FM.DeleteRecords 4076
- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.38 FM.UpdateRecord 4164

79.12.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.5pr3](#)

79.12.2 FileMaker Magazin

- [Ausgabe 6/2018, Seite 24](#)
- [Ausgabe 3/2018, Seite 36](#)
- [Ausgabe 1/2016, Seite 32](#)

Created 11st December 2015, last changed 17th January 2020.

79.13 FM.DeleteRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.DeleteRecords"; FileName; TableName; IDField; IDValue { ; IDField2; IDValue2; IDField3; IDValue3 })

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to delete records from. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The name of the second field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"PersonID"

IDValue2

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The value for second ID field to identify the record. Data type of parameter must match the data type of the field.

\$PersonID

IDField3

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The name of the third field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"CompanyID"

IDValue3

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The value for third ID field to identify the record. Data type of parameter must match the data type of the field.

\$CompanyID

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must not be unique, so several records can be updated at once.

Please note that FM.DeleteRecord and FM.DeleteRecords are nearly identical. Just FM.DeleteRecord provides the check to make sure only one record matches while FM.DeleteRecords allows several records to be deleted. So with FM.DeleteRecords you can easily erase a lot of data if you pass wrong ID!

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

Version 8.2 allows to specify up to 3 ID parameters.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Delete records based on values:

```
Set Variable [ $r ; Value: MBS( "FM.DeleteRecords"; Get(FileName); "Contacts"; "First"; "Christian";
"Last"; "Schmitz"; "Company"; "Test Inc." ) ]
```

See also

- 80.4 FM.DeleteRecord 4073
- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.39 FM.UpdateRecords 4167

Example Databases

- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)

79.13.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS FileMaker Plugin, version 5.5pr3](#)

79.13.2 FileMaker Magazin

- [Ausgabe 6/2018, Seite 24](#)
- [Ausgabe 3/2018, Seite 36](#)

Created 11st December 2015, last changed 17th January 2020.

79.14 FM.DisableMouseWheel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	No	Yes	No	No	No

MBS("FM.DisableMouseWheel")

Result Returns OK or error.

Description

Some clients prefer to disable mouse wheel to not go from record to record while editing a record.

This is no longer needed for FileMaker 15.

See also

- [79.16 FM.EnableMouseWheel](#)

3906

79.14.1 Blog Entries

- [Scroll through records with mouse wheel on MacOS](#)
- [MBS FileMaker Plugin, version 5.1pr4](#)

Created 7th April 2015, last changed 14th February 2019.

79.15 FM.DisableRuntimeEndWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	4.3	Yes	No	No	No	No

MBS("FM.DisableRuntimeEndWindow")

Result Returns OK or error.

Description

The plugin simply watches and terminates the runtime application when the end screen is shown. You can modify IDB_FMDRUNTIME_CLOSELOGO2.tiff image inside the application resources to show your own logo in this end screen if you don't disable it. Deleting IDD_FMDRUNTIME_CLOSESPASH.nib file on Mac can also prevent the dialog.

Deprecated as runtimes are deprecated.

79.15.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr7](#)

Created 25th August 2014, last changed 23th January 2020.

79.16 FM.EnableMouseWheel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	No	Yes	No	No	No

MBS("FM.EnableMouseWheel")

Result Returns OK or error.

Description

See also

- 79.14 FM.DisableMouseWheel

3904

Example Databases

- [MouseWheel scrolling through records](#)

79.16.1 Blog Entries

- [Scroll through records with mouse wheel on MacOS](#)

Created 7th April 2015, last changed 14th February 2019.

79.17 FM.Evaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	1.3	Yes	Yes	Yes	Yes	Yes

MBS("FM.Evaluate"; Expression)

Parameters

Expression

any valid FileMaker Expression Can be in local language of FileMaker Pro or english. For Server must always be in english.

Description

Examples

Evaluate an expression:

MBS("FM.Evaluate"; "1+2")

See also

- 98.6 JS.Evaluate

5190

Created 18th August 2014, last changed 6th December 2019.

79.18 FM.ExecuteFileSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	3.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "FM.ExecuteFileSQL"; FileName; SQL Statement { ; Column Delimiter; Record Delimiter; Params
} )
```

Parameters

FileName

The target database name. Can be empty to not limit query to one database.

””

SQL Statement

SQL Statement as a Text string

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is tab character, which has unicode code point 9. You can pass delimiter as text or as unicode code point.

9

Record Delimiter

Optional

Record Separator, only used with SELECT statement. Default is return character, which has unicode code point 13. You can pass delimiter as text or as unicode code point.

13

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns result of SQL expression or error.

Description

This function requires FileMaker 11 or newer. Please use FM.ExecuteSQL on FileMaker 10 or older.

There must be an occurrence of the Table on the current tables' Graph in the file you specified. If filename is empty, you use current file. SELECT returns the the records in as a tabbed delimited text string. All other SQL commands return ””.

Use FM.ExecuteSQL.LastError to check for errors.

Supported Commands: SELECT UPDATE (see limitation below) DELETE INSERT CREATE TABLE DROP TABLE CREATE INDEX DROP INDEX WHERE

String comparisons are Case Sensitive! WHERE First_Name="todd" will not find records that have "Todd" in the first Name Field. You can wrap the field you are searching for with "lower" like this WHERE

lower(First_Name)="todd" KNOWN LIMITATIONS Schema editing Record Locking Errors are Not Reported! This means you must exercise caution when using UPDATE. CAUTION! This is a very powerful function!

You can put field names in double quotes and string values in single quotes.

Use FM.ExecuteSQLOnIdle for special commands which change database like ALTER TABLE.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Error 8309 means you did pass wrong data type, like string for a number.

You can make queries against FILEMAKER_TABLES and FILEMAKER_FIELDS to query information about fields in your solution. The functions FM.QueryBaseTableNames, FM.QueryFieldsForBaseTableName, FM.QueryFieldsForTableName and FM.QueryTableNames provide simplified functions for some queries.

FILEMAKER_TABLES table contains:

1. TableName
2. TableID
3. BaseTableName
4. BaseFileName
5. ModCount

FILEMAKER_FIELDS table contains:

1. TableName
2. FieldName
3. FieldType (the SQL data type, not the FileMaker data type)
4. FieldID
5. FieldClass (Normal, Summary, Calculated)
6. FieldReps
7. ModCount

Examples

SELECT records

```
MBS("FM.ExecuteFileSQL"; "" ; "select * from Contacts")
```

INSERT record

```
MBS("FM.ExecuteFileSQL"; "" ; "INSERT INTO Contacts (FirstName, LastName) Values('Todd', 'Geist')")
```

Select records using delimiters

```
MBS("FM.ExecuteFileSQL"; "" ; "select * from Contacts"; "# "; " | ")
```

SELECT records with a Where clause

```
MBS("FM.ExecuteFileSQL"; "" ; "SELECT First_Name, Last_Name from Contacts WHERE ID_Contact_PK ='CN10013'")
```

Insert records with parameters 2 and 3:

```
MBS("FM.ExecuteFileSQL"; ""); "INSERT INTO \OtherTable\ (\ID\, \ID Job\ ) Values(?,?)"; 9; 13;
2; 3 )
```

Create Record with values via SQL

```
Set Variable [ $FirstName; Value:"First test" ]
Set Variable [ $LastName; Value:"Last test" ]
Set Variable [ $Street; Value:"Street test" ]
Set Variable [ $Zip; Value:"Zip test" ]
Set Variable [ $City; Value:"City test" ]
Set Variable [ $Country; Value:"Country test" ]
Set Variable [ $Phone; Value:"Phone test" ]
```

```
Set Variable [ $r; Value:MBS( "FM.ExecuteFileSQL"; ""); "INSERT INTO \Export records\ (\First
Name\, \Last Name\, \Street\, \Zip\, \City\, \Country\, \Phone\ ) VALUES (?,?,?,?,?,?)";
9; 13; $FirstName; $LastName; $Street; $Zip; $City; $City; $Country; $Phone ]
If [ MBS("IsError") ]
Show Custom Dialog [ MBS( "FM.ExecuteSQL.LastErrorMessage" ) ]
End If
```

Set value for all records of a table:

```
MBS( "FM.ExecuteFileSQL"; "test.fmp12"; "UPDATE \My Table\ SET \My Field\ = 'Hello' ")
```

Set timestamp to today:

```
MBS( "FM.ExecuteFileSQL"; "test.fmp12"; "UPDATE \my Table\ SET \Change Time\ = TODAY
WHERE \ID\ = '12345' ")
```

Update 5 fields:

```
MBS( "FM.ExecuteFileSQL"; "test.fmp12"; "UPDATE \my Table\ SET \Number Field\ = 1, \Text
Field\ = 'test', \Dest Field\ = \Source Field\, \Hour Field\ = CAST(HOUR(curtime) AS VAR-
CHAR), \Empty Field\ = NULL WHERE \ID\ = '12345' ")
```

Create an index:

```
MBS( "FM.ExecuteFileSQL"; ""; "CREATE INDEX ON tablename.fieldname" )
```

Select with parameter:

```
MBS("FM.ExecuteFileSQL"; ""; "select Menge from Boxen where Artikel_Nr=? ORDER BY Menge
DESC"; 9; 13; "ABC123")
```

Query value of a repeating field with [] :

```
MBS( "FM.ExecuteFileSQL"; "" ; "SELECT test [ 2 ] FROM Kontakte")
```

Set value of repeating field:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET test [ 2 ] = 'test'")
```

Query only first row:

```
MBS( "FM.ExecuteFileSQL"; "" ; "SELECT * FROM ProductImages FETCH FIRST 1 ROWS ONLY")
```

Insert with parameters:

```
MBS("FM.ExecuteFileSQL"; "" ; "INSERT INTO AttachmentsActions (RecID, Container) VALUES (?, ?)";
9; 13; $recid; files::container)
```

Set repeating global field values:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE \ "Meine Tabelle\ " SET test [ 1 ] =", test [ 2 ] =", test [ 3 ] =", "
```

Set timestamp field:

via CURRENT_TIMESTAMP constant:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET Datum = CURRENT_TIMESTAMP ")
```

or cast text to timestamp:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET Datum = CAST('2017-04-12 14:14:14' AS
TIMESTAMP) ")
```

via CURTIMESTAMP constant:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET Datum = CURTIMESTAMP ")
```

or to now plus one hour:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET Datum = CURTIMESTAMP + 3600 ")
```

Query tables and fields metadata:

```
MBS( "FM.ExecuteFileSQL"; "" ; "SELECT FILEMAKER_TABLES.TableName, FILEMAKER_TABLES.TableID,
FILEMAKER_TABLES.BaseTableName, FILEMAKER_TABLES.BaseFileName, FILEMAKER_TABLES.Mod-
Count, FILEMAKER_FIELDS.FieldName, FILEMAKER_FIELDS.FieldType, FILEMAKER_FIELDS.Fiel-
dID, FILEMAKER_FIELDS.FieldClass, FILEMAKER_FIELDS.FieldReps, FILEMAKER_FIELDS.Mod-
Count from FILEMAKER_TABLES, FILEMAKER_FIELDS where FILEMAKER_FIELDS.TableName =
FILEMAKER_TABLES.TableName" )
```

Get list of fields in all tables:

```
MBS( "FM.ExecuteFileSQL"; "" ; "SELECT * FROM FileMaker_Fields")
```

Query list of table names and IDs:

```
MBS( "FM.ExecuteFileSQL"; ""; "SELECT TableName, TableID FROM Filemaker__Tables")
```

Find table name for a given table ID:

```
MBS( "FM.ExecuteFileSQL"; ""; "SELECT TableName FROM Filemaker__Tables WHERE TableID=?";
9; 13; 1065089)
```

Query field type of a field:

```
MBS( "FM.ExecuteFileSQL"; ""; "SELECT FieldType FROM FILEMAKER_FIELDS WHERE Table-
Name=? AND FieldName=? "; 9; 13; "Contacts"; "gtest")
```

// could return "global varchar", if gtest is a global field in table Contacts

Query list of record IDs for a given table:

```
MBS("FM.ExecuteFileSQL"; ""; "SELECT ROWID FROM MyTable")
```

Look for a control character in the text and return record IDs:

```
MBS("FM.ExecuteFileSQL"; Get(FileName); "SELECT ROWID from \"MyTable\" WHERE \"MyField\"
like '%'+CHR(1)+'%'")
```

Update all values in a field based on a query:

```
MBS("FM.ExecuteFileSQL"; ""; "UPDATE \"Invoices\" SET \"Sum\" = (SELECT SUM(\"Quantity\" *
\"Price\") FROM Positions WHERE Invoices.CustomerID = Positions.CustomerID AND Invoices.InvoiceID
= Positions.InvoiceID)")
```

See also

- 40.23 AVPlayer.SetProgressEvaluate 1083
- 40.24 AVPlayer.SetProgressInterval 1085
- 80.7 FM.ExecuteFileSQLOnIdle 4086
- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.12 FM.ExecuteSQLOnIdle 4100
- 79.47 FM.QueryFieldsForBaseTableName 3979
- 79.48 FM.QueryFieldsForTableName 3980

79.18. <i>FM.EXECUTEFILESQL</i>	3913
• 79.49 FM.QueryTableNames	3982
• 124.6 IsError	6266

Example Databases

- [CURL/Email/Batch Emailer](#)
- [CURL/Email/IMAP Email](#)
- [JavaScript/JavaScript](#)
- [Mac and iOS/Events/Events Sync](#)
- [Shell/Shell](#)
- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Create Sort Script](#)
- [XML/XML Validation](#)
- [XML/XSLT](#)

79.18.1 Blog Entries

- [FileMaker Magazin Links](#)
- [ROWID in FileMaker SQL Commands](#)
- [Using found set in SQL queries](#)
- [Using ExecuteSQL with Parameters is important](#)
- [Import Calendar Items into FileMaker](#)
- [MBS Filemaker Plugin, version 4.5pr2](#)
- [ExecuteSQL and getting error details](#)

79.18.2 FileMaker Magazin

- [Ausgabe 4/2019, Seite 35](#)
- [Ausgabe 4/2019, Seite 34](#)
- [Ausgabe 4/2019, Seite 33](#)
- [Ausgabe 4/2019, Seite 32](#)
- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 3/2018, Seite 34](#)

- Ausgabe 5/2017, Seite 22
- Ausgabe 3/2015, Seite 41
- Ausgabe 3/2015, Seite 28
- Ausgabe 2/2015, Seite 15

Created 18th August 2014, last changed 13th January 2020.

79.19 FM.ExecuteFileSQLOnIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.5	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteFileSQLOnIdle"; SQL Statement; FileName { ; Column Delimiter; Record Delimiter; Params })

Parameters**SQL Statement**

the SQL statement

FileName

The file name of the database.

Get(FileName)

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is TAB

9

Record Delimiter

Optional

Record Separator, only used with SELECT statement, Default is Return

13

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

You run a script pause after using this function to give it time to execute.

See the other function for more info.

Seems like on FileMaker 11 you get LastError 8310 if you use fields with underscore in the name. You avoid that by placing the field names in quotes.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Examples

Create a new text field in a table:

```
MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable ADD MyField varchar")
```

Create in a script and check error:

```
# set command to run
```

```
Set Variable [ $r ; Value: MBS("FM.ExecuteFileSQLOnIdle"; "ALTER TABLE Kontakte ADD MyField
```

```

varchar"; "Kontakte.fmp12" ]
# Make pause to run it
Pause/Resume Script [ Duration (seconds): ,1 ]
# Check error status
Set Variable [ $errorNumber ; Value: MBS( "FM.ExecuteSQL.LastError" ) ]
Set Variable [ $errorMessage ; Value: MBS( "FM.ExecuteSQL.LastErrorMessage" ) ]

```

Create a field:

```

Set Variable [ $r ; Value: MBS("FM.ExecuteFileSQLOnIdle";"ALTER TABLE TestTable ADD MyField
varchar"; Get(FileName)) ]
Pause/Resume Script [ Duration (seconds): ,1 ]
If [ MBS("FM.ExecuteSQL.LastError") = 0 ]
Show Custom Dialog [ "Error adding column" ; MBS("FM.ExecuteSQL.LastError") & ": " & MBS("FM.Ex-
ecuteSQL.LastErrorMessage") ]
Else
Show Custom Dialog [ "Removed Column" ; "OK" ]
End If

```

See also

- 80.6 FM.ExecuteFileSQL 4079
- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.12 FM.ExecuteSQLOnIdle 4100

79.19.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

79.19.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 25
- Ausgabe 3/2018, Seite 34

Created 16th October 2016, last changed 5th November 2018.

79.20 FM.ExecuteSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteSQL"; SQL Statement { ; Column Delimiter; Record Delimiter })

Parameters

SQL Statement

SQL Statement as a Text string

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is TAB
""

Record Delimiter

Optional

Record Separator, only used with SELECT statement, Default is Return

Result Returns result of SQL expression or error.

Description

There must be an occurrence of the Table on the current tables' Graph. SELECT returns the the records in as a tabbed delimited text string. All other SQL commands return "".

Use FM.ExecuteSQL.LastError to check for errors.

Supported Commands: SELECT UPDATE (see limitation below) DELETE INSERT CREATE TABLE DROP TABLE CREATE INDEX DROP INDEX WHERE

String comparisons are Case Sensitive! WHERE First_Name="todd" will not find records that have "Todd" in the first Name Field. You can wrap the field you are searching for with "lower" like this WHERE lower(First_Name)="todd" KNOWN LIMITATIONS Schema editing SQL functions are not supported in FileMaker 8 and 8.5.

Record Locking Errors are Not Reported! This means you must exercise caution when using UPDATE. CAUTION! This is a very powerful function! It is relying on very new and relatively untested resources made available by the release of FileMaker 8.

Seems like on FileMaker 11 you get LastError 8310 for any syntax error, like bad braces or missing quotes. You can put field names in double quotes and string values in single quotes.

Use FM.ExecuteSQLOnIdle for special commands which change database like ALTER TABLE.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Error 8309 means you did pass wrong data type, like string for a number.

If you need to pass parameters, please use FM.ExecuteFileSQL.

You can make queries against FILEMAKER_TABLES and FILEMAKER_FIELDS to query information about fields in your solution. The functions FM.QueryBaseTableNames, FM.QueryFieldsForBaseTableName, FM.QueryFieldsForTableName and FM.QueryTableNames provide simplified functions for some queries.

FILEMAKER_TABLES table contains:

1. TableName
2. TableID
3. BaseTableName
4. BaseFileName
5. ModCount

FILEMAKER_FIELDS table contains:

1. TableName
2. FieldName
3. FieldType (the SQL data type, not the FileMaker data type)
4. FieldID
5. FieldClass (Normal, Summary, Calculated)
6. FieldReps
7. ModCount

Examples

SELECT records

```
MBS("FM.ExecuteSQL";"select * from Contacts")
```

INSERT record

```
MBS("FM.ExecuteSQL";"INSERT INTO Contacts (FirstName, LastName) Values('Bob', 'Miller')")
```

Select records using delimiters

```
MBS("FM.ExecuteSQL";"select * from Contacts"; "# "; " | ")
```

SELECT records with a Where clause

```
MBS("FM.ExecuteSQL"; "SELECT First_Name, Last_Name from Contacts WHERE ID_Contact_PK = 'CN10013'")
```

Get list of fields in all tables:

```
MBS("FM.ExecuteSQL";"SELECT * FROM FileMaker_Fields")
```

Create Record with values via SQL

```
Set Variable [ $r; Value:MBS( "FM.ExecuteSQL"; "INSERT INTO \"Export records\" (\\"First Name\", \\"Last Name\", \\"Street\", \\"Zip\", \\"City\", \\"Country\", \\"Phone\") VALUES ('MyFirst', 'MyLast', 'MyStreet', 'MyZip', 'MyCity', 'MyCountry', 'MyPhone')") ]
If [ MBS("IsError") ]
Show Custom Dialog [ MBS( "FM.ExecuteSQL.LastErrorMessage" ) ]
```

End If

Set value for all records of a table:

```
MBS( "FM.ExecuteSQL"; "UPDATE \My Table\ SET \My Field\ = 'Hello' ")
```

Set timestamp to today:

```
MBS( "FM.ExecuteSQL"; "UPDATE \my Table\ SET \Change Time\ = TODAY WHERE \ID\ = '12345' ")
```

Update 5 fields:

```
MBS( "FM.ExecuteSQL"; "UPDATE \my Table\ SET \Number Field\ = 1, \Text Field\ = 'test', \Dest Field\ = \Source Field\", \Hour Field\ = CAST(HOUR(curtime) AS VARCHAR), \Empty Field\ = NULL WHERE \ID\ = '12345' ")
```

Select with passing variable as part of expression:

```
MBS("FM.ExecuteSQL"; "SELECT First_Name, Last_Name from Contacts WHERE ID_Contact_PK ='" & $Variable & "'")
```

Update date field:

```
MBS( "FM.ExecuteSQL"; "UPDATE myTable SET myDateField = CAST('2015-08-15' as DATE) ") )
```

Delete all data in a table:

```
$Result = MBS( "FM.ExecuteSQL"; "DELETE FROM \Prova\";")
```

Create an index:

```
MBS( "FM.ExecuteSQL"; "CREATE INDEX ON tablename.fieldname" )
```

Drop an index:

```
MBS( "FM.ExecuteSQL"; "DROP INDEX ON tablename.fieldname" )
```

Value in List of values:

```
MBS( "FM.ExecuteSQL"; "select * from \Anlagen\ where \Modell\ in ('test', 'abc')")
```

Delete all records from Table People:

```
# no where condition, so deletes all records!
MBS( "FM.ExecuteSQL"; "DELETE FROM \People\")
```

Query value of a repeating field with [] :

```
MBS( "FM.ExecuteSQL"; "SELECT test [ 2 ] FROM Kontakte")
```

Set value of repeating field:

```
MBS( "FM.ExecuteSQL"; "UPDATE Kontakte SET test [ 2 ] = 'test'")
```

Query only first row:

```
MBS( "FM.ExecuteSQL"; "SELECT * FROM ProductImages FETCH FIRST 1 ROWS ONLY")
```

Truncates table in FileMaker 15 or newer:

```
MBS( "FM.ExecuteSQL"; "TRUNCATE TABLE Kontakte")
```

Query field ID for a field with given name and table name:

```
MBS("FM.ExecuteSQL"; "SELECT FieldID FROM FileMaker_Fields WHERE FieldName='Vorname' and  
TableName='Kontakte' ")
```

Query repetition count of global field by name:

```
MBS("FM.ExecuteSQL"; "SELECT FieldReps FROM FILEMAKER_FIELDS WHERE FieldName='Wieder-  
holen' ")
```

Query field name and repetition count for all fields in a table:

```
MBS("FM.ExecuteSQL"; "SELECT FieldReps, FieldName FROM FILEMAKER_FIELDS WHERE Table-  
Name='Aufgaben' AND FieldType like '% global%' ")
```

Query list of record IDs for a given table:

```
MBS("FM.ExecuteSQL"; "SELECT ROWID FROM MyTable")
```

See also

- 80.30 FM.SQL.InsertRecords 4146
- 80.38 FM.UpdateRecord 4164
- 79.81 FM.UpdateRecord3 4043
- 79.83 FM.UpdateRecords2 4048
- 79.84 FM.UpdateRecords3 4050

79.20. <i>FM.EXECUTESQL</i>	3921
• 124.6 IsError	6266
• 109.17 Matrix.InsertRecords	5798
• 156.68 SQL.InsertOrUpdateRecords	7394
• 156.69 SQL.InsertRecords	7397
• 164.68 Text.WriteTextFile	7871

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [SQL in FileMaker/Create Fields in Filemaker Table](#)
- [SQL in FileMaker/SQL Select](#)
- [Utility functions/Generate and Verify License Key](#)
- [Utility functions/Schedules](#)

79.20.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [ExecuteSQL and getting error details](#)
- [MBS FileMaker Plugin 3.4 for OS X/Windows](#)

79.20.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)
- [Ausgabe 3/2018, Seite 33](#)
- [Ausgabe 1/2016, Seite 27](#)
- [Ausgabe 4/2015, Seite 39](#)
- [Ausgabe 3/2015, Seite 29](#)
- [Ausgabe 3/2015, Seite 28](#)
- [Ausgabe 3/2015, Seite 27](#)

- Ausgabe 2/2015, Seite 18
- Ausgabe 2/2015, Seite 17
- Ausgabe 2/2015, Seite 16

Created 18th August 2014, last changed 13th January 2020.

79.21 FM.ExecuteSQL.LastError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteSQL.LastError")

Description

Set by FM.InsertRecord, FM.SQL.Execute, FM.ExecuteSQL, FM.ExecuteFileSQL or FM.ExecuteSQLOnIdle. The Errors number s are the same ones as the ones returned by Native FileMaker function "Get(LastError)" Examples: 1200 - "Generic Calculation Error" 200 - "Access Denied" 106 - "Missing Table" Known Limitations: Record Locking Errors are Not Reported! This means you must exercise caution when using UPDATE. There is no way to determine if an update actually occurs unless you check the value again after the update occurred.

In general error 8309 is a semantic error, so something is wrong in your SQL. 8310 is a syntax error, something in the SQL is not correctly parsed.

Error 8309 means you did pass wrong data type, like string for a number.

See also FM.ExecuteSQL.LastErrorMessage.

Examples

Get Last SQL Error

MBS("FM.ExecuteSQL.LastError")

See also

- 80.12 FM.ExecuteSQLOnIdle 4100
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.19 FM.InsertRecordCSV 4119
- 80.20 FM.InsertRecordQuery 4122
- 80.22 FM.InsertRecordTSV 4129
- 80.30 FM.SQL.InsertRecords 4146
- 109.17 Matrix.InsertRecords 5798
- 156.10 SQL.Execute 7309
- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397

Example Databases

- [SQL in FileMaker/Create Fields in Filemaker Table](#)

79.21.1 Blog Entries

- [ExecuteSQL and getting error details](#)
- [MBS Filemaker Plugin, version 4.2pr5](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)

79.21.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 18th August 2014, last changed 14th September 2015.

79.22 FM.ExecuteSQL.LastErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	3.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteSQL.LastErrorMessage")

Result Returns error message.

Description

Set by FM.InsertRecord, FM.SQL.Execute, FM.ExecuteSQL, FM.ExecuteFileSQL, FM.ExecuteSQLOnIdle and other SQL using functions.

If last error code was 0 (no error), you get an empty string.

Error may be something like this:

ERROR: FQL0007/(1:7): The column named "fieldname" does not exist in any table in the column reference's scope.

See also FM.ExecuteSQL.LastError. Use FM.ExecuteSQL.LastSQL to get the SQL command.

See also

- 80.9 FM.ExecuteSQL.LastError 4094
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.12 FM.ExecuteSQLOnIdle 4100
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115
- 80.19 FM.InsertRecordCSV 4119
- 80.21 FM.InsertRecordQueryIgnoreDuplicates 4126
- 80.22 FM.InsertRecordTSV 4129
- 80.30 FM.SQL.InsertRecords 4146
- 156.10 SQL.Execute 7309

Example Databases

- [SQL in FileMaker/Create Fields in Filemaker Table](#)

79.22.1 Blog Entries

- [ExecuteSQL and getting error details](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)

- [Create fields in Filemaker database from a Script](#)
- [MBS Filemaker Plugin, version 3.0pr2](#)

79.22.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)
- [Ausgabe 2/2015, Seite 16](#)

Created 18th August 2014, last changed 25th October 2019.

Error	Message
FQL0001	There is an error in the syntax of the query.
FQL0002	The table named "?0" does not exist.
FQL0003	The table named "?0" already exists in this query.
FQL0004	The query is too complex. The maximum number of tables has been exceeded.
FQL0005	Expressions involving aggregations are not supported.
FQL0006	"The column named "?0" appears in more than one table in the column reference's scope."
FQL0007	The column named "?0" does not exist in any table in the column reference's scope.
FQL0008	The table named "?0" does not exist in the column reference's scope.
FQL0009	The column named "?1" does not exist in table "?0".
FQL0010	The literal value "?0" is not a valid DATE, TIME or TIMESTAMP.
FQL0011	Predicate must contain a logical operation (=, <, OR, AND, IS NULL, ...).
FQL0012	The ordinal reference "?0" in the ORDER BY clause is not valid.
FQL0013	Incompatible types in assignment.
FQL0014	The number of values in a VALUES row value constructor does not match the number of values in the target.
FQL0015	The number of values in an INSERT...SELECT statement does not match the number of values in the target.
FQL0016	A subquery contains an illegal outer reference to a column in the INSERT's target table.
FQL0017	An expression contains data types that cannot be compared.
FQL0018	An expression contains incompatible data types.
FQL0019	The result data type of a CASE expression cannot be inferred; they are all NULL.
FQL0020	An invalid number of parameters was supplied to the function "?0"
FQL0021	Parameter number ?0 to the function "?1" is not of the correct type.
FQL0022	A subquery expression must have exactly one value in the SELECT list.
FQL0023	A CAST expression requested an invalid data type conversion.
FQL0024	A reference to ROWID must be qualified if more than one table is present in the query.
FQL0025	All non-aggregated column references in the SELECT list and HAVING clause must be in the GROUP BY clause.
FQL0026	The number of columns in both inputs to a UNION operation must be the same.
FQL0027	The data types of corresponding columns in the inputs to a UNION operation must be the same.
FQL0028	Field repetitions must be numeric and between 1 and ?0.
FQL0029	A field repetition in the SET clause of an UPDATE statement must be a constant.
FQL0030	"?0" is an invalid function.
FQL0031	The the parameter's type cannot be inferred in this context. At least one query parameter must be an expression, a column or a constant.
FQL0032	A query may contain either named parameters or dynamic parameters, but not both.
FQL0033	Column names in FROM clause subqueries must be unique.
FQL0034	The number of output columns in a FROM clause subquery must match the number of columns in the table's name list.
FQL0035	Cursor support is not enabled for this query.
FQL0036	A cursor with the name "?0" already exists.
FQL0037	There is no cursor with the name "?0"

79.23 FM.ExecuteSQL.LastSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteSQL.LastSQL")

Result Returns text or error.

Description

This is for executing SQL in FileMaker and provides you the last SQL command as run by the plugin.

See also

- 37.3 Audit.Changed 958
- 80.4 FM.DeleteRecord 4073
- 80.5 FM.DeleteRecords 4076
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.18 FM.InsertRecord 4115
- 80.38 FM.UpdateRecord 4164
- 79.80 FM.UpdateRecord2 4041
- 79.84 FM.UpdateRecords3 4050

79.23.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 11st September 2017, last changed 11st September 2017.

79.24 FM.ExecuteSQLOnIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	1.2	Yes	Yes	No	No	No

MBS("FM.ExecuteSQLOnIdle"; SQL Statement { ; Column Delimiter; Record Delimiter; Params })

Parameters

SQL Statement

the SQL statement

Column Delimiter

Optional

Optional column delimiter

Record Delimiter

Optional

Optional record delimiter

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Description

You run a script pause after using this function to give it time to execute.

See the other function for more info.

Seems like on FileMaker 11 you get LastError 8310 if you use fields with underscore in the name. You avoid that by placing the field names in quotes.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message. Use FM.ExecuteFileSQL if you want to specify the file name.

When you create fields, you can use the following types. Add global on the end to make it a global field.

FileMaker Type	SQL Type
Text	varchar
Number	decimal
Date	date
Time	time
Timestamp	timestamp
Container	binary

Examples

Create a new text field in a table:

```
MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable ADD MyField varchar")
```

And delete the field:

```
MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable DROP COLUMN MyField")
```

Create new table:

```
MBS("FM.ExecuteSQLOnIdle";"CREATE TABLE `MyTABLE` (test varchar)")
```

Create new index:

```
MBS("FM.ExecuteSQLOnIdle";"CREATE INDEX `IndexLastname` ON `Persons` (`LastName`);")
```

Add a global field:

```
MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable ADD MyGlobalField varchar global")
```

Create a field:

```
Set Variable [ $r ; Value: MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable ADD MyField var-
char") ]
Pause/Resume Script [ Duration (seconds): ,1 ]
If [ MBS("FM.ExecuteSQL.LastError") 0 ]
Show Custom Dialog [ "Error adding column" ; MBS("FM.ExecuteSQL.LastError") & ": " & MBS("FM.Ex-
ecuteSQL.LastErrorMessage") ]
Else
Show Custom Dialog [ "Removed Column" ; "OK" ]
End If
```

Remove a field:

```
Set Variable [ $r ; Value: MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable DROP COLUMN
MyField") ]
Pause/Resume Script [ Duration (seconds): 0.1 ]
If [ MBS("FM.ExecuteSQL.LastError") 0 ]
Show Custom Dialog [ "Error removing column" ; MBS("FM.ExecuteSQL.LastError") & ": " & MBS("FM.Ex-
ecuteSQL.LastErrorMessage") ]
Else
Show Custom Dialog [ "Removed Column" ; "OK" ]
End If
```

Change default value:

```
Set Variable [ $r ; Wert: MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE myTable ALTER myField SET
```

79.24. *FM.EXECUTESQLONIDLE* 3931
DEFAULT 'FileMaker'”)]

See also

- 80.6 FM.ExecuteFileSQL 4079
- 80.7 FM.ExecuteFileSQLOnIdle 4086
- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096

Example Databases

- [SQL in FileMaker/Create Fields in Filemaker Table](#)

79.24.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)
- [MBS FileMaker Plugin, version 7.4pr4](#)
- [MBS FileMaker Plugin, version 6.5pr3](#)
- [MBS Filemaker Plugin, version 4.2pr5](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)
- [Create fields in Filemaker database from a Script](#)

79.24.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 25
- Ausgabe 3/2018, Seite 34
- Ausgabe 3/2018, Seite 33
- Ausgabe 2/2015, Seite 15
- Ausgabe 2/2015, Seite 14

Created 18th August 2014, last changed 9th April 2019.

79.25 FM.GetDictionary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	9.4	Yes	No	No	No	No

MBS("FM.GetDictionary")

Result Returns text or error.

Description

You need to first run FM.ChooseDictionary to query values.

See also

- [79.5 FM.ChooseDictionary](#) 3888
- [79.26 FM.GetDictionaryList](#) 3933

79.25.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr4](#)
- [Choose spelling dictionary in FileMaker automatically](#)

Created 24th August 2019, last changed 24th August 2019.

79.26 FM.GetDictionaryList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	9.4	Yes	No	No	No	No

MBS("FM.GetDictionaryList")

Result Returns text or error.

Description

You need to first run FM.ChooseDictionary to query values.

See also

- [79.5 FM.ChooseDictionary](#) 3888
- [79.25 FM.GetDictionary](#) 3932

79.26.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr4](#)
- [Choose spelling dictionary in FileMaker automatically](#)

Created 24th August 2019, last changed 24th August 2019.

79.27 FM.GetDisableContextualMenus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	10.1	Yes	Yes	No	No	No

MBS("FM.GetDisableContextualMenus")

Result Returns 1, 0 or error.

Description

Returns 1 if MBS Plugin disables contextual menus.

See also

- 79.74 FM.SetDisableContextualMenus 4030

79.27.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 14th January 2020, last changed 14th January 2020.

79.28 FM.GetSQLBatchMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.GetSQLBatchMode")

Result Returns value or error.

Description

For use in FM.InsertRecordQuery.
(others could be added)

Default is 1.

See also

- 80.18 FM.InsertRecord 4115
- 80.20 FM.InsertRecordQuery 4122
- 80.37 FM.SetSQLBatchMode 4162

79.28.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr8](#)

Created 17th September 2016, last changed 18th September 2016.

79.29 FM.InitMessageFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.3	No	Yes	Yes, Windows only	No	No

MBS("FM.InitMessageFilter")

Result Returns OK or error.

Description

If a COM message can't be handled right away, COM may show a standard dialog to retry, switch task or cancel, which may bring your app in an endless dialog series. MBS Plugin implements a message filter which delays messages till the current processing is done and avoids the dialog. So long running options can perform well.

Call this once if you see "server busy" error dialogs from COM subsystem on Windows.

See also

- [181.12 WIA.Initialize](#) 8511

79.29.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [Putting an end to the Server Busy Dialog in Xojo and FileMaker](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 18th June 2018, last changed 15th May 2019.

79.30 FM.InsertOrUpdateRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertOrUpdateRecord"; FileName; TableName; IDField1; IDValue1; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

If the insert fails due to duplicate ID, we will update the record values.

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Then you pass one pair of field name and value for each field you like to set in the new record.

This function combines FM.InsertRecord and FM.UpdateRecord. If the ID is already used, we update, else we insert a new record.

For one ID field, please use FM.InsertOrUpdateRecord, for 2 ID fields FM.InsertOrUpdateRecord2 and for three ID fields FM.InsertOrUpdateRecord3.

This function is broken in version 6.4 as it returns always a SQL error for insert. Please use 6.5 or newer. With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update a record:

```
MBS( "FM.InsertOrUpdateRecord";
    ""; "Asset Management"; /* file and table name */
    "Asset ID"; "1"; /* ID field and value */
    "Information"; "Just a test"; /* first field and value */
    "Category"; "BestItems" ) /* second field and value */
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115
- 80.38 FM.UpdateRecord 4164
- 156.68 SQL.InsertOrUpdateRecords 7394

79.30.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.5pr1](#)

79.30.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 24
- Ausgabe 6/2018, Seite 23
- Ausgabe 3/2018, Seite 35

Created 5th December 2015, last changed 17th January 2020.

79.31 FM.InsertOrUpdateRecord2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertOrUpdateRecord2"; FileName; TableName; IDField1; IDValue1; IDField2; IDValue2; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.
Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.
"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.
"ID1"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.
\$RecordID

IDField2

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.
"ID2"

IDValue2

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.
\$RelatedRecordID

FieldName

A field name to set.
"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.
"Test"

Result Returns OK or error.

Description

Same as FM.InsertOrUpdateRecord, but with 2 ID fields to locate record.

If the insert fails due to duplicate ID, we will update the record values.

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Then you pass one pair of field name and value for each field you like to set in the new record.

This function combines FM.InsertRecord and FM.UpdateRecord. If the ID is already used, we update, else we insert a new record.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Insert or update:

```
MBS( "FM.InsertOrUpdateRecord2";
  ""; "Assets"; /* file and table name */
  "Asset ID Match Field"; 2; /* first ID field and value */
  "Internal ID"; "2"; /* second ID field and value */
  "Model"; "Just a test"; /* first field and value */
  "Category"; "BestItems2" ) /* second field and value */
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.14 FM.InsertOrUpdateRecord 4104
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115
- 80.38 FM.UpdateRecord 4164
- 156.68 SQL.InsertOrUpdateRecords 7394

79.31.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)
- [MBS FileMaker Plugin, version 6.1pr3](#)

79.31.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 24

Created 19th February 2016, last changed 17th January 2020.

79.32 FM.InsertOrUpdateRecord3

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertOrUpdateRecord3"; FileName; TableName; IDField1; IDValue1; IDField2; IDValue2; IDField3; IDValue3; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID1"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID2"

IDValue2

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RelatedRecordID

IDField3

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID3"

IDValue3

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$OtherRecordID

FieldName

A field name to set.
"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.
"Test"

Result Returns OK or error.

Description

Same as FM.InsertOrUpdateRecord, but with 3 ID fields to locate record.

If the insert fails due to duplicate ID, we will update the record values.

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Then you pass one pair of field name and value for each field you like to set in the new record.

This function combines FM.InsertRecord and FM.UpdateRecord. If the ID is already used, we update, else we insert a new record.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Insert a record:

```
MBS( "FM.InsertOrUpdateRecord3"; "" ; "Kontakte"; "Vorname"; "Christian"; "Nachname"; "Schmitz";
"Firma"; "MBS"; "Titel"; "Herr" )
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.14 FM.InsertOrUpdateRecord 4104
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115

<i>79.32. FM.INSERTORUPDATERECORD3</i>	3945
• 80.38 FM.UpdateRecord	4164
• 156.68 SQL.InsertOrUpdateRecords	7394

79.32.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)
- [MBS FileMaker Plugin, version 6.1pr3](#)

79.32.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 24
- Ausgabe 3/2018, Seite 35

Created 19th February 2016, last changed 17th January 2020.

79.33 FM.InsertOrUpdateRecordQuery

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	8.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertOrUpdateRecordQuery"; InsertFileName; InsertTableName; FieldNames; KeyFieldMapping; QueryFileName; SQL Statement { ; Params })

Parameters

InsertFileName

The file name of where the target table. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into (target). Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

KeyFieldMapping

The list of field names with index to map keys. Please specify a list of key name=key index. The key name is the name of the field in the target table and the index gives zero-based position in result set from query.

Field order in source and destination does not need to be the same.

ID=0

QueryFileName

The file name for the database to run the query against (source). Can be empty to look for the table in all files.

Get(FileName)

SQL Statement

SQL Statement as a Text string to query records from the source table.

Params

Optional

Pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from one table to another table.

Copy can be from one database to other or within same database. Also from one table to other or within

a table. Due to passing in new field names, you can even rearrange values from one column to other while copying. In the SQL you can use functions for sums or join data from several tables together to fill a new table. Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.
Reports an error if field name list doesn't match column count of the query result.

Please remove from SQL statement and field names all fields which are globals or unstored calculations.

For inserting records from other database (e.g. MySQL), please use SQL.InsertRecords function.

You can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

You can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

Examples

Copies records from Contacts to ContactsCopy:

```
Set Variable [ $r ; Value: MBS( "FM.InsertOrUpdateRecordQuery"; "" ; "ContactsCopy"; "ID$First$Last$Mobile"; "ID=0"; "" ; "SELECT \"ID\", \"First\", \"Last\", \"Mobile\" FROM \"Contacts\"" ) ]
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.14 FM.InsertOrUpdateRecord 4104
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.16 FM.InsertOrUpdateRecord3 4110
- 156.69 SQL.InsertRecords 7397

Created 27th July 2018, last changed 19th February 2020.

79.34 FM.InsertRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecord"; FileName; TableName; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

Then you pass one pair of field name and value for each field you like to set in the new record.

As we can't know the new ID assigned for the record, you can help yourself by passing in an UUID for a field and later select that to get the auto assigned primary key (or have the UUID be the primary key, so you don't need a query).

See also FM.UpdateRecord to insert new record and FM.InsertOrUpdateRecord to update or insert record. With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Insert a record into Assets table:

```
MBS("FM.InsertRecord"; ""; "Assets"; "Model"; "TestModell"; "Item"; "MyItem"; "Serial Number"; "1234";
    "In Service Date"; GetAsDate( "31.05.1996"))
```


Insert a record with 5 fields:

```
MBS("FM.InsertRecord"; $filename; $tablename; $field1; $value1; $field2; $value2; $field3; $value3; $field4;
$value4; $field5; $value5)
```

Insert with table and field ID instead of names:

```
Set Variable [ $r ; Value: MBS("FM.InsertRecord"; Get(FileName); "1065089"; "3"; "Hello") ]
```

Insert with using GetFieldName for field names:

```
MBS( "FM.InsertRecord"; ""; "Contacts";
GetFieldName ( Contacts::First ); "Joe";
GetFieldName ( Contacts::Last ); "Miller";
GetFieldName ( Contacts::Group ); "Best Customers" )
```

Build dynamically the evaluate statement with parameters:

```
# Our input parameters with field name list
Set Variable [ $FieldNames ; Value: FieldNames ( Get(FileName) ; Get(LayoutName) ) ]
#
# We build parameters for our Evaluate call
Set Variable [ $Params ; Value: "" ]
Set Variable [ $ParamIndex ; Value: 0 ]
#
Set Variable [ $ParamIndex ; Value: $ParamIndex + 1 ]
Set Variable [ $P [ $ParamIndex ] ; Value: Get(FileName) ]
Set Variable [ $Params ; Value: $Params & "; $P [ " & $ParamIndex & " ] " ]
#
Set Variable [ $ParamIndex ; Value: $ParamIndex + 1 ]
Set Variable [ $P [ $ParamIndex ] ; Value: Get(LayoutTableName) ]
Set Variable [ $Params ; Value: $Params & "; $P [ " & $ParamIndex & " ] " ]
#
# We loop over feidl list
Set Variable [ $Count ; Value: ValueCount ( $FieldNames ) ]
Set Variable [ $FieldIndex ; Value: 0 ]
Set Variable [ $Types ; Value: "" ]
#
Loop
# get field name and value
Set Variable [ $FieldIndex ; Value: $FieldIndex + 1 ]
Set Variable [ $Fieldname ; Value: GetValue($FieldNames; $FieldIndex) ]
Set Variable [ $Value ; Value: GetField ( $Fieldname) ]
#
# Check typ to filter fields we don't want
Set Variable [ $Typ ; Value: FieldType ( Get(FileName) ; $Fieldname ) ]
If [ Position ( $Typ; "Global"; 1; 1 ) = 1 or Position ( $Typ; "Summary"; 1; 1 ) = 1 or Position($Typ; "stored-
Calc"; 1; 1 ) = 1 or $Fieldname = "ID" ]
```

```

# ignore global, statistic and unsaved formula field
// Show Custom Dialog [ "Typ" ; $FieldName & ": " & $typ ]
Else
# We store in $P [ ] our parameters for evaluate and in $Params the parameters for Evaluate
Set Variable [ $Types ; Value: $Types & $& $FieldName & ": " & $Typ ]
Set Variable [ $ParamIndex ; Value: $ParamIndex + 1 ]
Set Variable [ $P [ $ParamIndex ] ; Value: $Fieldname ]
Set Variable [ $Params ; Value: $Params & "; $P [ " & $ParamIndex & " ] " ]
Set Variable [ $ParamIndex ; Value: $ParamIndex + 1 ]
Set Variable [ $P [ $ParamIndex ] ; Value: $Value ]
Set Variable [ $Params ; Value: $Params & "; $P [ " & $ParamIndex & " ] " ]
End If
#
Exit Loop If [ $FieldIndex = $count ]
End Loop
#
# now build Evaluate command and show it
// Show Custom Dialog [ "Types" ; $Types ]
Set Variable [ $Function ; Value: "FM.InsertRecord" ]
Set Variable [ $command ; Value: "MBS($Function" & $params & ")" ]
Show Custom Dialog [ "Command" ; $Command ]
If [ Get ( LastMessageChoice ) = 1 ]
# And run it!
Set Variable [ $result ; Value: Evaluate($Command) ]
Show Custom Dialog [ "Result" ; $Result ]
End If

```

Insert with automatic table name:

```

MBS("FM.InsertRecord";
""; // empty for current file
""; // empty as given with first field
GetFieldName ( Anlagen::Seriennummer ); // field name queried
"12345") // and value

```

See also

- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.13 FM.GetSQLBatchMode 4103
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.19 FM.InsertRecordCSV 4119

79.34. <i>FM.INSERTRECORD</i>	3951
• 80.20 FM.InsertRecordQuery	4122
• 80.21 FM.InsertRecordQueryIgnoreDuplicates	4126
• 80.38 FM.UpdateRecord	4164
• 156.69 SQL.InsertRecords	7397

Example Databases

- [SQL in FileMaker/SQL Select Container](#)

79.34.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [Dynamically build MBS call and evaluate it](#)
- [MBS FileMaker Plugin, version 8.4pr2](#)
- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS FileMaker Plugin, version 7.2pr4](#)
- [MBS FileMaker Plugin, version 6.2pr2](#)
- [MBS FileMaker Plugin 5.1 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.1pr7](#)
- [Quickly copy lots of records](#)

79.34.2 FileMaker Magazin

- [Ausgabe 6/2019, Seite 33](#)
- [Ausgabe 4/2019, Seite 27](#)
- [Ausgabe 6/2018, Seite 27](#)
- [Ausgabe 6/2018, Seite 26](#)
- [Ausgabe 6/2018, Seite 23](#)
- [Ausgabe 6/2018, Seite 22](#)
- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 3/2018, Seite 36](#)
- [Ausgabe 3/2018, Seite 35](#)
- [Ausgabe 3/2018, Seite 34](#)

Created 24th April 2015, last changed 17th January 2020.

79.35 FM.InsertRecordCSV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecordCSV"; InsertFileName; InsertTableName; FieldNames; Text { ; Delimiter; FieldName; FieldValue })

Parameters

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model"

Text

The text to import in TSV/CSV format. This means tab, comma or semicolon character between fields and newline character for new records. Use Files.ReadTextFile if needed to read this from a file on disk.

"Bob;Miller;12345;New York"

Delimiter

Optional

Available in MBS FileMaker Plugin 8.5 or newer.

The delimiter to use. If empty, we auto detect it.

","

FieldName

Optional

A field name to set.

"Model"

FieldValue

Optional

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

This function allows for easy importing of text to create a log of records.

Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result. The fields must be of type text. You can later use a script to copy values in whatever format you need. Returns number of records added.

CSV is automatically parsed per line with List.CSVSplit function internally.

You can pass one pair of field name and value for each extra field you like to set in the new records. e.g. a reference ID.

You can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

Version 8.5 adds Delimiter parameter, which may break scripts, but we need to have that parameter for people with older version.

Examples

Import some contacts with passing import ID/timestamp:

```
MBS( "FM.InsertRecordCSV"; "Contacts.fmp12"; "Contacts"; "FirstName$LastName$City"; $tsv; "ImportID"; $importID; "ImportDate"; Get(CurrentHostTimeStamp))
```

Import CSV:

```
MBS( "FM.InsertRecordCSV"; "Kontakte.fmp12"; "Kontakte"; "Vorname$Nachname$Firma$Position"; "Vorname;Nachname;Firma;Position")
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.18 FM.InsertRecord 4115
- 80.20 FM.InsertRecordQuery 4122
- 80.22 FM.InsertRecordTSV 4129
- 103.7 List.CSVSplit 5425

Example Databases

- [Text functions/CSV Import](#)

79.35.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr2](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS FileMaker Plugin, version 7.6pr5](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin 7.4 - More than 4900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 7.4pr8](#)

79.35.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 35](#)

Created 21st September 2017, last changed 17th January 2020.

79.36 FM.InsertRecordQuery

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecordQuery"; InsertFileName; InsertTableName; FieldNames; QueryFileName; SQL Statement { ; Params })

Parameters

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

QueryFileName

The file name for the database to run the query against. Can be empty to look for the table in all files.

Get(FileName)

SQL Statement

SQL Statement as a Text string

Params

Optional

Pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from one table to another table.

Copy can be from one database to other or within same database. Also from one table to other or within a table. Due to passing in new field names, you can even rearrange values from one column to other while copying. In the SQL you can use functions for sums or join data from several tables together to fill a new table. Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

Please remove from SQL statement and field names all fields which are globals or unstored calculations.

For inserting records from other database (e.g. MySQL), please use `SQL.InsertRecords` function.

Using `FM.SetSQLBatchMode` you can let the plugin insert e.g. 50 rows in one chunk which can speed up insert a lot.

Due to memory usage it can be useful to segment copy queries to only copy one GB at a time and avoid heavy memory pressure.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use `GetFieldName()` function to query field names and the plugin removes the table prefix with `::` in the field name before passing it to SQL engine.

Examples

Copy records within one table in same file:

```
MBS( "FM.InsertRecordQuery"; ""; "Contacts"; "First$Last$Company"; ""; "SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Copy records from a table from one database to other (production to development)

```
MBS( "FM.InsertRecordQuery"; "ContactsDev.fmp12"; "Contacts"; "First$Last$Company"; "Contacts.fmp12"; "SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Copy data to other table:

```
MBS( "FM.InsertRecordQuery"; ""; "Test"; "FirstName$LastName$CompanyName"; ""; "SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Query sum of sales grouped by customers in a sales report table:

```
MBS( "FM.InsertRecordQuery"; ""; "SalesReport"; "SumSales$CustomerID"; ""; "SELECT sum(\"Invoice-Total\"), \"CustomerID\" FROM Clients, Invoices WHERE Invoices.CustomerID = Clients.CustomerID GROUP by CustomerID" )
```

Copy two fields from one table to other:

```
MBS( "FM.InsertRecordQuery"; ""; "ASC Apple Script"; "Name$Script"; ""; "select * from \"Apple-Script\"" )
```

Copy from Anlagen example (in German) to copy of same file:

```
MBS( "FM.InsertRecordQuery";
```



```

/* InsertFileName */
"Anlagen2";
/* InsertTableName */
"Anlagen";
/* FieldNames */
"Abschreibung Jahre$Anzahl Diagramme$Ausgewählte Datei$Datei 1 Container$Datei 2 Container$Datei
3 Container$Datei 4 Container$Datei 5 Container$Datum Ausgang$Datum Ausgang Popover$Datum Ein-
gang$Erstellungsdatum$Fälligkeit$Fälligkeit Popover$Gekauft von$Geprüft durch$In Betrieb seit$Interne
ID$Kategorie$Kaufdatum$Kosten$Modell$Notizen$Ort$Position$Prüfdatum$Seriennummer$Signatur Con-
tainer$Zugewiesen an$Zustand";
/* QueryFileName */
"Anlagen";
/* SQL Statement */
"SELECT \"Abschreibung Jahre\", \"Anzahl Diagramme\", \"Ausgewählte Datei\", \"Datei 1 Container\",
\"Datei 2 Container\", \"Datei 3 Container\", \"Datei 4 Container\", \"Datei 5 Container\", \"Datum Aus-
gang\", \"Datum Ausgang Popover\", \"Datum Eingang\", \"Erstellungsdatum\", \"Fälligkeit\", \"Fäl-
ligkeit Popover\", \"Gekauft von\", \"Geprüft durch\", \"In Betrieb seit\", \"Interne ID\", \"Kategorie\",
\"Kaufdatum\", \"Kosten\", \"Modell\", \"Notizen\", \"Ort\", \"Position\", \"Prüfdatum\", \"Serien-
nummer\", \"Signatur Container\", \"Zugewiesen an\", \"Zustand\" FROM Anlagen"
)

```

Copy data to other table with parameter:

```

MBS( "FM.InsertRecordQuery"; ""; "Test"; "FirstName$LastName$CompanyName"; ""; "SELECT \"First\",
\"Last\", \"Company\" FROM Contacts WHERE City=?"; "Hamburg" )

```

Copy from file to fill clone with order and two fields to filter:

```

MBS( "FM.InsertRecordQuery"; "Aufgaben Clone"; "Aufgaben"; "Aufgabe$Fälligkeit$Beschreibung$Sta-
tus$Kategorie"; ""; "SELECT Aufgabe, \"Fälligkeit\", Beschreibung, Status, Kategorie FROM Aufgaben
WHERE IDField=? AND OtherThing=? ORDER BY \"Fälligkeit\" "; 123; "Haus" )

```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.18 FM.InsertRecord 4115
- 80.19 FM.InsertRecordCSV 4119
- 80.21 FM.InsertRecordQueryIgnoreDuplicates 4126
- 80.22 FM.InsertRecordTSV 4129
- 80.23 FM.InsertSetUpdateProgressDialog 4132

- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397

Example Databases

- [SQL in FileMaker/SQL Select Container](#)

79.36.1 Blog Entries

- [Dynamically build MBS call and evaluate it](#)
- [MBS FileMaker Plugin, version 6.2pr3](#)
- [MBS FileMaker Plugin, version 6.0pr7](#)
- [MBS FileMaker Plugin, version 5.4pr5](#)
- [MBS FileMaker Plugin 5.1 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.1pr7](#)
- [Quickly copy lots of records](#)

79.36.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 35](#)
- [Ausgabe 4/2015, Seite 40](#)
- [Ausgabe 4/2015, Seite 39](#)

Created 29th April 2015, last changed 17th January 2020.

79.37 FM.InsertRecordQueryIgnoreDuplicates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecordQueryIgnoreDuplicates"; InsertFileName; InsertTableName; FieldNames; QueryFileName; SQL Statement { ; Params })

Parameters

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

QueryFileName

The file name for the database to run the query against. Can be empty to look for the table in all files.

Get(FileName)

SQL Statement

SQL Statement as a Text string

Params

Optional

Pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

Same as FM.InsertRecordQuery, but ignores duplicate records.

On success returns the number of duplicate records instead of OK if there were any.

This function allows to easily copy a lot of records from one table to another table.

Copy can be from one database to other or within same database. Also from one table to other or within a table. Due to passing in new field names, you can even rearrange values from one column to other while copying. In the SQL you can use functions for sums or join data from several tables together to fill a new table. Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

Does not copy text styles, only plain text for text fields.

The duplicate check is based on FileMaker checking if a field is unique, e.g. the record ID.
For inserting records from other database (e.g. MySQL), please use `SQL.InsertRecords` function.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

Examples

Copy records within one table in same file:

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; ""; "Contacts"; "First$Last$Company"; ""; "SELECT \
\"First\", \"Last\", \"Company\" FROM Contacts" )
```

Copy records from a table from one database to other (production to development)

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; "ContactsDev.fmp12"; "Contacts"; "First$Last$Company";
"Contacts.fmp12"; "SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Copy data to other table:

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; ""; "Test"; "FirstName$LastName$CompanyName"; "";
"SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Query sum of sales grouped by customers in a sales report table:

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; ""; "SalesReport"; "SumSales$CustomerID"; ""; "SE-
LECT sum(\"InvoiceTotal\"), \"CustomerID\" FROM Clients, Invoices WHERE Invoices. CustomerID
= Clients.CustomerID GROUP by CustomerID" )
```

Copy two fields from one table to other:

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; ""; "ASC Apple Script"; "Name$Script"; ""; "select *
from \"AppleScript\"" )
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.18 FM.InsertRecord 4115
- 80.20 FM.InsertRecordQuery 4122
- 80.23 FM.InsertSetUpdateProgressDialog 4132

79.37. *FM.INSERTRECORDQUERYIGNOREDUPPLICATES*

3961

- 156.69 SQL.InsertRecords

7397

79.37.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr3](#)
- [MBS FileMaker Plugin, version 6.0pr7](#)

Created 18th January 2016, last changed 17th January 2020.

79.38 FM.InsertRecordTSV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecordTSV"; InsertFileName; InsertTableName; FieldNames; Text { ; FieldName; Field-Value })

Parameters

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

Text

The text to import in TSV format. This means tab character between fields and newline character for new records

"Bob Miller 12345 New York"

FieldName

Optional

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

Optional

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns number or error.

Description

This function allows for easy importing of text to create a log of records.

Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result. The fields must be of type text. You can later use a script to copy values in whatever format you need.

Returns number of records added.

For XML, please check XML.Import function. For splitting values with delimiter into a list, please use QuickList.New which also works with comma, tab, newline or other characters.

With plugin version 6.2 or newer you can pass one pair of field name and value for each extra field you like to set in the new records. e.g. a reference ID.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

Examples

Import records from text:

```
Delete All Records [ No dialog ]
Set Variable [ $fields; Value:"FirstName$LastName$City" ]
Set Variable [ $r; Value:MBS("FM.InsertRecordTSV"; ""; "Contacts"; $fields; Import::ImportText) ]
```

Import some contacts with passing import ID/timestamp:

```
MBS( "FM.InsertRecordTSV"; "Contacts.fmp12"; "Contacts"; "FirstName$LastName$City"; $tsv; "ImportID"; $importID; "ImportDate"; Get(CurrentHostTimeStamp))
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.18 FM.InsertRecord 4115
- 80.19 FM.InsertRecordCSV 4119
- 80.20 FM.InsertRecordQuery 4122
- 80.23 FM.InsertSetUpdateProgressDialog 4132
- 103.69 QuickList.New 5521
- 191.12 XML.Import 9273

Example Databases

- [Text functions/TSV Import](#)

79.38.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS FileMaker Plugin, version 7.6pr5](#)
- [MBS FileMaker Plugin, version 6.2pr5](#)
- [MBS FileMaker Plugin, version 6.2pr3](#)
- [\[ANN \] MBS FileMaker Plugin 5.3 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.3pr3](#)
- [XML Import for FileMaker](#)
- [New today: FM.InsertRecordTSV](#)

79.38.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 35](#)

Created 8th September 2015, last changed 17th January 2020.

79.39 FM.InsertSetUpdateProgressDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.2	Yes	Yes	No	No	No

MBS("FM.InsertSetUpdateProgressDialog"; Update { ; Base; Factor })

Parameters

Update

Pass 1 to update Progress Dialog. Pass 0 to disable feature.

1

Base

Optional

The progress base in percent. Default is 0.

25

Factor

Optional

The factor to apply for progress update. Default is 1.

0.5

Result Returns OK or error.

Description

If you enable progress dialog updates, the functions FM.InsertRecordQuery, FM.InsertRecordQueryIgnoreDuplicates and FM.InsertRecordTSV will update progress dialog.

If cancel button is clicked, the functions may cancel and return an error. Depending on event handling a cancel button may not work while a plugin function runs!

You can use Base/Factor to adjust updates in progress dialog. e.g. if you have 4 things to do and FM.InsertRecordTSV is 2nd one, you can use a base of 25 (so 25% is for first thing to do) and factor of 0.25. Our progress will go from 25 to 50% than.

Examples

Import tab return text data as records with progress dialog:

```
Set Variable [ $r; Value:MBS( "ProgressDialog.SetTitle"; "Please wait." ) ]
```

```
Set Variable [ $r; Value:MBS( "ProgressDialog.SetShowButton"; 0 ) ]
```

```
Set Variable [ $r; Value:MBS( "ProgressDialog.SetTopText"; "Importing text file..." ) ]
```

```
Set Variable [ $r; Value:MBS( "ProgressDialog.Show" ) ]
```

```
Set Variable [ $r; Value:MBS( "FM.InsertSetUpdateProgressDialog"; 1 ) ]
```

```
Set Variable [ $r; Value:MBS( "FM.InsertRecordTSV"; "" ; "TSV Import"; "First$Last$Street$City$State$Zip$Country"; TSV Import::Text to Import ) ]
```

```
Set Variable [ $r; Value:MBS( "ProgressDialog.Hide" ) ]
```

See also

- 63.47 Dialog.SetTop 2389
- 80.18 FM.InsertRecord 4115
- 80.20 FM.InsertRecordQuery 4122
- 80.21 FM.InsertRecordQueryIgnoreDuplicates 4126
- 80.22 FM.InsertRecordTSV 4129
- 80.37 FM.SetSQLBatchMode 4162
- 130.14 ProgressDialog.Hide 6508
- 130.26 ProgressDialog.SetShowButton 6527
- 130.29 ProgressDialog.SetTopText 6533
- 130.30 ProgressDialog.Show 6535

79.39.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr3](#)

Created 3th April 2016, last changed 18th September 2016.

79.40 FM.IsMainThread

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.IsMainThread")

Result Returns number or error.

Description

See also

- 79.42 FM.MainThreadID

3972

79.40.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr3](#)

Created 26th March 2015, last changed 26th March 2015.

79.41 FM.Loop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.Loop"; Variable Name; Start Value; End Value; Step Value; Expression { ; ExitIfExpression })

Parameters

Variable Name

The name of the variable to use. Can be with zero, one or zwei \$ on the start.
"index"

Start Value

The start value of the loop.
1

End Value

The end value of the loop.
12

Step Value

The number to add on each loop. Must not be zero. Can be positive to count forward or negative to count backwards.
1

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.
" MBS(\ "Log\"; index) "

ExitIfExpression

Optional

The expression to evaluate to check for exit early. Can be in local language of FileMaker Pro or english. For Server must always be in english.
"index >= 10"

Result Returns list of results or error.

Description

Counts number up/down from start to end value. Evaluates each time the formula with new variable value.

If trace is enabled and plugin writes log entries for each evaluate, things are slower than without tracing. For best performance, do not use trace with this function. e.g. call Trace.Off function. Returns empty text if End value is zero and step is positive to allow for 0 time loops.

Similar to the While() function in FileMaker 18.

Examples

Loop to place month names in a PDF table:

```

MBS("FM.Loop";
/* variable */ "index";
/* start */ 1;
/* end */ 12;
/* step */ 1;
/* formula */
"MBS(\\"DynaPDF.Table.SetCellText\\"; $table; $rowNum; index; \\"center\\"; \\"center\\"; GetValue($months;
index))")

```

Loop with Let for multiple commands

```

MBS("FM.Loop";
/* variable */ "index";
/* start */ 1;
/* end */ 31;
/* step */ 1;
/* formula */
"Let( [ $rowNum = MBS(\\"DynaPDF.Table.AddRow\\"; $table);
r = MBS(\\"DynaPDF.Table.SetCellText\\"; $table; $rowNum; 0; \\"center\\"; \\"center\\"; index) ] ; r)")

```

Counts upward from 2 to 24:

```

MBS("FM.Loop";
/* variable */ "index";
/* start */ 1;
/* end */ 12;
/* step */ 1;
/* formula */
"index*2")

```

Example result: 2

```

4
6
8
10
12
14
16
18
20
22
24

```

Counts downwards from 1.0 to 0.0 in 11 steps:

```

MBS("FM.Loop";
/* variable */ "index";
/* start */ 10;

```

```
/* end */ 0;
/* step */ -1;
/* formula */
"index/10")
```

Example result: 1

```
.9
.8
.7
.6
.5
.4
.3
.2
.1
0
```

Inner and outer loop:

```
Let( [
$Expression1 = "MBS(\"FM.Loop\"; \"j\"; 1; 3; 1; $Expression2)";
$Expression2 = "$i & \" * \" & j & \" = \" & ($i * j)"
// $i in outer loop must be with $ so it's valid in the inner loop
];
```

```
MBS("FM.Loop"; "$i"; 1; 4; 1; $Expression1))
```

Example result: 1 * 1 = 1

```
1 * 2 = 2
1 * 3 = 3
2 * 1 = 2
2 * 2 = 4
2 * 3 = 6
3 * 1 = 3
3 * 2 = 6
3 * 3 = 9
4 * 1 = 4
4 * 2 = 8
4 * 3 = 12
```

With an exit early expression:

```
MBS("FM.Loop";
/* variable */ "index";
/* start */ 1;
/* end */ 12;
/* step */ 1;
/* formula */
```

79.41. FM.LOOP

3971

```
"index*2"; // calculate this  
"index >= 10") // exit if index gets big
```

See also

- 70.451 DynaPDF.Table.AddRow 3262
- 70.482 DynaPDF.Table.SetCellText 3312
- 124.58 Trace.Off 6334

Example Databases

- [DynaPDF/Tables](#)

79.41.1 Blog Entries

- [Fun with While function in FileMaker](#)
- [FileMaker Roadmap for 2019](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)
- [Using found set in SQL queries](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin 8.2 - More than 5200 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.2 - 5200 Funktionen in einem Plugin](#)
- [Sum up values in JSON with MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)
- [New FM.Loop function](#)

79.41.2 FileMaker Magazin

- [Ausgabe 4/2019, Seite 33](#)

Created 25th March 2018, last changed 9th October 2019.

79.42 FM.MainThreadID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.MainThreadID")

Result Returns number or error.

Description

See also

- 79.40 FM.IsMainThread

3967

79.42.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr3](#)

Created 26th March 2015, last changed 26th March 2015.

79.43 FM.MouseWheelScriptTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	6.3	Yes	Yes	No	No	No

MBS("FM.MouseWheelScriptTrigger"; FileName; ScriptName { ; MinDelay; IgnoreRectangleX; IgnoreRectangleY; IgnoreRectangleW; IgnoreRectangleH })

Parameters

FileName

The file name for the script.

Get(FileName)

ScriptName

The name of the script to trigger. Can be empty to disable feature.

"WheelScriptTrigger"

MinDelay

Optional

The minimum delay between script triggers. Default is 1. Could be 0.5 for a quicker reaction.

1

IgnoreRectangleX

Optional

Available in MBS FileMaker Plugin 7.1 or newer.

The X position of the rectangle where scroll action is ignored if the mouse is inside. Relative to the parent window. Default is -1 to have no such rectangle.

Rectangle area is Windows only.

135

IgnoreRectangleY

Optional

Available in MBS FileMaker Plugin 7.1 or newer.

The Y position of the rectangle where scroll action is ignored if the mouse is inside. Relative to the parent window. Default is -1 to have no such rectangle.

55

IgnoreRectangleW

Optional

Available in MBS FileMaker Plugin 7.1 or newer.

The width of the rectangle where scroll action is ignored if the mouse is inside. Relative to the parent window. Default is -1 to have no such rectangle.

400

IgnoreRectangleH

Optional

Available in MBS FileMaker Plugin 7.1 or newer.

The height of the rectangle where scroll action is ignored if the mouse is inside. Relative to the parent window. Default is -1 to have no such rectangle.

500

Result Returns OK or error.

Description

If you like to have a script triggered to switch records on Windows with mouse wheel, you can use this function.

The script parameter is the delta on mouse wheel usage. 120 is one tick down and negative value means movement up.

The script is called at most once every second (by default).

Turn off by calling again with empty script name. This setting is global, so you may just install once in start script.

Add option to ignore a rectangle for plugin version 7.1.

Implemented for Mac and FileMaker 16 or newer with MBS Plugin 9.1.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Installs trigger:

```
MBS("FM.MouseWheelScriptTrigger"; Get(FileName); "MouseTrigger")
```

Sample MouseTrigger script to move between records:

```
If [ Get ( ActiveFieldName ) = "" ]
Set Variable [ $r; Value:Round(Get(ScriptParameter) / 120; 0) ]
Go to Record/Request/Page [ No dialog; Get ( RecordNumber ) + $r ]
// Set Variable [ $r; Value:MBS("Log"; "MouseWheel " & $r) ]
End If
```

See also

- [175.4 Log](#) 8233

Example Databases

- [MouseWheel scrolling through records](#)

79.43.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.1](#)

- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr3](#)
- [Scroll through records with mouse wheel on MacOS](#)
- [MBS FileMaker Plugin, version 7.1pr1](#)
- [MBS FileMaker Plugin, version 6.3pr1](#)

Created 27th May 2016, last changed 18th February 2019.

79.44 FM.NULL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.NULL")

Result Returns empty container.

Description

FileMaker doesn't really have a NULL value, but other databases make a difference between empty text ("") and no value (NULL).

This function returns a special container value with no content.

SQL.SetParamValue and SQL.SetParamValues can use this value to pass NULL to the database.

Examples

get null value:

```
MBS("FM.NULL")
```

See also

- 156.117 SQL.SetParamTypesValues 7467
- 156.119 SQL.SetParamValue 7470
- 156.120 SQL.SetParamValues 7472

79.44.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 20th April 2015, last changed 14th September 2015.

79.45 FM.PatchNotificationProblem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.1	Yes	No	No	No	No

MBS("FM.PatchNotificationProblem")

Result Returns OK or error.

Description

FileMaker 16.0.4 on MacOS 10.13.3 has a bug that can cause crashes with scroll gestures.

Crash reports show message about "terminating with uncaught exception" and stack trace shows `_beginScrollGesture` method called which posts a notification to a non-existing observer.

The plugin, if activated with this function will watch for those notifications and just ignore them, so the observer is not called and the crash does not happen.

79.45.1 Blog Entries

- [FileMaker Pro 16.0.5 Update available](#)
- [Crashes with FileMaker 16.0.4 with scroll gesture notification](#)

Created 2nd March 2018, last changed 2nd March 2018.

79.46 FM.QueryBaseTableNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	3.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.QueryBaseTableNames" { ; FileName })

Parameters

FileName

Optional

The database file name to look into. If empty or missing, we look in current database. (new in 6.2)
"Contacts"

Result Returns names of tables separated by return.

Description

See also FM.QueryTableNames.

Examples

Query tables in database Kontakte:

MBS("FM.QueryBaseTableNames"; "Kontakte")

See also

- 80.6 FM.ExecuteFileSQL 4079
- 80.8 FM.ExecuteSQL 4088
- 79.49 FM.QueryTableNames 3982

79.46.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr3](#)
- [MBS Filemaker Plugin, version 3.1pr3](#)

Created 18th August 2014, last changed 12nd April 2016.

79.47 FM.QueryFieldsForBaseTableName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	3.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.QueryFieldsForBaseTableName"; BaseTableName { ; FileName })

(old name: FM.QueryFields)

Parameters

BaseTableName

The base table name to query.
"test"

FileName

Optional
The database file name to look into. If empty or missing, we look in current database. (new in 6.2)
"Contacts"

Result Returns field names of fields separated by return.

Description

See also FM.QueryFieldsForTableName.

Examples

Query fields in table Kontakte in file Kontakte:

MBS("FM.QueryFieldsForBaseTableName"; "Kontakte"; "Kontakte")

See also

- 80.6 FM.ExecuteFileSQL 4079
- 80.8 FM.ExecuteSQL 4088
- 79.48 FM.QueryFieldsForTableName 3980

79.47.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)
- [MBS FileMaker Plugin, version 6.2pr3](#)
- [MBS Filemaker Plugin, version 3.1pr3](#)

Created 18th August 2014, last changed 18th April 2016.

79.48 FM.QueryFieldsForTableName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	3.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.QueryFieldsForTableName"; TableName { ; FileName })

Parameters

TableName

The table name to query.

"test"

FileName

Optional

The database file name to look into. If empty or missing, we look in current database. (new in 6.2)

"Contacts"

Result Returns field names of fields separated by return.

Description

See also FM.QueryFieldsForBaseTableName.

Examples

Query field names for Contacts table:

```
MBS( "FM.QueryFieldsForTableName"; "Contacts" )
```

Query fields for contacts in contacts database:

```
MBS( "FM.QueryFieldsForTableName"; "Kontakte"; "Kontakte" )
```

Build quoted list of fields:

```
"\" & substitute(MBS( "FM.QueryFieldsForTableName"; "Aufgaben" ); §; "\", \") & "\""
```

See also

- 80.6 FM.ExecuteFileSQL 4079
- 80.8 FM.ExecuteSQL 4088
- 79.47 FM.QueryFieldsForBaseTableName 3979
- 80.26 FM.SQL.Execute 4138
- 100.2 FM.SQL.JSONRecord 5234

79.48.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)
- [MBS FileMaker Plugin, version 6.2pr3](#)
- [MBS Filemaker Plugin, version 3.1pr3](#)

Created 18th August 2014, last changed 7th December 2017.

79.49 FM.QueryTableNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	3.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.QueryTableNames" { ; FileName })

(old name: FM.QueryTables)

Parameters

FileName

Optional

The database file name to look into. If empty or missing, we look in current database. (new in 6.2)
"Contacts"

Result Returns names of tables separated by return.

Description

See also FM.QueryBaseTableNames.

Examples

Query tables in database Kontakte:

```
MBS( "FM.QueryTableNames"; "Kontakte" )
```

See also

- 80.6 FM.ExecuteFileSQL 4079
- 80.8 FM.ExecuteSQL 4088
- 79.46 FM.QueryBaseTableNames 3978

79.49.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr3](#)
- [MBS Filemaker Plugin, version 3.1pr3](#)

Created 18th August 2014, last changed 18th April 2016.

79.50 FM.RunDatabaseDesignReport

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.0	Yes	Yes	No	No	No

MBS("FM.RunDatabaseDesignReport"; UseXML { ; Path; OpenWhenDone; FileNames })

(old name: FM.RunDataDesignReport)

Parameters

UseXML

Pass 1 to use XML or 0 to use HTML for the report.

1

Path

Optional

The path where to save for MacOS. If you don't specify a path, the last one used in the dialogs will be used.

No longer used on MacOS Catalina due to raised security by Apple which prevents us changing the dialog. "/tmp"

OpenWhenDone

Optional

Whether to open file when done. Pass 1 to open file after creating DDR or 0 to not open. Default is 0.

0

FileNames

Optional

Available in MBS FileMaker Plugin 9.4 or newer.

The list of filenames to set checkmarks for. Names must match exactly to be checked. MacOS only.

"test.fmp12\$other.fmp12"

Result Returns OK or error.

Description

This must be the last step in a script, because it triggers an asynchronously process to make a report. So the plugin will run the menu command, set the options, press the create button and the save button for you. If you like to run other things later, simply run a script 5 seconds later with FM.RunScriptLater.

FileMaker and the dialogs may need to be frontmost to have this work well.

May not work if debugger window is visible.

See also FM.RunSaveAsXML for FileMaker 18.

Needs accessibility permissions in system preferences to click save button for MacOS Catalina.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to

a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Make a XML report to temp folder on Mac:

```
Set Variable [ $r; Value:MBS( "FM.RunDataDesignReport"; 1; "/tmp" ) ]
```

Export to desktop:

```
Set Variable [ $r; Value:MBS( "FM.RunDataDesignReport"; 1; "/Users/cs/Desktop" ) ]  
// please change path!
```

See also

- 79.51 FM.RunSaveAsXML 3985
- 79.52 FM.RunScript 3986
- 79.54 FM.RunScriptLater 3990
- 121.2 Path.FileMakerPathToNativePath 6139

79.50.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr3](#)
- [MBS FileMaker Plugin, version 9.4pr2](#)
- [MBS FileMaker Plugin, version 9.2pr6](#)

Created 15th November 2014, last changed 10th February 2020.

79.51 FM.RunSaveAsXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	9.2	Yes	Yes	No	No	No

MBS("FM.RunSaveAsXML"; Path)

Parameters

Path

The path where to save for MacOS. If you don't specify a path, the last one used in the dialogs will be used. `"/Users/cs/Desktop/test.xml"`

Result Returns OK or error.

Description

This requires FileMaker Pro Advanced 18 and performs the relevant menu command for you.

This must be the last step in a script, because it triggers an asynchronously process to make a report. So the plugin will run the menu command, enters the file name and the save button for you. If you like to run other things later, simply run a script 5 seconds later with `FM.RunScriptLater`.

May not work if debugger window is visible.

Examples

Save as XML on desktop:

```
Set Variable [ $r ; Value: MBS( "FM.RunSaveAsXML"; "/Users/cs/Desktop/test.xml" ) ]
```

See also

- [79.50 FM.RunDatabaseDesignReport](#) 3983
- [79.52 FM.RunScript](#) 3986
- [79.54 FM.RunScriptLater](#) 3990

79.51.1 Blog Entries

- [FileMaker 18 Platform available](#)
- [MBS FileMaker Plugin, version 9.2pr6](#)

Created 30th April 2019, last changed 30th April 2019.

79.52 FM.RunScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	1.2	Yes	Yes	No	No	Yes

MBS("FM.RunScript"; FileName; ScriptName { ; ScriptParameter; ScriptControl })

Parameters

FileName

The name of the FileMaker File that contains the script

ScriptName

The name of the script to run.

ScriptParameter

Optional

The Parameter to Pass to the script.

ScriptControl

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The script control mode. Can be Pause, Halt, Exit or Resume. Default is Pause.

"pause"

Description

You can also pass a text string to the Script as a Parameter. The parameter can be retrieved by using Get(ScriptParameter) in the script that plug-in is calling. The basic concept behind triggering scripts with a plug-in is as follows. In order for the Plug-in to call a script it must be part of a calculation that is evaluated. For example to cause a script to run when a field is exited, you place the MBS function call in the auto-enter calculation of the field you want to serve as the trigger. When the field is exited the Auto-enter calculation is evaluated and the MBS function is fired off. Placing the function call in the Field Validation calculation of the trigger field will cause the script to run on Record Exit. NOT on field Exit. This is because Validations by calculation happen at when the record is exited. Anywhere you have access to the calculation dialog you can place a Script trigger function. When the calculation is evaluated the script will run. This includes the new conditional formatting calculations that can be placed on many layout objects. While this opens up new opportunities, you might find that your script is being called continuously.

see also FM.RunScriptIdle, FM.RunScriptLater and Schedule functions.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Trigger a script

```
Let(
[
```

79.52. FM.RUNSCRIPT

3987

```
trigger = MBS("FM.RunScript"; Get(FileName); "Triggered Script"; "")
];
1
)
```

Trigger script by ID:

```
MBS( "FM.RunScript"; "test.fmp12"; "12" /* PrintRecords */; "Hello World")
```

See also

- [34.10 App.OpenFile](#) 918
- [69.6 DragDrop.CreateWithControl](#) 2487
- [79.50 FM.RunDatabaseDesignReport](#) 3983
- [79.51 FM.RunSaveAsXML](#) 3985
- [79.53 FM.RunScriptIdle](#) 3988
- [79.54 FM.RunScriptLater](#) 3990
- [79.77 FM.StopScriptIdle](#) 4034
- [93.2 ImageView.CreateWithControl](#) 5092
- [106.8 MapView.CreateWithControl](#) 5650
- [165.5 TextView.CreateWithControl](#) 7882

Example Databases

- [ScriptTriggers/Trigger Script On Field Exit](#)
- [ScriptTriggers/Trigger Script On New Record](#)
- [ScriptTriggers/Trigger Script On Record Exit](#)
- [Utility functions/RunScript](#)
- [Utility functions/Schedules](#)

79.52.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr1](#)

Created 18th August 2014, last changed 11st December 2019.

79.53 FM.RunScriptIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	3.3	Yes	Yes	No	No	No

MBS("FM.RunScriptIdle"; DelaySeconds; FileName; ScriptName { ; ScriptParameter })

Parameters

DelaySeconds

The Number of Seconds to wait before running the script. Moving the mouse or using keyboard will reset the counter.

10

FileName

The name of the file that contains the script to be run

Get(FileName)

ScriptName

The exact name of the script to run

"TestScript"

ScriptParameter

Optional

The Script Parameter to pass to the script

Result Returns OK on success or error message on failure.

Description

This script is called in FileMaker whenever no user activity has been for the given amount of time.

You can also pass a text string to the Script as a Parameter. The parameter can be retrieved by using Get(ScriptParameter) in the script that plug-in is calling.

see also Schedule.StartScriptOnIdle, FM.StopScriptIdle, FM.RunScript, FM.RunScriptLater and Schedule functions.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Start idle script:

```
Set Variable [ $r; Value:MBS( "FM.RunScriptIdle"; 10; Get(FileName); "Trigger" ) ]
```

See also

- 79.52 FM.RunScript

79.53. <i>FM.RUNSCRIPTIDLE</i>	3989
• 79.54 FM.RunScriptLater	3990
• 79.77 FM.StopScriptIdle	4034
• 140.40 Schedule.StartScriptOnIdle	6835

Example Databases

- [Utility functions/Idle](#)
- [Utility functions/RunScript](#)

79.53.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr6](#)
- [MBS Filemaker Plugin, version 3.4pr2](#)
- [MBS Filemaker Plugin, version 3.3pr3](#)

Created 18th August 2014, last changed 9th January 2020.

79.54 FM.RunScriptLater

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	1.2	Yes	Yes	No	No	Yes

MBS("FM.RunScriptLater"; DelaySeconds; FileName; ScriptName { ; ScriptParameter })

Parameters

DelaySeconds

The Number of Seconds to wait before running the script.

10

FileName

The name of the file that contains the script to be run

Get(FileName)

ScriptName

The exact name of the script to run

"TestScript"

ScriptParameter

Optional

Optional, the Script Parameter to pass to the script

Result Returns OK on success or error message on failure.

Description

You can also pass a text string to the Script as a Parameter. The parameter can be retrieved by using Get(ScriptParameter) in the script that plug-in is calling.

see also Schedule.StartScriptAfterDelay, FM.RunScriptIdle, FM.RunScript and Schedule functions.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Trigger a script later

```
Let(
[
/*-----PARAMETERS-----*/
DelaySeconds = 5;
FileName = Get ( FileName );
ScriptName = "Triggered Script Demo 2";
ScriptParameter = "Some Data"
];
/*-----FUNCTION-----*/
```

79.54. *FM.RUNSCRIPTLATER* 3991

```
MBS(  
"FM.RunScriptLater";  
DelaySeconds;  
FileName;  
ScriptName;  
ScriptParameter  
)  
)
```

See also

- 34.10 App.OpenFile 918
- 69.6 DragDrop.CreateWithControl 2487
- 79.50 FM.RunDatabaseDesignReport 3983
- 79.51 FM.RunSaveAsXML 3985
- 79.52 FM.RunScript 3986
- 79.53 FM.RunScriptIdle 3988
- 93.2 ImageView.CreateWithControl 5092
- 106.8 MapView.CreateWithControl 5650
- 140.37 Schedule.StartScriptAfterDelay 6829
- 165.5 TextView.CreateWithControl 7882

Example Databases

- [Drag and Drop/DragTest Popover](#)
- [iOS/MapKit iOS](#)
- [Mac only/Process FrontMost](#)
- [RemoteControl/Press keys](#)
- [Utility functions/RunScript](#)
- [WebViewer/WebViewer IsLoading](#)

Created 18th August 2014, last changed 16th September 2019.

79.55 FM.SQL.Avg

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	9.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Avg"; SQLref; Column { ; firstRow; lastRow })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Column

The index of the column. Default is 0.

0

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

Result Returns number or error.

Description

You got a record set in memory and we can walk over a column in a given row range to add the sum value and later divide by number of values.

Examples

Query once and make several calculations:

```
# let FileMaker query data once
Set Variable [ $Records ; Value: MBS( "FM.SQL.Execute"; Get(FileName); "SELECT Price FROM Produkte" ) ]
# Now get sum, min, max and avg
Set Variable [ $sum ; Value: MBS( "FM.SQL.Sum"; $records; 0 ) ]
Set Variable [ $min ; Value: MBS( "FM.SQL.Min"; $records; 0 ) ]
Set Variable [ $max ; Value: MBS( "FM.SQL.Max"; $records; 0 ) ]
Set Variable [ $avg ; Value: MBS( "FM.SQL.Avg"; $records; 0 ) ]
Set Variable [ $text ; Value: MBS( "FM.SQL.Text"; $records; "" /* firstRow */; "" /* lastRow */; "" /* firstCol */; "" /* lastCol */; ", " /* rowSep */ ) ]
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $records ) ]
Show Custom Dialog [ "Sum: " & $sum & §& "Min: " & $min & §& "Max: " & $max & §& "Avg: " & $avg & §& "text: " & $text ]
```

79.55. *FM.SQL.AVG* 3993

See also

- 80.26 *FM.SQL.Execute* 4138
- 79.65 *FM.SQL.Max* 4014
- 79.66 *FM.SQL.Min* 4016
- 80.34 *FM.SQL.Release* 4155
- 80.35 *FM.SQL.RowCount* 4157
- 79.69 *FM.SQL.Sum* 4022
- 80.36 *FM.SQL.Text* 4159
- 156.10 *SQL.Execute* 7309

79.55.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr1](#)
- [FileMaker SQL with Sum, Min, Max and Avg on results](#)

Created 30th January 2019, last changed 30th January 2019.

79.56 FM.SQL.CSV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.CSV"; SQLref { ; firstRow; lastRow; firstCol; lastCol; rowSeparator; colSeparator })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$\$SQLRef

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

firstCol

Optional

The index of first column. Default is 0.

0

lastCol

Optional

The index of last column. Default is FM.SQL.FieldCount-1.

6

rowSeparator

Optional

The row separator. Default is CR.

Char(13)

colSeparator

Optional

The column separator. Default is semicolon.

”;"

Result Returns text or error.

Description

You can use this method to quickly get all fields in a given area as text.

If needed, we put values in quotes and escape quotes and newlines.

Please use Text.WriteTextFile to write to text file if you need CSV export.

Examples

Query fields and export as text and CSV:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "SQL error"; $sql ]
Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
# Write to text file
Set Variable [ $text; Value:MBS( "FM.SQL.Text"; $sql ) ]
Set Variable [ $desktopFolder; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $desktopFolder; "fields.txt" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
# Write to text file
Set Variable [ $text; Value:MBS( "FM.SQL.CSV"; $sql ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $desktopFolder; "fields.csv" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
# Cleanup
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If
```

See also

- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 80.36 FM.SQL.Text 4159
- 81.8 Folders.UserDesktop 4177
- 124.6 IsError 6266
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321
- 164.68 Text.WriteTextFile 7871

79.56.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr3](#)
- [MBS FileMaker Plugin, version 7.0pr2](#)

79.56.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 8th January 2017, last changed 8th January 2017.

79.57 FM.SQL.Execute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Execute"; FileName; SQL Statement { ; Params })

Parameters**FileName**

The target database name. Can be empty to not limit query to one database.

""

SQL Statement

SQL Statement as a Text string

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns reference number or error.

Description

This function requires FileMaker 11 or newer. Please use FM.ExecuteSQL on FileMaker 10 or older.

Returns a SQL Reference, so you can use functions like FM.SQL.RowCount, FM.SQL.FieldCount, FM.SQL.Field and FM.SQL.FieldType to query result. Don't forget to use FM.SQL.Release to release the result from memory when you are done with it.

Examples

Query only first row:

```
MBS( "FM.SQL.Execute"; ""; "SELECT * FROM ProductImages FETCH FIRST 1 ROWS ONLY")
```

SELECT records

```
MBS("FM.SQL.Execute"; ""; "select * from Contacts")
```

Select with parameter:

```
MBS("FM.SQL.Execute"; ""; "select Menge from Boxen where Artikel_Nr=? ORDER BY Menge DESC"; "ABC123")
```

Query some values:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; ""; "select * from Clients" ) ]
```

```
If [ MBS("IsError" ) ]
```

```
Show Custom Dialog [ "SQL error"; $sql ]
```

```

Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If

```

Query record as JSON:

```

Let ( [
fields = MBS( "FM.QueryFieldsForTableName"; "Contacts");
Records = MBS( "FM.SQL.Execute"; ""; "SELECT \" & substitute(fields; $; "\", \") & "\" FROM
\"Contacts\" WHERE \"First\" = ?"; "Joe");

json = MBS( "FM.SQL.JSONRecord"; Records; 0; fields);
r = MBS( "FM.SQL.Release"; Records ) ]
; json )

```

Make a JSON query in one Let statment:

```

Let (
[
$sdatt = "10/1/2019 00:00";
$edatt = "10/10/2019 00:00";
sku = "'PARbh50','PARgy50'";
sql1 = MBS("FM.SQL.Execute"; ""; "Select docnum,linetotal,db from \"MyTable\" where ItemCode in (\"
& sku & ") and DocDate between ? and ?"; $sdatt; $edatt);
json = MBS( "FM.SQL.JSONRecords"; sql1; "DocNum$LineTotal$DB"; 1);
r = MBS( "FM.SQL.Release"; sql1 )
]; json
)

```

See also

- 80.27 FM.SQL.Field 4141
- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 100.2 FM.SQL.JSONRecord 5234
- 100.3 FM.SQL.JSONRecords 5236
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 79.69 FM.SQL.Sum 4022
- 124.6 IsError 6266
- 156.10 SQL.Execute 7309

79.57. *FM.SQL.EXECUTE*

3999

- 156.16 SQL.FieldCount

7321

Example Databases

- [SQL in FileMaker/ImageGallery](#)
- [SQL in FileMaker/SQL Select Container](#)
- [SQL to other databases/SQL Export](#)
- [Third Party/FileMaker Snippet Storage](#)

79.57.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [FileMaker SQL with Sum, Min, Max and Avg on results](#)
- [MBS FileMaker Plugin, version 8.5pr4](#)
- [Image Gallery in FileMaker using SQL](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [FileMaker Custom function to query a value from other table or file](#)
- [MBS FileMaker Plugin 7.0 - More than 4400 Functions In One Plugin](#)
- [MBS FileMaker Plugin 7.0 - 4400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 6.4 for OS X/Windows](#)
- [Execute SQL in FileMaker and get back native field types](#)

79.57.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)

Created 18th April 2015, last changed 16th December 2019.

79.58 FM.SQL.Field

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Field"; SQLref; Row; Column)

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.
\$SQLRef

Row

The row number from 0 to FM.SQL.RowCount-1.
\$row

Column

The column number from 0 to FM.SQL.FieldCount-1.
\$col

Result Returns value or error.

Description

Native data type is preserved so this function can returns styled text, number, time, date, timestamp and container.

Examples

Query field values:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
# query first field of first row:
Set Variable [ $value; MBS( "FM.SQL.Field"; $sql; 0; 0 ) ]
# query other field
Set Variable [ $value; MBS( "FM.SQL.Field"; $sql; $row; $col ) ]
Set Variable [ $r; MBS( "FM.SQL.Release"; $sql ) ]
```

See also

- 80.25 FM.SQL.CSV 4135
- 80.26 FM.SQL.Execute 4138
- 80.28 FM.SQL.FieldCount 4143
- 80.29 FM.SQL.FieldType 4145
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157

79.58. <i>FM.SQL.FIELD</i>	4001
• 80.36 FM.SQL.Text	4159
• 109.32 Matrix.Text	5820
• 156.10 SQL.Execute	7309
• 156.16 SQL.FieldCount	7321

Example Databases

- [SQL in FileMaker/ImageGallery](#)
- [SQL in FileMaker/SQL Select Container](#)
- [SQL to other databases/SQL Export](#)

79.58.1 Blog Entries

- [Image Gallery in FileMaker using SQL](#)
- [FileMaker Custom function to query a value from other table or file](#)
- [MBS FileMaker Plugin, version 6.0pr6](#)
- [Execute SQL in FileMaker and get back native field types](#)

79.58.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)

Created 18th April 2015, last changed 1st March 2019.

79.59 FM.SQL.FieldCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.FieldCount"; SQLref)

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Result Returns number or error.

Description

Examples

Query some values:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "SQL error"; $sql ]
Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If
```

See also

- 80.25 FM.SQL.CSV 4135
- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.29 FM.SQL.FieldType 4145
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 80.36 FM.SQL.Text 4159
- 109.32 Matrix.Text 5820
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321

Example Databases

- [SQL in FileMaker/SQL Select Container](#)

79.59.1 Blog Entries

- [Execute SQL in FileMaker and get back native field types](#)

Created 18th April 2015, last changed 8th January 2017.

79.60 FM.SQL.FieldType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.FieldType"; SQLref; Row; Column)

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Row

The row number from 0 to FM.SQL.RowCount-1.

\$row

Column

The column number from 0 to FM.SQL.FieldCount-1.

\$col

Result Returns text or error.

Description

Returns text, date, number, time, timestamp, boolean, container or invalid.

See also

- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.35 FM.SQL.RowCount 4157
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321

Example Databases

- [SQL in FileMaker/SQL Select Container](#)

79.60.1 Blog Entries

- [Execute SQL in FileMaker and get back native field types](#)

Created 18th April 2015, last changed 14th September 2015.

79.61 FM.SQL.InsertRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "FM.SQL.InsertRecords"; SQLref; InsertFileName; InsertTableName; FieldNames { ; StartRow; EndRow } )
```

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$\$SQLRef

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model"

StartRow

Optional

The index of the start row in the current recordset. First row is 0.

0

EndRow

Optional

The index of the end row in the current recordset. First row is 0. Last Row would be FM.SQL.RowCount-1.

0

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from a query in FileMaker database into a FileMaker table.

Please provide field names in FileMaker. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

Function will fail if data types in source and dest fields do not match for assignment. e.g. date and time fields will not work, only timestamp fields.

For insert from SQL Connection into FileMaker database, please use SQL.InsertRecords.

Examples

Copy records:

```
# select some data
Set Variable [ $Records; Value:MBS( "FM.SQL.Execute"; "" ; "SELECT FirstName, LastName, Birthday
FROM test" ) ]
# now insert them somewhere else
Set Variable [ $r; Value:MBS( "FM.SQL.InsertRecords"; $Records; "" ; "test"; "FirstName$LastName$Birth-
Day" ) ]
# and free record set
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $Records ) ]
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.26 FM.SQL.Execute 4138
- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 156.10 SQL.Execute 7309
- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397

79.61.1 Blog Entries

- [MBS FileMaker Plugin 6.4 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)

79.61.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 1st August 2016, last changed 23th November 2017.

79.62 FM.SQL.InsertRecordsToSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.InsertRecordsToSQL"; SQLref; Connection; InsertTableName; FieldNames { ; StartRow; EndRow; Replace })

Parameters**SQLref**

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

InsertTableName

The name of the table to insert record into.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model\$Names"

StartRow

Optional

The index of the start row. First row is 0. Pass -1 or nothing for default which is starting with row 0.

-1

EndRow

Optional

The index of the end row. First row is 0. Last Row would be FM.SQL.RowCount-1. Pass -1 to use all rows and the plugin will internally use RowCount-1.

-1

Replace

Optional

Available in MBS FileMaker Plugin 7.1 or newer.

Set to 1 to replace existing entries. Currently available for MySQL and databases with same syntax.

0

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from a query in FileMaker database into a SQL database. Please provide field names in other table. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Reports an error if field name list doesn't match column count of the query result.

Function will fail if data types in source and dest fields do not match for assignment. e.g. date and time fields will not work, only timestamp fields.

For insert within FileMaker, please use FM.SQL.InsertRecords.

Examples

Insert Records to SQL database:

```
Set Variable [ $InsertResult; Value:MBS( "FM.SQL.InsertRecordsToSQL"; $Records; $connection; $BaseTableName; $FieldNames ) ]
```

Copy records to SQLite:

```
Set Variable [ $Connection ; Value: MBS("SQL.NewConnection") ]
# Tell plugin where SQLite library is
Set Variable [ $result ; Value: MBS("SQL.InternalSQLiteLibrary.Activate") ]
# Tell plugin we want to use SQLite
Set Variable [ $result ; Value: MBS("SQL.SetClient"; $Connection; "SQLite") ]
# Connect to database in read/write/create mode. Creates new file if none exists.
Set Variable [ $result ; Value: MBS("SQL.Connect"; $Connection; "/Users/cs/Desktop/mydatabase.sqlite") ]
]
If [ $result = "OK" ]
# Query records in FileMaker
Set Variable [ $Records ; Value: MBS( "FM.SQL.Execute"; Get(FileName); "SELECT FirstName, LastName, Birthday FROM People" ) ]
# Transfer to other database
Set Variable [ $Records ; Value: MBS( "FM.SQL.InsertRecordsToSQL"; $Records; $Connection; "People"; "FirstName$LastName$Birthday" ) ]
# Cleanup
Set Variable [ $result2 ; Value: MBS("SQL.Commit"; $Connection) ]
Set Variable [ $result2 ; Value: MBS( "FM.SQL.Release"; $Records ) ]
If [ $result = "OK" ]
Show Custom Dialog [ "Error: " & $result ]
Else
Show Custom Dialog [ "Record exported." ]
End If
End If
Set Variable [ $result2 ; Value: MBS("SQL.FreeConnection"; $Connection) ]
```

See also

- 80.26 FM.SQL.Execute 4138
- 80.30 FM.SQL.InsertRecords 4146
- 109.18 Matrix.InsertRecordsToSQL 5800
- 156.7 SQL.Commit 7300

79.62. <i>FM.SQL.INSERTRECORDSTOSQL</i>	4009
• 156.8 SQL.Connect	7302
• 156.10 SQL.Execute	7399
• 156.69 SQL.InsertRecords	7397
• 156.70 SQL.InternalSQLiteLibrary.Activate	7399
• 156.80 SQL.NewConnection	7412
• 156.97 SQL.SetClient	7434

Example Databases

- [SQL to other databases/SQL Export](#)
- [Third Party/FileMaker Snippet Storage](#)

79.62.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS FileMaker Plugin 6.4 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)

79.62.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)

Created 1st August 2016, last changed 7th November 2018.

79.63 FM.SQL.JSONRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 100 JSON	8.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.JSONRecord"; SQLref; Row; FieldNames { ; Flags })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLref

Row

The row you like to get.

1

FieldNames

A list of field names for the JSON.

"Model\$Names"

Flags

Optional

The flags for the json creation. Pass 1 to get all values as text. Pass 2 to get all dates, times and timestamps in SQL format.

1+2

Result Returns JSON text or error.

Description

You provide list of field names, which should be in same order as fields in SQL result.

Optionally we can return SQL dates, times and timestamps as SQL format.

Containers are returned as Base64 encoded data.

Examples

Query JSON record:

```
Set Variable [ $sql ; Value: MBS( "FM.SQL.Execute"; "" ; "SELECT \"First\", \"Last\", Birthday, \"Photo Container\" FROM Contacts" ) ]
```

```
Set Variable [ $json ; Value: MBS( "FM.SQL.JSONRecord"; $sql; 0; "First$Last$Birthday$Photo"; 2 ) ]
```

```
Show Custom Dialog [ "JSON" ; $json ]
```

```
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $sql ) ]
```

Query record as JSON:

```
Let ( [
fields = MBS( "FM.QueryFieldsForTableName"; "Contacts" );
Records = MBS( "FM.SQL.Execute"; "" ; "SELECT \"\" & substitute(fields; $; "\", \") & "\" FROM \"Contacts\" WHERE \"First\" = ?"; "Joe");
```

79.63. *FM.SQL.JSONRECORD*

4011

```
json = MBS( "FM.SQL.JSONRecord"; Records; 0; fields);  
r = MBS( "FM.SQL.Release"; Records ) ]  
; json )
```

See also

- 79.48 *FM.QueryFieldsForTableName* 3980
- 80.26 *FM.SQL.Execute* 4138
- 100.3 *FM.SQL.JSONRecords* 5236
- 80.34 *FM.SQL.Release* 4155
- 156.10 *SQL.Execute* 7309

79.63.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 4th March 2018, last changed 8th April 2019.

79.64 FM.SQL.JSONRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 100 JSON	8.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.JSONRecords"; SQLref; FieldNames { ; Flags })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

FieldNames

A list of field names for the JSON.

"Model\$Names"

Flags

Optional

The flags for the json creation. Pass 1 to get all values as text. Pass 2 to get all dates, times and timestamps in SQL format.

1+2

Result Returns JSON text or error.

Description

You provide list of field names, which should be in same order as fields in SQL result.

Optionally we can return SQL dates, times and timestamps as SQL format.

Containers are returned as Base64 encoded data.

Examples

Query JSON:

```
Set Variable [ $sql ; Value: MBS( "FM.SQL.Execute"; "" ; "SELECT \"First\", \"Last\", Birthday, \"Photo Container\" FROM Contacts" ) ]
```

```
Set Variable [ $json ; Value: MBS( "FM.SQL.JSONRecords"; $sql; "First$Last$Birthday$Photo"; 2 ) ]
```

```
Show Custom Dialog [ "JSON" ; $json ]
```

```
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $sql ) ]
```

Make a JSON query in one Let statment:

```
Let (
```

```
[
```

```
$sdat = "10/1/2019 00:00";
```

```
$edat = "10/10/2019 00:00";
```

```
sku = "'PARbh50','PARgy50'";
```

```
sql1 = MBS("FM.SQL.Execute"; "" ; "Select docnum,linetotal,db from \"MyTable\" where ItemCode in (\" & sku & ") and DocDate between ? and ?"; $sdat; $edat);
```

```
json = MBS( "FM.SQL.JSONRecords"; sql1; "DocNum$LineTotal$DB"; 1);
```

```
r = MBS( "FM.SQL.Release"; sql1 )
```


79.64. *FM.SQL.JSONRECORDS* 4013
] ; json
)

See also

- 80.26 *FM.SQL.Execute* 4138
- 100.2 *FM.SQL.JSONRecord* 5234
- 80.34 *FM.SQL.Release* 4155
- 156.10 *SQL.Execute* 7309

79.64.1 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 4th March 2018, last changed 16th December 2019.

79.65 FM.SQL.Max

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	9.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Max"; SQLref; Column { ; firstRow; lastRow })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Column

The index of the column. Default is 0.

0

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

Result Returns number or error.

Description

You got a record set in memory and we can walk over a column in a given row range to find the maximum value.

Examples

Query once and make several calculations:

```
# let FileMaker query data once
Set Variable [ $Records ; Value: MBS( "FM.SQL.Execute"; Get(FileName); "SELECT Price FROM Produkte" ) ]
# Now get sum, min, max and avg
Set Variable [ $sum ; Value: MBS( "FM.SQL.Sum"; $records; 0 ) ]
Set Variable [ $min ; Value: MBS( "FM.SQL.Min"; $records; 0 ) ]
Set Variable [ $max ; Value: MBS( "FM.SQL.Max"; $records; 0 ) ]
Set Variable [ $avg ; Value: MBS( "FM.SQL.Avg"; $records; 0 ) ]
Set Variable [ $text ; Value: MBS( "FM.SQL.Text"; $records; "" /* firstRow */; "" /* lastRow */; "" /* firstCol */; "" /* lastCol */; ", " /* rowSep */ ) ]
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $records ) ]
Show Custom Dialog [ "Sum: " & $sum & §& "Min: " & $min & §& "Max: " & $max & §& "Avg: " & $avg & §& "text: " & $text ]
```

79.65. *FM.SQL.MAX* 4015

See also

- 79.55 *FM.SQL.Avg* 3992
- 80.26 *FM.SQL.Execute* 4138
- 79.66 *FM.SQL.Min* 4016
- 80.34 *FM.SQL.Release* 4155
- 80.35 *FM.SQL.RowCount* 4157
- 79.69 *FM.SQL.Sum* 4022
- 80.36 *FM.SQL.Text* 4159
- 156.10 *SQL.Execute* 7309

79.65.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr1](#)
- [FileMaker SQL with Sum, Min, Max and Avg on results](#)

Created 30th January 2019, last changed 30th January 2019.

79.66 FM.SQL.Min

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	9.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Min"; SQLref; Column { ; firstRow; lastRow })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Column

The index of the column. Default is 0.

0

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

Result Returns number or error.

Description

You got a record set in memory and we can walk over a column in a given row range to find the minimum value.

Examples

Query once and make several calculations:

```
# let FileMaker query data once
Set Variable [ $Records ; Value: MBS( "FM.SQL.Execute"; Get(FileName); "SELECT Price FROM Produkte" ) ]
# Now get sum, min, max and avg
Set Variable [ $sum ; Value: MBS( "FM.SQL.Sum"; $records; 0 ) ]
Set Variable [ $min ; Value: MBS( "FM.SQL.Min"; $records; 0 ) ]
Set Variable [ $max ; Value: MBS( "FM.SQL.Max"; $records; 0 ) ]
Set Variable [ $avg ; Value: MBS( "FM.SQL.Avg"; $records; 0 ) ]
Set Variable [ $text ; Value: MBS( "FM.SQL.Text"; $records; "" /* firstRow */; "" /* lastRow */; "" /* firstCol */; "" /* lastCol */; ", " /* rowSep */ ) ]
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $records ) ]
Show Custom Dialog [ "Sum: " & $sum & §& "Min: " & $min & §& "Max: " & $max & §& "Avg: " & $avg & §& "text: " & $text ]
```

79.66. *FM.SQL.MIN* 4017

See also

- 79.55 *FM.SQL.Avg* 3992
- 80.26 *FM.SQL.Execute* 4138
- 79.65 *FM.SQL.Max* 4014
- 80.34 *FM.SQL.Release* 4155
- 80.35 *FM.SQL.RowCount* 4157
- 79.69 *FM.SQL.Sum* 4022
- 80.36 *FM.SQL.Text* 4159
- 156.10 *SQL.Execute* 7309

79.66.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr1](#)
- [FileMaker SQL with Sum, Min, Max and Avg on results](#)

Created 30th January 2019, last changed 30th January 2019.

79.67 FM.SQL.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Release"; SQLref)

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Result Returns OK or error.

Description

Examples

Run command and free it later:

```
$ref = MBS( "FM.SQL.Execute"; "" ; "SELECT * FROM ProductImages FETCH FIRST 1 ROWS ONLY")
```

...

```
$r = MBS( "FM.SQL.Release"; $ref )
```

See also

- 79.55 FM.SQL.Avg 3992
- 80.25 FM.SQL.CSV 4135
- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.30 FM.SQL.InsertRecords 4146
- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 79.66 FM.SQL.Min 4016
- 80.35 FM.SQL.RowCount 4157
- 79.69 FM.SQL.Sum 4022

Example Databases

- [SQL in FileMaker/ImageGallery](#)
- [SQL in FileMaker/SQL Select Container](#)
- [SQL to other databases/SQL Export](#)
- [Third Party/FileMaker Snippet Storage](#)

79.67.1 Blog Entries

- [FileMaker SQL with Sum, Min, Max and Avg on results](#)
- [Image Gallery in FileMaker using SQL](#)
- [FileMaker Custom function to query a value from other table or file](#)
- [Execute SQL in FileMaker and get back native field types](#)

Created 18th April 2015, last changed 1st August 2016.

79.68 FM.SQL.RowCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.RowCount"; SQLref)

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Result Returns number or error.

Description

Examples

Query some values:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "SQL error"; $sql ]
Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If
```

See also

- 80.25 FM.SQL.CSV 4135
- 79.65 FM.SQL.Max 4014
- 79.66 FM.SQL.Min 4016
- 80.34 FM.SQL.Release 4155
- 79.69 FM.SQL.Sum 4022
- 109.5 Matrix.Avg 5784
- 109.17 Matrix.InsertRecords 5798
- 109.22 Matrix.Min 5805
- 109.31 Matrix.Sum 5818
- 156.10 SQL.Execute 7309

Example Databases

- [SQL in FileMaker/ImageGallery](#)
- [SQL in FileMaker/SQL Select Container](#)
- [SQL to other databases/SQL Export](#)

79.68.1 Blog Entries

- [Image Gallery in FileMaker using SQL](#)
- [Execute SQL in FileMaker and get back native field types](#)

79.68.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)

Created 18th April 2015, last changed 8th January 2017.

79.69 FM.SQL.Sum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	9.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Sum"; SQLref; Column { ; firstRow; lastRow })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Column

The index of the column. Default is 0.

0

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

Result Returns number or error.

Description

You got a record set in memory and we can walk over a column in a given row range to add the sum value.

Examples

Query once and make several calculations:

```
# let FileMaker query data once
Set Variable [ $Records ; Value: MBS( "FM.SQL.Execute"; Get(FileName); "SELECT Price FROM Produkte" ) ]
# Now get sum, min, max and avg
Set Variable [ $sum ; Value: MBS( "FM.SQL.Sum"; $records; 0 ) ]
Set Variable [ $min ; Value: MBS( "FM.SQL.Min"; $records; 0 ) ]
Set Variable [ $max ; Value: MBS( "FM.SQL.Max"; $records; 0 ) ]
Set Variable [ $avg ; Value: MBS( "FM.SQL.Avg"; $records; 0 ) ]
Set Variable [ $text ; Value: MBS( "FM.SQL.Text"; $records; "" /* firstRow */; "" /* lastRow */; "" /* firstCol */; "" /* lastCol */; ", " /* rowSep */ ) ]
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $records ) ]
Show Custom Dialog [ "Sum: " & $sum & $& "Min: " & $min & $& "Max: " & $max & $& "Avg: " & $avg & $& "text: " & $text ]
```

See also

79.69. <i>FM.SQL.SUM</i>	4023
• 79.55 FM.SQL.Avg	3992
• 80.26 FM.SQL.Execute	4138
• 79.65 FM.SQL.Max	4014
• 79.66 FM.SQL.Min	4016
• 80.34 FM.SQL.Release	4155
• 80.35 FM.SQL.RowCount	4157
• 80.36 FM.SQL.Text	4159
• 156.10 SQL.Execute	7309

79.69.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr1](#)
- [FileMaker SQL with Sum, Min, Max and Avg on results](#)

Created 30th January 2019, last changed 30th January 2019.

79.70 FM.SQL.Text

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Text"; SQLref { ; firstRow; lastRow; firstCol; lastCol; rowSeparator; colSeparator })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$\$SQLref

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

firstCol

Optional

The index of first column. Default is 0.

0

lastCol

Optional

The index of last column. Default is FM.SQL.FieldCount-1.

6

rowSeparator

Optional

The row separator. Default is CR.

Char(13)

colSeparator

Optional

The column separator. Default is tab character.

Char(9)

Result Returns text or error.

Description

You can use this method to quickly get all fields in a given area as text.

Examples

Query fields and export as text and CSV:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
```

```

If [ MBS("IsError") ]
Show Custom Dialog [ "SQL error"; $sql ]
Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
# Write to text file
Set Variable [ $text; Value:MBS( "FM.SQL.Text"; $sql ) ]
Set Variable [ $desktopFolder; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $desktopFolder; "fields.txt" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
# Write to text file
Set Variable [ $text; Value:MBS( "FM.SQL.CSV"; $sql ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $desktopFolder; "fields.csv" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
# Cleanup
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If

```

See also

- 80.25 FM.SQL.CSV 4135
- 80.28 FM.SQL.FieldCount 4143
- 79.66 FM.SQL.Min 4016
- 79.69 FM.SQL.Sum 4022
- 81.8 Folders.UserDesktop 4177
- 124.6 IsError 6266
- 121.1 Path.AddPathComponent 6135
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321
- 164.68 Text.WriteTextFile 7871

79.70.1 Blog Entries

- [FileMaker SQL with Sum, Min, Max and Avg on results](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 7.0pr2](#)

79.70.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 8th January 2017, last changed 8th January 2017.

79.71 FM.ScriptIDForScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.ScriptIDForScriptName"; ScriptName { ; FileName })

Parameters

ScriptName

The name of the script.

"Test"

FileName

Optional

Available in MBS FileMaker Plugin 7.5 or newer.

The name of the file to look inside. If empty, we default to current file.

Result Returns number or error.

Description

Examples

Query script ID:

MBS("FM.ScriptIDForScriptName"; "Send Campaign")

79.71.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)
- [MBS FileMaker Plugin, version 5.1pr2](#)

Created 23th March 2015, last changed 1st October 2017.

79.72 FM.ScriptNameForScriptID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

```
MBS( "FM.ScriptNameForScriptID"; ScriptID { ; FileName } )
```

Parameters

ScriptID

The ID of the script.

"123"

FileName

Optional

Available in MBS FileMaker Plugin 7.5 or newer.

The name of the file to look inside. If empty, we default to current file.

Result Returns name or error.

Description

Examples

Query script name:

```
MBS( "FM.ScriptNameForScriptID"; 146 )
```

79.72.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)
- [MBS FileMaker Plugin, version 5.1pr2](#)

Created 23th March 2015, last changed 1st October 2017.

79.73 FM.ScriptNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.ScriptNames" { ; FileName })

Parameters

FileName

Optional

Available in MBS FileMaker Plugin 7.5 or newer.

The name of the file to look inside. If empty, we default to current file.

Result Returns list or error.

Description

Same as calling ScriptNames(Get(FileName)).

79.73.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr4](#)
- [MBS FileMaker Plugin, version 7.5pr2](#)

Created 23th March 2015, last changed 1st October 2017.

79.74 FM.SetDisableContextualMenus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	10.1	Yes	Yes	No	No	No

MBS("FM.SetDisableContextualMenus"; Value)

Parameters

Value

Whether to disable the context menu via plugin. Pass 1 to disable or 0 to enable.

1

Result Returns OK or error.

Description

Can be set to 1 to disable contextual menu.

You may want to use layout triggers to disable menus when entering layout and enable when leaving.

See also

- [79.27 FM.GetDisableContextualMenus](#)

3934

79.74.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 14th January 2020, last changed 14th January 2020.

79.75 FM.SetSQLBatchMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.SetSQLBatchMode"; Value)

Parameters

Value

The chunk size. Default is 1, but 10 or 50 is usually faster.

1

Result Returns OK or error.

Description

For use in FM.InsertRecordQuery.
(others could be added)

Our plugin can send several SQL commands in one chunk which makes some operation much faster.

Examples

Move records, 50 inserts per chunk:

```
Set Variable [ $r ; Value: MBS( "ProgressDialog.Reset" ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.SetTitle"; "Please wait." ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.SetTopText"; "Copying records..." ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.Show" ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.SetProgress"; 0 ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.Update" ) ]

Set Variable [ $r ; Value: MBS( "FM.SetSQLBatchMode"; 50 ) ]
Set Variable [ $r ; Value: MBS( "FM.InsertSetUpdateProgressDialog"; 1 ) ]
Set Variable [ $r ; Value: MBS( "FM.InsertRecordQuery"; "" ; "dest"; $FieldNames; "" ; "SELECT \"f1\", \"f2\", \"f3\", \"f4\", \"f5\", \"f6\", \"f7\",... ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.Hide" ) ]
```

See also

- 63.27 Dialog.Reset 2366
- 80.13 FM.GetSQLBatchMode 4103
- 80.20 FM.InsertRecordQuery 4122
- 80.23 FM.InsertSetUpdateProgressDialog 4132
- 130.15 ProgressDialog.Reset 6510
- 130.25 ProgressDialog.SetProgress 6525

- 130.27 ProgressDialog.SetTitle 6529
- 130.29 ProgressDialog.SetTopText 6533
- 130.30 ProgressDialog.Show 6535
- 130.31 ProgressDialog.Update 6537

79.75.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr8](#)

Created 17th September 2016, last changed 12nd November 2018.

79.76 FM.SetThreadName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.SetThreadName"; Name)

Parameters**Name**

The new name for the thread.

"MyScript"

Result Returns OK or error.

Description

On FileMaker Server each script is performed in a thread. You can use this function to name this thread. Than on a crash report you may find this name and than you can see which script may cause the problem. Created 13th December 2015, last changed 13th December 2015.

79.77 FM.StopScriptIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	5.0	Yes	Yes	Yes	Yes	No

MBS("FM.StopScriptIdle")

Result Returns OK or error.

Description

See also Schedule.StartScriptOnIdle, FM.RunScriptIdle and Schedule functions.
Does not stop scripts registered with Schedule.StartScriptIdle

Examples

Stop idle scripts:

```
Set Variable [ $r; Value:MBS( "FM.StopScriptIdle" ) ]
```

See also

- [79.52 FM.RunScript](#) 3986
- [79.53 FM.RunScriptIdle](#) 3988
- [140.40 Schedule.StartScriptOnIdle](#) 6835

Example Databases

- [Utility functions/Idle](#)

79.77.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr4](#)
- [MBS FileMaker Plugin, version 6.0pr6](#)
- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 12nd December 2014, last changed 9th January 2020.

79.78 FM.TableStatistics

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.TableStatistics"; FileName; TableName)

Parameters

FileName

The target database name. Can be empty to not limit query to one database.
""

TableName

The name of the table to check.
"Contacts"

Result Returns JSON or error.

Description

The plugin will walk over all records and count fields with various data types and how many empty fields are there.

We sum up the length of all text in text fields as well as the text content of all fields.

We sum up the size of all internal containers, so ContainerByteSize + AllTextLengths*2 plus some metadata is the size of the database file.

For internal containers we also count the streams inside, so you know how many JPEGs and other file types are in the table.

e.g.

```
{
}
```

This function can take a long time for huge tables with millions of records. 64-bit FileMaker version recommended for better memory handling.

Does not handle globals correctly and counts them for each record!
Version 10.0 or newer will ignore globals and un-stored calculations.

Examples

Check statistics:

```
MBS( "FM.TableStatistics"; "Contacts.fmp12"; "Contacts" )
```

Example Databases

- [Utility functions/TableStatistic](#)

```

"FileName":           "",
"TableName":         "Contacts",
"RecordCount":       4,
"MinRowID":          1,
"MaxRowID":          4,
"ColumnCount":       35,
"CountText":         20,
"CountEmpty":        107,
"CountNumber":       5,
"CountDate":         2,
"CountTime":         1,
"CountTimestamp":    1,
"CountContainer":    4,
"CountExternalContainer": 1,
"ContainerByteSize": 1162565,
"TextLengths":       132,
"AllTextLengths":    365,
"CountDPI_":         2,
"SizeDPI_":          8,
"CountFNAM":         3,
"SizeFNAM":          90,
"CountSIZE":         2,
"SizeSIZE":          8,
"CountPNGf":         1,
"SizePNGf":          727569,
"CountFILE":         1,
"SizeFILE":          390,
"CountJPEG":         1,
"SizeJPEG":          434606

```

79.78.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)
- [MBS FileMaker Plugin, version 8.6pr4](#)
- [MBS FileMaker Plugin 8.2 - More than 5200 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.2 - 5200 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin, version 8.2pr5](#)

Created 26th April 2018, last changed 12nd November 2019.

Key	Value
FileName	The file name for the table.
TableName	The table name for this statistics.
RecordCount	The number of records.
MinRowID	The smallest record ID.
MaxRowID	The biggest record ID.
ColumnCount	Number of columns.
CountText	Number of fields containing text.
CountEmpty	Number of fields being empty.
CountNumber	Number of fields containing numeric values.
CountDate	Number of fields containing dates.
CountTime	Number of fields containing times.
CountTimestamp	Number of fields containing time stamps.
CountContainer	Number of all fields containing containers (includes CountExternalContainer).
CountExternalContainer	Number of fields containing external containers.
TextLengths	Length of text in text fields only.
AllTextLengths	Length of all text in all fields seen including numbers, times, dates, timestamps and containers read as text.
CountDPI_	Count of containers with DPI information.
SizeDPI_	Size of all DPI informations in containers.
CountFNAM	Count of containers with file name information.
SizeFNAM	Size of all filename informations in containers.
CountSIZE	Count of containers with image dimension information.
SizeSIZE	Size of all image dimension informations in containers.
CountMAIN	Count of all main item informations in containers.
SizeMAIN	Size of all main item informations in containers.
CountTIFF	Count of all TIFF images in containers.
SizeTIFF	Size of all TIFF images in containers.
CountPDF	Count of all PDF documents in containers.
SizePDF	Size of all PDF documents in containers.
CountPNGf	Count of all PNG images in containers.
SizePNGf	Size of all PNG images in containers.
CountGIFf	Count of all GIF images in containers.
SizeGIFf	Size of all GIF images in containers.
CountBMPf	Count of all BMP images in containers.
SizeBMPf	Size of all BMP images in containers.
CountEPS	Count of all PostScript documents in containers.
SizeEPS	Size of all PostScript documents in containers.
CountPICT	Count of all PICT images in containers.
SizePICT	Size of all PICT images in containers.
CountM4V	Count of all MPEG4 videos in containers.
SizeM4V	Size of all MPEG4 videos in containers.
CountWAV	Count of all Windows audio sounds in containers.
SizeWAV	Size of all Windows audio sounds in containers.
CountM4A	Count of all MEPEG 4 sounds in containers.
SizeM4A	Size of all MEPEG 4 sounds in containers.
CountMOV	Count of all QuickTime movies in containers.
SizeMOV	Size of all QuickTime movies in containers.
CountAVI	Count of all Windows movies in containers.
SizeAVI	Size of all Windows movies in containers.
CountAU	Count of all Unix sounds in containers.
SizeAU	Size of all Unix sounds in containers.
CountMP3	Count of all MP3 sounds in containers.
SizeMP3	Size of all MP3 sounds in containers.
CountMPEG	Count of all MPEG movies in containers.
SizeMPEG	Size of all MPEG movies in containers.
CountMPG4	Count of all MPEG 4 movies in containers.
SizeMPG4	Size of all MPEG 4 movies in containers.
CountAIFF	Count of all AIFF sounds in containers.
SizeAIFF	Size of all AIFF sounds in containers.

79.79 FM.UpdateRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.UpdateRecord"; FileName; TableName; IDField; IDValue; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField

The name of the field which provides an unique ID for each record, so we can identify the field. Can be RecordID for the record ID.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Then you pass one pair of field name and value for each field you like to set in the new record.

Please note that FM.UpdateRecord and FM.UpdateRecords are nearly identical. Just FM.UpdateRecord

provides the check to make sure only one record matches while FM.UpdateRecords allows several records to be updated. So with FM.UpdateRecords you can easily erase a lot of data if you pass wrong ID!

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update a record:

```
MBS( "FM.UpdateRecord";
""; "Asset Management"; /* file and table name */
"Asset ID"; "1"; /* ID field and value */
"Information"; "Just a test"; /* first field and value */
"Category"; "BestItems" ) /* second field and value */
```

Update a record:

```
MBS( "FM.UpdateRecord"; Get(FileName); "Kontakte"; "Vorname"; "Joe"; "Firma"; "Test" )
```

Update a repeating field:

```
Set Variable [ $r ; Value: MBS( "FM.UpdateRecord"; ""; "Contacts"; "RowID"; 1; "repeating [ 5 ] "; "Hello"
) ]
Show Custom Dialog [ Get ( RecordID ) & ": " & Contacts::repeating [ 5 ] ]
```

See also

- 80.4 FM.DeleteRecord 4073
- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.14 FM.InsertOrUpdateRecord 4104
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.16 FM.InsertOrUpdateRecord3 4110
- 79.80 FM.UpdateRecord2 4041
- 79.81 FM.UpdateRecord3 4043
- 79.83 FM.UpdateRecords2 4048

- 79.84 FM.UpdateRecords3

Example Databases

- [Mac and iOS/MapKit/MapView Click Polygons](#)

79.79.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin, version 9.3pr1](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.5pr1](#)

79.79.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 24
- Ausgabe 6/2018, Seite 23
- Ausgabe 3/2018, Seite 35
- Ausgabe 1/2016, Seite 32

Created 5th December 2015, last changed 17th January 2020.

79.80 FM.UpdateRecord2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.UpdateRecord2"; FileName; TableName; IDField1; IDValue1; IDField2; IDValue2; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID1"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

The name of the field which provides an unique ID for each record, so we can identify the field.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID2"

IDValue2

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RelatedRecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

Same as FM.UpdateRecord, but with two key fields.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update record with two key fields:

```
MBS( "FM.UpdateRecord2"; Get(FileName); "Kontakte";  
"Vorname"; "Joe"; // first key  
"Nachname"; "Miller"; // second key  
"Firma"; "Test Company" )
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.38 FM.UpdateRecord 4164
- 79.81 FM.UpdateRecord3 4043
- 80.39 FM.UpdateRecords 4167
- 79.83 FM.UpdateRecords2 4048
- 79.84 FM.UpdateRecords3 4050

79.80.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr1](#)

Created 3th December 2017, last changed 17th January 2020.

79.81 FM.UpdateRecord3

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.UpdateRecord3"; FileName; TableName; IDField1; IDValue1; IDField2; IDValue2; IDField3; IDValue3; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID1"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

The name of the field which provides an unique ID for each record, so we can identify the field.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID2"

IDValue2

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RelatedRecordID

IDField3

The name of the field which provides an unique ID for each record, so we can identify the field.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID3"

IDValue3

The value for the ID field to identify the record. Data type of parameter must match the data type of the

field.

\$OtherRecordID

FieldName

A field name to set.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

Same as FM.UpdateRecord, but with three key fields.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update record with three key fields:

```
MBS( "FM.UpdateRecord3"; Get(FileName);
"Kontakte"; // table name
"Vorname"; "Joe"; // first key field
"Nachname"; "Miller"; // second key field
"Firma"; "Test Company"; // third key field
"Position"; "CEO"; // first field to update
"Website"; "http://mbs-plugins.com" ) // second field to update
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.38 FM.UpdateRecord 4164
- 79.80 FM.UpdateRecord2 4041
- 80.39 FM.UpdateRecords 4167
- 79.83 FM.UpdateRecords2 4048
- 79.84 FM.UpdateRecords3 4050

79.81.1 **Blog Entries**

- [MBS FileMaker Plugin, version 7.6pr1](#)

Created 3th December 2017, last changed 17th January 2020.

79.82 FM.UpdateRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.UpdateRecords"; FileName; TableName; IDField; IDValue; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must not be unique, so several records can be updated at once.

Then you pass one pair of field name and value for each field you like to set in the new record.

Please note that FM.UpdateRecord and FM.UpdateRecords are nearly identical. Just FM.UpdateRecord provides the check to make sure only one record matches while FM.UpdateRecords allows several records to be updated. So with FM.UpdateRecords you can easily erase a lot of data if you pass wrong ID!

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update a few records:

```
MBS( "FM.UpdateRecord";
    ""; "Asset Management"; /* file and table name */
    "Category"; "Houses"; /* ID field and value */
    "Information"; "Just a test"; /* first field and value */
    "Comment"; "Testing" ) /* second field and value */
```

See also

- 80.5 FM.DeleteRecords 4076
- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.38 FM.UpdateRecord 4164
- 79.80 FM.UpdateRecord2 4041
- 79.81 FM.UpdateRecord3 4043
- 79.83 FM.UpdateRecords2 4048
- 79.84 FM.UpdateRecords3 4050

79.82.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS FileMaker Plugin, version 5.5pr3](#)

79.82.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 30
- Ausgabe 6/2018, Seite 23

Created 11st December 2015, last changed 17th January 2020.

79.83 FM.UpdateRecords2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.UpdateRecords2"; FileName; TableName; IDField1; IDValue1; IDField2; IDValue2; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID1"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID2"

IDValue2

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RelatedRecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

Same as FM.UpdateRecords, but with two key fields.
Same as FM.UpdateRecord2, but changes multiple records.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update record with two key fields:

```
MBS( "FM.UpdateRecords2"; Get(FileName); "Kontakte";  
"Vorname"; "Joe"; // first key  
"Nachname"; "Miller"; // second key  
"Firma"; "Test Company" )
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.38 FM.UpdateRecord 4164
- 79.80 FM.UpdateRecord2 4041
- 79.81 FM.UpdateRecord3 4043
- 80.39 FM.UpdateRecords 4167
- 79.84 FM.UpdateRecords3 4050

79.83.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr1](#)

Created 3th December 2017, last changed 17th January 2020.

79.84 FM.UpdateRecords3

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM	8.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.UpdateRecords3"; FileName; TableName; IDField1; IDValue1; IDField2; IDValue2; IDField3; IDValue3; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID1"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID2"

IDValue2

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RelatedRecordID

IDField3

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID3"

IDValue3

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$OtherRecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

Same as FM.UpdateRecords, but with three key fields.
Same as FM.UpdateRecord3, but changes multiple records.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update record with three key fields:

```
MBS( "FM.UpdateRecords3"; Get(FileName);
"Kontakte"; // table name
"Vorname"; "Joe"; // first key field
"Nachname"; "Miller"; // second key field
"Firma"; "Test Company"; // third key field
"Position"; "CEO"; // first field to update
"Website"; "http://mbs-plugins.com" ) // second field to update
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.38 FM.UpdateRecord 4164
- 79.80 FM.UpdateRecord2 4041
- 79.81 FM.UpdateRecord3 4043
- 80.39 FM.UpdateRecords 4167
- 79.83 FM.UpdateRecords2 4048

79.84.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr1](#)

Created 3th December 2017, last changed 17th January 2020.

79.85 FM.VariableAdd

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	8.3	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableAdd"; Name; Value)

Parameters

Name

the name of the variable
"test"

Value

the value to add to the variable
5

Result Returns new value or error.

Description

Internally does similar to FM.VariableGet to read value, then adds given parameter and stores like FM.VariableSet, all in one operation, so no other script or calculation can get between.

Creates variable, if it's not existing yet.

Examples

Sets \$ID and counts up with each call:

```
Set Variable [ $ID ; Value: MBS( "FM.VariableAdd"; "ID"; 1 ) ]
```

See also

- [178.2 FM.VariableAppend](#) 8261
- [178.6 FM.VariableGet](#) 8265
- [178.7 FM.VariableList](#) 8267
- [178.10 FM.VariableSet](#) 8270

79.85.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 8th June 2018, last changed 13th January 2020.

79.86 FM.VariableAppend

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	9.5	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableAppend"; Name; Value)

Parameters

Name

the name of the variable

"test"

Value

the value to add to the variable

5

Result Returns new value or error.

Description

Internally does similar to FM.VariableGet to read value, then adds given parameter and stores like FM.VariableSet, all in one operation, so no other script or calculation can get between.

Creates variable, if it's not existing yet.

Examples

Test append function:

Let ([

```
r1 = MBS( "FM.VariableAppend"; "hello"; "Line 1" & $);
```

```
r2 = MBS( "FM.VariableAppend"; "hello"; "Line 2" & $);
```

```
r3 = MBS( "FM.VariableAppend"; "hello"; "Line 3" & $)
```

```
]; MBS( "FM.VariableGet"; "hello" ) )
```

See also

- [178.1 FM.VariableAdd](#) 8259
- [178.6 FM.VariableGet](#) 8265
- [178.10 FM.VariableSet](#) 8270

79.86.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)

Created 28th October 2019, last changed 28th October 2019.

79.87 FM.VariableClear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableClear"; Name)

Parameters

Name

The name of the variable to destroy

Result Returns OK.

Description

Examples

Destroy a variable

MBS("FM.VariableClear" ; "MyVar")

See also

- [178.4 FM.VariableClearAll](#) 8263
- [178.6 FM.VariableGet](#) 8265
- [178.8 FM.VariableNames](#) 8268
- [178.9 FM.VariableReset](#) 8269
- [178.10 FM.VariableSet](#) 8270

Example Databases

- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Global Variables](#)

79.87.1 Blog Entries

- [The power of global variables](#)

79.87.2 FileMaker Magazin

- [Ausgabe 2/2014, Seite 31](#)

Created 18th August 2014, last changed 21st June 2017.

79.88 FM.VariableClearAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	5.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableClearAll")

Result Returns OK or error.

Description

See also

- [178.3 FM.VariableClear](#) 8262
- [178.8 FM.VariableNames](#) 8268
- [178.10 FM.VariableSet](#) 8270

79.88.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr2](#)

Created 3th June 2015, last changed 8th June 2015.

79.89 FM.VariableExists

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	4.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableExists"; Name)

Parameters

Name

The name of the variable.

"x"

Result Returns 1 if variable exists, else 0.

Description

See also

- 178.6 FM.VariableGet 8265
- 178.7 FM.VariableList 8267

79.89.1 Blog Entries

- [The power of global variables](#)

79.89.2 FileMaker Magazin

- Ausgabe 2/2014, Seite 31

Created 18th August 2014, last changed 21st June 2017.

79.90 FM.VariableGet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableGet"; Name)

Parameters

Name

The Name of the variable

Description

Unlike the variables that were introduced in FileMaker 8 these variables are not limited to the File or Script. In other words they can be retrieved from any file in the system regardless of where they were declared.

You can check with FM.VariableExists whether a variable exists.

Examples

Retrieve a variable

MBS("FM.VariableGet" ; "myVar")

See also

- [178.1 FM.VariableAdd](#) 8259
- [178.2 FM.VariableAppend](#) 8261
- [178.3 FM.VariableClear](#) 8262
- [178.5 FM.VariableExists](#) 8264
- [178.7 FM.VariableList](#) 8267
- [178.8 FM.VariableNames](#) 8268
- [178.9 FM.VariableReset](#) 8269
- [178.10 FM.VariableSet](#) 8270

Example Databases

- [CURL/WebViewer Download Images with CURL](#)
- [Drag and Drop/for Mac/Image drag from one database to other/Image drop](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drop](#)
- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Global Variables](#)

79.90.1 Blog Entries

- [Data structures in FileMaker with MBS Plugins](#)
- [The power of global variables](#)

79.90.2 FileMaker Magazin

- Ausgabe 6/2019, Seite 34
- Ausgabe 6/2019, Seite 33
- Ausgabe 2/2014, Seite 32
- Ausgabe 2/2014, Seite 31

Created 18th August 2014, last changed 21st June 2017.

79.91 FM.VariableList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	4.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableList" { ; Delimiter })

Parameters

Delimiter

Optional

Optionally, the delimiter to use. Default is tab character.

”.”

Result Returns list.

Description

Container values or multiline texts will probably not be handled correctly for the result. So works best if you have just single line values.

See also

- [178.1 FM.VariableAdd](#) 8259
- [178.5 FM.VariableExists](#) 8264
- [178.6 FM.VariableGet](#) 8265
- [178.8 FM.VariableNames](#) 8268
- [178.9 FM.VariableReset](#) 8269
- [178.10 FM.VariableSet](#) 8270

Example Databases

- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Global Variables](#)

79.91.1 Blog Entries

- [The power of global variables](#)
- [MBS Filemaker Plugin, version 4.0pr1](#)

79.91.2 FileMaker Magazin

- [Ausgabe 2/2014, Seite 31](#)

Created 18th August 2014, last changed 21st June 2017.

79.92 FM.VariableNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	8.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableNames")

Result Returns list or error.

Description

Examples

Test functions:

```
MBS( "FM.VariableClearAll" ) &
MBS( "FM.VariableSet"; "Hello"; "World" ) &
MBS( "FM.VariableSet"; "other"; "value" ) &
§&
MBS( "FM.VariableList" ) &
§&
MBS( "FM.VariableNames" )
```

Example result: OKOKOK

```
other value
Hello World
other
Hello
```

See also

- [178.3 FM.VariableClear](#) 8262
- [178.4 FM.VariableClearAll](#) 8263
- [178.6 FM.VariableGet](#) 8265
- [178.7 FM.VariableList](#) 8267
- [178.9 FM.VariableReset](#) 8269
- [178.10 FM.VariableSet](#) 8270

79.92.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 13th December 2017, last changed 8th July 2018.

79.93 FM.VariableReset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	4.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableReset")

Result Returns OK.

Description

You can fill again with FM.VariableSet or remove individual variables with FM.VariableClear.

See also

- 178.3 FM.VariableClear 8262
- 178.6 FM.VariableGet 8265
- 178.7 FM.VariableList 8267
- 178.8 FM.VariableNames 8268
- 178.10 FM.VariableSet 8270

79.93.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 21st June 2017.

79.94 FM.VariableSet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableSet"; Name; Value)

Parameters

Name

the name of the variable

Value

the value to assign to the variable

Description

Unlike the variables that were introduced in FileMaker 8 these variables are not limited to the File or Script. In other words they can be retrieved from any file in the system regardless of where they were declared. All values are stored in their native data types (up to version 4.4 only text).

Use FM.VariableClear to clear the variables or FM.VariableClearAll to clear them all. FM.VariableList returns list of all defined variables.

On server, the variables are shared by all users connected to the server. So e.g. on Web Direct all users have the same set of global variables via plugin. You can prefix variables with user ID/Name to make them per use unique.

Examples

Set a variable

```
MBS( "FM.VariableSet" ; "myVar"; "Hello" )
```

See also

- 178.1 FM.VariableAdd 8259
- 178.2 FM.VariableAppend 8261
- 178.3 FM.VariableClear 8262
- 178.4 FM.VariableClearAll 8263
- 178.6 FM.VariableGet 8265
- 178.7 FM.VariableList 8267
- 178.8 FM.VariableNames 8268
- 178.9 FM.VariableReset 8269

Example Databases

- [CURL/WebView Download Images with CURL](#)
- [Drag and Drop/for Mac/Image drag from one database to other/Image drag](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drag](#)
- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Global Variables](#)

79.94.1 Blog Entries

- [Data structures in FileMaker with MBS Plugins](#)
- [The power of global variables](#)

79.94.2 FileMaker Magazin

- [Ausgabe 6/2019, Seite 33](#)
- [Ausgabe 2/2014, Seite 31](#)

Created 18th August 2014, last changed 24th July 2018.

Chapter 80

FMSQL

SQL inside FileMaker databases

This functions help you execute SQL within the FileMaker database on client and server.

If you look for SQL functions to other databases (like MySQL), please check our SQL functions.

80.1 Dictionary.AddSQLRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary 80 FMSQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.AddSQLRecord"; DictionaryRef; Keys; SQL Statement; FileName { ; Params })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.
\$dic

Keys

The list of keys for the dictionary. Could be the same as the field list.
"FirstName\$LastName\$Company"

SQL Statement

SQL Statement as a Text string

FileName

The target database name. Can be empty to not limit query to one database.
""

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the

SQL statement.

123

Result Returns OK or error.

Description

From the result set, the first record is used for values and given key list for the keys.

Returns error in case of SQL error with error message.

As we only use first record, you can use `FETCH FIRST 1 ROWS ONLY` in the SQL command to only query first record.

This function is currently only supported for FileMaker 11 and newer. If you need it for older versions, please contact us.

Examples

Query record and get JSON:

```
Set Variable [ $dic ; Value: MBS("Dictionary.Create") ]
```

```
Set Variable [ $r ; Value: MBS( "Dictionary.AddSQLRecord"; $dic; "Vorname$Nachname$Firma"; "SELECT Vorname, Nachname, Firma FROM Kontakte"; "Kontakte" ) ]
```

```
Set Variable [ $json ; Value: MBS( "Dictionary.ToJSON"; $dic ) ]
```

```
Set Variable [ $r ; Value: MBS( "Dictionary.Release"; $dic ) ]
```

See also

- 65.1 Dictionary.AddSQL 2397
- 80.2 Dictionary.AddSQLRecords 4067
- 65.7 Dictionary.Create 2407
- 65.14 Dictionary.Release 2417
- 100.1 Dictionary.ToJSON 5231

80.1.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr8](#)

Created 21st September 2017, last changed 20th February 2018.

80.2 Dictionary.AddSQLRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary 80 FMSQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.AddSQLRecords"; DictionaryRef; Keys; SQL Statement; FileName { ; Params })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.
\$dic

Keys

The list of keys for the dictionary. Could be the same as the field list.
"FirstName\$LastName\$Company"

SQL Statement

SQL Statement as a Text string

FileName

The target database name. Can be empty to not limit query to one database.
""

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

From the result set, the records are used for values and given key list for the keys.
If you have multiple records, you get all values collected per field in a list.
Returns error in case of SQL error with error message.

This function is currently only supported for FileMaker 11 and newer. If you need it for older versions, please contact us.

Examples

Query record and get JSON:

```
Set Variable [ $dic ; Value: MBS("Dictionary.Create") ]
Set Variable [ $r ; Value: MBS( "Dictionary.AddSQLRecords"; $dic; "Vorname$Nachname$Firma"; "SELECT Vorname, Nachname, Firma FROM Kontakte"; "Kontakte" ) ]
Set Variable [ $json ; Value: MBS( "Dictionary.ToJSON"; $dic ) ]
Set Variable [ $r ; Value: MBS( "Dictionary.Release"; $dic ) ]
```

See also

- 65.1 Dictionary.AddSQL 2397
- 80.1 Dictionary.AddSQLRecord 4065
- 65.7 Dictionary.Create 2407
- 65.14 Dictionary.Release 2417
- 100.1 Dictionary.ToJSON 5231

Created 23th September 2017, last changed 20th February 2018.

80.3 FM.CompareTables

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	9.3	Yes	Yes	Yes	Yes	Yes

```
MBS( "FM.CompareTables"; FileName1; TableName1; IDField1; FileName2; TableName2; IDField2 { ;
Options } )
```

Parameters

FileName1

The file name of where the table is inside. Can be empty to look for the table in all files. File extension is optional for file name.

Get(FileName)

TableName1

The name of the first table (newer). Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the ID field in first table. Can be a text or numeric field.

"Identifier"

FileName2

The file name of where the table is inside. Can be empty to look for the table in all files.

"other.fmp12"

TableName2

The name of the second table (older). Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField2

The name of the ID field in second table. Can be a text or numeric field.

"Identifier"

Options

Optional

Pass options. Add 1 to include details. Add 2 to include all the IDs found in both.

1+2

Result Returns JSON or error.

Description

We compare the field names for both tables and report added, removed and common field names.

Then we check the record identifiers to report added, changed and common IDs.

If IDField1 and IDField2 names are the same in both tables, we compare the common records to report the changed record identifiers.

Does not compare the internal FileMaker row IDs.

Records are compared in 100 records block to limit memory usage.

Examples

Compares two tables in two files:

```
MBS( "FM.CompareTables"; "Anlagen1.fmp12"; "Anlagen"; "Primärschlüssel"; "Anlagen2.fmp12"; "Anlagen"; "Primärschlüssel" )
```

Compare tables:

```
Show Custom Dialog [ MBS( "FM.CompareTables"; "Anlagen1.fmp12"; "Anlagen"; "Primärschlüssel"; "Anlagen2.fmp12"; "Anlagen"; "Primärschlüssel"; 1 ) ]
```

Example result: {

```
"Messages": [ ] ,
"TableName1": "Anlagen",
"TableName2": "Anlagen",
"FileName1": "Anlagen1.fmp12",
"FileName2": "Anlagen2.fmp12",
"RemovedFields": [ "Anlage1feld" ] ,
"Fields": [ "Anbieter", "Beschreibung", "Bild", "ErstelltVon", "Erstellungszeitstempel", "Gesamt", "GeändertVon", "Kaufdatum", "Name", "Preis", "Primärschlüssel", "Seriennummer", "Typ", "Änderungszeitstempel" ] ,
"AddedFields": [ "Anlage2feld" ] ,
"RemovedIDs": [ "00E5BB4E-3BB1-43D8-95DD-60E5C7E6153E", "149E3A95-89CC-4633-A576-C977831ED15E" ] ,
"IDs": [ "CFBA0CA0-3480-4560-B138-4FE605F1A666", "5AED71F4-D78F-490D-A842-CD623E25C118" ] ,
"AddedIDs": [ "04430FBE-C3AA-4D1B-B451-1B41AA703A96", "37E7E4AA-F5D0-4E96-BB24-BB720E808357" ] ,
"ChangedRecords": {
"CFBA0CA0-3480-4560-B138-4FE605F1A666": [ {
"Field": "Seriennummer",
"OldValue": "123a",
"NewValue": "123"
} , {
"Field": "Änderungszeitstempel",
"OldValue": "2019-06-15 20:13:21",
"NewValue": "2019-06-15 17:54:25"
} ] ,
"5AED71F4-D78F-490D-A842-CD623E25C118": [ {
"Field": "Kaufdatum",
"OldValue": "",
"NewValue": "2019-06-18"
} , {
"Field": "Änderungszeitstempel",
"OldValue": "2019-06-15 17:54:28",
"NewValue": "2019-06-16 05:47:24"
} ]
}
}
```

Compare and show results:

```

Set Variable [ $r ; Value: MBS("ProgressDialog.SetBottomText"; "") ]
Set Variable [ $r ; Value: MBS("ProgressDialog.SetTopText"; "Compare Table") ]
Set Variable [ $r ; Value: MBS("ProgressDialog.SetTitle"; "Compare..") ]
Set Variable [ $r ; Value: MBS("ProgressDialog.SetButtonCaption"; "Cancel") ]
Set Variable [ $r ; Value: MBS("ProgressDialog.SetProgress"; -1) ]
Set Variable [ $r ; Value: MBS("ProgressDialog.Show") ]
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $$r ; Value: MBS( "FM.CompareTables"; "test1.fmp12"; "Import2PropertyVal"; "_RecordU-
UID"; "test2.fmp12"; "Import2PropertyVal"; "_RecordUUID"; 1 ) ]
Pause/Resume Script [ Duration (seconds): ,1 ]
# Cleanup progress bar
Set Variable [ $r ; Value: MBS("ProgressDialog.Hide") ]
Show Custom Dialog [ $$r ]

```

```

Example result: {
  "Messages": [ ] ,
  "TableName1": "Import2PropertyVal",
  "TableName2": "Import2PropertyVal",
  "FileName1": "test1.fmp12",
  "FileName2": "test2.fmp12",
  "RemovedFields": [ ] ,
  "Fields": [ "Hex", "Hex.bytes", "PropertyVal.Name", "_CreationTimeStamp", "_ParentRecordUUID", "_Record-
dUUID", "test" ] ,
  "AddedFields": [ ] ,
  "RemovedIDs": [ ] ,
  "AddedIDs": [ ] ,
  "ChangedRecords": {
    "B92DB7FE-2506-4070-A384-BE99AE829EB8": [ {
      "Field": "Hex.bytes",
      "OldValue": "",
      "NewValue": "3"
    } , {
      "Field": "test",
      "OldValue": "Hello",
      "NewValue": "World"
    } ] ,
    "8D9BD00C-C31B-401B-B18C-0BCB0CC9EC73": [ {
      "Field": "Hex.bytes",
      "OldValue": "1",
      "NewValue": "2"
    } ] ,
    "2FED79CC-1BBF-4C5D-96E4-5E42C8454C3A": [ {
      "Field": "Hex.bytes",
      "OldValue": "1",
      "NewValue": "2"
    } ]
  }
}

```

See also

- [63.31 Dialog.SetButton](#) 2371
- [63.47 Dialog.SetTop](#) 2389
- [130.14 ProgressDialog.Hide](#) 6508
- [130.16 ProgressDialog.SetBottomText](#) 6511
- [130.17 ProgressDialog.SetButtonCaption](#) 6513
- [130.25 ProgressDialog.SetProgress](#) 6525
- [130.27 ProgressDialog.SetTitle](#) 6529
- [130.29 ProgressDialog.SetTopText](#) 6533
- [130.30 ProgressDialog.Show](#) 6535

80.3.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr4](#)
- [MBS FileMaker Plugin, version 9.3pr3](#)
- [Introducing FM.CompareTables function](#)

Created 15th June 2019, last changed 17th January 2020.

80.4 FM.DeleteRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.DeleteRecord"; FileName; TableName; IDField; IDValue { ; IDField2; IDValue2; IDField3; IDValue3 })

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to delete record from. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField

The name of the first field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue

The value for the first ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The name of the second field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"PersonID"

IDValue2

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The value for second ID field to identify the record. Data type of parameter must match the data type of the field.

\$PersonID

IDField3

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The name of the third field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"CompanyID"

IDValue3

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The value for third ID field to identify the record. Data type of parameter must match the data type of the field.

\$CompanyID

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Please note that FM.DeleteRecord and FM.DeleteRecords are nearly identical. Just FM.DeleteRecord provides the check to make sure only one record matches while FM.DeleteRecords allows several records to be deleted. So with FM.DeleteRecords you can easily erase a lot of data if you pass wrong ID!

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime.

Version 8.2 allows to specify up to 3 ID parameters.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Delete a record based on values:

```
Set Variable [ $r ; Value: MBS( "FM.DeleteRecord"; Get(FileName); "Contacts"; "First"; "Christian"; "Last"; "Schmitz"; "Company"; "Test Inc." ) ]
```

See also

- 80.5 FM.DeleteRecords 4076
- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.38 FM.UpdateRecord 4164

80.4.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.5pr3](#)

80.4.2 FileMaker Magazin

- [Ausgabe 6/2018, Seite 24](#)
- [Ausgabe 3/2018, Seite 36](#)
- [Ausgabe 1/2016, Seite 32](#)

Created 11st December 2015, last changed 17th January 2020.

80.5 FM.DeleteRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.DeleteRecords"; FileName; TableName; IDField; IDValue { ; IDField2; IDValue2; IDField3; IDValue3 })

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to delete records from. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The name of the second field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"PersonID"

IDValue2

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The value for second ID field to identify the record. Data type of parameter must match the data type of the field.

\$PersonID

IDField3

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The name of the third field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"CompanyID"

IDValue3

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

The value for third ID field to identify the record. Data type of parameter must match the data type of the field.

\$CompanyID

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must not be unique, so several records can be updated at once.

Please note that FM.DeleteRecord and FM.DeleteRecords are nearly identical. Just FM.DeleteRecord provides the check to make sure only one record matches while FM.DeleteRecords allows several records to be deleted. So with FM.DeleteRecords you can easily erase a lot of data if you pass wrong ID!

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

Version 8.2 allows to specify up to 3 ID parameters.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Delete records based on values:

```
Set Variable [ $r ; Value: MBS( "FM.DeleteRecords"; Get(FileName); "Contacts"; "First"; "Christian"; "Last"; "Schmitz"; "Company"; "Test Inc." ) ]
```

See also

- 80.4 FM.DeleteRecord 4073
- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.39 FM.UpdateRecords 4167

Example Databases

- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)

80.5.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS FileMaker Plugin, version 5.5pr3](#)

80.5.2 FileMaker Magazin

- [Ausgabe 6/2018, Seite 24](#)
- [Ausgabe 3/2018, Seite 36](#)

Created 11st December 2015, last changed 17th January 2020.

80.6 FM.ExecuteFileSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	3.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "FM.ExecuteFileSQL"; FileName; SQL Statement { ; Column Delimiter; Record Delimiter; Params
} )
```

Parameters

FileName

The target database name. Can be empty to not limit query to one database.
””

SQL Statement

SQL Statement as a Text string

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is tab character, which has unicode code point 9. You can pass delimiter as text or as unicode code point.

9

Record Delimiter

Optional

Record Separator, only used with SELECT statement. Default is return character, which has unicode code point 13. You can pass delimiter as text or as unicode code point.

13

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns result of SQL expression or error.

Description

This function requires FileMaker 11 or newer. Please use FM.ExecuteSQL on FileMaker 10 or older.

There must be an occurrence of the Table on the current tables' Graph in the file you specified. If filename is empty, you use current file. SELECT returns the the records in as a tabbed delimited text string. All other SQL commands return ””.

Use FM.ExecuteSQL.LastError to check for errors.

Supported Commands: SELECT UPDATE (see limitation below) DELETE INSERT CREATE TABLE DROP TABLE CREATE INDEX DROP INDEX WHERE

String comparisons are Case Sensitive! WHERE First_Name="todd" will not find records that have "Todd" in the first Name Field. You can wrap the field you are searching for with "lower" like this WHERE

lower(First_Name)="todd" KNOWN LIMITATIONS Schema editing Record Locking Errors are Not Reported! This means you must exercise caution when using UPDATE. CAUTION! This is a very powerful function!

You can put field names in double quotes and string values in single quotes.

Use FM.ExecuteSQLOnIdle for special commands which change database like ALTER TABLE.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Error 8309 means you did pass wrong data type, like string for a number.

You can make queries against FILEMAKER_TABLES and FILEMAKER_FIELDS to query information about fields in your solution. The functions FM.QueryBaseTableNames, FM.QueryFieldsForBaseTableName, FM.QueryFieldsForTableName and FM.QueryTableNames provide simplified functions for some queries.

FILEMAKER_TABLES table contains:

1. TableName
2. TableID
3. BaseTableName
4. BaseFileName
5. ModCount

FILEMAKER_FIELDS table contains:

1. TableName
2. FieldName
3. FieldType (the SQL data type, not the FileMaker data type)
4. FieldID
5. FieldClass (Normal, Summary, Calculated)
6. FieldReps
7. ModCount

Examples

SELECT records

```
MBS("FM.ExecuteFileSQL"; ""; "select * from Contacts")
```

INSERT record

```
MBS("FM.ExecuteFileSQL"; ""; "INSERT INTO Contacts (FirstName, LastName) Values('Todd', 'Geist')")
```

Select records using delimiters

```
MBS("FM.ExecuteFileSQL"; ""; "select * from Contacts"; "# "; " | ")
```

SELECT records with a Where clause

```
MBS("FM.ExecuteFileSQL"; ""; "SELECT First_Name, Last_Name from Contacts WHERE ID_Contact_PK ='CN10013'")
```

Insert records with parameters 2 and 3:

```
MBS("FM.ExecuteFileSQL"; ""); "INSERT INTO \OtherTable\ (\ID\, \ID Job\ ) Values(?,?)"; 9; 13; 2; 3 )
```

Create Record with values via SQL

```
Set Variable [ $FirstName; Value:"First test" ]
Set Variable [ $LastName; Value:"Last test" ]
Set Variable [ $Street; Value:"Street test" ]
Set Variable [ $Zip; Value:"Zip test" ]
Set Variable [ $City; Value:"City test" ]
Set Variable [ $Country; Value:"Country test" ]
Set Variable [ $Phone; Value:"Phone test" ]
```

```
Set Variable [ $r; Value:MBS( "FM.ExecuteFileSQL"; ""); "INSERT INTO \Export records\ (\First Name\, \Last Name\, \Street\, \Zip\, \City\, \Country\, \Phone\ ) VALUES (?,?,?,?,?,?)"; 9; 13; $FirstName; $LastName; $Street; $Zip; $City; $City; $Country; $Phone ]
If [ MBS("IsError") ]
Show Custom Dialog [ MBS( "FM.ExecuteSQL.LastErrorMessage" ) ]
End If
```

Set value for all records of a table:

```
MBS( "FM.ExecuteFileSQL"; "test.fmp12"; "UPDATE \My Table\ SET \My Field\ = 'Hello' ")
```

Set timestamp to today:

```
MBS( "FM.ExecuteFileSQL"; "test.fmp12"; "UPDATE \my Table\ SET \Change Time\ = TODAY WHERE \ID\ = '12345' ")
```

Update 5 fields:

```
MBS( "FM.ExecuteFileSQL"; "test.fmp12"; "UPDATE \my Table\ SET \Number Field\ = 1, \Text Field\ = 'test', \Dest Field\ = \Source Field\, \Hour Field\ = CAST(HOUR(curtime) AS VARCHAR), \Empty Field\ = NULL WHERE \ID\ = '12345' ")
```

Create an index:

```
MBS( "FM.ExecuteFileSQL"; ""; "CREATE INDEX ON tablename.fieldname" )
```

Select with parameter:

```
MBS("FM.ExecuteFileSQL"; ""; "select Menge from Boxen where Artikel_Nr=? ORDER BY Menge DESC"; 9; 13; "ABC123")
```

Query value of a repeating field with [] :

```
MBS( "FM.ExecuteFileSQL"; "" ; "SELECT test [ 2 ] FROM Kontakte")
```

Set value of repeating field:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET test [ 2 ] = 'test'")
```

Query only first row:

```
MBS( "FM.ExecuteFileSQL"; "" ; "SELECT * FROM ProductImages FETCH FIRST 1 ROWS ONLY")
```

Insert with parameters:

```
MBS("FM.ExecuteFileSQL"; "" ; "INSERT INTO AttachmentsActions (RecID, Container) VALUES (?, ?)";
9; 13; $recid; files::container)
```

Set repeating global field values:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE \ "Meine Tabelle\ " SET test [ 1 ] =", test [ 2 ] =", test [ 3 ] =", ")
```

Set timestamp field:

via CURRENT_TIMESTAMP constant:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET Datum = CURRENT_TIMESTAMP ")
```

or cast text to timestamp:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET Datum = CAST('2017-04-12 14:14:14' AS
TIMESTAMP) ")
```

via CURTIMESTAMP constant:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET Datum = CURTIMESTAMP ")
```

or to now plus one hour:

```
MBS( "FM.ExecuteFileSQL"; "" ; "UPDATE Kontakte SET Datum = CURTIMESTAMP + 3600 ")
```

Query tables and fields metadata:

```
MBS( "FM.ExecuteFileSQL"; "" ; "SELECT FILEMAKER_TABLES.TableName, FILEMAKER_TABLES.TableID,
FILEMAKER_TABLES.BaseTableName, FILEMAKER_TABLES.BaseFileName, FILEMAKER_TABLES.Mod-
Count, FILEMAKER_FIELDS.FieldName, FILEMAKER_FIELDS.FieldType, FILEMAKER_FIELDS.Fiel-
dID, FILEMAKER_FIELDS.FieldClass, FILEMAKER_FIELDS.FieldReps, FILEMAKER_FIELDS.Mod-
Count from FILEMAKER_TABLES, FILEMAKER_FIELDS where FILEMAKER_FIELDS.TableName =
FILEMAKER_TABLES.TableName" )
```

Get list of fields in all tables:

```
MBS( "FM.ExecuteFileSQL"; "" ; "SELECT * FROM FileMaker_Fields")
```

Query list of table names and IDs:

```
MBS( "FM.ExecuteFileSQL"; ""; "SELECT TableName, TableID FROM Filemaker__Tables")
```

Find table name for a given table ID:

```
MBS( "FM.ExecuteFileSQL"; ""; "SELECT TableName FROM Filemaker__Tables WHERE TableID=?";
9; 13; 1065089)
```

Query field type of a field:

```
MBS( "FM.ExecuteFileSQL"; ""; "SELECT FieldType FROM FILEMAKER__FIELDS WHERE Table-
Name=? AND FieldName=? "; 9; 13; "Contacts"; "gtest")
```

// could return "global varchar", if gtest is a global field in table Contacts

Query list of record IDs for a given table:

```
MBS("FM.ExecuteFileSQL"; ""; "SELECT ROWID FROM MyTable")
```

Look for a control character in the text and return record IDs:

```
MBS("FM.ExecuteFileSQL"; Get(FileName); "SELECT ROWID from \"MyTable\" WHERE \"MyField\"
like '% ' + CHR(1) + '% ' ")
```

Update all values in a field based on a query:

```
MBS("FM.ExecuteFileSQL"; ""; "UPDATE \"Invoices\" SET \"Sum\" = (SELECT SUM(\"Quantity\" *
\"Price\") FROM Positions WHERE Invoices.CustomerID = Positions.CustomerID AND Invoices.InvoiceID
= Positions.InvoiceID)")
```

See also

- 40.23 AVPlayer.SetProgressEvaluate 1083
- 40.24 AVPlayer.SetProgressInterval 1085
- 80.7 FM.ExecuteFileSQLOnIdle 4086
- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.12 FM.ExecuteSQLOnIdle 4100
- 79.47 FM.QueryFieldsForBaseTableName 3979
- 79.48 FM.QueryFieldsForTableName 3980

- 79.49 FM.QueryTableNames 3982
- 124.6 IsError 6266

Example Databases

- [CURL/Email/Batch Emailer](#)
- [CURL/Email/IMAP Email](#)
- [JavaScript/JavaScript](#)
- [Mac and iOS/Events/Events Sync](#)
- [Shell/Shell](#)
- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Create Sort Script](#)
- [XML/XML Validation](#)
- [XML/XSLT](#)

80.6.1 Blog Entries

- [FileMaker Magazin Links](#)
- [ROWID in FileMaker SQL Commands](#)
- [Using found set in SQL queries](#)
- [Using ExecuteSQL with Parameters is important](#)
- [Import Calendar Items into FileMaker](#)
- [MBS Filemaker Plugin, version 4.5pr2](#)
- [ExecuteSQL and getting error details](#)

80.6.2 FileMaker Magazin

- [Ausgabe 4/2019, Seite 35](#)
- [Ausgabe 4/2019, Seite 34](#)
- [Ausgabe 4/2019, Seite 33](#)
- [Ausgabe 4/2019, Seite 32](#)
- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 3/2018, Seite 34](#)

- Ausgabe 5/2017, Seite 22
- Ausgabe 3/2015, Seite 41
- Ausgabe 3/2015, Seite 28
- Ausgabe 2/2015, Seite 15

Created 18th August 2014, last changed 13th January 2020.

80.7 FM.ExecuteFileSQLOnIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.5	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteFileSQLOnIdle"; SQL Statement; FileName { ; Column Delimiter; Record Delimiter; Params })

Parameters

SQL Statement

the SQL statement

FileName

The file name of the database.

Get(FileName)

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is TAB

9

Record Delimiter

Optional

Record Separator, only used with SELECT statement, Default is Return

13

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

You run a script pause after using this function to give it time to execute.

See the other function for more info.

Seems like on FileMaker 11 you get LastError 8310 if you use fields with underscore in the name. You avoid that by placing the field names in quotes.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Examples

Create a new text field in a table:

```
MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable ADD MyField varchar")
```

Create in a script and check error:

```
# set command to run
```

```
Set Variable [ $r ; Value: MBS("FM.ExecuteFileSQLOnIdle"; "ALTER TABLE Kontakte ADD MyField
```

```

varchar"; "Kontakte.fmp12" ]
# Make pause to run it
Pause/Resume Script [ Duration (seconds): ,1 ]
# Check error status
Set Variable [ $errorNumber ; Value: MBS( "FM.ExecuteSQL.LastError" ) ]
Set Variable [ $errorMessage ; Value: MBS( "FM.ExecuteSQL.LastErrorMessage" ) ]

```

Create a field:

```

Set Variable [ $r ; Value: MBS("FM.ExecuteFileSQLOnIdle";"ALTER TABLE TestTable ADD MyField
varchar"; Get(FileName)) ]
Pause/Resume Script [ Duration (seconds): ,1 ]
If [ MBS("FM.ExecuteSQL.LastError") = 0 ]
Show Custom Dialog [ "Error adding column" ; MBS("FM.ExecuteSQL.LastError") & ": " & MBS("FM.Ex-
ecuteSQL.LastErrorMessage") ]
Else
Show Custom Dialog [ "Removed Column" ; "OK" ]
End If

```

See also

- 80.6 FM.ExecuteFileSQL 4079
- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.12 FM.ExecuteSQLOnIdle 4100

80.7.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

80.7.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 25
- Ausgabe 3/2018, Seite 34

Created 16th October 2016, last changed 5th November 2018.

80.8 FM.ExecuteSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteSQL"; SQL Statement { ; Column Delimiter; Record Delimiter })

Parameters

SQL Statement

SQL Statement as a Text string

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is TAB
""

Record Delimiter

Optional

Record Separator, only used with SELECT statement, Default is Return

Result Returns result of SQL expression or error.

Description

There must be an occurrence of the Table on the current tables' Graph. SELECT returns the the records in as a tabbed delimited text string. All other SQL commands return "".

Use FM.ExecuteSQL.LastError to check for errors.

Supported Commands: SELECT UPDATE (see limitation below) DELETE INSERT CREATE TABLE DROP TABLE CREATE INDEX DROP INDEX WHERE

String comparisons are Case Sensitive! WHERE First_Name="todd" will not find records that have "Todd" in the first Name Field. You can wrap the field you are searching for with "lower" like this WHERE lower(First_Name)="todd" KNOWN LIMITATIONS Schema editing SQL functions are not supported in FileMaker 8 and 8.5.

Record Locking Errors are Not Reported! This means you must exercise caution when using UPDATE. CAUTION! This is a very powerful function! It is relying on very new and relatively untested resources made available by the release of FileMaker 8.

Seems like on FileMaker 11 you get LastError 8310 for any syntax error, like bad braces or missing quotes.

You can put field names in double quotes and string values in single quotes.

Use FM.ExecuteSQLOnIdle for special commands which change database like ALTER TABLE.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Error 8309 means you did pass wrong data type, like string for a number.

If you need to pass parameters, please use FM.ExecuteFileSQL.

You can make queries against FILEMAKER_TABLES and FILEMAKER_FIELDS to query information about fields in your solution. The functions FM.QueryBaseTableNames, FM.QueryFieldsForBaseTableName, FM.QueryFieldsForTableName and FM.QueryTableNames provide simplified functions for some queries.

FILEMAKER_TABLES table contains:

1. TableName
2. TableID
3. BaseTableName
4. BaseFileName
5. ModCount

FILEMAKER_FIELDS table contains:

1. TableName
2. FieldName
3. FieldType (the SQL data type, not the FileMaker data type)
4. FieldID
5. FieldClass (Normal, Summary, Calculated)
6. FieldReps
7. ModCount

Examples

SELECT records

```
MBS("FM.ExecuteSQL";"select * from Contacts")
```

INSERT record

```
MBS("FM.ExecuteSQL";"INSERT INTO Contacts (FirstName, LastName) Values('Bob', 'Miller')")
```

Select records using delimiters

```
MBS("FM.ExecuteSQL";"select * from Contacts"; "# "; " | ")
```

SELECT records with a Where clause

```
MBS("FM.ExecuteSQL"; "SELECT First_Name, Last_Name from Contacts WHERE ID_Contact_PK = 'CN10013'")
```

Get list of fields in all tables:

```
MBS("FM.ExecuteSQL";"SELECT * FROM FileMaker_Fields")
```

Create Record with values via SQL

```
Set Variable [ $r; Value:MBS( "FM.ExecuteSQL"; "INSERT INTO \"Export records\" (\\"First Name\", \\"Last Name\", \\"Street\", \\"Zip\", \\"City\", \\"Country\", \\"Phone\") VALUES ('MyFirst', 'MyLast', 'MyStreet', 'MyZip', 'MyCity', 'MyCountry', 'MyPhone')") ]
If [ MBS("IsError") ]
Show Custom Dialog [ MBS( "FM.ExecuteSQL.LastErrorMessage" ) ]
```

End If

Set value for all records of a table:

```
MBS( "FM.ExecuteSQL"; "UPDATE \"My Table\" SET \"My Field\" = 'Hello' ")
```

Set timestamp to today:

```
MBS( "FM.ExecuteSQL"; "UPDATE \"my Table\" SET \"Change Time\" = TODAY WHERE \"ID\" = '12345' ")
```

Update 5 fields:

```
MBS( "FM.ExecuteSQL"; "UPDATE \"my Table\" SET \"Number Field\" = 1, \"Text Field\" = 'test', \"Dest Field\" = \"Source Field\", \"Hour Field\" = CAST(HOUR(curtime) AS VARCHAR), \"Empty Field\" = NULL WHERE \"ID\" = '12345' ")
```

Select with passing variable as part of expression:

```
MBS("FM.ExecuteSQL"; "SELECT First_Name, Last_Name from Contacts WHERE ID_Contact_PK ='" & $Variable & "'")
```

Update date field:

```
MBS( "FM.ExecuteSQL"; "UPDATE myTable SET myDateField = CAST('2015-08-15' as DATE) " )
```

Delete all data in a table:

```
$Result = MBS( "FM.ExecuteSQL"; "DELETE FROM \"Prova\";")
```

Create an index:

```
MBS( "FM.ExecuteSQL"; "CREATE INDEX ON tablename.fieldname" )
```

Drop an index:

```
MBS( "FM.ExecuteSQL"; "DROP INDEX ON tablename.fieldname" )
```

Value in List of values:

```
MBS( "FM.ExecuteSQL"; "select * from \"Anlagen\" where \"Modell\" in ('test', 'abc')")
```

Delete all records from Table People:

```
# no where condition, so deletes all records!
MBS( "FM.ExecuteSQL"; "DELETE FROM \"People\"")
```

Query value of a repeating field with [] :

```
MBS( "FM.ExecuteSQL"; "SELECT test [ 2 ] FROM Kontakte")
```

Set value of repeating field:

```
MBS( "FM.ExecuteSQL"; "UPDATE Kontakte SET test [ 2 ] = 'test'")
```

Query only first row:

```
MBS( "FM.ExecuteSQL"; "SELECT * FROM ProductImages FETCH FIRST 1 ROWS ONLY")
```

Truncates table in FileMaker 15 or newer:

```
MBS( "FM.ExecuteSQL"; "TRUNCATE TABLE Kontakte")
```

Query field ID for a field with given name and table name:

```
MBS("FM.ExecuteSQL"; "SELECT FieldID FROM FileMaker_Fields WHERE FieldName='Vorname' and  
TableName='Kontakte' ")
```

Query repetition count of global field by name:

```
MBS("FM.ExecuteSQL"; "SELECT FieldReps FROM FILEMAKER_FIELDS WHERE FieldName='Wieder-  
holen' ")
```

Query field name and repetition count for all fields in a table:

```
MBS("FM.ExecuteSQL"; "SELECT FieldReps, FieldName FROM FILEMAKER_FIELDS WHERE Table-  
Name='Aufgaben' AND FieldType like '% global%' ")
```

Query list of record IDs for a given table:

```
MBS("FM.ExecuteSQL"; "SELECT ROWID FROM MyTable")
```

See also

- 80.30 FM.SQL.InsertRecords 4146
- 80.38 FM.UpdateRecord 4164
- 79.81 FM.UpdateRecord3 4043
- 79.83 FM.UpdateRecords2 4048
- 79.84 FM.UpdateRecords3 4050

- 124.6 IsError 6266
- 109.17 Matrix.InsertRecords 5798
- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397
- 164.68 Text.WriteTextFile 7871

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [SQL in FileMaker/Create Fields in Filemaker Table](#)
- [SQL in FileMaker/SQL Select](#)
- [Utility functions/Generate and Verify License Key](#)
- [Utility functions/Schedules](#)

80.8.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [ExecuteSQL and getting error details](#)
- [MBS FileMaker Plugin 3.4 for OS X/Windows](#)

80.8.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)
- [Ausgabe 3/2018, Seite 33](#)
- [Ausgabe 1/2016, Seite 27](#)
- [Ausgabe 4/2015, Seite 39](#)
- [Ausgabe 3/2015, Seite 29](#)
- [Ausgabe 3/2015, Seite 28](#)
- [Ausgabe 3/2015, Seite 27](#)

- Ausgabe 2/2015, Seite 18
- Ausgabe 2/2015, Seite 17
- Ausgabe 2/2015, Seite 16

Created 18th August 2014, last changed 13th January 2020.

80.9 FM.ExecuteSQL.LastError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteSQL.LastError")

Description

Set by FM.InsertRecord, FM.SQL.Execute, FM.ExecuteSQL, FM.ExecuteFileSQL or FM.ExecuteSQLOnIdle. The Errors number s are the same ones as the ones returned by Native FileMaker function "Get(LastError)" Examples: 1200 - "Generic Calculation Error" 200 - "Access Denied" 106 - "Missing Table" Known Limitations: Record Locking Errors are Not Reported! This means you must exercise caution when using UPDATE. There is no way to determine if an update actually occurs unless you check the value again after the update occurred.

In general error 8309 is a semantic error, so something is wrong in your SQL. 8310 is a syntax error, something in the SQL is not correctly parsed.

Error 8309 means you did pass wrong data type, like string for a number.

See also FM.ExecuteSQL.LastErrorMessage.

Examples

Get Last SQL Error

MBS("FM.ExecuteSQL.LastError")

See also

- 80.12 FM.ExecuteSQLOnIdle 4100
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.19 FM.InsertRecordCSV 4119
- 80.20 FM.InsertRecordQuery 4122
- 80.22 FM.InsertRecordTSV 4129
- 80.30 FM.SQL.InsertRecords 4146
- 109.17 Matrix.InsertRecords 5798
- 156.10 SQL.Execute 7309
- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397

Example Databases

- [SQL in FileMaker/Create Fields in Filemaker Table](#)

80.9.1 Blog Entries

- [ExecuteSQL and getting error details](#)
- [MBS Filemaker Plugin, version 4.2pr5](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)

80.9.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 18th August 2014, last changed 14th September 2015.

80.10 FM.ExecuteSQL.LastErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	3.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteSQL.LastErrorMessage")

Result Returns error message.

Description

Set by FM.InsertRecord, FM.SQL.Execute, FM.ExecuteSQL, FM.ExecuteFileSQL, FM.ExecuteSQLOnIdle and other SQL using functions.

If last error code was 0 (no error), you get an empty string.

Error may be something like this:

ERROR: FQL0007/(1:7): The column named "fieldname" does not exist in any table in the column reference's scope.

See also FM.ExecuteSQL.LastError. Use FM.ExecuteSQL.LastSQL to get the SQL command.

See also

- [80.9 FM.ExecuteSQL.LastError](#) 4094
- [80.11 FM.ExecuteSQL.LastSQL](#) 4099
- [80.12 FM.ExecuteSQLOnIdle](#) 4100
- [80.17 FM.InsertOrUpdateRecordQuery](#) 4113
- [80.18 FM.InsertRecord](#) 4115
- [80.19 FM.InsertRecordCSV](#) 4119
- [80.21 FM.InsertRecordQueryIgnoreDuplicates](#) 4126
- [80.22 FM.InsertRecordTSV](#) 4129
- [80.30 FM.SQL.InsertRecords](#) 4146
- [156.10 SQL.Execute](#) 7309

Example Databases

- [SQL in FileMaker/Create Fields in Filemaker Table](#)

80.10.1 Blog Entries

- [ExecuteSQL and getting error details](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)

- [Create fields in Filemaker database from a Script](#)
- [MBS Filemaker Plugin, version 3.0pr2](#)

80.10.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)
- [Ausgabe 2/2015, Seite 16](#)

Created 18th August 2014, last changed 25th October 2019.

Error	Message
FQL0001	There is an error in the syntax of the query.
FQL0002	The table named "?0" does not exist.
FQL0003	The table named "?0" already exists in this query.
FQL0004	The query is too complex. The maximum number of tables has been exceeded.
FQL0005	Expressions involving aggregations are not supported.
FQL0006	"The column named "?0" appears in more than one table in the column reference's scope."
FQL0007	The column named "?0" does not exist in any table in the column reference's scope.
FQL0008	The table named "?0" does not exist in the column reference's scope.
FQL0009	The column named "?1" does not exist in table "?0".
FQL0010	The literal value "?0" is not a valid DATE, TIME or TIMESTAMP.
FQL0011	Predicate must contain a logical operation (=, <, OR, AND, IS NULL, ...).
FQL0012	The ordinal reference "?0" in the ORDER BY clause is not valid.
FQL0013	Incompatible types in assignment.
FQL0014	The number of values in a VALUES row value constructor does not match the number of values in the target.
FQL0015	The number of values in an INSERT...SELECT statement does not match the number of values in the target.
FQL0016	A subquery contains an illegal outer reference to a column in the INSERT's target table.
FQL0017	An expression contains data types that cannot be compared.
FQL0018	An expression contains incompatible data types.
FQL0019	The result data type of a CASE expression cannot be inferred; they are all NULL.
FQL0020	An invalid number of parameters was supplied to the function "?0"
FQL0021	Parameter number ?0 to the function "?1" is not of the correct type.
FQL0022	A subquery expression must have exactly one value in the SELECT list.
FQL0023	A CAST expression requested an invalid data type conversion.
FQL0024	A reference to ROWID must be qualified if more than one table is present in the query.
FQL0025	All non-aggregated column references in the SELECT list and HAVING clause must be in the GROUP BY clause.
FQL0026	The number of columns in both inputs to a UNION operation must be the same.
FQL0027	The data types of corresponding columns in the inputs to a UNION operation must be the same.
FQL0028	Field repetitions must be numeric and between 1 and ?0.
FQL0029	A field repetition in the SET clause of an UPDATE statement must be a constant.
FQL0030	"?0" is an invalid function.
FQL0031	The the parameter's type cannot be inferred in this context. At least one query parameter must be an expression, a column or a constant.
FQL0032	A query may contain either named parameters or dynamic parameters, but not both.
FQL0033	Column names in FROM clause subqueries must be unique.
FQL0034	The number of output columns in a FROM clause subquery must match the number of columns in the table's name list.
FQL0035	Cursor support is not enabled for this query.
FQL0036	A cursor with the name "?0" already exists.
FQL0037	There is no cursor with the name "?0"

80.11 FM.ExecuteSQL.LastSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.ExecuteSQL.LastSQL")

Result Returns text or error.

Description

This is for executing SQL in FileMaker and provides you the last SQL command as run by the plugin.

See also

- 37.3 Audit.Changed 958
- 80.4 FM.DeleteRecord 4073
- 80.5 FM.DeleteRecords 4076
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.18 FM.InsertRecord 4115
- 80.38 FM.UpdateRecord 4164
- 79.80 FM.UpdateRecord2 4041
- 79.84 FM.UpdateRecords3 4050

80.11.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 11st September 2017, last changed 11st September 2017.

80.12 FM.ExecuteSQLOnIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	1.2	Yes	Yes	No	No	No

MBS("FM.ExecuteSQLOnIdle"; SQL Statement { ; Column Delimiter; Record Delimiter; Params })

Parameters

SQL Statement

the SQL statement

Column Delimiter

Optional

Optional column delimiter

Record Delimiter

Optional

Optional record delimiter

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Description

You run a script pause after using this function to give it time to execute.

See the other function for more info.

Seems like on FileMaker 11 you get LastError 8310 if you use fields with underscore in the name. You avoid that by placing the field names in quotes.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message. Use FM.ExecuteFileSQL if you want to specify the file name.

When you create fields, you can use the following types. Add global on the end to make it a global field.

FileMaker Type	SQL Type
Text	varchar
Number	decimal
Date	date
Time	time
Timestamp	timestamp
Container	binary

Examples

Create a new text field in a table:

```
MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable ADD MyField varchar")
```

And delete the field:

```
MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable DROP COLUMN MyField")
```

Create new table:

```
MBS("FM.ExecuteSQLOnIdle";"CREATE TABLE `MyTABLE` (test varchar)")
```

Create new index:

```
MBS("FM.ExecuteSQLOnIdle";"CREATE INDEX `IndexLastname` ON `Persons` (`LastName`);")
```

Add a global field:

```
MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable ADD MyGlobalField varchar global")
```

Create a field:

```
Set Variable [ $r ; Value: MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable ADD MyField var-
char") ]
Pause/Resume Script [ Duration (seconds): ,1 ]
If [ MBS("FM.ExecuteSQL.LastError") 0 ]
Show Custom Dialog [ "Error adding column" ; MBS("FM.ExecuteSQL.LastError") & ": " & MBS("FM.Ex-
ecuteSQL.LastErrorMessage") ]
Else
Show Custom Dialog [ "Removed Column" ; "OK" ]
End If
```

Remove a field:

```
Set Variable [ $r ; Value: MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE TestTable DROP COLUMN
MyField") ]
Pause/Resume Script [ Duration (seconds): 0.1 ]
If [ MBS("FM.ExecuteSQL.LastError") 0 ]
Show Custom Dialog [ "Error removing column" ; MBS("FM.ExecuteSQL.LastError") & ": " & MBS("FM.Ex-
ecuteSQL.LastErrorMessage") ]
Else
Show Custom Dialog [ "Removed Column" ; "OK" ]
End If
```

Change default value:

```
Set Variable [ $r ; Wert: MBS("FM.ExecuteSQLOnIdle";"ALTER TABLE myTable ALTER myField SET
```

```
DEFAULT 'FileMaker'") ]
```

See also

- [80.6 FM.ExecuteFileSQL](#) 4079
- [80.7 FM.ExecuteFileSQLOnIdle](#) 4086
- [80.8 FM.ExecuteSQL](#) 4088
- [80.9 FM.ExecuteSQL.LastError](#) 4094
- [80.10 FM.ExecuteSQL.LastErrorMessage](#) 4096

Example Databases

- [SQL in FileMaker/Create Fields in Filemaker Table](#)

80.12.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)
- [MBS FileMaker Plugin, version 7.4pr4](#)
- [MBS FileMaker Plugin, version 6.5pr3](#)
- [MBS Filemaker Plugin, version 4.2pr5](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)
- [Create fields in Filemaker database from a Script](#)

80.12.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 3/2018, Seite 34](#)
- [Ausgabe 3/2018, Seite 33](#)
- [Ausgabe 2/2015, Seite 15](#)
- [Ausgabe 2/2015, Seite 14](#)

Created 18th August 2014, last changed 9th April 2019.

80.13 FM.GetSQLBatchMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.GetSQLBatchMode")

Result Returns value or error.

Description

For use in FM.InsertRecordQuery.
(others could be added)

Default is 1.

See also

- 80.18 FM.InsertRecord 4115
- 80.20 FM.InsertRecordQuery 4122
- 80.37 FM.SetSQLBatchMode 4162

80.13.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr8](#)

Created 17th September 2016, last changed 18th September 2016.

80.14 FM.InsertOrUpdateRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertOrUpdateRecord"; FileName; TableName; IDField1; IDValue1; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

If the insert fails due to duplicate ID, we will update the record values.

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Then you pass one pair of field name and value for each field you like to set in the new record.

This function combines FM.InsertRecord and FM.UpdateRecord. If the ID is already used, we update, else we insert a new record.

For one ID field, please use FM.InsertOrUpdateRecord, for 2 ID fields FM.InsertOrUpdateRecord2 and for three ID fields FM.InsertOrUpdateRecord3.

This function is broken in version 6.4 as it returns always a SQL error for insert. Please use 6.5 or newer. With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update a record:

```
MBS( "FM.InsertOrUpdateRecord";
    ""; "Asset Management"; /* file and table name */
    "Asset ID"; "1"; /* ID field and value */
    "Information"; "Just a test"; /* first field and value */
    "Category"; "BestItems" ) /* second field and value */
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115
- 80.38 FM.UpdateRecord 4164
- 156.68 SQL.InsertOrUpdateRecords 7394

80.14.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.5pr1](#)

80.14.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 24
- Ausgabe 6/2018, Seite 23
- Ausgabe 3/2018, Seite 35

Created 5th December 2015, last changed 17th January 2020.

80.15 FM.InsertOrUpdateRecord2

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertOrUpdateRecord2"; FileName; TableName; IDField1; IDValue1; IDField2; IDValue2; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.
Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.
"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.
"ID1"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.
\$RecordID

IDField2

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.
"ID2"

IDValue2

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.
\$RelatedRecordID

FieldName

A field name to set.
"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.
"Test"

Result Returns OK or error.

Description

Same as FM.InsertOrUpdateRecord, but with 2 ID fields to locate record.

If the insert fails due to duplicate ID, we will update the record values.

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Then you pass one pair of field name and value for each field you like to set in the new record.

This function combines FM.InsertRecord and FM.UpdateRecord. If the ID is already used, we update, else we insert a new record.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Insert or update:

```
MBS( "FM.InsertOrUpdateRecord2";
  ""; "Assets"; /* file and table name */
  "Asset ID Match Field"; 2; /* first ID field and value */
  "Internal ID"; "2"; /* second ID field and value */
  "Model"; "Just a test"; /* first field and value */
  "Category"; "BestItems2" ) /* second field and value */
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.14 FM.InsertOrUpdateRecord 4104
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115
- 80.38 FM.UpdateRecord 4164
- 156.68 SQL.InsertOrUpdateRecords 7394

80.15.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)
- [MBS FileMaker Plugin, version 6.1pr3](#)

80.15.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 24

Created 19th February 2016, last changed 17th January 2020.

80.16 FM.InsertOrUpdateRecord3

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertOrUpdateRecord3"; FileName; TableName; IDField1; IDValue1; IDField2; IDValue2; IDField3; IDValue3; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField1

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID1"

IDValue1

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

IDField2

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID2"

IDValue2

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RelatedRecordID

IDField3

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID3"

IDValue3

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$OtherRecordID

FieldName

A field name to set.
"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.
"Test"

Result Returns OK or error.

Description

Same as FM.InsertOrUpdateRecord, but with 3 ID fields to locate record.

If the insert fails due to duplicate ID, we will update the record values.

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Then you pass one pair of field name and value for each field you like to set in the new record.

This function combines FM.InsertRecord and FM.UpdateRecord. If the ID is already used, we update, else we insert a new record.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Insert a record:

```
MBS( "FM.InsertOrUpdateRecord3"; "" ; "Kontakte"; "Vorname"; "Christian"; "Nachname"; "Schmitz";
"Firma"; "MBS"; "Titel"; "Herr" )
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.14 FM.InsertOrUpdateRecord 4104
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.17 FM.InsertOrUpdateRecordQuery 4113
- 80.18 FM.InsertRecord 4115

- 80.38 FM.UpdateRecord 4164
- 156.68 SQL.InsertOrUpdateRecords 7394

80.16.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)
- [MBS FileMaker Plugin, version 6.1pr3](#)

80.16.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 24
- Ausgabe 3/2018, Seite 35

Created 19th February 2016, last changed 17th January 2020.

80.17 FM.InsertOrUpdateRecordQuery

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	8.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertOrUpdateRecordQuery"; InsertFileName; InsertTableName; FieldNames; KeyFieldMapping; QueryFileName; SQL Statement { ; Params })

Parameters

InsertFileName

The file name of where the target table. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into (target). Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

KeyFieldMapping

The list of field names with index to map keys. Please specify a list of key name=key index. The key name is the name of the field in the target table and the index gives zero-based position in result set from query.

Field order in source and destination does not need to be the same.

ID=0

QueryFileName

The file name for the database to run the query against (source). Can be empty to look for the table in all files.

Get(FileName)

SQL Statement

SQL Statement as a Text string to query records from the source table.

Params

Optional

Pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from one table to another table.

Copy can be from one database to other or within same database. Also from one table to other or within

a table. Due to passing in new field names, you can even rearrange values from one column to other while copying. In the SQL you can use functions for sums or join data from several tables together to fill a new table. Filename parameters can be empty.

Use `FM.ExecuteSQL.LastErrorMessage` and `FM.ExecuteSQL.LastError` to see error message.

Reports an error if field name list doesn't match column count of the query result.

Please remove from SQL statement and field names all fields which are globals or unstored calculations.

For inserting records from other database (e.g. MySQL), please use `SQL.InsertRecords` function.

You can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

You can use `GetFieldName()` function to query field names and the plugin removes the table prefix with `::` in the field name before passing it to SQL engine.

Examples

Copies records from `Contacts` to `ContactsCopy`:

```
Set Variable [ $r ; Value: MBS( "FM.InsertOrUpdateRecordQuery"; "" ; "ContactsCopy"; "ID$First$Last$Mobile"; "ID=0"; "" ; "SELECT \"ID\", \"First\", \"Last\", \"Mobile\" FROM \"Contacts\" ) ]
```

See also

- 80.8 `FM.ExecuteSQL` 4088
- 80.9 `FM.ExecuteSQL.LastError` 4094
- 80.10 `FM.ExecuteSQL.LastErrorMessage` 4096
- 80.14 `FM.InsertOrUpdateRecord` 4104
- 80.15 `FM.InsertOrUpdateRecord2` 4107
- 80.16 `FM.InsertOrUpdateRecord3` 4110
- 156.69 `SQL.InsertRecords` 7397

Created 27th July 2018, last changed 19th February 2020.

80.18 FM.InsertRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecord"; FileName; TableName; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

Then you pass one pair of field name and value for each field you like to set in the new record.

As we can't know the new ID assigned for the record, you can help yourself by passing in an UUID for a field and later select that to get the auto assigned primary key (or have the UUID be the primary key, so you don't need a query).

See also FM.UpdateRecord to insert new record and FM.InsertOrUpdateRecord to update or insert record. With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Insert a record into Assets table:

```
MBS("FM.InsertRecord"; ""; "Assets"; "Model"; "TestModell"; "Item"; "MyItem"; "Serial Number"; "1234"; "In Service Date"; GetAsDate( "31.05.1996"))
```

Insert a record with 5 fields:

```
MBS("FM.InsertRecord"; $filename; $tablename; $field1; $value1; $field2; $value2; $field3; $value3; $field4;
$value4; $field5; $value5)
```

Insert with table and field ID instead of names:

```
Set Variable [ $r ; Value: MBS("FM.InsertRecord"; Get(FileName); "1065089"; "3"; "Hello") ]
```

Insert with using GetFieldName for field names:

```
MBS( "FM.InsertRecord"; ""; "Contacts";
GetFieldName ( Contacts::First ); "Joe";
GetFieldName ( Contacts::Last ); "Miller";
GetFieldName ( Contacts::Group ); "Best Customers" )
```

Build dynamically the evaluate statement with parameters:

```
# Our input parameters with field name list
Set Variable [ $FieldNames ; Value: FieldNames ( Get(FileName) ; Get(LayoutName) ) ]
#
# We build parameters for our Evaluate call
Set Variable [ $Params ; Value: "" ]
Set Variable [ $ParamIndex ; Value: 0 ]
#
Set Variable [ $ParamIndex ; Value: $ParamIndex + 1 ]
Set Variable [ $P [ $ParamIndex ] ; Value: Get(FileName) ]
Set Variable [ $Params ; Value: $Params & "; $P [ " & $ParamIndex & " ] " ]
#
Set Variable [ $ParamIndex ; Value: $ParamIndex + 1 ]
Set Variable [ $P [ $ParamIndex ] ; Value: Get(LayoutTableName) ]
Set Variable [ $Params ; Value: $Params & "; $P [ " & $ParamIndex & " ] " ]
#
# We loop over feidl list
Set Variable [ $Count ; Value: ValueCount ( $FieldNames ) ]
Set Variable [ $FieldIndex ; Value: 0 ]
Set Variable [ $Types ; Value: "" ]
#
Loop
# get field name and value
Set Variable [ $FieldIndex ; Value: $FieldIndex + 1 ]
Set Variable [ $Fieldname ; Value: GetValue($FieldNames; $FieldIndex) ]
Set Variable [ $Value ; Value: GetField ( $Fieldname) ]
#
# Check typ to filter fields we don't want
Set Variable [ $Typ ; Value: FieldType ( Get(FileName) ; $Fieldname ) ]
If [ Position ( $Typ; "Global"; 1; 1 ) = 1 or Position ( $Typ; "Summary"; 1; 1 ) = 1 or Position($Typ; "stored-
Calc"; 1; 1 ) = 1 or $Fieldname = "ID" ]
```



```

# ignore global, statistic and unsaved formula field
// Show Custom Dialog [ "Typ" ; $FieldName & ": " & $typ ]
Else
# We store in $P [ ] our parameters for evaluate and in $Params the parameters for Evaluate
Set Variable [ $Types ; Value: $Types & $& $FieldName & ": " & $Typ ]
Set Variable [ $ParamIndex ; Value: $ParamIndex + 1 ]
Set Variable [ $P [ $ParamIndex ] ; Value: $Fieldname ]
Set Variable [ $Params ; Value: $Params & "; $P [ " & $ParamIndex & " ] " ]
Set Variable [ $ParamIndex ; Value: $ParamIndex + 1 ]
Set Variable [ $P [ $ParamIndex ] ; Value: $Value ]
Set Variable [ $Params ; Value: $Params & "; $P [ " & $ParamIndex & " ] " ]
End If
#
Exit Loop If [ $FieldIndex = $count ]
End Loop
#
# now build Evaluate command and show it
// Show Custom Dialog [ "Types" ; $Types ]
Set Variable [ $Function ; Value: "FM.InsertRecord" ]
Set Variable [ $command ; Value: "MBS($Function" & $params & ")" ]
Show Custom Dialog [ "Command" ; $Command ]
If [ Get ( LastMessageChoice ) = 1 ]
# And run it!
Set Variable [ $result ; Value: Evaluate($Command) ]
Show Custom Dialog [ "Result" ; $Result ]
End If

```

Insert with automatic table name:

```

MBS("FM.InsertRecord";
""; // empty for current file
""; // empty as given with first field
GetFieldName ( Anlagen::Seriennummer ); // field name queried
"12345") // and value

```

See also

- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.13 FM.GetSQLBatchMode 4103
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.16 FM.InsertOrUpdateRecord3 4110
- 80.19 FM.InsertRecordCSV 4119

- 80.20 FM.InsertRecordQuery 4122
- 80.21 FM.InsertRecordQueryIgnoreDuplicates 4126
- 80.38 FM.UpdateRecord 4164
- 156.69 SQL.InsertRecords 7397

Example Databases

- [SQL in FileMaker/SQL Select Container](#)

80.18.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [Dynamically build MBS call and evaluate it](#)
- [MBS FileMaker Plugin, version 8.4pr2](#)
- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS FileMaker Plugin, version 7.2pr4](#)
- [MBS FileMaker Plugin, version 6.2pr2](#)
- [MBS FileMaker Plugin 5.1 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.1pr7](#)
- [Quickly copy lots of records](#)

80.18.2 FileMaker Magazin

- [Ausgabe 6/2019, Seite 33](#)
- [Ausgabe 4/2019, Seite 27](#)
- [Ausgabe 6/2018, Seite 27](#)
- [Ausgabe 6/2018, Seite 26](#)
- [Ausgabe 6/2018, Seite 23](#)
- [Ausgabe 6/2018, Seite 22](#)
- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 3/2018, Seite 36](#)
- [Ausgabe 3/2018, Seite 35](#)
- [Ausgabe 3/2018, Seite 34](#)

80.19 FM.InsertRecordCSV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecordCSV"; InsertFileName; InsertTableName; FieldNames; Text { ; Delimiter; FieldName; FieldValue })

Parameters

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model"

Text

The text to import in TSV/CSV format. This means tab, comma or semicolon character between fields and newline character for new records. Use Files.ReadTextFile if needed to read this from a file on disk.

"Bob;Miller;12345;New York"

Delimiter

Optional

Available in MBS FileMaker Plugin 8.5 or newer.

The delimiter to use. If empty, we auto detect it.

","

FieldName

Optional

A field name to set.

"Model"

FieldValue

Optional

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

This function allows for easy importing of text to create a log of records.

Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result. The fields must be of type text. You can later use a script to copy values in whatever format you need.
Returns number of records added.

CSV is automatically parsed per line with List.CSVSplit function internally.

You can pass one pair of field name and value for each extra field you like to set in the new records. e.g. a reference ID.

You can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

Version 8.5 adds Delimiter parameter, which may break scripts, but we need to have that parameter for people with older version.

Examples

Import some contacts with passing import ID/timestamp:

```
MBS( "FM.InsertRecordCSV"; "Contacts.fmp12"; "Contacts"; "FirstName$LastName$City"; $tsv; "ImportID"; $importID; "ImportDate"; Get(CurrentHostTimeStamp))
```

Import CSV:

```
MBS( "FM.InsertRecordCSV"; "Kontakte.fmp12"; "Kontakte"; "Vorname$Nachname$Firma$Position"; "Vorname;Nachname;Firma;Position")
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.18 FM.InsertRecord 4115
- 80.20 FM.InsertRecordQuery 4122
- 80.22 FM.InsertRecordTSV 4129
- 103.7 List.CSVSplit 5425

Example Databases

- [Text functions/CSV Import](#)

80.19.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr2](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS FileMaker Plugin, version 7.6pr5](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin 7.4 - More than 4900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 7.4pr8](#)

80.19.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 35](#)

Created 21st September 2017, last changed 17th January 2020.

80.20 FM.InsertRecordQuery

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecordQuery"; InsertFileName; InsertTableName; FieldNames; QueryFileName; SQL Statement { ; Params })

Parameters

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

QueryFileName

The file name for the database to run the query against. Can be empty to look for the table in all files.

Get(FileName)

SQL Statement

SQL Statement as a Text string

Params

Optional

Pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from one table to another table.

Copy can be from one database to other or within same database. Also from one table to other or within a table. Due to passing in new field names, you can even rearrange values from one column to other while copying. In the SQL you can use functions for sums or join data from several tables together to fill a new table. Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

Please remove from SQL statement and field names all fields which are globals or unstored calculations.

For inserting records from other database (e.g. MySQL), please use SQL.InsertRecords function.

Using FM.SetSQLBatchMode you can let the plugin insert e.g. 50 rows in one chunk which can speed up insert a lot.

Due to memory usage it can be useful to segment copy queries to only copy one GB at a time and avoid heavy memory pressure.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

Examples

Copy records within one table in same file:

```
MBS( "FM.InsertRecordQuery"; ""; "Contacts"; "First$Last$Company"; ""; "SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Copy records from a table from one database to other (production to development)

```
MBS( "FM.InsertRecordQuery"; "ContactsDev.fmp12"; "Contacts"; "First$Last$Company"; "Contacts.fmp12"; "SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Copy data to other table:

```
MBS( "FM.InsertRecordQuery"; ""; "Test"; "FirstName$LastName$CompanyName"; ""; "SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Query sum of sales grouped by customers in a sales report table:

```
MBS( "FM.InsertRecordQuery"; ""; "SalesReport"; "SumSales$CustomerID"; ""; "SELECT sum(\"Invoice-Total\"), \"CustomerID\" FROM Clients, Invoices WHERE Invoices.CustomerID = Clients.CustomerID GROUP by CustomerID" )
```

Copy two fields from one table to other:

```
MBS( "FM.InsertRecordQuery"; ""; "ASC Apple Script"; "Name$Script"; ""; "select * from \"Apple-Script\"" )
```

Copy from Anlagen example (in German) to copy of same file:

```
MBS( "FM.InsertRecordQuery";
```

```

/* InsertFileName */
"Anlagen2";
/* InsertTableName */
"Anlagen";
/* FieldNames */
"Abschreibung Jahre$Anzahl Diagramme$Ausgewählte Datei$Datei 1 Container$Datei 2 Container$Datei
3 Container$Datei 4 Container$Datei 5 Container$Datum Ausgang$Datum Ausgang Popover$Datum Ein-
gang$Erstellungsdatum$Fälligkeit$Fälligkeit Popover$Gekauft von$Geprüft durch$In Betrieb seit$Interne
ID$Kategorie$Kaufdatum$Kosten$Modell$Notizen$Ort$Position$Prüfdatum$Seriennummer$Signatur Con-
tainer$Zugewiesen an$Zustand";
/* QueryFileName */
"Anlagen";
/* SQL Statement */
"SELECT \"Abschreibung Jahre\", \"Anzahl Diagramme\", \"Ausgewählte Datei\", \"Datei 1 Container\",
\"Datei 2 Container\", \"Datei 3 Container\", \"Datei 4 Container\", \"Datei 5 Container\", \"Datum Aus-
gang\", \"Datum Ausgang Popover\", \"Datum Eingang\", \"Erstellungsdatum\", \"Fälligkeit\", \"Fäl-
ligkeit Popover\", \"Gekauft von\", \"Geprüft durch\", \"In Betrieb seit\", \"Interne ID\", \"Kategorie\",
\"Kaufdatum\", \"Kosten\", \"Modell\", \"Notizen\", \"Ort\", \"Position\", \"Prüfdatum\", \"Serien-
nummer\", \"Signatur Container\", \"Zugewiesen an\", \"Zustand\" FROM Anlagen"
)

```

Copy data to other table with parameter:

```

MBS( "FM.InsertRecordQuery"; ""; "Test"; "FirstName$LastName$CompanyName"; ""; "SELECT \"First\",
\"Last\", \"Company\" FROM Contacts WHERE City=?"; "Hamburg" )

```

Copy from file to fill clone with order and two fields to filter:

```

MBS( "FM.InsertRecordQuery"; "Aufgaben Clone"; "Aufgaben"; "Aufgabe$Fälligkeit$Beschreibung$Sta-
tus$Kategorie"; ""; "SELECT Aufgabe, \"Fälligkeit\", Beschreibung, Status, Kategorie FROM Aufgaben
WHERE IDField=? AND OtherThing=? ORDER BY \"Fälligkeit\" "; 123; "Haus" )

```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.18 FM.InsertRecord 4115
- 80.19 FM.InsertRecordCSV 4119
- 80.21 FM.InsertRecordQueryIgnoreDuplicates 4126
- 80.22 FM.InsertRecordTSV 4129
- 80.23 FM.InsertSetUpdateProgressDialog 4132

80.20. <i>FM.INSERTRECORDQUERY</i>	4125
• 156.68 SQL.InsertOrUpdateRecords	7394
• 156.69 SQL.InsertRecords	7397

Example Databases

- [SQL in FileMaker/SQL Select Container](#)

80.20.1 Blog Entries

- [Dynamically build MBS call and evaluate it](#)
- [MBS FileMaker Plugin, version 6.2pr3](#)
- [MBS FileMaker Plugin, version 6.0pr7](#)
- [MBS FileMaker Plugin, version 5.4pr5](#)
- [MBS FileMaker Plugin 5.1 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.1pr7](#)
- [Quickly copy lots of records](#)

80.20.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 35](#)
- [Ausgabe 4/2015, Seite 40](#)
- [Ausgabe 4/2015, Seite 39](#)

Created 29th April 2015, last changed 17th January 2020.

80.21 FM.InsertRecordQueryIgnoreDuplicates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecordQueryIgnoreDuplicates"; InsertFileName; InsertTableName; FieldNames; QueryFileName; SQL Statement { ; Params })

Parameters

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

QueryFileName

The file name for the database to run the query against. Can be empty to look for the table in all files.

Get(FileName)

SQL Statement

SQL Statement as a Text string

Params

Optional

Pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns OK or error.

Description

Same as FM.InsertRecordQuery, but ignores duplicate records.

On success returns the number of duplicate records instead of OK if there were any.

This function allows to easily copy a lot of records from one table to another table.

Copy can be from one database to other or within same database. Also from one table to other or within a table. Due to passing in new field names, you can even rearrange values from one column to other while copying. In the SQL you can use functions for sums or join data from several tables together to fill a new table. Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

Does not copy text styles, only plain text for text fields.

The duplicate check is based on FileMaker checking if a field is unique, e.g. the record ID.
For inserting records from other database (e.g. MySQL), please use SQL.InsertRecords function.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

Examples

Copy records within one table in same file:

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; "" ; "Contacts"; "First$Last$Company"; "" ; "SELECT \
\"First\", \"Last\", \"Company\" FROM Contacts" )
```

Copy records from a table from one database to other (production to development)

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; "ContactsDev.fmp12"; "Contacts"; "First$Last$Company";
"Contacts.fmp12"; "SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Copy data to other table:

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; "" ; "Test"; "FirstName$LastName$CompanyName"; "" ;
"SELECT \"First\", \"Last\", \"Company\" FROM Contacts" )
```

Query sum of sales grouped by customers in a sales report table:

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; "" ; "SalesReport"; "SumSales$CustomerID"; "" ; "SE-
LECT sum(\"InvoiceTotal\"), \"CustomerID\" FROM Clients, Invoices WHERE Invoices. CustomerID
= Clients.CustomerID GROUP by CustomerID" )
```

Copy two fields from one table to other:

```
MBS( "FM.InsertRecordQueryIgnoreDuplicates"; "" ; "ASC Apple Script"; "Name$Script"; "" ; "select *
from \"AppleScript\"" )
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.18 FM.InsertRecord 4115
- 80.20 FM.InsertRecordQuery 4122
- 80.23 FM.InsertSetUpdateProgressDialog 4132

- 156.69 SQL.InsertRecords

80.21.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr3](#)
- [MBS FileMaker Plugin, version 6.0pr7](#)

Created 18th January 2016, last changed 17th January 2020.

80.22 FM.InsertRecordTSV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("FM.InsertRecordTSV"; InsertFileName; InsertTableName; FieldNames; Text { ; FieldName; Field-Value })

Parameters

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

Text

The text to import in TSV format. This means tab character between fields and newline character for new records

"Bob Miller 12345 New York"

FieldName

Optional

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

Optional

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns number or error.

Description

This function allows for easy importing of text to create a log of records.

Filename parameters can be empty.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result. The fields must be of type text. You can later use a script to copy values in whatever format you need.

Returns number of records added.

For XML, please check XML.Import function. For splitting values with delimiter into a list, please use QuickList.New which also works with comma, tab, newline or other characters.

With plugin version 6.2 or newer you can pass one pair of field name and value for each extra field you like to set in the new records. e.g. a reference ID.

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

Examples

Import records from text:

```
Delete All Records [ No dialog ]
Set Variable [ $fields; Value:"FirstName$LastName$City" ]
Set Variable [ $r; Value:MBS("FM.InsertRecordTSV"; ""; "Contacts"; $fields; Import::ImportText) ]
```

Import some contacts with passing import ID/timestamp:

```
MBS( "FM.InsertRecordTSV"; "Contacts.fmp12"; "Contacts"; "FirstName$LastName$City"; $tsv; "ImportID"; $importID; "ImportDate"; Get(CurrentHostTimeStamp))
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.18 FM.InsertRecord 4115
- 80.19 FM.InsertRecordCSV 4119
- 80.20 FM.InsertRecordQuery 4122
- 80.23 FM.InsertSetUpdateProgressDialog 4132
- 103.69 QuickList.New 5521
- 191.12 XML.Import 9273

Example Databases

- [Text functions/TSV Import](#)

80.22.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)
- [MBS FileMaker Plugin, version 7.6pr5](#)
- [MBS FileMaker Plugin, version 6.2pr5](#)
- [MBS FileMaker Plugin, version 6.2pr3](#)
- [\[ANN \] MBS FileMaker Plugin 5.3 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.3pr3](#)
- [XML Import for FileMaker](#)
- [New today: FM.InsertRecordTSV](#)

80.22.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 35](#)

Created 8th September 2015, last changed 17th January 2020.

80.23 FM.InsertSetUpdateProgressDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.2	Yes	Yes	No	No	No

MBS("FM.InsertSetUpdateProgressDialog"; Update { ; Base; Factor })

Parameters

Update

Pass 1 to update Progress Dialog. Pass 0 to disable feature.

1

Base

Optional

The progress base in percent. Default is 0.

25

Factor

Optional

The factor to apply for progress update. Default is 1.

0.5

Result Returns OK or error.

Description

If you enable progress dialog updates, the functions FM.InsertRecordQuery, FM.InsertRecordQueryIgnoreDuplicates and FM.InsertRecordTSV will update progress dialog.

If cancel button is clicked, the functions may cancel and return an error. Depending on event handling a cancel button may not work while a plugin function runs!

You can use Base/Factor to adjust updates in progress dialog. e.g. if you have 4 things to do and FM.InsertRecordTSV is 2nd one, you can use a base of 25 (so 25% is for first thing to do) and factor of 0.25. Our progress will go from 25 to 50% than.

Examples

Import tab return text data as records with progress dialog:

```
Set Variable [ $r; Value:MBS( "ProgressDialog.SetTitle"; "Please wait." ) ]
```

```
Set Variable [ $r; Value:MBS( "ProgressDialog.SetShowButton"; 0 ) ]
```

```
Set Variable [ $r; Value:MBS( "ProgressDialog.SetTopText"; "Importing text file.." ) ]
```

```
Set Variable [ $r; Value:MBS( "ProgressDialog.Show" ) ]
```

```
Set Variable [ $r; Value:MBS( "FM.InsertSetUpdateProgressDialog"; 1 ) ]
```

```
Set Variable [ $r; Value:MBS( "FM.InsertRecordTSV"; "" ; "TSV Import"; "First$Last$Street$City$State$Zip$Country"; TSV Import::Text to Import ) ]
```

```
Set Variable [ $r; Value:MBS( "ProgressDialog.Hide" ) ]
```

See also

<i>80.23. FM.INSERTSETUPDATEPROGRESSDIALOG</i>	4133
• 63.47 Dialog.SetTop	2389
• 80.18 FM.InsertRecord	4115
• 80.20 FM.InsertRecordQuery	4122
• 80.21 FM.InsertRecordQueryIgnoreDuplicates	4126
• 80.22 FM.InsertRecordTSV	4129
• 80.37 FM.SetSQLBatchMode	4162
• 130.14 ProgressDialog.Hide	6508
• 130.26 ProgressDialog.SetShowButton	6527
• 130.29 ProgressDialog.SetTopText	6533
• 130.30 ProgressDialog.Show	6535

80.23.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr3](#)

Created 3th April 2016, last changed 18th September 2016.

80.24 FM.NULL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.NULL")

Result Returns empty container.

Description

FileMaker doesn't really have a NULL value, but other databases make a difference between empty text ("") and no value (NULL).

This function returns a special container value with no content.

SQL.SetParamValue and SQL.SetParamValues can use this value to pass NULL to the database.

Examples

get null value:

```
MBS("FM.NULL")
```

See also

- 156.117 SQL.SetParamTypesValues 7467
- 156.119 SQL.SetParamValue 7470
- 156.120 SQL.SetParamValues 7472

80.24.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 20th April 2015, last changed 14th September 2015.

80.25 FM.SQL.CSV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.CSV"; SQLref { ; firstRow; lastRow; firstCol; lastCol; rowSeparator; colSeparator })

Parameters**SQLref**

The reference number returned by FM.SQL.Execute function.

\$\$SQLRef

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

firstCol

Optional

The index of first column. Default is 0.

0

lastCol

Optional

The index of last column. Default is FM.SQL.FieldCount-1.

6

rowSeparator

Optional

The row separator. Default is CR.

Char(13)

colSeparator

Optional

The column separator. Default is semicolon.

”;"

Result Returns text or error.

Description

You can use this method to quickly get all fields in a given area as text.

If needed, we put values in quotes and escape quotes and newlines.

Please use Text.WriteTextFile to write to text file if you need CSV export.

Examples

Query fields and export as text and CSV:

```

Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "SQL error"; $sql ]
Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
# Write to text file
Set Variable [ $text; Value:MBS( "FM.SQL.Text"; $sql ) ]
Set Variable [ $desktopFolder; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $desktopFolder; "fields.txt" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
# Write to text file
Set Variable [ $text; Value:MBS( "FM.SQL.CSV"; $sql ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $desktopFolder; "fields.csv" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
# Cleanup
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If

```

See also

- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 80.36 FM.SQL.Text 4159
- 81.8 Folders.UserDesktop 4177
- 124.6 IsError 6266
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321
- 164.68 Text.WriteTextFile 7871

80.25.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr3](#)
- [MBS FileMaker Plugin, version 7.0pr2](#)

80.25.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 8th January 2017, last changed 8th January 2017.

80.26 FM.SQL.Execute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Execute"; FileName; SQL Statement { ; Params })

Parameters

FileName

The target database name. Can be empty to not limit query to one database.

""

SQL Statement

SQL Statement as a Text string

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns reference number or error.

Description

This function requires FileMaker 11 or newer. Please use FM.ExecuteSQL on FileMaker 10 or older.

Returns a SQL Reference, so you can use functions like FM.SQL.RowCount, FM.SQL.FieldCount, FM.SQL.Field and FM.SQL.FieldType to query result. Don't forget to use FM.SQL.Release to release the result from memory when you are done with it.

Examples

Query only first row:

```
MBS( "FM.SQL.Execute"; ""; "SELECT * FROM ProductImages FETCH FIRST 1 ROWS ONLY")
```

SELECT records

```
MBS("FM.SQL.Execute"; ""; "select * from Contacts")
```

Select with parameter:

```
MBS("FM.SQL.Execute"; ""; "select Menge from Boxen where Artikel_Nr=? ORDER BY Menge DESC"; "ABC123")
```

Query some values:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; ""; "select * from Clients" ) ]
```

```
If [ MBS("IsError" ) ]
```

```
Show Custom Dialog [ "SQL error"; $sql ]
```

```

Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If

```

Query record as JSON:

```

Let ( [
fields = MBS( "FM.QueryFieldsForTableName"; "Contacts");
Records = MBS( "FM.SQL.Execute"; ""; "SELECT \" & substitute(fields; $; "\", \") & "\" FROM
\"Contacts\" WHERE \"First\" = ?"; "Joe");

json = MBS( "FM.SQL.JSONRecord"; Records; 0; fields);
r = MBS( "FM.SQL.Release"; Records ) ]
; json )

```

Make a JSON query in one Let statment:

```

Let (
[
$sdatt = "10/1/2019 00:00";
$edatt = "10/10/2019 00:00";
sku = "'PARbh50','PARgy50'";
sql1 = MBS("FM.SQL.Execute"; ""; "Select docnum,linetotal,db from \"MyTable\" where ItemCode in (\"
& sku & ") and DocDate between ? and ?"; $sdatt; $edatt);
json = MBS( "FM.SQL.JSONRecords"; sql1; "DocNum$LineTotal$DB"; 1);
r = MBS( "FM.SQL.Release"; sql1 )
]; json
)

```

See also

- 80.27 FM.SQL.Field 4141
- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 100.2 FM.SQL.JSONRecord 5234
- 100.3 FM.SQL.JSONRecords 5236
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 79.69 FM.SQL.Sum 4022
- 124.6 IsError 6266
- 156.10 SQL.Execute 7309

- 156.16 SQL.FieldCount

Example Databases

- [SQL in FileMaker/ImageGallery](#)
- [SQL in FileMaker/SQL Select Container](#)
- [SQL to other databases/SQL Export](#)
- [Third Party/FileMaker Snippet Storage](#)

80.26.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [FileMaker SQL with Sum, Min, Max and Avg on results](#)
- [MBS FileMaker Plugin, version 8.5pr4](#)
- [Image Gallery in FileMaker using SQL](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [FileMaker Custom function to query a value from other table or file](#)
- [MBS FileMaker Plugin 7.0 - More than 4400 Functions In One Plugin](#)
- [MBS FileMaker Plugin 7.0 - 4400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 6.4 for OS X/Windows](#)
- [Execute SQL in FileMaker and get back native field types](#)

80.26.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)

Created 18th April 2015, last changed 16th December 2019.

80.27 FM.SQL.Field

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Field"; SQLref; Row; Column)

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.
\$SQLRef

Row

The row number from 0 to FM.SQL.RowCount-1.
\$row

Column

The column number from 0 to FM.SQL.FieldCount-1.
\$col

Result Returns value or error.

Description

Native data type is preserved so this function can returns styled text, number, time, date, timestamp and container.

Examples

Query field values:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
# query first field of first row:
Set Variable [ $value; MBS( "FM.SQL.Field"; $sql; 0; 0 ) ]
# query other field
Set Variable [ $value; MBS( "FM.SQL.Field"; $sql; $row; $col ) ]
Set Variable [ $r; MBS( "FM.SQL.Release"; $sql ) ]
```

See also

- 80.25 FM.SQL.CSV 4135
- 80.26 FM.SQL.Execute 4138
- 80.28 FM.SQL.FieldCount 4143
- 80.29 FM.SQL.FieldType 4145
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157

- 80.36 FM.SQL.Text 4159
- 109.32 Matrix.Text 5820
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321

Example Databases

- [SQL in FileMaker/ImageGallery](#)
- [SQL in FileMaker/SQL Select Container](#)
- [SQL to other databases/SQL Export](#)

80.27.1 Blog Entries

- [Image Gallery in FileMaker using SQL](#)
- [FileMaker Custom function to query a value from other table or file](#)
- [MBS FileMaker Plugin, version 6.0pr6](#)
- [Execute SQL in FileMaker and get back native field types](#)

80.27.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)

Created 18th April 2015, last changed 1st March 2019.

80.28 FM.SQL.FieldCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.FieldCount"; SQLref)

Parameters**SQLref**

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Result Returns number or error.

Description**Examples**

Query some values:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "SQL error"; $sql ]
Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If
```

See also

- 80.25 FM.SQL.CSV 4135
- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.29 FM.SQL.FieldType 4145
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 80.36 FM.SQL.Text 4159
- 109.32 Matrix.Text 5820
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321

Example Databases

- [SQL in FileMaker/SQL Select Container](#)

80.28.1 Blog Entries

- [Execute SQL in FileMaker and get back native field types](#)

Created 18th April 2015, last changed 8th January 2017.

80.29 FM.SQL.FieldType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.FieldType"; SQLref; Row; Column)

Parameters**SQLref**

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Row

The row number from 0 to FM.SQL.RowCount-1.

\$row

Column

The column number from 0 to FM.SQL.FieldCount-1.

\$col

Result Returns text or error.

Description

Returns text, date, number, time, timestamp, boolean, container or invalid.

See also

- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.35 FM.SQL.RowCount 4157
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321

Example Databases

- [SQL in FileMaker/SQL Select Container](#)

80.29.1 Blog Entries

- [Execute SQL in FileMaker and get back native field types](#)

Created 18th April 2015, last changed 14th September 2015.

80.30 FM.SQL.InsertRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "FM.SQL.InsertRecords"; SQLref; InsertFileName; InsertTableName; FieldNames { ; StartRow; EndRow } )
```

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$\$SQLRef

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model"

StartRow

Optional

The index of the start row in the current recordset. First row is 0.

0

EndRow

Optional

The index of the end row in the current recordset. First row is 0. Last Row would be FM.SQL.RowCount-1.

0

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from a query in FileMaker database into a FileMaker table.

Please provide field names in FileMaker. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

Function will fail if data types in source and dest fields do not match for assignment. e.g. date and time fields will not work, only timestamp fields.

For insert from SQL Connection into FileMaker database, please use SQL.InsertRecords.

Examples

Copy records:

```
# select some data
Set Variable [ $Records; Value:MBS( "FM.SQL.Execute"; "" ; "SELECT FirstName, LastName, Birthday
FROM test" ) ]
# now insert them somewhere else
Set Variable [ $r; Value:MBS( "FM.SQL.InsertRecords"; $Records; "" ; "test"; "FirstName$LastName$Birth-
Day" ) ]
# and free record set
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $Records ) ]
```

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.26 FM.SQL.Execute 4138
- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 80.34 FM.SQL.Release 4155
- 80.35 FM.SQL.RowCount 4157
- 156.10 SQL.Execute 7309
- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397

80.30.1 Blog Entries

- [MBS FileMaker Plugin 6.4 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)

80.30.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 1st August 2016, last changed 23th November 2017.

80.31 FM.SQL.InsertRecordsToSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.InsertRecordsToSQL"; SQLref; Connection; InsertTableName; FieldNames { ; StartRow; EndRow; Replace })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

InsertTableName

The name of the table to insert record into.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model\$Names"

StartRow

Optional

The index of the start row. First row is 0. Pass -1 or nothing for default which is starting with row 0.

-1

EndRow

Optional

The index of the end row. First row is 0. Last Row would be FM.SQL.RowCount-1. Pass -1 to use all rows and the plugin will internally use RowCount-1.

-1

Replace

Optional

Available in MBS FileMaker Plugin 7.1 or newer.

Set to 1 to replace existing entries. Currently available for MySQL and databases with same syntax.

0

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from a query in FileMaker database into a SQL database. Please provide field names in other table. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Reports an error if field name list doesn't match column count of the query result.

Function will fail if data types in source and dest fields do not match for assignment. e.g. date and time fields will not work, only timestamp fields.

For insert within FileMaker, please use FM.SQL.InsertRecords.

Examples

Insert Records to SQL database:

```
Set Variable [ $InsertResult; Value:MBS( "FM.SQL.InsertRecordsToSQL"; $Records; $connection; $BaseTableName; $FieldNames ) ]
```

Copy records to SQLite:

```
Set Variable [ $Connection ; Value: MBS("SQL.NewConnection") ]
# Tell plugin where SQLite library is
Set Variable [ $result ; Value: MBS("SQL.InternalSQLiteLibrary.Activate") ]
# Tell plugin we want to use SQLite
Set Variable [ $result ; Value: MBS("SQL.SetClient"; $Connection; "SQLite") ]
# Connect to database in read/write/create mode. Creates new file if none exists.
Set Variable [ $result ; Value: MBS("SQL.Connect"; $Connection; "/Users/cs/Desktop/mydatabase.sqlite") ]
]
If [ $result = "OK" ]
# Query records in FileMaker
Set Variable [ $Records ; Value: MBS( "FM.SQL.Execute"; Get(FileName); "SELECT FirstName, LastName, Birthday FROM People") ]
# Transfer to other database
Set Variable [ $Records ; Value: MBS( "FM.SQL.InsertRecordsToSQL"; $Records; $Connection; "People"; "FirstName$LastName$Birthday") ]
# Cleanup
Set Variable [ $result2 ; Value: MBS("SQL.Commit"; $Connection) ]
Set Variable [ $result2 ; Value: MBS( "FM.SQL.Release"; $Records ) ]
If [ $result "OK" ]
Show Custom Dialog [ "Error: " & $result ]
Else
Show Custom Dialog [ "Record exported." ]
End If
End If
Set Variable [ $result2 ; Value: MBS("SQL.FreeConnection"; $Connection) ]
```

See also

- 80.26 FM.SQL.Execute 4138
- 80.30 FM.SQL.InsertRecords 4146
- 109.18 Matrix.InsertRecordsToSQL 5800
- 156.7 SQL.Commit 7300

- 156.8 SQL.Connect 7302
- 156.10 SQL.Execute 7309
- 156.69 SQL.InsertRecords 7397
- 156.70 SQL.InternalSQLiteLibrary.Activate 7399
- 156.80 SQL.NewConnection 7412
- 156.97 SQL.SetClient 7434

Example Databases

- [SQL to other databases/SQL Export](#)
- [Third Party/FileMaker Snippet Storage](#)

80.31.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS FileMaker Plugin 6.4 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)

80.31.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)

Created 1st August 2016, last changed 7th November 2018.

80.32 FM.SQL.JSONRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 100 JSON	8.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.JSONRecord"; SQLref; Row; FieldNames { ; Flags })

Parameters**SQLref**

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Row

The row you like to get.

1

FieldNames

A list of field names for the JSON.

"Model\$Names"

Flags

Optional

The flags for the json creation. Pass 1 to get all values as text. Pass 2 to get all dates, times and timestamps in SQL format.

1+2

Result Returns JSON text or error.

Description

You provide list of field names, which should be in same order as fields in SQL result.

Optionally we can return SQL dates, times and timestamps as SQL format.

Containers are returned as Base64 encoded data.

Examples

Query JSON record:

```
Set Variable [ $sql ; Value: MBS( "FM.SQL.Execute"; "" ; "SELECT \"First\", \"Last\", Birthday, \"Photo Container\" FROM Contacts" ) ]
```

```
Set Variable [ $json ; Value: MBS( "FM.SQL.JSONRecord"; $sql; 0; "First$Last$Birthday$Photo"; 2) ]
```

```
Show Custom Dialog [ "JSON" ; $json ]
```

```
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $sql ) ]
```

Query record as JSON:

```
Let ( [
```

```
fields = MBS( "FM.QueryFieldsForTableName"; "Contacts");
```

```
Records = MBS( "FM.SQL.Execute"; "" ; "SELECT \"\" & substitute(fields; $; \"\", \") & \"\" FROM \"Contacts\" WHERE \"First\" = ?"; "Joe");
```

```
json = MBS( "FM.SQL.JSONRecord"; Records; 0; fields);  
r = MBS( "FM.SQL.Release"; Records ) ]  
; json )
```

See also

- 79.48 FM.QueryFieldsForTableName 3980
- 80.26 FM.SQL.Execute 4138
- 100.3 FM.SQL.JSONRecords 5236
- 80.34 FM.SQL.Release 4155
- 156.10 SQL.Execute 7309

80.32.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 4th March 2018, last changed 8th April 2019.

80.33 FM.SQL.JSONRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 100 JSON	8.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.JSONRecords"; SQLref; FieldNames { ; Flags })

Parameters**SQLref**

The reference number returned by FM.SQL.Execute function.

\$SQLRef

FieldNames

A list of field names for the JSON.

"Model\$Names"

Flags

Optional

The flags for the json creation. Pass 1 to get all values as text. Pass 2 to get all dates, times and timestamps in SQL format.

1+2

Result Returns JSON text or error.

Description

You provide list of field names, which should be in same order as fields in SQL result.

Optionally we can return SQL dates, times and timestamps as SQL format.

Containers are returned as Base64 encoded data.

Examples

Query JSON:

```
Set Variable [ $sql ; Value: MBS( "FM.SQL.Execute"; "" ; "SELECT \"First\" , \"Last\" , Birthday, \"Photo Container\" FROM Contacts" ) ]
```

```
Set Variable [ $json ; Value: MBS( "FM.SQL.JSONRecords"; $sql; "First$Last$Birthday$Photo"; 2 ) ]
```

```
Show Custom Dialog [ "JSON" ; $json ]
```

```
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $sql ) ]
```

Make a JSON query in one Let statment:

```
Let (
```

```
[
```

```
$sdat = "10/1/2019 00:00";
```

```
$edat = "10/10/2019 00:00";
```

```
sku = "'PARbh50','PARgy50'";
```

```
sql1 = MBS("FM.SQL.Execute"; "" ; "Select docnum,linetotal,db from \"MyTable\" where ItemCode in (\" & sku & ") and DocDate between ? and ?"; $sdat; $edat);
```

```
json = MBS( "FM.SQL.JSONRecords"; sql1; "DocNum$LineTotal$DB"; 1);
```

```
r = MBS( "FM.SQL.Release"; sql1 )
```

4154

```
] ; json  
)
```

See also

- 80.26 FM.SQL.Execute 4138
- 100.2 FM.SQL.JSONRecord 5234
- 80.34 FM.SQL.Release 4155
- 156.10 SQL.Execute 7309

80.33.1 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 4th March 2018, last changed 16th December 2019.

80.34 FM.SQL.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Release"; SQLref)

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Result Returns OK or error.

Description

Examples

Run command and free it later:

```
$ref = MBS( "FM.SQL.Execute"; "" ; "SELECT * FROM ProductImages FETCH FIRST 1 ROWS ONLY")
```

...

```
$r = MBS( "FM.SQL.Release"; $ref )
```

See also

- 79.55 FM.SQL.Avg 3992
- 80.25 FM.SQL.CSV 4135
- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.30 FM.SQL.InsertRecords 4146
- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 79.66 FM.SQL.Min 4016
- 80.35 FM.SQL.RowCount 4157
- 79.69 FM.SQL.Sum 4022

Example Databases

- [SQL in FileMaker/ImageGallery](#)
- [SQL in FileMaker/SQL Select Container](#)
- [SQL to other databases/SQL Export](#)
- [Third Party/FileMaker Snippet Storage](#)

80.34.1 Blog Entries

- [FileMaker SQL with Sum, Min, Max and Avg on results](#)
- [Image Gallery in FileMaker using SQL](#)
- [FileMaker Custom function to query a value from other table or file](#)
- [Execute SQL in FileMaker and get back native field types](#)

Created 18th April 2015, last changed 1st August 2016.

80.35 FM.SQL.RowCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.RowCount"; SQLref)

Parameters**SQLref**

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Result Returns number or error.

Description**Examples**

Query some values:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "SQL error"; $sql ]
Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If
```

See also

- 80.25 FM.SQL.CSV 4135
- 79.65 FM.SQL.Max 4014
- 79.66 FM.SQL.Min 4016
- 80.34 FM.SQL.Release 4155
- 79.69 FM.SQL.Sum 4022
- 109.5 Matrix.Avg 5784
- 109.17 Matrix.InsertRecords 5798
- 109.22 Matrix.Min 5805
- 109.31 Matrix.Sum 5818
- 156.10 SQL.Execute 7309

Example Databases

- [SQL in FileMaker/ImageGallery](#)
- [SQL in FileMaker/SQL Select Container](#)
- [SQL to other databases/SQL Export](#)

80.35.1 Blog Entries

- [Image Gallery in FileMaker using SQL](#)
- [Execute SQL in FileMaker and get back native field types](#)

80.35.2 FileMaker Magazin

- [Ausgabe 3/2018, Seite 34](#)

Created 18th April 2015, last changed 8th January 2017.

80.36 FM.SQL.Text

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	7.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.Text"; SQLref { ; firstRow; lastRow; firstCol; lastCol; rowSeparator; colSeparator })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$\$SQLref

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

firstCol

Optional

The index of first column. Default is 0.

0

lastCol

Optional

The index of last column. Default is FM.SQL.FieldCount-1.

6

rowSeparator

Optional

The row separator. Default is CR.

Char(13)

colSeparator

Optional

The column separator. Default is tab character.

Char(9)

Result Returns text or error.

Description

You can use this method to quickly get all fields in a given area as text.

Examples

Query fields and export as text and CSV:

```
Set Variable [ $sql; Value:MBS( "FM.SQL.Execute"; "" ; "select * from Clients" ) ]
```

```

If [ MBS("IsError") ]
Show Custom Dialog [ "SQL error"; $sql ]
Else
Show Custom Dialog [ "SQL result"; "got " & MBS( "FM.SQL.RowCount"; $sql ) & " rows with each " &
MBS( "FM.SQL.FieldCount"; $sql ) & " ..." ]
# Write to text file
Set Variable [ $text; Value:MBS( "FM.SQL.Text"; $sql ) ]
Set Variable [ $desktopFolder; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $desktopFolder; "fields.txt" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
# Write to text file
Set Variable [ $text; Value:MBS( "FM.SQL.CSV"; $sql ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $desktopFolder; "fields.csv" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
# Cleanup
Set Variable [ $r; Value:MBS( "FM.SQL.Release"; $sql ) ]
End If

```

See also

- 80.25 FM.SQL.CSV 4135
- 80.28 FM.SQL.FieldCount 4143
- 79.66 FM.SQL.Min 4016
- 79.69 FM.SQL.Sum 4022
- 81.8 Folders.UserDesktop 4177
- 124.6 IsError 6266
- 121.1 Path.AddPathComponent 6135
- 156.10 SQL.Execute 7309
- 156.16 SQL.FieldCount 7321
- 164.68 Text.WriteTextFile 7871

80.36.1 Blog Entries

- [FileMaker SQL with Sum, Min, Max and Avg on results](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 7.0pr2](#)

80.36.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 8th January 2017, last changed 8th January 2017.

80.37 FM.SetSQLBatchMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("FM.SetSQLBatchMode"; Value)

Parameters

Value

The chunk size. Default is 1, but 10 or 50 is usually faster.

1

Result Returns OK or error.

Description

For use in FM.InsertRecordQuery.
(others could be added)

Our plugin can send several SQL commands in one chunk which makes some operation much faster.

Examples

Move records, 50 inserts per chunk:

```
Set Variable [ $r ; Value: MBS( "ProgressDialog.Reset" ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.SetTitle"; "Please wait." ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.SetTopText"; "Copying records..." ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.Show" ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.SetProgress"; 0 ) ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.Update" ) ]

Set Variable [ $r ; Value: MBS( "FM.SetSQLBatchMode"; 50 ) ]
Set Variable [ $r ; Value: MBS( "FM.InsertSetUpdateProgressDialog"; 1 ) ]
Set Variable [ $r ; Value: MBS( "FM.InsertRecordQuery"; "" ; "dest"; $FieldNames; "" ; "SELECT \"f1\", \"f2\", \"f3\", \"f4\", \"f5\", \"f6\", \"f7\",... ]
Set Variable [ $r ; Value: MBS( "ProgressDialog.Hide" ) ]
```

See also

- 63.27 Dialog.Reset 2366
- 80.13 FM.GetSQLBatchMode 4103
- 80.20 FM.InsertRecordQuery 4122
- 80.23 FM.InsertSetUpdateProgressDialog 4132
- 130.15 ProgressDialog.Reset 6510
- 130.25 ProgressDialog.SetProgress 6525

<i>80.37. FM.SETSQLBATCHMODE</i>	4163
• 130.27 ProgressDialog.SetTitle	6529
• 130.29 ProgressDialog.SetTopText	6533
• 130.30 ProgressDialog.Show	6535
• 130.31 ProgressDialog.Update	6537

80.37.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr8](#)

Created 17th September 2016, last changed 12nd November 2018.

80.38 FM.UpdateRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.UpdateRecord"; FileName; TableName; IDField; IDValue; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField

The name of the field which provides an unique ID for each record, so we can identify the field. Can be RecordID for the record ID.

Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must be unique.

Then you pass one pair of field name and value for each field you like to set in the new record.

Please note that FM.UpdateRecord and FM.UpdateRecords are nearly identical. Just FM.UpdateRecord

provides the check to make sure only one record matches while FM.UpdateRecords allows several records to be updated. So with FM.UpdateRecords you can easily erase a lot of data if you pass wrong ID!

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use GetFieldName() function to query field names and the plugin removes the table prefix with :: in the field name before passing it to SQL engine.

You can use FM.ExecuteSQL.LastSQL function to see later what SQL was created and run.

Examples

Update a record:

```
MBS( "FM.UpdateRecord";
""; "Asset Management"; /* file and table name */
"Asset ID"; "1"; /* ID field and value */
"Information"; "Just a test"; /* first field and value */
"Category"; "BestItems" ) /* second field and value */
```

Update a record:

```
MBS( "FM.UpdateRecord"; Get(FileName); "Kontakte"; "Vorname"; "Joe"; "Firma"; "Test" )
```

Update a repeating field:

```
Set Variable [ $r ; Value: MBS( "FM.UpdateRecord"; ""; "Contacts"; "RowID"; 1; "repeating [ 5 ] "; "Hello"
) ]
Show Custom Dialog [ Get ( RecordID ) & ": " & Contacts::repeating [ 5 ] ]
```

See also

- 80.4 FM.DeleteRecord 4073
- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.14 FM.InsertOrUpdateRecord 4104
- 80.15 FM.InsertOrUpdateRecord2 4107
- 80.16 FM.InsertOrUpdateRecord3 4110
- 79.80 FM.UpdateRecord2 4041
- 79.81 FM.UpdateRecord3 4043
- 79.83 FM.UpdateRecords2 4048

- 79.84 FM.UpdateRecords3

Example Databases

- [Mac and iOS/MapKit/MapView Click Polygons](#)

80.38.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS FileMaker Plugin, version 9.3pr1](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 5.5pr1](#)

80.38.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 24
- Ausgabe 6/2018, Seite 23
- Ausgabe 3/2018, Seite 35
- Ausgabe 1/2016, Seite 32

Created 5th December 2015, last changed 17th January 2020.

80.39 FM.UpdateRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL	6.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.UpdateRecords"; FileName; TableName; IDField; IDValue; FieldName; FieldValue)

Parameters

FileName

The file name of where the table is inside. Can be empty to look for the table in all files.

Get(FileName)

TableName

The name of the table to insert record into. Can be ID of table, so we lookup name by ID. Can be result of GetFieldName() function as we remove field name automatically.

"Assets"

IDField

The name of the field which provides an unique ID for each record, so we can identify the field. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"ID"

IDValue

The value for the ID field to identify the record. Data type of parameter must match the data type of the field.

\$RecordID

FieldName

A field name to set. Can be ID of field, so we lookup name by ID. Can be result of GetFieldName() function as we remove table name automatically.

"Model"

FieldValue

A field value to use for setting the field in the parameter before. Data type of parameter must match the data type of the field.

"Test"

Result Returns OK or error.

Description

You pass to this function table name (and optional filename).

To identify the record you pass the name of the ID field and the value for the record. The ID field must not be unique, so several records can be updated at once.

Then you pass one pair of field name and value for each field you like to set in the new record.

Please note that FM.UpdateRecord and FM.UpdateRecords are nearly identical. Just FM.UpdateRecord provides the check to make sure only one record matches while FM.UpdateRecords allows several records to be updated. So with FM.UpdateRecords you can easily erase a lot of data if you pass wrong ID!

With plugin version 7.2 or later, you can specify fields and table via IDs and the plugin will lookup them for you at runtime. Table IDs and table names must be unique across all open files for this to work correctly.

With plugin version 8.4 or newer, you can use `GetFieldName()` function to query field names and the plugin removes the table prefix with `::` in the field name before passing it to SQL engine.

You can use `FM.ExecuteSQL.LastSQL` function to see later what SQL was created and run.

Examples

Update a few records:

```
MBS( "FM.UpdateRecord";
"; "Asset Management"; /* file and table name */
"Category"; "Houses"; /* ID field and value */
"Information"; "Just a test"; /* first field and value */
"Comment"; "Testing" ) /* second field and value */
```

See also

- 80.5 FM.DeleteRecords 4076
- 80.8 FM.ExecuteSQL 4088
- 80.11 FM.ExecuteSQL.LastSQL 4099
- 80.38 FM.UpdateRecord 4164
- 79.80 FM.UpdateRecord2 4041
- 79.81 FM.UpdateRecord3 4043
- 79.83 FM.UpdateRecords2 4048
- 79.84 FM.UpdateRecords3 4050

80.39.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS FileMaker Plugin, version 5.5pr3](#)

80.39.2 FileMaker Magazin

- Ausgabe 3/2019, Seite 30
- Ausgabe 6/2018, Seite 23

Created 11st December 2015, last changed 17th January 2020.

Chapter 81

Folders

Functions to query special folders.

81.1 Folders.Applications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	No	Yes

MBS("Folders.Applications")

Result Returns path or error.

Description

This is a native path. You can use `Path.NativePathToFileMakerPath` if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.Applications")

See also

- 121.7 `Path.NativePathToFileMakerPath`

6147

Created 18th August 2014, last changed 29th April 2016.

81.2 Folders.LocalFonts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	No	Yes, macOS only	No	No

MBS("Folders.LocalFonts")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.LocalFonts")

See also

- 81.11 Folders.UserFonts 4182
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 17th June 2018.

81.3 Folders.LocalPreferences

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	No	Yes

MBS("Folders.LocalPreferences")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.LocalPreferences")

See also

- 81.15 Folders.UserPreferences 4186
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 29th April 2016.

81.4 Folders.SharedDocuments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Folders.SharedDocuments")

Result Returns path or error.

Description

This is a native path. You can use `Path.NativePathToFileMakerPath` if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.SharedDocuments")

See also

- [81.9 Folders.UserDocuments](#) 4179
- [121.7 Path.NativePathToFileMakerPath](#) 6147

Created 18th August 2014, last changed 17th June 2018.

81.5 Folders.System

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	No	Yes

MBS("Folders.System")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.System")

See also

- 61.9 CURL.Cleanup 1772
- 61.13 CURL.CloseOutputFile 1778
- 78.36 Files.LaunchFile 3826
- 78.62 Files.WriteFile 3871
- 81.6 Folders.SystemFonts 4174
- 81.7 Folders.SystemTemporary 4175
- 81.16 Folders.UserTemporary 4187
- 121.1 Path.AddPathComponent 6135
- 121.5 Path.LastPathComponent 6144
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 29th April 2016.

81.6 Folders.SystemFonts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	No	No

MBS("Folders.SystemFonts")

Result Returns path or error.

Description

This is a native path. You can use `Path.NativePathToFileMakerPath` if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.SystemFonts")

See also

- 81.5 Folders.System 4173
- 81.11 Folders.UserFonts 4182
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 29th April 2016.

81.7 Folders.SystemTemporary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Folders.SystemTemporary")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

On Mac Folders.UserTemporary is in the user's home folder while the system wide temporary folder is in /var/folders and can be queried with Folders.SystemTemporary.

Examples

Queries path:

```
MBS( "Folders.SystemTemporary" )
```

Write container to temp file and launch:

```
# get temp folder
Set Variable [ $TempFolder; Value:MBS( "Folders.SystemTemporary" ) ]
# and file name from container
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; test::myContainer ) ]
# add name to folder path
Set Variable [ $TempPath; Value:MBS( "Path.AddPathComponent"; $TempFolder; $name ) ]
# now write temp file
Set Variable [ $r; Value:MBS( "Files.WriteFile"; test::myContainer; $TempPath) ]
# and launch file
Set Variable [ $r; Value:MBS( "Files.LaunchFile"; $TempPath) ]
```

Download URL to temp file:

```
Set Variable [ $curl; Value:MBS("CURL.New") ]
# this is URL to download
Set Variable [ $url; Value:"https://www.monkeybreadsoftware.com/filemaker/test.txt" ]
# get file name from URL
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $URL ) ]
# now make temp file path
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.SystemTemporary" ); $name ) ]
# set URL to download
Set Variable [ $r; Value:MBS("CURL.SetOptionURL"; $curl; "https://www.monkeybreadsoftware.com/filemaker/test.txt") ]
# open destination file
```

```
Set Variable [ $r; Value:MBS("CURL.CreateOutputFile"; $curl; $path) ]
# run transfer
Set Field [ CURL Test::Result; MBS("CURL.Perform"; $curl) ]
# close destination file
Set Variable [ $r; Value:MBS("CURL.CloseOutputFile"; $curl) ]
# get debug messages
Set Field [ CURL Test::debug; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
```

See also

- 61.9 CURL.Cleanup 1772
- 61.13 CURL.CloseOutputFile 1778
- 61.16 CURL.CreateOutputFile 1784
- 61.44 CURL.GetDebugAsText 1831
- 61.139 CURL.New 1947
- 78.35 Files.Launch 3823
- 78.36 Files.LaunchFile 3826
- 78.62 Files.WriteFile 3871
- 121.1 Path.AddPathComponent 6135
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 29th November 2019.

81.8 Folders.UserDesktop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	No	Yes

MBS("Folders.UserDesktop")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

For FileMaker Server it is possible to not have a desktop folder or to have it on a different location than normal user accounts.

Examples

Queries path:

```
MBS( "Folders.UserDesktop" )
```

Create folder on Desktop:

```
Set Variable [ $folder; Value:MBS( "Folders.UserDesktop" ) ]
If [ IsEmpty(Container Export::Name) ]
Set Field [ Container Export::Name; "Record " & Get(RecordID) ]
End If
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; Container Export::Name ) ]
Set Variable [ $r; Value:MBS("Files.CreateDirectory"; $path) ]
```

Get file in desktop folder:

```
Set Variable [ $folder; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; "test.txt" ) ]
```

See also

- 106.59 MapView.Screenshot 5705
- 121.1 Path.AddPathComponent 6135
- 121.7 Path.NativePathToFileMakerPath 6147
- 159.1 SyntaxColoring.AddContextMenuCommand 7553
- 164.49 Text.ReadTextFile 7843
- 180.16 WebDownloadDelegate.SetFolder 8297
- 180.102 WebView.PrintToFile 8413

- 189.18 WordFile.ReplaceTag 8835
- 190.29 XL.Book.SaveToFile 8888
- 190.244 XL.Sheet.RemoveRow 9184

Example Databases

- [AVRecorder/AVRecorder](#)
- [CURL/CURL Download Text to file](#)
- [DynaPDF/Invoice/Invoice](#)
- [Files/File Listing With Icons](#)
- [Mac and iOS/MapKit/MapView](#)
- [Mac only/Movies/AVAsset Export Session](#)
- [Mac only/RichText/Write Document](#)
- [WebViewer/Custom WebView](#)
- [WordFile/WordFile Fields](#)
- [WordFile/WordFile](#)

81.8.1 Blog Entries

- [Define hot keys for functions in the FileMaker development](#)
- [Parsing VCard file](#)

Created 18th August 2014, last changed 7th November 2018.

81.9 Folders.UserDocuments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Folders.UserDocuments")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

Version 8.5 and newer return the server documents folder for scripts running on server.

Examples

Queries path:

```
MBS( "Folders.UserDocuments" )
```

Create folder in documents:

```
Set Variable [ $folder; Value:MBS( "Folders.UserDocuments" ) ]
If [ IsEmpty(Container Export::Name) ]
Set Field [ Container Export::Name; "Record " & Get(RecordID) ]
End If
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; Container Export::Name ) ]
Set Variable [ $r; Value:MBS("Files.CreateDirectory"; $path) ]
```

Get file in documents folder:

```
Set Variable [ $folder; Value:MBS( "Folders.UserDocuments" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; "test.txt" ) ]
```

See also

- 61.179 [CURL.SetOptionCAINFO](#) 2022
- 78.10 [Files.CreateDirectory](#) 3785
- 81.4 [Folders.SharedDocuments](#) 4172
- 81.10 [Folders.UserDownloads](#) 4181
- 81.11 [Folders.UserFonts](#) 4182
- 121.1 [Path.AddPathComponent](#) 6135
- 121.7 [Path.NativePathToFileMakerPath](#) 6147

Example Databases

- [CURL/CURL with certificates included with FileMaker](#)

81.9.1 Blog Entries

- [Use root certificates included with FileMaker](#)
- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 18th August 2014, last changed 7th November 2018.

81.10 Folders.UserDownloads

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	6.2	Yes	Yes	No	No	No

MBS("Folders.UserDownloads")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

e.g. C:\Users\test\Downloads on Windows or /Users/test/Downloads on Mac.

Examples

Query download folder path:

```
MBS( "Folders.UserDownloads" )
```

Create folder in downloads:

```
Set Variable [ $folder; Value:MBS( "Folders.UserDownloads" ) ]
If [ IsEmpty(Container Export::Name) ]
Set Field [ Container Export::Name; "Record " & Get(RecordID) ]
End If
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; Container Export::Name ) ]
Set Variable [ $r; Value:MBS("Files.CreateDirectory"; $path) ]
```

Get file in download folder:

```
Set Variable [ $folder; Value:MBS( "Folders.UserDownloads" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; "test.txt" ) ]
```

See also

- [78.10 Files.CreateDirectory](#) 3785
- [81.9 Folders.UserDocuments](#) 4179
- [121.1 Path.AddPathComponent](#) 6135
- [121.7 Path.NativePathToFileMakerPath](#) 6147

81.10.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 22nd March 2016, last changed 7th November 2018.

81.11 Folders.UserFonts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	No	Yes, macOS only	No	No

MBS("Folders.UserFonts")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

Examples

Queries path:

```
MBS( "Folders.UserFonts" )
```

Get file in fonts folder:

```
Set Variable [ $folder; Value:MBS( "Folders.UserFonts" ) ]
```

```
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; "test.txt" ) ]
```

See also

- 81.2 Folders.LocalFonts 4170
- 81.6 Folders.SystemFonts 4174
- 81.9 Folders.UserDocuments 4179
- 81.12 Folders.UserHome 4183
- 81.13 Folders.UserMusic 4184
- 81.17 Folders.UserTrash 4189
- 81.18 Folders.UserVideo 4190
- 121.1 Path.AddPathComponent 6135
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 7th November 2018.

81.12 Folders.UserHome

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	7.3	Yes	Yes	Yes	Yes	Yes

MBS("Folders.UserHome")

Result Returns path or error.

Description

Examples

Query user folder path:

MBS("Folders.UserHome")

See also

- 81.11 Folders.UserFonts 4182
- 81.18 Folders.UserVideo 4190
- 159.1 SyntaxColoring.AddContextMenuCommand 7553

Created 14th July 2017, last changed 14th July 2017.

81.13 Folders.UserMusic

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	No	Yes

MBS("Folders.UserMusic")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.UserMusic")

See also

- 81.11 Folders.UserFonts 4182
- 81.17 Folders.UserTrash 4189
- 81.18 Folders.UserVideo 4190
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 29th April 2016.

81.14 Folders.UserPictures

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	7.2	Yes	No	Yes, macOS only	No	Yes

MBS("Folders.UserPictures")

Result Returns path or error.

Description

This is a native path. You can use `Path.NativePathToFileMakerPath` if you need to use path in a script step.

See also

- [121.7 Path.NativePathToFileMakerPath](#)

6147

81.14.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr7](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 19th March 2017, last changed 19th March 2017.

81.15 Folders.UserPreferences

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	No	Yes

MBS("Folders.UserPreferences")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.UserPreferences")

See also

- 81.3 Folders.LocalPreferences 4171
- 121.7 Path.NativePathToFileMakerPath 6147

Created 18th August 2014, last changed 29th April 2016.

81.16 Folders.UserTemporary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	6.2	Yes	Yes	Yes	Yes	Yes

MBS("Folders.UserTemporary")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

On Mac Folders.UserTemporary is in the user's home folder while the system wide temporary folder is in /var/folders and can be queried with Folders.SystemTemporary.

Examples

Get path for temp PDF file:

```
Set Variable [ $stemppath; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.UserTemporary" ); "temp.pdf" ) ]
```

See also

- 55.35 Container.WriteFile 1658
- 70.273 DynaPDF.Initialize 2941
- 81.5 Folders.System 4173
- 81.7 Folders.SystemTemporary 4175
- 121.1 Path.AddPathComponent 6135
- 121.3 Path.FilePathToFileURL 6141
- 121.7 Path.NativePathToFileMakerPath 6147
- 138.9 RichText.ReadContainer 6722
- 138.27 RichText.WritePDF 6750
- 164.68 Text.WriteTextFile 7871

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/IMAP Email](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

81.16.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr2](#)

Created 23th April 2016, last changed 17th June 2018.

81.17 Folders.UserTrash

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	5.1	Yes	Yes	Yes	No	No

MBS("Folders.UserTrash")

Result Returns path or error.

Description

e.g. on Mac this is `"/Users/Bob/.Trash"`

For Windows, there is no real path to a trash folder as it's a virtual path.

See also

- 81.11 Folders.UserFonts 4182
- 81.13 Folders.UserMusic 4184
- 81.18 Folders.UserVideo 4190

81.17.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr4](#)

Created 7th April 2015, last changed 13th November 2018.

81.18 Folders.UserVideo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	Yes	Yes	Yes	No	Yes

MBS("Folders.UserVideo")

Result Returns path or error.

Description

This is a native path. You can use Path.NativePathToFileMakerPath if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.UserVideo")

See also

- [81.11 Folders.UserFonts](#) 4182
- [81.12 Folders.UserHome](#) 4183
- [81.13 Folders.UserMusic](#) 4184
- [81.17 Folders.UserTrash](#) 4189
- [121.7 Path.NativePathToFileMakerPath](#) 6147

81.18.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr8](#)

Created 18th August 2014, last changed 29th April 2016.

81.19 Folders.Windows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
81 Folders	4.3	No	Yes	Yes, Windows only	No	No

MBS("Folders.Windows")

Result Returns path or error.

Description

This is a native path. You can use `Path.NativePathToFileMakerPath` if you need to use path in a script step.

Examples

Queries path:

MBS("Folders.Windows")

See also

- 121.7 `Path.NativePathToFileMakerPath`

6147

Created 18th August 2014, last changed 18th March 2017.

Chapter 82

Font

Font functions.

82.1 Font.Activate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
82 Font	2.6	Yes	Yes	No	No	No

MBS("Font.Activate"; path; local)

Parameters

path

The native file path to the font file.
"/Users/test/Desktop/test.ttf"

local

Pass 1 to activate only inside app or 0 for globally. You may need to use 0 in order to let FileMaker see the font when you restart.

0

Result Returns "OK" or error number from OS.

Description

It looks like FileMaker reads font list only on startup, so it may not react to loading this font.

Examples

Activate a font:

```
MBS( "Font.Activate"; "/Users/test/Desktop/test.ttf"; 1 )
```

See also

- 82.5 Font.Deactivate

Example Databases

- [Utility functions/Load Fonts](#)

82.1.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr5](#)

Created 18th August 2014, last changed 13th July 2019.

82.2 Font.CalculateTextFits

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
82 Font	8.4	Yes	Yes	Yes	No	Yes

MBS("Font.CalculateTextFits"; Text; MaxWidth { ; Font; Size })

Parameters

Text

The text to measure.

"Hello World"

MaxWidth

The maximum width.

100

Font

Optional

The font name. Using System font in case of empty parameter.

"Arial"

Size

Optional

The font size to use. Default is system font size.

12

Result Returns number or error.

Description

The plugin will check how long the text would be in points.

Then we reduce text to see how much text fits in the space and return the length of the reminding space.

Examples

Checks how much fits:

MBS("Font.CalculateTextFits"; "Hello World"; 50; "Arial"; 12)

See also

- [82.3 Font.CalculateTextHeight](#) 4197
- [82.4 Font.CalculateTextWidth](#) 4199

82.2.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.4 - Über 5400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.4 - More than 5400 Functions In One Plugin](#)

- [MBS FileMaker Plugin, version 8.4pr8](#)

Created 12nd September 2018, last changed 12nd September 2018.

82.3 Font.CalculateTextHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
82 Font	8.4	Yes	Yes	Yes	No	Yes

MBS("Font.CalculateTextHeight"; Text; Warp Width { ; Font; Size })

Parameters

Text

The text to measure.

"Hello World"

Warp Width

The width of the text block to use for wrapping. If <50 will be set to 50 to avoid endless loops.
500

Font

Optional

The font name. Using System font in case of empty parameter.

"Arial"

Size

Optional

The font size to use. Default is system font size.

12

Result Returns number or error.

Description

The plugin uses system font rendering to calculate height given your wrap width. This may be different from what FileMaker renders with it's own engine.

You can use the measured size to detect if text fits a field.

Mac result in logical points, but on Windows in pixels.

Examples

Calculates text height for a given text:

MBS("Font.CalculateTextHeight"; "Hello World. Just a test."; 100; "Arial"; 12)

Example result: 36

See also

- 82.2 Font.CalculateTextFits 4195
- 82.4 Font.CalculateTextWidth 4199

Example Databases

- [Utility functions/Calculate Text Size](#)

82.3.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.4 - Über 5400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.4 - More than 5400 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.4pr7](#)

Created 3th September 2018, last changed 16th November 2018.

82.4 Font.CalculateTextWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
82 Font	6.5	Yes	Yes	Yes	No	Yes

MBS("Font.CalculateTextWidth"; Text { ; Font; Size })

Parameters

Text

The text to measure.

"Hello World"

Font

Optional

The font name. Using System font in case of empty parameter.

"Arial"

Size

Optional

The font size to use. Default is system font size.

12

Result Returns number or error.

Description

The plugin uses system font rendering to calculate width. This may be different from what FileMaker renders with it's own engine.

You can use the measured size to detect if text fits a field.

Mac result in logical points, but on Windows in pixels.

Examples

Calculate width of Hello World:

```
MBS( "Font.CalculateTextWidth"; "Hello World" )
```

e.g. 70.9 on Mac and 77 on Windows.

Calculate with Arial

```
MBS( "Font.CalculateTextWidth"; "Hello World"; "Arial"; 12 )
```

e.g. 61 on Windows, 61,7 on Mac

See also

- 82.2 Font.CalculateTextFits 4195
- 82.3 Font.CalculateTextHeight 4197

Example Databases

- [Utility functions/Calculate Text Size](#)
- [Utility functions/FontWidth](#)

82.4.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr8](#)
- [Measure text length in FileMaker](#)
- [MBS FileMaker Plugin, version 6.5pr4](#)

Created 21st October 2016, last changed 16th November 2018.

82.5 Font.Deactivate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
82 Font	2.6	Yes	Yes	No	No	No

MBS("Font.Deactivate"; path; local)

Parameters

path

The native file path to the font file.

"C:\test.fon"

local

Pass 1 to activate only inside app or 0 for globally.

0

Result Returns "OK" or error number from OS.

Description

Examples

Deactivate a font:

MBS("Font.Deactivate"; "/Users/test/Desktop/test.ttf"; 1)

See also

- [82.1 Font.Activate](#)

4193

Example Databases

- [Utility functions/Load Fonts](#)

82.5.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr5](#)

Created 18th August 2014, last changed 18th October 2016.

82.6 FontManager.FontFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
82 Font	6.2	Yes	No	No	No	No

MBS("FontManager.FontFile"; FontName)

Parameters

FontName

The name of the font.

"Helvetica"

Result Returns path or error.

Description

Examples

Queries file path for Helvetica:

MBS("FontManager.FontFile"; "Helvetica")

Created 27th April 2016, last changed 27th April 2016.

82.7 FontManager.ListFontFamilies

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
82 Font	5.1	Yes	Yes	No	No	Yes

MBS("FontManager.ListFontFamilies")

Result Returns list or error.

Description

The list is not sorted, but you can sort it with List.Sort function.

See also

- [103.34 List.Sort](#)

5464

82.7.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr5](#)

Created 15th April 2015, last changed 12nd July 2019.

82.8 FontManager.ListFonts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
82 Font	5.1	Yes	Yes	No	No	No

MBS("FontManager.ListFonts" { ; FamilyName })

Parameters

FamilyName

Optional

The family name whose fonts to query.

"Times"

Result Returns list or error.

Description

The list is not sorted, but you can sort it with List.Sort function.

Examples

List Arial fonts:

```
MBS( "FontManager.ListFonts"; "Arial")
```

See also

- 103.34 List.Sort

5464

Created 15th April 2015, last changed 16th November 2018.

Chapter 83

FSEvents

File System Monitoring

Watch changes on folder or volume and get script triggered for changes. See DirectoryWatcher functions for Windows.

83.1 FSEvents.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

```
MBS( "FSEvents.Create"; PathList { ; sinceWhen; Flags; latency } )
```

Parameters

PathList

List of folders to watch. (or just one path)

\$path

sinceWhen

Optional

The event ID from where to start. Can be the latest ID you saw last time or you pass "now" to start with now.

"now"

Flags

Optional

The flags. Can be a combination of NoDefer, WatchRoot, IgnoreSelf, FileEvents or MarkSelf.

"IgnoreSelf,FileEvents"

latency

Optional

The latency.

2

Result Returns reference number or error.

Description

Works on server and client.

May not work for network shared disks as most drivers don't pass through change events.

Flag values:

NoDefer = 2

Affects the meaning of the latency parameter. If you specify this flag and more than latency seconds have elapsed since the last event, your app will receive the event immediately. The delivery of the event resets the latency timer and any further events will be delivered after latency seconds have elapsed. This flag is useful for apps that are interactive and want to react immediately to changes but avoid getting swamped by notifications when changes are occurring in rapid succession. If you do not specify this flag, then when an event occurs after a period of no events, the latency timer is started. Any events that occur during the next latency seconds will be delivered as one group (including that first event). The delivery of the group of events resets the latency timer and any further events will be delivered after latency seconds. This is the default behavior and is more appropriate for background, daemon or batch processing apps.

WatchRoot = 4

Request notifications of changes along the path to the path(s) you're watching. For example, with this flag, if you watch `"/foo/bar"` and it is renamed to `"/foo/bar.old"`, you would receive a `RootChanged` event. The same is true if the directory `"/foo"` were renamed. The event you receive is a special event: the path for the event is the original path you specified, the flag `kFSEventStreamEventFlagRootChanged` is set and event ID is zero. `RootChanged` events are useful to indicate that you should rescan a particular hierarchy because it changed completely (as opposed to the things inside of it changing). If you want to track the current location of a directory, it is best to open the directory before creating the stream so that you have a file descriptor for it and can issue an `F_GETPATH` `fcntl()` to find the current path.

IgnoreSelf = 8

Don't send events that were triggered by the current process. This is useful for reducing the volume of events that are sent. It is only useful if your process might modify the file system hierarchy beneath the path(s) being monitored. Note: this has no effect on historical events, i.e., those delivered before the `HistoryDone` sentinel event. Also, this does not apply to `RootChanged` events because the `WatchRoot` feature uses a separate mechanism that is unable to provide information about the responsible process.

FileEvents = 16

Request file-level notifications. Your stream will receive events about individual files in the hierarchy you're watching instead of only receiving directory level notifications. Use this flag with care as it will generate significantly more events than without it.

MarkSel = 32

Tag events that were triggered by the current process with the "OwnEvent" flag. This is only useful if your process might modify the file system hierarchy beneath the path(s) being monitored and you wish to know which events were triggered by your process. Note: this has no effect on historical events, i.e., those delivered before the HistoryDone sentinel event.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Initializes FSEvents:

```

Delete All Records [ No dialog ]
Set Variable [ $path; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $sinceWhen; Value:"now" ]
If [ not IsEmpty(FSEvents::LastID) ]
Set Variable [ $sinceWhen; Value:FSEvents::LastID ]
End If
Set Variable [ $fstream; Value:MBS("FSEvents.Create"; $path; $sinceWhen; "IgnoreSelf, FileEvents, Watch-
Root"; 2) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; "Failed to create file system event monitor." ]
Else
Set Variable [ $r; Value:MBS("FSEvents.SetFilename"; $fstream; Get(FileName)) ]
Set Variable [ $r; Value:MBS("FSEvents.SetScriptName"; $fstream; "FSEventsNotification") ]
Set Variable [ $r; Value:MBS("FSEvents.Start"; $fstream) ]
If [ $r = 1 ]
Set Field [ FSEvents::StreamRef; $fstream ]
Else
Show Custom Dialog [ "Error"; "Failed to start file system event monitor." ]
Set Variable [ $r; Value:MBS("FSEvents.Release"; $fstream) ]
End If
End If

```

See also

- 83.2 FSEvents.CreateRelativeToDevice 4209
- 83.5 FSEvents.DeviceBeingWatched 4212
- 83.15 FSEvents.LastEventIdForDeviceBeforeTime 4222
- 83.17 FSEvents.NextEvent 4224
- 83.19 FSEvents.Release 4229
- 83.23 FSEvents.SetScriptName 4233
- 83.25 FSEvents.Start 4235

- 83.28 FSEvents.UUIDForDevice 4238
- 124.6 IsError 6266
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [Mac only/FSEvents](#)

Created 18th November 2015, last changed 13th January 2020.

83.2 FSEvents.CreateRelativeToDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.0	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.CreateRelativeToDevice"; DeviceID; PathList; sinceWhen { ; Flags; latency })

Parameters

DeviceID

The device ID. Either a number or the path to a file/folder of that device.

"/"

PathList

List of folders to watch. (or just one path)

\$path

sinceWhen

The event ID from where to start. Can be the latest ID you saw last time or you pass "now" to start with now.

"now"

Flags

Optional

The flags. Can be a combination of NoDefer, WatchRoot, IgnoreSelf, FileEvents or MarkSelf.

"IgnoreSelf,FileEvents"

latency

Optional

The latency.

2

Result Returns reference number or error.

Description

You can only pass one path in the pathList. Pass empty text there to watch the root of the device.

Examples

Watch root device with root folder since now:

```
MBS("FSEvents.CreateRelativeToDevice"; "/" ; "" ; "now")
```

See also

- 83.1 FSEvents.Create 4205
- 83.5 FSEvents.DeviceBeingWatched 4212
- 83.15 FSEvents.LastEventIdForDeviceBeforeTime 4222

Created 29th November 2015, last changed 6th August 2017.

83.3 FSEvents.CurrentEventId

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.CurrentEventId")

Result Returns ID or error.

Description

Fetches the most recently generated event ID, system-wide (not just for one stream). By the time it is returned to your application even newer events may have already been generated.

Examples

Show current event ID:

Show Custom Dialog ["Current event ID"; MBS("FSEvents.CurrentEventId")]

See also

- 83.16 FSEvents.LatestEventId

4223

Created 18th November 2015, last changed 13th March 2016.

83.4 FSEvents.Description

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.Description")

Result Returns text or error.

Description

For debugging only.

Created 18th November 2015, last changed 19th November 2015.

83.5 FSEvents.DeviceBeingWatched

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.0	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.DeviceBeingWatched"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns number or error.

Description

Only useful if created with FSEvents.CreateRelativeToDevice.

See also

- 83.1 FSEvents.Create 4205
- 83.2 FSEvents.CreateRelativeToDevice 4209
- 83.18 FSEvents.PathsBeingWatched 4228

Created 29th November 2015, last changed 29th November 2015.

83.6 FSEvents.DeviceID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.0	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.DeviceID"; Path)

Parameters

Path

The path to the disk.

"/"

Result Returns ID or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Query ID for root:

```
MBS( "FSEvents.DeviceID"; "/" )
```

Query ID for volume Test:

```
MBS( "FSEvents.DeviceID"; "/Volumes/Test" )
```

See also

- 121.2 Path.FileMakerPathToNativePath

6139

Created 29th November 2015, last changed 12nd August 2017.

83.7 FSEvents.EventCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.EventCount"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns number or error.

Description

Examples

Shows event count:

```
Show Custom Dialog [ "Current event count"; MBS( "FSEvents.EventCount"; $fsEvents ) ]
```

Created 18th November 2015, last changed 12nd August 2017.

83.8 FSEvents.FlushASync

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.FlushASync"; FSEventsRef)

Parameters**FSEventsRef**

The reference number for this FSEvents object.

\$fstream

Result Returns ID or error.

Description

Asks the FS Events service to flush out any events that have occurred but have not yet been delivered, due to the latency parameter that was supplied when the stream was created. This flushing occurs asynchronously – do not expect the events to have already been delivered by the time this call returns. FSEvents.FlushASync can only be called after the stream has been started, via FSEvents.Start.

See also

- 83.9 FSEvents.FlushSync 4216
- 83.25 FSEvents.Start 4235

Created 18th November 2015, last changed 19th November 2015.

83.9 FSEvents.FlushSync

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.FlushSync"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns OK or error.

Description

Asks the FS Events service to flush out any events that have occurred but have not yet been delivered, due to the latency parameter that was supplied when the stream was created. This flushing occurs synchronously – by the time this call returns, your callback will have been invoked for every event that had already occurred at the time you made this call. FSEvents.FlushSync can only be called after the stream has been started, via FSEvents.Start.

Examples

Flush events:

MBS("FSEvents.FlushSync"; \$FSEvents)

See also

- 83.8 FSEvents.FlushASync 4215
- 83.25 FSEvents.Start 4235

Created 18th November 2015, last changed 13th March 2016.

83.10 FSEvents.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.2	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.GetEvaluate"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.
\$fstream

Result Returns OK or error.

Description

See also

- 83.20 FSEvents.SetEvaluate

4230

83.10.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 29th March 2016.

83.11 FSEvents.GetExclusionPaths

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.0	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.GetExclusionPaths"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns list or error.

Description

See also

- 83.21 FSEvents.SetExclusionPaths

4231

Created 29th November 2015, last changed 29th November 2015.

83.12 FSEvents.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.GetFileName"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.
\$fstream

Result Returns text or error.

Description

See also

- 83.13 FSEvents.GetScriptName 4220
- 83.22 FSEvents.SetFileName 4232

Created 18th November 2015, last changed 18th November 2015.

83.13 FSEvents.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.GetScriptName"; FSEventsRef)

Parameters**FSEventsRef**

The reference number for this FSEvents object.

\$fstream

Result Returns text or error.

Description**See also**

- 83.12 FSEvents.GetFileName 4219
- 83.23 FSEvents.SetScriptName 4233

Created 18th November 2015, last changed 18th November 2015.

83.14 FSEvents.HasNextEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.HasNextEvent"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns 0 or 1 or error.

Description

Returns 1 if there is an event in the queue or zero if no event is there.

See also

- [83.16 FSEvents.LatestEventId](#) 4223
- [83.17 FSEvents.NextEvent](#) 4224

Example Databases

- [Mac only/FSEvents](#)

Created 18th November 2015, last changed 18th November 2015.

83.15 FSEvents.LastEventIdForDeviceBeforeTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.0	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.LastEventIdForDeviceBeforeTime"; Path; TimeStamp)

Parameters

Path

The path to the disk.

"/"

TimeStamp

The timestamp to use.

Result Returns ID or error.

Description

Gets the last event ID for the given device that was returned before the given time. This is conservative in the sense that if you then use the returned event ID as the sinceWhen parameter of FSEvents.CreateRelativeToDevice that you will not miss any events that happened since that time. On the other hand, you might receive some (harmless) extra events.

Beware: there are things that can cause this to fail to be accurate. For example, someone might change the system's clock (either backwards or forwards). Or an external drive might be used on different systems without perfectly synchronized clocks.

Examples

Queries event ID for root device:

```
MBS( "FSEvents.LastEventIdForDeviceBeforeTime"; "/" ; Date( 1 ; 1 ; 2015 ) )
```

See also

- 83.1 FSEvents.Create 4205
- 83.2 FSEvents.CreateRelativeToDevice 4209

Created 29th November 2015, last changed 12nd August 2017.

83.16 FSEvents.LatestEventId

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.LatestEventId"; FSEventsRef)

Parameters**FSEventsRef**

The reference number for this FSEvents object.

\$fstream

Result Returns ID or error.

Description

Fetches the sinceWhen property of the stream. Upon receiving an event (and just before invoking the client's callback) this attribute is updated to the highest-numbered event ID mentioned in the event.

Examples

Query last event ID:

MBS("FSEvents.LatestEventId"; \$FSE)

See also

- 83.3 FSEvents.CurrentEventId 4210
- 83.14 FSEvents.HasNextEvent 4221

Created 18th November 2015, last changed 13th March 2016.

83.17 FSEvents.NextEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.NextEvent"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns event data or error.

Description

Returns a list of values. First entry is the path, second entry the ID number for this event. Third is the flags value as number and forth as text values. This allows you to check for some values like "ItemCreated".

Flags that are returned for file system events.

It is important to note that event flags are simply hints about the sort of operations that occurred at that path.

Furthermore, the FSEvent stream should NOT be treated as a form of historical log that could somehow be replayed to arrive at the current state of the file system.

The FSEvent stream simply indicates what paths changed; and clients need to reconcile what is really in the file system with their internal data model - and recognize that what is actually in the file system can change immediately after you check it.

MustScanSubDirs = 1

Your application must rescan not just the directory given in the event, but all its children, recursively. This can happen if there was a problem whereby events were coalesced hierarchically. For example, an event in /Users/jsmith/Music and an event in /Users/jsmith/Pictures might be coalesced into an event with this flag set and path=/Users/jsmith. If this flag is set you may be able to get an idea of whether the bottleneck happened in the kernel (less likely) or in your client (more likely) by checking for the presence of the informational flags UserDropped or KernelDropped.

UserDropped = 2

KernelDropped = 4

The UserDropped or KernelDropped flags may be set in addition to the MustScanSubDirs flag to indicate that a problem occurred in buffering the events (the particular flag set indicates where the problem occurred) and that the client must do a full scan of any directories (and their subdirectories, recursively) being monitored by this stream. If you asked to monitor multiple paths with this stream then you will be notified about all of them. Your code need only check for the MustScanSubDirs flag; these flags (if present) only provide information to help you diagnose the problem.

EventIdsWrapped = 8

If `EventIdsWrapped` is set, it means the 64-bit event ID counter wrapped around. As a result, previously-issued event ID's are no longer valid arguments for the `sinceWhen` parameter of the `FSEvent.Create` function.

`HistoryDone = 16`

Denotes a sentinel event sent to mark the end of the "historical" events sent as a result of specifying a `sinceWhen` value in the `FSEvents.Create...`() call that created this event stream. (It will not be sent if `kFSEventStreamEventIdSinceNow` was passed for `sinceWhen`.) After invoking the client's callback with all the "historical" events that occurred before now, the client's callback will be invoked with an event where the `HistoryDone` flag is set. The client should ignore the path supplied in this callback.

`RootChanged = 32`

Denotes a special event sent when there is a change to one of the directories along the path to one of the directories you asked to watch. When this flag is set, the event ID is zero and the path corresponds to one of the paths you asked to watch (specifically, the one that changed). The path may no longer exist because it or one of its parents was deleted or renamed. Events with this flag set will only be sent if you passed the flag `kFSEvents.CreateFlagWatchRoot` to `FSEvents.Create` when you created the stream.

`Mount = 64`

Denotes a special event sent when a volume is mounted underneath one of the paths being monitored. The path in the event is the path to the newly-mounted volume. You will receive one of these notifications for every volume mount event inside the kernel (independent of `DiskArbitration`). Beware that a newly-mounted volume could contain an arbitrarily large directory hierarchy. Avoid pitfalls like triggering a recursive scan of a non-local filesystem, which you can detect by checking for the absence of the `MNT_LOCAL` flag in the `f_flags` returned by `statfs()`. Also be aware of the `MNT_DONTBROWSE` flag that is set for volumes which should not be displayed by user interface elements.

`Unmount = 128`

Denotes a special event sent when a volume is unmounted underneath one of the paths being monitored. The path in the event is the path to the directory from which the volume was unmounted. You will receive one of these notifications for every volume unmount event inside the kernel. This is not a substitute for the notifications provided by the `DiskArbitration` framework; you only get notified after the unmount has occurred. Beware that unmounting a volume could uncover an arbitrarily large directory hierarchy, although Mac OS X never does that.

`ItemCreated = 256`

A file system object was created at the specific path supplied in this event.
(This flag is only ever set if you specified the `FileEvents` flag when creating the stream.)

`ItemRemoved = 512`

A file system object was removed at the specific path supplied in this event.
(This flag is only ever set if you specified the `FileEvents` flag when creating the stream.)

`ItemInodeMetaMod = 1024`

A file system object at the specific path supplied in this event had its metadata modified.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemRenamed = 2048

A file system object was renamed at the specific path supplied in this event.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemModified = 4096

A file system object at the specific path supplied in this event had its data modified.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemFinderInfoMod = 8192

A file system object at the specific path supplied in this event had its FinderInfo data modified.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemChangeOwner = 16384

A file system object at the specific path supplied in this event had its ownership changed.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemXattrMod = 32768

A file system object at the specific path supplied in this event had its extended attributes modified.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemIsFile = 65536

The file system object at the specific path supplied in this event is a regular file.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemIsDir = 131072

The file system object at the specific path supplied in this event is a directory.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemIsSymlink = 262144

The file system object at the specific path supplied in this event is a symbolic link.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

OwnEvent = 524288

Indicates the event was triggered by the current process.

(This flag is only ever set if you specified the MarkSelf flag when creating the stream.)

ItemIsHardlink = 1048576

Indicates the object at the specified path supplied in this event is a hard link.

(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

83.17. *FSEVENTS.NEXTEVENT*

4227

ItemIsLastHardlink = 2097152

Indicates the object at the specific path supplied in this event was the last hard link.
(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

ItemCloned = 4194304

The file system object at the specific path supplied in this event is a clone or was cloned.
(This flag is only ever set if you specified the FileEvents flag when creating the stream.)

See also

- 76.93 Events.NewEvent 3612
- 83.1 FSEvents.Create 4205
- 83.14 FSEvents.HasNextEvent 4221

Example Databases

- [Mac only/FSEvents](#)

Created 18th November 2015, last changed 10th September 2017.

83.18 FSEvents.PathsBeingWatched

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.PathsBeingWatched"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns path list or error.

Description

Examples

Query paths being watched:

```

Delete All Records [ No dialog ]
Set Variable [ $path; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $sinceWhen; Value:"now" ]
If [ not IsEmpty(FSEvents::LastID) ]
Set Variable [ $sinceWhen; Value:FSEvents::LastID ]
End If
Set Variable [ $fstream; Value:MBS("FSEvents.Create"; $path; $sinceWhen; "IgnoreSelf, FileEvents, Watch-Root"; 2) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; "Failed to create file system event monitor." ]
Else
Show Custom Dialog [ "Paths"; MBS( "FSEvents.PathsBeingWatched"; $fstream ) ]
....
End If

```

See also

- 81.8 Folders.UserDesktop 4177
- 83.1 FSEvents.Create 4205
- 83.5 FSEvents.DeviceBeingWatched 4212
- 124.6 IsError 6266

Created 18th November 2015, last changed 13th March 2016.

83.19 FSEvents.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.Release"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns OK or error.

Description

Examples

Release FSEvents object:

```
Set Variable [ $r; Value:MBS("FSEvents.Release"; $fstream) ]
```

See also

- 83.1 FSEvents.Create

4205

Example Databases

- [Mac only/FSEvents](#)

Created 18th November 2015, last changed 13th March 2016.

83.20 FSEvents.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.2	Yes	No	No	No	No

MBS("FSEvents.SetEvaluate"; FSEventsRef; Expression)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the FSEventsRef, so you can pass it to other functions if needed.

See also

- 83.10 FSEvents.GetEvaluate 4217

83.20.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 4th April 2018.

83.21 FSEvents.SetExclusionPaths

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.0	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.SetExclusionPaths"; FSEventsRef; Paths)

Parameters**FSEventsRef**

The reference number for this FSEvents object.

\$fstream

Paths

The list of directories to filter.

Result Returns 1, 0 or error.

Description

A maximum of 8 directories maybe specified.

Requires OS X 10.9 or newer.

Returns 1 on success or 0 on failure.

Examples

Pass two paths to ignore:

```
Set Variable [ $r; Value:MBS( "FSEvents.SetExclusionPaths"; $FSEvents; "/Backups$/Data/Temp" ) ]
```

See also

- 83.11 FSEvents.GetExclusionPaths

4218

Created 29th November 2015, last changed 13th March 2016.

83.22 FSEvents.SetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	No	No	No

MBS("FSEvents.SetFileName"; FSEventsRef; Filename)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Filename

The database file name where the script is located.

"test.fmp12"

Result Returns OK or error.

Description

Examples

Sets script to trigger:

```
Set Variable [ $r; Value:MBS("FSEvents.SetFilename"; $fstream; Get(FileName)) ]
```

```
Set Variable [ $r; Value:MBS("FSEvents.SetScriptName"; $fstream; "FSEventsNotification") ]
```

See also

- 83.1 FSEvents.Create 4205
- 83.12 FSEvents.GetFileName 4219
- 83.23 FSEvents.SetScriptName 4233

Created 18th November 2015, last changed 29th March 2016.

83.23 FSEvents.SetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	No	No	No

MBS("FSEvents.SetScriptName"; FSEventsRef; Scriptname)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Scriptname

The new script name.

""

Result Returns OK or error.

Description

The script trigger feature does not work with FileMaker server. Please schedule a script there to check regularly.

Examples

Sets script to trigger:

```
Set Variable [ $r; Value:MBS("FSEvents.SetFilename"; $fstream; Get(FileName)) ]
Set Variable [ $r; Value:MBS("FSEvents.SetScriptName"; $fstream; "FSEventsNotification") ]
```

See also

- [83.1 FSEvents.Create](#) 4205
- [83.13 FSEvents.GetScriptName](#) 4220
- [83.22 FSEvents.SetFileName](#) 4232

Example Databases

- [Mac only/FSEvents](#)

Created 18th November 2015, last changed 29th March 2016.

83.24 FSEvents.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.Show"; FSEventsRef)

Parameters**FSEventsRef**

The reference number for this FSEvents object.

\$fstream

Result Returns OK or error.

Description

For debugging only.

See also

- 83.27 FSEvents.Stop

4237

Created 18th November 2015, last changed 19th November 2015.

83.25 FSEvents.Start

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.Start"; FSEventsRef)

Parameters**FSEventsRef**

The reference number for this FSEvents object.

\$fstream

Result Returns 1, 0 or error.

Description

Returns 1 on success or 0 on failure.

Attempts to register with the FS Events service to receive events per the parameters in the stream.

Once started, the stream can be stopped via FSEvents.Stop.

Examples

Start FSEvents:

```
Set Variable [ $r; Value:MBS("FSEvents.Start"; $fstream) ]
```

See also

- [83.1 FSEvents.Create](#) 4205
- [83.8 FSEvents.FlushASync](#) 4215
- [83.9 FSEvents.FlushSync](#) 4216
- [83.26 FSEvents.Started](#) 4236
- [83.27 FSEvents.Stop](#) 4237

Example Databases

- [Mac only/FSEvents](#)

Created 18th November 2015, last changed 13th March 2016.

83.26 FSEvents.Started

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.Started"; FSEventsRef)

Parameters

FSEventsRef

The reference number for this FSEvents object.

\$fstream

Result Returns 0, 1 or error.

Description

Returns 1 if started, 0 if stopped.

See also

- 83.25 FSEvents.Start

4235

Created 18th November 2015, last changed 18th November 2015.

83.27 FSEvents.Stop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	5.4	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.Stop"; FSEventsRef)

Parameters**FSEventsRef**

The reference number for this FSEvents object.

\$stream

Result Returns OK or error.

Description

Unregisters with the FS Events service. The trigger will not be called for this stream while it is stopped. Stop can only be called if the stream has been started, via FSEvents.Start. Once stopped, the stream can be restarted via FSEvents.Start, at which point it will resume receiving events from where it left off ("sinceWhen").

See also

- 83.24 FSEvents.Show 4234
- 83.25 FSEvents.Start 4235

Created 18th November 2015, last changed 19th November 2015.

83.28 FSEvents.UUIDForDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
83 FSEvents	6.0	Yes	No	Yes, macOS only	No	No

MBS("FSEvents.UUIDForDevice")

Result Returns UUID or error.

Description

Returns empty text if not possible (for example, on read-only device).

A (non-empty) UUID uniquely identifies a given stream of FSEvents. If this (non-empty) UUID is different than one that you stored from a previous run then the event stream is different (for example, because FSEvents were purged, because the disk was erased, or because the event ID counter wrapped around back to zero). An empty return value indicates that "historical" events are not available, i.e., you should not supply a "sinceWhen" value to FSEvents.Create other than "now".

The UUID is returned as 32 hex characters.

Examples

Queries UUID for root:

```
MBS( "FSEvents.UUIDForDevice"; "/" )
```

See also

- 83.1 FSEvents.Create

4205

Created 29th November 2015, last changed 29th November 2015.

Chapter 84

GameKit

Functions for Game Center on MacOS and iOS

Please read documentation from Apple on the concept of Game Center. Your iOS/Mac app needs to be setup with Apple and get entitlements and signature.

84.1 GameKit.Achievement.Completed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Achievement.Completed"; AchievementRef)

Parameters

AchievementRef

The identifier for the achievement.

\$Achievement

Result Returns 1, 0 or error.

Description

A Boolean value that states whether the player has completed the achievement.

The value of this property is 1 if the percentComplete property is equal to 100.0; otherwise, it is 0.

See also

- 84.6 GameKit.Achievement.Player

4244

Created 5th November 2018, last changed 8th November 2018.

84.2 GameKit.Achievement.GetPercentComplete

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Achievement.GetPercentComplete"; AchievementRef)

Parameters

AchievementRef

The identifier for the achievement.

\$Achievement

Result Returns number or error.

Description

A percentage value that states how far the player has progressed on this achievement.

The default value for a newly initialized achievement object is 0.0. The range of legal values is between 0.0 and 100.0, inclusive. You decide how that percentage is calculated and when it changes. For example, if the player earns an achievement simply for discovering a location in your game, then you would simply report the achievement as 100 percent complete the first time you report progress to Game Center. On the other hand, for an achievement like “Capture 10 pirates”, your reporting mechanism increments by 10 percent each time the player captures a pirate.

See also

- 84.7 GameKit.Achievement.SetPercentComplete

4245

Created 5th November 2018, last changed 8th November 2018.

84.3 GameKit.Achievement.GetShowsCompletionBanner

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Achievement.GetShowsCompletionBanner"; AchievementRef)

Parameters

AchievementRef

The identifier for the achievement.

\$Achievement

Result Returns 1, 0 or error.

Description

A Boolean value that states whether a banner is displayed when the achievement is completed.

When an achievement is completed and the value of this property is 1, a notification banner is displayed to the player to inform them of the completed achievement. If the value of this property is 0, there is no visual indication that the achievement is completed. Your game should set this property to 0 to provide its own visual indicator that the achievement was earned. The default value is 0.

See also

- 84.8 GameKit.Achievement.SetShowsCompletionBanner

4246

Created 5th November 2018, last changed 8th November 2018.

84.4 GameKit.Achievement.LastReportedDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Achievement.LastReportedDate"; AchievementRef)

Parameters

AchievementRef

The identifier for the achievement.

\$Achievement

Result Returns timestamp or error.

Description

The last time that progress on the achievement was successfully reported to Game Center.

On a newly initialized achievement object, this property holds the current date.

Examples

Query last reported date:

MBS("GameKit.Achievement.LastReportedDate"; "de.mbsplugins.test")

Created 5th November 2018, last changed 8th November 2018.

84.5 GameKit.Achievement.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Achievement.New"; Identifier { ; Player })

Parameters

Identifier

The identifier for the achievement.

Player

Optional

The identifier for the player.

Result Returns achievement identifier or error.

Description

Your game initializes a new achievement object only when it has not previously reported progress for that achievement. If your game has previously reported progress on an achievement, you should first retrieve the current progress by calling the GameKit.LoadAchievements function.

The identifier string should be a reverse DNS style string, such as "com.mycompany.myapplication.myactivity". Zero-length strings are not allowed.

Examples

Make new achievement:

```
MBS( "GameKit.Achievement.New"; "de.mbsplugins.test")
```

See also

- 84.6 GameKit.Achievement.Player 4244
- 84.61 GameKit.LoadAchievements 4299

Created 5th November 2018, last changed 8th November 2018.

84.6 GameKit.Achievement.Player

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Achievement.Player"; AchievementRef)

Parameters

AchievementRef

The identifier for the achievement.

\$Achievement

Result Returns player identifier or error.

Description

See also

- 84.1 GameKit.Achievement.Completed 4239
- 84.5 GameKit.Achievement.New 4243

Created 5th November 2018, last changed 8th November 2018.

84.7 GameKit.Achievement.SetPercentComplete

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Achievement.SetPercentComplete"; AchievementRef; Value)

Parameters

AchievementRef

The identifier for the achievement.

\$Achievement

Value

The new percent value.

100

Result Returns OK or error.

Description

A percentage value that states how far the player has progressed on this achievement.

The default value for a newly initialized achievement object is 0.0. The range of legal values is between 0.0 and 100.0, inclusive. You decide how that percentage is calculated and when it changes. For example, if the player earns an achievement simply for discovering a location in your game, then you would simply report the achievement as 100 percent complete the first time you report progress to Game Center. On the other hand, for an achievement like “Capture 10 pirates”, your reporting mechanism increments by 10 percent each time the player captures a pirate.

See also

- 84.2 GameKit.Achievement.GetPercentComplete

4240

Created 5th November 2018, last changed 8th November 2018.

84.8 GameKit.Achievement.SetShowsCompletionBanner

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Achievement.SetShowsCompletionBanner"; AchievementRef; Value)

Parameters

AchievementRef

The identifier for the achievement.

\$Achievement

Value

The new boolean value. Pass 1 to show or 0 to hide banner.

Result Returns OK or error.

Description

A Boolean value that states whether a banner is displayed when the achievement is completed.

When an achievement is completed and the value of this property is 1, a notification banner is displayed to the player to inform them of the completed achievement. If the value of this property is 0, there is no visual indication that the achievement is completed. Your game should set this property to 0 to provide its own visual indicator that the achievement was earned. The default value is 0.

See also

- 84.3 GameKit.Achievement.GetShowsCompletionBanner

4241

Created 5th November 2018, last changed 8th November 2018.

84.9 GameKit.AchievementDescription.AchievedDescription

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.AchievedDescription"; AchievementDescriptionRef)

Parameters

AchievementDescriptionRef

The identifier for the achievement description.

\$AchievementDescription

Result Returns text or error.

Description

A localized description to be used after the local player has completed the achievement.

See also

- 84.18 GameKit.AchievementDescription.UnachievedDescription

4256

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.10 GameKit.AchievementDescription.GroupIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.GroupIdentifier"; AchievementDescriptionRef)

Parameters

AchievementDescriptionRef

The identifier for the achievement description.

\$AchievementDescription

Result Returns group identifier or error.

Description

The identifier for the group the achievement description is part of.

If your game is configured to be part of a game group in App Store Connect, this property holds the identifier you assigned to the achievement in the game group. If the game is not part of a game group, this property is empty.

Created 5th November 2018, last changed 8th November 2018.

84.11 GameKit.AchievementDescription.Hidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.Hidden"; AchievementDescriptionRef)

Parameters

AchievementDescriptionRef

The identifier for the achievement description.

\$AchievementDescription

Result Returns 1, 0 or error.

Description

A Boolean value that states whether this achievement is initially visible to players.

If the value of this property is 0, this achievement is always visible to the player. If 1, the achievement is not displayed in any of the standard achievement user interface screens. It remains hidden until the first time your game reports progress towards completing this achievement.

See also

- 84.12 GameKit.AchievementDescription.Image 4250
- 84.14 GameKit.AchievementDescription.MaximumPoints 4252
- 84.16 GameKit.AchievementDescription.Replayable 4254
- 84.17 GameKit.AchievementDescription.Title 4255

Created 5th November 2018, last changed 8th November 2018.

84.12 GameKit.AchievementDescription.Image

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.Image"; AchievementDescriptionRef { ; Filename; Type })

Parameters

AchievementDescriptionRef

The identifier for the achievement description.

\$AchievementDescription

Filename

Optional

For PDF or image files returned an optional file name.

"test.jpg"

Type

Optional

For images the type you like to get. Can be JPEG, TIFF, PNG, GIF, BMP or PDF.

"JPEG"

Result Returns image container or error.

Description

Loading and displaying achievements using a custom interface is a two-step process, with the first step being to call the GameKit.LoadAchievementDescriptions function. The second step is to call the GameKit.AchievementDescription.Image function for each achievement the user has completed. Your game should display the placeholder image until the image is successfully downloaded.

See also

- 84.11 GameKit.AchievementDescription.Hidden 4249
- 84.16 GameKit.AchievementDescription.Replayable 4254
- 84.17 GameKit.AchievementDescription.Title 4255
- 84.60 GameKit.LoadAchievementDescriptions 4298

Created 8th November 2018, last changed 8th November 2018.

84.13 GameKit.AchievementDescription.IncompleteAchievementImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.IncompleteAchievementImage" { ; Filename; Type })

Parameters

Filename

Optional

For PDF or image files returned an optional file name.

"test.jpg"

Type

Optional

For images the type you like to get. Can be JPEG, TIFF, PNG, GIF, BMP or PDF.

"JPEG"

Result Returns image container or error.

Description

See also

- 84.15 GameKit.AchievementDescription.PlaceholderCompletedAchievementImage 4253

Created 5th November 2018, last changed 8th November 2018.

84.14 GameKit.AchievementDescription.MaximumPoints

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.MaximumPoints"; AchievementDescriptionRef)

Parameters

AchievementDescriptionRef

The identifier for the achievement description.

\$AchievementDescription

Result Returns number or error.

Description

The number of points the player earns by completing this achievement.

See also

- 84.11 GameKit.AchievementDescription.Hidden

4249

Created 5th November 2018, last changed 8th November 2018.

84.15. GAMEKIT.ACHIEVEMENTDESCRIPTION.PLACEHOLDERCOMPLETEDACHIEVEMENTIMAGE4253

84.15 GameKit.AchievementDescription.PlaceholderCompletedAchievementImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.PlaceholderCompletedAchievementImage" { ; Filename; Type })

Parameters

Filename

Optional

For PDF or image files returned an optional file name.

"test.jpg"

Type

Optional

For images the type you like to get. Can be JPEG, TIFF, PNG, GIF, BMP or PDF.

"JPEG"

Result Returns image container or error.

Description

When an achievement is completed, your game can display this image until the custom image for an achievement finishes loading.

See also

- 84.13 GameKit.AchievementDescription.IncompleteAchievementImage

4251

Created 5th November 2018, last changed 8th November 2018.

84.16 GameKit.AchievementDescription.Replayable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.Replayable"; AchievementDescriptionRef)

Parameters

AchievementDescriptionRef

The identifier for the achievement description.

\$AchievementDescription

Result Returns 1, 0 or error.

Description

A Boolean value that states whether this achievement can be earned multiple times.

If the value of this property is 0, then the achievement may only be earned once. After the achievement is earned, Game Center ignores any further progress submitted for it. If the value of this property is 1, then the achievement is considered earned each time your game reports progress to Game Center that completes the achievement. This means that any appropriate banners are displayed to the player again, challenges based on the achievement are completed, and so on.

See also

- 84.11 GameKit.AchievementDescription.Hidden 4249
- 84.12 GameKit.AchievementDescription.Image 4250
- 84.17 GameKit.AchievementDescription.Title 4255

Created 5th November 2018, last changed 28th November 2019.

84.17 GameKit.AchievementDescription.Title

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.Title"; AchievementDescriptionRef)

Parameters

AchievementDescriptionRef

The identifier for the achievement description.

\$AchievementDescription

Result Returns title text or error.

Description

See also

- 84.11 GameKit.AchievementDescription.Hidden 4249
- 84.12 GameKit.AchievementDescription.Image 4250
- 84.16 GameKit.AchievementDescription.Replayable 4254
- 84.60 GameKit.LoadAchievementDescriptions 4298

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.18 GameKit.AchievementDescription.UnachievedDescription

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AchievementDescription.UnachievedDescription"; AchievementDescriptionRef)

Parameters

AchievementDescriptionRef

The identifier for the achievement description.

\$AchievementDescription

Result Returns text or error.

Description

A localized description of the achievement to be used when the local player has not completed the achievement.

See also

- 84.9 GameKit.AchievementDescription.AchievedDescription 4247

Created 5th November 2018, last changed 8th November 2018.

84.19 GameKit.AnonymousGuestPlayer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.AnonymousGuestPlayer"; guestIdentifier)

Parameters

guestIdentifier

A developer created text used to identify the guest player.
"OtherPlayer"

Result Returns player identifier or error.

Description

This method is used to create a new player object for a guest player. Treat the guest player the same as a authenticated user in regards to matchmaking services.

Created 5th November 2018, last changed 8th November 2018.

84.20 GameKit.Challenge.Achievement

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.Achievement"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns achievement identifier or error.

Description

A challenge sent to another player urging them to complete a specific achievement.

Only for achievement challenges.

Created 5th November 2018, last changed 8th November 2018.

84.21 GameKit.Challenge.CompletionDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.CompletionDate"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns date or error.

Description

If the challenge is not complete, this value is empty.

Created 5th November 2018, last changed 8th November 2018.

84.22 GameKit.Challenge.Decline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.Decline"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns OK or error.

Description

If your game implements a custom user interface to display challenges, it should include controls that allow a player to decline a challenge. If the player uses your user interface to decline a challenge, call this method.

See also

- 84.25 GameKit.Challenge.Message 4263
- 84.27 GameKit.Challenge.Score 4265
- 84.28 GameKit.Challenge.State 4266

Created 5th November 2018, last changed 8th November 2018.

84.23 GameKit.Challenge.IssueDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.IssueDate"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns date or error.

Description

See also

- 84.24 GameKit.Challenge.IssuingPlayer 4262
- 84.25 GameKit.Challenge.Message 4263
- 84.28 GameKit.Challenge.State 4266

Created 5th November 2018, last changed 8th November 2018.

84.24 GameKit.Challenge.IssuingPlayer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.IssuingPlayer"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns player identifier or error.

Description

The player identifier associated with the player who issued the challenge.

See also

- 84.23 GameKit.Challenge.IssueDate 4261
- 84.26 GameKit.Challenge.ReceivingPlayer 4264

Created 5th November 2018, last changed 8th November 2018.

84.25 GameKit.Challenge.Message

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.Message"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns text or error.

Description

See also

- 84.22 GameKit.Challenge.Decline 4260
- 84.23 GameKit.Challenge.IssueDate 4261
- 84.27 GameKit.Challenge.Score 4265
- 84.28 GameKit.Challenge.State 4266

Created 5th November 2018, last changed 8th November 2018.

84.26 GameKit.Challenge.ReceivingPlayer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.ReceivingPlayer"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns player identifier or error.

Description

Queries the player identifier associated with the player who received the challenge.

See also

- 84.24 GameKit.Challenge.IssuingPlayer

4262

Created 5th November 2018, last changed 8th November 2018.

84.27 GameKit.Challenge.Score

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.Score"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns score identifier or error.

Description

Only for score challenges.

See also

- 84.22 GameKit.Challenge.Decline 4260
- 84.25 GameKit.Challenge.Message 4263
- 84.28 GameKit.Challenge.State 4266

Created 5th November 2018, last changed 8th November 2018.

84.28 GameKit.Challenge.State

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Challenge.State"; ChallengeRef)

Parameters

ChallengeRef

The identifier for the challenge.

\$challenge

Result Returns state or error.

Description

Possible values:

Invalid	An error occurred. The state of this challenge is not valid.
Pending	The challenge has been issued, but is not yet completed nor declined.
Completed	The receiving player successfully completed the challenge.
Declined	The receiving player declined the challenge.

See also

- 84.22 GameKit.Challenge.Decline 4260
- 84.23 GameKit.Challenge.IssueDate 4261
- 84.25 GameKit.Challenge.Message 4263
- 84.27 GameKit.Challenge.Score 4265

Created 5th November 2018, last changed 8th November 2018.

84.29 GameKit.DefaultLeaderboardIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.DefaultLeaderboardIdentifier")

Result Returns category ID or error.

Description

Returns the category ID string for the local player's default leaderboard.

See also

- 84.87 GameKit.Score.LeaderboardIdentifier 4325
- 84.95 GameKit.SetDefaultLeaderboardIdentifier 4333

Created 5th November 2018, last changed 8th November 2018.

84.30 GameKit.GameCenterView.Dismiss

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.Dismiss")

Result Returns OK or error.

Description

See also

- 84.34 GameKit.GameCenterView.Initialize 4272
- 84.35 GameKit.GameCenterView.Present 4273

Created 5th November 2018, last changed 8th November 2018.

84.31 GameKit.GameCenterView.GetLeaderboardIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.GetLeaderboardIdentifier")

Result Returns leaderboard identifier or error.

Description

The named leaderboard that is displayed by the view controller.

See also

- 84.32 GameKit.GameCenterView.GetLeaderboardTimeScope 4270
- 84.36 GameKit.GameCenterView.SetLeaderboardIdentifier 4274
- 84.37 GameKit.GameCenterView.SetLeaderboardTimeScope 4275

Created 5th November 2018, last changed 8th November 2018.

84.32 GameKit.GameCenterView.GetLeaderboardTimeScope

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.GetLeaderboardTimeScope")

Result Returns value or error.

Description

A filter used to restrict the search to scores that were posted within a specific period of time. Can be "Week", "Today" or "AllTime".

See also

- 84.31 GameKit.GameCenterView.GetLeaderboardIdentifier 4269
- 84.36 GameKit.GameCenterView.SetLeaderboardIdentifier 4274
- 84.37 GameKit.GameCenterView.SetLeaderboardTimeScope 4275

Created 5th November 2018, last changed 8th November 2018.

84.33 GameKit.GameCenterView.GetViewState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.GetViewState")

Result Returns state or error.

Description

The content displayed by the Game Center controller.

When you first present the Game Center view controller, the content displayed by the view controller is determined by this property. If the player navigates to different content, the view state is automatically updated. For example, to preserve the player's selections, you can read the viewState property after the screen is dismissed, and set that value the next time you initialize the view controller.

Value can be Default, Leaderboards, Achievements or Challenges.

See also

- 84.39 GameKit.GameCenterView.SetViewState

4277

Created 5th November 2018, last changed 8th November 2018.

84.34 GameKit.GameCenterView.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.Initialize")

Result Returns OK or error.

Description

The Game Center view provides a single user interface used to display achievements and leaderboards supported by Game Center.

See also

- [84.30 GameKit.GameCenterView.Dismiss](#) 4268

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.35 GameKit.GameCenterView.Present

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.Present")

Result Returns OK or error.

Description

For iOS this is full screen and for MacOS on the current window.

See also

- 84.30 GameKit.GameCenterView.Dismiss

4268

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.36 GameKit.GameCenterView.SetLeaderboardIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.SetLeaderboardIdentifier"; leaderboardIdentifier)

Parameters

leaderboardIdentifier

The leaderboard identifier for the leaderboard to use.

Result Returns OK or error.

Description

The named leaderboard that is displayed by the view controller.

The leaderboardIdentifier property must either be empty or it must match a leaderboard identifier you defined when you created your leaderboards in App Store Connect. If empty, the view displays scores for the aggregate leaderboard. Default is empty.

When the leaderboard is presented, the value of this property determines which leaderboard content is displayed to the player. As the player changes which leaderboard content they view, the leaderboardIdentifier property is automatically updated. For example, to preserve the player's selections, you can read the leaderboardIdentifier property after the screen is dismissed, and set that value the next time you initialize the view controller.

See also

- 84.31 GameKit.GameCenterView.GetLeaderboardIdentifier 4269
- 84.32 GameKit.GameCenterView.GetLeaderboardTimeScope 4270
- 84.37 GameKit.GameCenterView.SetLeaderboardTimeScope 4275

Created 5th November 2018, last changed 8th November 2018.

84.37 GameKit.GameCenterView.SetLeaderboardTimeScope

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.SetLeaderboardTimeScope"; Scope)

Parameters

Scope

The new time scope. Can be Today, Week or AllTime.
"Week"

Result Returns OK or error.

Description

A filter used to restrict the search to scores that were showed within a specific period of time. Can be "Week", "Today" or "AllTime".

This property determines which tab view of the scores screen is displayed to the player. The default value is AllTime, which shows the best score each player has earned. For more information on time scopes, see Leaderboard functions.

When the leaderboard is presented, the value of this property determines the initial tab that is displayed to the player. As the player changes which tab they view, the leaderboardTimeScope property is automatically updated. For example, to preserve the player's selections, you can read the leaderboardTimeScope property after the screen is dismissed, and set that value the next time you initialize the view controller.

See also

- 84.31 GameKit.GameCenterView.GetLeaderboardIdentifier 4269
- 84.32 GameKit.GameCenterView.GetLeaderboardTimeScope 4270
- 84.36 GameKit.GameCenterView.SetLeaderboardIdentifier 4274

Created 5th November 2018, last changed 8th November 2018.

84.38 GameKit.GameCenterView.SetScriptTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.SetScriptTrigger"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

The script parameter.

Result Returns OK or error.

Description

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.39 GameKit.GameCenterView.SetViewState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.SetViewState"; ViewState)

Parameters

ViewState

The view state to use. Can be Leaderboards, Achievements, Challenges or Default. "Leaderboards"

Result Returns OK or error.

Description

The content displayed by the Game Center controller.

When you first present the Game Center view controller, the content displayed by the view controller is determined by this property. If the player navigates to different content, the view state is automatically updated. For example, to preserve the player's selections, you can read the viewState property after the screen is dismissed, and set that value the next time you initialize the view controller.

Value can be Default, Leaderboards, Achievements or Challenges.

See also

- [84.33 GameKit.GameCenterView.GetViewState](#)

4271

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.40 GameKit.GameCenterView.ShowBannerWithTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.GameCenterView.ShowBannerWithTitle"; Title; Message { ; Duration })

Parameters

Title

The title for the banner.

Message

A secondary message to be displayed.

Duration

Optional

The amount of time that the banner should be displayed to the player. In seconds.

5

Result Returns OK or error.

Description

Optional for a specified period of time.

Created 5th November 2018, last changed 8th November 2018.

84.41 GameKit.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Initialize")

Result Returns OK or error.

Description

Loads the framework, setups script triggers and loads local player.
Must be called once before doing any other method.

Examples

Initialize GameKit:

```
# Try to init GameKit
Set Variable [ $r ; Value: MBS( "GameKit.Initialize" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to initialize GameKit." ; $r ]
Exit Script [ Text Result: ]
End If
# Set script to call when player changes
Set Variable [ $r ; Value: MBS( "GameKit.SetPlayerDidChangeScriptTrigger"; Get(FileName); "Player-Changed" ) ]
# Login if needed
If [ MBS( "GameKit.LocalPlayer.isAuthenticated" ) = 0 ]
# Show Login dialog
Set Variable [ $r ; Value: MBS( "GameKit.LocalPlayer.Authenticate" ) ]
End If
```

See also

- [84.66 GameKit.LocalPlayer](#) 4304
- [84.67 GameKit.LocalPlayer.Authenticate](#) 4305
- [84.70 GameKit.LocalPlayer.isAuthenticated](#) 4308
- [84.96 GameKit.SetPlayerDidChangeScriptTrigger](#) 4334
- [124.6 IsError](#) 6266

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.42 GameKit.Leadersboard.GetPlayerScope

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leadersboard.GetPlayerScope"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns value or error.

Description

A filter used to restrict the search to a subset of the players on Game Center.

The `playerScope` property is ignored if the leaderboard request was initialized using the player identifiers list. Otherwise, the `playerScope` property determines which players are included in the request for high scores. The default is `Global`.

Value can be `FriendsOnly` or `Global`.

See also

- 84.44 GameKit.Leadersboard.GetTimeScope 4282
- 84.49 GameKit.Leadersboard.LocalPlayerScore 4287
- 84.53 GameKit.Leadersboard.SetPlayerScope 4291
- 84.55 GameKit.Leadersboard.SetTimeScope 4293

Created 5th November 2018, last changed 8th November 2018.

84.43 GameKit.Leaderboard.GetRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.GetRange"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns range values or error.

Description

Returns list of two values, first is start value and second is length.

See also

- 84.44 GameKit.Leaderboard.GetTimeScope 4282
- 84.46 GameKit.Leaderboard.Image 4284
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.56 GameKit.Leaderboard.Title 4294
- 84.58 GameKit.LeaderboardSet.Image 4296
- 84.59 GameKit.LeaderboardSet.Title 4297

Created 5th November 2018, last changed 8th November 2018.

84.44 GameKit.Leadersboard.GetTimeScope

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leadersboard.GetTimeScope"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns value or error.

Description

A filter used to restrict the search to scores that were posted within a specific period of time. Can be "Week", "Today" or "AllTime".

See also

- 84.42 GameKit.Leadersboard.GetPlayerScope 4280
- 84.43 GameKit.Leadersboard.GetRange 4281
- 84.53 GameKit.Leadersboard.SetPlayerScope 4291
- 84.55 GameKit.Leadersboard.SetTimeScope 4293

Created 5th November 2018, last changed 8th November 2018.

84.45 GameKit.Leaderboard.GroupIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.GroupIdentifier"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns group identifier or error.

Description

If your game was configured to be part of a group in App Store Connect, this property holds the identifier you assigned to the group.

See also

- 84.57 GameKit.LeaderboardSet.GroupIdentifier 4295

Created 5th November 2018, last changed 8th November 2018.

84.46 GameKit.Leaderboard.Image

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.Image"; LeaderboardIdentifier { ; Filename; Type })

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Filename

Optional

For PDF or image files returned an optional file name.

"test.jpg"

Type

Optional

For images the type you like to get. Can be JPEG, TIFF, PNG, GIF, BMP or PDF.

"JPEG"

Result Returns image container or error.

Description

See also

- 84.43 GameKit.Leaderboard.GetRange 4281
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.51 GameKit.Leaderboard.New 4289
- 84.52 GameKit.Leaderboard.Scores 4290
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.56 GameKit.Leaderboard.Title 4294
- 84.58 GameKit.LeaderboardSet.Image 4296
- 84.59 GameKit.LeaderboardSet.Title 4297

Created 5th November 2018, last changed 8th November 2018.

84.47 GameKit.Leaderboard.LoadScores

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.LoadScores"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns list of score identifiers or error.

Description

See also

- 84.48 GameKit.Leaderboard.Loading 4286
- 84.49 GameKit.Leaderboard.LocalPlayerScore 4287
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.52 GameKit.Leaderboard.Scores 4290
- 84.56 GameKit.Leaderboard.Title 4294

Created 5th November 2018, last changed 8th November 2018.

84.48 GameKit.Leaderboard.Loading

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.Loading"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns 1, 0 or error.

Description

A Boolean value that indicates whether the leaderboard object is retrieving scores.

The value of the loading property is 1 if the leaderboard object has any pending requests for scores.

See also

- 84.43 GameKit.Leaderboard.GetRange 4281
- 84.46 GameKit.Leaderboard.Image 4284
- 84.47 GameKit.Leaderboard.LoadScores 4285
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.52 GameKit.Leaderboard.Scores 4290
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.56 GameKit.Leaderboard.Title 4294
- 84.58 GameKit.LeaderboardSet.Image 4296
- 84.59 GameKit.LeaderboardSet.Title 4297

Created 5th November 2018, last changed 8th November 2018.

84.49 GameKit.Leaderboard.LocalPlayerScore

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.LocalPlayerScore"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns score identifier or error.

Description

This property is invalid until a call to GameKit.Leaderboard.LoadScores is completed. Afterward, it contains a score object representing the local player's score on the leaderboard given the filters you applied to the query.

See also

- 84.42 GameKit.Leaderboard.GetPlayerScope 4280
- 84.47 GameKit.Leaderboard.LoadScores 4285
- 84.53 GameKit.Leaderboard.SetPlayerScope 4291

Created 5th November 2018, last changed 8th November 2018.

84.50 GameKit.Leaderboard.MaxRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.MaxRange"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns number or error.

Description

This property is invalid until a call to GameKit.Leaderboard.LoadScores is completed. Afterward, it contains the total number of entries available to return to your game given the filters you applied to the query.

See also

- 84.43 GameKit.Leaderboard.GetRange 4281
- 84.46 GameKit.Leaderboard.Image 4284
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.47 GameKit.Leaderboard.LoadScores 4285
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.56 GameKit.Leaderboard.Title 4294
- 84.58 GameKit.LeaderboardSet.Image 4296
- 84.59 GameKit.LeaderboardSet.Title 4297

Created 5th November 2018, last changed 8th November 2018.

84.51 GameKit.Leaderboard.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.New" { ; playerIdentifiers })

Parameters

playerIdentifiers

Optional

The list of player identifiers.

Result Returns leaderboard identifier or error.

Description

If player list is given, returns an identifier for the leaderboard object initialized with this method ignores the playerScope and range properties. Instead, it retrieves scores for the specific list of players whose player identifiers are included in the players parameter.

If no player list is given, a leaderboard object initialized with this method uses the playerScope, timeScope, and range properties to search Game Center for scores.

See also

- 84.46 GameKit.Leaderboard.Image 4284
- 84.52 GameKit.Leaderboard.Scores 4290
- 84.56 GameKit.Leaderboard.Title 4294

84.51.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)

Created 5th November 2018, last changed 8th November 2018.

84.52 GameKit.Leaderboard.Scores

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.Scores"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns list of score identifiers or error.

Description

An array of score objects that contains the scores returned by the search.

This property is invalid until a call to GameKit.Leaderboard.LoadScores is completed. Afterward, it contains the same score objects that were returned to the completion handler.

See also

- 84.46 GameKit.Leaderboard.Image 4284
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.47 GameKit.Leaderboard.LoadScores 4285
- 84.51 GameKit.Leaderboard.New 4289
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.56 GameKit.Leaderboard.Title 4294

Created 5th November 2018, last changed 8th November 2018.

84.53 GameKit.Leaderboard.SetPlayerScope

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.SetPlayerScope"; LeaderboardIdentifier; Value)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Value

The new scope value. Can be Global or FriendsOnly.
"global"

Result Returns OK or error.

Description

See also

- 84.42 GameKit.Leaderboard.GetPlayerScope 4280
- 84.44 GameKit.Leaderboard.GetTimeScope 4282
- 84.49 GameKit.Leaderboard.LocalPlayerScore 4287
- 84.55 GameKit.Leaderboard.SetTimeScope 4293

Created 5th November 2018, last changed 8th November 2018.

84.54 GameKit.Leaderboard.SetRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.SetRange"; LeaderboardIdentifier; Start; Length)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Start

The new start value of the range.

1

Length

The new length value of the range.

10

Result Returns OK or error.

Description

The range property is ignored if the leaderboard request was initialized using the player list option. Otherwise, the range property is used to filter which scores are returned to your game. For example, if you specified a range of [1,10], after the search is complete, your game receives the best ten scores. The default range is [1,25] .

The minimum index is 1. The maximum length is 100.

See also

- 84.43 GameKit.Leaderboard.GetRange 4281
- 84.46 GameKit.Leaderboard.Image 4284
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.52 GameKit.Leaderboard.Scores 4290
- 84.55 GameKit.Leaderboard.SetTimeScope 4293
- 84.56 GameKit.Leaderboard.Title 4294
- 84.58 GameKit.LeaderboardSet.Image 4296
- 84.59 GameKit.LeaderboardSet.Title 4297

Created 5th November 2018, last changed 8th November 2018.

84.55 GameKit.Leaderboard.SetTimeScope

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.SetTimeScope"; LeaderboardIdentifier; TimeScope)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

TimeScope

Can be "Week", "Today" or "AllTime".

"Week"

Result Returns OK or error.

Description

A filter used to restrict the search to scores that were posted within a specific period of time.

Can be "Week", "Today" or "AllTime".

See also

- 84.42 GameKit.Leaderboard.GetPlayerScope 4280
- 84.44 GameKit.Leaderboard.GetTimeScope 4282
- 84.53 GameKit.Leaderboard.SetPlayerScope 4291
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.58 GameKit.LeaderboardSet.Image 4296
- 84.59 GameKit.LeaderboardSet.Title 4297

Created 5th November 2018, last changed 8th November 2018.

84.56 GameKit.Leaderboard.Title

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Leaderboard.Title"; LeaderboardIdentifier)

Parameters

LeaderboardIdentifier

The identifier of the leaderboard.

Result Returns text or error.

Description

If you initialized a new leaderboard object, this property is invalid until a call to `GameKit.Leaderboard.LoadScores` is complete. Afterward, it contains the localized title for the leaderboard identified by the category property.

See also

- 84.43 `GameKit.Leaderboard.GetRange` 4281
- 84.46 `GameKit.Leaderboard.Image` 4284
- 84.48 `GameKit.Leaderboard.Loading` 4286
- 84.47 `GameKit.Leaderboard.LoadScores` 4285
- 84.50 `GameKit.Leaderboard.MaxRange` 4288
- 84.51 `GameKit.Leaderboard.New` 4289
- 84.52 `GameKit.Leaderboard.Scores` 4290
- 84.54 `GameKit.Leaderboard.SetRange` 4292
- 84.58 `GameKit.LeaderboardSet.Image` 4296
- 84.59 `GameKit.LeaderboardSet.Title` 4297

Created 5th November 2018, last changed 8th November 2018.

84.57 GameKit.LeaderboardSet.GroupIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LeaderboardSet.GroupIdentifier"; LeaderboardSetIdentifier)

Parameters

LeaderboardSetIdentifier

The identifier of the leaderboard set.

Result Returns group identifier or error.

Description

See also

- 84.45 GameKit.Leaderboard.GroupIdentifier

4283

Created 5th November 2018, last changed 8th November 2018.

84.58 GameKit.LeaderboardSet.Image

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LeaderboardSet.Image"; LeaderboardSetIdentifier { ; Filename; Type })

Parameters

LeaderboardSetIdentifier

The identifier of the leaderboard set.

Filename

Optional

For PDF or image files returned an optional file name.

"test.jpg"

Type

Optional

For images the type you like to get. Can be JPEG, TIFF, PNG, GIF, BMP or PDF.

"JPEG"

Result Returns image container or error.

Description

See also

- 84.43 GameKit.Leaderboard.GetRange 4281
- 84.46 GameKit.Leaderboard.Image 4284
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.55 GameKit.Leaderboard.SetTimeScope 4293
- 84.56 GameKit.Leaderboard.Title 4294
- 84.59 GameKit.LeaderboardSet.Title 4297

Created 5th November 2018, last changed 8th November 2018.

84.59 GameKit.LeaderboardSet.Title

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LeaderboardSet.Title"; LeaderboardSetIdentifier)

Parameters

LeaderboardSetIdentifier

The identifier of the leaderboard set.

Result Returns text or error.

Description

See also

- 84.43 GameKit.Leaderboard.GetRange 4281
- 84.46 GameKit.Leaderboard.Image 4284
- 84.48 GameKit.Leaderboard.Loading 4286
- 84.50 GameKit.Leaderboard.MaxRange 4288
- 84.54 GameKit.Leaderboard.SetRange 4292
- 84.55 GameKit.Leaderboard.SetTimeScope 4293
- 84.56 GameKit.Leaderboard.Title 4294
- 84.58 GameKit.LeaderboardSet.Image 4296

Created 5th November 2018, last changed 8th November 2018.

84.60 GameKit.LoadAchievementDescriptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LoadAchievementDescriptions")

Result Returns achievement descriptions list or error.

Description

See also

- 84.12 GameKit.AchievementDescription.Image 4250
- 84.17 GameKit.AchievementDescription.Title 4255

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.61 GameKit.LoadAchievements

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LoadAchievements")

Result Returns OK or error.

Description

Loads previously submitted achievement progress for the local player from Game Center.

See also

- 84.5 GameKit.Achievement.New 4243
- 84.77 GameKit.ReportAchievements 4315
- 84.81 GameKit.ResetAchievements 4319

Created 5th November 2018, last changed 8th November 2018.

84.62 GameKit.LoadLeaderboardSets

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LoadLeaderboardSets")

Result Returns list of leaderboard set identifiers or error.

Description

See also

- 84.63 GameKit.LoadLeaderboards

4301

Created 5th November 2018, last changed 8th November 2018.

84.63 GameKit.LoadLeaderboards

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LoadLeaderboards"; LeaderboardSetIdentifier)

Parameters

LeaderboardSetIdentifier

The identifier of the leaderboard set.

Result Returns leaderboard identifier list or error.

Description

See also

- 84.62 GameKit.LoadLeaderboardSets

4300

Created 5th November 2018, last changed 27th January 2019.

84.64 GameKit.LoadPlayers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LoadPlayers")

Result Returns list of player identifiers or error.

Description

See also

- 84.66 GameKit.LocalPlayer

4304

Created 5th November 2018, last changed 8th November 2018.

84.65 GameKit.LoadReceivedChallenges

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LoadReceivedChallenges")

Result Returns list or error.

Description

Returns list of challenge identifiers or error.

Created 5th November 2018, last changed 8th November 2018.

84.66 GameKit.LocalPlayer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LocalPlayer")

Result Returns player identifier or error.

Description

You never directly create a local player object. Instead, you retrieve the Singleton object by calling this function.

Identifier changes when authenticated, but the plugin can always use local player if you pass "localplayer" as player identifier.

See also

- 84.41 GameKit.Initialize 4279
- 84.64 GameKit.LoadPlayers 4302
- 84.67 GameKit.LocalPlayer.Authenticate 4305
- 84.68 GameKit.LocalPlayer.AuthenticateError 4306
- 84.69 GameKit.LocalPlayer.ClearAuthenticateHandler 4307
- 84.70 GameKit.LocalPlayer.isAuthenticated 4308
- 84.89 GameKit.Score.Player 4327

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.67 GameKit.LocalPlayer.Authenticate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LocalPlayer.Authenticate")

Result Returns OK or error.

Description

Your game should authenticate the player as early as possible after launching, ideally as soon as you can present a user interface to the player. For example, your game may be launched because the player accepted an invitation to join a match or to take a turn in a turn-based match, so you want your game to authenticate the player and process the match invitation as quickly as possible. After you set a handler, authentication begins automatically and is repeated when your game moves to the background and then back to the foreground.

Check later status via `GameKit.LocalPlayer.isAuthenticated` and `GameKit.LocalPlayer.AuthenticateError` functions.

Examples

Login if needed:

```
If [ MBS( "GameKit.LocalPlayer.isAuthenticated" ) = 0 ]
# Show Login dialog
Set Variable [ $r ; Value: MBS( "GameKit.LocalPlayer.Authenticate" ) ]
End If
```

See also

- 84.41 `GameKit.Initialize` 4279
- 84.66 `GameKit.LocalPlayer` 4304
- 84.68 `GameKit.LocalPlayer.AuthenticateError` 4306
- 84.69 `GameKit.LocalPlayer.ClearAuthenticateHandler` 4307
- 84.70 `GameKit.LocalPlayer.isAuthenticated` 4308

Created 5th November 2018, last changed 8th November 2018.

84.68 GameKit.LocalPlayer.AuthenticateError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LocalPlayer.AuthenticateError")

Result Returns error text or nothing.

Description

Set by GameKit.LocalPlayer.Authenticate function.

See also

- [84.66 GameKit.LocalPlayer](#) 4304
- [84.67 GameKit.LocalPlayer.Authenticate](#) 4305
- [84.69 GameKit.LocalPlayer.ClearAuthenticateHandler](#) 4307
- [84.70 GameKit.LocalPlayer.isAuthenticated](#) 4308

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.69 GameKit.LocalPlayer.ClearAuthenticateHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LocalPlayer.ClearAuthenticateHandler")

Result Returns OK or error.

Description

Once cleared, the authenticate dialog is no longer coming when needed. You can call GameKit.LocalPlayer.Authenticate again to authenticate later.

See also

- 84.66 GameKit.LocalPlayer 4304
- 84.67 GameKit.LocalPlayer.Authenticate 4305
- 84.68 GameKit.LocalPlayer.AuthenticateError 4306

Created 8th November 2018, last changed 8th November 2018.

84.70 GameKit.LocalPlayer.isAuthenticated

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LocalPlayer.isAuthenticated")

Result Returns 1, 0 or error.

Description

A Boolean value that indicates whether a local player is currently signed in to Game Center.

Examples

Login if needed:

```
If [ MBS( "GameKit.LocalPlayer.isAuthenticated" ) = 0 ]
# Show Login dialog
Set Variable [ $r ; Value: MBS( "GameKit.LocalPlayer.Authenticate" ) ]
End If
```

See also

- 84.41 GameKit.Initialize 4279
- 84.66 GameKit.LocalPlayer 4304
- 84.67 GameKit.LocalPlayer.Authenticate 4305
- 84.68 GameKit.LocalPlayer.AuthenticateError 4306

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.71 GameKit.LocalPlayer.isUnderage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.LocalPlayer.isUnderage")

Result Returns 1, 0 or error.

Description

A Boolean value that declares whether the local player is underage.

Some Game Center features are disabled if the local player is underage. Your game can also test this property if it wants to disable some of its own features based on the player's age.

Example Databases

- [iOS/GameCenter](#)

Created 5th November 2018, last changed 8th November 2018.

84.72 GameKit.Player.Alias

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Player.Alias"; PlayerID)

Parameters

PlayerID

The player identifier.

\$player

Result Returns alias name or error.

Description

A string chosen by the player to identify themselves to other players.

See also

- 84.75 GameKit.Player.Photo

4313

Created 5th November 2018, last changed 8th November 2018.

84.73 GameKit.Player.DisplayName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Player.DisplayName"; PlayerID)

Parameters

PlayerID

The player identifier.

\$player

Result Returns name or error.

Description

Returns the string to display for the player.

The display name for a player depends on whether the player is a friend of the local player authenticated on the device. If the player is a friend of the local player, then the display name is the actual name of the player. If the player is not a friend, then the display name is the player's alias.

Created 5th November 2018, last changed 8th November 2018.

84.74 GameKit.Player.GuestIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Player.GuestIdentifier"; PlayerID)

Parameters

PlayerID

The player identifier.

\$player

Result Returns text or error.

Description

A developer created string used to identify a guest player.

Created 5th November 2018, last changed 8th November 2018.

84.75 GameKit.Player.Photo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Player.Photo"; PlayerID { ; Filename; Type })

Parameters

PlayerID

The player identifier.

\$player

Filename

Optional

For PDF or image files returned an optional file name.

"test.jpg"

Type

Optional

For images the type you like to get. Can be JPEG, TIFF, PNG, GIF, BMP or PDF.

"JPEG"

Result Returns image container or error.

Description

See also

- 84.72 GameKit.Player.Alias

4310

Created 5th November 2018, last changed 8th November 2018.

84.76 GameKit.RecentPlayers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.RecentPlayers")

Result Returns player identifiers or error.

Description

This method retrieves an array of players who have previously played with the local player or any players that are on the local player's legacy friends list.

Created 5th November 2018, last changed 8th November 2018.

84.77 GameKit.ReportAchievements

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.ReportAchievements"; achievementIdentifiers)

Parameters

achievementIdentifiers

The list of achievement identifiers.

Result Returns OK or error.

Description

Use this class method whenever you need to submit one or more achievement updates at the same time. Calling this method reports each of the achievements in the array. Processing multiple achievements at once allows the entire operation to be processed more efficiently.

See also

- 84.61 GameKit.LoadAchievements 4299
- 84.81 GameKit.ResetAchievements 4319

Created 5th November 2018, last changed 8th November 2018.

84.78 GameKit.ReportAchievementsWithEligibleChallenges

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.ReportAchievementsWithEligibleChallenges"; challengeIdentifiers; achievementIdentifiers)

Parameters

challengeIdentifiers

The list of challenge identifiers.

achievementIdentifiers

The list of achievement identifiers.

Result Returns OK or error.

Description

Reports a list of achievements and limits the challenges those achievements may complete.

See also

- 84.80 GameKit.ReportScoresWithEligibleChallenges

4318

Created 5th November 2018, last changed 8th November 2018.

84.79 GameKit.ReportScores

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.ReportScores"; scoreIdentifiers)

Parameters

scoreIdentifiers

The list of score identifiers.

Result Returns OK or error.

Description

Use this function whenever you need to submit scores to Game Center, whether you are reporting a single score or multiple scores. The method runs through the array of Score identifiers, submitting scores one at a time.

Created 5th November 2018, last changed 8th November 2018.

84.80 GameKit.ReportScoresWithEligibleChallenges

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.ReportScoresWithEligibleChallenges"; challengeIdentifiers; scoreIdentifiers)

Parameters

challengeIdentifiers

The list of challenge identifiers.

scoreIdentifiers

The list of score identifiers.

Result Returns OK or error.

Description

See also

- 84.78 GameKit.ReportAchievementsWithEligibleChallenges

4316

Created 5th November 2018, last changed 8th November 2018.

84.81 GameKit.ResetAchievements

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.ResetAchievements")

Result Returns OK or error.

Description

Calling this class method deletes all progress towards achievements previously reported for the local player. Hidden achievements that were previously visible are now hidden again.

See also

- 84.61 GameKit.LoadAchievements 4299
- 84.77 GameKit.ReportAchievements 4315

Created 5th November 2018, last changed 8th November 2018.

84.82 GameKit.Score.Date

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.Date"; ScoreIdentifier)

Parameters

ScoreIdentifier

The identifier for the score object.

Result Returns timestamp or error.

Description

When you initialize the new score object, the date property is automatically set to the current date and time.

See also

- 84.88 GameKit.Score.New 4326
- 84.89 GameKit.Score.Player 4327
- 84.90 GameKit.Score.Rank 4328

Created 5th November 2018, last changed 8th November 2018.

84.83 GameKit.Score.FormattedValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.FormattedValue"; ScoreIdentifier)

Parameters

ScoreIdentifier

The identifier for the score object.

Result Returns text or error.

Description

This property is invalid on a newly initialized score object. On a score returned from GameKit, it contains a formatted string based on the player's score. You determine how a score is formatted when you define the leaderboard in App Store Connect.

Never convert the value property into a string directly; always use this method to receive the formatted string.

Created 5th November 2018, last changed 8th November 2018.

84.84 GameKit.Score.GetContext

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.GetContext"; ScoreIdentifier)

Parameters

ScoreIdentifier

The identifier for the score object.

Result Returns number or error.

Description

An integer value used by your game.

The context property is stored and returned to your game, but is otherwise ignored by Game Center. It allows your game to associate an arbitrary 64-bit unsigned integer value with the score data reported to Game Center. You decide how this integer value is interpreted by your game. For example, you might use the context property to store flags that provide game-specific details about a player's score, or you might use the context as a key to other data stored on the device or on your own server. The context is most useful when your game displays a custom leaderboard user interface.

See also

- 84.86 GameKit.Score.GetValue 4324
- 84.91 GameKit.Score.SetContext 4329

Created 5th November 2018, last changed 8th November 2018.

84.85 GameKit.Score.GetShouldSetDefaultLeaderboard

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.GetShouldSetDefaultLeaderboard"; ScoreIdentifier)

Parameters

ScoreIdentifier

The identifier for the score object.

Result Returns 1, 0 or error.

Description

A Boolean value that indicates whether this score should also update the default leaderboard.

If the value of this property is true, when the score is reported to Game Center, Game Center also updates the local player's default leaderboard to match the value stored in the leaderboardIdentifier property of the score object.

If the value of this property is false, the default leaderboard is not changed by reporting the score. The default value of this property is false.

See also

- 84.92 GameKit.Score.SetShouldSetDefaultLeaderboard 4330

Created 5th November 2018, last changed 8th November 2018.

84.86 GameKit.Score.GetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.GetValue"; ScoreIdentifier)

Parameters

ScoreIdentifier

The identifier for the score object.

Result Returns value or error.

Description

The score earned by the player.

You can use any algorithm you want to calculate scores in your game. Your game must set the value property before reporting a score, otherwise an error is returned.

The value provided by a score object is interpreted by Game Center only when formatted for display. You determine how your scores are formatted when you define the leaderboard in App Store Connect.

See also

- 84.84 GameKit.Score.GetContext 4322
- 84.93 GameKit.Score.SetValue 4331

Created 5th November 2018, last changed 8th November 2018.

84.87 GameKit.Score.LeaderboardIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.LeaderboardIdentifier"; ScoreIdentifier)

Parameters

ScoreIdentifier

The identifier for the score object.

Result Returns leaderboard identifier or error.

Description

See also

- 84.29 GameKit.DefaultLeaderboardIdentifier 4267
- 84.95 GameKit.SetDefaultLeaderboardIdentifier 4333

Created 5th November 2018, last changed 8th November 2018.

84.88 GameKit.Score.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.New"; LeaderboardIdentifier { ; PlayerIdentifier })

Parameters

LeaderboardIdentifier

The identifier for the leaderboard for this score.

PlayerIdentifier

Optional

The player identifier, if not the current one.

Result Returns score identifier or error.

Description

Returns score identifier for a new score object for the specified leaderboard and optional player.

Your game explicitly allocates and initializes a score object using the designated player and current date when it needs to report a new score to Game Center.

See also

- 84.82 GameKit.Score.Date 4320
- 84.89 GameKit.Score.Player 4327
- 84.90 GameKit.Score.Rank 4328

Created 5th November 2018, last changed 8th November 2018.

84.89 GameKit.Score.Player

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.Player"; ScoreIdentifier)

Parameters

ScoreIdentifier

The identifier for the score object.

Result Returns player identifier or error.

Description

When you initialize a new score object, the player property is set to the identifier for the local player. If the score object was returned to your game by loading scores from Game Center, the player property identifies the player who recorded that score.

See also

- 84.66 GameKit.LocalPlayer 4304
- 84.82 GameKit.Score.Date 4320
- 84.88 GameKit.Score.New 4326
- 84.90 GameKit.Score.Rank 4328

Created 5th November 2018, last changed 8th November 2018.

84.90 GameKit.Score.Rank

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.Rank"; ScoreIdentifier)

Parameters

ScoreIdentifier

The identifier for the score object.

Result Returns number or error.

Description

The value of this property is only valid on score objects returned from Game Center. The rank property represents the position of the score in the returned results, with 1 being the best score, 2 being the second best, and so on.

See also

- 84.82 GameKit.Score.Date 4320
- 84.88 GameKit.Score.New 4326
- 84.89 GameKit.Score.Player 4327

Created 5th November 2018, last changed 8th November 2018.

84.91 GameKit.Score.SetContext

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.SetContext"; ScoreIdentifier; Value)

Parameters

ScoreIdentifier

The identifier for the score object.

Value

The new context value. This is a 64-bit number you can store with the score.

Result Returns OK or error.

Description

An integer value used by your game.

The context property is stored and returned to your game, but is otherwise ignored by Game Center. It allows your game to associate an arbitrary 64-bit unsigned integer value with the score data reported to Game Center. You decide how this integer value is interpreted by your game. For example, you might use the context property to store flags that provide game-specific details about a player's score, or you might use the context as a key to other data stored on the device or on your own server. The context is most useful when your game displays a custom leaderboard user interface.

See also

- 84.84 GameKit.Score.GetContext 4322
- 84.93 GameKit.Score.SetValue 4331

Created 5th November 2018, last changed 8th November 2018.

84.92 GameKit.Score.SetShouldSetDefaultLeaderboard

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.SetShouldSetDefaultLeaderboard"; ScoreIdentifier; Value)

Parameters

ScoreIdentifier

The identifier for the score object.

Value

The new value. Pass 1 to update default leaderboard or 0 if not.

1

Result Returns OK or error.

Description

A Boolean value that indicates whether this score should also update the default leaderboard.

If the value of this property is true, when the score is reported to Game Center, Game Center also updates the local player's default leaderboard to match the value stored in the leaderboardIdentifier property of the score object.

If the value of this property is false, the default leaderboard is not changed by reporting the score. The default value of this property is false.

See also

- 84.85 GameKit.Score.GetShouldSetDefaultLeaderboard 4323

Created 5th November 2018, last changed 8th November 2018.

84.93 GameKit.Score.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.Score.SetValue"; ScoreIdentifier; Value)

Parameters

ScoreIdentifier

The identifier for the score object.

Value

The new score value.

Result Returns OK or error.

Description

The score earned by the player.

You can use any algorithm you want to calculate scores in your game. Your game must set the value property before reporting a score, otherwise an error is returned.

The value provided by a score object is interpreted by Game Center only when formatted for display. You determine how your scores are formatted when you define the leaderboard in App Store Connect.

See also

- 84.86 GameKit.Score.GetValue 4324
- 84.91 GameKit.Score.SetContext 4329

Created 5th November 2018, last changed 8th November 2018.

84.94 GameKit.SelectChallengeablePlayers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.SelectChallengeablePlayers"; AchievementRef; playerIdentifiers)

Parameters

AchievementRef

The identifier for the achievement.

\$Achievement

playerIdentifiers

The list of player identifiers.

Result Returns player identifier list or error.

Description

The list of players is used to find those players that are eligible to earn the achievement.

Created 5th November 2018, last changed 8th November 2018.

84.95 GameKit.SetDefaultLeaderboardIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.SetDefaultLeaderboardIdentifier"; leaderboardIdentifier)

Parameters**leaderboardIdentifier**

The new default leaderboard identifier.

Result Returns OK or error.

Description

The default leaderboard is configured in App Store Connect as part of configuring your game's leaderboards. All players normally start with this leaderboard as the default leaderboard. Calling this method changes the default leaderboard only for the local player.

See also

- 84.29 GameKit.DefaultLeaderboardIdentifier 4267
- 84.87 GameKit.Score.LeaderboardIdentifier 4325

Created 5th November 2018, last changed 8th November 2018.

84.96 GameKit.SetPlayerDidChangeScriptTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.SetPlayerDidChangeScriptTrigger"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Script is called when player changed.

Examples

Set script to call when player changes:

```
Set Variable [ $r ; Value: MBS( "GameKit.SetPlayerDidChangeScriptTrigger"; Get(FileName); "Player-Changed" ) ]
```

See also

- 84.41 GameKit.Initialize

4279

Created 5th November 2018, last changed 8th November 2018.

84.97 GameKit.ShowChallengeComposeDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
84 GameKit	8.5	Yes	No	No	No	Yes

MBS("GameKit.ShowChallengeComposeDialog"; scoreRef or AchievementRef; Message; playerIdentifiers { ; Filename; ScriptName })

Parameters

scoreRef or AchievementRef

The score or achievement identifier.

Message

The message text.

playerIdentifiers

The list of player identifiers.

Filename

Optional

The database file name where the script is located.

"test.fmp12"

ScriptName

Optional

The script name.

"MyScript"

Result Returns OK or error.

Description

Provides a challenge compose view controller with pre-selected player identifiers and a pre-formatted, player-editable message.

Once dialog finishes, the given script is triggered and passed either didIssueChallenge or cancel as parameter.

Created 5th November 2018, last changed 8th November 2018.

Chapter 85

GraphicsMagick

Image functions to convert between image formats and apply effects.

85.1 GImage.AdaptiveThreshold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AdaptiveThreshold"; ImageRef; Width; height { ; offset })

Parameters

ImageRef

The image reference number.

1

Width

defines the size of the pixel neighborhood

100

height

defines the size of the pixel neighborhood

100

offset

Optional

Optional, constant to subtract from pixel neighborhood mean

0

Result Returns "OK" on success.

Description

See also

- 85.237 GImage.SetCacheThreshold

Created 18th August 2014, last changed 18th August 2014.

85.2 GImage.AddNoise

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddNoise"; ImageRef; noiseType)

Parameters

ImageRef

The image reference number.

1

noiseType

UniformNoise = 0, GaussianNoise = 1, MultiplicativeGaussianNoise = 2, ImpulseNoise = 3, LaplacianNoise = 4, PoissonNoise = 5.

0

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.3 GImage.AddNoiseChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddNoiseChannel"; ImageRef; ChannelType; noiseType)

Parameters

ImageRef

The image reference number.

1

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

1

noiseType

UniformNoise = 0, GaussianNoise = 1, MultiplicativeGaussianNoise = 2, ImpulseNoise = 3, LaplacianNoise = 4, PoissonNoise = 5.

0

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.4 GImage.AddPathArcAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathArcAbs"; ImageRef; radiusX; radiusY; xAxisRotation; largeArcFlag; sweepFlag; x; y)

Parameters

ImageRef

The image reference number.

1

radiusX

The radius in x direction.

100

radiusY

The radius in y direction.

100

xAxisRotation

The rotation value.

0

largeArcFlag

Pass 1 or 0 to decide if you want to draw larger arcs.

0

sweepFlag

Whether to draw the arc matching a clock-wise rotation.

0

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description

Draws an elliptical arc from the current point to (x, y). The size and orientation of the ellipse are defined by two radii (radiusX, radiusY) and an xAxisRotation, which indicates how the ellipse as a whole is rotated relative to the current coordinate system. The center (cx, cy) of the ellipse is calculated automatically to satisfy the constraints imposed by the other parameters. largeArcFlag and sweepFlag contribute to the automatic calculations and help determine how the arc is drawn. If largeArcFlag is 1 then draw the larger of the available arcs. If sweepFlag is 1, then draw the arc matching a clock-wise rotation.

With absolute coordinate.

See also

- 85.5 GImage.AddPathArcRel 4343
- 85.7 GImage.AddPathCurvetoAbs 4346
- 85.9 GImage.AddPathLinetoAbs 4350
- 85.15 GImage.AddPathMovetoAbs 4356

Created 18th August 2014, last changed 18th August 2014.

85.5 GImage.AddPathArcRel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathArcRel"; ImageRef; radiusX; radiusY; xAxisRotation; largeArcFlag; sweepFlag; x; y)

Parameters

ImageRef

The image reference number.

1

radiusX

The radius in x direction.

100

radiusY

The radius in y direction.

100

xAxisRotation

The rotation value.

0

largeArcFlag

Pass 1 or 0 to decide if you want to draw larger arcs.

0

sweepFlag

Whether to draw the arc matching a clock-wise rotation.

0

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description

Draws an elliptical arc from the current point to (x, y). The size and orientation of the ellipse are defined by two radii (radiusX, radiusY) and an xAxisRotation, which indicates how the ellipse as a whole is rotated relative to the current coordinate system. The center (cx, cy) of the ellipse is calculated automatically to satisfy the constraints imposed by the other parameters. largeArcFlag and sweepFlag contribute to the automatic calculations and help determine how the arc is drawn. If largeArcFlag is 1 then draw the larger of the available arcs. If sweepFlag is 1, then draw the arc matching a clock-wise rotation.

With relative coordinate.

See also

- 85.4 `GImage.AddPathArcAbs` 4341
- 85.8 `GImage.AddPathCurvetoRel` 4348
- 85.12 `GImage.AddPathLinetoRel` 4353
- 85.16 `GImage.AddPathMovetoRel` 4357

Created 18th August 2014, last changed 18th August 2014.

85.6 **GImage.AddPathClosePath**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathClosePath"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns OK or error.

Description

Created 18th August 2014, last changed 18th August 2014.

85.7 GImage.AddPathCurvetoAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

```
MBS( "GImage.AddPathCurvetoAbs"; ImageRef; x1; y1; x2; y2; x; y )
```

Parameters

ImageRef

The image reference number.

1

x1

The first control point.

y1

The first control point.

x2

The second control point.

y2

The second control point.

x

Destination point coordinate.

y

Destination point coordinate.

Result Returns OK or error.

Description

Draws a cubic Bézier curve from the current point to (x,*y*) using (x1,*y1*) as the control point at the beginning of the curve and (x2,*y2*) as the control point at the end of the curve. GImage.AddPathCurveToAbs indicates that absolute coordinates will follow; GImage.AddPathCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,*y*) coordinate pair used in the polybezier.

Examples

Draws a bezier curve:

```
$r = MBS("GImage.AddPathMovetoAbs"; $img; 100; 100 )
```

```
$r = MBS("GImage.AddPathCurvetoAbs"; $img; 100; 300; 300; 100; 300; 300 )
```

```
$r = MBS("GImage.DrawPath"; $img )
```

See also

- 85.4 GImage.AddPathArcAbs

85.7. <i>GMIMAGE.ADDPATHCURVETOABS</i>	4347
• 85.8 <i>GMImage.AddPathCurvetoRel</i>	4348
• 85.9 <i>GMImage.AddPathLinetoAbs</i>	4350
• 85.12 <i>GMImage.AddPathLinetoRel</i>	4353
• 85.15 <i>GMImage.AddPathMovetoAbs</i>	4356
• 85.16 <i>GMImage.AddPathMovetoRel</i>	4357
• 85.19 <i>GMImage.AddPathSmoothCurvetoAbs</i>	4360
• 85.57 <i>GMImage.DrawPath</i>	4418

Example Databases

- [GraphicsMagick/GraphicsMagick Path Drawing](#)

Created 18th August 2014, last changed 18th August 2014.

85.8 GImage.AddPathCurvetoRel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathCurvetoRel"; ImageRef; x1; y1; x2; y2; x; y)

Parameters

ImageRef

The image reference number.

1

x1

The first control point.

y1

The first control point.

x2

The second control point.

y2

The second control point.

x

Destination point coordinate.

y

Destination point coordinate.

Result Returns OK or error.

Description

Draws a cubic Bézier curve from the current point to (x,*y*) using (x1,*y1*) as the control point at the beginning of the curve and (x2,*y2*) as the control point at the end of the curve. GImage.AddPathCurve-toAbs indicates that absolute coordinates will follow; GImage.AddPathCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,*y*) coordinate pair used in the polybezier.

See also

- 85.5 GImage.AddPathArcRel 4343
- 85.7 GImage.AddPathCurvetoAbs 4346
- 85.9 GImage.AddPathLinetoAbs 4350
- 85.12 GImage.AddPathLinetoRel 4353
- 85.15 GImage.AddPathMovetoAbs 4356
- 85.16 GImage.AddPathMovetoRel 4357

85.8. *GMIMAGE.ADDPATHCURVETOREL*

4349

- 85.20 *GImage.AddPathSmoothCurvetoRel*

4361

Created 18th August 2014, last changed 18th August 2014.

85.9 GImage.AddPathLinetoAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathLinetoAbs"; ImageRef; x; y)

Parameters

ImageRef

The image reference number.

1

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description

Draw a line from the current point to the given coordinate which becomes the new current point. Relative coordinates are used. At the end of the command, the new current point is set to the final set of coordinates provided.

See also

- 85.4 GImage.AddPathArcAbs 4341
- 85.7 GImage.AddPathCurvetoAbs 4346
- 85.8 GImage.AddPathCurvetoRel 4348
- 85.12 GImage.AddPathLinetoRel 4353
- 85.15 GImage.AddPathMovetoAbs 4356
- 85.16 GImage.AddPathMovetoRel 4357

Example Databases

- [GraphicsMagick/GraphicsMagick Path Drawing](#)

Created 18th August 2014, last changed 18th August 2014.

85.10 GMImage.AddPathLinetoHorizontalAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.AddPathLinetoHorizontalAbs"; ImageRef; x)

Parameters**ImageRef**

The image reference number.

1

x

The new x coordinate.

100

Result Returns OK or error.

Description

GMImage.AddPathLinetoHorizontalAbs indicates that absolute coordinates are supplied. At the end of the command, the new current point becomes (x, cpy) for the final value of x

See also

- 85.11 GMImage.AddPathLinetoHorizontalRel 4352
- 85.13 GMImage.AddPathLinetoVerticalAbs 4354

Created 18th August 2014, last changed 18th August 2014.

85.11 GImage.AddPathLinetoHorizontalRel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathLinetoHorizontalRel"; ImageRef; x)

Parameters

ImageRef

The image reference number.

1

x

The new relative x coordinate.

100

Result Returns OK or error.

Description

GImage.AddPathLinetoHorizontalRel indicates that relative coordinates are supplied. At the end of the command, the new current point becomes (x, cpy) for the final value of x.

See also

- 85.10 GImage.AddPathLinetoHorizontalAbs 4351
- 85.14 GImage.AddPathLinetoVerticalRel 4355

Created 18th August 2014, last changed 18th August 2014.

85.12 GMImage.AddPathLinetoRel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.AddPathLinetoRel"; ImageRef; x; y)

Parameters**ImageRef**

The image reference number.

1

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description

Draw a line from the current point to the given coordinate which becomes the new current point. Relative coordinates are used. At the end of the command, the new current point is set to the final set of coordinates provided.

See also

- 85.5 GMImage.AddPathArcRel 4343
- 85.7 GMImage.AddPathCurvetoAbs 4346
- 85.8 GMImage.AddPathCurvetoRel 4348
- 85.9 GMImage.AddPathLinetoAbs 4350
- 85.15 GMImage.AddPathMovetoAbs 4356
- 85.16 GMImage.AddPathMovetoRel 4357

Created 18th August 2014, last changed 18th August 2014.

85.13 GImage.AddPathLinetoVerticalAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathLinetoVerticalAbs"; ImageRef; y)

Parameters

ImageRef

The image reference number.

1

y

The new relative y coordinate.

100

Result Returns OK or error.

Description

PathLinetoVerticalAbs indicates that absolute coordinates are supplied. At the end of the command, the new current point becomes (cpx, y) for the final value of y.

See also

- 85.10 GImage.AddPathLinetoHorizontalAbs 4351
- 85.14 GImage.AddPathLinetoVerticalRel 4355

Created 18th August 2014, last changed 18th August 2014.

85.14 **GMImage.AddPathLinetoVerticalRel**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.AddPathLinetoVerticalRel"; ImageRef; y)

Parameters

ImageRef

The image reference number.

1

y

The new relative y coordinate.

100

Result Returns OK or error.

Description

GMImage.AddPathLinetoVerticalRel indicates that relative coordinates are supplied. At the end of the command, the new current point becomes (cpx, y) for the final value of y.

See also

- 85.11 GMImage.AddPathLinetoHorizontalRel 4352
- 85.13 GMImage.AddPathLinetoVerticalAbs 4354

Created 18th August 2014, last changed 18th August 2014.

85.15 GImage.AddPathMovetoAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathMovetoAbs"; ImageRef; x; y)

Parameters

ImageRef

The image reference number.

1

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description

See also

- 85.4 GImage.AddPathArcAbs 4341
- 85.7 GImage.AddPathCurvetoAbs 4346
- 85.8 GImage.AddPathCurvetoRel 4348
- 85.9 GImage.AddPathLinetoAbs 4350
- 85.12 GImage.AddPathLinetoRel 4353
- 85.16 GImage.AddPathMovetoRel 4357

Example Databases

- [GraphicsMagick/GraphicsMagick Path Drawing](#)

Created 18th August 2014, last changed 18th August 2014.

85.16 GMImage.AddPathMovetoRel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.AddPathMovetoRel"; ImageRef; x; y)

Parameters**ImageRef**

The image reference number.

1

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description**See also**

- 85.5 GMImage.AddPathArcRel 4343
- 85.7 GMImage.AddPathCurvetoAbs 4346
- 85.8 GMImage.AddPathCurvetoRel 4348
- 85.9 GMImage.AddPathLinetoAbs 4350
- 85.12 GMImage.AddPathLinetoRel 4353
- 85.15 GMImage.AddPathMovetoAbs 4356

Created 18th August 2014, last changed 18th August 2014.

85.17 GImage.AddPathQuadraticCurvetoAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathQuadraticCurvetoAbs"; ImageRef; x1; y1; x; y)

Parameters

ImageRef

The image reference number.

1

x1

The first control point.

y1

The first control point.

x

The target point.

y

The target point.

Result Returns OK or error.

Description

The quadratic Bézier commands depend on the argument x1/y1 and x/y.

See also

- 85.18 GImage.AddPathQuadraticCurvetoRel 4359
- 85.19 GImage.AddPathSmoothCurvetoAbs 4360
- 85.21 GImage.AddPathSmoothQuadraticCurvetoAbs 4362
- 85.22 GImage.AddPathSmoothQuadraticCurvetoRel 4363

Created 18th August 2014, last changed 18th August 2014.

85.18 GMImage.AddPathQuadraticCurvetoRel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.AddPathQuadraticCurvetoRel"; ImageRef; x1; y1; x; y)

Parameters**ImageRef**

The image reference number.

1

x1

The first control point.

y1

The first control point.

x

The target point.

y

The target point.

Result Returns OK or error.

Description

The quadratic Bézier commands depend on the argument x1/y1 and x/y.

See also

- 85.17 GMImage.AddPathQuadraticCurvetoAbs 4358
- 85.20 GMImage.AddPathSmoothCurvetoRel 4361
- 85.21 GMImage.AddPathSmoothQuadraticCurvetoAbs 4362
- 85.22 GMImage.AddPathSmoothQuadraticCurvetoRel 4363

Created 18th August 2014, last changed 18th August 2014.

85.19 GImage.AddPathSmoothCurvetoAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathSmoothCurvetoAbs"; ImageRef; x; y)

Parameters

ImageRef

The image reference number.

1

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description

See also

- 85.7 GImage.AddPathCurvetoAbs 4346
- 85.17 GImage.AddPathQuadraticCurvetoAbs 4358
- 85.20 GImage.AddPathSmoothCurvetoRel 4361
- 85.21 GImage.AddPathSmoothQuadraticCurvetoAbs 4362

Created 18th August 2014, last changed 18th August 2014.

85.20 GMImage.AddPathSmoothCurvetoRel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.AddPathSmoothCurvetoRel"; ImageRef; x; y)

Parameters**ImageRef**

The image reference number.

1

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description**See also**

- 85.8 GMImage.AddPathCurvetoRel 4348
- 85.18 GMImage.AddPathQuadraticCurvetoRel 4359
- 85.19 GMImage.AddPathSmoothCurvetoAbs 4360
- 85.22 GMImage.AddPathSmoothQuadraticCurvetoRel 4363

Created 18th August 2014, last changed 18th August 2014.

85.21 GImage.AddPathSmoothQuadraticCurvetoAbs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AddPathSmoothQuadraticCurvetoAbs"; ImageRef; x; y)

Parameters

ImageRef

The image reference number.

1

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description

See also

- 85.17 GImage.AddPathQuadraticCurvetoAbs 4358
- 85.18 GImage.AddPathQuadraticCurvetoRel 4359
- 85.19 GImage.AddPathSmoothCurvetoAbs 4360
- 85.22 GImage.AddPathSmoothQuadraticCurvetoRel 4363

Created 18th August 2014, last changed 18th August 2014.

85.22 GMImage.AddPathSmoothQuadraticCurvetoRel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.AddPathSmoothQuadraticCurvetoRel"; ImageRef; x; y)

Parameters**ImageRef**

The image reference number.

1

x

The x coordinate.

10

y

The y coordinate.

10

Result Returns OK or error.

Description**See also**

- 85.17 GMImage.AddPathQuadraticCurvetoAbs 4358
- 85.18 GMImage.AddPathQuadraticCurvetoRel 4359
- 85.20 GMImage.AddPathSmoothCurvetoRel 4361
- 85.21 GMImage.AddPathSmoothQuadraticCurvetoAbs 4362

Created 18th August 2014, last changed 18th August 2014.

85.23 GImage.Affine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Affine"; ImageRef; sx; sy; rx; ry; tx; ty)

Parameters

ImageRef

The image reference number.

1

sx

The x scale factors.

1

sy

The y scale factors.

1

rx

The x rotate factors.

0

ry

The y rotate factors.

0

tx

The x translation value.

0

ty

The y translation value.

0

Result Returns OK or error.

Description

Specify a transformation matrix to adjust scaling, rotation, and translation (coordinate transformation) for subsequently drawn objects in the same or decendent drawing context. The sx & sy parameters represent the x & y scale factors, the rx & ry parameters represent the x & y rotation, and the tx & ty parameters represent the x & y translation:

See also

- 85.218 GImage.Resize

4619

Created 18th August 2014, last changed 18th August 2014.

85.24 GMImage.Annotate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Annotate"; ImageRef; text { ; boundingArea; gravity; degrees })

Parameters

ImageRef

The image reference number.

1

text

Some text

"Hello World"

boundingArea

Optional

The rectangle where to draw. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200%!"

"100x200+10+20"

gravity

Optional

The position of the text. Can be number of text value. Can be ForgetGravity=0, NorthWestGravity=1, NorthGravity=2, NorthEastGravity=3, WestGravity=4, CenterGravity=5, EastGravity=6, SouthWestGravity=7, SouthGravity=8, SouthEastGravity=9, StaticGravity=10.

"SouthWestGravity"

degrees

Optional

The rotation in degrees.

0

Result Returns "OK" on success.

Description

Annotates an image with text. Optionally you can include any of the following bits of information about the image by embedding the appropriate special characters:

% b file size in bytes. % c comment. % d directory in which the image resides. % e extension of the image file. % f original filename of the image. % h height of image. % i filename of the image. % k number of unique colors. % l image label. % m image file format. % n number of images in a image sequence. % o output image filename. % p page number of the image. % q image depth (8 or 16). % p page number of the image. % q image depth (8 or 16). % s image scene number. % t image filename without any extension. % u a unique temporary filename. % w image width. % x x resolution of the image. % y y resolution of the image.

Set a font with full path and @ in front. e.g. "@/Library/Fonts/Arial.ttf". This way the plugin loads it directly.

Gravity values:

NorthWestGravity	1	text bottom-left corner placed at top-left
NorthGravity	2	text bottom-center placed at top-center
NorthEastGravity	3	text bottom-right corner placed at top-right
WestGravity	4	text left-center placed at left-center
CenterGravity	5	text center placed at center
EastGravity	6	text right-center placed at right-center
SouthWestGravity	7	text top-left placed at bottom-left
SouthGravity	8	text top-center placed at bottom-center
SouthEastGravity	9	text top-right placed at bottom-right
StaticGravity	10	static

You can pass empty text for parameters or not pass parameters. This function can work in 5 modes:

- Annotate with text using specified text, bounding area, placement gravity, and rotation.
- Annotate using specified text, bounding area, and placement gravity
- Annotate with text (bounding area is entire image) and placement gravity
- Annotate using specified text, and placement location
- Annotate with text (bounding area is entire image) and placement south

Depending on which parameters you specify or leave empty, we pick the best mode.

The function does not wrap text.

Please use `GMImage.FontTypeMetrics` to measure how much space text needs.

With version 8.3 or newer you can pass font names without file path, as we now recognize most standard fonts. Only for special fonts you need full path.

Examples

Write three lines at 200/200 into the picture:

```
MBS( "GMImage.Annotate"; $ImageRef; "Hello\nWorld\nAgain"; "200x200"; 0; 0 )
```

Setup and write Hello:

```
MBS("GMImage.SetLineWidth"; $img; 1)
MBS("GMImage.SetStrokeColor"; $img; "RGB 0 0 0")
```

```
MBS("GMImage.SetFont"; $img; "@/Library/Fonts/Arial.ttf")
MBS("GMImage.SetfontPointSize"; $img; 14)
MBS("GMImage.Annotate"; $img; "Hello World"; "+20+20")
```

For Windows use different font path:

```
MBS("GMImage.SetFont"; $img; "@c:\Windows\Fonts\Tahoma.ttf")
MBS("GMImage.Annotate"; $img; "Hello World"; "+20+20")
```

Load pictures, sets puts text on it in yellow and centered:

```
# load image from container
Set Variable [ $ref; Wert:MBS("GMImage.NewFromContainer"; Annotate Image::InputImage) ]
# set font and font size
Set Variable [ $r; Wert:MBS("GMImage.SetFontPointSize"; $ref; Annotate Image::FontSize) ]
Set Variable [ $r; Wert:MBS("GMImage.SetFont"; $ref; Annotate Image::FontPath) ]
# set color to yellow
Set Variable [ $r; Wert:MBS("GMImage.SetFillColor"; $ref; "RGB 1 1 0") ]
# draw in rectangle with width and height of image (here 640 by 480) centered.
Set Variable [ $r; Wert:MBS("GMImage.Annotate"; $ref; Annotate Image::Text; "640x480"; "CenterGravity") ]
# save image
Set Field [ Annotate Image::OutputImage; MBS( "GMImage.WriteToPNGContainer"; $ref ) ]
# and free memory
Set Variable [ $Error; Wert:MBS("GMImage.Release";$ref) ]
```

Text and gravity only:

```
MBS("GMImage.Annotate"; $ref; Annotate Image::Text; ""; "SouthWestGravity")
```

Write text with Arial Black:

```
Set Variable [ $ref ; Value: MBS("GMImage.NewFromContainer"; Annotate Image::InputImage) ]
Set Variable [ $r ; Value: MBS("GMImage.SetFontPointSize"; $ref; 72) ]
Set Variable [ $r ; Value: MBS("GMImage.SetFont"; $ref; "Arial Black") ]
Set Variable [ $r ; Value: MBS("GMImage.SetFillColor"; $ref; "RGB 0 0 0") ]
Set Variable [ $r ; Value: MBS("GMImage.Annotate"; $ref; "Hello World"; "100x200+10+80"; 1) ]
Set Field [ Annotate Image::OutputImage ; MBS( "GMImage.WriteToPNGContainer"; $ref ) ]
Set Variable [ $Error ; Value: MBS("GMImage.Release";$ref) ]
```

See also

- 85.78 GMImage.FontTypeMetrics 4450
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584

- 85.221 GImage.Rotate 4623
- 85.253 GImage.SetFillColor 4664
- 85.256 GImage.SetFont 4668
- 85.257 GImage.SetFontSize 4669
- 85.264 GImage.SetLineWidth 4677
- 85.285 GImage.SetStrokeColor 4706
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Annotate Image](#)

85.24.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS FileMaker Plugin, version 7.4pr7](#)
- [MBS Filemaker Plugin, version 4.3pr1](#)
- [MBS Filemaker Plugin, version 4.2pr9](#)

Created 18th August 2014, last changed 28th December 2018.

85.25 **GMImage.AutoOrient**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.AutoOrient"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns OK or error.

Description

This allows the image to be viewed correctly when the orientation attribute is not available, or is not respected.

85.25.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr6](#)

Created 28th December 2018, last changed 14th May 2019.

85.26 GImage.AveragePixelValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.AveragePixelValue"; ImageRef { ; X; Y; Width; Height })

Parameters

ImageRef

The image reference number.

1

X

Optional

X-Position of the rectangle.

\$left

Y

Optional

Y-Position of the rectangle.

\$top

Width

Optional

The width of the rectangle. Default is width of image.

\$width

Height

Optional

The height of the rectangle. Default is height of image.

\$height

Result Returns the average pixel value.

Description

Value is in range from 0.0 to 1.0 depending if it is more black (0.0) or white (1.0).

Make sure the pixels are in RGB format before you call this method. (Use GImage.SetType with value 6.)

This function is designed to test if a certain area in the image is white or black.

Does not check alpha channel!

Version 9.1 and later uses full image if rectangle is missed.

See also

- 85.296 GImage.SetType

4718

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)

85.26.1 Blog Entries

- [Create PDF from scanned images and skip blank pages](#)
- [MBS FileMaker Plugin, version 9.1pr4](#)
- [MBS Filemaker Plugin, version 3.0pr10](#)

Created 18th August 2014, last changed 18th February 2019.

85.27 GImage.BaseColumns

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.BaseColumns"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number for the base image width (before transformations).

Description

See also

- 85.42 GImage.Columns

4393

Created 18th August 2014, last changed 18th August 2014.

85.28 GImage.BaseFilename

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.BaseFilename"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a string.

Description**See also**

- 85.114 GImage.GetFileName 4492
- 85.252 GImage.SetFileName 4663

Created 18th August 2014, last changed 18th August 2014.

85.29 GImage.BaseRows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.BaseRows"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.30 GMImage.Blur

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Blur"; ImageRef { ; radius; sigma })

Parameters

ImageRef

The image reference number.

1

radius

Optional

Optional, The radius of the Gaussian, in pixels, not counting the center pixel.

0

sigma

Optional

Optional, The standard deviation of the Laplacian, in pixels.

1

Result Returns "OK" on success.

Description

Examples

Blurs image

```
Let (
[
$Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
$RotateResult = MBS("GMImage.Blur"; $Image; 10; 5);
$Result = MBS("GMImage.WriteToPNGContainer"; $Image);
$DestroyResult = MBS("GMImage.Release"; $Image)
];
$Result)
```

See also

- 85.70 GMImage.Flip 4438
- 85.76 GMImage.Flop 4447
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612

- [85.340 GImage.WriteToPNGContainer](#)

Example Databases

- [GraphicsMagick/Annotate Image](#)
- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.31 GMImage.BlurChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.BlurChannel"; ImageRef; ChannelType; radius; sigma)

Parameters

ImageRef

The image reference number.

1

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

1

radius

The radius of the Gaussian, in pixels, not counting the center pixel.

0

sigma

The standard deviation of the Laplacian, in pixels.

1

Result Returns "OK" on success.

Description

See also

- 85.34 GMImage.Channel 4381
- 85.48 GMImage.CopyChannel 4402
- 85.175 GMImage.InvertChannel 4559
- 85.178 GMImage.LevelChannel 4563

Created 18th August 2014, last changed 18th August 2014.

85.32 GImage.Border

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Border"; ImageRef { ; Geometry })

Parameters

ImageRef

The image reference number.

1

Geometry

Optional

Optional, The rectangle with border width and height. Geometry is specified as a width and height "100x200". "100x200"

Result Returns "OK" on success.

Description

The color of the border is specified by the borderColor attribute.

Offset from geometry is not used, just width and height.

Examples

Add whitespace on top and bottom of image:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$r = MBS( "GImage.SetBorderColor"; $Image; "white" );
$r = MBS("GImage.Border";$Image; "0x100");
$Result = MBS("GImage.WriteToPNGContainer"; $Image);

$r = MBS("GImage.Release";$Image)
];
$Result)
```

Add white space:

```
Set Variable [ $image ; Value: MBS("GImage.NewFromContainer"; ScancodeTests::MyImage ) ]
Set Variable [ $r ; Value: MBS("GImage.SetBorderColor"; $image; "white") ]
Set Variable [ $r ; Value: MBS("GImage.Border"; $image; "20x2") ]
```

See also

- 85.39 GImage.Coders

85.32. <i>GMIMAGE.BORDER</i>	4379
• 85.49 GMImage.Crop	4405
• 85.79 GMImage.Format	4452
• 85.191 GMImage.New	4580
• 85.193 GMImage.NewFromContainer	4584
• 85.214 GMImage.Release	4612
• 85.235 GMImage.SetBorderColor	4642
• 85.340 GMImage.WriteToPNGContainer	4777

Created 18th August 2014, last changed 21st December 2018.

85.33 GImage.BoundingBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.BoundingBox"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a string with a geometry.

Description

The current fuzz value is used when discriminating between pixels. This is the crop bounding box used by `crop(Geometry(0,0))`;

See also

- 85.329 GImage.Trim

4758

Created 18th August 2014, last changed 18th August 2014.

85.34 GMImage.Channel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Channel"; ImageRef; ChannelType)

Parameters

ImageRef

The image reference number.

1

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

1

Result Returns "OK" on success.

Description

Examples

Extracts the red channel:

```
Let ( [
  $Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
  $Result = MBS("GMImage.Channel";$Image; 1);
  $Result = MBS("GMImage.WriteToPNGContainer"; $Image);
  $Error = MBS("GMImage.Release";$Image)
] ;
$Result)
```

See also

- 85.31 GMImage.BlurChannel 4377
- 85.35 GMImage.Charcoal 4383
- 85.48 GMImage.CopyChannel 4402
- 85.62 GMImage.Enhance 4427
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612

- 85.303 GImage.Sharpen 4727
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.35 GMImage.Charcoal

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Charcoal"; ImageRef { ; radius; sigma })

Parameters

ImageRef

The image reference number.

1

radius

Optional

Optional, The radius of the Gaussian, in pixels, not counting the center pixel.

0

sigma

Optional

Optional, The standard deviation of the Laplacian, in pixels.

1

Result Returns "OK" on success.

Description

Examples

Apply Charcoal effect to an image

```
Let (
[
$Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
$RotateResult = MBS("GMImage.Charcoal"; $Image; 10; 5);
$Result = MBS("GMImage.WriteToPNGContainer"; $Image);
$DestroyResult = MBS("GMImage.Release"; $Image)
];
$Result)
```

See also

- 85.34 GMImage.Channel 4381
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.340 GMImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.36 GMImage.Chop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Chop"; ImageRef; Geometry)

Parameters

ImageRef

The image reference number.

1

Geometry

The area to remove. A Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Result Returns "OK" on success.

Description

See also

- 85.47 GMImage.Copy 4401
- 85.49 GMImage.Crop 4405
- 85.70 GMImage.Flip 4438
- 85.76 GMImage.Flop 4447
- 85.181 GMImage.Map 4567
- 85.344 GMImage.Zoom 4784

Created 18th August 2014, last changed 18th August 2014.

85.37 GImage.ClipMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.ClipMask"; ImageRef; clipMask)

Parameters

ImageRef

The image reference number.

1

clipMask

The image reference number.

2

Result Returns "OK" on success.

Description

The clip mask must be the same dimensions as the image. Pass an invalid image to unset an existing clip mask.

See also

- 85.38 GImage.ClipPath 4387
- 85.100 GImage.GetClipMask 4477

Created 18th August 2014, last changed 18th August 2014.

85.38 GMImage.ClipPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.ClipPath"; ImageRef; name)

Parameters**ImageRef**

The image reference number.

1

name

The clipping path name.

"Clip1"

Result Returns OK or error.

Description**See also**

- 85.37 GMImage.ClipMask 4386
- 85.57 GMImage.DrawPath 4418
- 85.204 GMImage.PopClipPath 4599
- 85.206 GMImage.PushClipPath 4601

Created 18th August 2014, last changed 18th August 2014.

85.39 GImage.Coders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	8.4	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Coders")

Result Returns JSON or error.

Description

For each coder, we have the following entries:

Name	Format ID ("magick")
Description	Format description
Note	Usage note for user
Version	Support library version
Module	Name of loadable module
Readable	Whether this coder can read.
Writable	Whether this coder can write.
MultiFrame	Coder may read/write multiple frames (default True)
BlobSupport	Coder uses BLOB APIs (default True)
ThreadSupport	Coder is thread safe (default True)

See also

- [85.32 GImage.Border](#) 4378
- [85.42 GImage.Columns](#) 4393
- [85.43 GImage.Compare](#) 4394
- [85.46 GImage.Contrast](#) 4400

85.39.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr1](#)

Created 23th July 2018, last changed 28th July 2018.

85.40 GMImage.Colorize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Colorize"; ImageRef; opacity; penColor)

Parameters

ImageRef

The image reference number.

1

opacity

Percent from 0 to 100.

50

penColor

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

Blends the fill color with each pixel in the image.

A percentage blend is specified with opacity. Control the application of different color components by specifying a different percentage for each component (e.g. 90/100/10 is 90% red, 100% green, and 10% blue).

Examples

Colorize an image:

```
Set Variable [ $image ; Value: MBS( "GMImage.NewFromContainer"; test::Input ) ]
```

```
Set Variable [ $r ; Value: MBS( "GMImage.Colorize"; $image; 50; "RGB 1 0 0" ) ]
```

```
Set Field [ test::Output ; MBS( "GMImage.WriteToPNGContainer"; $image ) ]
```

```
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $image ) ]
```

See also

- 85.41 GMImage.ColorizeRGB 4391
- 85.44 GMImage.Composite 4396
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584

- 85.214 GImage.Release 4612
- 85.310 GImage.Solarize 4736
- 85.340 GImage.WriteToPNGContainer 4777

Created 18th August 2014, last changed 11st November 2019.

85.41 GMImage.ColorizeRGB

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.ColorizeRGB"; ImageRef; opacityRed; opacityGreen; opacityBlue; penColor)

Parameters

ImageRef

The image reference number.

1

opacityRed

Percent from 0 to 100.

50

opacityGreen

Percent from 0 to 100.

50

opacityBlue

Percent from 0 to 100.

50

penColor

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

Blends the fill color with each pixel in the image.

A percentage blend is specified with opacity. Control the application of different color components by specifying a different percentage for each component (e.g. 90/100/10 is 90% red, 100% green, and 10% blue).

Examples

Colorize an image

```
MBS("GMImage.ColorizeRGB"; $BigImageRef; 10; 0; 0; "green")
```

Colorize by adding 10% blue:

```
Set Variable [ $BigImageRef; Value:MBS("GMImage.NewFromContainer"; Test::BigImage) ]
```

```
# 10% blue
```

```
Set Variable [ $Result; Value:MBS("GMImage.ColorizeRGB"; $BigImageRef; 10; 10; 10; "blue") ]
```

Set Field [Test::Result; MBS("GMImage.WriteToJPEGContainer"; \$BigImageRef)]

Set Variable [\$Error; Value:MBS("GMImage.Release";\$BigImageRef)]

See also

- 85.40 GMImage.Colorize 4389
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.338 GMImage.WriteToJPEGContainer 4773

Created 18th August 2014, last changed 11st November 2019.

85.42 **GMImage.Columns**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Columns"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the Image width.

Description

See also

- [85.27 GMImage.BaseColumns](#) 4372
- [85.39 GMImage.Coders](#) 4388

Example Databases

- [GraphicsMagick/Annotate Image](#)

Created 18th August 2014, last changed 18th August 2014.

85.43 GImage.Compare

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Compare"; ImageRef; OtherImageRef)

Parameters

ImageRef

The image reference number.

1

OtherImageRef

The image reference number.

1

Result Returns true if equal and false if not equal.

Description

Sets meanErrorPerPixel, normalizedMaxError, and normalizedMeanError in the current image. False is returned if the images are identical.

Examples

Compare images:

```

Set Variable [ $img1; Value:MBS( "GImage.NewFromContainer"; test::Container1 ) ]
Set Variable [ $img2; Value:MBS( "GImage.NewFromContainer"; test::Container2 ) ]
Set Variable [ $result; Value:MBS( "GImage.Compare"; $img1; $img2 ) ]
If [ $result = 1 ]
Show Custom Dialog [ "Image Comparison"; "equal" ]
Else If [ $result = 0 ]
Set Variable [ $e; Value:MBS( "GImage.NormalizedMaxError"; $img1 ) ]
If [ $e 0 and $e <,03 ]
Show Custom Dialog [ "Image Comparison"; "very similar: " & MBS( "GImage.NormalizedMaxError";
$img1 ) ]
Else
Show Custom Dialog [ "Image Comparison"; "not equal" ]
End If
End If
Set Variable [ $r; Value:MBS("GImage.Release"; $img1) ]
Set Variable [ $r; Value:MBS("GImage.Release"; $img2) ]

```

See also

- 85.39 GImage.Coders 4388
- 85.44 GImage.Composite 4396
- 85.191 GImage.New 4580

85.43. <i>GMIMAGE.COMPARE</i>	4395
• 85.193 GImage.NewFromContainer	4584
• 85.198 GImage.Normalize	4592
• 85.199 GImage.NormalizedMaxError	4593
• 85.214 GImage.Release	4612
• 85.216 GImage.Repage	4615
• 85.221 GImage.Rotate	4623
• 85.224 GImage.Sample	4627

Created 18th August 2014, last changed 21st December 2018.

85.44 GImage.Composite

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Composite"; ImageRef; OtherImageRef; GravityType { ; CompositeOperator })

Parameters

ImageRef

The image reference number.

1

OtherImageRef

The second image reference (a number returned from the GImage.New functions)

2

GravityType

The Gravity Type. Can be ForgetGravity=0, NorthWestGravity=1, NorthGravity=2, NorthEastGravity=3, WestGravity=4, CenterGravity=5, EastGravity=6, SouthWestGravity=7, SouthGravity=8, SouthEastGravity=9, StaticGravity=10.

0

CompositeOperator

Optional

Optional operator. Can be one of the following numbers: UndefinedCompositeOp = 0, OverCompositeOp = 1, InCompositeOp = 2, OutCompositeOp = 3, AtopCompositeOp = 4, XorCompositeOp = 5, PlusCompositeOp = 6, MinusCompositeOp = 7, AddCompositeOp = 8, SubtractCompositeOp = 9, DifferenceCompositeOp = 10, MultiplyCompositeOp = 11, BumpmapCompositeOp = 12, CopyCompositeOp = 13, CopyRedCompositeOp = 14, CopyGreenCompositeOp = 15, CopyBlueCompositeOp = 16, CopyOpacityCompositeOp = 17, ClearCompositeOp = 18, DissolveCompositeOp = 19, DisplaceCompositeOp = 20, ModulateCompositeOp = 21, ThresholdCompositeOp = 22, NoCompositeOp = 23, DarkenCompositeOp = 24, LightenCompositeOp = 25, HueCompositeOp = 26, SaturateCompositeOp = 27, ColorizeCompositeOp = 28, LuminizeCompositeOp = 29, CopyCyanCompositeOp = 32, CopyMagentaCompositeOp = 33, CopyYellowCompositeOp = 34, CopyBlackCompositeOp = 35, DivideCompositeOp = 36. Default is 2.

2

Result Returns "OK" on success.

Description

Examples

Load image and compose it on another one:

```
# load images...
Set Variable [ $Image1 ; Value: MBS( "GImage.NewFromFile"; "/Users/cs/Pictures/logo.png" ) ]
Set Variable [ $Image2 ; Value: MBS( "GImage.NewFromFile"; "/Users/cs/Pictures/input.jpg" ) ]
# maybe scale it?
Set Variable [ $r ; Value: MBS( "GImage.Scale"; $Image1; "500x500" ) ]
# put first on second
```



```
Set Variable [ $r ; Value: MBS( "GMImage.Composite"; $Image2; $Image1; 5; 1) ]  
# and save to file  
Set Variable [ $r ; Value: MBS( "GMImage.WriteToFile"; $Image2; "/Users/cs/Pictures/output.jpg") ]  
# free memory  
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $Image1) ]  
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $Image2) ]
```

See also

- 85.40 *GMImage.Colorize* 4389
- 85.43 *GMImage.Compare* 4394
- 85.45 *GMImage.CompositeXY* 4398
- 85.48 *GMImage.CopyChannel* 4402
- 85.105 *GMImage.GetCompose* 4483
- 85.191 *GMImage.New* 4580
- 85.194 *GMImage.NewFromFile* 4586
- 85.214 *GMImage.Release* 4612
- 85.225 *GMImage.Scale* 4628
- 85.336 *GMImage.WriteToFile* 4768

Example Databases

- [Barcode/Swiss QR-Code for invoices ISO 20022](#)
- [GraphicsMagick/Annotate Image](#)

85.44.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr5](#)
- [QR Codes for Invoices in Switzerland](#)

85.44.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 29

85.45 GMMImage.CompositeXY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMMImage.CompositeXY"; ImageRef; OtherImageRef; xOffset; yOffset { ; CompositeOperator })

Parameters

ImageRef

The image reference number.

1

OtherImageRef

The second image reference (a number returned from the GMMImage.New functions)

2

xOffset

The x offset.

0

yOffset

The y offset.

0

CompositeOperator

Optional

Optional operator. Can be one of the following numbers: UndefinedCompositeOp = 0, OverCompositeOp = 1, InCompositeOp = 2, OutCompositeOp = 3, AtopCompositeOp = 4, XorCompositeOp = 5, PlusCompositeOp = 6, MinusCompositeOp = 7, AddCompositeOp = 8, SubtractCompositeOp = 9, DifferenceCompositeOp = 10, MultiplyCompositeOp = 11, BumpmapCompositeOp = 12, CopyCompositeOp = 13, CopyRedCompositeOp = 14, CopyGreenCompositeOp = 15, CopyBlueCompositeOp = 16, CopyOpacityCompositeOp = 17, ClearCompositeOp = 18, DissolveCompositeOp = 19, DisplaceCompositeOp = 20, ModulateCompositeOp = 21, ThresholdCompositeOp = 22, NoCompositeOp = 23, DarkenCompositeOp = 24, LightenCompositeOp = 25, HueCompositeOp = 26, SaturateCompositeOp = 27, ColorizeCompositeOp = 28, LuminizeCompositeOp = 29, CopyCyanCompositeOp = 32, CopyMagentaCompositeOp = 33, CopyYellowCompositeOp = 34, CopyBlackCompositeOp = 35, DivideCompositeOp = 36. Default is 2.

2

Result Returns "OK" on success.

Description

You can use this function for example to add a watermark image.

Examples

Compose a picture on second:

```
# load images...
Set Variable [ $Image1 ; Value: MBS( "GMMImage.NewFromFile"; "/Users/cs/Pictures/IMG_3625.jpg" ) ]
Set Variable [ $Image2 ; Value: MBS( "GMMImage.NewFromFile"; "/Users/cs/Pictures/mond.jpg" ) ]
# put first on second
```

85.45. *GMIMAGE.COMPOSITEXY*

4399

```
Set Variable [ $r ; Value: MBS( "GMImage.CompositeXY"; $Image2; $Image1; 500; 200) ]
# and save to file
Set Variable [ $r ; Value: MBS( "GMImage.WriteToFile"; $Image2; "/Users/cs/Pictures/output.jpg") ]
# free memory
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $Image1) ]
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $Image2) ]
```

See also

- [85.44 GMImage.Composite](#) 4396
- [85.48 GMImage.CopyChannel](#) 4402
- [85.191 GMImage.New](#) 4580
- [85.194 GMImage.NewFromFile](#) 4586
- [85.214 GMImage.Release](#) 4612
- [85.336 GMImage.WriteToFile](#) 4768

Example Databases

- [GraphicsMagick/Apply Mask](#)
- [GraphicsMagick/Clip Image](#)
- [GraphicsMagick/Combine Pictures](#)
- [GraphicsMagick/Create GIF](#)
- [GraphicsMagick/Reduce Image](#)

85.45.1 Blog Entries

- [Circle crop images in FileMaker with MBS Plugin](#)
- [QR Codes for Invoices in Switzerland](#)

85.45.2 FileMaker Magazin

- [Ausgabe 5/2011, Seite 31](#)

Created 18th August 2014, last changed 11st December 2019.

85.46 GImage.Contrast

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Contrast"; ImageRef; sharpen)

Parameters

ImageRef

The image reference number.

1

sharpen

The sharpen value. An integer number, either 0 or 1.

1

Result Returns "OK" on success.

Description

Enhances the intensity differences between the lighter and darker elements of the image. Set sharpen to a value other than 0 to increase the image contrast otherwise the contrast is reduced.

Examples

Changes contrast:

```
# load images...
Set Variable [ $Image ; Value: MBS( "GImage.NewFromContainer"; test::Input ) ]
# change contrast
Set Variable [ $r ; Value: MBS( "GImage.Contrast"; $Image; 1 ) ]
# and save to container
Set Field [ test::Output ; MBS( "GImage.WriteToPNGContainer"; $Image; "test.png" ) ]
# free memory
Set Variable [ $r ; Value: MBS( "GImage.Release"; $Image ) ]
```

See also

- 85.39 GImage.Coders 4388
- 85.77 GImage.FontMap 4449
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.340 GImage.WriteToPNGContainer 4777

Created 18th August 2014, last changed 11st December 2019.

85.47 GMImage.Copy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Copy"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the ImageRef number on success.

Description

Please call GMImage.Release later to free memory for this image.

See also

- [85.36 GMImage.Chop](#) 4385
- [85.48 GMImage.CopyChannel](#) 4402
- [85.49 GMImage.Crop](#) 4405
- [85.76 GMImage.Flop](#) 4447
- [85.181 GMImage.Map](#) 4567
- [85.214 GMImage.Release](#) 4612
- [85.219 GMImage.Roll](#) 4621
- [85.223 GMImage.Rows](#) 4626
- [85.344 GMImage.Zoom](#) 4784

Example Databases

- [GraphicsMagick/Find Pixels](#)

85.47.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 18th August 2014, last changed 31st July 2019.

85.48 GImage.CopyChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	7.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.CopyChannel"; SourceImage; SourceChannel; DestImage; DestChannel)

Parameters

SourceImage

The image reference number of source image.

\$sourceImage

SourceChannel

The source channel. Can be Red, Green, Blue or Opacity.

"Opacity"

DestImage

The image reference number of dest image.

\$destImage

DestChannel

The dest channel. Can be Red, Green, Blue or Opacity.

"Opacity"

Result Returns OK or error.

Description

e.g. to copy opacity from one image to other.

Examples

Clip an image:

```
Set Variable [ $gray ; Value: "# 777777" ]
# Read in source image
Set Variable [ $SourceImage ; Value: MBS( "GImage.NewFromContainer"; Clip Image::Input ) ]
Set Variable [ $sourceWidth ; Value: MBS( "GImage.GetWidth"; $SourceImage ) ]
Set Variable [ $sourceHeight ; Value: MBS( "GImage.GetHeight"; $SourceImage ) ]
#
# Scale to dest size
Set Variable [ $sourceSize ; Value: If($sourceWidth >$sourceHeight; $sourceHeight; $sourceWidth) ]
Set Variable [ $destWidth ; Value: GetAsNumber ( Clip Image::Width ) ]
Set Variable [ $destHeight ; Value: GetAsNumber ( Clip Image::Height ) ]
Set Variable [ $destSize ; Value: If($destWidth >$destHeight; $destHeight; $destWidth) ]
Set Variable [ $tempImage ; Value: MBS( "GImage.New"; $sourceSize & "x" & $sourceSize; "transparent"
) ]
Set Variable [ $r ; Value: MBS( "GImage.CompositeXY"; $tempImage; $sourceImage; -($sourceWidth-
$sourceSize)/2; -($sourceHeight-$sourceSize)/2; 1) ]
Set Variable [ $r ; Value: MBS( "GImage.Scale"; $tempImage; $destSize & "x" & $destSize ) ]
#
```

```

# Build mask
Set Variable [ $clipImage ; Value: MBS( "GMImage.New"; $destSize & "x" & $destSize; "transparent" ) ]
Set Variable [ $r ; Value: MBS( "GMImage.SetFillColor"; $clipImage; "black" ) ]
Set Variable [ $radius ; Value: $destSize/2 ]
Set Variable [ $r ; Value: MBS( "GMImage.DrawCircle"; $clipImage; $radius; $radius; 0; $radius ) ]
#
# Apply mask
Set Variable [ $r ; Value: MBS( "GMImage.CopyChannel"; $tempImage; "Opacity"; $clipImage; "Opacity" ) ]
#
# Create destination image
Set Variable [ $destImage ; Value: MBS( "GMImage.New"; $destWidth & "x" & $destHeight; $gray ) ]
Set Variable [ $r ; Value: MBS( "GMImage.CompositeXY"; $destImage; $tempImage; ($destWidth-$destSize)/2; ($destHeight-$destSize)/2; 1 ) ]
Set Field [ Clip Image::Output ; MBS( "GMImage.WriteToPNGContainer"; $destImage ) ]
#
# Memory cleanup
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $SourceImage ) ]
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $tempImage ) ]
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $clipImage ) ]

```

See also

- 85.34 *GMImage.Channel* 4381
- 85.44 *GMImage.Composite* 4396
- 85.45 *GMImage.CompositeXY* 4398
- 85.47 *GMImage.Copy* 4401
- 85.123 *GMImage.GetHeight* 4501
- 85.169 *GMImage.GetWidth* 4550
- 85.178 *GMImage.LevelChannel* 4563
- 85.191 *GMImage.New* 4580
- 85.214 *GMImage.Release* 4612
- 85.253 *GMImage.SetFillColor* 4664

Example Databases

- [GraphicsMagick/Clip Image](#)

85.48.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS FileMaker Plugin, version 8.2pr2](#)
- [Circle crop images in FileMaker with MBS Plugin](#)

Created 16th July 2017, last changed 21st December 2018.

85.49 GMImage.Crop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Crop"; ImageRef; geometry)

Parameters

ImageRef

The image reference number.

1

geometry

The rectangle to crop. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Result Returns "OK" on success.

Description

You can add pixels with GMImage.Border function.

Examples

Crops the image:

```
Let ( [
$Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
$Width = MBS("GMImage.GetWidth";$Image);
$Height = MBS("GMImage.GetHeight";$Image);
$Width = $Width/2;
$Height = $Height/2;
$ScaleResult = MBS("GMImage.Crop";$Image; $Width & "x" & $Height);
$Result = MBS("GMImage.WriteToPNGContainer"; $Image);
$error = MBS("GMImage.Release";$Image)
];
$Result)
```

Create barcode and crop it:

```
Set Field [ Barcode Generation::Image ; "" ]
Set Variable [ $img ; Value: MBS("Barcode.Generate"; Barcode Generation::Symbology; Barcode Generation::Text) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $ImageHeight ; Value: MBS("GMImage.GetHeight"; $img) ]
Set Variable [ $ImageWidth ; Value: MBS("GMImage.GetWidth"; $img) ]
# calculate the crop rectangle
Set Variable [ $w ; Value: $ImageWidth ]
Set Variable [ $h ; Value: $ImageHeight ]
```

```

Set Variable [ $x ; Value: 0 ]
Set Variable [ $y ; Value: $ImageHeight - 50 ]
# crop
Set Variable [ $r ; Value: MBS("GImage.Crop"; $img; $w & "x" & $h & "+" & $x & "+" & $y) ]
Set Field [ Barcode Generation::Image ; MBS( "GImage.WriteToPNGContainer"; $img; "barcode.png") ]
Set Variable [ $r ; Value: MBS( "GImage.Destroy"; $img ) ]
End If

```

See also

- 85.47 GImage.Copy 4401
- 85.70 GImage.Flip 4438
- 85.169 GImage.GetWidth 4550
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.314 GImage.Strip 4741
- 85.329 GImage.Trim 4758
- 85.340 GImage.WriteToPNGContainer 4777
- 85.344 GImage.Zoom 4784
- 124.6 IsError 6266

Example Databases

- [Barcode/Barcode Generation](#)
- [GraphicsMagick/GraphicsMagick Sample](#)
- [GraphicsMagick/Image Cropping](#)
- [WebView/MethodDraw SVG Editor/MethodDraw](#)

Created 18th August 2014, last changed 20th August 2019.

85.50 GMImage.CycleColormap

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.CycleColormap"; ImageRef; amount)

Parameters

ImageRef

The image reference number.

1

amount

the number of colors to cycle.

1

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.51 GImage.Despeckle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Despeckle"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.52 **GMImage.Directory**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Directory"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the directory string.

Description

Created 18th August 2014, last changed 18th August 2014.

85.53 GImage.DrawArc

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.DrawArc"; ImageRef; startX; startY; endX; endY; startDegrees; endDegrees)

Parameters

ImageRef

The image reference number.

1

startX

The X coordinate for start position.

startY

The Y coordinate for start position.

endX

The X coordinate for end position.

endY

The Y coordinate for end position.

startDegrees

The start degree value.

endDegrees

The end degree value.

Result Returns OK or error message.

Description

Draw an arc using the stroke color and based on the circle starting at coordinates startX,startY, and ending with coordinates endX,endY, and bounded by the rotational arc startDegrees,endDegrees.

If you have an open path, the command is added there for later drawing with GImage.DrawPath.

Examples

Creates a new image with a round rectangle:

```
Set Variable [ $img; Wert:MBS("GImage.New"; "300x200"; "RGB 1 1 1" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetStrokeColor"; $img; "RGB 1 0 0" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetFillColor"; $img; "RGB 0 0 1" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetLineWidth"; $img; 5) ]
Set Variable [ $r; Wert:MBS("GImage.DrawArc"; $img; 50; 50; 250; 150; 0; 90) ]
Set Variable [ $png; Wert:MBS("GImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Variable [ $r; Wert:MBS("GImage.Release"; $img) ]
Set Field [ Drawing::Image; $png ]
```

85.53. *GMIMAGE.DRAWARC* 4411

See also

- 85.54 *GMImage.DrawCircle* 4412
- 85.56 *GMImage.DrawLine* 4416
- 85.57 *GMImage.DrawPath* 4418
- 85.191 *GMImage.New* 4580
- 85.214 *GMImage.Release* 4612
- 85.253 *GMImage.SetFillColor* 4664
- 85.264 *GMImage.SetLineWidth* 4677
- 85.285 *GMImage.SetStrokeColor* 4706
- 85.340 *GMImage.WriteToPNGContainer* 4777

Example Databases

- [GraphicsMagick/Drawing](#)

Created 18th August 2014, last changed 21st December 2018.

85.54 GImage.DrawCircle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.DrawCircle"; ImageRef; originX; originY; perimX; perimY)

Parameters

ImageRef

The image reference number.

1

originX

The X coordinate for start position.

originY

The Y coordinate for start position.

perimX

The perimeter width.

perimY

The perimeter height.

Result Returns OK or error message.

Description

Draw a circle using the stroke color and thickness using specified origin and perimeter coordinates. If a fill color is specified, then the object is filled.

PerimX/PerimY define a point where the circle goes through, so put it a radius away from the origin.

If you have an open path, the command is added there for later drawing with GImage.DrawPath.

Examples

Creates a new image and draws a circle inside:

```
Set Variable [ $img; Wert:MBS("GImage.New"; "300x200"; "RGB 1 1 1" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetStrokeColor"; $img; "RGB 1 0 0" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetFillColor"; $img; "RGB 0 0 1" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetLineWidth"; $img; 5) ]
Set Variable [ $r; Wert:MBS("GImage.DrawCircle"; $img; 150; 100; 100; 100) ]
Set Variable [ $png; Wert:MBS("GImage.WriteToPNGContainer"; $img; "test.png") ]
Set Variable [ $r; Wert:MBS("GImage.Release"; $img) ]
Set Field [ Drawing::Image; $png ]
```

Draws a circle in a rectangle in a circle:

```
Set Variable [ $img; Value:MBS( "GImage.New"; "100x100"; "white" ) ]
Set Variable [ $r; Value:MBS( "GImage.SetFillColor"; $img; "RGB 1 0 0" ) ]
Set Variable [ $r; Value:MBS( "GImage.SetStrokeColor"; $img; "RGB 0 0 1" ) ]
Set Variable [ $r; Value:MBS( "GImage.DrawCircle"; $img; 50; 50; 50; 90 ) ]
```


85.54. *GMIMAGE.DRAWCIRCLE* 4413

Set Variable [\$r; Value:MBS("GMImage.DrawRectangle"; \$img; 22; 22; 100-22; 100-22)]

Set Variable [\$r; Value:MBS("GMImage.DrawCircle"; \$img; 50; 50; 50; 100-22)]

Set Field [test::test; MBS("GMImage.WriteToPNGContainer"; \$img; "test.png")]

Set Variable [\$r; Value:MBS("GMImage.Release"; \$img)]

See also

- 85.48 GMImage.CopyChannel 4402
- 85.53 GMImage.DrawArc 4410
- 85.56 GMImage.DrawLine 4416
- 85.57 GMImage.DrawPath 4418
- 85.58 GMImage.DrawRectangle 4419
- 85.191 GMImage.New 4580
- 85.253 GMImage.SetFillColor 4664
- 85.264 GMImage.SetLineWidth 4677
- 85.285 GMImage.SetStrokeColor 4706
- 85.340 GMImage.WriteToPNGContainer 4777

Example Databases

- [DynaPDF/Click Points](#)
- [GraphicsMagick/Clip Image](#)
- [GraphicsMagick/Drawing](#)
- [GraphicsMagick/GraphicsMagick Path Drawing](#)

85.54.1 Blog Entries

- [Circle crop images in FileMaker with MBS Plugin](#)

Created 18th August 2014, last changed 11st November 2019.

85.55 GImage.DrawEllipse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.DrawEllipse"; ImageRef; originX; originY; radiusX; radiusY; arcStart; arcEnd)

Parameters

ImageRef

The image reference number.

1

originX

The X coordinate for origin position.

originY

The Y coordinate for origin position.

radiusX

The radius.

radiusY

The radius.

arcStart

The start degree value.

arcEnd

The end degree value.

Result Returns OK or error message.

Description

Draw an ellipse using the stroke color and thickness, specified origin, x & y radius, as well as specified start and end of arc in degrees. If a fill color is specified, then the object is filled.

If you have an open path, the command is added there for later drawing with GImage.DrawPath.

Examples

Draws an ellipse in a new image:

```
Set Variable [ $img; Wert:MBS("GImage.New"; "300x200"; "RGB 1 1 1" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetStrokeColor"; $img; "RGB 1 0 0") ]
Set Variable [ $r; Wert:MBS("GImage.SetFillColor"; $img; "RGB 0 0 1") ]
Set Variable [ $r; Wert:MBS("GImage.SetLineWidth"; $img; 5) ]
Set Variable [ $r; Wert:MBS("GImage.DrawEllipse"; $img; 150; 100; 80; 60; 0; 360) ]
Set Variable [ $png; Wert:MBS("GImage.WriteToPNGContainer"; $img; "test.png") ]
Set Variable [ $r; Wert:MBS("GImage.Release"; $img) ]
Set Field [ Drawing::Image; $png ]
```

85.55. *GMIMAGE.DRAWELLIPSE* 4415

See also

- 85.57 *GMImage.DrawPath* 4418
- 85.191 *GMImage.New* 4580
- 85.214 *GMImage.Release* 4612
- 85.253 *GMImage.SetFillColor* 4664
- 85.264 *GMImage.SetLineWidth* 4677
- 85.285 *GMImage.SetStrokeColor* 4706
- 85.340 *GMImage.WriteToPNGContainer* 4777

Example Databases

- [GraphicsMagick/Drawing](#)

Created 18th August 2014, last changed 21st December 2018.

85.56 GImage.DrawLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.DrawLine"; ImageRef; startX; startY; endX; endY)

Parameters

ImageRef

The image reference number.

1

startX

The start X position.

startY

The start Y position.

endX

The end X position.

endY

The end Y position.

Result Returns OK or error message.

Description

Draw a line using stroke color and thickness using starting and ending coordinates.

If you have an open path, the command is added there for later drawing with GImage.DrawPath.

Examples

Create an image with a line:

```
Set Variable [ $img; Wert:MBS("GImage.New"; "300x200"; "RGB 1 1 1") ]
Set Variable [ $r; Wert:MBS("GImage.SetStrokeColor"; $img; "RGB 1 0 0") ]
Set Variable [ $f; Wert:MBS("GImage.SetFillColor"; $img; "RGB 0 0 1") ]
Set Variable [ $l; Wert:MBS("GImage.SetLineWidth"; $img; 5) ]
Set Variable [ $d; Wert:MBS("GImage.DrawLine"; $img; 50; 50; 250; 150) ]
Set Variable [ $png; Wert:MBS("GImage.WriteToPNGContainer"; $img; "test.png") ]
Set Variable [ $r; Wert:MBS("GImage.Release"; $img) ]
Set Field [ Drawing::Image; $png ]
```

Draw a line from pos to pos2 on column x:

```
MBS( "GImage.DrawLine"; $img; $x; $pos; $x; $pos2 )
```

See also

85.56. <i>GMIMAGE.DRAWLINE</i>	4417
• 85.53 GImage.DrawArc	4410
• 85.54 GImage.DrawCircle	4412
• 85.57 GImage.DrawPath	4418
• 85.191 GImage.New	4580
• 85.214 GImage.Release	4612
• 85.253 GImage.SetFillColor	4664
• 85.264 GImage.SetLineWidth	4677
• 85.284 GImage.SetStrokeAntiAlias	4704
• 85.285 GImage.SetStrokeColor	4706
• 85.340 GImage.WriteToPNGContainer	4777

Example Databases

- [GraphicsMagick/Drawing](#)
- [GraphicsMagick/Find Pixels](#)

Created 18th August 2014, last changed 21st December 2018.

85.57 GImage.DrawPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.DrawPath"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns OK or error.

Description

See also

- 85.7 GImage.AddPathCurvetoAbs 4346
- 85.38 GImage.ClipPath 4387
- 85.53 GImage.DrawArc 4410
- 85.54 GImage.DrawCircle 4412
- 85.55 GImage.DrawEllipse 4414
- 85.56 GImage.DrawLine 4416
- 85.58 GImage.DrawRectangle 4419
- 85.59 GImage.DrawRoundRectangle 4422
- 85.291 GImage.SetStrokeWidth 4713

Example Databases

- [GraphicsMagick/GraphicsMagick Path Drawing](#)

Created 18th August 2014, last changed 18th August 2014.

85.58 GImage.DrawRectangle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.DrawRectangle"; ImageRef; upperLeftX; upperLeftY; lowerRightX; lowerRightY)

Parameters

ImageRef

The image reference number.

1

upperLeftX

Upper left X position.

upperLeftY

Upper left Y position.

lowerRightX

Lower right X position.

lowerRightY

Lower right Y position.

Result Returns OK or error message.

Description

Draw a rectangle using stroke color and thickness from upper-left coordinates to lower-right coordinates. If a fill color is specified, then the object is filled.

If you have an open path, the command is added there for later drawing with GImage.DrawPath.

Examples

Creates a new image and draws a rectangle inside:

```
Set Variable [ $img; Wert:MBS("GImage.New"; "300x200"; "RGB 1 1 1" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetStrokeColor"; $img; "RGB 1 0 0" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetFillColor"; $img; "RGB 0 0 1" ) ]
Set Variable [ $r; Wert:MBS("GImage.SetLineWidth"; $img; 5) ]
Set Variable [ $r; Wert:MBS("GImage.DrawRectangle"; $img; 50; 50; 250; 150) ]
Set Variable [ $png; Wert:MBS("GImage.WriteToPNGContainer"; $img; "test.png") ]
Set Variable [ $r; Wert:MBS("GImage.Release"; $img) ]
Set Field [ Drawing::Image; $png ]
```

Draws a circle in a rectangle in a circle:

```
Set Variable [ $img; Value:MBS( "GImage.New"; "100x100"; "white" ) ]
Set Variable [ $r; Value:MBS( "GImage.SetFillColor"; $img; "RGB 1 0 0" ) ]
Set Variable [ $r; Value:MBS( "GImage.SetStrokeColor"; $img; "RGB 0 0 1" ) ]
```

```

Set Variable [ $r; Value:MBS( "GMImage.DrawCircle"; $img; 50; 50; 50; 90 ) ]
Set Variable [ $r; Value:MBS( "GMImage.DrawRectangle"; $img; 22; 22; 100-22; 100-22 ) ]
Set Variable [ $r; Value:MBS( "GMImage.DrawCircle"; $img; 50; 50; 50; 100-22 ) ]
Set Field [ test::test; MBS( "GMImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Variable [ $r; Value:MBS( "GMImage.Release"; $img ) ]

```

Draw something and write to file on desktop:

```

# New Image
Set Variable [ $img; Value:MBS("GMImage.New"; "300x200"; "RGB 1 1 1") ]
# Set colors and line width
Set Variable [ $r; Value:MBS("GMImage.SetStrokeColor"; $img; "RGB 1 0 0") ]
Set Variable [ $r; Value:MBS("GMImage.SetFillColor"; $img; "RGB 0 0 1") ]
Set Variable [ $r; Value:MBS("GMImage.SetLineWidth"; $img; 5) ]
# draw a rectangle
Set Variable [ $r; Value:MBS("GMImage.DrawRectangle"; $img; 50; 50; 250; 150) ]
# save to test.png on desktop:
Set Variable [ $DesktopPath; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $DesktopPath; "test.png") ]
Set Variable [ $r; Value:MBS("GMImage.WriteToFile"; $img; $path) ]
# cleanup
Set Variable [ $r; Value:MBS("GMImage.Release"; $img) ]

```

See also

- 81.8 Folders.UserDesktop 4177
- 85.54 GMImage.DrawCircle 4412
- 85.59 GMImage.DrawRoundRectangle 4422
- 85.191 GMImage.New 4580
- 85.214 GMImage.Release 4612
- 85.253 GMImage.SetFillColor 4664
- 85.284 GMImage.SetStrokeAntiAlias 4704
- 85.285 GMImage.SetStrokeColor 4706
- 85.340 GMImage.WriteToPNGContainer 4777
- 121.1 Path.AddPathComponent 6135

Example Databases

- [GraphicsMagick/Drawing](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)

85.58.1 Blog Entries

- [Face detection via CoreImage in FileMaker](#)

Created 18th August 2014, last changed 11st November 2019.

85.59 GImage.DrawRoundRectangle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.DrawRoundRectangle"; ImageRef; upperLeftX; upperLeftY; lowerRightX; lowerRightY; cornerWidth; cornerHeight)

Parameters

ImageRef

The image reference number.

1

upperLeftX

Upper left X position.

upperLeftY

Upper left Y position.

lowerRightX

Lower right X position.

lowerRightY

Lower right Y position.

cornerWidth

The width of the corner arc.

cornerHeight

The height of the corner arc.

Result Returns OK or error message.

Description

Draw a rounded rectangle using stroke color and thickness, with specified center coordinate, specified width and height, and specified corner width and height. If a fill color is specified, then the object is filled.

If you have an open path, the command is added there for later drawing with GImage.DrawPath.

Examples

Creates a new image and draws a round rectangle inside:

```
Set Variable [ $img; Wert:MBS("GImage.New"; "300x200"; "RGB 1 1 1") ]
Set Variable [ $r; Wert:MBS("GImage.SetStrokeColor"; $img; "RGB 1 0 0") ]
Set Variable [ $r; Wert:MBS("GImage.SetFillColor"; $img; "RGB 0 0 1") ]
Set Variable [ $r; Wert:MBS("GImage.SetLineWidth"; $img; 5) ]
Set Variable [ $r; Wert:MBS("GImage.DrawRoundRectangle"; $img; 50; 50; 250; 150; 10; 10) ]
Set Variable [ $png; Wert:MBS("GImage.WriteToPNGContainer"; $img; "test.png") ]
Set Variable [ $r; Wert:MBS("GImage.Release"; $img) ]
Set Field [ Drawing::Image; $png ]
```

85.59. *GMIMAGE.DRAWROUNDRECTANGLE* 4423

See also

- 85.57 *GMImage.DrawPath* 4418
- 85.58 *GMImage.DrawRectangle* 4419
- 85.191 *GMImage.New* 4580
- 85.214 *GMImage.Release* 4612
- 85.253 *GMImage.SetFillColor* 4664
- 85.264 *GMImage.SetLineWidth* 4677
- 85.285 *GMImage.SetStrokeColor* 4706
- 85.340 *GMImage.WriteToPNGContainer* 4777

Example Databases

- [GraphicsMagick/Drawing](#)

Created 18th August 2014, last changed 13th January 2020.

85.60 GImage.Edge

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Edge"; ImageRef { ; radius })

Parameters

ImageRef

The image reference number.

1

radius

Optional

Optional the radius value.

0.0

Result Returns "OK" on success.

Description

See also

- 85.64 GImage.Erase 4429
- 85.81 GImage.Free 4455
- 85.332 GImage.Wave 4762

Created 18th August 2014, last changed 18th August 2014.

85.61 GMImage.Emboss

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Emboss"; ImageRef { ; radius; sigma })

Parameters

ImageRef

The image reference number.

1

radius

Optional

Optional, The radius of the Gaussian, in pixels, not counting the center pixel.

0

sigma

Optional

Optional, The standard deviation of the Laplacian, in pixels.

1

Result Returns "OK" on success.

Description

Examples

Apply an emboss effect to an image

```
Let (
[
$Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
$RotateResult = MBS("GMImage.Emboss"; $Image; 10; 5);
$Result = MBS("GMImage.WriteToPNGContainer"; $Image);
$DestroyResult = MBS("GMImage.Release";$Image)
];
$Result)
```

See also

- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.340 GMImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.62 GMImage.Enhance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Enhance"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns "OK" on success.

Description

Examples

Apply an enhance effect to the image:

```
Let ( [
$Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GMImage.Enhance";$Image);
$Result = MBS("GMImage.WriteToPNGContainer"; $Image);
$error = MBS("GMImage.Release";$Image)
];
$Result)
```

See also

- 85.34 GMImage.Channel 4381
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.340 GMImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.63 GImage.Equalize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Equalize"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns "OK" on success.

Description

Examples

Apply equalize effect to an image:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GImage.Equalize";$Image);
$Result = MBS("GImage.WriteToPNGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result)
```

See also

- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.198 GImage.Normalize 4592
- 85.207 GImage.Quantize 4602
- 85.214 GImage.Release 4612
- 85.310 GImage.Solarize 4736
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.64 GMImage.Erase

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Erase"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns "OK" on success.

Description**See also**

- 85.60 GMImage.Edge 4424
- 85.80 GMImage.Frame 4453
- 85.81 GMImage.Free 4455
- 85.172 GMImage.Hash 4555
- 85.191 GMImage.New 4580
- 85.209 GMImage.Raise 4605
- 85.225 GMImage.Scale 4628
- 85.233 GMImage.SetBackgroundColor 4639
- 85.266 GMImage.SetMatte 4680
- 85.332 GMImage.Wave 4762

Created 18th August 2014, last changed 18th August 2014.

85.65 GImage.ExifThumbnail

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	10.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.ExifThumbnail"; ImageRef { ; FileName })

Parameters

ImageRef

The image reference number.

1

FileName

Optional

File name to pass to FileMaker with container.

"test.jpg"

Result Returns container value or error.

Description

Returns a JPEG in a container.

85.65.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 22nd February 2020, last changed 22nd February 2020.

85.66 GMImage.Extent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Extent"; ImageRef; geometry { ; Color; GravityType })

Parameters

ImageRef

The image reference number.

1

geometry

The rectangle to use. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Color

Optional

The background color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. #FF0000 for full red.

"RGB 1 0 0"

GravityType

Optional

The Gravity Type. Can be number of text value. Can be ForgetGravity=0, NorthWestGravity=1, NorthGravity=2, NorthEastGravity=3, WestGravity=4, CenterGravity=5, EastGravity=6, SouthWestGravity=7, SouthGravity=8, SouthEastGravity=9, StaticGravity=10.

0

Result Returns OK or error.

Description

Create an image canvas using background color sized according to geometry and composite existing image on it, with image placement controlled by gravity.

Parameters are obtained from existing image properties if they are not specified via a method parameter. Parameters which are supported by image properties (gravity and backgroundColor) update those image properties as a side-effect.

Examples

Extent image with red space around:

```
Set Variable [ $BigImageRef ; Value: MBS("GMImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result ; Value: MBS("GMImage.Extent"; $BigImageRef; "1000x1000"; "red"; "center") ]
Set Field [ Test::Result ; MBS( "GMImage.WriteToPNGContainer"; $BigImageRef; "test.png" ) ]
Set Variable [ $Error ; Value: MBS("GMImage.Destroy";$BigImageRef) ]
```

See also

- 85.119 GImage.GetFont 4497
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.227 GImage.Segment 4633
- 85.256 GImage.SetFont 4668
- 85.340 GImage.WriteToPNGContainer 4777

85.66.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr6](#)

Created 28th December 2018, last changed 11st November 2019.

85.67 **GMImage.FillPattern**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.FillPattern"; ImageRef; fillPatternRef)

Parameters

ImageRef

The image reference number.

1

fillPatternRef

The image reference number.

2

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.68 GImage.FindColorInColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	5.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.FindColorInColumn"; ImageRef; x; y; color { ; Invert; Tolerance })

Parameters

ImageRef

The image reference number.

1

x

The x coordinate. Zero based from 0 to GImage.GetWidth-1.

10

y

The y coordinate. Zero based from 0 to GImage.GetHeight-1.

10

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Invert

Optional

If 0, we find first pixel matching your color. If 1 we find first pixel not matching the color. Default is 0.

0

Tolerance

Optional

The tolerance for comparison. Normally a small value like 3. So if color is 255, 255, 255 and pixel is 252, 252, 252 we have a match for tolerance being 3.

3

Result Returns position or error.

Description

You can find first pixel matching your given color in the column starting with given y position and given tolerance. If you set Invert to 1, the plugin returns row for first pixel not matching color.

Returns -1 if not found.

Examples

Finds color in column:

```
MBS("GImage.FindColorInColumn"; $img; $x; $y; $ColorToSearch; 1; 3)
```

85.68. *GMIMAGE.FINDCOLORINCOLUMN*

4435

See also

- 85.69 *GMImage.FindColorInRow* 4436
- 85.123 *GMImage.GetHeight* 4501
- 85.169 *GMImage.GetWidth* 4550

Example Databases

- [GraphicsMagick/Find Pixels](#)

85.68.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 4th February 2015, last changed 11st November 2019.

85.69 GImage.FindColorInRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	5.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.FindColorInRow"; ImageRef; x; y; color { ; Invert; Tolerance })

Parameters

ImageRef

The image reference number.

1

x

The x coordinate. Zero based from 0 to GImage.GetWidth-1.

10

y

The y coordinate. Zero based from 0 to GImage.GetHeight-1.

10

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Invert

Optional

If 0, we find first pixel matching your color. If 1 we find first pixel not matching the color. Default is 0.

0

Tolerance

Optional

The tolerance for comparison. Normally a small value like 3. So if color is 65535, 65535, 65535 and pixel is 64764, 64764, 64764 we have a match for tolerance being 800.

800

Result Returns position or error.

Description

You can find first pixel matching your given color in the row starting with given x position and given tolerance. If you set Invert to 1, the plugin returns column for first pixel not matching color.

Returns -1 if not found.

Examples

Finds color in row:

MBS("GImage.FindColorInRow"; \$img; \$x; \$y; \$ColorToSearch; 1; 3)

85.69. *GMIMAGE.FINDCOLORINROW*

4437

See also

- 85.68 *GMImage.FindColorInColumn* 4434
- 85.123 *GMImage.GetHeight* 4501
- 85.169 *GMImage.GetWidth* 4550

Example Databases

- [GraphicsMagick/Find Pixels](#)

85.69.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 4th February 2015, last changed 11st November 2019.

85.70 GImage.Flip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Flip"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns "OK" on success.

Description

Examples

Mirror the picture.

```
Let (
[
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$RotateResult = MBS("GImage.Flip"; $Image);
$Result = MBS("GImage.WriteToPNGContainer"; $Image);
$DestroyResult = MBS("GImage.Release"; $Image)
];
$Result)
```

See also

- 85.30 GImage.Blur 4375
- 85.36 GImage.Chop 4385
- 85.49 GImage.Crop 4405
- 85.76 GImage.Flop 4447
- 85.81 GImage.Free 4455
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.314 GImage.Strip 4741
- 85.329 GImage.Trim 4758
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Correct Image Orientation](#)
- [GraphicsMagick/GraphicsMagick Sample](#)

85.70.1 Blog Entries

- [Correct Image Orientation in FileMaker](#)

Created 18th August 2014, last changed 21st December 2018.

85.71 GImage.FloodFillColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.FloodFillColor"; ImageRef; Geometry; fillColor { ; borderColor })

Parameters

ImageRef

The image reference number.

1

Geometry

The point. A Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !"

+20+30

fillColor

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

borderColor

Optional

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

Fill pixels starting at target-pixel and stopping at pixels matching specified border color. Uses current fuzz setting when determining color match:

See also

- 85.72 GImage.FloodFillColorXY 4442
- 85.74 GImage.FloodFillTexture 4445
- 85.116 GImage.GetFillColor 4494
- 85.239 GImage.SetColorFuzz 4647
- 85.253 GImage.SetFillColor 4664

85.71. *GMIMAGE.FLOODFILLCOLOR*

4441

- 85.328 GImage.Transparent

4756

Created 18th August 2014, last changed 11st November 2019.

85.72 GImage.FloodFillColorXY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.FloodFillColorXY"; ImageRef; x; y; fillColor { ; borderColor })

Parameters

ImageRef

The image reference number.

1

x

x Position

0

y

y Position

0

fillColor

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

borderColor

Optional

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

Uses current fuzz setting when determining color match.

Examples

Make a picture transparent:

```
# load a picture
Set Variable [ $image; Value:MBS( "GImage.NewFromContainer"; Test::BigImage) ]
# white in RGB
Set Variable [ $f; Value:"white" ]
# Replace all white with nearly white
```

```
Set Variable [ $r; Value:MBS( "GMImage.ReplaceColor"; $image; $f; "COLOR 65535 65278 65535"; 0 ) ]
# now flood fill it with 5 as tolerance
Set Variable [ $r; Value:MBS( "GMImage.SetColorFuzz"; $image; 5 ) ]
Set Variable [ $r; Value:MBS( "GMImage.FloodFillColorXY"; $image; 0; 0; $f ) ]
# now set back fuzz and make transparent using white
Set Variable [ $r; Value:MBS( "GMImage.SetColorFuzz"; $image; 0 ) ]
Set Variable [ $imagecolor; Value:MBS( "GMImage.Transparent"; $image; $f ) ]
# write back to container
Set Field [ Test::Result; MBS( "GMImage.WriteToPNGContainer"; $image;) ]
# cleanup
Set Variable [ $Error; Value:MBS("GMImage.Release";$image) ]
```

See also

- 85.71 GMImage.FloodFillColor 4440
- 85.73 GMImage.FloodFillOpacity 4444
- 85.75 GMImage.FloodFillTextureXY 4446
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.217 GMImage.ReplaceColor 4616
- 85.239 GMImage.SetColorFuzz 4647
- 85.328 GMImage.Transparent 4756
- 85.340 GMImage.WriteToPNGContainer 4777

85.73 GImage.FloodFillOpacity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.FloodFillOpacity"; ImageRef; x; y; opacity; PaintMethod)

Parameters

ImageRef

The image reference number.

1

x

The X Position

0

y

The Y Position

0

opacity

A value from 0 to 65535.

127*257

PaintMethod

PointMethod = 0, ReplaceMethod = 1, FloodfillMethod = 2, FillToBorderMethod = 3, ResetMethod = 4

1

Result Returns "OK" on success.

Description

See also

- 85.72 GImage.FloodFillColorXY 4442
- 85.74 GImage.FloodFillTexture 4445

Created 18th August 2014, last changed 11st November 2019.

85.74 **GMImage.FloodFillTexture**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.FloodFillTexture"; ImageRef; Geometry; texture { ; borderColor })

Parameters

ImageRef

The image reference number.

1

Geometry

The point. A Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" +20+30

texture

The image reference number.

2

borderColor

Optional

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

Fills pixels starting at target-pixel and stopping at pixels matching specified border color. Uses current fuzz setting when determining color match.

See also

- 85.71 GMImage.FloodFillColor 4440
- 85.72 GMImage.FloodFillColorXY 4442
- 85.73 GMImage.FloodFillOpacity 4444
- 85.75 GMImage.FloodFillTextureXY 4446

Created 18th August 2014, last changed 11st November 2019.

85.75 GImage.FloodFillTextureXY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.FloodFillTextureXY"; ImageRef; x; y; texture { ; borderColor })

Parameters

ImageRef

The image reference number.

1

x

x Position

0

y

y Position

0

texture

The image reference number.

2

borderColor

Optional

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

Fills pixels that match the color of the target pixel and are neighbors of the target pixel. Uses current fuzz setting when determining color match.

See also

- 85.72 GImage.FloodFillColorXY 4442
- 85.74 GImage.FloodFillTexture 4445

Created 18th August 2014, last changed 11st November 2019.

85.76 GMImage.Flop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Flop"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns "OK" on success.

Description

Examples

Mirror the picture.

```
Let (
[
$Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
$RotateResult = MBS("GMImage.Flop"; $Image);
$Result = MBS("GMImage.WriteToPNGContainer"; $Image);
$DestroyResult = MBS("GMImage.Release"; $Image)
];
$Result)
```

See also

- 85.30 GMImage.Blur 4375
- 85.36 GMImage.Chop 4385
- 85.47 GMImage.Copy 4401
- 85.49 GMImage.Crop 4405
- 85.81 GMImage.Free 4455
- 85.172 GMImage.Hash 4555
- 85.181 GMImage.Map 4567
- 85.219 GMImage.Roll 4621
- 85.340 GMImage.WriteToPNGContainer 4777
- 85.344 GMImage.Zoom 4784

Example Databases

- [GraphicsMagick/Correct Image Orientation](#)
- [GraphicsMagick/GraphicsMagick Sample](#)

85.76.1 Blog Entries

- [Correct Image Orientation in FileMaker](#)

Created 18th August 2014, last changed 21st December 2018.

85.77 GMImage.FontMap

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	10.1	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.FontMap")

Result Returns XML text or error.

Description

The MBS Plugin provides to GraphicsMagick the font map to use.

This is a XML defining which fonts are available.

Use this function to learn what fonts may be available or debug to see why a font doesn't load.

See also

- [85.46 GMImage.Contrast](#) 4400
- [85.79 GMImage.Format](#) 4452

85.77.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr2](#)

Created 2nd February 2020, last changed 2nd February 2020.

85.78 GImage.FontTypeMetrics

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	7.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.FontTypeMetrics"; ImageRef; text)

Parameters

ImageRef

The image reference number.

1

text

Some text

"Hello World"

Result Returns list or error.

Description

Obtain font metrics for text string given current font, point size, and density settings.

Returns list with following values:

- text width in pixel
- text height in pixel
- Ascent, the distance in pixels from the text baseline to the highest/upper grid coordinate used to place an outline point.
- Descent, the distance in pixels from the baseline to the lowest grid coordinate used to place an outline point. Always a negative value.
- Maximum horizontal advance in pixels.
- Font size

To extract values, please pass through `Math.TextToNumber` or similar functions which always uses dot as decimal separator.

Examples

Draw some text on a picture:

```
# open a picture
Set Variable [ $ref ; Value: MBS("GImage.NewFromContainer"; Annotate Image::InputImage) ]
# set font size
Set Variable [ $r ; Value: MBS("GImage.SetFontPointsize"; $ref; 20) ]
# set the font
Set Variable [ $r ; Value: MBS("GImage.SetFont"; $ref; "@/System/Library/Fonts/LucidaGrande.ttc") ]
# set the fill color
```

```

Set Variable [ $r ; Value: MBS("GMImage.SetFillColor"; $ref; "RGB 0 0 0") ]
# Query size for this text:
Set Variable [ $r ; Value: MBS("GMImage.FontTypeMetrics"; $ref; Annotate Image::Text) ]
# draw the text:
Set Variable [ $r ; Value: MBS("GMImage.Annotate"; $ref; Annotate Image::Text; "100x200+10+40"; 1) ]
# write image
Set Field [ Annotate Image::OutputImage ; MBS( "GMImage.WriteToPNGContainer"; $ref ) ]
# free memory
Set Variable [ $Error ; Value: MBS("GMImage.Release";$ref) ]

```

Measure text:

```
MBS("GMImage.FontTypeMetrics"; $ref; Annotate Image::Text)
```

Example result: "528.000000

47.000000

39.000000

-8.000000

66.000000

40.000000"

See also

- 85.24 GMImage.Annotate 4365
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.253 GMImage.SetFillColor 4664
- 85.256 GMImage.SetFont 4668
- 85.257 GMImage.SetFontPointsize 4669
- 85.340 GMImage.WriteToPNGContainer 4777
- 108.20 Math.TextToNumber 5776

Example Databases

- [GraphicsMagick/Text Wrap](#)

85.78.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr3](#)

Created 20th June 2017, last changed 21st December 2018.

85.79 GImage.Format

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Format"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the long image format description.

Description

See also

- 85.32 GImage.Border 4378
- 85.77 GImage.FontMap 4449
- 85.80 GImage.Frame 4453
- 85.221 GImage.Rotate 4623
- 85.311 GImage.Spread 4738

Created 18th August 2014, last changed 18th August 2014.

85.80 GMImage.Frame

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Frame"; ImageRef; width; height; innerBevel; outerBevel)

Parameters

ImageRef

The image reference number.

1

width

The width of the frame

300

height

The height of the frame

200

innerBevel

The inner bevel size

6

outerBevel

The outer bevel size

6

Result Returns "OK" on success.

Description

Examples

Adds a frame to the image:

```
Let (
[
$Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
$RotateResult = MBS("GMImage.Frame"; $Image);
$Result = MBS("GMImage.WriteToPNGContainer"; $Image);
$DestroyResult = MBS("GMImage.Release"; $Image)
];
$Result)
```

See also

- 85.64 GMImage.Erase 4429
- 85.79 GMImage.Format 4452

- 85.81 GImage.Free 4455
- 85.191 GImage.New 4580
- 85.214 GImage.Release 4612
- 85.225 GImage.Scale 4628
- 85.302 GImage.Shade 4726
- 85.305 GImage.Shave 4730
- 85.329 GImage.Trim 4758
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.81 GMImage.Free

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	8.4	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Free"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns OK or error.

Description

Please call this function when you are done with the image to free memory.

The plugin doesn't know whether you need the image later, so it can't free the memory for you.

You can use `GMImage.ImageCount` to find out how many images are open in memory.

See also

- 85.49 `GMImage.Crop` 4405
- 85.60 `GMImage.Edge` 4424
- 85.70 `GMImage.Flip` 4438
- 85.76 `GMImage.Flop` 4447
- 85.80 `GMImage.Frame` 4453
- 85.82 `GMImage.FreeAll` 4457
- 85.173 `GMImage.ImageCount` 4557
- 85.191 `GMImage.New` 4580
- 85.329 `GMImage.Trim` 4758
- 85.332 `GMImage.Wave` 4762

Example Databases

- [GraphicsMagick/Clip Image](#)
- [GraphicsMagick/Create GIF](#)
- [GraphicsMagick/Create Multi Tiff](#)
- [GraphicsMagick/GraphicsMagick Exif](#)
- [GraphicsMagick/GraphicsMagick IPTC](#)

- [GraphicsMagick/GraphicsMagick Path Drawing](#)
- [GraphicsMagick/Picture Text Encoding](#)
- [GraphicsMagick/Rotate Orientation](#)
- [GraphicsMagick/Trim Picture Border](#)
- [GraphicsMagick/Trim Picture](#)

85.81.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 20th September 2018, last changed 21st September 2018.

85.82 **GMImage.FreeAll**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	8.4	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.FreeAll")

Result Returns OK or error.

Description

See also

- 85.81 GMImage.Free

4455

85.82.1 **Blog Entries**

- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 20th September 2018, last changed 20th September 2018.

85.83 GImage.Gamma

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Gamma"; ImageRef; gammaRed; gammaGreen; gammaBlue)

Parameters

ImageRef

The image reference number.

1

gammaRed

The gamma value for the red channel. (or if only one value is given the gamma value for all channels)

0.5

gammaGreen

The gamma value for the green channel.

0.5

gammaBlue

The gamma value for the blue channel.

0.5

Result Returns "OK" on success.

Description

You can also pass only one gamma value for all three channels.

See also

- 85.121 GImage.GetGamma

4499

Created 18th August 2014, last changed 18th August 2014.

85.84 GImage.GaussianBlur

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GaussianBlur"; ImageRef; width; sigma)

Parameters

ImageRef

The image reference number.

1

width

The number of neighbor pixels to be included in the convolution mask is specified by width

100

sigma

Specifies the standard deviation of the gaussian bell curve

1

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.85 GImage.GaussianBlurChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GaussianBlurChannel"; ImageRef; ChannelType; width; sigma)

Parameters

ImageRef

The image reference number.

1

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

1

width

The number of neighbor pixels to be included in the convolution mask is specified by width

100

sigma

Specifies the standard deviation of the gaussian bell curve

1

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.86 GMImage.Geometry

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Geometry"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the geometry string.

Description

Created 18th August 2014, last changed 18th August 2014.

85.87 GImage.GetAdjoin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetAdjoin"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a boolean value.

Description

See also

- 85.113 GImage.GetEndian 4491
- 85.228 GImage.SetAdjoin 4634

Created 18th August 2014, last changed 18th August 2014.

85.88 GImage.GetAnimationDelay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetAnimationDelay"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns animation delay value as number.

Description

Time in 1/100ths of a second which must expire before displaying the next image in an animated sequence.

Time in 1/100ths of a second (0 to 65535) which must expire before displaying the next image in an animated sequence. This option is useful for regulating the animation of a sequence of GIF images within Netscape.

See also

- 85.229 GImage.SetAnimationDelay

4635

Created 18th August 2014, last changed 11st September 2017.

85.89 GImage.GetAnimationIterations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetAnimationIterations"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the Number of iterations to loop an animation for.

Description

See also

- 85.230 GImage.SetAnimationIterations

4636

Created 18th August 2014, last changed 18th August 2014.

85.90 **GMImage.GetAntiAlias**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.GetAntiAlias"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a boolean value.

Description

See also

- 85.231 [GMImage.SetAntiAlias](#)

4637

Created 18th August 2014, last changed 18th August 2014.

85.91 GImage.GetAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

```
MBS( "GImage.GetAttribute"; ImageRef; name { ; Encoding } )
```

Parameters

ImageRef

The image reference number.

1

name

The name of the attribute.

Encoding

Optional

The text encoding. Default is UTF-8.

UTF8

Result Returns the value as string.

Description

Any number of named attributes may be attached to the image. For example, the image comment is a named image attribute with the name "comment". EXIF tags are attached to the image as named attributes. Use the syntax "EXIF:<tag>" to request an EXIF tag similar to "EXIF:DateTime":

Examples

Read EXIF DateTime:

```
MBS( "GImage.GetAttribute"; $image; "EXIF:DateTime" )
```

Query IPTC Keywords:

```
MBS("GImage.GetAttribute"; $img; "IPTC:2:25"; "UTF-8")
```

Query JPEG Quality used to compress image:

```
Set Variable [ $img; Value:MBS("GImage.NewFromContainer"; Image::InputImage) ]
Set Variable [ $value; Value:MBS("GImage.GetAttribute"; $img; "JPEG-Quality") ]
Show Custom Dialog [ "JPEG Quality used to compress image"; $value ]
Set Variable [ $r; Value:MBS("GImage.Release"; $img) ]
```

Read PNG original color type:

```
MBS("GImage.GetAttribute"; $image; "png:IHDR.color-type-orig")
// Value is combination of 0 = gray, 1 = palette, 2 = color, 4 = alpha
// e.g. 4 = Gray + Alpha, 6 = RGBA, 2 = RGB, 0 = Gray
```

Query JPEG Colorspace:

```
MBS("GMImage.GetAttribute"; $img; "JPEG-Colorspace-Name") & " " & MBS("GMImage.GetAttribute";
$img; "JPEG-Colorspace")
// the numbers are: 1 = grayscale, 2 = RGB, 3 = YCbCr, 4 = CMYK, 5 = YCCK
```

Show GPS location:

```
Set Variable [ $img ; Value: MBS("GMImage.NewFromContainer"; GraphicsMagick Exif::InputImage) ]
Set Variable [ $lat ; Value: MBS("GMImage.GetAttribute"; $img; "EXIF:GPSLatitude") ]
Set Variable [ $long ; Value: MBS("GMImage.GetAttribute"; $img; "EXIF:GPSLongitude") ]
Show Custom Dialog [ "GPS" ; $lat & " / " & $long ]
Set Variable [ $r ; Value: MBS("GMImage.Release"; $img) ]
```

See also

- 85.92 *GMImage.GetAttributeNames* 4468
- 85.93 *GMImage.GetAttributesJSON* 4469
- 85.191 *GMImage.New* 4580
- 85.193 *GMImage.NewFromContainer* 4584
- 85.214 *GMImage.Release* 4612
- 85.232 *GMImage.SetAttribute* 4638

Example Databases

- [GraphicsMagick/GraphicsMagick Exif](#)
- [GraphicsMagick/GraphicsMagick IPTC](#)

85.91.1 Blog Entries

- [JPEG Quality Estimate](#)

Created 18th August 2014, last changed 10th June 2019.

85.92 GImage.GetAttributeNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.2	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetAttributeNames"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns list or error.

Description

Only attributes created before are visible, so e.g. EXIF data may not yet be loaded and parsed.

Examples

Show attributes:

```
Set Variable [ $ImageRef ; Value: MBS("GImage.NewFromFile"; "/Users/cs/Desktop/image2.png") ]
Show Custom Dialog [ "Attributes" ; MBS( "GImage.GetAttributeNames"; $ImageRef ) ]
Set Variable [ $r ; Value: MBS("GImage.Release"; $ImageRef) ]
```

See also

- 85.91 GImage.GetAttribute 4466
- 85.93 GImage.GetAttributesJSON 4469
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612

85.92.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr4](#)

Created 18th April 2019, last changed 18th April 2019.

85.93 GMImage.GetAttributesJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.2	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.GetAttributesJSON"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns JSON object or error.

Description

Only attributes created before are visible, so e.g. EXIF data may not yet be loaded and parsed. e.g. for a PNG this may include the original color type and the bit depth:

```
{
```

```
  "png:IHDR.color-type-orig":  "4",
  "png:IHDR.bit-depth-orig":  "16"
```

```
}
```

Examples

Show attributes:

```
Set Variable [ $ImageRef ; Value: MBS("GMImage.NewFromFile"; "/Users/cs/Desktop/image2.png") ]
Show Custom Dialog [ "Attributes" ; MBS( "GMImage.GetAttributesJSON"; $ImageRef ) ]
Set Variable [ $r ; Value: MBS("GMImage.Release"; $ImageRef) ]
```

See also

- 85.91 GMImage.GetAttribute 4466
- 85.92 GMImage.GetAttributeNames 4468
- 85.191 GMImage.New 4580
- 85.194 GMImage.NewFromFile 4586
- 85.214 GMImage.Release 4612

85.93.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr4](#)

85.94 **GMImage.GetBackgroundColor**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.GetBackgroundColor"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a color value as string.

Description

See also

- 85.95 *GMImage.GetBackgroundTexture* 4472
- 85.233 *GMImage.SetBackgroundColor* 4639
- 85.234 *GMImage.SetBackgroundTexture* 4641

Created 18th August 2014, last changed 18th August 2014.

85.95 GImage.GetBackgroundTexture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetBackgroundTexture"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the image name as string.

Description

See also

- 85.94 GImage.GetBackgroundColor 4471
- 85.233 GImage.SetBackgroundColor 4639
- 85.234 GImage.SetBackgroundTexture 4641

Created 18th August 2014, last changed 18th August 2014.

85.96 GMImage.GetBorderColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.GetBorderColor"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a color value as string.

Description

See also

- 85.97 GMImage.GetBoxColor 4474
- 85.135 GMImage.GetMatteColor 4514
- 85.142 GMImage.GetPixelColor 4522
- 85.155 GMImage.GetStrokeColor 4536
- 85.235 GMImage.SetBorderColor 4642
- 85.236 GMImage.SetBoxColor 4644
- 85.267 GMImage.SetMatteColor 4682
- 85.272 GMImage.SetPixelColor 4688
- 85.285 GMImage.SetStrokeColor 4706

Created 18th August 2014, last changed 18th August 2014.

85.97 GImage.GetBoxColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetBoxColor"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a color value as string.

Description

See also

- 85.96 GImage.GetBorderColor 4473
- 85.116 GImage.GetFillColor 4494
- 85.135 GImage.GetMatteColor 4514
- 85.142 GImage.GetPixelColor 4522
- 85.155 GImage.GetStrokeColor 4536
- 85.235 GImage.SetBorderColor 4642
- 85.236 GImage.SetBoxColor 4644
- 85.253 GImage.SetFillColor 4664
- 85.272 GImage.SetPixelColor 4688

Created 18th August 2014, last changed 18th August 2014.

85.98 GMImage.GetChannelDepth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.GetChannelDepth"; ImageRef; ChannelType)

Parameters

ImageRef

The image reference number.

1

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

1

Result Returns a depth value.

Description

See also

- 85.300 GMImage.SetchannelDepth

4724

Created 18th August 2014, last changed 27th May 2018.

85.99 GImage.GetClassType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetClassType"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the class type number.

Description

Value is either 1 for DirectClass or 2 for PseudoClass.

Examples

Show image class type:

```
Set Variable [ $image ; Value: MBS("GImage.NewFromFile"; "/Users/cs/Desktop/image4.png") ]
Set Variable [ $value ; Value: MBS("GImage.GetClassType"; $image) ]
Show Custom Dialog [ "Class" ; $value ]
Set Variable [ $r ; Value: MBS("GImage.Release"; $image) ]
```

See also

- 85.106 GImage.GetCompressType 4484
- 85.118 GImage.GetFilterType 4496
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612
- 85.238 GImage.SetClassType 4646

Created 18th August 2014, last changed 17th April 2019.

85.100 GImage.GetClipMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	7.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetClipMask"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns image reference or error.

Description

Please call GImage.Release later to free memory for this image.

See also

- 85.37 GImage.ClipMask 4386
- 85.105 GImage.GetCompose 4483
- 85.214 GImage.Release 4612

Created 16th July 2017, last changed 31st July 2019.

85.101 GImage.GetColorFuzz

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetColorFuzz"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.171 GImage.GetcolorMap 4554
- 85.103 GImage.GetColorSpace 4480
- 85.239 GImage.SetColorFuzz 4647

Created 18th August 2014, last changed 18th August 2014.

85.102 GImage.GetColorMapSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetColorMapSize"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.171 GImage.GetcolorMap 4554
- 85.103 GImage.GetColorSpace 4480
- 85.240 GImage.SetColorMapSize 4649
- 85.241 GImage.SetColorSpace 4650

Created 18th August 2014, last changed 18th August 2014.

85.103 GImage.GetColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetColorSpace"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the color space type as number.

Description

UndefinedColorspace = 0, RGBColorspace = 1 (Plain old RGB colorspace), GRAYColorspace = 2 (Plain old full-range grayscale), TransparentColorspace = 3 (RGB but preserve matte channel during quantize), OHTAColorspace = 4, XYZColorspace = 5 (CIE XYZ), YCCColorspace = 6 (Kodak PhotoCD PhotoYCC), YIQColorspace = 7, YPbPrColorspace = 8, YUVCColorspace = 9, CMYKColorspace = 10 (Cyan, magenta, yellow, black, alpha), sRGBColorspace = 11 (Kodak PhotoCD sRGB), HSLColorspace = 12 (Hue, saturation, luminosity), HWBColorspace = 13 (Hue, whiteness, blackness), LABColorspace = 14 (LAB colorspace not supported yet other than via lcms), CineonLogRGBColorspace = 15 (RGB data with Cineon Log scaling, 2.048 density range), Rec601LumaColorspace = 16 (Luma (Y) according to ITU-R 601), Rec601YCbCrColorspace = 17 (YCbCr according to ITU-R 601), Rec709LumaColorspace = 18 (Luma (Y) according to ITU-R 709), Rec709YCbCrColorspace = 19 (YCbCr according to ITU-R 709)

Examples

Shows color space for image:

```
Set Variable [ $image ; Value: MBS("GImage.NewFromFile"; "/Users/cs/Desktop/image2.png") ]
Set Variable [ $value ; Value: MBS("GImage.GetColorSpace"; $image) ]
Show Custom Dialog [ "ColorSpace" ; $value ]
Set Variable [ $r ; Value: MBS("GImage.Release"; $image) ]
```

See also

- 85.101 GImage.GetColorFuzz 4478
- 85.171 GImage.GetcolorMap 4554
- 85.102 GImage.GetColorMapSize 4479
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612
- 85.240 GImage.SetColorMapSize 4649

85.103. *GMIMAGE.GETCOLORSPACE*

4481

- 85.241 *GImage.SetColorSpace*

4650

Created 18th August 2014, last changed 17th April 2019.

85.104 GImage.GetComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetComment"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns the comment.

Description**See also**

- 85.105 GImage.GetCompose 4483
- 85.119 GImage.GetFont 4497
- 85.242 GImage.SetComment 4651
- 85.243 GImage.SetCompose 4652

Created 18th August 2014, last changed 18th August 2014.

85.105 GImage.GetCompose

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetCompose"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.44 GImage.Composite 4396
- 85.100 GImage.GetClipMask 4477
- 85.104 GImage.GetComment 4482
- 85.167 GImage.GetVerbose 4548
- 85.242 GImage.SetComment 4651
- 85.243 GImage.SetCompose 4652
- 85.297 GImage.SetVerbose 4721

Created 18th August 2014, last changed 18th August 2014.

85.106 GImage.GetCompressType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetCompressType"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

UndefinedCompression = 0, NoCompression = 1, BZipCompression = 2, FaxCompression = 3, Group4Compression = 4, JPEGCompression = 5, LosslessJPEGCompression = 6, LZWCompression = 7, RLECompression = 8, ZipCompression = 9

Examples

Shows compression:

```
Set Variable [ $image ; Value: MBS("GImage.NewFromFile"; "/Users/cs/Desktop/image4.png") ]
```

```
Set Variable [ $value ; Value: MBS("GImage.GetCompressType"; $image) ]
```

```
Show Custom Dialog [ "Compress type" ; $value ]
```

```
Set Variable [ $r ; Value: MBS("GImage.Release"; $image) ]
```

See also

- 85.99 GImage.GetClassType 4476
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612
- 85.244 GImage.SetCompressType 4653

Created 18th August 2014, last changed 17th April 2019.

85.107 GImage.GetDebug

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetDebug"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a boolean value.

Description

See also

- 85.111 GImage.GetDepth 4489
- 85.131 GImage.GetLabel 4510
- 85.245 GImage.SetDebug 4655
- 85.249 GImage.SetDepth 4660

Created 18th August 2014, last changed 18th August 2014.

85.108 GImage.GetDefineSet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetDefineSet"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a boolean value.

Description

Tagged image format define. Similar to the get/setdefineValue() functions except that passing the flag value 'true' creates a value-less define with that format and key. Passing the flag value 'false' removes any existing matching definition. The method returns 'true' if a matching key exists, and 'false' if no matching key exists.

See also

- 85.109 GImage.GetDefineValue 4487
- 85.246 GImage.SetDefineSet 4656

Created 18th August 2014, last changed 18th August 2014.

85.109 GImage.GetDefineValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetDefineValue"; ImageRef; magick; key)

Parameters**ImageRef**

The image reference number.

1

magick

The name of the codec

key

A key name as string

Result Returns the value as string.

Description

Tagged image format define (set/access coder-specific option) The magick option specifies the coder the define applies to. The key option provides the key specific to that coder. The value option provides the value to set (if any). See the get/set defineSet functions if the key must be removed entirely.

See also

- 85.108 GImage.GetDefineSet 4486
- 85.247 GImage.SetDefineValue 4657

Created 18th August 2014, last changed 18th August 2014.

85.110 GImage.GetDensity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetDensity"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a geomery as string.

Description**Examples**

Load image and get density:

```
$image = MBS( "GImage.NewFromContainer"; MediaField)
$res = MBS( "GImage.GetDensity"; $image )
MBS( "GMimage.Release"; $image )
```

See also

- 85.111 GImage.GetDepth 4489
- 85.113 GImage.GetEndian 4491
- 85.123 GImage.GetHeight 4501
- 85.144 GImage.GetQuality 4525
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.248 GImage.SetDensity 4658
- 85.274 GImage.SetQuality 4692

Example Databases

- [GraphicsMagick/Apply Mask](#)

Created 18th August 2014, last changed 21st December 2018.

85.111 GMImage.GetDepth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.GetDepth"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

Examples

Queries color depth:

```
Set Variable [ $image ; Value: MBS("GMImage.NewFromFile"; "/Users/cs/Desktop/image4.png") ]
```

```
Set Variable [ $value ; Value: MBS("GMImage.GetDepth"; $image) ]
```

```
Show Custom Dialog [ "Depth" ; $value ]
```

```
Set Variable [ $r ; Value: MBS("GMImage.Release"; $image) ]
```

See also

- 85.107 GMImage.GetDebug 4485
- 85.110 GMImage.GetDensity 4488
- 85.119 GMImage.GetFont 4497
- 85.123 GMImage.GetHeight 4501
- 85.134 GMImage.GetMatte 4513
- 85.166 GMImage.GetType 4547
- 85.169 GMImage.GetWidth 4550
- 85.194 GMImage.NewFromFile 4586
- 85.245 GMImage.SetDebug 4655
- 85.249 GMImage.SetDepth 4660

Created 18th August 2014, last changed 17th April 2019.

85.112 GImage.GetEXIFOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	6.5	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetEXIFOrientation"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns value or error.

Description

Returns number from 0 to 8 depending on rotation.

This function can only read orientation, if there is an EXIF block in image.

Examples

Shows EXIF orientation:

```
Set Variable [ $image ; Value: MBS("GImage.NewFromFile"; "/Users/cs/Desktop/image4.png") ]
Set Variable [ $value ; Value: MBS("GImage.GetEXIFOrientation"; $image) ]
Show Custom Dialog [ "Orientation in EXIF" ; $value ]
Set Variable [ $r ; Value: MBS("GImage.Release"; $image) ]
```

See also

- 85.138 GImage.GetOrientation 4517
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612
- 85.250 GImage.SetEXIFOrientation 4661
- 85.270 GImage.SetOrientation 4685

85.112.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 30th November 2016, last changed 17th April 2019.

85.113 GImage.GetEndian

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetEndian"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description

UndefinedEndian = 0, LSBEndian = 1, MSBEndian = 2

See also

- 85.87 GImage.GetAdjoin 4462
- 85.110 GImage.GetDensity 4488
- 85.133 GImage.GetMagick 4512
- 85.251 GImage.SetEndian 4662

Created 18th August 2014, last changed 18th August 2014.

85.114 GImage.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetFileName"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a string.

Description**See also**

- 85.28 GImage.BaseFilename 4373
- 85.115 GImage.GetFileSize 4493
- 85.117 GImage.GetFillRule 4495
- 85.118 GImage.GetFilterType 4496
- 85.165 GImage.GetTileName 4546
- 85.252 GImage.SetFileName 4663
- 85.254 GImage.SetFillRule 4666
- 85.295 GImage.SetTileName 4717

Created 18th August 2014, last changed 18th August 2014.

85.115 GImage.GetFileSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetFileSize"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.114 GImage.GetFileName 4492
- 85.117 GImage.GetFillRule 4495
- 85.118 GImage.GetFilterType 4496
- 85.153 GImage.GetSize 4534
- 85.165 GImage.GetTileName 4546
- 85.252 GImage.SetFileName 4663
- 85.254 GImage.SetFillRule 4666
- 85.295 GImage.SetTileName 4717

Created 18th August 2014, last changed 18th August 2014.

85.116 GImage.GetFillColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetFillColor"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a color value as string.

Description**See also**

- 85.71 GImage.FloodFillColor 4440
- 85.97 GImage.GetBoxColor 4474
- 85.117 GImage.GetFillRule 4495
- 85.135 GImage.GetMatteColor 4514
- 85.142 GImage.GetPixelColor 4522
- 85.236 GImage.SetBoxColor 4644
- 85.253 GImage.SetFillColor 4664
- 85.254 GImage.SetFillRule 4666
- 85.272 GImage.SetPixelColor 4688

Example Databases

- [GraphicsMagick/Find Pixels](#)

Created 18th August 2014, last changed 18th August 2014.

85.117 GImage.GetFillRule

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetFillRule"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description

UndefinedRule = 0, EvenOddRule = 1, NonZeroRule = 2

See also

- 85.114 GImage.GetFileName 4492
- 85.115 GImage.GetFileSize 4493
- 85.116 GImage.GetFillColor 4494
- 85.165 GImage.GetTileName 4546
- 85.252 GImage.SetFileName 4663
- 85.253 GImage.SetFillColor 4664
- 85.254 GImage.SetFillRule 4666

Created 18th August 2014, last changed 18th August 2014.

85.118 GImage.GetFilterType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetFilterType"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description

UndefinedFilter = 0, PointFilter = 1, BoxFilter = 2, TriangleFilter = 3, HermiteFilter = 4, HanningFilter = 5, HammingFilter = 6, BlackmanFilter = 7, GaussianFilter = 8, QuadraticFilter = 9, CubicFilter = 10, CatromFilter = 11, MitchellFilter = 12, LanczosFilter = 13, BesselFilter = 14, SincFilter = 15

See also

- 85.99 GImage.GetClassType 4476
- 85.114 GImage.GetFileName 4492
- 85.115 GImage.GetFileSize 4493
- 85.255 GImage.SetFilterType 4667

Created 18th August 2014, last changed 18th August 2014.

85.119 GImage.GetFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetFont"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a string.

Description**See also**

- 85.141 GImage.GetPage 4521
- 85.149 GImage.GetQuiet 4530
- 85.152 GImage.GetScene 4533
- 85.153 GImage.GetSize 4534
- 85.166 GImage.GetType 4547
- 85.168 GImage.GetView 4549
- 85.169 GImage.GetWidth 4550
- 85.170 GImage.GetXMP 4552
- 85.227 GImage.Segment 4633
- 85.256 GImage.SetFont 4668

Created 18th August 2014, last changed 18th August 2014.

85.120 GImage.GetFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetFontSize"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

See also

- 85.257 GImage.SetFontSize

4669

Created 18th August 2014, last changed 18th August 2014.

85.121 GImage.GetGamma

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetGamma"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns the Gamma level of the image as number.

Description**See also**

- 85.83 GImage.Gamma 4458
- 85.131 GImage.GetLabel 4510
- 85.134 GImage.GetMatte 4513
- 85.141 GImage.GetPage 4521

Created 18th August 2014, last changed 18th August 2014.

85.122 GImage.GetGifDisposeMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetGifDisposeMethod"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

See also

- 85.258 GImage.SetGifDisposeMethod

4670

Created 18th August 2014, last changed 18th August 2014.

85.123 GImage.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetHeight"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the image height.

Description

Examples

Show with and height

```
Let ( [
  $Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
  $Width = MBS("GImage.GetWidth"; $Image);
  $Height = MBS("GImage.GetHeight"; $Image);
  $Error = MBS("GMimage.Release"; $Image)
];
$Width & " x " & $Height )
```

Query size of image into \$h and \$w:

```
Set Variable [ $Image ; Value: MBS( "GImage.NewFromContainer"; ImageView::ImageContainer ) ]
Set Variable [ $w ; Value: MBS( "GImage.GetWidth"; $Image ) ]
Set Variable [ $h ; Value: MBS( "GImage.GetHeight"; $Image ) ]
Set Variable [ $r ; Value: MBS( "GMimage.Release"; $Image ) ]
```

See also

- 85.48 GImage.CopyChannel 4402
- 85.49 GImage.Crop 4405
- 85.69 GImage.FindColorInRow 4436
- 85.110 GImage.GetDensity 4488
- 85.111 GImage.GetDepth 4489
- 85.225 GImage.Scale 4628
- 93.2 ImageView.CreateWithControl 5092

- 93.3 `ImageView.CreateWithSize` 5094
- 190.4 `XL.Book.AddPictureContainer` 8857
- 190.270 `XL.Sheet.SetPictureWithSize` 9222

Example Databases

- [DynaPDF/Click Points](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [GraphicsMagick/Apply Mask](#)
- [GraphicsMagick/Clip Image](#)
- [GraphicsMagick/Combine Pictures](#)
- [GraphicsMagick/Find Pixels](#)
- [GraphicsMagick/Image Scaling](#)
- [GraphicsMagick/Reduce Image](#)
- [Mac and iOS/ImageView](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)

85.123.1 Blog Entries

- [Create PDF from scanned images and skip blank pages](#)
- [Circle crop images in FileMaker with MBS Plugin](#)
- [Face detection via CoreImage in FileMaker](#)

85.123.2 FileMaker Magazin

- [Ausgabe 5/2011, Seite 32](#)

Created 18th August 2014, last changed 21st December 2018.

85.124 GImage.GetICCColorProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetICCColorProfile"; ImageRef { ; Filename })

Parameters

ImageRef

The image reference number.

1

Filename

Optional

The filename to use for the profile. Default is "profile.icc".

"myprofile.icc"

Result Returns a container value with the profile file inside.

Description

Examples

Queries profile:

```
$Profile = MBS("GImage.GeticcColorProfile"; $Image);
```

See also

- [85.125 GImage.GetIPTCProfile](#) 4504
- [85.259 GImage.SetICCColorProfile](#) 4671

85.124.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr3](#)

Created 18th August 2014, last changed 10th October 2017.

85.125 GImage.GetIPTCProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetIPTCProfile"; ImageRef { ; Filename })

Parameters

ImageRef

The image reference number.

1

Filename

Optional

The filename to use for the profile. Default is "profile.iptc".
"myprofile.iptc"

Result Returns a container value with the profile file inside.

Description

See also

- [85.124 GImage.GetICCColorProfile](#) 4503
- [85.126 GImage.GetIPTCProfileValues](#) 4505
- [85.143 GImage.GetProfile](#) 4524
- [85.260 GImage.SetIPTCProfile](#) 4673
- [85.273 GImage.SetProfile](#) 4690

85.125.1 Blog Entries

- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr3](#)

Created 18th August 2014, last changed 30th August 2018.

85.126 GImage.GetIPTCProfileValues

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	6.2	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetIPTCProfileValues"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns list or error.

Description**Examples**

Queries IPTC values:

```
Set Variable [ $img; Value:MBS("GImage.NewFromContainer"; IPTC::InputImage) ]
```

```
Set Field [ IPTC::values; MBS("GImage.GetiptcProfileValues"; $img) ]
```

```
Set Variable [ $r; Value:MBS("GImage.Release"; $img) ]
```

See also

- 85.125 GImage.GetIPTCProfile 4504
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612

85.126.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 15th March 2016, last changed 21st December 2018.

85.127 GImage.GetInterlaceType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetInterlaceType"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

UndefinedInterlace = 0, NoInterlace = 1, LineInterlace = 2, PlaneInterlace = 3, PartitionInterlace = 4

See also

- 85.261 GImage.SetInterlaceType 4674

Created 18th August 2014, last changed 18th August 2014.

85.128 GImage.GetIsValid

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetIsValid"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a boolean value.

Description**See also**

- 85.144 GImage.GetQuality 4525
- 85.262 GImage.SetIsValid 4675

Created 18th August 2014, last changed 18th August 2014.

85.129 GImage.GetJPEGAsBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetJPEGAsBase64"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns text.

Description

For the quality setting use the SetQuality function.

Useful for sending JPEG image as email.

See also

- [85.130 GImage.GetJPEGAsHex](#) 4509
- [85.139 GImage.GetPNGAsBase64](#) 4519

Example Databases

- [GraphicsMagick/Picture Text Encoding](#)

85.129.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 18th August 2014.

85.130 GImage.GetJPEGAsHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetJPEGAsHex"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns text.

Description

For the quality setting use the SetQuality function.

Useful for storing in database.

See also

- 85.129 GImage.GetJPEGAsBase64 4508
- 85.140 GImage.GetPNGAsHex 4520

Example Databases

- [GraphicsMagick/Picture Text Encoding](#)

85.130.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 18th August 2014.

85.131 GImage.GetLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetLabel"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a string.

Description**See also**

- 85.107 GImage.GetDebug 4485
- 85.121 GImage.GetGamma 4499
- 85.134 GImage.GetMatte 4513
- 85.141 GImage.GetPage 4521
- 85.149 GImage.GetQuiet 4530
- 85.153 GImage.GetSize 4534
- 85.166 GImage.GetType 4547
- 85.168 GImage.GetView 4549
- 85.263 GImage.SetLabel 4676
- 85.271 GImage.SetPage 4687

Created 18th August 2014, last changed 18th August 2014.

85.132 GImage.GetLineWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetLineWidth"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

Examples

Set and Query line width:

```
Set Variable [ $Image ; Value: MBS("GImage.New"; "200x200"; "white") ]
```

```
Set Variable [ $r ; Value: MBS("GImage.SetLineWidth"; $Image; 5) ]
```

```
Show Custom Dialog [ "LineWidth" ; MBS("GImage.GetLineWidth";$Image;) ]
```

```
Set Variable [ $r ; Value: MBS("GImage.Release";$Image) ]
```

See also

- 85.161 GImage.GetStrokeWidth 4542
- 85.169 GImage.GetWidth 4550
- 85.191 GImage.New 4580
- 85.214 GImage.Release 4612
- 85.264 GImage.SetLineWidth 4677

Created 18th August 2014, last changed 21st December 2018.

85.133 GImage.GetMagick

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetMagick"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a string.

Description**See also**

- 85.113 GImage.GetEndian 4491
- 85.123 GImage.GetHeight 4501
- 85.134 GImage.GetMatte 4513
- 85.141 GImage.GetPage 4521
- 85.144 GImage.GetQuality 4525
- 85.265 GImage.SetMagick 4678

Created 18th August 2014, last changed 18th August 2014.

85.134 GImage.GetMatte

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetMatte"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a boolean value.

Description

See also

- 85.141 GImage.GetPage 4521
- 85.149 GImage.GetQuiet 4530
- 85.152 GImage.GetScene 4533
- 85.153 GImage.GetSize 4534
- 85.166 GImage.GetType 4547
- 85.169 GImage.GetWidth 4550
- 85.190 GImage.Negate 4578
- 85.221 GImage.Rotate 4623
- 85.266 GImage.SetMatte 4680
- 85.271 GImage.SetPage 4687

Example Databases

- [GraphicsMagick/Reduce Image](#)

Created 18th August 2014, last changed 18th August 2014.

85.135 GImage.GetMatteColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetMatteColor"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a color value as string.

Description**See also**

- 85.97 GImage.GetBoxColor 4474
- 85.116 GImage.GetFillColor 4494
- 85.142 GImage.GetPixelColor 4522
- 85.146 GImage.GetQuantizeColors 4527
- 85.155 GImage.GetStrokeColor 4536
- 85.217 GImage.ReplaceColor 4616
- 85.235 GImage.SetBorderColor 4642
- 85.267 GImage.SetMatteColor 4682
- 85.272 GImage.SetPixelColor 4688
- 85.285 GImage.SetStrokeColor 4706

Created 18th August 2014, last changed 18th August 2014.

85.136 **GImage.GetModulusDepth**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetModulusDepth"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

That is the minimum number of bits required to support red/green/blue components without loss of accuracy.

See also

- 85.268 [GImage.SetModulusDepth](#)

4683

Created 18th August 2014, last changed 18th August 2014.

85.137 GImage.GetMonochrome

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetMonochrome"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a boolean value.

Description

See also

- 85.269 GImage.SetMonochrome

4684

Created 18th August 2014, last changed 18th August 2014.

85.138 GImage.GetOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetOrientation"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

UndefinedOrientation = 0, TopLeftOrientation = 1, (Line direction: Left to right, Frame Direction: Top to bottom) TopRightOrientation = 2, (Line direction: Right to left, Frame Direction: Top to bottom) BottomRightOrientation = 3, (Line direction: Right to left, Frame Direction: Bottom to top) BottomLeftOrientation = 4, (Line direction: Left to right, Frame Direction: Bottom to top) LeftTopOrientation = 5, (Line direction: Top to bottom, Frame Direction: Left to right) RightTopOrientation = 6, (Line direction: Top to bottom, Frame Direction: Right to left) RightBottomOrientation = 7, (Line direction: Bottom to top, Frame Direction: Right to left) LeftBottomOrientation = 8 (Line direction: Bottom to top, Frame Direction: Left to right)

Examples

Set and query orientation:

```
Set Variable [ $Image ; Value: MBS("GImage.New"; "200x200"; "white") ]
Set Variable [ $r ; Value: MBS("GImage.SetOrientation"; $Image; 5) ]
Show Custom Dialog [ "LineWidth" ; MBS("GImage.GetOrientation";$Image;) ]
Set Variable [ $r ; Value: MBS("GImage.Release";$Image) ]
```

See also

- 85.112 GImage.GetEXIFOrientation 4490
- 85.191 GImage.New 4580
- 85.214 GImage.Release 4612
- 85.250 GImage.SetEXIFOrientation 4661
- 85.270 GImage.SetOrientation 4685

Example Databases

- [GraphicsMagick/Correct Image Orientation](#)

85.138.1 Blog Entries

- [Correct Image Orientation in FileMaker](#)

Created 18th August 2014, last changed 21st December 2018.

85.139 GImage.GetPNGAsBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetPNGAsBase64"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns text.

Description

For the quality setting use the SetQuality function.

Useful for sending PNG image as email.

See also

- 85.129 GImage.GetJPEGAsBase64 4508
- 85.140 GImage.GetPNGAsHex 4520

85.139.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 18th August 2014.

85.140 GImage.GetPNGAsHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetPNGAsHex"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns text.

Description

For the quality setting use the SetQuality function.

Useful for storing in database.

See also

- [85.130 GImage.GetJPEGAsHex](#) 4509
- [85.139 GImage.GetPNGAsBase64](#) 4519

Example Databases

- [GraphicsMagick/Picture Text Encoding](#)

85.140.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 18th August 2014.

85.141 GImage.GetPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetPage"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a geometry string.

Description**See also**

- 85.170 GImage.GetXMP 4552
- 85.190 GImage.Negate 4578
- 85.214 GImage.Release 4612
- 85.216 GImage.Repage 4615
- 85.221 GImage.Rotate 4623
- 85.263 GImage.SetLabel 4676
- 85.266 GImage.SetMatte 4680
- 85.271 GImage.SetPage 4687
- 85.283 GImage.SetSize 4703
- 85.296 GImage.SetType 4718

Created 18th August 2014, last changed 18th August 2014.

85.142 GImage.GetPixelColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetPixelColor"; ImageRef; x; y)

Parameters

ImageRef

The image reference number.

1

x

The horizontal position. Range from 0 to GImage.GetWidth-1.

0

y

The vertical position. Range from 0 to GImage.GetHeight-1.

0

Result Returns a color value as string.

Description

Returned color is 16bit in v9.0 or later.

You may need to divide values by 257 if you need 8 bit values.

Examples

Open picture and read first pixel:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$colorValue = MBS("GImage.GetPixelColor"; $Image; 0; 0);
$error = MBS("GImage.Release"; $Image)
];
$colorValue )
```

Trims space around image and make transparent:

```
Set Variable [ $BigImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result; Value:MBS( "GImage.SetBackgroundColor"; $BigImageRef; "RGB 1 0 0" ) ]
Set Variable [ $Result; Value:MBS("GImage.Trim"; $BigImageRef) ]
Set Variable [ $Result; Value:MBS( "GImage.SetColorFuzz"; $BigImageRef; 5 ) ]
Set Variable [ $Result; Value:MBS( "GImage.SetMatte"; $BigImageRef; 1 ) ]
Set Variable [ $farbe; Value:MBS( "GImage.GetPixelColor"; $BigImageRef; 0; 0 ) ]
Set Variable [ $Result; Value:MBS( "GImage.ReplaceColor"; $BigImageRef; $farbe; "RGB 1 1 1"; 5) ]
Set Field [ Test::Result; MBS( "GImage.WriteToPNGContainer"; $BigImageRef ) ]
Set Variable [ $Error; Value:MBS("GImage.Release"; $BigImageRef) ]
```

See also

- 85.96 *GImage.GetBorderColor* 4473
- 85.135 *GImage.GetMatteColor* 4514
- 85.155 *GImage.GetStrokeColor* 4536
- 85.169 *GImage.GetWidth* 4550
- 85.233 *GImage.SetBackgroundColor* 4639
- 85.235 *GImage.SetBorderColor* 4642
- 85.236 *GImage.SetBoxColor* 4644
- 85.239 *GImage.SetColorFuzz* 4647
- 85.253 *GImage.SetFillColor* 4664
- 85.340 *GImage.WriteToPNGContainer* 4777

Example Databases

- [GraphicsMagick/Find Pixels](#)
- [GraphicsMagick/Trim Picture Border](#)

85.142.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 18th August 2014, last changed 9th January 2020.

85.143 GImage.GetProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetProfile"; ImageRef; name { ; Filename })

Parameters

ImageRef

The image reference number.

1

name

the string with the name of the profile.

"IPTC"

Filename

Optional

The filename to use for the profile. Default is "profile".

"myprofile.icc"

Result Returns a container file value with the embedded profile file.

Description

Valid names are: "8BIM", "8BIMTEXT", "APP1", "EXIF", "APP1JPEG", "ICC", "ICM", & "IPTC" or an existing user/format-defined profile name.

Examples

Get EXIF data blob:

```
MBS( "GImage.Getprofile"; $img; "EXIF" )
```

See also

- 85.125 GImage.GetIPTCProfile 4504
- 85.194 GImage.NewFromFile 4586
- 85.260 GImage.SetIPTCProfile 4673
- 85.273 GImage.SetProfile 4690

85.143.1 Blog Entries

- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr3](#)

Created 18th August 2014, last changed 19th January 2018.

85.144 GImage.GetQuality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetQuality"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.110 GImage.GetDensity 4488
- 85.128 GImage.GetIsValid 4507
- 85.133 GImage.GetMagick 4512
- 85.149 GImage.GetQuiet 4530
- 85.248 GImage.SetDensity 4658
- 85.274 GImage.SetQuality 4692

Created 18th August 2014, last changed 18th August 2014.

85.145 GImage.GetQuantizeColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetQuantizeColorSpace"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

UndefinedColorspace = 0, RGBColorspace = 1 (Plain old RGB colorspace), GRAYColorspace = 2 (Plain old full-range grayscale), TransparentColorspace = 3 (RGB but preserve matte channel during quantize), OHTAColorspace = 4, XYZColorspace = 5 (CIE XYZ), YCCColorspace = 6 (Kodak PhotoCD PhotoYCC), YIQColorspace = 7, YPbPrColorspace = 8, YUVCColorspace = 9, CMYKColorspace = 10 (Cyan, magenta, yellow, black, alpha), sRGBColorspace = 11 (Kodak PhotoCD sRGB), HSLColorspace = 12 (Hue, saturation, luminosity), HWBColorspace = 13 (Hue, whiteness, blackness), LABColorspace = 14 (LAB colorspace not supported yet other than via lcms), CineonLogRGBColorspace = 15 (RGB data with Cineon Log scaling, 2.048 density range), Rec601LumaColorspace = 16 (Luma (Y) according to ITU-R 601), Rec601YCbCrColorspace = 17 (YCbCr according to ITU-R 601), Rec709LumaColorspace = 18 (Luma (Y) according to ITU-R 709), Rec709YCbCrColorspace = 19 (YCbCr according to ITU-R 709)

See also

- 85.146 GImage.GetQuantizeColors 4527
- 85.276 GImage.SetQuantizeColors 4695
- 85.275 GImage.SetQuantizeColorSpace 4694

Created 18th August 2014, last changed 18th August 2014.

85.146 GImage.GetQuantizeColors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetQuantizeColors"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.135 GImage.GetMatteColor 4514
- 85.145 GImage.GetQuantizeColorSpace 4526
- 85.147 GImage.GetQuantizeDither 4528
- 85.276 GImage.SetQuantizeColors 4695
- 85.275 GImage.SetQuantizeColorSpace 4694
- 85.277 GImage.SetQuantizeDither 4696

Created 18th August 2014, last changed 18th August 2014.

85.147 GImage.GetQuantizeDither

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetQuantizeDither"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a boolean value.

Description**See also**

- 85.146 GImage.GetQuantizeColors 4527
- 85.276 GImage.SetQuantizeColors 4695
- 85.277 GImage.SetQuantizeDither 4696

Created 18th August 2014, last changed 18th August 2014.

85.148 **GImage.GetQuantizeTreeDepth**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetQuantizeTreeDepth"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

See also

- 85.278 [GImage.SetQuantizeTreeDepth](#)

4697

Created 18th August 2014, last changed 18th August 2014.

85.149 GImage.GetQuiet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetQuiet"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns 1, 0 or error.

Description

If enabled, suppress all warning messages. Error messages are still reported.

See also

- 85.131 GImage.GetLabel 4510
- 85.134 GImage.GetMatte 4513
- 85.141 GImage.GetPage 4521
- 85.144 GImage.GetQuality 4525
- 85.153 GImage.GetSize 4534
- 85.166 GImage.GetType 4547
- 85.168 GImage.GetView 4549
- 85.169 GImage.GetWidth 4550
- 85.279 GImage.SetQuiet 4698
- 85.298 GImage.SetView 4722

85.149.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr6](#)

Created 28th December 2018, last changed 28th December 2018.

85.150 GImage.GetRenderingIntent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetRenderingIntent"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description

UndefinedIntent = 0, SaturationIntent = 1, PerceptualIntent = 2, AbsoluteIntent = 3, RelativeIntent = 4

See also

- 85.280 GImage.SetRenderingIntent

4699

Created 18th August 2014, last changed 18th August 2014.

85.151 GImage.GetResolutionUnits

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetResolutionUnits"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

UndefinedResolution = 0, PixelsPerInchResolution = 1, PixelsPerCentimeterResolution = 2

See also

- 85.281 GImage.SetResolutionUnits 4700

Example Databases

- [GraphicsMagick/Apply Mask](#)

85.151.1 FileMaker Magazin

- Ausgabe 5/2011, Seite 32

Created 18th August 2014, last changed 18th August 2014.

85.152 GImage.GetScene

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetScene"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.119 GImage.GetFont 4497
- 85.134 GImage.GetMatte 4513
- 85.141 GImage.GetPage 4521
- 85.153 GImage.GetSize 4534
- 85.166 GImage.GetType 4547
- 85.168 GImage.GetView 4549
- 85.282 GImage.SetScene 4702
- 85.283 GImage.SetSize 4703

Created 18th August 2014, last changed 18th August 2014.

85.153 GImage.GetSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetSize"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns "OK" on success.

Description**Examples**

Shows size:

```
Set Variable [ $image ; Value: MBS("GImage.NewFromFile"; "/Users/cs/Desktop/image4.png") ]
```

```
Set Variable [ $value ; Value: MBS("GImage.GetSize"; $image) ]
```

```
Show Custom Dialog [ "size" ; $value ]
```

```
Set Variable [ $r ; Value: MBS("GImage.Release"; $image) ]
```

See also

- 85.168 GImage.GetView 4549
- 85.169 GImage.GetWidth 4550
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612
- 85.218 GImage.Resize 4619
- 85.271 GImage.SetPage 4687
- 85.282 GImage.SetScene 4702
- 85.296 GImage.SetType 4718
- 85.298 GImage.SetView 4722

Created 18th August 2014, last changed 17th April 2019.

85.154 GImage.GetStrokeAntiAlias

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetStrokeAntiAlias"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a boolean value.

Description**See also**

- 85.156 GImage.GetStrokeDashArray 4537
- 85.158 GImage.GetStrokeLineCap 4539
- 85.284 GImage.SetStrokeAntiAlias 4704

Created 18th August 2014, last changed 18th August 2014.

85.155 GImage.GetStrokeColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetStrokeColor"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a color value as string.

Description**See also**

- 85.96 GImage.GetBorderColor 4473
- 85.97 GImage.GetBoxColor 4474
- 85.135 GImage.GetMatteColor 4514
- 85.142 GImage.GetPixelColor 4522
- 85.161 GImage.GetStrokeWidth 4542
- 85.235 GImage.SetBorderColor 4642
- 85.267 GImage.SetMatteColor 4682
- 85.285 GImage.SetStrokeColor 4706
- 85.291 GImage.SetStrokeWidth 4713

Created 18th August 2014, last changed 18th August 2014.

85.156 **GImage.GetStrokeDashArray**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.2	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetStrokeDashArray"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns list of values or error.

Description

The strokeDashArray represents an array of numbers that specify the lengths of alternating dashes and gaps in pixels. If an odd number of values is provided, then the list of values is repeated to yield an even number of values. A typical strokeDashArray array might contain the members 5 3 2.

See also

- 85.154 GImage.GetStrokeAntiAlias 4535
- 85.157 GImage.GetStrokeDashOffset 4538
- 85.286 GImage.SetStrokeDashArray 4708
- 85.287 GImage.SetStrokeDashOffset 4709

85.156.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr9](#)

Created 18th August 2014, last changed 18th August 2014.

85.157 GImage.GetStrokeDashOffset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetStrokeDashOffset"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description

While drawing using a dash pattern, specify distance into the dash pattern to start the dash (default 0).

See also

- 85.156 GImage.GetStrokeDashArray 4537
- 85.286 GImage.SetStrokeDashArray 4708
- 85.287 GImage.SetStrokeDashOffset 4709

Created 18th August 2014, last changed 18th August 2014.

85.158 GImage.GetStrokeLineCap

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetStrokeLineCap"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description

UndefinedCap = 0, ButtCap = 1, RoundCap = 2, SquareCap = 3

See also

- 85.154 GImage.GetStrokeAntiAlias 4535
- 85.159 GImage.GetStrokeLineJoin 4540
- 85.161 GImage.GetStrokeWidth 4542
- 85.288 GImage.SetStrokeLineCap 4710
- 85.289 GImage.SetStrokeLineJoin 4711

Created 18th August 2014, last changed 18th August 2014.

85.159 GImage.GetStrokeLineJoin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetStrokeLineJoin"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description

UndefinedJoin = 0, MiterJoin = 1, RoundJoin = 2, BevelJoin = 3

See also

- 85.158 GImage.GetStrokeLineCap 4539
- 85.160 GImage.GetStrokeMiterLimit 4541
- 85.288 GImage.SetStrokeLineCap 4710
- 85.289 GImage.SetStrokeLineJoin 4711

Created 18th August 2014, last changed 18th August 2014.

85.160 GImage.GetStrokeMiterLimit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetStrokeMiterLimit"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description

When two line segments meet at a sharp angle and miter joins have been specified for 'lineJoin', it is possible for the miter to extend far beyond the thickness of the line stroking the path. The miterLimit' imposes a limit on the ratio of the miter length to the 'lineWidth'. The default value of this parameter is 4.

See also

- 85.159 GImage.GetStrokeLineJoin 4540
- 85.290 GImage.SetStrokeMiterLimit 4712

Created 18th August 2014, last changed 18th August 2014.

85.161 GImage.GetStrokeWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetStrokeWidth"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.132 GImage.GetLineWidth 4511
- 85.155 GImage.GetStrokeColor 4536
- 85.158 GImage.GetStrokeLineCap 4539
- 85.285 GImage.SetStrokeColor 4706
- 85.291 GImage.SetStrokeWidth 4713

Created 18th August 2014, last changed 18th August 2014.

85.162 **GImage.GetSubImage**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetSubImage"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a number.

Description

See also

- 85.163 [GImage.GetSubRange](#) 4544
- 85.292 [GImage.SetSubImage](#) 4714
- 85.293 [GImage.SetSubRange](#) 4715

Created 18th August 2014, last changed 18th August 2014.

85.163 GImage.GetSubRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetSubRange"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a number.

Description**See also**

- 85.162 GImage.GetSubImage 4543
- 85.292 GImage.SetSubImage 4714
- 85.293 GImage.SetSubRange 4715

Created 18th August 2014, last changed 18th August 2014.

85.164 **GImage.GetTextEncoding**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetTextEncoding"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a string.

Description

See also

- 85.294 [GImage.SetTextEncoding](#)

4716

Created 18th August 2014, last changed 18th August 2014.

85.165 GImage.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetFileName"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a string.

Description**See also**

- 85.114 GImage.GetFileName 4492
- 85.115 GImage.GetFileSize 4493
- 85.117 GImage.GetFillRule 4495
- 85.252 GImage.SetFileName 4663
- 85.295 GImage.SetTileName 4717

Created 18th August 2014, last changed 18th August 2014.

85.166 GImage.GetType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetType"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the image type number.

Description

UndefinedType = 0, BilevelType = 1, GrayscaleType = 2, GrayscaleMatteType = 3, PaletteType = 4, PaletteMatteType = 5, TrueColorType = 6, TrueColorMatteType = 7, ColorSeparationType = 8, ColorSeparationMatteType = 9, OptimizeType = 10

Examples

Shows type:

```
Set Variable [ $image ; Value: MBS("GImage.NewFromFile"; "/Users/cs/Desktop/image4.png") ]
Set Variable [ $value ; Value: MBS("GImage.GetType"; $image) ]
Show Custom Dialog [ "Type"; $value ]
Set Variable [ $r ; Value: MBS("GImage.Release"; $image) ]
```

See also

- 85.134 GImage.GetMatte 4513
- 85.141 GImage.GetPage 4521
- 85.153 GImage.GetSize 4534
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.207 GImage.Quantize 4602
- 85.214 GImage.Release 4612
- 85.271 GImage.SetPage 4687
- 85.283 GImage.SetSize 4703
- 85.296 GImage.SetType 4718

Created 18th August 2014, last changed 17th April 2019.

85.167 GImage.GetVerbose

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetVerbose"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a boolean value.

Description**See also**

- 85.105 GImage.GetCompose 4483
- 85.243 GImage.SetCompose 4652
- 85.297 GImage.SetVerbose 4721

Created 18th August 2014, last changed 18th August 2014.

85.168 GImage.Get View

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetView"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a string.

Description**See also**

- 85.141 GImage.GetPage 4521
- 85.149 GImage.GetQuiet 4530
- 85.152 GImage.GetScene 4533
- 85.153 GImage.GetSize 4534
- 85.166 GImage.GetType 4547
- 85.169 GImage.GetWidth 4550
- 85.170 GImage.GetXMP 4552
- 85.279 GImage.SetQuiet 4698
- 85.283 GImage.SetSize 4703
- 85.298 GImage.SetView 4722

Created 18th August 2014, last changed 18th August 2014.

85.169 GImage.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetWidth"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the Image width.

Description

Examples

Show with and height

```
Let ( [
  $Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
  $Width = MBS("GImage.GetWidth"; $Image);
  $Height = MBS("GImage.GetHeight"; $Image);
  $Error = MBS("GImage.Release"; $Image)
];
$Width & " x " & $Height )
```

Query size of image into \$h and \$w:

```
Set Variable [ $Image ; Value: MBS( "GImage.NewFromContainer"; ImageView::ImageContainer ) ]
Set Variable [ $w ; Value: MBS( "GImage.GetWidth"; $Image ) ]
Set Variable [ $h ; Value: MBS( "GImage.GetHeight"; $Image ) ]
Set Variable [ $r ; Value: MBS( "GImage.Release"; $Image ) ]
```

See also

- 85.69 GImage.FindColorInRow 4436
- 85.119 GImage.GetFont 4497
- 85.142 GImage.GetPixelColor 4522
- 85.153 GImage.GetSize 4534
- 85.225 GImage.Scale 4628
- 85.249 GImage.SetDepth 4660
- 85.272 GImage.SetPixelColor 4688

85.169. <i>GMIMAGE.GETWIDTH</i>	4551
• 93.3 <i>ImageView.CreateWithSize</i>	5094
• 190.4 <i>XL.Book.AddPictureContainer</i>	8857
• 190.270 <i>XL.Sheet.SetPictureWithSize</i>	9222

Example Databases

- [Barcode/Barcode Generation](#)
- [Barcode/Swiss QR-Code for invoices ISO 20022](#)
- [DynaPDF/Click Points](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [GraphicsMagick/Clip Image](#)
- [GraphicsMagick/Combine Pictures](#)
- [GraphicsMagick/Find Pixels](#)
- [GraphicsMagick/Image Cropping](#)
- [GraphicsMagick/Image Scaling](#)
- [GraphicsMagick/Reduce Image](#)

85.169.1 Blog Entries

- [Create PDF from scanned images and skip blank pages](#)
- [Circle crop images in FileMaker with MBS Plugin](#)
- [QR Codes for Invoices in Switzerland](#)

85.169.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 29](#)
- [Ausgabe 5/2011, Seite 32](#)

Created 18th August 2014, last changed 21st December 2018.

85.170 GImage.GetXMP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	6.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetXMP"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns XML text or error.

Description

XMP data is a XML file with a given structure.

You can easily use the XML.Query function to get values.

Examples

Query XMP data from image:

```
Variable setzen [ $img; Wert:MBS( "GImage.NewImagesFromFile"; "/Users/cs/Desktop/test.tif" ) ]
```

```
Variable setzen [ $xmp; Wert:MBS( "GImage.GetXMP"; $img ) ]
```

```
Variable setzen [ $r; Wert:MBS( "GImage.Release"; $img ) ]
```

See also

- 85.119 GImage.GetFont 4497
- 85.141 GImage.GetPage 4521
- 85.153 GImage.GetSize 4534
- 85.166 GImage.GetType 4547
- 85.168 GImage.GetView 4549
- 85.191 GImage.New 4580
- 85.197 GImage.NewImagesFromFile 4590
- 85.214 GImage.Release 4612
- 85.299 GImage.SetXMP 4723
- 191.26 XML.Query 9293

85.170.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr2](#)

Created 8th June 2016, last changed 21st December 2018.

85.171 GImage.GetcolorMap

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.GetcolorMap"; ImageRef; index)

Parameters**ImageRef**

The image reference number.

1

index

Position of the entry. Zero based.

0

Result Returns a color as string.

Description**See also**

- 85.101 GImage.GetColorFuzz 4478
- 85.102 GImage.GetColorMapSize 4479
- 85.103 GImage.GetColorSpace 4480
- 85.301 GImage.SetcolorMap 4725

Created 18th August 2014, last changed 18th August 2014.

85.172 GImage.Hash

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.4	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Hash"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns text or error.

Description

Hash is returned as 64 characters being 1 or 0.

We convert image to 8x8, turn grayscale and check if pixels are above or below mean value.

This hash is quite immune against resizing, compression artifacts and hue changes.

You can use Text.LevenshteinDistance or Text.JaroWinklerDistance to compare two hashes.

Examples

Play with hash function:

```
Set Variable [ $ImageRef ; Value: MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Hash1 ; Value: MBS("GImage.Hash"; $ImageRef) ]
Set Variable [ $r ; Value: MBS( "GImage.Flip"; $ImageRef ) ]
Set Variable [ $Hash2 ; Value: MBS("GImage.Hash"; $ImageRef) ]
Set Variable [ $r ; Value: MBS( "GImage.Flop"; $ImageRef ) ]
Set Variable [ $Hash3 ; Value: MBS("GImage.Hash"; $ImageRef) ]
Set Variable [ $Error ; Value: MBS("GImage.Release"; $ImageRef) ]
Show Custom Dialog [ "Hash original: " & $hash1 & §& "Hash after 1x mirror: " & $hash2 & §& "Hash
after 2x mirror: " & ... ]
```

See also

- 85.64 GImage.Erase 4429
- 85.70 GImage.Flip 4438
- 85.76 GImage.Flop 4447
- 85.179 GImage.List 4565
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.209 GImage.Raise 4605
- 85.214 GImage.Release 4612

- 85.332 GImage.Wave 4762
- 164.43 Text.LevenshteinDistance 7836

85.172.1 Blog Entries

- [MBS FileMaker Plugin 9.4 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 10th September 2019, last changed 12nd September 2019.

85.173 GImage.ImageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	5.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.ImageCount")

Result Returns Number.

Description

This function allows you to check if you properly released all images from memory when your script is done. See also GImage.Release.

See also

- 85.81 GImage.Free 4455
- 85.214 GImage.Release 4612

Created 24th February 2015, last changed 21st December 2018.

85.174 GImage.Implode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Implode"; ImageRef; factor)

Parameters

ImageRef

The image reference number.

1

factor

The implode factor.

0

Result Returns "OK" on success.

Description

Examples

Applies the implode effect:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GImage.Implode";$Image; 5);
$Result = MBS("GImage.WriteToPNGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result)
```

See also

- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.224 GImage.Sample 4627
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.175 GImage.InvertChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	8.4	Yes	Yes	Yes	Yes	Yes

MBS("GImage.InvertChannel"; ImageRef; Channel)

Parameters

ImageRef

The image reference number.

1

Channel

Which channel to work with. Can be opacity, red, green or blue. The value rgb will apply effect to all three color channels.

"rgb"

Result Returns OK or error.

Description

All pixel values are negated.

This is same as MBS("GImage.MultiplyChannel"; ImageRef; Channel; -1; 0; 65535), but a bit faster.

Examples

Invert image:

```
Set Variable [ $image ; Value: MBS( "GImage.NewFromContainer"; Invert::Input ) ]
# each channel...
// Set Variable [ $r ; Value: MBS( "GImage.InvertChannel"; $image; "red" ) ]
// Set Variable [ $g ; Value: MBS( "GImage.InvertChannel"; $image ) ]
// Set Variable [ $b ; Value: MBS( "GImage.InvertChannel"; $image; "blue" ) ]
# all channels...
Set Variable [ $r ; Value: MBS( "GImage.InvertChannel"; $image; "rgb" ) ]
Set Field [ Invert::Output ; MBS( "GImage.WriteToPNGContainer"; $image; "output.png" ) ]
Set Variable [ $r ; Value: MBS( "GImage.Release"; $image ) ]
```

See also

- 85.31 GImage.BlurChannel 4377
- 85.178 GImage.LevelChannel 4563
- 85.189 GImage.MultiplyChannel 4576
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584

- 85.214 GImage.Release 4612
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Invert](#)

85.175.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr8](#)

Created 13th September 2018, last changed 11st November 2019.

85.176 GImage.IsGray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	8.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.IsGray"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns value or error.

Description

Returns 1 for gray or 0 if one pixel at least is not gray.

85.176.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr5](#)

Created 4th July 2018, last changed 28th November 2019.

85.177 GImage.Level

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Level"; ImageRef; blackPoint; whitePoint { ; midPoint })

Parameters**ImageRef**

The image reference number.

1

blackPoint

The black point.

0

whitePoint

The white point.

1.0

midPoint

Optional

The middle point.

1.0

Result Returns "OK" on success.

Description

Adjust the levels of the image by scaling the colors falling between specified white and black points to the full available quantum range. The parameters provided represent the black, mid (gamma), and white points. The black point specifies the darkest color in the image. Colors darker than the black point are set to zero. Mid point (gamma) specifies a gamma correction to apply to the image. White point specifies the lightest color in the image. Colors brighter than the white point are set to the maximum quantum value. The black and white point have the valid range 0 to MaxRGB while mid (gamma) has a useful range of 0 to ten.

See also

- 85.332 GImage.Wave

4762

Created 18th August 2014, last changed 18th August 2014.

85.178 GMImage.LevelChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.LevelChannel"; ImageRef; ChannelType; blackPoint; whitePoint { ; midPoint })

Parameters

ImageRef

The image reference number.

1

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

1

blackPoint

The black point.

0

whitePoint

The white point.

1.0

midPoint

Optional

The middle point.

1.0

Result Returns "OK" on success.

Description

Adjust the levels of the image by scaling the colors falling between specified white and black points to the full available quantum range. The parameters provided represent the black, mid (gamma), and white points. The black point specifies the darkest color in the image. Colors darker than the black point are set to zero. Mid point (gamma) specifies a gamma correction to apply to the image. White point specifies the lightest color in the image. Colors brighter than the white point are set to the maximum quantum value. The black and white point have the valid range 0 to MaxRGB while mid (gamma) has a useful range of 0 to ten.

See also

- 85.31 GMImage.BlurChannel 4377
- 85.48 GMImage.CopyChannel 4402
- 85.175 GMImage.InvertChannel 4559

85.179 GImage.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	8.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.List")

Result Returns list or error.

Description

Returns IDs for all images in memory. If this list is growing, you may have forgotten to call GImage.Release in your scripts.

Normally after all scripts are done, this list should be empty, except for static images you want to load once and reuse from time to time.

See also

- [85.172 GImage.Hash](#) 4555
- [85.209 GImage.Raise](#) 4605
- [85.214 GImage.Release](#) 4612

85.179.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr3](#)

Created 12nd February 2018, last changed 21st December 2018.

85.180 GImage.Magnify

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Magnify"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns "OK" on success.

Description

Increases image size to 200% .

Examples

Magnificates an image:

```
# load images...
Set Variable [ $Image ; Value: MBS( "GImage.NewFromFile"; "/Users/cs/Pictures/IMG_3625.jpg" ) ]
# put first on second
Set Variable [ $r ; Value: MBS( "GImage.Magnify"; $Image ) ]
# magnify image
Set Variable [ $r ; Value: MBS( "GImage.WriteToFile"; $Image; "/Users/cs/Pictures/output.jpg" ) ]
# free memory
Set Variable [ $r ; Value: MBS( "GImage.Release"; $Image ) ]
```

See also

- 85.185 GImage.Minify 4571
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612
- 85.336 GImage.WriteToFile 4768

Created 18th August 2014, last changed 11st December 2019.

85.181 GImage.Map

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Map"; ImageRef; mapImage { ; dither })

Parameters**ImageRef**

The image reference number.

1

mapImage

The image reference number.

2

dither

Optional

Optional, a boolean whether to dither.

0

Result Returns "OK" on success.

Description**See also**

- 85.36 GImage.Chop 4385
- 85.47 GImage.Copy 4401
- 85.49 GImage.Crop 4405
- 85.70 GImage.Flip 4438
- 85.76 GImage.Flop 4447
- 85.172 GImage.Hash 4555
- 85.191 GImage.New 4580
- 85.212 GImage.Read 4609
- 85.332 GImage.Wave 4762

Created 18th August 2014, last changed 18th August 2014.

85.182 GImage.MatteFloodfill

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.MatteFloodfill"; ImageRef; target; opacity; x; y; PaintMethod)

Parameters**ImageRef**

The image reference number.

1

target

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

opacity

The opacity value from 0 to 65535.

127*257

x

The X Position.

0

y

The Y Position.

0

PaintMethod

PointMethod = 0, ReplaceMethod = 1, FloodfillMethod = 2, FillToBorderMethod = 3, ResetMethod = 4

2

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 11st November 2019.

85.183 GImage.MeanErrorPerPixel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.MeanErrorPerPixel"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns the mean error per pixel as number.

Description

Created 18th August 2014, last changed 18th August 2014.

85.184 GImage.MedianFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.MedianFilter"; ImageRef; radius)

Parameters

ImageRef

The image reference number.

1

radius

The radius.

0.0

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.185 GImage.Minify

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Minify"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns "OK" on success.

Description

Reduces image size to 50% .

Examples

Shrinks image:

```
# load images...
Set Variable [ $Image ; Value: MBS( "GImage.NewFromFile"; "/Users/cs/Pictures/IMG_3625.jpg" ) ]
# minimize first
Set Variable [ $r ; Value: MBS( "GImage.Minify"; $Image ) ]
# and save to file
Set Variable [ $r ; Value: MBS( "GImage.WriteToFile"; $Image; "/Users/cs/Pictures/output.jpg" ) ]
# free memory
Set Variable [ $r ; Value: MBS( "GImage.Release"; $Image ) ]
```

See also

- 85.180 GImage.Magnify 4566
- 85.191 GImage.New 4580
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612
- 85.336 GImage.WriteToFile 4768

Created 18th August 2014, last changed 11st December 2019.

85.186 GImage.Modulate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Modulate"; ImageRef; brightness; saturation; hue)

Parameters

ImageRef

The image reference number.

1

brightness

The brightness value.

100

saturation

The saturation value.

0

hue

The hue value.

100

Result Returns "OK" on success.

Description

Modulation of saturation and brightness is as a ratio of the current value (100 for no change). Modulation of hue is an absolute rotation of -180 degrees to +180 degrees from the current position corresponding to an argument range of 0 to 200 (100 for no change).

Examples

Increase brightness:

```
MBS("GImage.Modulate"; $Image; 110; 100; 100);
```

Increase saturation:

```
MBS("GImage.Modulate"; $Image; 100; 110; 100);
```

Increase hue:

```
MBS("GImage.Modulate"; $Image; 100; 100; 110);
```

Modulate an image:

```
Set Variable [ $image ; Value: MBS("GImage.NewFromContainer"; MyTable::InputImage) ]
Set Variable [ $r ; Value: MBS ("GImage.Modulate" ; $image ; 150 ; 150 ; 150 ) ]
Set Field [ MyTable::Brightened ; MBS("GImage.WriteToJPEGContainer";$image) ]
```


85.186. *GMIMAGE.MODULATE* 4573

Set Variable [\$r ; Value: MBS("GMImage.Release"; \$image)]

See also

- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.221 GMImage.Rotate 4623
- 85.338 GMImage.WriteToJPEGContainer 4773

Created 18th August 2014, last changed 26th April 2019.

85.187 GImage.MontageGeometry

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.MontageGeometry"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns a geometry string.

Description

Created 18th August 2014, last changed 18th August 2014.

85.188 GImage.MotionBlur

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.MotionBlur"; ImageRef; radius; sigma; angle)

Parameters**ImageRef**

The image reference number.

1

radius

Specifies the radius of the Gaussian, in pixels, not counting the center pixel.

10

sigma

Specifies the standard deviation of the Laplacian, in pixels.

5

angle

specifies the angle the object appears to be coming from (zero degrees is from the right).

0

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.189 GImage.MultiplyChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	5.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.MultiplyChannel"; ImageRef; Channel; Factor { ; Add1; Add2 })

Parameters

ImageRef

The image reference number.

1

Channel

Which channel to work with. Can be opacity, red, green or blue. The value rgb will apply effect to all three color channels.

"rgb"

Factor

The multiplication factor. Range from -1.0 to 1.0.

0.1

Add1

Optional

The value to add before multiply. Usually between -65535 and 65535.

0

Add2

Optional

The value to add after multiply. Usually in range from -65535 to 65535.

65535*0.9

Result Returns OK or error.

Description

For every pixel component, we apply the formula:

$$\text{newValue} = ((\text{Add1} + \text{oldValue}) * \text{Factor}) + \text{Add2}$$

This can be used to change brightness or make opacity less/more transparent.

Examples

Multiplies existing opacity channel to make image 90% transparent:

```
// existing values * 0.1 and add 90% to the value to move to higher range.
```

```
MBS("GImage.MultiplyChannel"; $ImageRef; "opacity"; 0.1; 0; 255*0.9)
```

Invert image via multiply:

```
Set Variable [ $image ; Value: MBS( "GImage.NewFromContainer"; Invert::Input ) ]
```

```
# each channel...
```

```
// Set Variable [ $r ; Value: MBS( "GImage.MultiplyChannel"; $image; "red"; -1; 0; 65535) ]
```

```
// Set Variable [ $r ; Value: MBS( "GImage.MultiplyChannel"; $image; "green"; -1; 0; 65535) ]
```

85.189. GMIMAGE.MULTIPLYCHANNEL

4577

```
// Set Variable [ $r ; Value: MBS( "GMImage.MultiplyChannel"; $image; "blue"; -1; 0; 65535) ]  
# all channels...  
Set Variable [ $r ; Value: MBS( "GMImage.MultiplyChannel"; $image; "rgb"; -1; 0; 65535) ]  
Set Field [ Invert::Output ; MBS( "GMImage.WriteToPNGContainer"; $image; "output.png" ) ]  
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $image) ]
```

See also

- 85.175 GMImage.InvertChannel 4559
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.340 GMImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Annotate Image](#)
- [GraphicsMagick/Invert](#)

85.189.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 3th February 2015, last changed 11st November 2019.

85.190 GImage.Negate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Negate"; ImageRef; grayscale)

Parameters**ImageRef**

The image reference number.

1

grayscale

Set grayscale to only negate grayscale values in image.

1

Result Returns "OK" on success.

Description**Examples**

Negates an image:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GImage.Negate";$Image);
$Result = MBS("GImage.WriteToPNGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result)
```

See also

- 85.134 GImage.GetMatte 4513
- 85.141 GImage.GetPage 4521
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.216 GImage.Repage 4615
- 85.221 GImage.Rotate 4623
- 85.266 GImage.SetMatte 4680
- 85.312 GImage.Stegano 4739

85.190. *GMIMAGE.NEGATE*

4579

- 85.340 GImage.WriteToPNGContainer

4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.191 GImage.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.New"; Geometry; Color)

Parameters**Geometry**

The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns the ImageRef number on success.

Description

Please call GImage.Release later to free memory for this image.

Image reference numbers are starting at 18000 and counting up for each new image.

Examples

New white image:

```
MBS( "GImage.New"; "16x16"; "white" )
```

New red image:

```
MBS( "GImage.New"; "16x16"; "# FF0000" )
```

Create red square and save to container:

```
Set Variable [ $img; Value:MBS( "GImage.New"; "16x16"; "red" ) ]
Set Field [ test::test; MBS( "GImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
```

Build in a calculation:

```
SetVars ( [
```

```
img = MBS( "GImage.New"; "16x16"; "random" );
result = MBS( "GImage.WriteToPNGContainer"; img; "test.png" );
```



```
r = MBS( "GMImage.Release"; img)

]; result )
```

Create picture with red and 50% alpha:

```
# Create picture
Set Variable [ $img; Value:MBS( "GMImage.New"; "16x16"; "white" ) ]
# Add alpha channel
Set Variable [ $r; Value:MBS( "GMImage.SetMatte"; $img; 1 ) ]
# Set background color and fill
Set Variable [ $r; Value:MBS( "GMImage.SetBackgroundColor"; $img; "COLOR 65535 0 0 0.5" ) ]
Set Variable [ $r; Value:MBS( "GMImage.Erase"; $img ) ]
# Write to field
Set Variable [ $pic; Value:MBS( "GMImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Field [ test::r; $pic ]
# Cleanup
Set Variable [ $r; Value:MBS( "GMImage.Release"; $img ) ]
```

See also

- 85.212 GMImage.Read 4609
- 85.308 GMImage.SkewX 4734
- 85.339 GMImage.WriteToPDFContainer 4775
- 85.341 GMImage.WriteToTiffContainer 4780
- 93.2 ImageView.CreateWithControl 5092
- 93.3 ImageView.CreateWithSize 5094
- 120.6 OCR.GetText 6114
- 120.14 OCR.SetImage 6125
- 182.96 Window.SetTitleIcon 8653
- 190.4 XL.Book.AddPictureContainer 8857

Example Databases

- [Color Panel](#)
- [GraphicsMagick/Apply Mask](#)
- [GraphicsMagick/Clip Image](#)
- [GraphicsMagick/Colors](#)

- [GraphicsMagick/Create GIF](#)
- [GraphicsMagick/Drawing](#)
- [GraphicsMagick/GraphicsMagick Path Drawing](#)
- [GraphicsMagick/Reduce Image](#)
- [GraphicsMagick/Text Wrap](#)
- [Utility functions/Colors](#)

85.191.1 Blog Entries

- [Gradients in GraphicsMagick](#)
- [Circle crop images in FileMaker with MBS Plugin](#)

Created 18th August 2014, last changed 11st November 2019.

85.192 GImage.NewFromBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.NewFromBase64"; text)

Parameters

text

The text to decode.

Result Returns the ImageRef number on success.

Description

Please call GImage.Release later to free memory for this image.

This is useful for images you got from an email.

Image reference numbers are starting at 18000 and counting up for each new image.

See also

- 85.194 GImage.NewFromFile 4586
- 85.195 GImage.NewFromHex 4588
- 85.214 GImage.Release 4612

Example Databases

- [GraphicsMagick/Picture Text Encoding](#)

85.192.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr5](#)
- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 21st December 2018.

85.193 GImage.NewFromContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.NewFromContainer"; data)

Parameters

data

A value from a Container Field.

Result Returns the ImageRef number on success.

Description

Please call GImage.Release later to free memory for this image.

Image reference numbers are starting at 18000 and counting up for each new image.

Examples

Show with and height

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Width = MBS("GImage.GetWidth";$Image);
$Height = MBS("GImage.GetHeight";$Image);
$error = MBS("GImage.Release";$Image)
];
$Width & " x " & $Height )
```

Load from container:

```
MBS( "GImage.NewFromContainer"; test::test)
```

See also

- 85.196 GImage.NewImagesFromContainer 4589
- 85.318 GImage.Threshold 4745
- 85.328 GImage.Transparent 4756
- 85.329 GImage.Trim 4758
- 85.336 GImage.WriteToFile 4768
- 85.338 GImage.WriteToJPEGContainer 4773
- 85.339 GImage.WriteToPDFContainer 4775
- 85.341 GImage.WriteToTiffContainer 4780

85.193. <i>GMIMAGE.NEWFROMCONTAINER</i>	4585
• 93.2 <i>ImageView.CreateWithControl</i>	5092
• 93.3 <i>ImageView.CreateWithSize</i>	5094

Example Databases

- [GraphicsMagick/Image Cropping](#)
- [GraphicsMagick/Invert](#)
- [GraphicsMagick/Picture Text Encoding](#)
- [GraphicsMagick/Reduce Image](#)
- [GraphicsMagick/Rotate Orientation](#)
- [GraphicsMagick/Trim Picture Border](#)
- [GraphicsMagick/Trim Picture](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [OCR/OCR with DynaPDF](#)

85.193.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.5](#)
- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.5pr3](#)
- [New MBS FileMaker Plugin 9.0](#)
- [Neues MBS FileMaker Plugin 9.0](#)
- [MBS FileMaker Plugin, version 9.0pr6](#)
- [MBS FileMaker Plugin, version 8.6pr5](#)
- [Correct Image Orientation in FileMaker](#)
- [MBS FileMaker Plugin, version 8.3pr7](#)
- [Circle crop images in FileMaker with MBS Plugin](#)

85.193.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 29](#)
- [Ausgabe 5/2011, Seite 32](#)

Created 18th August 2014, last changed 21st December 2018.

85.194 GImage.NewFromFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.NewFromFile"; Path { ; Magick })

Parameters

Path

The platform specific file path.

"/test.jpg"

Magick

Optional

Available in MBS FileMaker Plugin 8.4 or newer.

The magick setting to define which codec to use.

"JPG"

Result Returns the ImageRef number on success.

Description

Please call GImage.Release later to free memory for this image.

Image reference numbers are starting at 18000 and counting up for each new image.

See also

- 85.106 GImage.GetCompressType 4484
- 85.111 GImage.GetDepth 4489
- 85.112 GImage.GetEXIFOrientation 4490
- 85.143 GImage.GetProfile 4524
- 85.166 GImage.GetType 4547
- 85.180 GImage.Magnify 4566
- 85.185 GImage.Minify 4571
- 85.195 GImage.NewFromHex 4588
- 85.209 GImage.Raise 4605
- 85.214 GImage.Release 4612

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)

85.194.1 Blog Entries

- [Create PDF from scanned images and skip blank pages](#)
- [MBS FileMaker Plugin, version 8.4pr4](#)
- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS Filemaker Plugin, version 4.4pr7](#)

Created 18th August 2014, last changed 21st December 2018.

85.195 GImage.NewFromHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.NewFromHex"; text)

Parameters

text

The text to decode.

Result Returns the ImageRef number on success.

Description

Please call GImage.Release later to free memory for this image.

This is useful for images you got from a database.

Image reference numbers are starting at 18000 and counting up for each new image.

See also

- 85.192 GImage.NewFromBase64 4583
- 85.194 GImage.NewFromFile 4586
- 85.214 GImage.Release 4612

Example Databases

- [GraphicsMagick/Picture Text Encoding](#)

85.195.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 21st December 2018.

85.196 GImage.NewImagesFromContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	5.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.NewImagesFromContainer"; data)

Parameters**data**

A value from a Container Field.

Result Returns list of image references or error.

Description

This is for loading multi image tiff files.

Please call GImage.Release later to free memory each image.

Image reference numbers are starting at 18000 and counting up for each new image.

See also

- 85.193 GImage.NewFromContainer 4584
- 85.197 GImage.NewImagesFromFile 4590
- 85.214 GImage.Release 4612
- 85.333 GImage.WriteImages 4763

Example Databases

- [GraphicsMagick/Split Multi Tiff](#)

85.196.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 11st March 2015, last changed 31st July 2019.

85.197 GImage.NewImagesFromFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	5.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.NewImagesFromFile"; Path)

Parameters

Path

The platform specific file path.

"/test.tif"

Result Returns list of image references or error.

Description

This is for loading multi image tiff files.

Please call GImage.Release later to free memory for each image.

Image reference numbers are starting at 18000 and counting up for each new image.

Examples

Loads from file and writes to other file:

```
Set Variable [ $img; Value:MBS("GImage.NewImagesFromFile"; "/Users/cs/Desktop/test.jpg") ]
If [ MBS("IsError") = 0 ]
Set Variable [ $r; Value:MBS( "GImage.WriteToFile"; $img; "/Users/cs/Desktop/test.tif" ) ]
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
End If
```

See also

- 85.170 GImage.GetXMP 4552
- 85.191 GImage.New 4580
- 85.196 GImage.NewImagesFromContainer 4589
- 85.214 GImage.Release 4612
- 85.333 GImage.WriteImages 4763
- 85.336 GImage.WriteToFile 4768
- 124.6 IsError 6266

85.197.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr8](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)

85.197. *GMIMAGE.NEWIMAGESFROMFILE*

4591

Created 11st March 2015, last changed 31st July 2019.

85.198 GImage.Normalize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Normalize"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns "OK" on success.

Description**See also**

- 85.43 GImage.Compare 4394
- 85.63 GImage.Equalize 4428
- 85.199 GImage.NormalizedMaxError 4593
- 85.310 GImage.Solarize 4736

Created 18th August 2014, last changed 18th August 2014.

85.199 GImage.NormalizedMaxError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.NormalizedMaxError"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns the normalized max error as number.

Description**Examples**

Compares two images:

```

Set Variable [ $img1; Value:MBS( "GImage.NewFromContainer"; test::Container1 ) ]
Set Variable [ $img2; Value:MBS( "GImage.NewFromContainer"; test::Container2 ) ]
Set Variable [ $result; Value:MBS( "GImage.Compare"; $img1; $img2 ) ]
If [ $result = 1 ]
Show Custom Dialog [ "Image Comparison"; "equal" ]
Else If [ $result = 0 ]
Set Variable [ $e; Value:MBS( "GImage.NormalizedMaxError"; $img1 ) ]
If [ $e 0 and $e <,03 ]
Show Custom Dialog [ "Image Comparison"; "very similar: " & MBS( "GImage.NormalizedMaxError";
$img1 ) ]
Else
Show Custom Dialog [ "Image Comparison"; "not equal" ]
End If
End If
Set Variable [ $r; Value:MBS("GImage.Release"; $img1) ]
Set Variable [ $r; Value:MBS("GImage.Release"; $img2) ]

```

See also

- 85.43 GImage.Compare 4394
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.198 GImage.Normalize 4592
- 85.200 GImage.NormalizedMeanError 4595
- 85.214 GImage.Release 4612

85.200 **GImage.NormalizedMeanError**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.NormalizedMeanError"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the normalized mean error as number.

Description

See also

- 85.199 [GImage.NormalizedMaxError](#)

4593

Created 18th August 2014, last changed 18th August 2014.

85.201 GImage.OilPaint

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.OilPaint"; ImageRef { ; radius })

Parameters

ImageRef

The image reference number.

1

radius

Optional

The radius.

3.0

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.202 GImage.Opacity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Opacity"; ImageRef; opacity)

Parameters

ImageRef

The image reference number.

1

opacity

The opacity, range from 0 to 255.

127

Result Returns "OK" on success.

Description

If the image pixels are opaque then they are set to the specified opacity value, otherwise they are blended with the supplied opacity value. The value of opacity ranges from 0 (completely opaque) to MaxRGB. The defines OpaqueOpacity and TransparentOpacity are available to specify completely opaque or completely transparent, respectively.

See also

- 85.203 GImage.Opaque

4598

85.202.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)

Created 18th August 2014, last changed 18th August 2014.

85.203 GImage.Opacity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Opacity"; ImageRef; opaqueColor; penColor)

Parameters

ImageRef

The image reference number.

1

opaqueColor

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

penColor

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

See also

- 85.202 GImage.Opacity 4597
- 85.216 GImage.Repage 4615

Created 18th August 2014, last changed 11st November 2019.

85.204 GImage.PopClipPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.PopClipPath"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns OK or error.

Description

See also

- 85.38 GImage.ClipPath 4387
- 85.206 GImage.PushClipPath 4601

Created 18th August 2014, last changed 18th August 2014.

85.205 GImage.PurgeTemporaryFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	5.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.PurgeTemporaryFiles")

Result Returns OK or error.

Description

The plugin checks if images are in use and refuses to purge if there are current image references.

If you process images in a batch and you finish your work, you can call this method after freeing the last image to clear temp files.

85.205.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr12](#)

Created 14th February 2015, last changed 14th February 2015.

85.206 GImage.PushClipPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.PushClipPath"; ImageRef; name)

Parameters**ImageRef**

The image reference number.

1

name

The name of the new clippath.

"Clip1"

Result Returns OK or error.

Description

Clip patch definition consists of subsequent drawing commands, terminated by GImage.PopClipPath.

See also

- 85.38 GImage.ClipPath 4387
- 85.204 GImage.PopClipPath 4599

Created 18th August 2014, last changed 18th August 2014.

85.207 GImage.Quantize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Quantize"; ImageRef { ; measureError })

Parameters

ImageRef

The image reference number.

1

measureError

Optional

Optionally, a boolean value.

0

Result Returns "OK" on success.

Description

See GImage.SetQuantizeColorSpace, GImage.SetQuantizeColors, GImage.SetQuantizeDither and GImage.SetQuantizeTreeDepth for options.

Examples

Quantize picture:

```
Set Variable [ $BigImageRef ; Value: MBS("GImage.NewFromContainer"; Test::BigImage) ]
# reduce to 20 colors, so we see the effect. Normally 256
Set Variable [ $Result ; Value: MBS( "GImage.SetQuantizeColors"; $BigImageRef; 20) // 256 ) ]
# Enable dithering, turn off to really see the effect
Set Variable [ $Result ; Value: MBS( "GImage.SetQuantizeDither"; $BigImageRef; 1 ) ]
# Quantize to palette colors
Set Variable [ $Result ; Value: MBS( "GImage.SetQuantizeColorSpace"; $BigImageRef; 4 /* palette */ )
]
# Do it!
Set Variable [ $Result ; Value: MBS("GImage.Quantize"; $BigImageRef) ]
# Type should now be 4 for palette
Set Variable [ $Result ; Value: MBS("GImage.GetType"; $BigImageRef) ]
# save as GIF
Set Field [ Test::Result ; MBS( "GImage.WriteToGIFContainer"; $BigImageRef ) ]
Set Variable [ $Error ; Value: MBS("GImage.Release";$BigImageRef) ]
```

See also

- 85.63 GImage.Equalize 4428
- 85.166 GImage.GetType 4547
- 85.191 GImage.New 4580

85.207. <i>GMIMAGE.QUANTIZE</i>	4603
• 85.193 GImage.NewFromContainer	4584
• 85.214 GImage.Release	4612
• 85.276 GImage.SetQuantizeColors	4695
• 85.275 GImage.SetQuantizeColorSpace	4694
• 85.277 GImage.SetQuantizeDither	4696
• 85.278 GImage.SetQuantizeTreeDepth	4697
• 85.337 GImage.WriteToGIFContainer	4771

Created 18th August 2014, last changed 21st December 2018.

85.208 GImage.QuantumDepth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	8.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.QuantumDepth")

Result Returns bit number.

Description

This is bit depth used to store one component of a pixel.
The MBS Plugin can be build with 8 or 16 bit.

85.208.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)

Created 25th May 2018, last changed 27th May 2018.

85.209 GImage.Raise

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Raise"; ImageRef { ; geometry; raisedFlag })

Parameters

ImageRef

The image reference number.

1

geometry

Optional

The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

raisedFlag

Optional

A boolean flag.

0

Result Returns "OK" on success.

Description

Examples

Raises the border of an image:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$ScaleResult = MBS("GImage.Raise";$Image);
$Result = MBS("GImage.WriteToPNGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result)
```

Raise an image:

```
# load images...
Set Variable [ $Image ; Value: MBS( "GImage.NewFromFile"; "/Users/cs/Pictures/IMG_3625.jpg") ]
# raise image
Set Variable [ $r ; Value: MBS( "GImage.Raise"; $Image) ]
# and save to file
Set Variable [ $r ; Value: MBS( "GImage.WriteToFile"; $Image; "/Users/cs/Pictures/output.jpg") ]
# free memory
Set Variable [ $r ; Value: MBS( "GImage.Release"; $Image) ]
```

See also

- 85.64 GImage.Erase 4429
- 85.179 GImage.List 4565
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.194 GImage.NewFromFile 4586
- 85.218 GImage.Resize 4619
- 85.223 GImage.Rows 4626
- 85.332 GImage.Wave 4762
- 85.336 GImage.WriteToFile 4768
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 11st December 2019.

85.210 GImage.RandomThreshold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.RandomThreshold"; ImageRef; thresholds)

Parameters

ImageRef

The image reference number.

1

thresholds

The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Result Returns "OK" on success.

Description

Changes the value of individual pixels based on the intensity of each pixel compared to a random threshold. The result is a low-contrast, two color image. The thresholds_ argument is a geometry containing LOWx-HIGH thresholds. If the string contains 2x2, 3x3, or 4x4, then an ordered dither of order 2, 3, or 4 will be performed instead. If a ChannelType argument is specified then only the specified channel is altered. This is a very fast alternative to 'quantize' based dithering.

Created 18th August 2014, last changed 18th August 2014.

85.211 GImage.RandomThresholdChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.RandomThresholdChannel"; ImageRef; thresholds; ChannelType)

Parameters

ImageRef

The image reference number.

1

thresholds

The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20".

For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

"100x200"

ChannelType

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

Result Returns "OK" on success.

Description

Changes the value of individual pixels based on the intensity of each pixel compared to a random threshold. The result is a low-contrast, two color image. The thresholds_ argument is a geometry containing LOWx-HIGH thresholds. If the string contains 2x2, 3x3, or 4x4, then an ordered dither of order 2, 3, or 4 will be performed instead. If a ChannelType argument is specified then only the specified channel is altered. This is a very fast alternative to 'quantize' based dithering.

Created 18th August 2014, last changed 18th August 2014.

85.212 GImage.Read

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	8.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Read"; ImageRef; Spec { ; Geometry })

Parameters

ImageRef

The image reference number.

1

Spec

The image specification. e.g. native file path

Geometry

Optional

The image size. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Result Returns OK or error.

Description

This allows you to directly specify the coders to use and include options.

e.g. gradient coder takes a range of two colors to create gradient.

Examples

Reads in a gradient image:

```
Set Variable [ $image ; Value: MBS( "GImage.New"; "200x200"; "white" ) ]
Set Variable [ $r ; Value: MBS( "GImage.Read"; $image; "gradient:# 20a0ff-# ffff00;" ) ]
// Set Variable [ $r ; Value: MBS( "GImage.Read"; $image; "gradient:white-black" ) ]
Set Field [ Contacts::Photo Container ; MBS( "GImage.WriteToPNGContainer"; $image; "gradient.png" ) ]
Set Variable [ $r ; Value: MBS( "GImage.Release"; $image) ]
```

See also

- 85.181 GImage.Map 4567
- 85.191 GImage.New 4580
- 85.214 GImage.Release 4612
- 85.216 GImage.Repage 4615
- 85.219 GImage.Roll 4621

- 85.223 GImage.Rows 4626
- 85.302 GImage.Shade 4726
- 85.306 GImage.Shear 4732
- 85.311 GImage.Spread 4738
- 85.340 GImage.WriteToPNGContainer 4777

85.212.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)
- [Gradients in GraphicsMagick](#)

Created 25th May 2018, last changed 21st December 2018.

85.213 GImage.ReduceNoise

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.ReduceNoise"; ImageRef { ; order })

Parameters**ImageRef**

The image reference number.

1

order

Optional

The order value.

0

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.214 GImage.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Release"; ImageRef)

(old name: GImage.Destroy)

Parameters

ImageRef

The image reference number.

1

Result Returns OK or error.

Description

Please call this function when you are done with the image to free memory.

The plugin doesn't know whether you need the image later, so it can't free the memory for you.

You can use GImage.ImageCount to find out how many images are open in memory.

On the long term, we will change all examples to use GImage.Release instead of GImage.Destroy and later deprecate GImage.Destroy and hide it in documentation.

You need to release all image references returned by functions GImage.New, GImage.NewFromBase64, GImage.NewFromContainer, GImage.NewFromFile, GImage.NewFromHex, GImage.NewImagesFromContainer, GImage.NewImagesFromFile, GImage.Copy, GImage.GetClipMask, MenuItem.GetImage, MenuItem.GetMixedStateImage, MenuItem.GetOffStateImage, MenuItem.GetOnStateImage, Twain.CurrentImage, and Barcode.Generate.

Examples

Show with and height

```
Let ( [
  $Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
  $Width = MBS("GImage.GetWidth";$Image);
  $Height = MBS("GImage.GetHeight";$Image);
  $Error = MBS("GImage.Destroy";$Image)
];
$Width & " x " & $Height )
```

Create red square and save to container:

```
Set Variable [ $img; Value:MBS( "GImage.New"; "16x16"; "red" ) ]
Set Field [ test::test; MBS( "GImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Variable [ $r; Value:MBS( "GImage.Destroy"; $img ) ]
```


85.214. *GMIMAGE.RELEASE* 4613

See also

- 85.190 *GImage.Negate* 4578
- 85.221 *GImage.Rotate* 4623
- 85.271 *GImage.SetPage* 4687
- 112.54 *MenuItem.GetMixedStateImage* 5921
- 112.55 *MenuItem.GetOffStateImage* 5922
- 112.56 *MenuItem.GetOnStateImage* 5923
- 120.6 *OCR.GetText* 6114
- 169.7 *Twain.CurrentImage* 7994
- 190.4 *XL.Book.AddPictureContainer* 8857
- 190.270 *XL.Sheet.SetPictureWithSize* 9222

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)

85.214.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr5](#)

Created 18th August 2014, last changed 31st July 2019.

85.215 GImage.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	7.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.ReleaseAll")

(old name: GImage.DestroyAll)

Result Returns OK or error.

Description

On the long term, we will change all examples to use GImage.ReleaseAll instead of GImage.DestroyAll and later deprecate GImage.DestroyAll and hide it in documentation.

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

See also

- 85.214 GImage.Release

4612

Created 2nd January 2017, last changed 9th January 2020.

85.216 GMImage.Repage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Repage"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns OK or error.

Description**See also**

- 85.43 GMImage.Compare 4394
- 85.141 GMImage.GetPage 4521
- 85.190 GMImage.Negate 4578
- 85.203 GMImage.Opaque 4598
- 85.212 GMImage.Read 4609
- 85.214 GMImage.Release 4612
- 85.218 GMImage.Resize 4619
- 85.221 GMImage.Rotate 4623
- 85.271 GMImage.SetPage 4687

85.216.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr6](#)

Created 28th December 2018, last changed 28th December 2018.

85.217 GImage.ReplaceColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.ReplaceColor"; ImageRef; color1; color2 { ; Tolerance })

Parameters

ImageRef

The image reference number.

1

color1

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

color2

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 0 1 0"

Tolerance

Optional

The tolerance to allow for a match. Pass 1 to have one channel be matched if value is one away, e.g. 128 is accepted if searched for 127 or 129. Default is 0.

1

Result Returns OK or error.

Description

Match is exact, so no fuzzy matching.

Examples

Replaces a nearly white color with red:

```
Set Variable [ $img; Wert:MBS( "GImage.NewFromContainer"; Replace Colors::Input) ]
Set Variable [ $r; Wert:MBS( "GImage.ReplaceColor"; $img; "COLOR 65278 65278 65278"; "COLOR 65535 0 0") ]
Set Variable [ Replace Colors::Output; MBS( "GImage.WriteToPNGContainer"; $img; "logo.png" ) ]
Set Variable [ $r; Wert:MBS( "GImage.Release"; $img ) ]
```

Replace white with transparent:

```

Set Variable [ $BigImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
# Set type to RGBA
Set Variable [ $Result; Value:MBS("GImage.SetType"; $BigImageRef; 7) ]
# Replace white with transparent
Set Variable [ $Result; Value:MBS("GImage.ReplaceColor"; $BigImageRef; "white"; "transparent"; 10) ]
# save as PNG
Set Field [ Test::Result; MBS( "GImage.WriteToPNGContainer"; $BigImageRef ) ]
Set Variable [ $Error; Value:MBS("GImage.Release";$BigImageRef) ]

```

Trims space around image and make transparent:

```

Set Variable [ $BigImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result; Value:MBS( "GImage.SetBackgroundColor"; $BigImageRef; "RGB 1 0 0" ) ]
Set Variable [ $Result; Value:MBS("GImage.Trim"; $BigImageRef) ]
Set Variable [ $Result; Value:MBS( "GImage.SetColorFuzz"; $BigImageRef; 5 ) ]
Set Variable [ $Result; Value:MBS( "GImage.SetMatte"; $BigImageRef; 1 ) ]
Set Variable [ $farbe; Value:MBS( "GImage.GetPixelColor"; $BigImageRef; 0; 0 ) ]
Set Variable [ $Result; Value:MBS( "GImage.ReplaceColor"; $BigImageRef; $farbe; "RGB 1 1 1"; 5) ]
Set Field [ Test::Result; MBS( "GImage.WriteToPNGContainer"; $BigImageRef ) ]
Set Variable [ $Error; Value:MBS("GImage.Release";$BigImageRef) ]

```

Replace black in black & white picture with red:

```

Set Variable [ $image ; Value: MBS( "GImage.NewFromContainer"; test::Input ) ]
Set Variable [ $r ; Value: MBS( "GImage.ReplaceColor"; $image; "black"; "red"; 1) ]
Set Field [ test::Output ; MBS( "GImage.WriteToPNGContainer"; $image) ]
Set Variable [ $r ; Value: MBS( "GImage.Release"; $image) ]

```

See also

- 43.4 Barcode.Generate 1143
- 85.72 GImage.FloodFillColorXY 4442
- 85.135 GImage.GetMatteColor 4514
- 85.214 GImage.Release 4612
- 85.233 GImage.SetBackgroundColor 4639
- 85.239 GImage.SetColorFuzz 4647
- 85.267 GImage.SetMatteColor 4682
- 85.296 GImage.SetType 4718
- 85.328 GImage.Transparent 4756
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Trim Picture Border](#)

85.217.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr10](#)

85.217.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 27

Created 6th September 2014, last changed 11st November 2019.

85.218 GImage.Resize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Resize"; ImageRef; geometry { ; FilterTypes; Blur })

Parameters

ImageRef

The image reference number.

1

geometry

The rectangle to use. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

FilterTypes

Optional

Which filter to use. Can be one of Undefined, Point, Box, Triangle, Hermite, Hanning, Hamming, Blackman, Gaussian, Quadratic, Cubic, Catrom, Mitchell, Lanczos, Bessel, or Sinc. "Cubic"

Blur

Optional

The blur radius. Only used if filter is specified.

3

Result Returns OK or error.

Description

If filter or blur is not specified, we use image defaults.

Examples

Resize image to 1000x1000 with cubic filter:

```
Set Variable [ $BigImageRef ; Value: MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result ; Value: MBS("GImage.Resize"; $BigImageRef; "1000x1000"; "Cubic"; 0) ]
Set Field [ Test::Result ; MBS( "GImage.WriteToPNGContainer"; $BigImageRef; "test.png" ) ]
Set Variable [ $Error ; Value: MBS("GImage.Destroy";$BigImageRef) ]
```

See also

- 85.23 GImage.Affine 4364
- 85.153 GImage.GetSize 4534
- 85.190 GImage.Negate 4578
- 85.191 GImage.New 4580

- 85.193 GImage.NewFromContainer 4584
- 85.209 GImage.Raise 4605
- 85.214 GImage.Release 4612
- 85.216 GImage.Repage 4615
- 85.221 GImage.Rotate 4623
- 85.283 GImage.SetSize 4703

85.218.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr6](#)

Created 28th December 2018, last changed 13th May 2019.

85.219 GMImage.Roll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Roll"; ImageRef; Geometry)

Parameters**ImageRef**

The image reference number.

1

Geometry

The point. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "+20+20"

Result Returns "OK" on success.

Description**See also**

- 85.47 GMImage.Copy 4401
- 85.76 GMImage.Flop 4447
- 85.212 GMImage.Read 4609
- 85.220 GMImage.Rollxy 4622
- 85.223 GMImage.Rows 4626
- 85.344 GMImage.Zoom 4784

Created 18th August 2014, last changed 18th August 2014.

85.220 GImage.Rollxy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Rollxy"; ImageRef; columns; rows)

Parameters**ImageRef**

The image reference number.

1

columns

The column index.

0

rows

The row index.

0

Result Returns "OK" on success.

Description**See also**

- 85.219 GImage.Roll 4621
- 85.221 GImage.Rotate 4623

Created 18th August 2014, last changed 18th August 2014.

85.221 GImage.Rotate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Rotate"; ImageRef; degrees)

Parameters

ImageRef

The image reference number.

1

degrees

The angle in degrees.

90

Result Returns "OK" on success.

Description

Positive angles rotate the image in a clockwise direction while negative angles rotate counter-clockwise.

Examples

Rotates image by 90 degree to right

```
Let (
[
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$RotateResult = MBS("GImage.Rotate"; $Image; 90);
$Result = MBS("GImage.WriteToPNGContainer"; $Image);
$DestroyResult = MBS("GImage.Release"; $Image)
];
$Result)
```

Custom function to rotate image:

```
/*
MBS_Image_Rotate (Picture; rotation)
```

Picture: Container 'MyTable::MyField'
rotation: Grad ° - numeric Value, positiv OR negative

Benjamin Fehr, EfficientBizz GmbH
<http://www.efficientbizz.com>
/

```
Let (
[
```

```

$image = MBS("GMImage.NewFromContainer"; Picture);
$rotateResult = MBS("GMImage.Rotate"; $image; rotation);
$result = MBS("GMImage.WriteToPNGContainer"; $image);
$destroyResult = MBS("GMImage.Release"; $image)
];

$result)

```

See also

- 85.141 GMImage.GetPage 4521
- 85.186 GMImage.Modulate 4572
- 85.190 GMImage.Negate 4578
- 85.191 GMImage.New 4580
- 85.214 GMImage.Release 4612
- 85.220 GMImage.Rolxy 4622
- 85.222 GMImage.Rotating 4625
- 85.271 GMImage.SetPage 4687
- 85.323 GMImage.TransformRotation 4751
- 85.340 GMImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Correct Image Orientation](#)
- [GraphicsMagick/GraphicsMagick Sample](#)

85.221.1 Blog Entries

- [Correct Image Orientation in FileMaker](#)

Created 18th August 2014, last changed 21st December 2018.

85.222 GImage.Rotating

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Rotating"; ImageRef; angle)

Parameters

ImageRef

The image reference number.

1

angle

The rotation angle.

10

Result Returns OK or error.

Description

See also

- 85.221 GImage.Rotate 4623
- 85.226 GImage.Scoring 4632

Created 18th August 2014, last changed 18th August 2014.

85.223 GImage.Rows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Rows"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns the image height.

Description**See also**

- 85.47 GImage.Copy 4401
- 85.191 GImage.New 4580
- 85.209 GImage.Raise 4605
- 85.212 GImage.Read 4609
- 85.219 GImage.Roll 4621
- 85.344 GImage.Zoom 4784

Example Databases

- [GraphicsMagick/Annotate Image](#)

Created 18th August 2014, last changed 18th August 2014.

85.224 GMImage.Sample

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Sample"; ImageRef; Geometry)

Parameters**ImageRef**

The image reference number.

1

Geometry

The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "300x200"

Result Returns "OK" on success.

Description**See also**

- 85.43 GMImage.Compare 4394
- 85.174 GMImage.Implode 4558
- 85.225 GMImage.Scale 4628
- 85.303 GMImage.Sharpen 4727

Created 18th August 2014, last changed 18th August 2014.

85.225 GImage.Scale

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Scale"; ImageRef; Geometry)

Parameters

ImageRef

The image reference number.

1

Geometry

The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "300x200"

Result Returns "OK" on success.

Description

GraphicsMagick has added a number of qualifiers to the standard geometry string for use when resizing images. The form of an extended geometry string is "<width>x<height>{ +- } <xoffset>{ +- } <yoffset>{ % } { ! } { < } { > } ". Extended geometry strings should only be used when resizing an image. Using an extended geometry string for other applications may cause the API call to fail. The available qualifiers are shown in the following table:

Qualifier	Description
%	Interpret width and height as a percentage of the current size.
!	Resize to width and height exactly, losing original aspect ratio.
<	Resize only if the image is smaller than the geometry specification.
>	Resize only if the image is greater than the geometry specification.

Examples

Scales the image to 50% with calculating ourself

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Width = MBS("GImage.GetWidth";$Image);
$Height = MBS("GImage.GetHeight";$Image);
$Width = $Width/2;
$Height = $Height/2;
$ScaleResult = MBS("GImage.Scale";$Image; $Width & "x" & $Height);
$Result = MBS("GImage.WriteToPNGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
```



```
$Result)
```

Scales the image to 50% easily

```
Let ( [
$Image = MBS("GUIImage.NewFromContainer"; GraphicsMagick::image);
$ScaleResult = MBS("GUIImage.Scale";$Image; "50% ");
$Result = MBS("GUIImage.WriteToPNGContainer"; $Image);
$error = MBS("GMimage.Release";$Image)
] ;
$Result)
```

Scales the image down to 640 pixel width, if it is bigger

```
Let ( [
$Image = MBS("GUIImage.NewFromContainer"; GraphicsMagick::image);
$ScaleResult = MBS("GUIImage.Scale";$Image; "640>");
$Result = MBS("GUIImage.WriteToPNGContainer"; $Image);
$error = MBS("GMimage.Release";$Image)
] ;
$Result)
```

Scale as script:

```
Set Variable [ $Image; Value:MBS("GUIImage.NewFromContainer"; Image Scaling::InputImage) ]
Set Variable [ $r; Value:MBS("GUIImage.Scale"; $Image; "800x600") ]
Set Field [ Image Scaling::Result; MBS("GUIImage.WriteToPNGContainer"; $Image) ]
Set Variable [ $r; Value: MBS("GMimage.Release"; $Image) ]
```

Download picture and scale it down:

```
Set Variable [ $curl ; Value: MBS("CURL.New") ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionURL"; $curl; MIX::URL) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionFollowLocation"; $curl; 1) ]
Set Variable [ $r ; Value: MBS("CURL.SetOptionMaxRedirs"; $curl; 3) ]
Set Variable [ $result ; Value: MBS("CURL.Perform"; $curl) ]
Set Variable [ $debug ; Value: MBS( "CURL.GetDebugAsText"; $curl) ]
If [ $result = "OK" ]
Set Variable [ $Image ; Value: MBS( "CURL.GetResultAsContainer"; $curl) ]
Set Variable [ $ImageRef ; Value: MBS("GUIImage.NewFromContainer"; $image) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $r ; Value: MBS("GUIImage.Scale";$ImageRef; "256x256>") ]
Set Variable [ $ScaledImage ; Value: MBS("GUIImage.WriteToJPEGContainer"; $ImageRef) ]
If [ MBS("IsError") = 0 ]
Set Field [ MIX::Image ; $ScaledImage ]
End If
Set Variable [ $r ; Value: MBS("GMimage.Release";$ImageRef) ]
```

End If

End If

Set Variable [\$r ; Value: MBS(”CURL.Cleanup”; \$curl)]

See also

- [85.80 GImage.Frame](#) 4453
- [85.191 GImage.New](#) 4580
- [85.214 GImage.Release](#) 4612
- [85.226 GImage.Scaling](#) 4632
- [85.281 GImage.SetResolutionUnits](#) 4700
- [85.302 GImage.Shade](#) 4726
- [85.332 GImage.Wave](#) 4762
- [85.338 GImage.WriteToJPEGContainer](#) 4773
- [85.340 GImage.WriteToPNGContainer](#) 4777
- [124.6 IsError](#) 6266

Example Databases

- [Barcode/Swiss QR-Code for invoices ISO 20022](#)
- [GraphicsMagick/Clip Image](#)
- [GraphicsMagick/Create GIF](#)
- [GraphicsMagick/GraphicsMagick Sample](#)
- [GraphicsMagick/Image Scaling](#)
- [GraphicsMagick/Reduce Image](#)
- [GraphicsMagick/SVG to PNG](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

85.225.1 Blog Entries

- [Circle crop images in FileMaker with MBS Plugin](#)
- [QR Codes for Invoices in Switzerland](#)
- [Filemaker Magazine](#)
- [Filemaker Notes](#)

85.225.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 29
- Ausgabe 5/2011, Seite 33
- Ausgabe 5/2011, Seite 32

Created 18th August 2014, last changed 21st December 2018.

85.226 GImage.Scaling

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Scaling"; ImageRef; x; y)

Parameters**ImageRef**

The image reference number.

1

x

The x scaling factor.

1

y

The y scaling factor.

1

Result Returns OK or error.

Description**See also**

- 85.222 GImage.Rotating 4625
- 85.225 GImage.Scale 4628

Created 18th August 2014, last changed 18th August 2014.

85.227 GImage.Segment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Segment"; ImageRef; clusterThreshold; smoothingThreshold)

Parameters

ImageRef

The image reference number.

1

clusterThreshold

the cluster threshold

1.0

smoothingThreshold

the smoothing threshold

1.5

Result Returns "OK" on success.

Description

Segment (coalesce similar image components) by analyzing the histograms of the color components and identifying units that are homogeneous with the fuzzy c-means technique. Also uses QuantizeColorSpace and Verbose image attributes

See also

- 85.66 GImage.Extent 4431
- 85.119 GImage.GetFont 4497
- 85.242 GImage.SetComment 4651
- 85.249 GImage.SetDepth 4660
- 85.256 GImage.SetFont 4668
- 85.282 GImage.SetScene 4702
- 85.312 GImage.Stegano 4739

Created 18th August 2014, last changed 18th August 2014.

85.228 GImage.SetAdjoin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetAdjoin"; ImageRef; flag)

Parameters**ImageRef**

The image reference number.

1

flag

a boolean value

0

Result Returns "OK" on success.

Description**See also**

- 85.87 GImage.GetAdjoin 4462
- 85.251 GImage.SetEndian 4662

Created 18th August 2014, last changed 18th August 2014.

85.229 GImage.SetAnimationDelay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetAnimationDelay"; ImageRef; delay)

Parameters**ImageRef**

The image reference number.

1

delay

Time in 1/100ths of a second

10

Result Returns "OK" on success.

Description

Time in 1/100ths of a second which must expire before displaying the next image in an animated sequence.

Time in 1/100ths of a second (0 to 65535) which must expire before displaying the next image in an animated sequence. This option is useful for regulating the animation of a sequence of GIF images within Netscape.

See also

- 85.88 GImage.GetAnimationDelay

4463

Example Databases

- [GraphicsMagick/Create GIF](#)

Created 18th August 2014, last changed 11st September 2017.

85.230 GImage.SetAnimationIterations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetAnimationIterations"; ImageRef; iterations)

Parameters

ImageRef

The image reference number.

1

iterations

the Number of iterations to loop an animation for

10

Result Returns "OK" on success.

Description

See also

- 85.89 GImage.GetAnimationIterations

4464

Example Databases

- [GraphicsMagick/Create GIF](#)

Created 18th August 2014, last changed 18th August 2014.

85.231 GImage.SetAntiAlias

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetAntiAlias"; ImageRef; flag)

Parameters

ImageRef

The image reference number.

1

flag

a boolean value

0

Result Returns "OK" on success.

Description

See also

- 85.90 GImage.GetAntiAlias

4465

Created 18th August 2014, last changed 18th August 2014.

85.232 GImage.SetAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetAttribute"; ImageRef; name; value { ; Encoding })

Parameters

ImageRef

The image reference number.

1

name

The name of the attribute.

value

The value of the attribute.

Encoding

Optional

The text encoding. Default is UTF-8.

UTF8

Result Returns "OK" on success.

Description

GraphicsMagick does not support writing attributes back to files, so this only stores new value in memory for GImage.GetAttribute to query.

See also

- 85.91 GImage.GetAttribute 4466

85.232.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

Created 18th August 2014, last changed 18th April 2019.

85.233 GImage.SetBackgroundColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetBackgroundColor"; ImageRef; color)

Parameters**ImageRef**

The image reference number.

1

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description**Examples**

Create picture with red and 50% alpha:

```
# Create picture
Set Variable [ $img; Value:MBS( "GImage.New"; "16x16"; "white" ) ]
# Add alpha channel
Set Variable [ $r; Value:MBS( "GImage.SetMatte"; $img; 1 ) ]
# Set background color and fill
Set Variable [ $r; Value:MBS( "GImage.SetBackgroundColor"; $img; "COLOR 65535 0 0 0.5" ) ]
Set Variable [ $r; Value:MBS( "GImage.Erase"; $img ) ]
# Write to field
Set Variable [ $pic; Value:MBS( "GImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Field [ test::r; $pic ]
# Cleanup
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
```

See also

- 85.64 GImage.Erase 4429
- 85.94 GImage.GetBackgroundColor 4471
- 85.95 GImage.GetBackgroundTexture 4472
- 85.142 GImage.GetPixelColor 4522

- 85.191 GImage.New 4580
- 85.214 GImage.Release 4612
- 85.239 GImage.SetColorFuzz 4647
- 85.266 GImage.SetMatte 4680
- 85.329 GImage.Trim 4758
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Trim Picture](#)

Created 18th August 2014, last changed 11st November 2019.

85.234 **GImage.SetBackgroundTexture**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetBackgroundTexture"; ImageRef; Name)

Parameters

ImageRef

The image reference number.

1

Name

The image name

Result Returns "OK" on success.

Description

See also

- 85.94 GImage.GetBackgroundColor 4471
- 85.95 GImage.GetBackgroundTexture 4472
- 85.233 GImage.SetBackgroundColor 4639

Created 18th August 2014, last changed 18th August 2014.

85.235 GImage.SetBorderColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetBorderColor"; ImageRef; color)

Parameters

ImageRef

The image reference number.

1

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

You can set this and call GImage.Border to add border with given color.

Examples

Add whitespace on top and bottom of image:

```
Let ( [
```

```
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$r = MBS( "GImage.SetBorderColor"; $Image; "white" );
$r = MBS("GImage.Border";$Image; "0x100");
$result = MBS("GImage.WriteToPNGContainer"; $Image);
```

```
$r = MBS("GMImage.Release";$Image)
];
```

```
$Result)
```

See also

- 85.96 GImage.GetBorderColor 4473
- 85.97 GImage.GetBoxColor 4474
- 85.135 GImage.GetMatteColor 4514
- 85.142 GImage.GetPixelColor 4522

85.235. <i>GMIMAGE.SETBORDERCOLOR</i>	4643
• 85.155 GImage.GetStrokeColor	4536
• 85.191 GImage.New	4580
• 85.214 GImage.Release	4612
• 85.236 GImage.SetBoxColor	4644
• 85.267 GImage.SetMatteColor	4682
• 85.285 GImage.SetStrokeColor	4706

Created 18th August 2014, last changed 11st November 2019.

85.236 GImage.SetBoxColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetBoxColor"; ImageRef; color)

Parameters**ImageRef**

The image reference number.

1

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description**See also**

- 85.96 GImage.GetBorderColor 4473
- 85.97 GImage.GetBoxColor 4474
- 85.116 GImage.GetFillColor 4494
- 85.142 GImage.GetPixelColor 4522
- 85.235 GImage.SetBorderColor 4642
- 85.253 GImage.SetFillColor 4664
- 85.267 GImage.SetMatteColor 4682
- 85.272 GImage.SetPixelColor 4688
- 85.285 GImage.SetStrokeColor 4706

Created 18th August 2014, last changed 11st November 2019.

85.237 GImage.SetCacheThreshold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetCacheThreshold"; threshold)

Parameters**threshold**

The Pixel cache threshold in megabytes

1

Result Returns "OK" on success.

Description

Once this memory threshold is exceeded, all subsequent pixels cache operations are to/from disk. This setting is shared by all Image objects.

See also

- 85.1 GImage.AdaptiveThreshold

4337

Created 18th August 2014, last changed 11st March 2017.

85.238 GImage.SetClassType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetClassType"; ImageRef; classtype)

Parameters**ImageRef**

The image reference number.

1

classtype

The class type number

2

Result Returns "OK" on success.

Description

setting a DirectClass image to PseudoClass will result in the loss of color information if the number of colors in the image is greater than the maximum palette size (either 256 or 65536 entries depending on the value of QuantumDepth when ImageMagick was built).

See also

- 85.99 GImage.GetClassType 4476
- 85.244 GImage.SetCompressType 4653
- 85.255 GImage.SetFilterType 4667

Created 18th August 2014, last changed 18th August 2014.

85.239 GMImage.SetColorFuzz

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.SetColorFuzz"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

a float number.

1.0

Result Returns "OK" on success.

Description

Used for example with GMImage.Trim function.

Range is from 0 to 65535 with zero being no fuzz and 65535 to match all colors.

Useful range may be around 50*257.

Examples

Trim a picture:

```
Set Variable [ $BigImageRef; Value:MBS("GMImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result; Value:MBS( "GMImage.SetBackgroundColor"; $BigImageRef; "white" ) ]
Set Variable [ $Result; Value:MBS( "GMImage.SetColorFuzz"; $BigImageRef; 100 ) ]
Set Variable [ $Result; Value:MBS("GMImage.Trim"; $BigImageRef) ]
Set Field [ Test::Result; MBS( "GMImage.WriteToJPEGContainer"; $BigImageRef ) ]
Set Variable [ $Error; Value:MBS("GMImage.Release";$BigImageRef) ]
```

Make a picture transparent:

```
# load a picture
Set Variable [ $image; Value:MBS( "GMImage.NewFromContainer"; Test::BigImage) ]
# white in RGB
Set Variable [ $f; Value:"white" ]
# Replace all white with nearly white
Set Variable [ $r; Value:MBS( "GMImage.ReplaceColor"; $image; $f; "white"; 0 ) ]
# now flood fill it with 5 as tolerance
Set Variable [ $r; Value:MBS( "GMImage.SetColorFuzz"; $image; 5 ) ]
Set Variable [ $r; Value:MBS( "GMImage.FloodFillColorXY"; $image; 0; 0; $f ) ]
# now set back fuzz and make transparent using white
Set Variable [ $r; Value:MBS( "GMImage.SetColorFuzz"; $image; 0 ) ]
Set Variable [ $imagecolor; Value:MBS( "GMImage.Transparent"; $image; $f ) ]
# write back to container
```

```
Set Field [ Test::Result; MBS( "GMImage.WriteToPNGContainer"; $image; ) ]  
# cleanup  
Set Variable [ $Error; Value:MBS("GMImage.Release";$image) ]
```

See also

- 85.72 GMImage.FloodFillColorXY 4442
- 85.142 GMImage.GetPixelColor 4522
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.217 GMImage.ReplaceColor 4616
- 85.233 GMImage.SetBackgroundColor 4639
- 85.301 GMImage.SetcolorMap 4725
- 85.241 GMImage.SetColorSpace 4650
- 85.328 GMImage.Transparent 4756
- 85.329 GMImage.Trim 4758

Example Databases

- [GraphicsMagick/Trim Picture Border](#)

Created 18th August 2014, last changed 11st November 2019.

85.240 GImage.SetColorMapSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetColorMapSize"; ImageRef; colorMapSize)

Parameters**ImageRef**

The image reference number.

1

colorMapSize

The size number.

256

Result Returns "OK" on success.

Description**See also**

- 85.102 GImage.GetColorMapSize 4479
- 85.103 GImage.GetColorSpace 4480
- 85.301 GImage.SetcolorMap 4725
- 85.241 GImage.SetColorSpace 4650

Created 18th August 2014, last changed 18th August 2014.

85.241 GImage.SetColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetColorSpace"; ImageRef; ColorSpaceType)

Parameters

ImageRef

The image reference number.

1

ColorSpaceType

UndefinedColorspace = 0, RGBColorspace = 1 (Plain old RGB colorspace), GRAYColorspace = 2 (Plain old full-range grayscale), TransparentColorspace = 3 (RGB but preserve matte channel during quantize), OHTAColorspace = 4, XYZColorspace = 5 (CIE XYZ), YCCColorspace = 6 (Kodak PhotoCD PhotoYCC), YIQColorspace = 7, YPbPrColorspace = 8, YUVColorspace = 9, CMYKColorspace = 10 (Cyan, magenta, yellow, black, alpha), sRGBColorspace = 11 (Kodak PhotoCD sRGB), HSLColorspace = 12 (Hue, saturation, luminosity), HWBColorspace = 13 (Hue, whiteness, blackness), LABColorspace = 14 (LAB colorspace not supported yet other than via lcms), CineonLogRGBColorspace = 15 (RGB data with Cineon Log scaling, 2.048 density range), Rec601LumaColorspace = 16 (Luma (Y) according to ITU-R 601), Rec601YCbCrColorspace = 17 (YCbCr according to ITU-R 601), Rec709LumaColorspace = 18 (Luma (Y) according to ITU-R 709), Rec709YCbCrColorspace = 19 (YCbCr according to ITU-R 709)

1

Result Returns "OK" on success.

Description

See also

- 85.102 GImage.GetColorMapSize 4479
- 85.103 GImage.GetColorSpace 4480
- 85.239 GImage.SetColorFuzz 4647
- 85.301 GImage.SetcolorMap 4725
- 85.240 GImage.SetColorMapSize 4649

Created 18th August 2014, last changed 18th August 2014.

85.242 GImage.SetComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetComment"; ImageRef; comment)

Parameters**ImageRef**

The image reference number.

1

comment

The new comment.

"Hello World"

Result Returns "OK" on success.

Description**See also**

- 85.104 GImage.GetComment 4482
- 85.105 GImage.GetCompose 4483
- 85.227 GImage.Segment 4633
- 85.243 GImage.SetCompose 4652
- 85.256 GImage.SetFont 4668

Created 18th August 2014, last changed 18th August 2014.

85.243 GImage.SetCompose

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetCompose"; ImageRef; CompositeOperator)

Parameters

ImageRef

The image reference number.

1

CompositeOperator

UndefinedCompositeOp = 0, OverCompositeOp = 1, InCompositeOp = 2, OutCompositeOp = 3, AtopCompositeOp = 4, XorCompositeOp = 5, PlusCompositeOp = 6, MinusCompositeOp = 7, AddCompositeOp = 8, SubtractCompositeOp = 9, DifferenceCompositeOp = 10, MultiplyCompositeOp = 11, BumpmapCompositeOp = 12, CopyCompositeOp = 13, CopyRedCompositeOp = 14, CopyGreenCompositeOp = 15, CopyBlueCompositeOp = 16, CopyOpacityCompositeOp = 17, ClearCompositeOp = 18, DissolveCompositeOp = 19, DisplaceCompositeOp = 20, ModulateCompositeOp = 21, ThresholdCompositeOp = 22, NoCompositeOp = 23, DarkenCompositeOp = 24, LightenCompositeOp = 25, HueCompositeOp = 26, SaturateCompositeOp = 27, ColorizeCompositeOp = 28, LuminizeCompositeOp = 29, CopyCyanCompositeOp = 32, CopyMagentaCompositeOp = 33, CopyYellowCompositeOp = 34, CopyBlackCompositeOp = 35, DivideCompositeOp = 36.

1

Result Returns "OK" on success.

Description

See also

- 85.44 GImage.Composite 4396
- 85.104 GImage.GetComment 4482
- 85.105 GImage.GetCompose 4483
- 85.167 GImage.GetVerbose 4548
- 85.242 GImage.SetComment 4651
- 85.297 GImage.SetVerbose 4721

Created 18th August 2014, last changed 18th August 2014.

85.244 GMImage.SetCompressType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.SetCompressType"; ImageRef; CompressionType)

Parameters

ImageRef

The image reference number.

1

CompressionType

UndefinedCompression = 0, NoCompression = 1, BZipCompression = 2, FaxCompression = 3, Group4Compression = 4, JPEGCompression = 5, LosslessJPEGCompression = 6, LZWCompression = 7, RLECompression = 8, ZipCompression = 9

1

Result Returns "OK" on success.

Description

Examples

Convert image to 1 bit TIFF:

```
# Load from container
$image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);

# make black and white with threshold
$result = MBS("GMImage.Threshold"; $image; 127);

# mark as monochrome image
$result = MBS("GMImage.SetMonochrome"; $image; 1);

# set type to 1 for black/white
$result = MBS("GMImage.SetType"; $image; 1);

# set to use TIFF for compression
$result = MBS("GMImage.SetMagick"; $image; "TIFF");

# set to use CCITT 4 Fax compression
$result = MBS("GMImage.SetCompressType"; $image; 4);

# and write to a file
$result = MBS("GMImage.WriteToFile"; $image; "/tmp/test.tif");

# cleanup
$error = MBS("GMImage.Release"; $image)
```

See also

- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.238 GImage.SetClassType 4646
- 85.265 GImage.SetMagick 4678
- 85.269 GImage.SetMonochrome 4684
- 85.296 GImage.SetType 4718
- 85.318 GImage.Threshold 4745
- 85.336 GImage.WriteToFile 4768
- 85.341 GImage.WriteToTiffContainer 4780

Created 18th August 2014, last changed 21st December 2018.

85.245 GImage.SetDebug

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetDebug"; ImageRef; flag)

Parameters**ImageRef**

The image reference number.

1

flag

A boolean value.

1

Result Returns "OK" on success.

Description**See also**

- 85.107 GImage.GetDebug 4485
- 85.111 GImage.GetDepth 4489
- 85.249 GImage.SetDepth 4660
- 85.263 GImage.SetLabel 4676

Created 18th August 2014, last changed 18th August 2014.

85.246 GImage.SetDefineSet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetDefineSet"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns "OK" on success.

Description

Tagged image format define. Similar to the get/setdefineValue() functions except that passing the flag value 'true' creates a value-less define with that format and key. Passing the flag value 'false' removes any existing matching definition. The method returns 'true' if a matching key exists, and 'false' if no matching key exists.

See also

- 85.108 GImage.GetDefineSet 4486
- 85.247 GImage.SetDefineValue 4657

Created 18th August 2014, last changed 18th August 2014.

85.247 GImage.SetDefineValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetDefineValue"; ImageRef; magick; key; value)

Parameters**ImageRef**

The image reference number.

1

magick

The name of the codec

key

A key name as string

value

The value as string

Result Returns "OK" on success.

Description

Tagged image format define (set/access coder-specific option) The magick option specifies the coder the define applies to. The key option provides the key specific to that coder. The value option provides the value to set (if any). See the get/set defineSet functions if the key must be removed entirely.

See also

- 85.109 GImage.GetDefineValue 4487
- 85.246 GImage.SetDefineSet 4656

Created 18th August 2014, last changed 18th August 2014.

85.248 GImage.SetDensity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetDensity"; ImageRef; geometry)

Parameters

ImageRef

The image reference number.

1

geometry

The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Result Returns "OK" on success.

Description

Please use GImage.SetResolutionUnits to define units.

Examples

Loads image and writes back with new DPI setting:

```
Set Variable [ $ImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result; Value:MBS("GImage.SetDensity"; $ImageRef; "300x300") ]
Set Variable [ $Result; Value:MBS("GImage.SetQuality"; $ImageRef; 90) ]
Set Field [ Test::Result; MBS( "GImage.WriteToJPEGContainer"; $ImageRef ) ]
Set Variable [ $Error; Value:MBS("GImage.Release";$ImageRef) ]
```

Set resolution and remove all metadata with different resolution:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image );
$r = MBS("GImage.SetDensity"; $Image; "72x72") ;
$r = MBS( "GImage.SetProfile"; $Image; "EXIF"; "" ) ;
$r = MBS( "GImage.SetProfile"; $Image; "IPTC"; "" ) ;
$r = MBS( "GImage.SetProfile"; $Image; "XMP"; "" ) ;
$Result = MBS("GImage.WriteToJPEGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result
)
```

85.248. *GMIMAGE.SETDENSITY* 4659

See also

- 85.144 *GMImage.GetQuality* 4525
- 85.191 *GMImage.New* 4580
- 85.193 *GMImage.NewFromContainer* 4584
- 85.214 *GMImage.Release* 4612
- 85.251 *GMImage.SetEndian* 4662
- 85.273 *GMImage.SetProfile* 4690
- 85.274 *GMImage.SetQuality* 4692
- 85.281 *GMImage.SetResolutionUnits* 4700
- 85.338 *GMImage.WriteToJPEGContainer* 4773
- 85.339 *GMImage.WriteToPDFContainer* 4775

Example Databases

- [GraphicsMagick/Apply Mask](#)
- [GraphicsMagick/SVG to PNG](#)

85.248.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr3](#)

Created 18th August 2014, last changed 21st December 2018.

85.249 GImage.SetDepth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetDepth"; ImageRef; depth)

Parameters**ImageRef**

The image reference number.

1

depth

The bit depth.

8

Result Returns "OK" on success.

Description**See also**

- 85.107 GImage.GetDebug 4485
- 85.111 GImage.GetDepth 4489
- 85.169 GImage.GetWidth 4550
- 85.227 GImage.Segment 4633
- 85.245 GImage.SetDebug 4655
- 85.248 GImage.SetDensity 4658
- 85.256 GImage.SetFont 4668
- 85.266 GImage.SetMatte 4680
- 85.296 GImage.SetType 4718

Created 18th August 2014, last changed 18th August 2014.

85.250 GImage.SetEXIFOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	6.5	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetEXIFOrientation"; ImageRef; Orientation)

Parameters

ImageRef

The image reference number.

1

Orientation

The orientation value: UndefinedOrientation = 0, TopLeftOrientation = 1, (Line direction: Left to right, Frame Direction: Top to bottom) TopRightOrientation = 2, (Line direction: Right to left, Frame Direction: Top to bottom) BottomRightOrientation = 3, (Line direction: Right to left, Frame Direction: Bottom to top) BottomLeftOrientation = 4, (Line direction: Left to right, Frame Direction: Bottom to top) LeftTopOrientation = 5, (Line direction: Top to bottom, Frame Direction: Left to right) RightTopOrientation = 6, (Line direction: Top to bottom, Frame Direction: Right to left) RightBottomOrientation = 7, (Line direction: Bottom to top, Frame Direction: Right to left) LeftBottomOrientation = 8 (Line direction: Bottom to top, Frame Direction: Left to right)

1

Result Returns OK or error.

Description

Changing orientation may need to set orientation via GImage.SetOrientation and GImage.SetEXIFOrientation. With a JPEG you have orientation both in JPEG header and in EXIF metadata.

See also

- 85.112 GImage.GetEXIFOrientation 4490
- 85.138 GImage.GetOrientation 4517
- 85.270 GImage.SetOrientation 4685

Example Databases

- [GraphicsMagick/Correct Image Orientation](#)

85.250.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr4](#)
- [Correct Image Orientation in FileMaker](#)
- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 30th November 2016, last changed 5th December 2016.

85.251 GImage.SetEndian

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetEndian"; ImageRef; endian)

Parameters**ImageRef**

The image reference number.

1

endian

UndefinedEndian = 0, LSBEndian = 1, MSBEndian = 2

1

Result Returns "OK" on success.

Description**See also**

- 85.113 GImage.GetEndian 4491
- 85.228 GImage.SetAdjoin 4634
- 85.248 GImage.SetDensity 4658
- 85.265 GImage.SetMagick 4678

Created 18th August 2014, last changed 18th August 2014.

85.252 GMImage.SetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.SetFileName"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

Result Returns "OK" on success.

Description**See also**

- 85.28 GMImage.BaseFilename 4373
- 85.114 GMImage.GetFileName 4492
- 85.115 GMImage.GetFileSize 4493
- 85.117 GMImage.GetFillRule 4495
- 85.165 GMImage.GetTileName 4546
- 85.254 GMImage.SetFillRule 4666
- 85.255 GMImage.SetFilterType 4667
- 85.295 GMImage.SetTileName 4717

Created 18th August 2014, last changed 18th August 2014.

85.253 GImage.SetFillColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetFillColor"; ImageRef; color)

Parameters

ImageRef

The image reference number.

1

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

Examples

Set red fill color:

```
MBS( "GImage.SetFillColor"; $img; "red" )
```

Draws a circle in a rectangle in a circle:

```
Set Variable [ $img; Value:MBS( "GImage.New"; "100x100"; "white" ) ]
Set Variable [ $r; Value:MBS( "GImage.SetFillColor"; $img; "RGB 1 0 0" ) ]
Set Variable [ $s; Value:MBS( "GImage.SetStrokeColor"; $img; "RGB 0 0 1" ) ]
Set Variable [ $c; Value:MBS( "GImage.DrawCircle"; $img; 50; 50; 50; 90 ) ]
Set Variable [ $r; Value:MBS( "GImage.DrawRectangle"; $img; 22; 22; 100-22; 100-22 ) ]
Set Variable [ $c; Value:MBS( "GImage.DrawCircle"; $img; 50; 50; 50; 100-22 ) ]
Set Field [ test::test; MBS( "GImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
```

See also

- 85.97 GImage.GetBoxColor 4474
- 85.117 GImage.GetFillRule 4495
- 85.142 GImage.GetPixelColor 4522
- 85.191 GImage.New 4580

85.253. <i>GMIMAGE.SETFILLCOLOR</i>	4665
• 85.214 <i>GImage.Release</i>	4612
• 85.254 <i>GImage.SetFillRule</i>	4666
• 85.267 <i>GImage.SetMatteColor</i>	4682
• 85.285 <i>GImage.SetStrokeColor</i>	4706
• 85.336 <i>GImage.WriteToFile</i>	4768
• 85.340 <i>GImage.WriteToPNGContainer</i>	4777

Example Databases

- [DynaPDF/Click Points](#)
- [GraphicsMagick/Annotate Image](#)
- [GraphicsMagick/Clip Image](#)
- [GraphicsMagick/Drawing](#)
- [GraphicsMagick/Find Pixels](#)
- [GraphicsMagick/GraphicsMagick Path Drawing](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)

85.253.1 Blog Entries

- [Circle crop images in FileMaker with MBS Plugin](#)
- [Face detection via CoreImage in FileMaker](#)

Created 18th August 2014, last changed 11st November 2019.

85.254 GImage.SetFillRule

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetFillRule"; ImageRef; fillrule)

Parameters**ImageRef**

The image reference number.

1

fillrule

UndefinedRule = 0, EvenOddRule = 1, NonZeroRule = 2

2

Result Returns "OK" on success.

Description**See also**

- 85.114 GImage.GetFileName 4492
- 85.115 GImage.GetFileSize 4493
- 85.116 GImage.GetFillColor 4494
- 85.117 GImage.GetFillRule 4495
- 85.252 GImage.SetFileName 4663
- 85.253 GImage.SetFillColor 4664
- 85.295 GImage.SetTileName 4717

Example Databases

- [GraphicsMagick/GraphicsMagick Path Drawing](#)

Created 18th August 2014, last changed 18th August 2014.

85.255 GImage.SetFilterType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetFilterType"; ImageRef; FilterType)

Parameters

ImageRef

The image reference number.

1

FilterType

The filter type. Possible values: UndefinedFilter = 0, PointFilter = 1, BoxFilter = 2, TriangleFilter = 3, HermiteFilter = 4, HanningFilter = 5, HammingFilter = 6, BlackmanFilter = 7, GaussianFilter = 8, QuadraticFilter = 9, CubicFilter = 10, CatromFilter = 11, MitchellFilter = 12, LanczosFilter = 13, BesselFilter = 14, SincFilter = 15

2

Result Returns "OK" on success.

Description

Version 9.0 or newer lets you pass filter by name instead of number.

Examples

Set filter type to 1:

```
MBS( "GImage.SetFilterType"; $cross; 1 )
```

See also

- 85.118 GImage.GetFilterType 4496
- 85.238 GImage.SetClassType 4646
- 85.252 GImage.SetFileName 4663

Created 18th August 2014, last changed 27th December 2018.

85.256 GImage.SetFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetFont"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

Result Returns "OK" on success.

Description**See also**

- 85.78 GImage.FontTypeMetrics 4450
- 85.119 GImage.GetFont 4497
- 85.266 GImage.SetMatte 4680
- 85.271 GImage.SetPage 4687
- 85.279 GImage.SetQuiet 4698
- 85.282 GImage.SetScene 4702
- 85.283 GImage.SetSize 4703
- 85.298 GImage.SetView 4722
- 85.299 GImage.SetXMP 4723
- 85.312 GImage.Stegano 4739

Example Databases

- [GraphicsMagick/Annotate Image](#)
- [GraphicsMagick/Text Wrap](#)

Created 18th August 2014, last changed 18th August 2014.

85.257 GImage.SetFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetFontSize"; ImageRef; pointsize)

Parameters**ImageRef**

The image reference number.

1

pointsize

A floating point number.

20.0

Result Returns "OK" on success.

Description**See also**

- 85.24 GImage.Annotate 4365
- 85.78 GImage.FontTypeMetrics 4450
- 85.120 GImage.GetFontSize 4498

Example Databases

- [GraphicsMagick/Annotate Image](#)
- [GraphicsMagick/Text Wrap](#)

Created 18th August 2014, last changed 18th August 2014.

85.258 GImage.SetGifDisposeMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetGifDisposeMethod"; ImageRef; disposeMethod)

Parameters**ImageRef**

The image reference number.

1

disposeMethod

The dispose Method number.

Result Returns "OK" on success.

Description

Disposal	Description
0	No disposal specified.
1	Do not dispose between frames.
2	Overwrite frame with background color from header.
3	Overwrite with previous frame.

See also

- 85.122 GImage.GetGifDisposeMethod 4500

Example Databases

- [GraphicsMagick/Create GIF](#)

Created 18th August 2014, last changed 23th November 2016.

85.259 GImage.SetICCColorProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetICCColorProfile"; ImageRef; data)

Parameters

ImageRef

The image reference number.

1

data

a Container field value with an embedded file containing the profile.

Result Returns "OK" on success.

Description

Supplied via a Blob since GraphicsMagick do not currently support formatting this data structure directly. If there is not already an ICC color profile, the profile is merely attached to the image without transforming the pixels. If there is already an ICC color profile (the source profile), the pixels are translated according to the source and target profiles, and the existing profile is replaced with the target profile.

Also see GImage.SetRenderingIntent, which allows specifying the rendering intent if the profile is executed. Specifications for ICC color profiles and their usage are available from the International Color Consortium for the format of ICC color profiles.

Examples

Removes an existing profile:

```
MBS("GImage.SetICCColorProfile"; $Image; "")
```

Assigns new profile from container:

```
MBS("GImage.SetICCColorProfile"; $Image; MyTable::ProfileContainer);
```

See also

- 85.124 GImage.GetICCColorProfile 4503
- 85.260 GImage.SetIPTCProfile 4673
- 85.280 GImage.SetRenderingIntent 4699
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Reduce Image](#)

85.259.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)

Created 18th August 2014, last changed 10th October 2017.

85.260 GImage.SetIPTCProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetIPTCProfile"; ImageRef; data)

Parameters**ImageRef**

The image reference number.

1

data

a Container field value with an embedded file containing the profile.

Result Returns "OK" on success.

Description**See also**

- 85.125 GImage.GetIPTCProfile 4504
- 85.143 GImage.GetProfile 4524
- 85.259 GImage.SetICColorProfile 4671
- 85.273 GImage.SetProfile 4690

85.260.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)

Created 18th August 2014, last changed 30th August 2018.

85.261 GImage.SetInterlaceType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetInterlaceType"; ImageRef; Interlace)

Parameters**ImageRef**

The image reference number.

1

Interlace

UndefinedInterlace = 0, NoInterlace = 1, LineInterlace = 2, PlaneInterlace = 3, PartitionInterlace = 4

1

Result Returns "OK" on success.

Description**See also**

- 85.127 GImage.GetInterlaceType

4506

Created 18th August 2014, last changed 18th August 2014.

85.262 GImage.SetIsValid

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetIsValid"; ImageRef; flag)

Parameters**ImageRef**

The image reference number.

1

flag

A boolean value.

1

Result Returns "OK" on success.

Description**See also**

- 85.128 GImage.GetIsValid 4507
- 85.274 GImage.SetQuality 4692

Created 18th August 2014, last changed 18th August 2014.

85.263 GImage.SetLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetLabel"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

Result Returns "OK" on success.

Description**See also**

- 85.131 GImage.GetLabel 4510
- 85.141 GImage.GetPage 4521
- 85.245 GImage.SetDebug 4655
- 85.266 GImage.SetMatte 4680
- 85.271 GImage.SetPage 4687
- 85.279 GImage.SetQuiet 4698
- 85.283 GImage.SetSize 4703
- 85.296 GImage.SetType 4718
- 85.298 GImage.SetView 4722

Created 18th August 2014, last changed 18th August 2014.

85.264 GImage.SetLineWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetLineWidth"; ImageRef; lineWidth)

Parameters**ImageRef**

The image reference number.

1

lineWidth

The line width.

5.0

Result Returns "OK" on success.

Description**See also**

- 85.24 GImage.Annotate 4365
- 85.53 GImage.DrawArc 4410
- 85.54 GImage.DrawCircle 4412
- 85.55 GImage.DrawEllipse 4414
- 85.56 GImage.DrawLine 4416
- 85.58 GImage.DrawRectangle 4419
- 85.132 GImage.GetLineWidth 4511
- 85.284 GImage.SetStrokeAntiAlias 4704
- 85.291 GImage.SetStrokeWidth 4713
- 85.336 GImage.WriteToFile 4768

Example Databases

- [DynaPDF/Click Points](#)
- [GraphicsMagick/Drawing](#)
- [GraphicsMagick/GraphicsMagick Path Drawing](#)

Created 18th August 2014, last changed 18th August 2014.

85.265 GImage.SetMagick

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetMagick"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

Result Returns "OK" on success.

Description**Examples**

Convert image to 1 bit TIFF:

```
# Load from container
$image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);

# make black and white with threshold
$result = MBS("GImage.Threshold"; $image; 127);

# mark as monochrome image
$result = MBS("GImage.SetMonochrome"; $image; 1);

# set type to 1 for black/white
$result = MBS("GImage.SetType"; $image; 1);

# set to use TIFF for compression
$result = MBS("GImage.SetMagick"; $image; "TIFF");

# set to use CCITT 4 Fax compression
$result = MBS("GImage.SetCompressType"; $image; 4);

# and write to a file
$result = MBS("GImage.WriteToFile"; $image; "/tmp/test.tif");

# cleanup
$error = MBS("GImage.Release"; $image)
```

See also

85.265. <i>GMIMAGE.SETMAGICK</i>	4679
• 85.193 GImage.NewFromContainer	4584
• 85.214 GImage.Release	4612
• 85.244 GImage.SetCompressType	4653
• 85.251 GImage.SetEndian	4662
• 85.269 GImage.SetMonochrome	4684
• 85.271 GImage.SetPage	4687
• 85.274 GImage.SetQuality	4692
• 85.318 GImage.Threshold	4745
• 85.335 GImage.WriteToContainer	4766
• 85.336 GImage.WriteToFile	4768

Example Databases

- [GraphicsMagick/Export Images](#)

Created 18th August 2014, last changed 21st December 2018.

85.266 GImage.SetMatte

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetMatte"; ImageRef; flag)

Parameters

ImageRef

The image reference number.

1

flag

A boolean value.

1

Result Returns "OK" on success.

Description

Examples

Removes alpha channel:

```
MBS("GImage.SetMatte"; $image; 0)
```

Adds an alpha channel:

```
MBS("GImage.SetMatte"; $image; 1)
```

Create picture with red and 50% alpha:

```
# Create picture
Set Variable [ $img; Value:MBS( "GImage.New"; "16x16"; "white" ) ]
# Add alpha channel
Set Variable [ $r; Value:MBS( "GImage.SetMatte"; $img; 1 ) ]
# Set background color and fill
Set Variable [ $r; Value:MBS( "GImage.SetBackgroundColor"; $img; "COLOR 65535 0 0 0.5" ) ]
Set Variable [ $r; Value:MBS( "GImage.Erase"; $img ) ]
# Write to field
Set Variable [ $pic; Value:MBS( "GImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Field [ test::r; $pic ]
# Cleanup
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
```

See also

- 85.214 GImage.Release

85.266. <i>GMIMAGE.SETMATTE</i>	4681
• 85.233 GImage.SetBackgroundColor	4639
• 85.249 GImage.SetDepth	4660
• 85.265 GImage.SetMagick	4678
• 85.271 GImage.SetPage	4687
• 85.279 GImage.SetQuiet	4698
• 85.282 GImage.SetScene	4702
• 85.283 GImage.SetSize	4703
• 85.296 GImage.SetType	4718
• 85.340 GImage.WriteToPNGContainer	4777

Example Databases

- [GraphicsMagick/Trim Picture Border](#)

Created 18th August 2014, last changed 11st November 2019.

85.267 GImage.SetMatteColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetMatteColor"; ImageRef; color)

Parameters**ImageRef**

The image reference number.

1

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description**See also**

- 85.135 GImage.GetMatteColor 4514
- 85.142 GImage.GetPixelColor 4522
- 85.155 GImage.GetStrokeColor 4536
- 85.217 GImage.ReplaceColor 4616
- 85.235 GImage.SetBorderColor 4642
- 85.236 GImage.SetBoxColor 4644
- 85.253 GImage.SetFillColor 4664
- 85.272 GImage.SetPixelColor 4688
- 85.276 GImage.SetQuantizeColors 4695
- 85.285 GImage.SetStrokeColor 4706

Created 18th August 2014, last changed 11st November 2019.

85.268 GImage.SetModulusDepth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetModulusDepth"; ImageRef; modulusDepth)

Parameters**ImageRef**

The image reference number.

1

modulusDepth

The new value.

8

Result Returns "OK" on success.

Description

The minimum number of bits required to support red/green/blue components without loss of accuracy.

See also

- 85.136 GImage.GetModulusDepth

4515

Created 18th August 2014, last changed 18th August 2014.

85.269 GImage.SetMonochrome

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetMonochrome"; ImageRef; flag)

Parameters**ImageRef**

The image reference number.

1

flag

A boolean value.

1

Result Returns "OK" on success.

Description**See also**

- 85.137 GImage.GetMonochrome 4516
- 85.244 GImage.SetCompressType 4653
- 85.265 GImage.SetMagick 4678
- 85.296 GImage.SetType 4718
- 85.318 GImage.Threshold 4745
- 85.336 GImage.WriteToFile 4768
- 85.341 GImage.WriteToTiffContainer 4780

Created 18th August 2014, last changed 18th August 2014.

85.270 GImage.SetOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetOrientation"; ImageRef; Orientation)

Parameters

ImageRef

The image reference number.

1

Orientation

The orientation value: UndefinedOrientation = 0, TopLeftOrientation = 1, (Line direction: Left to right, Frame Direction: Top to bottom) TopRightOrientation = 2, (Line direction: Right to left, Frame Direction: Top to bottom) BottomRightOrientation = 3, (Line direction: Right to left, Frame Direction: Bottom to top) BottomLeftOrientation = 4, (Line direction: Left to right, Frame Direction: Bottom to top) LeftTopOrientation = 5, (Line direction: Top to bottom, Frame Direction: Left to right) RightTopOrientation = 6, (Line direction: Top to bottom, Frame Direction: Right to left) RightBottomOrientation = 7, (Line direction: Bottom to top, Frame Direction: Right to left) LeftBottomOrientation = 8 (Line direction: Bottom to top, Frame Direction: Left to right)

1

Result Returns "OK" on success.

Description

Examples

Set orientation

```
# load a picture
Set Variable [ $image; Value:MBS( "GImage.NewFromContainer"; Test::BigImage) ]
# Set orientation to 1
Set Variable [ $r; Value:MBS( "GImage.SetOrientation"; $image; 1) ]
# write back to container
Set Field [ Test::Result; MBS( "GImage.WriteToPNGContainer"; $image;) ]
# cleanup
Set Variable [ $Error; Value:MBS("GImage.Release";$image) ]
```

See also

- 85.112 GImage.GetEXIFOrientation 4490
- 85.138 GImage.GetOrientation 4517
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584

- 85.214 GImage.Release 4612
- 85.250 GImage.SetEXIFOrientation 4661
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Correct Image Orientation](#)
- [GraphicsMagick/Rotate Orientation](#)

85.270.1 Blog Entries

- [Correct Image Orientation in FileMaker](#)

Created 18th August 2014, last changed 21st December 2018.

85.271 GImage.SetPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetPage"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns a geometry string.

Description**See also**

- 85.141 GImage.GetPage 4521
- 85.265 GImage.SetMagick 4678
- 85.266 GImage.SetMatte 4680
- 85.279 GImage.SetQuiet 4698
- 85.282 GImage.SetScene 4702
- 85.283 GImage.SetSize 4703
- 85.296 GImage.SetType 4718
- 85.298 GImage.SetView 4722
- 85.299 GImage.SetXMP 4723
- 85.312 GImage.Stegano 4739

Created 18th August 2014, last changed 18th August 2014.

85.272 GImage.SetPixelColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetPixelColor"; ImageRef; x; y; color)

Parameters

ImageRef

The image reference number.

1

x

The horizontal position. Range from 0 to GImage.GetWidth-1.

0

y

The vertical position. Range from 0 to GImage.GetHeight-1.

0

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

See also

- 85.96 GImage.GetBorderColor 4473
- 85.97 GImage.GetBoxColor 4474
- 85.135 GImage.GetMatteColor 4514
- 85.142 GImage.GetPixelColor 4522
- 85.169 GImage.GetWidth 4550
- 85.235 GImage.SetBorderColor 4642
- 85.236 GImage.SetBoxColor 4644
- 85.267 GImage.SetMatteColor 4682
- 85.285 GImage.SetStrokeColor 4706
- 85.329 GImage.Trim 4758

85.272. *GMIMAGE.SETPIXELCOLOR*

4689

Created 18th August 2014, last changed 11st November 2019.

85.273 GImage.SetProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetProfile"; ImageRef; name; data)

Parameters

ImageRef

The image reference number.

1

name

The string with the name of the profile.

"IPTC"

data

The container field value with the embedded profile file.

Result Returns "OK" on success.

Description

Remove the profile by passing an empty container field. Valid names are "*", "8BIM", "ICM", "IPTC", "EXIF", or a user/format-defined profile name.

Examples

Remove XMP:

```
Set Variable [ $Result; Value:MBS( "GImage.SetProfile"; $imageRef; "XMP"; "" ) ]
```

Remove IPTC:

```
Set Variable [ $Result; Value:MBS( "GImage.SetProfile"; $imageRef; "IPTC"; "" ) ]
```

Remove EXIF:

```
Set Variable [ $Result; Value:MBS( "GImage.SetProfile"; $imageRef; "EXIF"; "" ) ]
```

Clear all profiles:

```
Set Variable [ $Image ; Value: MBS("GImage.NewFromContainer"; MyTable::BMPContainer) ]
# remove metadata
Set Variable [ $Result; Value:MBS( "GImage.SetProfile"; $Image; "EXIF"; "" ) ]
Set Variable [ $Result; Value:MBS( "GImage.SetProfile"; $Image; "IPTC"; "" ) ]
Set Variable [ $Result; Value:MBS( "GImage.SetProfile"; $Image; "XMP"; "" ) ]
# write back as JPEG
Set Variable [ $r ; Value: MBS("GImage.SetQuality";$Image; 90) ]
Set Field [ MyTable::JPEGContainer ; MBS("GImage.WriteToJPEGContainer"; $Image) ]
```

85.273. *GMIMAGE.SETPROFILE* 4691
Set Variable [\$r ; Value: MBS("GMImage.Release";\$Image)]

See also

- 85.125 GMImage.GetIPTCProfile 4504
- 85.143 GMImage.GetProfile 4524
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.194 GMImage.NewFromFile 4586
- 85.214 GMImage.Release 4612
- 85.248 GMImage.SetDensity 4658
- 85.260 GMImage.SetIPTCProfile 4673
- 85.274 GMImage.SetQuality 4692
- 85.338 GMImage.WriteToJPEGContainer 4773

85.273.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)

Created 18th August 2014, last changed 21st December 2018.

85.274 GImage.SetQuality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetQuality"; ImageRef; quality)

Parameters

ImageRef

The image reference number.

1

quality

a number in range of 0 to 100.

75

Result Returns "OK" on success.

Description

Examples

Recompresses the image with JPEG compressor and a really bad quality:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GImage.SetQuality"; $Image; 5);
$Result = MBS("GImage.WriteToJPEGContainer"; $Image);
$error = MBS("GImage.Release"; $Image)
] ;
$Result)
```

Converts to JPEG with 90% compression:

```
Set Variable [ $ImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result; Value:MBS("GImage.SetQuality"; $ImageRef; 90) ]
Set Field [ Test::Result; MBS( "GImage.WriteToJPEGContainer"; $ImageRef ) ]
Set Variable [ $Error; Value:MBS("GImage.Release"; $ImageRef) ]
```

See also

- 70.395 DynaPDF.SetJPEGQuality 3172
- 85.110 GImage.GetDensity 4488
- 85.144 GImage.GetQuality 4525
- 85.193 GImage.NewFromContainer 4584
- 85.248 GImage.SetDensity 4658

85.274. <i>GMIMAGE.SETQUALITY</i>	4693
• 85.262 GImage.SetIsValid	4675
• 85.265 GImage.SetMagick	4678
• 85.273 GImage.SetProfile	4690
• 85.279 GImage.SetQuiet	4698
• 85.338 GImage.WriteToJPEGContainer	4773

Example Databases

- [GraphicsMagick/Combine Pictures](#)
- [GraphicsMagick/GraphicsMagick Sample](#)
- [GraphicsMagick/Reduce Image](#)

85.274.1 FileMaker Magazin

- Ausgabe 5/2011, Seite 33
- Ausgabe 5/2011, Seite 32

Created 18th August 2014, last changed 21st December 2018.

85.275 GImage.SetQuantizeColorSpace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetQuantizeColorSpace"; ImageRef; colorspaceType)

Parameters**ImageRef**

The image reference number.

1

colorspaceType

UndefinedColorspace = 0, RGBColorspace = 1 (Plain old RGB colorspace), GRAYColorspace = 2 (Plain old full-range grayscale), TransparentColorspace = 3 (RGB but preserve matte channel during quantize), OHTAColorspace = 4, XYZColorspace = 5 (CIE XYZ), YCCColorspace = 6 (Kodak PhotoCD PhotoYCC), YIQColorspace = 7, YPbPrColorspace = 8, YUVColorspace = 9, CMYKColorspace = 10 (Cyan, magenta, yellow, black, alpha), sRGBColorspace = 11 (Kodak PhotoCD sRGB), HSLColorspace = 12 (Hue, saturation, luminosity), HWBColorspace = 13 (Hue, whiteness, blackness), LABColorspace = 14 (LAB colorspace not supported yet other than via lcms), CineonLogRGBColorspace = 15 (RGB data with Cineon Log scaling, 2.048 density range), Rec601LumaColorspace = 16 (Luma (Y) according to ITU-R 601), Rec601YCbCrColorspace = 17 (YCbCr according to ITU-R 601), Rec709LumaColorspace = 18 (Luma (Y) according to ITU-R 709), Rec709YCbCrColorspace = 19 (YCbCr according to ITU-R 709)

1

Result Returns "OK" on success.

Description**See also**

- 85.146 GImage.GetQuantizeColors 4527
- 85.145 GImage.GetQuantizeColorSpace 4526
- 85.207 GImage.Quantize 4602
- 85.276 GImage.SetQuantizeColors 4695

Created 18th August 2014, last changed 18th August 2014.

85.276 GImage.SetQuantizeColors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetQuantizeColors"; ImageRef; colors)

Parameters**ImageRef**

The image reference number.

1

colors

Maximum number of colors to quantize to

10

Result Returns "OK" on success.

Description**See also**

- 85.146 GImage.GetQuantizeColors 4527
- 85.145 GImage.GetQuantizeColorSpace 4526
- 85.147 GImage.GetQuantizeDither 4528
- 85.207 GImage.Quantize 4602
- 85.267 GImage.SetMatteColor 4682
- 85.275 GImage.SetQuantizeColorSpace 4694
- 85.277 GImage.SetQuantizeDither 4696

Created 18th August 2014, last changed 18th August 2014.

85.277 GImage.SetQuantizeDither

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetQuantizeDither"; ImageRef; flag)

Parameters**ImageRef**

The image reference number.

1

flag

A boolean value.

1

Result Returns "OK" on success.

Description**See also**

- 85.146 GImage.GetQuantizeColors 4527
- 85.147 GImage.GetQuantizeDither 4528
- 85.207 GImage.Quantize 4602
- 85.276 GImage.SetQuantizeColors 4695

Created 18th August 2014, last changed 18th August 2014.

85.278 GImage.SetQuantizeTreeDepth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetQuantizeTreeDepth"; ImageRef; treeDepth)

Parameters**ImageRef**

The image reference number.

1

treeDepth

Sets the tree depth.

10

Result Returns "OK" on success.

Description**See also**

- 85.148 GImage.GetQuantizeTreeDepth 4529
- 85.207 GImage.Quantize 4602

Created 18th August 2014, last changed 18th August 2014.

85.279 GImage.SetQuiet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetQuiet"; ImageRef; Value)

Parameters

ImageRef

The image reference number.

1

Value

The new setting. Pass 1 for quiet.

0

Result Returns OK or error.

Description

If enabled, suppress all warning messages. Error messages are still reported.

See also

- 85.149 GImage.GetQuiet 4530
- 85.168 GImage.GetView 4549
- 85.256 GImage.SetFont 4668
- 85.263 GImage.SetLabel 4676
- 85.266 GImage.SetMatte 4680
- 85.271 GImage.SetPage 4687
- 85.274 GImage.SetQuality 4692
- 85.283 GImage.SetSize 4703
- 85.296 GImage.SetType 4718
- 85.298 GImage.SetView 4722

85.279.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr6](#)

Created 28th December 2018, last changed 28th December 2018.

85.280 GImage.SetRenderingIntent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetRenderingIntent"; ImageRef; renderingIntent)

Parameters**ImageRef**

The image reference number.

1

renderingIntent

UndefinedIntent = 0, SaturationIntent = 1, PerceptualIntent = 2, AbsoluteIntent = 3, RelativeIntent = 4

1

Result Returns "OK" on success.

Description**See also**

- 85.150 GImage.GetRenderingIntent 4531
- 85.259 GImage.SetICColorProfile 4671

Created 18th August 2014, last changed 18th August 2014.

85.281 GImage.SetResolutionUnits

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetResolutionUnits"; ImageRef; ResolutionType)

Parameters

ImageRef

The image reference number.

1

ResolutionType

UndefinedResolution = 0, PixelsPerInchResolution = 1, PixelsPerCentimeterResolution = 2

1

Result Returns "OK" on success.

Description

Examples

Convert and Scale:

```
# Load image from container
Variable setzen [ $image ; Wert: MBS( "GImage.NewFromContainer"; SVG to PNG::InputFile ) ]
Variable setzen [ $name ; Wert: MBS( "Files.FileName"; LiesAlsText(SVG to PNG::InputFile) ) ]
# Scale if parameters are filled in fields
Wenn [ IstLeer ( SVG to PNG::Target Width in Pixel ) ]
Wenn [ IstLeer ( SVG to PNG::Target Height in Pixel ) ]
# both empty, do nothing
Sonst
Variable setzen [ $r ; Wert: MBS( "GImage.Scale"; $image; "99999x" & SVG to PNG::Target Height in
Pixel & ">" ) ]
Ende (wenn)
Sonst
Wenn [ IstLeer ( SVG to PNG::Target Height in Pixel ) ]
Variable setzen [ $r ; Wert: MBS( "GImage.Scale"; $image; SVG to PNG::Target Width in Pixel& ">" ) ]
Sonst
Variable setzen [ $r ; Wert: MBS( "GImage.Scale"; // function $image; // pass in picture SVG to
PNG::Target Width in Pixel & // width "x" & // by SVG to PNG::Target Height in Pixel & // height ">"
// scale only if it will get smaller ) ]
Ende (wenn)
Ende (wenn)
# If a resolution is defined, put it in
Wenn [ NICHT IstLeer ( SVG to PNG::Resolution in DPI ) ]
Variable setzen [ $r ; Wert: MBS( "GImage.SetResolutionUnits"; $image; 1 /* pixel per inch */ ) ]
Variable setzen [ $r ; Wert: MBS( "GImage.SetDensity"; $image; SVG to PNG::Resolution in DPI & "x"
& SVG to PNG::Resolution in DPI ) ]
Ende (wenn)
```



```
# Output to container
Feldwert setzen [ SVG to PNG::OutputFile ; MBS( "GImage.WriteToPNGContainer"; $image; $name &
".png" ) ]
# Cleanup
Variable setzen [ $r ; Wert: MBS("GImage.Release"; $image) ]
```

See also

- 78.23 Files.FileName 3807
- 85.151 GImage.GetResolutionUnits 4532
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.225 GImage.Scale 4628
- 85.248 GImage.SetDensity 4658
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/Apply Mask](#)
- [GraphicsMagick/SVG to PNG](#)

Created 18th August 2014, last changed 21st December 2018.

85.282 GImage.SetScene

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetScene"; ImageRef; scene)

Parameters**ImageRef**

The image reference number.

1

scene

The scene number.

1

Result Returns "OK" on success.

Description**See also**

- 85.152 GImage.GetScene 4533
- 85.153 GImage.GetSize 4534
- 85.227 GImage.Segment 4633
- 85.256 GImage.SetFont 4668
- 85.266 GImage.SetMatte 4680
- 85.271 GImage.SetPage 4687
- 85.283 GImage.SetSize 4703
- 85.296 GImage.SetType 4718
- 85.298 GImage.SetView 4722

Created 18th August 2014, last changed 18th August 2014.

85.283 GImage.SetSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetSize"; ImageRef; Size)

Parameters**ImageRef**

The image reference number.

1

Size

The rectangle. A Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Result Returns "OK" on success.

Description

Width and height of a raw image (an image which does not support width and height information). Size may also be used to affect the image size read from a multi-resolution format (e.g. Photo CD, JBIG, or JPEG)

See also

- 85.153 GImage.GetSize 4534
- 85.263 GImage.SetLabel 4676
- 85.266 GImage.SetMatte 4680
- 85.271 GImage.SetPage 4687
- 85.279 GImage.SetQuiet 4698
- 85.282 GImage.SetScene 4702
- 85.296 GImage.SetType 4718
- 85.298 GImage.SetView 4722
- 85.299 GImage.SetXMP 4723
- 85.310 GImage.Solarize 4736

Created 18th August 2014, last changed 16th September 2019.

85.284 GImage.SetStrokeAntiAlias

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetStrokeAntiAlias"; ImageRef; flag)

Parameters**ImageRef**

The image reference number.

1

flag

A boolean value.

1

Result Returns "OK" on success.

Description**Examples**

Draw without anti alias:

```
Variable setzen [ $img ; Wert: MBS("GImage.New"; "150x100"; "RGB 1 1 1") ]
# Draw rectangle in blue
Variable setzen [ $r ; Wert: MBS("GImage.SetFillColor"; $img; "RGB 0 0 1") ]
Variable setzen [ $r ; Wert: MBS("GImage.DrawRectangle"; $img; 0; 0; 500; 500; "fill") ]
# Draw line without anti alias
Variable setzen [ $r ; Wert: MBS( "GImage.SetStrokeAntiAlias"; $img; 0 ) ]
Variable setzen [ $r ; Wert: MBS("GImage.SetStrokeColor"; $img; "RGB 1 0 0") ]
Variable setzen [ $r ; Wert: MBS("GImage.SetFillColor"; $img; "RGB 0 0 1") ]
Variable setzen [ $r ; Wert: MBS("GImage.SetLineWidth"; $img; 1) ]
Variable setzen [ $r ; Wert: MBS("GImage.DrawLine"; $img; 50; 50; 250; 50) ]
# Save picture & cleanup
Variable setzen [ $png ; Wert: MBS("GImage.WriteToPNGContainer"; $img; "test.png") ]
Variable setzen [ $r ; Wert: MBS("GImage.Release"; $img) ]
Feldwert setzen [ Drawing::Image ; $png ]
```

See also

- 85.56 GImage.DrawLine 4416
- 85.58 GImage.DrawRectangle 4419
- 85.154 GImage.GetStrokeAntiAlias 4535
- 85.191 GImage.New 4580
- 85.214 GImage.Release 4612

85.284. <i>GMIMAGE.SETSTROKEANTIALIAS</i>	4705
• 85.253 GImage.SetFillColor	4664
• 85.264 GImage.SetLineWidth	4677
• 85.285 GImage.SetStrokeColor	4706
• 85.286 GImage.SetStrokeDashArray	4708
• 85.340 GImage.WriteToPNGContainer	4777

Created 18th August 2014, last changed 21st December 2018.

85.285 GImage.SetStrokeColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetStrokeColor"; ImageRef; color)

Parameters

ImageRef

The image reference number.

1

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description

The plugin has a list so some colors can be simply named like "red".

Examples

Set color to red:

```
MBS( "GImage.SetStrokeColor"; $img; "red" )
```

Draws a circle in a rectangle in a circle:

```
Set Variable [ $img; Value:MBS( "GImage.New"; "100x100"; "white" ) ]
Set Variable [ $r; Value:MBS( "GImage.SetFillColor"; $img; "RGB 1 0 0" ) ]
Set Variable [ $s; Value:MBS( "GImage.SetStrokeColor"; $img; "RGB 0 0 1" ) ]
Set Variable [ $c; Value:MBS( "GImage.DrawCircle"; $img; 50; 50; 50; 90 ) ]
Set Variable [ $r; Value:MBS( "GImage.DrawRectangle"; $img; 22; 22; 100-22; 100-22 ) ]
Set Variable [ $c; Value:MBS( "GImage.DrawCircle"; $img; 50; 50; 50; 100-22 ) ]
Set Field [ test::test; MBS( "GImage.WriteToPNGContainer"; $img; "test.png" ) ]
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
```

See also

- 85.96 GImage.GetBorderColor 4473
- 85.214 GImage.Release 4612
- 85.235 GImage.SetBorderColor 4642

85.285. <i>GMIMAGE.SETSTROKECOLOR</i>	4707
• 85.236 GImage.SetBoxColor	4644
• 85.253 GImage.SetFillColor	4664
• 85.267 GImage.SetMatteColor	4682
• 85.272 GImage.SetPixelColor	4688
• 85.284 GImage.SetStrokeAntiAlias	4704
• 85.336 GImage.WriteToFile	4768
• 85.340 GImage.WriteToPNGContainer	4777

Example Databases

- [DynaPDF/Click Points](#)
- [GraphicsMagick/Drawing](#)
- [GraphicsMagick/Find Pixels](#)
- [GraphicsMagick/GraphicsMagick Path Drawing](#)

Created 18th August 2014, last changed 11st November 2019.

85.286 GImage.SetStrokeDashArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.2	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetStrokeDashArray"; ImageRef; Pattern)

Parameters

ImageRef

The image reference number.

1

Pattern

The list of pattern numbers. can be separated by space or newline.

"5 3 2"

Result Returns OK or error.

Description

The strokeDashArray represents an array of numbers that specify the lengths of alternating dashes and gaps in pixels. If an odd number of values is provided, then the list of values is repeated to yield an even number of values. A typical strokeDashArray array might contain the members 5 3 2.

Examples

Set a pattern

MBS("GImage.SetStrokeDashArray"; \$ImageRef; "5 3 2")

See also

- 85.156 GImage.GetStrokeDashArray 4537
- 85.157 GImage.GetStrokeDashOffset 4538
- 85.284 GImage.SetStrokeAntiAlias 4704
- 85.287 GImage.SetStrokeDashOffset 4709

85.286.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr9](#)

Created 18th August 2014, last changed 18th August 2014.

85.287 GImage.SetStrokeDashOffset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetStrokeDashOffset"; ImageRef; offset)

Parameters**ImageRef**

The image reference number.

1

offset

The new value.

1.5

Result Returns "OK" on success.

Description

While drawing using a dash pattern, specify distance into the dash pattern to start the dash (default 0).

See also

- 85.156 GImage.GetStrokeDashArray 4537
- 85.157 GImage.GetStrokeDashOffset 4538
- 85.286 GImage.SetStrokeDashArray 4708

Created 18th August 2014, last changed 18th August 2014.

85.288 GImage.SetStrokeLineCap

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetStrokeLineCap"; ImageRef; linecap)

Parameters**ImageRef**

The image reference number.

1

linecap

UndefinedCap = 0, ButtCap = 1, RoundCap = 2, SquareCap = 3

1

Result Returns "OK" on success.

Description

See also GImage.SetStrokeLineJoin.

Examples

Set miter join and round cap:

```
MBS( "GImage.SetStrokeLineJoin"; $img; 1 )
```

```
MBS( "GImage.SetStrokeLineCap"; $img; 2 )
```

See also

- 85.158 GImage.GetStrokeLineCap 4539
- 85.159 GImage.GetStrokeLineJoin 4540
- 85.284 GImage.SetStrokeAntiAlias 4704
- 85.289 GImage.SetStrokeLineJoin 4711
- 85.291 GImage.SetStrokeWidth 4713

Created 18th August 2014, last changed 18th August 2014.

85.289 GImage.SetStrokeLineJoin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetStrokeLineJoin"; ImageRef; linejoin)

Parameters**ImageRef**

The image reference number.

1

linejoin

UndefinedJoin = 0, MiterJoin = 1, RoundJoin = 2, BevelJoin = 3

1

Result Returns "OK" on success.

Description

See also GImage.SetStrokeLineCap.

Examples

Set miter join and round cap:

```
MBS( "GImage.SetStrokeLineJoin"; $img; 1 )
```

```
MBS( "GImage.SetStrokeLineCap"; $img; 2 )
```

See also

- 85.158 GImage.GetStrokeLineCap 4539
- 85.159 GImage.GetStrokeLineJoin 4540
- 85.288 GImage.SetStrokeLineCap 4710
- 85.290 GImage.SetStrokeMiterLimit 4712

Example Databases

- [GraphicsMagick/GraphicsMagick Path Drawing](#)

Created 18th August 2014, last changed 18th August 2014.

85.290 GImage.SetStrokeMiterLimit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetStrokeMiterLimit"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

Result Returns "OK" on success.

Description

When two line segments meet at a sharp angle and miter joins have been specified for 'lineJoin', it is possible for the miter to extend far beyond the thickness of the line stroking the path. The miterLimit' imposes a limit on the ratio of the miter length to the 'lineWidth'. The default value of this parameter is 4.

See also

- 85.160 GImage.GetStrokeMiterLimit 4541
- 85.289 GImage.SetStrokeLineJoin 4711

Created 18th August 2014, last changed 18th August 2014.

85.291 GImage.SetStrokeWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetStrokeWidth"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The stroke width.

4

Result Returns "OK" on success.

Description

If you have an open path, the command is added there for later drawing with GImage.DrawPath.

See also

- 85.57 GImage.DrawPath 4418
- 85.155 GImage.GetStrokeColor 4536
- 85.161 GImage.GetStrokeWidth 4542
- 85.264 GImage.SetLineWidth 4677
- 85.285 GImage.SetStrokeColor 4706
- 85.288 GImage.SetStrokeLineCap 4710

Created 18th August 2014, last changed 18th August 2014.

85.292 GImage.SetSubImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetSubImage"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

the new index

0

Result Returns "OK" on success.

Description**See also**

- 85.162 GImage.GetSubImage 4543
- 85.163 GImage.GetSubRange 4544
- 85.293 GImage.SetSubRange 4715

Created 18th August 2014, last changed 18th August 2014.

85.293 GImage.SetSubRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetSubRange"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

0

Result Returns "OK" on success.

Description**See also**

- 85.162 GImage.GetSubImage 4543
- 85.163 GImage.GetSubRange 4544
- 85.292 GImage.SetSubImage 4714

Created 18th August 2014, last changed 18th August 2014.

85.294 GImage.SetTextEncoding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetTextEncoding"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

Result Returns "OK" on success.

Description**See also**

- 85.164 GImage.GetTextEncoding

4545

Created 18th August 2014, last changed 18th August 2014.

85.295 GImage.SetTileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetTileName"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

Result Returns "OK" on success.

Description**See also**

- 85.114 GImage.GetFileName 4492
- 85.115 GImage.GetFileSize 4493
- 85.165 GImage.GetTileName 4546
- 85.252 GImage.SetFileName 4663
- 85.254 GImage.SetFillRule 4666

Created 18th August 2014, last changed 18th August 2014.

85.296 GImage.SetType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetType"; ImageRef; type)

Parameters**ImageRef**

The image reference number.

1

type

UndefinedType = 0, BilevelType = 1, GrayscaleType = 2, GrayscaleMatteType = 3, PaletteType = 4, PaletteMatteType = 5, TrueColorType = 6, TrueColorMatteType = 7, ColorSeparationType = 8, ColorSeparationMatteType = 9, OptimizeType = 10

6

Result Returns "OK" on success.

Description

Changing the type from TrueColorType to GrayscaleType will convert a color picture to grayscale.

Examples

Change the picture to grayscale.

```
Let ( [
  $Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
  $Result = MBS("GImage.SetType"; $Image; 2);
  $Result = MBS("GImage.WriteToPNGContainer"; $Image);
  $Error = MBS("GImage.Release"; $Image)
] ;
$Result)
```

Convert image to 1 bit TIFF:

```
# Load from container
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);

# make black and white with threshold
$Result = MBS("GImage.Threshold"; $Image; 127);

# mark as monochrome image
$Result = MBS("GImage.SetMonochrome"; $Image; 1);

# set type to 1 for black/white
$Result = MBS("GImage.SetType"; $Image; 1);
```

```
# set to use TIFF for compression
$Result = MBS("GImage.SetMagick";$Image; "TIFF");

# set to use CCITT 4 Fax compression
$Result = MBS("GImage.SetCompressType";$Image; 4);

# and write to a file
$Result = MBS("GImage.WriteToFile"; $Image; "/tmp/test.tif");

# cleanup
$error = MBS("GImage.Release";$Image)
```

Change picture to RGB:

```
MBS("GImage.SetType"; $image; 6);
```

Replace white with transparent:

```
Set Variable [ $BigImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
# Set type to RGBA
Set Variable [ $Result; Value:MBS("GImage.SetType"; $BigImageRef; 7) ]
# Replace white with transparent
Set Variable [ $Result; Value:MBS("GImage.ReplaceColor"; $BigImageRef; "white"; "transparent"; 10) ]
# save as PNG
Set Field [ Test::Result; MBS( "GImage.WriteToPNGContainer"; $BigImageRef ) ]
Set Variable [ $Error; Value:MBS("GImage.Release";$BigImageRef) ]
```

See also

- 85.166 GImage.GetType 4547
- 85.256 GImage.SetFont 4668
- 85.263 GImage.SetLabel 4676
- 85.266 GImage.SetMatte 4680
- 85.269 GImage.SetMonochrome 4684
- 85.271 GImage.SetPage 4687
- 85.283 GImage.SetSize 4703
- 85.299 GImage.SetXMP 4723
- 85.336 GImage.WriteToFile 4768
- 85.341 GImage.WriteToTiffContainer 4780

Example Databases

- [Barcode/Swiss QR-Code for invoices ISO 20022](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [GraphicsMagick/Create GIF](#)
- [GraphicsMagick/GraphicsMagick Sample](#)
- [GraphicsMagick/Reduce Image](#)

85.296.1 Blog Entries

- [Create PDF from scanned images and skip blank pages](#)
- [QR Codes for Invoices in Switzerland](#)

85.296.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 29](#)
- [Ausgabe 5/2018, Seite 27](#)

Created 18th August 2014, last changed 21st December 2018.

85.297 GImage.SetVerbose

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetVerbose"; ImageRef; flag)

Parameters**ImageRef**

The image reference number.

1

flag

A boolean value.

1

Result Returns "OK" on success.

Description**See also**

- 85.105 GImage.GetCompose 4483
- 85.167 GImage.GetVerbose 4548
- 85.243 GImage.SetCompose 4652

Created 18th August 2014, last changed 18th August 2014.

85.298 GImage.SetView

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetView"; ImageRef; value)

Parameters**ImageRef**

The image reference number.

1

value

The new value.

Result Returns "OK" on success.

Description**See also**

- 85.168 GImage.GetView 4549
- 85.256 GImage.SetFont 4668
- 85.263 GImage.SetLabel 4676
- 85.271 GImage.SetPage 4687
- 85.279 GImage.SetQuiet 4698
- 85.282 GImage.SetScene 4702
- 85.283 GImage.SetSize 4703
- 85.296 GImage.SetType 4718
- 85.299 GImage.SetXMP 4723
- 85.313 GImage.Stereo 4740

Created 18th August 2014, last changed 18th August 2014.

85.299 GImage.SetXMP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	6.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetXMP"; ImageRef; XMP)

Parameters**ImageRef**

The image reference number.

1

XMP

The XML text to save to file.

Result Returns OK or error.

Description**See also**

- 85.170 GImage.GetXMP 4552
- 85.256 GImage.SetFont 4668
- 85.271 GImage.SetPage 4687
- 85.283 GImage.SetSize 4703
- 85.296 GImage.SetType 4718
- 85.298 GImage.SetView 4722
- 85.313 GImage.Stereo 4740

85.299.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr2](#)

Created 8th June 2016, last changed 8th June 2016.

85.300 GImage.SetchannelDepth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetchannelDepth"; ImageRef; ChannelType; depth)

Parameters**ImageRef**

The image reference number.

1

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

1

depth

The depth value.

8

Result Returns "OK" on success.

Description**See also**

- 85.98 GImage.GetChannelDepth

4475

Created 18th August 2014, last changed 18th August 2014.

85.301 GImage.SetcolorMap

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SetcolorMap"; ImageRef; index; color)

Parameters**ImageRef**

The image reference number.

1

index

Position of the entry. Zero based.

0

color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description**See also**

- 85.171 GImage.GetcolorMap 4554
- 85.239 GImage.SetColorFuzz 4647
- 85.240 GImage.SetColorMapSize 4649
- 85.241 GImage.SetColorSpace 4650

Created 18th August 2014, last changed 11st November 2019.

85.302 GImage.Shade

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Shade"; ImageRef; azimuth; elevation; colorShading)

Parameters**ImageRef**

The image reference number.

1

azimuth

The azimuth.

30

elevation

The elevation

30

colorShading

A boolean value.

0

Result Returns "OK" on success.

Description**See also**

- 85.64 GImage.Erase 4429
- 85.80 GImage.Frame 4453
- 85.212 GImage.Read 4609
- 85.225 GImage.Scale 4628
- 85.303 GImage.Sharpen 4727
- 85.305 GImage.Shave 4730
- 85.306 GImage.Shear 4732
- 85.332 GImage.Wave 4762

Created 18th August 2014, last changed 18th August 2014.

85.303 GMImage.Sharpen

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GMImage.Sharpen"; ImageRef { ; radius; sigma })

Parameters**ImageRef**

The image reference number.

1

radius

Optional

Optional, The radius of the Gaussian, in pixels, not counting the center pixel.

0

sigma

Optional

Optional, The standard deviation of the Laplacian, in pixels.

1

Result Returns "OK" on success.

Description**Examples**

Applies the sharpen effect to the image:

```
Let (
[
$Image = MBS("GMImage.NewFromContainer"; GraphicsMagick::image);
$RotateResult = MBS("GMImage.Sharpen"; $Image; 10; 5);
$Result = MBS("GMImage.WriteToPNGContainer"; $Image);
$DestroyResult = MBS("GMImage.Release";$Image)
];
$Result)
```

See also

- 85.34 GMImage.Channel 4381
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.224 GMImage.Sample 4627

- 85.302 GImage.Shade 4726
- 85.305 GImage.Shave 4730
- 85.313 GImage.Stereo 4740
- 85.340 GImage.WriteToPNGContainer 4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.304 GImage.SharpenChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SharpenChannel"; ImageRef; ChannelType; radius; sigma)

Parameters**ImageRef**

The image reference number.

1

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

1

radius

The radius of the Gaussian, in pixels, not counting the center pixel.

0

sigma

The standard deviation of the Laplacian, in pixels.

1

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.305 GImage.Shave

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Shave"; ImageRef; Geometry)

Parameters**ImageRef**

The image reference number.

1

Geometry

The rectangle where to draw. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200%!"

"100x200"

Result Returns "OK" on success.

Description**Examples**

Shaves an image:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$ShaveResult = MBS("GImage.Shave";$Image; "10x10");
$Result = MBS("GImage.WriteToPNGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result)
```

See also

- 85.64 GImage.Erase 4429
- 85.80 GImage.Frame 4453
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.225 GImage.Scale 4628
- 85.302 GImage.Shade 4726
- 85.303 GImage.Sharpen 4727
- 85.306 GImage.Shear 4732

85.305. <i>GMIMAGE.SHAVE</i>	4731
• 85.332 GImage.Wave	4762
• 85.340 GImage.WriteToPNGContainer	4777

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.306 GImage.Shear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Shear"; ImageRef; xShearAngle; yShearAngle)

Parameters**ImageRef**

The image reference number.

1

xShearAngle

X Angle

0

yShearAngle

Y Angle

0

Result Returns "OK" on success.

Description**See also**

- 85.212 GImage.Read 4609
- 85.302 GImage.Shade 4726
- 85.305 GImage.Shave 4730
- 85.308 GImage.SkewX 4734
- 85.309 GImage.SkewY 4735
- 85.311 GImage.Spread 4738

Created 18th August 2014, last changed 18th August 2014.

85.307 GImage.Signature

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Signature"; ImageRef { ; force })

Parameters

ImageRef

The image reference number.

1

force

Optional

Optional, a boolean value.

0

Result Returns the signature string.

Description

Created 18th August 2014, last changed 18th August 2014.

85.308 GImage.SkewX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SkewX"; ImageRef; angle)

Parameters**ImageRef**

The image reference number.

1

angle

The angle for the skew operation.

0

Result Returns OK or error.

Description**See also**

- 85.191 GImage.New 4580
- 85.306 GImage.Shear 4732
- 85.309 GImage.SkewY 4735

Created 18th August 2014, last changed 18th August 2014.

85.309 GImage.SkewY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.SkewY"; ImageRef; angle)

Parameters**ImageRef**

The image reference number.

1

angle

The angle for the skew operation.

0

Result Returns OK or error.

Description**See also**

- 85.191 GImage.New 4580
- 85.306 GImage.Shear 4732
- 85.308 GImage.SkewX 4734

Created 18th August 2014, last changed 18th August 2014.

85.310 GImage.Solarize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Solarize"; ImageRef { ; factor })

Parameters**ImageRef**

The image reference number.

1

factor

Optional

The factor.

50.0

Result Returns "OK" on success.

Description**Examples**

Applies the solarize effect to an image:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GImage.Solarize";$Image);
$Result = MBS("GImage.WriteToJPEGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result)
```

See also

- 85.40 GImage.Colorize 4389
- 85.63 GImage.Equalize 4428
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.198 GImage.Normalize 4592
- 85.214 GImage.Release 4612
- 85.283 GImage.SetSize 4703
- 85.338 GImage.WriteToJPEGContainer 4773

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.311 GImage.Spread

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Spread"; ImageRef; amount)

Parameters**ImageRef**

The image reference number.

1

amount

The amount.

3

Result Returns "OK" on success.

Description**See also**

- 85.79 GImage.Format 4452
- 85.212 GImage.Read 4609
- 85.306 GImage.Shear 4732
- 85.313 GImage.Stereo 4740

Created 18th August 2014, last changed 18th August 2014.

85.312 GImage.Stegano

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Stegano"; ImageRef; watermark)

Parameters**ImageRef**

The image reference number.

1

watermark

The image reference number.

2

Result Returns "OK" on success.

Description**See also**

- 85.190 GImage.Negate 4578
- 85.227 GImage.Segment 4633
- 85.256 GImage.SetFont 4668
- 85.271 GImage.SetPage 4687
- 85.313 GImage.Stereo 4740

Created 18th August 2014, last changed 18th August 2014.

85.313 GImage.Stereo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Stereo"; ImageRef; rightImage)

Parameters**ImageRef**

The image reference number.

1

rightImage

The image reference number.

2

Result Returns "OK" on success.

Description**See also**

- 85.298 GImage.SetView 4722
- 85.299 GImage.SetXMP 4723
- 85.303 GImage.Sharpen 4727
- 85.311 GImage.Spread 4738
- 85.312 GImage.Stegano 4739
- 85.314 GImage.Strip 4741

Created 18th August 2014, last changed 18th August 2014.

85.314 GImage.Strip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.5	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Strip"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns "OK" on success.

Description**See also**

- 85.49 GImage.Crop 4405
- 85.70 GImage.Flip 4438
- 85.313 GImage.Stereo 4740
- 85.316 GImage.Swirl 4743
- 85.329 GImage.Trim 4758

Created 18th August 2014, last changed 18th August 2014.

85.315 GImage.StrokePattern

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.StrokePattern"; ImageRef; patternImageRef)

Parameters

ImageRef

The image reference number.

1

patternImageRef

The image reference number.

2

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.316 GImage.Swirl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Swirl"; ImageRef; degrees)

Parameters

ImageRef

The image reference number.

1

degrees

The degrees.

90

Result Returns "OK" on success.

Description

Examples

Does a swirl on the image:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GImage.Swirl";$Image; 90);
$Result = MBS("GImage.WriteToJPEGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
] ;
$Result)
```

See also

- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.314 GImage.Strip 4741
- 85.338 GImage.WriteToJPEGContainer 4773

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 21st December 2018.

85.317 GImage.Texture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Texture"; ImageRef; texture)

Parameters

ImageRef

The image reference number.

1

texture

The image reference number.

2

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.318 GImage.Threshold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Threshold"; ImageRef { ; threshold })

Parameters

ImageRef

The image reference number.

1

threshold

Optional

The range of the threshold parameter is 0 to MaxRGB (65535).

127*256

Result Returns "OK" on success.

Description

Examples

Applies a threshold on the image:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GImage.Threshold";$Image; 127);
$Result = MBS("GImage.WriteToJPEGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result)
```

Convert image to 1 bit TIFF:

```
# Load from container
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);

# make black and white with threshold
$Result = MBS("GImage.Threshold";$Image; 127);

# mark as monochrome image
$Result = MBS("GImage.SetMonochrome";$Image; 1);

# set type to 1 for black/white
$Result = MBS("GImage.SetType";$Image; 1);

# set to use TIFF for compression
$Result = MBS("GImage.SetMagick";$Image; "TIFF");
```

```
# set to use CCITT 4 Fax compression
$Result = MBS("GMImage.SetCompressType";$Image; 4);

# and write to a file
$Result = MBS("GMImage.WriteToFile"; $Image; "/tmp/test.tif");

# cleanup
$error = MBS("GMImage.Release";$Image)
```

Make a picture black and transparent:

```
Set Variable [ $image; Value:MBS( "GMImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $r; Value:MBS( "GMImage.Threshold"; $image; 127) ]
Set Variable [ $imagecolor; Value:MBS( "GMImage.Transparent"; $image; "white") ]
Set Field [ Test::Result; MBS( "GMImage.WriteToPNGContainer"; $image;) ]
Set Variable [ $Error; Value:MBS("GMImage.Release";$image) ]
```

See also

- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 85.265 GMImage.SetMagick 4678
- 85.269 GMImage.SetMonochrome 4684
- 85.296 GMImage.SetType 4718
- 85.328 GMImage.Transparent 4756
- 85.336 GMImage.WriteToFile 4768
- 85.338 GMImage.WriteToJPEGContainer 4773
- 85.340 GMImage.WriteToPNGContainer 4777
- 85.341 GMImage.WriteToTiffContainer 4780

Example Databases

- [GraphicsMagick/GraphicsMagick Sample](#)

Created 18th August 2014, last changed 11st November 2019.

85.319 GImage.TotalColors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.TotalColors"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns the number of colors in the image.

Description

Created 18th August 2014, last changed 18th August 2014.

85.320 GImage.Transform

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Transform"; ImageRef; imageGeometry { ; cropGeometry })

Parameters**ImageRef**

The image reference number.

1

imageGeometry

The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

cropGeometry

Optional

Optional, The rectangle. Geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "100x200"

Result Returns "OK" on success.

Description**See also**

- 85.322 GImage.TransformReset 4750
- 85.324 GImage.TransformScale 4752
- 85.325 GImage.TransformSkewX 4753
- 85.326 GImage.TransformSkewY 4754
- 85.328 GImage.Transparent 4756

Created 18th August 2014, last changed 13th May 2019.

85.321 GImage.TransformOrigin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.TransformOrigin"; ImageRef; x; y)

Parameters**ImageRef**

The image reference number.

1

x

The horizontal offset

0

y

The vertical offset

0

Result Returns "OK" on success.

Description**See also**

- 85.322 GImage.TransformReset 4750
- 85.323 GImage.TransformRotation 4751
- 85.324 GImage.TransformScale 4752
- 85.325 GImage.TransformSkewX 4753
- 85.326 GImage.TransformSkewY 4754

Created 18th August 2014, last changed 18th August 2014.

85.322 GImage.TransformReset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.TransformReset"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns "OK" on success.

Description**See also**

- 85.320 GImage.Transform 4748
- 85.321 GImage.TransformOrigin 4749
- 85.323 GImage.TransformRotation 4751
- 85.324 GImage.TransformScale 4752
- 85.325 GImage.TransformSkewX 4753
- 85.326 GImage.TransformSkewY 4754

Created 18th August 2014, last changed 18th August 2014.

85.323 GImage.TransformRotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.TransformRotation"; ImageRef; angle)

Parameters**ImageRef**

The image reference number.

1

angle

The angle.

90

Result Returns "OK" on success.

Description

If you need to rotate the image, please use GImage.Rotate function.

See also

- 85.221 GImage.Rotate 4623
- 85.321 GImage.TransformOrigin 4749
- 85.322 GImage.TransformReset 4750

Created 18th August 2014, last changed 18th August 2014.

85.324 GImage.TransformScale

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.TransformScale"; ImageRef; sx; sy)

Parameters**ImageRef**

The image reference number.

1

sx

the x factor

2

sy

the y factor

2

Result Returns "OK" on success.

Description

If you need to scale the image, please use GImage.Scale function.

See also

- 85.225 GImage.Scale 4628
- 85.320 GImage.Transform 4748
- 85.321 GImage.TransformOrigin 4749
- 85.322 GImage.TransformReset 4750
- 85.325 GImage.TransformSkewX 4753
- 85.326 GImage.TransformSkewY 4754

Created 18th August 2014, last changed 18th August 2014.

85.325 GImage.TransformSkewX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.TransformSkewX"; ImageRef; skewx)

Parameters**ImageRef**

The image reference number.

1

skewx

the skew value

10

Result Returns "OK" on success.

Description**See also**

- 85.320 GImage.Transform 4748
- 85.321 GImage.TransformOrigin 4749
- 85.322 GImage.TransformReset 4750
- 85.324 GImage.TransformScale 4752
- 85.326 GImage.TransformSkewY 4754

Created 18th August 2014, last changed 18th August 2014.

85.326 GImage.TransformSkewY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.TransformSkewY"; ImageRef; skewy)

Parameters**ImageRef**

The image reference number.

1

skewy

The skewy value.

10

Result Returns "OK" on success.

Description**See also**

- 85.320 GImage.Transform 4748
- 85.321 GImage.TransformOrigin 4749
- 85.322 GImage.TransformReset 4750
- 85.324 GImage.TransformScale 4752
- 85.325 GImage.TransformSkewX 4753

Created 18th August 2014, last changed 18th August 2014.

85.327 GImage.Translation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.1	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Translation"; ImageRef; X; Y)

Parameters**ImageRef**

The image reference number.

1

X

The x coordinate.

10

Y

The y coordinate.

10

Result Returns OK or error.

Description

Sets the new coordinate origin.

See also

- 85.328 GImage.Transparent

4756

Created 18th August 2014, last changed 18th August 2014.

85.328 GImage.Transparent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Transparent"; ImageRef; Color)

Parameters**ImageRef**

The image reference number.

1

Color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"RGB 1 0 0"

Result Returns "OK" on success.

Description**Examples**

Make a picture transparent:

```
# load a picture
Set Variable [ $image; Value:MBS( "GImage.NewFromContainer"; Test::BigImage) ]
# white in RGB
Set Variable [ $f; Value:"COLOR 65535 65535 65535" ]
# Replace all white with nearly white
Set Variable [ $r; Value:MBS( "GImage.ReplaceColor"; $image; $f; "COLOR 65535 65278 65535"; 0) ]
# now flood fill it with 5 as tolerance
Set Variable [ $r; Value:MBS( "GImage.SetColorFuzz"; $image; 5 ) ]
Set Variable [ $r; Value:MBS( "GImage.FloodFillColorXY"; $image; 0; 0; $f ) ]
# now set back fuzz and make transparent using white
Set Variable [ $r; Value:MBS( "GImage.SetColorFuzz"; $image; 0 ) ]
Set Variable [ $imagecolor; Value:MBS( "GImage.Transparent"; $image; $f) ]
# write back to container
Set Field [ Test::Result; MBS( "GImage.WriteToPNGContainer"; $image;) ]
# cleanup
Set Variable [ $Error; Value:MBS("GMimage.Release";$image) ]
```

See also

- 85.71 GImage.FloodFillColor

85.328. <i>GMIMAGE.TRANSSPARENT</i>	4757
• 85.72 GImage.FloodFillColorXY	4442
• 85.193 GImage.NewFromContainer	4584
• 85.214 GImage.Release	4612
• 85.217 GImage.ReplaceColor	4616
• 85.239 GImage.SetColorFuzz	4647
• 85.318 GImage.Threshold	4745
• 85.320 GImage.Transform	4748
• 85.327 GImage.Translation	4755
• 85.340 GImage.WriteToPNGContainer	4777

Created 18th August 2014, last changed 11st November 2019.

85.329 GImage.Trim

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Trim"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns "OK" on success.

Description

Use GImage.SetColorFuzz to set the fuzzy level.

Trim looks on what pixel colors the edges have and checks if there is a smaller rectangle where all pixel outside have same color. See GImage.BoundingBox for the bounding box of content.

Examples

Trim a picture:

```
Set Variable [ $BigImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result; Value:MBS( "GImage.SetColorFuzz"; $BigImageRef; 100 ) ]
Set Variable [ $Result; Value:MBS("GImage.Trim"; $BigImageRef) ]
Set Field [ Test::Result; MBS( "GImage.WriteToJPEGContainer"; $BigImageRef ) ]
Set Variable [ $Error; Value:MBS("GImage.Release";$BigImageRef) ]
```

Trim white around picture:

```
Set Variable [ $BigImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
# set one white pixel to make sure it trims only white
Set Variable [ $Result; Value:MBS( "GImage.SetPixelColor"; $BigImageRef; 0; 0; "white" ) ]
# allows up to 5 away into gray for comparing to white
Set Variable [ $Result; Value:MBS( "GImage.SetColorFuzz"; $BigImageRef; 5 ) ]
Set Variable [ $Result; Value:MBS("GImage.Trim"; $BigImageRef) ]
Set Field [ Test::Result; MBS( "GImage.WriteToJPEGContainer"; $BigImageRef ) ]
Set Variable [ $Error; Value:MBS("GImage.Release";$BigImageRef) ]
```

Trims space around image and make transparent:

```
Set Variable [ $BigImageRef; Value:MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result; Value:MBS( "GImage.SetBackgroundColor"; $BigImageRef; "RGB 1 0 0" ) ]
Set Variable [ $Result; Value:MBS("GImage.Trim"; $BigImageRef) ]
Set Variable [ $Result; Value:MBS( "GImage.SetColorFuzz"; $BigImageRef; 5 ) ]
Set Variable [ $Result; Value:MBS( "GImage.SetMatte"; $BigImageRef; 1 ) ]
```

```
Set Variable [ $farbe; Value:MBS( "GImage.GetPixelColor"; $BigImageRef; 0; 0 ) ]  
Set Variable [ $Result; Value:MBS( "GImage.ReplaceColor"; $BigImageRef; $farbe; "RGB 1 1 1"; 5 ) ]  
Set Field [ Test::Result; MBS( "GImage.WriteToPNGContainer"; $BigImageRef ) ]  
Set Variable [ $Error; Value:MBS("GImage.Release";$BigImageRef) ]
```

See also

- 85.49 *GImage.Crop* 4405
- 85.70 *GImage.Flip* 4438
- 85.80 *GImage.Frame* 4453
- 85.81 *GImage.Free* 4455
- 85.217 *GImage.ReplaceColor* 4616
- 85.266 *GImage.SetMatte* 4680
- 85.272 *GImage.SetPixelColor* 4688
- 85.314 *GImage.Strip* 4741
- 85.338 *GImage.WriteToJPEGContainer* 4773
- 85.344 *GImage.Zoom* 4784

Example Databases

- [GraphicsMagick/Trim Picture Border](#)
- [GraphicsMagick/Trim Picture](#)

Created 18th August 2014, last changed 21st December 2018.

85.330 GImage.Unsharpmask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Unsharpmask"; ImageRef; radius; sigma; amount; threshold)

Parameters

ImageRef

The image reference number.

1

radius

the radius of the Gaussian, in pixels, not counting the center pixel.

3

sigma

the standard deviation of the Gaussian, in pixels.

1

amount

the percentage of the difference between the original and the blur image that is added back into the original.

50

threshold

the threshold in pixels needed to apply the diffence amount.

3

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.331 GImage.UnsharpmaskChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.UnsharpmaskChannel"; ImageRef; ChannelType; radius; sigma; amount; threshold)

Parameters**ImageRef**

The image reference number.

1

ChannelType

ChannelType

One of the following values: RedChannel = 1 (RGB Red channel), CyanChannel = 2 (CMYK Cyan channel), GreenChannel = 3 (RGB Green channel), MagentaChannel = 4 (CMYK Magenta channel), BlueChannel = 5 (RGB Blue channel), YellowChannel = 6 (CMYK Yellow channel), OpacityChannel = 7 (Opacity channel), BlackChannel = 8 (CMYK Black (K) channel), MatteChannel = 9 (Same as Opacity channel (deprecated)), AllChannels = 10 (Color channels), GrayChannel = 11 (Color channels represent an intensity.)

radius

the radius of the Gaussian, in pixels, not counting the center pixel.

3

sigma

the standard deviation of the Gaussian, in pixels.

1

amount

the percentage of the difference between the original and the blur image that is added back into the original.

50

threshold

the threshold in pixels needed to apply the diffence amount.

3

Result Returns "OK" on success.

Description

Created 18th August 2014, last changed 18th August 2014.

85.332 GImage.Wave

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Wave"; ImageRef { ; amplitude; wavelength })

Parameters**ImageRef**

The image reference number.

1

amplitude

Optional

The amplitude

25.0

wavelength

Optional

The wave length

150.0

Result Returns "OK" on success.

Description**See also**

- 85.64 GImage.Erase 4429
- 85.80 GImage.Frame 4453
- 85.81 GImage.Free 4455
- 85.172 GImage.Hash 4555
- 85.177 GImage.Level 4562
- 85.181 GImage.Map 4567
- 85.209 GImage.Raise 4605
- 85.225 GImage.Scale 4628
- 85.302 GImage.Shade 4726
- 85.305 GImage.Shave 4730

Created 18th August 2014, last changed 18th August 2014.

85.333 GImage.WriteImages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	3.4	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteImages"; ImageList; Path; Adjoin)

Parameters

ImageList

The list of image references (numbers returned from the GImage.New functions) separated by either space or new line character.

"1 2 3"

Path

A platform specific filepath where to write the image.

"C:\Test.tif"

Adjoin

Whether to write one file per image or one image file with all images.

1

Result Returns OK or error message.

Description

This function can be used to create multi image tiff files.

See GImage.NewImagesFromFile and GImage.NewImagesFromContainer for reading multi picture files.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- 85.191 GImage.New 4580
- 85.196 GImage.NewImagesFromContainer 4589
- 85.197 GImage.NewImagesFromFile 4590
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [GraphicsMagick/Create GIF](#)
- [GraphicsMagick/Create Multi Tiff](#)

85.333.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 3.4pr1](#)

Created 18th August 2014, last changed 28th November 2019.

85.334 GImage.WriteToBMPContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.4	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteToBMPContainer"; ImageRef { ; Filename })

Parameters**ImageRef**

The image reference number.

1

Filename

Optional

The file name to use for the container. Default is "image.bmp"
"ball.bmp"

Result Returns a container value.

Description

For preview a JPEG version is included as well as a file name "image.bmp" and the image size.
See also GImage.WriteToFile, GImage.WriteToPNGContainer, GImage.WriteToTiffContainer, GImage.WriteToJPEGContainer and GImage.WriteToGIFContainer.

Examples

Get a container value from the picture in BMP format.

MBS("GImage.WriteToBMPContainer"; \$MyImageRef; "logo.bmp")

See also

- 85.335 GImage.WriteToContainer 4766
- 85.336 GImage.WriteToFile 4768
- 85.337 GImage.WriteToGIFContainer 4771
- 85.338 GImage.WriteToJPEGContainer 4773
- 85.339 GImage.WriteToPDFContainer 4775
- 85.340 GImage.WriteToPNGContainer 4777
- 85.341 GImage.WriteToTiffContainer 4780

85.334.1 FileMaker Magazin

- Ausgabe 5/2011, Seite 33

Created 18th August 2014, last changed 16th October 2014.

85.335 GImage.WriteToContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	9.3	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteToContainer"; ImageRef { ; FileName })

Parameters

ImageRef

The image reference number.

1

FileName

Optional

File name to pass to FileMaker with container.

"test.jpg"

Result Returns OK or error.

Description

Please set type you want with GImage.SetMagick function.

Similar to other write functions, but allows you to use whatever magick type is set for codec.

This function is similar to our specialized functions GImage.WriteToBMPContainer, GImage.WriteToGIFContainer, GImage.WriteToJPEGContainer, GImage.WriteToPDFContainer, GImage.WriteToPNGContainer and GImage.WriteToTiffContainer, but you can specify the codec to use. Image is compressed and passed to FileMaker with filename. Then FileMaker (or our plugin for older FileMaker versions before 13) can detect the type from filename and generate required previews.

Examples

Save an image as PNG:

```
Set Variable [ $BigImageRef ; Value: MBS("GImage.NewFromContainer"; Test::BigImage) ]
Set Variable [ $Result ; Value: MBS("GImage.SetMagick"; $BigImageRef; "PNG") ]
Set Field [ Test::Result ; MBS( "GImage.WriteToContainer"; $BigImageRef; "test.png" ) ]
Set Variable [ $Error ; Value: MBS("GImage.Destroy";$BigImageRef) ]
```

See also

- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.265 GImage.SetMagick 4678
- 85.334 GImage.WriteToBMPContainer 4765
- 85.337 GImage.WriteToGIFContainer 4771

85.335. <i>GMIMAGE.WRITETOCONTAINER</i>	4767
• 85.338 GImage.WriteToJPEGContainer	4773
• 85.339 GImage.WriteToPDFContainer	4775
• 85.340 GImage.WriteToPNGContainer	4777
• 85.341 GImage.WriteToTiffContainer	4780

85.335.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr7](#)

Created 20th July 2019, last changed 22nd February 2020.

85.336 GImage.WriteToFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteToFile"; ImageRef; Path)

Parameters**ImageRef**

The image reference number.

1

Path

A platform specific filepath where to write the image.

"C:\Test.jpg"

Result Returns "OK" on success.

Description

See also GImage.WriteToPNGContainer, GImage.WriteToBMPCContainer, GImage.WriteToTiffContainer, GImage.WriteToJPEGContainer and GImage.WriteToGIFContainer.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Save file to Bob's desktop as GIF file on Mac OS X:

```
MBS( "GImage.WriteToFile"; $BigImageRef; "/Users/Bob/Desktop/test.gif" )
```

Save file to Bob's desktop as JPG file on Windows:

```
MBS( "GImage.WriteToFile"; $BigImageRef; "C:\Data\logo.jpg" )
```

Convert image to 1 bit TIFF:

```
# Load from container
```

```
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
```

```
# make black and white with threshold
```

```
$Result = MBS("GImage.Threshold";$Image; 127);
```

```
# mark as monochrome image
```

```
$Result = MBS("GImage.SetMonochrome";$Image; 1);
```

```
# set type to 1 for black/white
```

```
$Result = MBS("GImage.SetType";$Image; 1);
```

```

# set to use TIFF for compression
$Result = MBS("GImage.SetMagick";$Image; "TIFF");

# set to use CCITT 4 Fax compression
$Result = MBS("GImage.SetCompressType";$Image; 4);

# and write to a file
$Result = MBS("GImage.WriteToFile"; $Image; "/tmp/test.tif");

# cleanup
$error = MBS("GImage.Release";$Image)

```

Loads from file and writes to other file:

```

Set Variable [ $img; Value:MBS("GImage.NewImagesFromFile"; "/Users/cs/Desktop/test.jpg") ]
If [ MBS("IsError") = 0 ]
Set Variable [ $r; Value:MBS( "GImage.WriteToFile"; $img; "/Users/cs/Desktop/test.tif" ) ]
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
End If

```

Draw something and write to file on desktop:

```

# New Image
Set Variable [ $img; Value:MBS("GImage.New"; "300x200"; "RGB 1 1 1") ]
# Set colors and line width
Set Variable [ $r; Value:MBS("GImage.SetStrokeColor"; $img; "RGB 1 0 0") ]
Set Variable [ $r; Value:MBS("GImage.SetFillColor"; $img; "RGB 0 0 1") ]
Set Variable [ $r; Value:MBS("GImage.SetLineWidth"; $img; 5) ]
# draw a rectangle
Set Variable [ $r; Value:MBS("GImage.DrawRectangle"; $img; 50; 50; 250; 150) ]
# save to test.png on desktop:
Set Variable [ $DesktopPath; Value:MBS( "Folders.UserDesktop" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $DesktopPath; "test.png") ]
Set Variable [ $r; Value:MBS("GImage.WriteToFile"; $img; $path) ]
# cleanup
Set Variable [ $r; Value:MBS("GImage.Release"; $img) ]

```

See also

- 85.264 GImage.SetLineWidth 4677
- 85.265 GImage.SetMagick 4678
- 85.285 GImage.SetStrokeColor 4706
- 85.296 GImage.SetType 4718
- 85.318 GImage.Threshold 4745

- 85.334 GImage.WriteToBMPContainer 4765
- 85.337 GImage.WriteToGIFContainer 4771
- 85.339 GImage.WriteToPDFContainer 4775
- 85.340 GImage.WriteToPNGContainer 4777
- 124.6 IsError 6266

Example Databases

- [GraphicsMagick/Export Images](#)

85.336.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr7](#)

85.336.2 FileMaker Magazin

- Ausgabe 5/2011, Seite 33

Created 18th August 2014, last changed 26th April 2019.

85.337 GImage.WriteToGIFContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.4	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteToGIFContainer"; ImageRef { ; Filename })

Parameters

ImageRef

The image reference number.

1

Filename

Optional

The file name to use for the container. Default is "image.gif"
"ball.gif"

Result Returns a container value.

Description

For preview a JPEG version is included as well as a file name "image.gif" and the image size.

See also GImage.WriteToFile, GImage.WriteToPNGContainer, GImage.WriteToTiffContainer, GImage.WriteToBMPContainer and GImage.WriteToJPEGContainer.

Examples

Get a container value from the picture in GIF format.

MBS("GImage.WriteToGIFContainer"; \$MyImageRef; "logo.gif")

See also

- 85.207 GImage.Quantize 4602
- 85.334 GImage.WriteToBMPContainer 4765
- 85.335 GImage.WriteToContainer 4766
- 85.336 GImage.WriteToFile 4768
- 85.338 GImage.WriteToJPEGContainer 4773
- 85.339 GImage.WriteToPDFContainer 4775
- 85.340 GImage.WriteToPNGContainer 4777
- 85.341 GImage.WriteToTiffContainer 4780

85.337.1 Blog Entries

- [MBS Filemaker Plugin 2.4 release notes](#)

- [MBS Filemaker Plugin, version 2.4pr3](#)

85.337.2 FileMaker Magazin

- Ausgabe 5/2011, Seite 33

Created 18th August 2014, last changed 24th August 2017.

85.338 GImage.WriteToJPEGContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteToJPEGContainer"; ImageRef { ; Filename })

Parameters**ImageRef**

The image reference number.

1

Filename

Optional

The file name to use for the container. Default is "image.jpg"

"ball.jpg"

Result Returns a container value.

Description

Includes a file name "image.jpg" and the image size.

For the quality setting use the GImage.SetQuality function.

For most cases the PNG file format is the better choice as it supports transparency and lossless compression.

See also GImage.WriteToFile, GImage.WriteToPNGContainer, GImage.WriteToTiffContainer, GImage.WriteToBMPContainer and GImage.WriteToGIFContainer.

Examples

Recompresses the image with JPEG compressor and a really bad quality:

```
Let ( [
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
$Result = MBS("GImage.SetQuality";$Image; 5);
$Result = MBS("GImage.WriteToJPEGContainer"; $Image);
$error = MBS("GImage.Release";$Image)
];
$Result)
```

Save JPEG image to container as script:

```
Set Variable [ $Image ; Value: MBS("GImage.NewFromContainer"; MyTable::BMPContainer) ]
Set Variable [ $r ; Value: MBS("GImage.SetQuality";$Image; 90) ]
Set Field [ MyTable::JPEGContainer ; MBS("GImage.WriteToJPEGContainer"; $Image) ]
Set Variable [ $r ; Value: MBS("GImage.Release";$Image) ]
```

See also

- 85.239 GImage.SetColorFuzz

- 85.248 GImage.SetDensity 4658
- 85.310 GImage.Solarize 4736
- 85.316 GImage.Swirl 4743
- 85.318 GImage.Threshold 4745
- 85.329 GImage.Trim 4758
- 85.336 GImage.WriteToFile 4768
- 85.337 GImage.WriteToGIFContainer 4771
- 85.339 GImage.WriteToPDFContainer 4775
- 85.341 GImage.WriteToTiffContainer 4780

Example Databases

- [GraphicsMagick/Correct Image Orientation](#)
- [GraphicsMagick/Reduce Image](#)
- [GraphicsMagick/Rotate Orientation](#)
- [GraphicsMagick/Trim Picture](#)

85.338.1 Blog Entries

- [Correct Image Orientation in FileMaker](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr3](#)

85.338.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 26
- Ausgabe 5/2011, Seite 33

Created 18th August 2014, last changed 21st December 2018.

85.339 GImage.WriteToPDFContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	7.4	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteToPDFContainer"; ImageRef { ; Filename })

Parameters**ImageRef**

The image reference number.

1

Filename

Optional

The file name to use for the container. Default is "image.pdf"

"test.pdf"

Result Returns OK or error.

Description

For preview a JPEG version is included as well as a file name and the image size.

Please make sure the DPI value is set via GImage.SetDensity function as an incorrect value can crop the PDF page.

See also GImage.WriteToFile, GImage.WriteToJPEGContainer, GImage.WriteToBMPContainer and GImage.WriteToGIFContainer.

If you need more options for PDF file, please use our DynaPDF functions.

Examples

Load image and Save to container as PDF:

```
Let ( [
```

```
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
```

```
$Result = MBS("GImage.WriteToPDFContainer"; $Image; "image.pdf");
```

```
$Error = MBS("GImage.Release";$Image)
```

```
];
```

```
$Result)
```

See also

- 85.191 GImage.New

- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 85.248 GImage.SetDensity 4658
- 85.334 GImage.WriteToBMPContainer 4765
- 85.336 GImage.WriteToFile 4768
- 85.337 GImage.WriteToGIFContainer 4771
- 85.338 GImage.WriteToJPEGContainer 4773
- 85.340 GImage.WriteToPNGContainer 4777
- 85.341 GImage.WriteToTiffContainer 4780

85.339.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr4](#)

Created 24th August 2017, last changed 21st December 2018.

85.340 GImage.WriteToPNGContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteToPNGContainer"; ImageRef { ; Filename })

Parameters**ImageRef**

The image reference number.

1

Filename

Optional

The file name to use for the container. Default is "image.png"

"ball.png"

Result Returns a container value.

Description

For preview a JPEG version is included as well as a file name "image.png" and the image size.

See also GImage.WriteToFile, GImage.WriteToJPEGContainer, GImage.WriteToBMPContainer and GImage.WriteToGIFContainer.

Some images have bad ICC profile, so saving them will crash (version 3.4 or lower) or return error (3.5 and newer). In this case, please use MBS("GImage.SetICCPProfile"; ImageRef; "") to remove the profile.

Examples

Get a container value from the picture in PNG format.

```
MBS( "GImage.WriteToPNGContainer"; $MyImageRef; "logo.png" )
```

Make a barcode and store it as PNG in a container:

```
Set Variable [ $image; Value:MBS( "Barcode.Generate"; "UPCA"; "72527270270" ) ]
```

```
If [ MBS("Iserror") = 0 ]
```

```
Set Field [ MyTable::BarCodeContainer; MBS( "GImage.WriteToPNGContainer"; $image; "barcode.png" ) ]
```

```
Set Variable [ $r; Value:MBS("GImage.Release"; $image) ]
```

```
Else
```

```
Set Field [ MyTable::BarCodeContainer; "" ]
```

```
End If
```

Create red square and save to container:

```
Set Variable [ $img; Value:MBS( "GImage.New"; "16x16"; "red" ) ]
```

```
Set Field [ test::test; MBS( "GImage.WriteToPNGContainer"; $img; "test.png" ) ]
```

```
Set Variable [ $r; Value:MBS( "GImage.Release"; $img ) ]
```

See also

- 85.296 GImage.SetType 4718
- 85.303 GImage.Sharpen 4727
- 85.305 GImage.Shave 4730
- 85.318 GImage.Threshold 4745
- 85.334 GImage.WriteToBMPContainer 4765
- 85.335 GImage.WriteToContainer 4766
- 85.336 GImage.WriteToFile 4768
- 85.337 GImage.WriteToGIFContainer 4771
- 85.338 GImage.WriteToJPEGContainer 4773
- 124.6 IsError 6266

Example Databases

- [Barcode/Barcode Generation](#)
- [Barcode/Swiss QR-Code for invoices ISO 20022](#)
- [Drag and Drop/for Mac/Image drag from one database to other/Image drop](#)
- [GraphicsMagick/Colors](#)
- [GraphicsMagick/Find Pixels](#)
- [GraphicsMagick/Image Cropping](#)
- [GraphicsMagick/Reduce Image](#)
- [GraphicsMagick/SVG to PNG](#)
- [GraphicsMagick/Trim Picture Border](#)
- [Twain/Twain](#)

85.340.1 Blog Entries

- [Create Barcodes on Server from FileMaker Go](#)
- [Neue Funktionen des MBS FileMaker Plugin 9.4](#)
- [Gradients in GraphicsMagick](#)

- [Circle crop images in FileMaker with MBS Plugin](#)
- [QR Codes for Invoices in Switzerland](#)
- [Face detection via CoreImage in FileMaker](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr3](#)

85.340.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 29](#)
- [Ausgabe 5/2018, Seite 26](#)
- [Ausgabe 5/2011, Seite 33](#)

Created 18th August 2014, last changed 21st December 2018.

85.341 GImage.WriteToTiffContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	4.4	Yes	Yes	Yes	Yes	Yes

MBS("GImage.WriteToTiffContainer"; ImageRef { ; Filename })

Parameters**ImageRef**

The image reference number.

1

Filename

Optional

The file name to use for the container. Default is "image.tif"
"ball.tif"

Result Returns a container value.

Description

For preview a JPEG version is included as well as a file name "image.tif" and the image size.

See also GImage.WriteToFile, GImage.WriteToJPEGContainer, GImage.WriteToPNGContainer, GImage.WriteToBMPCContainer and GImage.WriteToGIFContainer.

Examples

Get a container value from the picture in Tiff format.

```
MBS( "GImage.WriteToTIFFContainer"; $MyImageRef; "logo.tif" )
```

Convert image to 1 bit TIFF:

```
# Load from container
```

```
$Image = MBS("GImage.NewFromContainer"; GraphicsMagick::image);
```

```
# make black and white with threshold
```

```
$Result = MBS("GImage.Threshold";$Image; 127);
```

```
# mark as monochrome image
```

```
$Result = MBS("GImage.SetMonochrome";$Image; 1);
```

```
# set type to 1 for black/white
```

```
$Result = MBS("GImage.SetType";$Image; 1);
```

```
# set to use TIFF for compression
```

```
$Result = MBS("GImage.SetMagick";$Image; "TIFF");
```

```
# set to use CCITT 4 Fax compression
```

```
$Result = MBS("GImage.SetCompressType";$Image; 4);
```



```
# and write to a file
$Result = MBS("GImage.WriteToTiffContainer"; $Image; "test.tif");

# cleanup
$error = MBS("GImage.Release";$Image)
```

See also

- [85.191 GImage.New](#) 4580
- [85.214 GImage.Release](#) 4612
- [85.244 GImage.SetCompressType](#) 4653
- [85.269 GImage.SetMonochrome](#) 4684
- [85.296 GImage.SetType](#) 4718
- [85.334 GImage.WriteToBMPContainer](#) 4765
- [85.335 GImage.WriteToContainer](#) 4766
- [85.336 GImage.WriteToFile](#) 4768
- [85.337 GImage.WriteToGIFContainer](#) 4771
- [85.339 GImage.WriteToPDFContainer](#) 4775

Example Databases

- [GraphicsMagick/Split Multi Tiff](#)

85.341.1 Blog Entries

- [\[ANN \] MBS FileMaker Plugin 4.4 for OS X/Windows - More than 2800 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 4.4pr6](#)

Created 16th October 2014, last changed 21st December 2018.

85.342 GImage.XResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.XResolution"; ImageRef)

Parameters

ImageRef

The image reference number.

1

Result Returns the x resolution of the image.

Description

See also density functions.

See also

- 85.343 GImage.YResolution

4783

85.342.1 FileMaker Magazin

- Ausgabe 5/2011, Seite 32

Created 18th August 2014, last changed 18th August 2014.

85.343 GImage.YResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.YResolution"; ImageRef)

Parameters**ImageRef**

The image reference number.

1

Result Returns the y resolution of the image.

Description

See also density functions.

See also

- 85.342 GImage.XResolution

4782

Created 18th August 2014, last changed 18th August 2014.

85.344 GImage.Zoom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
85 GraphicsMagick	2.0	Yes	Yes	Yes	Yes	Yes

MBS("GImage.Zoom"; ImageRef; Geometry)

Parameters**ImageRef**

The image reference number.

1

Geometry

The rectangle. A geometry is specified as a width and height "100x200". With an optional offset "100x200+10+20". For percent values, add a percent on the end, for % values add a % : "100x200% !" "200x300"

Result Returns "OK" on success.

Description**See also**

- 85.36 GImage.Chop 4385
- 85.47 GImage.Copy 4401
- 85.49 GImage.Crop 4405
- 85.76 GImage.Flop 4447
- 85.219 GImage.Roll 4621
- 85.223 GImage.Rows 4626
- 85.329 GImage.Trim 4758

Created 18th August 2014, last changed 18th August 2014.

Chapter 86

Hash

Calculate hash value of text.

86.1 Hash.CRC32

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	8.3	Yes	Yes	Yes	Yes	Yes

MBS("Hash.CRC32"; InputType; InputData { ; InputEncoding; StartValue })

Parameters

InputType

The type of input. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

InputData

The actual input data. Text, container or file path.

"Hello World"

InputEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

StartValue

Optional

The start value for the CRC. Default is zero.

0

Result Returns OK or error.

Description

Same algorithm as used for zip functions.

Examples

CRC32 of Hello:

```
MBS("Hash.CRC32"; "Text"; "Hello"; "UTF-8"; 0)
```

86.1.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 11st July 2018, last changed 11st July 2018.

86.2 Hash.Digest

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Hash.Digest"; Algorithm; InputType; InputData; InputEncoding; OutputType { ; OutputInfo })

Parameters

Algorithm

Which algorithm to use. Can be MD4, MD5, SHA, SHA1, MDC2, RIPEMD160, SHA224, SHA256, SHA384 or SHA512.

"SHA512"

InputType

The type of input. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

InputData

The actual input data. Text, container or file path.

"Hello World"

InputEncoding

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

OutputType

The output type. Can be Base64, Hex, Text, File, Path.

"Hex"

OutputInfo

Optional

The addition info for output. For text it is the text encoding, for file container the file name and for path the actual native file path.

""

Result Returns error or hash.

Description

Input can be one of different types:

- Text, you pass "text", your text and the text encoding. If no or invalid encoding name is passed, the native one is used. The encoding can be one of the following strings: ansi, windows, mac, latin1, utf8, dos or native.
- PDF, you pass the container with the PDF file inside.
- Image, you pass the container with an image file (JPEG, GIF, TIFF, PNG, PICT).
- Data, you pass container and plugin looks for the file data inside.

- Hex, you pass a hex encoded text.
- Base64, you pass a base64 encoded text.
- Path, you pass the file path to a file to read.
- Container, you pass a container which is packed with all its content.

Now for output we can return the digest in various ways:

- Text, we return the hash as text in the encoding. This is not recommended for hash values. `OutputInfo` parameter is text encoding.
- Base64, the hash is returned as base64 encoded text.
- Hex, the hash is returned as hex encoded text.
- File, the hash is returned as a container value with a file inside containing the hash. `OutputInfo` parameter is the filename to be stored in the container value.
- Path, the hash is written to a file. In the `OutputInfo` parameter you provide a native file path.
- JPEG, a container with a JPEG image.
- GIF, a container with a GIF image.
- TIFF, a container with a TIFF image.
- PNG, a container with a PNG image.

Possible digest engines:

DSA-SHA, DSA, MD5, MDC2, RIPEMD160, SHA, SHA1, SHA224, SHA256, SHA384 or SHA512.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Calculate MD5 from text:

```
MBS( "Hash.Digest"; "MD5"; "Text"; "Hello World"; "UTF-8"; "Hex"; "" )
```

Calculate SHA512 from image in container and encode it as base64:

```
MBS( "Hash.Digest"; "SHA512"; "Image"; MyTable::MyContainer; ""; "Base64"; "" )
```

Hash of PDF in container:

```
MBS( "Hash.Digest"; "SHA512"; "PDF"; MyTable::MyContainer; ""; "Hex"; "" )
```


Hash a file with MD5:

```
MBS( "Hash.Digest"; "MD5"; "Path"; "/Users/cs/Desktop/test.fmp12"; ""; "Hex"; "" )
```

Stream file to AWS:

```
# Build a path to file (local) and in AWS
Set Variable [ $Filename ; Value: "test.pdf" ]
Set Variable [ $Path ; Value: "/" & $BucketName & "/PDF/" & $Filename ]
Set Variable [ $localPath ; Value: "/Users/cs/Desktop/license.pdf" ]
# calculate hash for file to upload
Set Variable [ $HashedPayload ; Value: Lower(MBS( "Hash.Digest"; "sha256"; "path"; $localPath; ""; "hex"
)) ]
# upload
Set Variable [ $curl ; Value: MBS("CURL.New") ]
# file content is streamed
Set Variable [ $result ; Value: MBS("CURL.OpenInputFile"; $curl; $localPath) ]
# setup AWS
Set Variable [ $result ; Value: MBS("CURL.SetupAWS"; $curl; $AWSAccessKeyId; $AWSSecretAccessKey;
$Region; $Service; $Path; $Domain; $Verb; $HashedPayload; $headers) ]
Set Field [ CURL Test::Result ; MBS("CURL.Perform"; $curl) ]
Set Field [ CURL Test::debug ; MBS("CURL.GetDebugAsText"; $curl) ]
Set Variable [ $result ; Value: MBS("CURL.Cleanup"; $curl) ]
```

See also

- [61.9 CURL.Cleanup](#) 1772
- [61.44 CURL.GetDebugAsText](#) 1831
- [61.139 CURL.New](#) 1947
- [61.141 CURL.OpenInputFile](#) 1951
- [61.142 CURL.Perform](#) 1954
- [61.386 CURL.SetupAWS](#) 2320
- [73.1 Encryption.Cipher](#) 3445
- [86.3 Hash.DigestFile](#) 4791
- [86.9 Hash.SHA1](#) 4802
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [Encryption and Hash/AES with PHP/AES with PHP](#)

- [Encryption and Hash/Hash Digest](#)
- [Third Party/FileMaker Snippet Storage](#)

86.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr3](#)
- [AES in FileMaker and PHP](#)
- [New universal Hash and Encrypt functions for MBS FileMaker Plugin](#)
- [MBS Filemaker Plugin, version 4.1pr2](#)

Created 18th August 2014, last changed 12nd April 2019.

86.3 Hash.DigestFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Hash.DigestFile"; Algorithm; FilePath; OutputType { ; OutputInfo })

Parameters

Algorithm

Which algorithm to use. Can be MD4, MD5, SHA, SHA1, MDC2, RIPEMD160, SHA224, SHA256, SHA384 or SHA512.

"SHA512"

FilePath

The native file path to use.

"C:\test.dat"

OutputType

The output type. Can be Base64, Hex, Text, File, Path.

"Hex"

OutputInfo

Optional

The addition info for output. For text it is the text encoding, for file container the file name and for path the actual native file path.

""

Result Returns OK or error.

Description

This function is optimized to process files on disk in chunks, so it works well for several GB of file sizes.

For output we can return the digest in various ways:

- Base64, the hash is returned as base64 encoded text.
- Hex, the hash is returned as hex encoded text.

Possible digest engines:

DSA-SHA, DSA, MD5, MDC2, RIPEMD160, SHA, SHA1, SHA224, SHA256, SHA384 or SHA512.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Create MD5 of file:

```
MBS("Hash.DigestFile"; "MD5"; "/Users/cs/Movies/test.mov"; "hex")
```

See also

- 86.2 Hash.Digest 4787
- 121.2 Path.FileMakerPathToNativePath 6139

86.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr3](#)

Created 12nd April 2019, last changed 12nd April 2019.

86.4 Hash.MD5

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	2.7	Yes	Yes	Yes	Yes	Yes

MBS("Hash.MD5"; text { ; Flags })

Parameters

text

The text to process.

"Hello World"

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded.

Pass 2 if input data is Hex encoded and plugin should decode it first.

0

Result Returns MD5 hash.

Description

Text is converted to UTF-8 to make sure the text encoding doesn't change the hash value.

Hashes are used to store a fingerprint of some data. When hashes are not equal, the data is probably also not equal.

This function is good to make hashes for passwords. You don't save the password in your database, but only the hash. On login, you calculate the hash for the password entered by the user and compare the hash with the stored one. This way the database only contains hashes. And it's unlikely someone finds the password given the hash, except for easy cases like "hello" where google will tell you the text for the hash.

To make hashes more secure, use a prefix/suffix like the user id or simply your application name. This way even hello as a password will be quite impossible to recover from the hash.

SHA-512 is stronger than MD5.

Please be aware that text can result in different hashes if it contains line endings. You may want to make sure that line endings are right with the Text.ReplaceNewline function before you compare hashes to results in other development tools. FileMaker uses Mac line endings by default and most examples for Javascript use Unix line endings.

Examples

Calculate hash of password:

```
MBS( "Hash.MD5"; $password )
```

Testing flags:

```
Set Variable [ $hash1; Value:MBS( "Hash.MD5"; "Hello" ) ]
```

```
Set Variable [ $hash2; Value:MBS( "Hash.MD5"; "48656C6C6F"; 2 ) ]
```

```
Show Custom Dialog [ "Two calculations for same hash..."; $hash1 & $hash2 ]
```

FileMaker 16 vs. Plugin:

```
# MBS Plugin:  
MBS( "Hash.MD5"; "Hello World")  
# Same via FileMaker 16 native:  
HexEncode( CryptDigest ( "Hello World"; "MD5" ))
```

See also

- [86.5 Hash.MD5.HMAC](#) 4795
- [164.59 Text.ReplaceNewline](#) 7857

Example Databases

- [Encryption and Hash/Hashes](#)

86.4.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr1](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr4](#)

Created 18th August 2014, last changed 4th June 2017.

86.5 Hash.MD5.HMAC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	4.0	Yes	Yes	Yes	Yes	Yes

MBS("Hash.MD5.HMAC"; key; data { ; Flags })

Parameters

key

The key text to use.

"Hello"

data

The data text to use.

"World"

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded. Pass 2 if key is Hex encoded and plugin should decode it first. Pass 4 if data is hex encoded and plugin should decode it first.

0

Result Returns the hash string.

Description

Keyed-Hash Message Authentication Code is a way to add salt to a hash for more security.

Please be aware that text can result in different hashes if it contains line endings. You may want to make sure that line endings are right with the Text.ReplaceNewline function before you compare hashes to results in other development tools. FileMaker uses Mac line endings by default and most examples for Javascript use Unix line endings.

Examples

Hash empty string

MBS("Hash.MD5.HMAC"; ""; "")

Example result: 74E6F7298A9C2D168935F58C001BAD88

Hash a test string

MBS("Hash.MD5.HMAC"; "key"; "The quick brown fox jumps over the lazy dog")

Example result: 80070713463E7749B90C2DC24911E275

FileMaker 16 vs. Plugin:

```
# MBS Plugin:
```

```
MBS( "Hash.MD5.HMAC"; "Key"; "Data")
```

```
# Same via FileMaker 16 native:  
HexEncode( CryptAuthCode ( "Data" ; "MD5" ; "Key" ))
```

See also

- [86.4 Hash.MD5](#) 4793
- [164.59 Text.ReplaceNewline](#) 7857

86.5.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)
- [MBS Filemaker Plugin, version 4.0pr4](#)

Created 18th August 2014, last changed 4th June 2017.

86.6 Hash.PBKDF2.HMAC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	3.3	Yes	Yes	Yes	Yes	Yes

MBS("Hash.PBKDF2.HMAC"; salt; password; iterations; desiredHashLength; hashAlgorithm { ; Flags })

Parameters

salt

The key text to use.

"Hello"

password

The data text to use.

"World"

iterations

Number of loops that the hash algorithm does.

100

desiredHashLength

Number of bytes that you want the resulting hash to be. 16 or 32 bytes are commonly used.

32

hashAlgorithm

The hash algorithm. Can be MD5, SHA1, SHA256 or SHA512.

"MD5"

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded. Pass 2 if salt is Hex encoded and plugin should decode it first. Pass 4 if password is hex encoded and plugin should decode it first.

0

Result Returns the hash or error.

Description

Same as Crypto.PBKDF2 in Xojo (Real Studio):

<http://docs.realsoftware.com/index.php/Crypto.PBKDF2>

Examples

Calculate password hash:

MBS("Hash.PBKDF2.HMAC"; "Hello"; "World"; 100; 32; "SHA512")

Example result: 2CFDC277C8B84693B85E18D5A0176249EF29B74DFDF2EE6826636F5ACBF70D0

86.6.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)
- [MBS FileMaker Plugin 3.3 for OS X/Windows - More than 1600 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 3.3pr1](#)

86.6.2 FileMaker Magazin

- [Ausgabe 4/2013, Seite 37](#)

Created 18th August 2014, last changed 11st December 2016.

86.7 Hash.RandomHexString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	3.3	Yes	Yes	Yes	Yes	Yes

MBS("Hash.RandomHexString"; Length)

Parameters

Length

The length of the text to return in characters. Result string will be double that size as it is hex.
32

Result Returns text.

Description

You can use these strings for hash seeds.

Examples

Creates 8 byte string:

MBS("Hash.RandomHexString"; 8)

See also

- 86.8 Hash.RandomString 4800
- 86.9 Hash.SHA1 4802

86.7.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

86.8 Hash.RandomString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Hash.RandomString"; Length { ; Characters })

Parameters

Length

The length of the text to return in characters.

32

Characters

Optional

Optional, a list of characters to use instead of default set.

"1234"

Result Returns text.

Description

User Characters: a to z, A to Z and 0 to 9.

You can use this strings for hash seeds or as password suggestions.

Examples

Creates 8 byte string:

```
MBS( "Hash.RandomString"; 8 )
```

Create random text with only digits:

```
MBS("Hash.RandomString"; 32; "1234567890")
```

Create random hex number:

```
MBS("Hash.RandomString"; 32; "1234567890ABCDEF")
```

Create random password using digits and punctuation:

```
MBS("Hash.RandomString"; 10; "1234567890ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz~!@# $% ^& *-_+=.")
```

See also

- 86.7 Hash.RandomHexString

4799

Example Databases

- [CURL/WebServices/Twitter OAuth](#)

86.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr5](#)
- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 14th January 2015.

86.9 Hash.SHA1

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	3.1	Yes	Yes	Yes	Yes	Yes

```
MBS( "Hash.SHA1"; text { ; Flags } )
```

Parameters

text

The text to process.

"Hello World"

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded.

Pass 2 if input data is Hex encoded and plugin should decode it first.

0

Result Returns SHA-256 hash.

Description

Text is converted to UTF-8 to make sure the text encoding doesn't change the hash value.

Hashes are used to store a fingerprint of some data. When hashes are not equal, the data is probably also not equal.

This function is good to make hashes for passwords. You don't save the password in your database, but only the hash. On login, you calculate the hash for the password entered by the user and compare the hash with the stored one. This way the database only contains hashes. And it's unlikely someone finds the password given the hash, except for easy cases like "hello" where google will tell you the text for the hash.

To make hashes more secure, use a prefix/suffix like the user id or simply your application name. This way even hello as a password will be quite impossible to recover from the hash.

SHA-1 is stronger than MD5 and weaker than SHA-512.

Please be aware that text can result in different hashes if it contains line endings. You may want to make sure that line endings are right with the Text.ReplaceNewline function before you compare hashes to results in other development tools. FileMaker uses Mac line endings by default and most examples for Javascript use Unix line endings.

Examples

Calculate hash of password:

```
MBS( "Hash.SHA1"; $password )
```

Calculate empty hash:

```
MBS("Hash.SHA1"; "")
```

Example result: DA39A3EE5E6B4B0D3255BFEF95601890AFD80709

Calculate empty hash as Base64:

```
MBS("Hash.SHA1"; ""); 1)
```

Example result: "2jmj7l5rSw0yVb/vlWAYkK/YBwk="

Calculate for two similar texts:

```
MBS("Hash.SHA1"; "Franz jagt im komplett verwahrlosten Taxi quer durch Bayern")
```

Example result: 68AC906495480A3404BEEE4874ED853A037A7A8F

Encode Password like in PHP:

```
# original in PHP:
#
# $nonce_date_pwd = pack("A*",$nonce) . pack("A*",$CREATIONDATE) . pack("H*", sha1($password));
# $PASSWORDDDIGEST = base64_encode( pack('H*', sha1($nonce_date_pwd)));
#
# in FileMaker:
#
# you can use Hash.RandomHexString to make your Nonce.
#
Set Variable [ $NonceHexEncoded ; Wert: MBS("Text.EncodeToHex"; Password Digest::Nonce) ]
Set Variable [ $CreationDateHexEncoded ; Wert: MBS("Text.EncodeToHex"; Password Digest::CreationDate) ]
Set Variable [ $PasswordHashHexEncoded ; Wert: MBS( "Hash.SHA1"; Password Digest::Password; 0 ) ]
Set Variable [ $Input ; Wert: $NonceHexEncoded & $CreationDateHexEncoded & $PasswordHashHexEncoded ]
# build hash by decoding from Hex, doing SHA1 and encode back to Base64
Set Variable [ $PasswordDigest ; Wert: MBS( "Hash.Digest"; "SHA1"; "hex"; $input; "" ; "Base64"; "" ) ]
Set Field [ Password Digest::PasswordDigest ; $PasswordDigest ]
```

Calculate for two similar texts:

```
MBS("Hash.SHA1"; "Frank jagt im komplett verwahrlosten Taxi quer durch Bayern")
```

Example result: D8E8ECE39C437E515AA8997C1A1E94F1ED2A0E62

FileMaker 16 vs. Plugin:

```
# MBS Plugin:
MBS( "Hash.SHA1"; "Hello World")
# Same via FileMaker 16 native:
HexEncode( CryptDigest ( "Hello World"; "SHA1" ))
```

See also

- 86.2 Hash.Digest

- 86.7 Hash.RandomHexString 4799
- 86.10 Hash.SHA1.HMAC 4805
- 86.13 Hash.SHA512 4812
- 164.32 Text.EncodeToHex 7819
- 164.59 Text.ReplaceNewline 7857

86.9.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 4th June 2017.

86.10 Hash.SHA1.HMAC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	3.1	Yes	Yes	Yes	Yes	Yes

```
MBS( "Hash.SHA1.HMAC"; key; data { ; Flags } )
```

Parameters

key

The key text to use.

```
"Hello"
```

data

The data text to use.

```
"World"
```

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded. Pass 2 if key is Hex encoded and plugin should decode it first. Pass 4 if data is hex encoded and plugin should decode it first.

```
0
```

Result Returns the hash string.

Description

Keyed-Hash Message Authentication Code is a way to add salt to a hash for more security.

Please be aware that text can result in different hashes if it contains line endings. You may want to make sure that line endings are right with the Text.ReplaceNewline function before you compare hashes to results in other development tools. FileMaker uses Mac line endings by default and most examples for Javascript use Unix line endings.

Examples

Hash empty string

```
MBS( "Hash.SHA1.HMAC"; ""; "" )
```

Example result: FBDB1D1B18AA6C08324B7D64B71FB76370690E1D

Hash a test string

```
MBS( "Hash.SHA1.HMAC"; "key"; "The quick brown fox jumps over the lazy dog")
```

Example result: DE7C9B85B8B78AA6BC8A7A36F70A90701C9DB4D9

FileMaker 16 vs. Plugin:

```
# MBS Plugin:
```

```
MBS( "Hash.SHA1.HMAC"; "Key"; "Data")
```

```
# Same via FileMaker 16 native:  
HexEncode( CryptAuthCode ( "Data" ; "SHA1" ; "Key" ))
```

See also

- [86.9 Hash.SHA1](#) 4802
- [86.12 Hash.SHA256.HMAC](#) 4809
- [86.14 Hash.SHA512.HMAC](#) 4814
- [164.59 Text.ReplaceNewline](#) 7857

Example Databases

- [CURL/WebServices/Twitter OAuth](#)
- [Encryption and Hash/HMAC](#)

86.10.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)
- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 4th June 2017.

86.11 Hash.SHA256

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Hash.SHA256"; text { ; Flags })

Parameters

text

The text to process.

"Hello World"

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded.

Pass 2 if input data is Hex encoded and plugin should decode it first.

0

Result Returns SHA-256 hash.

Description

Text is converted to UTF-8 to make sure the text encoding doesn't change the hash value.

Hashes are used to store a fingerprint of some data. When hashes are not equal, the data is probably also not equal.

This function is good to make hashes for passwords. You don't save the password in your database, but only the hash. On login, you calculate the hash for the password entered by the user and compare the hash with the stored one. This way the database only contains hashes. And it's unlikely someone finds the password given the hash, except for easy cases like "hello" where google will tell you the text for the hash.

To make hashes more secure, use a prefix/suffix like the user id or simply your application name. This way even hello as a password will be quite impossible to recover from the hash.

SHA-256 is stronger than SHA-1.

Please be aware that text can result in different hashes if it contains line endings. You may want to make sure that line endings are right with the Text.ReplaceNewline function before you compare hashes to results in other development tools. FileMaker uses Mac line endings by default and most examples for Javascript use Unix line endings.

Examples

Calculate hash of password:

```
MBS( "Hash.SHA256"; $password )
```

Calculate empty text hash:

```
MBS("Hash.SHA256"; "")
```

Example result: E3B0C44298FC1C149AFBF4C8996FB92427AE41E4649B934CA495991B7852B855

Calculate hash:

```
MBS("Hash.SHA256"; "The quick brown fox jumps over the lazy dog")
```

Example result: D7A8FBB307D7809469CA9ABCB0082E4F8D5651E46D3CDB762D02D0BF37C9E592

FileMaker 16 vs. Plugin:

```
# MBS Plugin:
```

```
MBS( "Hash.SHA256"; "Hello World")
```

```
# Same via FileMaker 16 native:
```

```
HexEncode( CryptDigest ( "Hello World"; "SHA256" ))
```

See also

- 86.12 Hash.SHA256.HMAC 4809
- 86.13 Hash.SHA512 4812
- 164.29 Text.EncodeToBase64URL 7814
- 164.59 Text.ReplaceNewline 7857

86.11.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 4th June 2017.

86.12 Hash.SHA256.HMAC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Hash.SHA256.HMAC"; key; data { ; Flags })

Parameters

key

The key text to use.

"Hello"

data

The data text to use.

"World"

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded. Pass 2 if key is Hex encoded and plugin should decode it first. Pass 4 if data is hex encoded and plugin should decode it first.

0

Result Returns the hash string.

Description

Keyed-Hash Message Authentication Code is a way to add salt to a hash for more security.

Please be aware that text can result in different hashes if it contains line endings. You may want to make sure that line endings are right with the Text.ReplaceNewline function before you compare hashes to results in other development tools. FileMaker uses Mac line endings by default and most examples for Javascript use Unix line endings.

Can be used to sign requests for Amazon MWS.

Examples

Hash empty string

MBS("Hash.SHA256.HMAC"; ""; "")

Example result: B613679A0814D9EC772F95D778C35FC5FF1697C493715653C6C712144292C5AD

Hash a test string

MBS("Hash.SHA256.HMAC"; "key"; "The quick brown fox jumps over the lazy dog")

Example result: F7BC83F430538424B13298E6AA6FB143EF4D59A14946175997479DBC2D1A3CD8

Hash with flags:

```
MBS( "Hash.SHA256.HMAC"; "6B6579"; "54686520717569636B2062726F776E20666F78206A756D7073206F766572207468652+4)
```

Example result: F7BC83F430538424B13298E6AA6FB143EF4D59A14946175997479DBC2D1A3CD8

FileMaker 16 vs. Plugin:

```
# MBS Plugin:
MBS( "Hash.SHA256.HMAC"; "Key"; "Data")
# Same via FileMaker 16 native:
HexEncode( CryptAuthCode ( "Data" ; "SHA256" ; "Key" ))
```

Calculate Amazon AWS Signature for canonical query:

```
Set Variable [ $Verb ; Value: "POST" ]
Set Variable [ $Domain ; Value: "mws.amazonservices.com" ]
Set Variable [ $Path ; Value: "/Orders/2013-09-01" ]
Set Variable [ $QueryString ; Value: "AWSAccessKeyId=AKIAJVZ5JFVD2SERTQIA& Action=GetOrder& AmazonOrderId.Id.1=112-4707920-3733828& SellerId=A1DGCWQ1HE6UN1& SignatureMethod=HmacSHA256& SignatureVersion=2& Timestamp=2018-01-24T22%3A34%3A24Z& Version=2013-09-01" ]
Set Variable [ $SecretKey ; Value: "1234567890" ]
Set Variable [ $Signature ; Value: MBS( "Hash.SHA256.HMAC"; $SecretKey; $Verb & Char(10) & $Domain & Char(10) & $Path & Char(10) & $QueryString; 1 ) ]
Show Custom Dialog [ "AWS Signature" ; $signature ]
```

Example result: "hTX0IGOH+lWyaqZBf513TcB6Mk3U/hidyQvJASsn7aE="

Calculate a JSON Web Token (JWT) in FileMaker:

```
// Header: { \alg\":"HS256\","typ\":"JWT\" }
// Payload: { "iss":"scotch.io","exp":1300819380,"name":"Chris Sevilleja","admin":true }

// expected result: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJsb2dnZWVJbGZlIjoiYWRtaW4iLCJpYXQiOiE0MjI3NzkraSYs8EXBxLN_oWnFSRgCzcmJmMjLiuuyu5CSpyHI
```

```
Let ( [
secret = "secretkey";
header = " { \alg\":"HS256\","typ\":"JWT\" } ";
payload = " { \loggedInAs\":"admin\","iat\":"1422779638 } ";
encodedString = MBS( "Text.EncodeToBase64URL"; header; "UTF-8") & " " & MBS( "Text.EncodeToBase64URL"; payload; "UTF-8");
// calculate hash
hash = MBS( "Hash.SHA256.HMAC"; secret; encodedString; 1 );
// transcode from Base64 to Base64 URL:
hash = MBS( "Text.EncodeToBase64URL"; MBS( "Text.DecodeFromBase64"; hash; "Windows" ); "Windows" );
// and built final result:
result = MBS( "Text.EncodeToBase64URL"; header; "UTF-8") & " " & MBS( "Text.EncodeToBase64URL"; payload; "UTF-8") & " " & hash
```

86.12. *HASH.SHA256.HMAC* 4811
] ; result)

See also

- 86.10 Hash.SHA1.HMAC 4805
- 86.11 Hash.SHA256 4807
- 86.14 Hash.SHA512.HMAC 4814
- 164.13 Text.DecodeFromBase64 7795
- 164.28 Text.EncodeToBase64 7813
- 164.29 Text.EncodeToBase64URL 7814
- 164.59 Text.ReplaceNewline 7857

86.12.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)
- [MBS Filemaker Plugin, version 4.0pr4](#)

Created 18th August 2014, last changed 1st February 2020.

86.13 Hash.SHA512

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	2.7	Yes	Yes	Yes	Yes	Yes

```
MBS( "Hash.SHA512"; text { ; Flags } )
```

Parameters

text

The text to process.

```
"Hello World"
```

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded.

Pass 2 if input data is Hex encoded and plugin should decode it first.

```
0
```

Result Returns SHA-512 hash.

Description

Text is converted to UTF-8 to make sure the text encoding doesn't change the hash value.

Hashes are used to store a fingerprint of some data. When hashes are not equal, the data is probably also not equal.

This function is good to make hashes for passwords. You don't save the password in your database, but only the hash. On login, you calculate the hash for the password entered by the user and compare the hash with the stored one. This way the database only contains hashes. And it's unlikely someone finds the password given the hash, except for easy cases like "hello" where google will tell you the text for the hash.

To make hashes more secure, use a prefix/suffix like the user id or simply your application name. This way even hello as a password will be quite impossible to recover from the hash.

SHA-512 is stronger than MD5.

Please be aware that text can result in different hashes if it contains line endings. You may want to make sure that line endings are right with the Text.ReplaceNewline function before you compare hashes to results in other development tools. FileMaker uses Mac line endings by default and most examples for Javascript use Unix line endings.

Examples

Calculate hash of password:

```
MBS( "Hash.SHA512"; $password )
```

FileMaker 16 vs. Plugin:

```
# MBS Plugin:
```

```
MBS( "Hash.SHA512"; "Hello World")
```

```
# Same via FileMaker 16 native:
```

```
HexEncode( CryptDigest ( "Hello World"; "SHA512" ) )
```


See also

- 149.12 ECKey.Verify 7074
- 86.9 Hash.SHA1 4802
- 86.11 Hash.SHA256 4807
- 86.14 Hash.SHA512.HMAC 4814
- 164.59 Text.ReplaceNewline 7857

Example Databases

- [Encryption and Hash/ECKey Test](#)
- [Encryption and Hash/Hashes](#)
- [Encryption and Hash/Solution Registration/Solution Registration Creator](#)
- [Encryption and Hash/Solution Registration/Solution Registration](#)

86.13.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr4](#)

86.13.2 FileMaker Magazin

- Ausgabe 6/2015, Seite 30
- Ausgabe 6/2015, Seite 29

Created 18th August 2014, last changed 4th June 2017.

86.14 Hash.SHA512.HMAC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
86 Hash	4.0	Yes	Yes	Yes	Yes	Yes

```
MBS( "Hash.SHA512.HMAC"; key; data { ; Flags } )
```

Parameters

key

The key text to use.

```
"Hello"
```

data

The data text to use.

```
"World"
```

Flags

Optional

Various flags you can combine by addition. Pass 1 for getting result Base64 encoded instead of Hex encoded. Pass 2 if key is Hex encoded and plugin should decode it first. Pass 4 if data is hex encoded and plugin should decode it first.

```
0
```

Result Returns the hash string.

Description

Keyed-Hash Message Authentication Code is a way to add salt to a hash for more security.

Please be aware that text can result in different hashes if it contains line endings. You may want to make sure that line endings are right with the `Text.ReplaceNewline` function before you compare hashes to results in other development tools. FileMaker uses Mac line endings by default and most examples for Javascript use Unix line endings.

Examples

Hash empty string

```
MBS( "Hash.SHA512.HMAC"; ""; "" )
```

Example result: B936CEE86C9F87AA5D3C6F2E84CB5A4239A5FE50480A6EC66B70AB5B1F4AC6730C6C515421B327EC1D69402E

Hash a test string

```
MBS( "Hash.SHA512.HMAC"; "key"; "The quick brown fox jumps over the lazy dog")
```

Example result: B42AF09057BAC1E2D41708E48A902E09B5FF7F12AB428A4FE86653C73DD248FB82F948A549F7B791A5B41915EE

FileMaker 16 vs. Plugin:

```
# MBS Plugin:
```

```
MBS( "Hash.SHA512.HMAC"; "Key"; "Data")
```

86.14. *HASH.SHA512.HMAC* 4815

Same via FileMaker 16 native:
HexEncode(CryptAuthCode ("Data" ; "SHA512" ; "Key"))

See also

- 86.10 Hash.SHA1.HMAC 4805
- 86.12 Hash.SHA256.HMAC 4809
- 86.13 Hash.SHA512 4812
- 164.59 Text.ReplaceNewline 7857

86.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)
- [MBS Filemaker Plugin, version 4.0pr4](#)

Created 18th August 2014, last changed 4th June 2017.

Chapter 87

HealthKit

Functions for health data on iOS.

87.1 HealthKit.AuthorizationStatusForType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.AuthorizationStatusForType"; Type)

Parameters

Type

The type to check.

"BiologicalSex"

Result Returns value or error.

Description

Returns the application's authorization status for the given object type.

Value is NotDetermined, SharingDenied or SharingAuthorized.

Use HealthKit.RequestAuthorizationToShareTypes to request authentication.

Please enable HealthKit for the app entitlements for Xcode, add HealthKit framework and set NSHealthShareUsageDescription descriptor for info.plist.

Examples

Check status:

```
Set Variable [ $r ; Value: MBS( "HealthKit.AuthorizationStatusForType"; "BiologicalSex" ) ]  
Show Custom Dialog [ "Status" ; $r ]
```

See also

- 87.7 HealthKit.RequestAuthorizationToShareTypes

4824

Created 25th April 2018, last changed 9th August 2018.

87.2 HealthKit.BiologicalSex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.BiologicalSex")

Result Returns sex value or error.

Description

Before calling this function, the application should request authorization to access objects with the BiologicalSex type.

Returns error message, NotSet, Female, Male or Other.

Examples

Show sex:

```
Show Custom Dialog [ "Biological Sex" ; MBS( "HealthKit.BiologicalSex" ) ]
```

Created 25th April 2018, last changed 25th April 2018.

87.3 HealthKit.BloodType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.BloodType")

Result Returns value or error.

Description

Returns an object encapsulating the user's blood type.

Before calling this method, the application should request authorization to access objects with the BloodType type.

Value can be NotSet, APositive, ANegative, BPositive, BNegative, ABPositive, ABNegative, OPositive or ONegative.

Examples

Show blood type:

```
Show Custom Dialog [ "Blood Type" ; MBS( "HealthKit.BloodType" ) ]
```

Created 25th April 2018, last changed 25th April 2018.

87.4 HealthKit.DateOfBirth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.DateOfBirth")

Result Returns date or error.

Description

Returns the user's date of birth in the Gregorian calendar.

Before calling this method, the application should request authorization to access objects with the DateOfBirth type.

Examples

Show date of birth as date and components:

```
Show Custom Dialog [ "Date of Birth" ; MBS( "HealthKit.DateOfBirth" ) & §& MBS( "HealthKit.DateOfBirthComponents" ) ]
```

See also

- 87.5 HealthKit.DateOfBirthComponents

4822

Created 25th April 2018, last changed 25th April 2018.

87.5 HealthKit.DateOfBirthComponents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.DateOfBirthComponents")

Result Returns date components or error.

Description

For iOS 10.0 or newer.

Returns the user's date of birth in the Gregorian calendar.

Before calling this method, the application should request authorization to access objects with the DateOfBirth type.

Examples

Show date of birth as date and components:

```
Show Custom Dialog [ "Date of Birth" ; MBS( "HealthKit.DateOfBirth" ) & §& MBS( "HealthKit.DateOfBirthComponents" ) ]
```

See also

- 87.4 HealthKit.DateOfBirth

4821

Created 25th April 2018, last changed 25th April 2018.

87.6 HealthKit.FitzpatrickSkinType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.FitzpatrickSkinType")

Result Returns value or error.

Description

Returns an object encapsulating the user's Fitzpatrick skin type.

Before calling this method, the application should request authorization to access objects with the FitzpatrickSkinType type.

This represents the skin type of an individual based on the Fitzpatrick scale.

The Fitzpatrick scale is a numerical classification for skin color based on the skin's response to sun exposure in terms of the degree of burning and tanning.

I Pale white skin that always burns easily in the sun and never tans.

II White skin that burns easily and tans minimally.

III White to light brown skin that burns moderately and tans uniformly.

IV Beige-olive, lightly tanned skin that burns minimally and tans moderately.

V Brown skin that rarely burns and tans profusely.

VI Dark brown to black skin that never burns and tans profusely.

Examples

Show skin type:

Show Custom Dialog ["Skin Type" ; MBS("HealthKit.FitzpatrickSkinType")]

Created 25th April 2018, last changed 25th April 2018.

87.7 HealthKit.RequestAuthorizationToShareTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.RequestAuthorizationToShareTypes"; ShareList; ReadList { ; FileName; ScriptName })

Parameters

ShareList

The list of sample types to share. Can be empty if you just read.
 """

ReadList

The list of object types to read.
 "BiologicalSex\$BloodType"

FileName

Optional
 The file name of the script to call.
 Get(FileName)

ScriptName

Optional
 The name of the script to trigger.
 "AuthorizationCompleted"

Result Returns OK or error.

Description

Prompts the user to authorize the application for reading and saving objects of the given types. Before attempting to execute queries or save objects, the application should first request authorization from the user to read and share every type of object for which the application may require access. The request is performed asynchronously and its completion will be executed on an arbitrary background queue after the user has responded. If the user has already chosen whether to grant the application access to all of the types provided, then the completion will be called without prompting the user.

We call optionally your script to pass in the result. You get a list of values. First entry is Success or Cancel. Second value is the error message.

The success parameter of the completion indicates whether prompting the user, if necessary, completed successfully and was not cancelled by the user. It does NOT indicate whether the application was granted authorization.

To customize the messages displayed on the authorization sheet, set the following keys in your app's Info.plist file. Set the NSHealthShareUsageDescription key to customize the message for reading data.

Set the NSHealthUpdateUsageDescription key to customize the message for writing data.

Supported quantity types:

- Body Measurements: BodyFatPercentage, BodyMass, BodyMassIndex, Height, LeanBodyMass, WaistCircumference.
- Fitness: StepCount, DistanceWalkingRunning, DistanceCycling, DistanceWheelchair, BasalEnergyBurned, ActiveEnergyBurned, FlightsClimbed, NikeFuel, AppleExerciseTime, PushCount, DistanceSwimming, SwimmingStrokeCount, VO2Max.
- Vitals: HeartRate, BodyTemperature, BasalBodyTemperature, BloodPressureSystolic, BloodPressureDiastolic, RespiratoryRate.
- Results: OxygenSaturation, PeripheralPerfusionIndex, BloodGlucose, NumberOfTimesFallen, ElectrodermalActivity, InhalerUsage, InsulinDelivery, BloodAlcoholContent, ForcedVitalCapacity, ForcedExpiratoryVolume1, PeakExpiratoryFlowRate.

Nutrition: DietaryFatTotal, DietaryFatPolyunsaturated, DietaryFatMonounsaturated, DietaryFatSaturated, DietaryCholesterol, DietarySodium, DietaryCarbohydrates, DietaryFiber, DietarySugar, DietaryEnergyConsumed, DietaryProtein, DietaryVitaminA, DietaryVitaminB6, DietaryVitaminB12, DietaryVitaminC, DietaryVitaminD, DietaryVitaminE, DietaryVitaminK, DietaryCalcium, DietaryIron, DietaryThiamin, DietaryRiboflavin, DietaryNiacin, DietaryFolate, DietaryBiotin, DietaryPantothenicAcid, DietaryPhosphorus, DietaryIodine, DietaryMagnesium, DietaryZinc, DietarySelenium, DietaryCopper, DietaryManganese, DietaryChromium, DietaryMolybdenum, DietaryChloride, DietaryPotassium, DietaryCaffeine, DietaryWater.

- UVExposure

Sample Types include Quantity types plus:

- Workout
- SleepAnalysis, AppleStandHour, CervicalMucusQuality, OvulationTestResult, MenstrualFlow, Inter-menstrualBleeding, SexualActivity and MindfulSession.
- BloodPressure and CDA.

Object Types include all above plus:

- activitySummary
- BiologicalSex
- BloodType
- DateOfBirth
- FitzpatrickSkinType

- WheelchairUse

Please enable HealthKit for the app entitlements for Xcode, add HealthKit framework and set NSHealthShareUsageDescription descriptor for info.plist.

Examples

Request authorization:

```
Set Variable [ $r ; Value: MBS( "HealthKit.RequestAuthorizationToShareTypes"; "" ; "BiologicalSex$Blood-  
Type$WheelchairUse$DateOfBirth$FitzpatrickSkinType$StepCount" ; Get(FileName); "AuthorizeTrigger"  
) ]  
If [ $r "OK" ]  
Show Custom Dialog [ "Error" ; $r ]  
End If
```

See also

- 87.1 HealthKit.AuthorizationStatusForType 4817

Created 25th April 2018, last changed 13th January 2020.

87.8 HealthKit.SampleQuery

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

```
MBS( "HealthKit.SampleQuery"; QuantityType; Unit; StartDate; EndDate { ; SortKey; ascending; limit }
)
```

Parameters

QuantityType

The quantity type to lookup.

"StepCount"

Unit

The unit to use. Can be SI unit or for example count for counters. See Apple documentation for details.

"count"

StartDate

The start date for the search.

Date (1 ; 1 ; 2018)

EndDate

The end date for the search.

Date (2 ; 1 ; 2018)

SortKey

Optional

How to sort. Can be StartDate or EndDate.

"StartDate"

ascending

Optional

Whether to prefer ascending instead of descending. Pass 1 for ascending or 0 for descending.

1

limit

Optional

The limit for search. Default 0 for no limit.

0

Result Returns values as JSON or error.

Description

Before calling this method, the application should request authorization to access objects with the desired quantity type.

Supported quantity types:

Body Measurements:

BodyFatPercentage, BodyMass, BodyMassIndex, Height, LeanBodyMass, WaistCircumference.

Fitness:

StepCount, DistanceWalkingRunning, DistanceCycling, DistanceWheelchair, BasalEnergyBurned, ActiveEnergyBurned, FlightsClimbed, NikeFuel, AppleExerciseTime, PushCount, DistanceSwimming, SwimmingStrokeCount, VO2Max.

Vitals:

HeartRate, BodyTemperature, BasalBodyTemperature, BloodPressureSystolic, BloodPressureDiastolic, RespiratoryRate.

Results:

OxygenSaturation, PeripheralPerfusionIndex, BloodGlucose, NumberOfTimesFallen, ElectrodermalActivity, InhalerUsage, InsulinDelivery, BloodAlcoholContent, ForcedVitalCapacity, ForcedExpiratoryVolume1, PeakExpiratoryFlowRate.

Nutrition:

DietaryFatTotal, DietaryFatPolyunsaturated, DietaryFatMonounsaturated, DietaryFatSaturated, DietaryCholesterol, DietarySodium, DietaryCarbohydrates, DietaryFiber, DietarySugar, DietaryEnergyConsumed, DietaryProtein, DietaryVitaminA, DietaryVitaminB6, DietaryVitaminB12, DietaryVitaminC, DietaryVitaminD, DietaryVitaminE, DietaryVitaminK, DietaryCalcium, DietaryIron, DietaryThiamin, DietaryRiboflavin, DietaryNiacin, DietaryFolate, DietaryBiotin, DietaryPantothenicAcid, DietaryPhosphorus, DietaryIodine, DietaryMagnesium, DietaryZinc, DietarySelenium, DietaryCopper, DietaryManganese, DietaryChromium, DietaryMolybdenum, DietaryChloride, DietaryPotassium, DietaryCaffeine, DietaryWater.

UVExposure

Examples

Query step count:

```
Set Field [ Placeholder::Result ; MBS( "HealthKit.SampleQuery"; "StepCount"; "count"; Date ( 1 ; 1 ; 2018 ); Date ( 1 ; 1 ; 2019 ) ) ]
```

87.8.1 Blog Entries

- [HealthKit for FileMaker on iOS](#)

Created 25th April 2018, last changed 26th April 2018.

87.9 HealthKit.WheelchairUse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.WheelchairUse")

Result Returns value or error.

Description

Returns an object encapsulating the user's wheelchair use.

Before calling this method, the application should request authorization to access objects with the WheelchairUse type.

Value is NotSet, No or Yes.

Examples

Show wheelchair usage:

Show Custom Dialog ["Wheelchair used" ; MBS("HealthKit.WheelchairUse")]

Created 25th April 2018, last changed 25th April 2018.

87.10 HealthKit.isHealthDataAvailable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
87 HealthKit	8.2	No	No	No	No	Yes

MBS("HealthKit.isHealthDataAvailable")

Result Returns 1, 0 or error.

Description

Returns 1 if HealthKit is supported on the device.

HealthKit is not supported on all iOS devices. Call isHealthDataAvailable before attempting to use other parts of the framework.

Please ask for a plugin with HealthKit included. We often ship without this feature as you can only use it in apps which opt-in for HealthKit.

Examples

Check status:

```
Show Custom Dialog [ "Health available" ; Let ( [ r = Let ( [ r = MBS( "HealthKit.isHealthDataAvailable" ); text = Case ( r = 1 ; "yes"; r = 0 ; "no" ; r ) ] ; text) ]
```

Created 25th April 2018, last changed 30th March 2019.

Chapter 88

HotKey

Hotkeys to execute scripts.

88.1 HotKey.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.GetEnabled"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns 1, 0 or error.

Description

The plugin does not trigger script if hotkey is temporary disabled.

See also

- [88.13 HotKey.Register](#) 4843
- [88.14 HotKey.SetEnabled](#) 4847

88.1.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 29th October 2015, last changed 29th October 2015.

88.2 HotKey.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	6.1	Yes	Yes	No	No	No

MBS("HotKey.GetEvaluate"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Result Returns OK or error.

Description

See also

- [88.13 HotKey.Register](#) 4843
- [88.15 HotKey.SetEvaluate](#) 4848

88.2.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

88.3 HotKey.GetIgnoreOnModal

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.GetIgnoreOnModal"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Result Returns OK or error.

Description

If set to 1, Hotkey scripts are not triggered in case a modal window is frontmost.

See also

- [88.13 HotKey.Register](#) 4843
- [88.16 HotKey.SetIgnoreOnModal](#) 4851

88.3.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 29th October 2015, last changed 29th October 2015.

88.4 HotKey.GetKeyCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.2	Yes	Yes	No	No	No

MBS("HotKey.GetKeyCode"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns key or error.

Description

See also

- 88.5 HotKey.GetKeyUp 4835
- 88.13 HotKey.Register 4843

Created 29th June 2015, last changed 29th June 2015.

88.5 HotKey.GetKeyUp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	7.1	Yes	Yes	No	No	No

MBS("HotKey.GetKeyUp"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns 0, 1 or error.

Description

See also

- [88.4 HotKey.GetKeyCode](#) 4834
- [88.13 HotKey.Register](#) 4843
- [88.17 HotKey.SetKeyUp](#) 4852

88.5.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 10th February 2017, last changed 10th February 2017.

88.6 HotKey.GetLocal

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.GetLocal"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns 0, 1 or error.

Description

See also

- 88.13 HotKey.Register 4843
- 88.18 HotKey.SetLocal 4853

88.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 21st October 2015, last changed 21st October 2015.

88.7 HotKey.GetModifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.2	Yes	Yes	No	No	No

MBS("HotKey.GetModifiers"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns modifiers or error.

Description

See also

- 88.13 HotKey.Register

4843

Created 29th June 2015, last changed 29th June 2015.

88.8 HotKey.GetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.GetName"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns text or error.

Description

See also

- [88.11 HotKey.GetTag](#) 4841
- [88.13 HotKey.Register](#) 4843
- [88.19 HotKey.SetName](#) 4854

88.8.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 21st October 2015, last changed 21st October 2015.

88.9 HotKey.GetScriptFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.0	Yes	Yes	No	No	No

MBS("HotKey.GetScriptFileName"; HotKeyRef)

Parameters**HotKeyRef**

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns file name or error.

Description**See also**

- 88.10 HotKey.GetScriptName 4840
- 88.13 HotKey.Register 4843
- 112.11 Menu.GetScriptFileName 5871
- 112.64 MenuItem.GetScriptFileName 5931

Created 4th February 2015, last changed 6th February 2015.

88.10 HotKey.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.0	Yes	Yes	No	No	No

MBS("HotKey.GetScriptName"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns script name or error.

Description

See also

- 88.9 HotKey.GetScriptFileName 4839
- 88.13 HotKey.Register 4843

Created 4th February 2015, last changed 6th February 2015.

88.11 HotKey.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.GetTag"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns text or error.

Description

See also

- [88.8 HotKey.GetName](#) 4838
- [88.13 HotKey.Register](#) 4843
- [88.21 HotKey.SetTag](#) 4856

88.11.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 21st October 2015, last changed 21st October 2015.

88.12 HotKey.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.2	Yes	Yes	No	No	No

MBS("HotKey.List")

Result Returns list or error.

Description

Returns list with IDs for currently registered hotkeys.

This helps debugging, especially finding scripts which do not release their objects properly.

Created 29th June 2015, last changed 21st September 2015.

88.13 HotKey.Register

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.0	Yes	Yes	No	No	No

MBS("HotKey.Register"; Code; Modifiers { ; Exclusive; FileName; ScriptName; Local; Name; Tag })

Parameters

Code

The virtual key code of the key to watch. Can be number or name of key.

"F5"

Modifiers

The keyboard modifiers to look for. Can be number of text. Text can include command, shift, alpha, option and control. Added in 6.2 for Windows: RightShift, RightOption and RightControl.

"control"

Exclusive

Optional

Pass 1 to register exclusive or 0 for non exclusive.

0

FileName

Optional

The database file name where the script is located.

"test.fmp12"

ScriptName

Optional

The script name.

"MyScript"

Local

Optional

Pass 1 to have hotkey only run script if FileMaker is frontmost. Else pass 0 (default) to have a global hotkey.

0

Name

Optional

The name for the hotkey. e.g. you can use this property to later decide in a script what to do.

"Test Hotkey"

Tag

Optional

The tag for the hotkey. e.g. you can use this property to later decide in a script what to do.

Result Returns reference or error.

Description

Only one such combination can exist for the current application, i.e. multiple entities in the same application

cannot register for the same hot key combination. The same hot key can, however, be registered by multiple applications. This means that multiple applications can potentially be notified when a particular hot key is requested.

You can request exclusive registration for your process by passing 1 for exclusive parameter. Please use `HotKey.SetScript` to assign a script for the hotkey or use parameters here.

Added Windows support with version 5.2.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Register Control-F5:

```
Set Field [ HotKeys::HotKey ID; MBS("Hotkey.Register"; "F5"; "control") ]
Set Variable [ $r; Value:MBS("HotKey.SetScript"; HotKeys::HotKey ID; Get(FileName); "HotkeyAction") ]
```

Register key 37 (L on US keyboard) with modifiers:

```
Set Field [ HotKeys::HotKey ID; MBS("Hotkey.Register"; 37; "shift-control-command-option") ]
Set Variable [ $r; Value:MBS("HotKey.SetScript"; HotKeys::HotKey ID; Get(FileName); "HotkeyAction") ]
```

Register Control-F5 for showing/hiding data viewer:

```
Set Variable [ $hotkey; Value:MBS("HotKey.Register"; "F5"; "control") ]
Set Variable [ $r; Value:MBS( "HotKey.SetEvaluate"; $hotkey; "MBS(\ "MenuBar.RunMenuCommand\ ";
49297)" ) ]
// Mac & Windows
```

Register Control-F5 to write text file on desktop with content of data viewer:

```
MBS( "HotKey.SetEvaluate";
MBS("HotKey.Register"; "F5"; "control");
"MBS( \ "Text.WriteTextFile\ ";
MBS( \ "FM.DataViewerContent\ " );
MBS( \ "Path.AddPathComponent\ ";
MBS( \ "Folders.UserDesktop\ " );
\ "Data Viewer \ " & substitute(substitute(Get(CurrentTimestamp); \":\"; \"-"); \"/\"; \"-") & \".txt\"
);
\ "UTF-8\ "
)"
)
// Mac only.
```

Register Control-F6 to write current script a text file to desktop:


```

MBS( "HotKey.SetEvaluate";
MBS("HotKey.Register"; "F6"; "control");
"MBS( \"Text.WriteTextFile\";
MBS( \"ScriptWorkspace.ScriptText\" );
MBS( \"Path.AddPathComponent\";
MBS( \"Folders.UserDesktop\" );
\"Script \" & substitute(substitute(MBS( \"ScriptWorkspace.CurrentTab\" ); \":\"; \";\"-\" ); \"/\"; \";\"-\" )
& \".txt\" );
\"UTF-8\"
)\"
)
// Mac only

```

Register hotkey Control-F7 for Windows to insert XML snippet:

```

MBS( "HotKey.SetEvaluate"; MBS("HotKey.Register"; "F7"; "control");
"Let ( [
xml = \"<fmxmlsnippet type=\\\\"FMObjectList\\\\"><Step enable=\\\\"True\\\\" id=\\\\"89\\\\" name=\\\\"#
(comment)\\\\"><Text>loop counting up from 1 to $count</Text></Step><Step enable=\\\\"True\\\\"
id=\\\\"141\\\\" name=\\\\"Set Variable\\\\"><Value><Calculation><! [ CDATA [ \\\\"/* add count
here */\\\\" ] ] ></Calculation></Value><Repetition><Calculation><! [ CDATA [ 1 ] ] ></Calcula-
tion></Repetition><Name>$count</Name></Step><Step enable=\\\\"True\\\\" id=\\\\"141\\\\" name=\\\\"Set
Variable\\\\"><Value><Calculation><! [ CDATA [ 1 ] ] ></Calculation></Value><Repetition><Calcula-
tion><! [ CDATA [ 1 ] ] ></Calculation></Repetition><Name>$index</Name></Step><Step
enable=\\\\"True\\\\" id=\\\\"68\\\\" name=\\\\"If\\\\"><Calculation><! [ CDATA [ $index $count ] ]
></Calculation></Step><Step enable=\\\\"True\\\\" id=\\\\"71\\\\" name=\\\\"Loop\\\\"></Step><Step
enable=\\\\"True\\\\" id=\\\\"89\\\\" name=\\\\"# (comment)\\\\"><Text>your script steps here</Text></Step><Step
enable=\\\\"True\\\\" id=\\\\"89\\\\" name=\\\\"# (comment)\\\\"></Step><Step enable=\\\\"True\\\\"
id=\\\\"89\\\\" name=\\\\"# (comment)\\\\"><Text>next</Text></Step><Step enable=\\\\"True\\\\"
id=\\\\"141\\\\" name=\\\\"Set Variable\\\\"><Value><Calculation><! [ CDATA [ $index + 1 ] ] ></Calcula-
tion></Value><Repetition><Calculation><! [ CDATA [ 1 ] ] ></Calculation></Repetition><Name>$in-
dex</Name></Step><Step enable=\\\\"True\\\\" id=\\\\"72\\\\" name=\\\\"Exit Loop If\\\\"><Calcula-
tion><! [ CDATA [ $index >$count ] ] ></Calculation></Step><Step enable=\\\\"True\\\\" id=\\\\"73\\\\"
name=\\\\"End Loop\\\\"></Step><Step enable=\\\\"True\\\\" id=\\\\"70\\\\" name=\\\\"End If\\\\"></Step></fmxml-
snippet>\";
r = MBS( \"Clipboard.SetFileMakerData\"; \"ScriptStep\"; xml );
r = MBS( \"RemoteControl.PressControlKey\"; 1 );
r = MBS( \"RemoteControl.PressKey\"; \"v\" );
r = MBS( \"RemoteControl.PressControlKey\"; 0 )
]; 1 ); 0 )
// for Windows

```

See also

- 79.11 FM.DataViewerContent 3897
- 88.10 HotKey.GetScriptName 4840

- 88.14 HotKey.SetEnabled 4847
- 88.15 HotKey.SetEvaluate 4848
- 88.16 HotKey.SetIgnoreOnModal 4851
- 88.17 HotKey.SetKeyUp 4852
- 88.18 HotKey.SetLocal 4853
- 121.1 Path.AddPathComponent 6135
- 137.12 RemoteControl.PressKey 6705
- 142.3 ScriptWorkspace.CurrentTab 6851

Example Databases

- [Window/Popover CardWindow](#)

88.13.1 Blog Entries

- [Insert snippet for FileMaker on Windows](#)
- [Define hot keys for functions in the FileMaker development](#)

Created 4th February 2015, last changed 20th November 2019.

88.14 HotKey.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.SetEnabled"; HotKeyRef; Value)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Value

The new state. 1 to enable, 0 to disable.

1

Result Returns OK or error.

Description

The plugin does not trigger script if hotkey is temporary disabled.

Examples

Set state:

MBS("HotKey.SetEnabled"; "35001"; 0)

See also

- [88.1 HotKey.GetEnabled](#) 4831
- [88.13 HotKey.Register](#) 4843

88.14.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 29th October 2015, last changed 29th October 2015.

88.15 HotKey.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	6.1	Yes	Yes	No	No	No

MBS("HotKey.SetEvaluate"; HotKeyRef; Expression)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the hotkey reference, so you can pass it to other functions if needed.

Examples

Sets expression to run when hotkey is pressed:

```
Variable setzen [ $result ; Wert: MBS( "HotKey.SetEvaluate"; $curl; "Let ( $$Cancelled = 1 ; 1 )" ) ]
```

Set to write to a log file when a key is pressed:

```
MBS( "HotKey.SetEvaluate"; $hotkey; "MBS(\ "Text.AppendTextFile\"; Get(CurrentHostTimeStamp) & \": Key F5 pressed$\"; \"/Users/cs/Desktop/hotkey.txt\"; \ "native\ ")")
```

Register Control-F5 for showing/hiding data viewer:

```
Set Variable [ $hotkey; Value:MBS("HotKey.Register"; "F5"; "control") ]
Set Variable [ $r; Value:MBS( "HotKey.SetEvaluate"; $hotkey; "MBS(\ "MenuBar.RunMenuCommand\"; 49297)" ) ]
```

Register Control-F5 to write text file on desktop with content of data viewer:

```
MBS( "HotKey.SetEvaluate";
MBS("HotKey.Register"; "F5"; "control");
"MBS( \ "Text.WriteTextFile\";
MBS( \ "FM.DataViewerContent\ " );
MBS( \ "Path.AddPathComponent\";
MBS( \ "Folders.UserDesktop\ " );
\ "Data Viewer \ " & substitute(substitute(Get(CurrentTimestamp); \":\"; \ "-\"); \"/\"; \ "-\") & \ ".txt\ "
```


- Evaluate vs. Script Trigger

Created 4th March 2016, last changed 15th November 2019.

88.16 HotKey.SetIgnoreOnModal

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.SetIgnoreOnModal"; HotKeyRef; Value)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Value

The new state. 1 to enable, 0 to disable.

1

Result Returns OK or error.

Description

If set to 1, Hotkey scripts are not triggered in case a modal window is frontmost.

Examples

Set state:

MBS("HotKey.SetIgnoreOnModal"; "35001"; 1)

See also

- [88.3 HotKey.GetIgnoreOnModal](#) 4833
- [88.13 HotKey.Register](#) 4843

88.16.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 29th October 2015, last changed 29th October 2015.

88.17 HotKey.SetKeyUp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	7.1	Yes	Yes	No	No	No

MBS("HotKey.SetKeyUp"; HotKeyRef; Value)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Value

Pass 1 to receive key down and up events. Pass 0 to only get one event for key down.

1

Result Returns OK or error.

Description

The script parameter will have two values. First is the hotkey ID and second KeyDown or KeyUp as text.

See also

- 88.5 HotKey.GetKeyUp 4835
- 88.13 HotKey.Register 4843

88.17.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 10th February 2017, last changed 10th February 2017.

88.18 HotKey.SetLocal

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.SetLocal"; HotKeyRef; Local)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Local

Set to 1 to only run hotkey if FileMaker is frontmost application.

0

Result Returns OK or error.

Description

Examples

Create hotkey and set local only:

```
Set Variable [ $HotKeyID; Value:MBS("Hotkey.Register"; "F5"; "shift control") ]
Set Variable [ $r; Value:MBS("HotKey.SetScript"; $HotKeyID; Get(FileName); "HotkeyAction") ]
Set Variable [ $r; Value:MBS("HotKey.SetLocal"; $HotKeyID; 1) ]
```

See also

- 88.6 HotKey.GetLocal 4836
- 88.13 HotKey.Register 4843
- 88.20 HotKey.SetScript 4855

88.18.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 21st October 2015, last changed 21st October 2015.

88.19 HotKey.SetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.SetName"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Result Returns OK or error.

Description

This is just your own name which you can query. The plugin does not use this information.

Examples

Register new hotkey with name:

```
Set Variable [ $HotKeyID; Value:MBS("Hotkey.Register"; "F5"; "shift control") ]
Set Variable [ $r; Value:MBS("HotKey.SetScript"; $HotKeyID; Get(FileName); "HotkeyAction") ]
Set Variable [ $r; Value:MBS("HotKey.SetName"; $HotKeyID; "Search People") ]
```

See also

- 88.8 HotKey.GetName 4838
- 88.13 HotKey.Register 4843
- 88.20 HotKey.SetScript 4855
- 88.21 HotKey.SetTag 4856

88.19.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 21st October 2015, last changed 21st October 2015.

88.20 HotKey.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.0	Yes	Yes	No	No	No

MBS("HotKey.SetScript"; HotKeyRef; Filename; ScriptName)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Register Control-F5:

```
Set Field [ HotKeys::HotKey ID; MBS("Hotkey.Register"; "F5"; "control") ]
```

```
Set Variable [ $r; Value:MBS("HotKey.SetScript"; HotKeys::HotKey ID; Get(FileName); "HotkeyAction") ]
```

See also

- [88.13 HotKey.Register](#) 4843
- [88.18 HotKey.SetLocal](#) 4853
- [88.19 HotKey.SetName](#) 4854
- [88.21 HotKey.SetTag](#) 4856

Example Databases

- [HotKeys](#)
- [Window/Popover CardWindow](#)

Created 4th February 2015, last changed 27th January 2016.

88.21 HotKey.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.4	Yes	Yes	No	No	No

MBS("HotKey.SetTag"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.

\$hotkey

Result Returns OK or error.

Description

This is just your own value which you can query. The plugin does not use this information.

Examples

Register new hotkey with tag:

```
Set Variable [ $HotKeyID; Value:MBS("Hotkey.Register"; "F5"; "shift control") ]
Set Variable [ $r; Value:MBS("HotKey.SetScript"; $HotKeyID; Get(FileName); "HotkeyAction") ]
Set Variable [ $r; Value:MBS("HotKey.SetTag"; $HotKeyID; "Search People") ]
```

See also

- 88.11 HotKey.GetTag 4841
- 88.13 HotKey.Register 4843
- 88.19 HotKey.SetName 4854
- 88.20 HotKey.SetScript 4855

88.21.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 21st October 2015, last changed 21st October 2015.

88.22 HotKey.Unregister

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
88 HotKey	5.0	Yes	Yes	No	No	No

MBS("HotKey.Unregister"; HotKeyRef)

Parameters

HotKeyRef

The reference value for the hotkey as returned by HotKey.Register function.
\$hotkey

Result Returns OK or error.

Description

Examples

Unregister a hotkey:

MBS("Hotkey.Unregister"; HotKeys::HotKey ID)

See also

- 88.13 HotKey.Register

4843

Example Databases

- [Window/Popover CardWindow](#)

Created 4th February 2015, last changed 4th February 2015.

Chapter 89

IKPictureTaker

A panel on Mac OS X to load images.

89.1 IKPictureTaker.ClearNotification

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.ClearNotification")

Result Returns OK on success.

Description

See also

- 89.24 IKPictureTaker.SetNotification 4882

Created 18th August 2014, last changed 18th August 2014.

89.2 IKPictureTaker.GetAllowsEditing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetAllowsEditing")

Result Returns OK or error.

Description

See also

- 89.3 IKPictureTaker.GetAllowsFileChoosing 4861
- 89.18 IKPictureTaker.SetAllowsEditing 4876

Created 18th August 2014, last changed 18th August 2014.

89.3 IKPictureTaker.GetAllowsFileChoosing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetAllowsFileChoosing")

Result Returns value or error.

Description

See also

- 89.2 IKPictureTaker.GetAllowsEditing 4860
- 89.4 IKPictureTaker.GetAllowsVideoCapture 4862
- 89.19 IKPictureTaker.SetAllowsFileChoosing 4877

Created 18th August 2014, last changed 18th August 2014.

89.4 IKPictureTaker.GetAllowsVideoCapture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetAllowsVideoCapture")

Result Returns value or error.

Description

See also

- 89.3 IKPictureTaker.GetAllowsFileChoosing 4861
- 89.20 IKPictureTaker.SetAllowsVideoCapture 4878

Created 18th August 2014, last changed 18th August 2014.

89.5 IKPictureTaker.GetInformationalText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetInformationalText")

Result Returns text or error.

Description

See also

- 89.21 IKPictureTaker.SetInformationalText

4879

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.6 IKPictureTaker.GetInputImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetInputImage" { ; ImageType; Filename })

Parameters

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

See also

- 89.8 IKPictureTaker.GetOutputImage 4866
- 89.22 IKPictureTaker.SetInputImage 4880

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.7 IKPictureTaker.GetMirroring

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetMirroring")

Result Returns value or error.

Description

Returns 1 if video mirroring is enabled, 0 otherwise.

See also

- 89.23 IKPictureTaker.SetMirroring

4881

Created 18th August 2014, last changed 18th August 2014.

89.8 IKPictureTaker.GetOutputImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetOutputImage" { ; ImageType; Filename })

Parameters

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

See also

- 89.6 IKPictureTaker.GetInputImage 4864
- 89.10 IKPictureTaker.GetOutputImageMaxWidth 4868
- 89.22 IKPictureTaker.SetInputImage 4880
- 89.25 IKPictureTaker.SetOutputImageMaxSize 4883

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.9 IKPictureTaker.GetOutputImageMaxHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetOutputImageMaxHeight")

Result Returns value or error.

Description

See also

- 89.10 IKPictureTaker.GetOutputImageMaxWidth 4868
- 89.25 IKPictureTaker.SetOutputImageMaxSize 4883

Created 18th August 2014, last changed 18th August 2014.

89.10 IKPictureTaker.GetOutputImageMaxWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetOutputImageMaxWidth")

Result Returns value or error.

Description

See also

- 89.8 IKPictureTaker.GetOutputImage 4866
- 89.9 IKPictureTaker.GetOutputImageMaxHeight 4867
- 89.25 IKPictureTaker.SetOutputImageMaxSize 4883

Created 18th August 2014, last changed 18th August 2014.

89.11 IKPictureTaker.GetRemainOpenAfterValidate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetRemainOpenAfterValidate")

Result Returns value or error.

Description

See also

- 89.26 IKPictureTaker.SetRemainOpenAfterValidate

4884

Created 18th August 2014, last changed 18th August 2014.

89.12 IKPictureTaker.GetShowAddressBookPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetShowAddressBookPicture")

Result Returns value or error.

Description

See also

- 89.15 IKPictureTaker.GetShowRecentPicture 4873
- 89.27 IKPictureTaker.SetShowAddressBookPicture 4885

Created 18th August 2014, last changed 18th August 2014.

89.13 IKPictureTaker.GetShowEffects

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetShowEffects")

Result Returns value or error.

Description

See also

- 89.28 IKPictureTaker.SetShowEffects

4886

Created 18th August 2014, last changed 28th November 2019.

89.14 IKPictureTaker.GetShowEmptyPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetShowEmptyPicture" { ; ImageType; Filename })

Parameters

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

See also

- 89.15 IKPictureTaker.GetShowRecentPicture 4873
- 89.29 IKPictureTaker.SetShowEmptyPicture 4887
- 89.30 IKPictureTaker.SetShowRecentPicture 4888

Created 18th August 2014, last changed 18th August 2014.

89.15 IKPictureTaker.GetShowRecentPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetShowRecentPicture")

Result Returns value or error.

Description

See also

- 89.12 IKPictureTaker.GetShowAddressBookPicture 4870
- 89.14 IKPictureTaker.GetShowEmptyPicture 4872
- 89.16 IKPictureTaker.GetUpdateRecentPicture 4874
- 89.29 IKPictureTaker.SetShowEmptyPicture 4887
- 89.30 IKPictureTaker.SetShowRecentPicture 4888
- 89.31 IKPictureTaker.SetUpdateRecentPicture 4889

Created 18th August 2014, last changed 18th August 2014.

89.16 IKPictureTaker.GetUpdateRecentPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.GetUpdateRecentPicture")

Result Returns value or error.

Description

See also

- 89.15 IKPictureTaker.GetShowRecentPicture 4873
- 89.30 IKPictureTaker.SetShowRecentPicture 4888
- 89.31 IKPictureTaker.SetUpdateRecentPicture 4889

Created 18th August 2014, last changed 18th August 2014.

89.17 IKPictureTaker.Run

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.Run")

Result Returns OK on success.

Description

Created 18th August 2014, last changed 18th August 2014.

89.18 IKPictureTaker.SetAllowsEditing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetAllowsEditing"; Value)

Parameters

Value

The new setting. Pass 0 to disable or 1 to enable.

1

Result Returns OK or error.

Description

See also

- [89.2 IKPictureTaker.GetAllowsEditing](#) 4860
- [89.19 IKPictureTaker.SetAllowsFileChoosing](#) 4877

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.19 IKPictureTaker.SetAllowsFileChoosing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetAllowsFileChoosing"; Value)

Parameters

Value

The new setting. Pass 0 to disable and 1 to enable.

1

Result Returns OK or error.

Description

See also

- [89.3 IKPictureTaker.GetAllowsFileChoosing](#) 4861
- [89.18 IKPictureTaker.SetAllowsEditing](#) 4876
- [89.20 IKPictureTaker.SetAllowsVideoCapture](#) 4878

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.20 IKPictureTaker.SetAllowsVideoCapture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetAllowsVideoCapture"; Value)

Parameters

Value

The new setting. Pass 0 to disable and 1 to enable.

1

Result Returns OK or error.

Description

See also

- [89.4 IKPictureTaker.GetAllowsVideoCapture](#) 4862
- [89.19 IKPictureTaker.SetAllowsFileChoosing](#) 4877

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.21 IKPictureTaker.SetInformationalText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetInformationalText"; text)

Parameters

text

The new informational text.

"Logo Picture"

Result Returns OK or error.

Description

Default text is "Drag Image Here".

See also

- 89.5 IKPictureTaker.GetInformationalText

4863

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.22 IKPictureTaker.SetInputImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetInputImage"; Image)

Parameters

Image

The new container value with an input image.

\$image

Result Returns OK or error.

Description

See also

- [89.6 IKPictureTaker.GetInputImage](#) 4864
- [89.8 IKPictureTaker.GetOutputImage](#) 4866

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.23 IKPictureTaker.SetMirroring

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetMirroring"; Value)

Parameters

Value

The new setting.

1

Result Returns OK or error.

Description

See also

- 89.7 IKPictureTaker.GetMirroring

4865

Created 18th August 2014, last changed 18th August 2014.

89.24 IKPictureTaker.SetNotification

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetNotification"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fp7"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK on success.

Description

This script is called whenever the buttons in the panel are called.

Parameter to this script is "0" for cancel and "1" for OK.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Installs notification script:

```
MBS( "IKPictureTaker.SetNotification"; Get(Filename); "GotImage" )
```

See also

- 89.1 IKPictureTaker.ClearNotification

4859

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 27th January 2016.

89.25 IKPictureTaker.SetOutputImageMaxSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetOutputImageMaxSize"; Width; Height)

Parameters

Width

The maximum image width.

500

Height

The maximum image height.

500

Result Returns OK or error.

Description

See also

- 89.8 IKPictureTaker.GetOutputImage 4866
- 89.9 IKPictureTaker.GetOutputImageMaxHeight 4867
- 89.10 IKPictureTaker.GetOutputImageMaxWidth 4868

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.26 IKPictureTaker.SetRemainOpenAfterValidate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetRemainOpenAfterValidate"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

This allows the application to programmatically dismiss the panel.

See also

- 89.11 IKPictureTaker.GetRemainOpenAfterValidate 4869

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.27 IKPictureTaker.SetShowAddressBookPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetShowAddressBookPicture"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Deprecated by Apple.

See also

- 89.12 IKPictureTaker.GetShowAddressBookPicture 4870
- 89.30 IKPictureTaker.SetShowRecentPicture 4888

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 14th October 2017.

89.28 IKPictureTaker.SetShowEffects

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetShowEffects"; Value)

Parameters

Value

The new setting. Pass 0 to disable or 1 to enable.

1

Result Returns OK or error.

Description

See also

- [89.13 IKPictureTaker.GetShowEffects](#) 4871

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 28th November 2019.

89.29 IKPictureTaker.SetShowEmptyPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetShowEmptyPicture"; Image)

Parameters**Image**

The new container value with an input image.

\$image

Result Returns OK or error.

Description**See also**

- 89.14 IKPictureTaker.GetShowEmptyPicture 4872
- 89.15 IKPictureTaker.GetShowRecentPicture 4873
- 89.30 IKPictureTaker.SetShowRecentPicture 4888

Created 18th August 2014, last changed 18th August 2014.

89.30 IKPictureTaker.SetShowRecentPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetShowRecentPicture"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 disable.

1

Result Returns OK or error.

Description

See also

- 89.14 IKPictureTaker.GetShowEmptyPicture 4872
- 89.15 IKPictureTaker.GetShowRecentPicture 4873
- 89.16 IKPictureTaker.GetUpdateRecentPicture 4874
- 89.27 IKPictureTaker.SetShowAddressBookPicture 4885
- 89.29 IKPictureTaker.SetShowEmptyPicture 4887
- 89.31 IKPictureTaker.SetUpdateRecentPicture 4889

Example Databases

- [Mac only/IKPictureTaker](#)

Created 18th August 2014, last changed 18th August 2014.

89.31 IKPictureTaker.SetUpdateRecentPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
89 IKPictureTaker	3.5	Yes	No	No	No	No

MBS("IKPictureTaker.SetUpdateRecentPicture"; Value)

Parameters

Value

The new setting. Pass 0 to disable or 1 to enable.

1

Result Returns OK or error.

Description

See also

- 89.15 IKPictureTaker.GetShowRecentPicture 4873
- 89.16 IKPictureTaker.GetUpdateRecentPicture 4874
- 89.30 IKPictureTaker.SetShowRecentPicture 4888

Created 18th August 2014, last changed 18th August 2014.

Chapter 90

IKSlideShow

Run slideshow on Mac OS X.

90.1 IKSlideShow.Add

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.Add"; container)

Parameters

container

The container with the image or the file.

Result Returns the number of slides added or an error message.

Description

The container can contain an image (GIF, PNG, BMP, JPEG) or an image file (TIFF, BMP, PNG, JPEG) and other formats supported by Mac OS X) or a PDF file.

For PDF files each page is made one slide.

This is the general function. It may often be better to use the functions IKSlideShow.AddImage, IKSlideShow.AddPath, IKSlideShow.AddPDF or IKSlideShow.AddURL.

Sets mode to images.

See also

- 90.2 IKSlideShow.AddImage 4893
- 90.4 IKSlideShow.AddPath 4895
- 90.3 IKSlideShow.AddPDF 4894
- 90.5 IKSlideShow.AddURL 4896

- 90.17 IKSlideShow.ItemAtIndex 4908
- 90.18 IKSlideShow.Run 4910

Example Databases

- [Mac only/Slideshow Example](#)

Created 18th August 2014, last changed 18th August 2014.

90.2 IKSlideShow.AddImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	3.1	Yes	No	No	No	No

MBS("IKSlideShow.AddImage"; Image)

Parameters

Image

The image as container.

\$img

Result Returns the number of slides added or an error message.

Description

The container can contain an image (GIF, PNG, BMP, JPEG) or an image file (TIFF, BMP, PNG, JPEG and other formats supported by Mac OS X).

Sets mode to images.

See also

- [90.1 IKSlideShow.Add](#) 4891
- [90.4 IKSlideShow.AddPath](#) 4895
- [90.3 IKSlideShow.AddPDF](#) 4894
- [90.5 IKSlideShow.AddURL](#) 4896

90.2.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 18th August 2014.

90.3 IKSlideShow.AddPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	3.1	Yes	No	No	No	No

MBS("IKSlideShow.AddPDF"; PDF)

Parameters

PDF

The PDF.

\$pdf

Result Returns the number of slides added or an error message.

Description

Each page is made one slide.

You can pass a container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Sets mode to PDF.

See also

- 90.1 IKSlideShow.Add 4891
- 90.2 IKSlideShow.AddImage 4893
- 90.4 IKSlideShow.AddPath 4895
- 90.5 IKSlideShow.AddURL 4896
- 122.28 PDFKit.Open 6198

90.3.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 18th August 2014.

90.4 IKSlideShow.AddPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	3.1	Yes	No	No	No	No

MBS("IKSlideShow.AddPath"; Path)

Parameters

Path

The native file path to the image file.

"/Users/test/Images/test.jpg"

Result Returns the number of slides added or an error message.

Description

The file can contain an image (GIF, PNG, BMP, JPEG) or an image file (TIFF, BMP, PNG, JPEG and other formats supported by Mac OS X)

Sets mode to images.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 90.1 IKSlideShow.Add 4891
- 90.2 IKSlideShow.AddImage 4893
- 90.3 IKSlideShow.AddPDF 4894
- 90.5 IKSlideShow.AddURL 4896
- 121.2 Path.FileMakerPathToNativePath 6139

90.4.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 5th September 2014.

90.5 IKSlideShow.AddURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	3.1	Yes	No	No	No	No

MBS("IKSlideShow.AddURL"; URL)

Parameters

URL

The file url to the image.

"https://www.mbsplugins.de/images/realworld-disney.jpg"

Result Returns the number of slides added or an error message.

Description

The URL can be http/https and some other formats Apple's frameworks know about.

Sets mode to images.

See also

- 90.1 IKSlideShow.Add 4891
- 90.2 IKSlideShow.AddImage 4893
- 90.4 IKSlideShow.AddPath 4895
- 90.3 IKSlideShow.AddPDF 4894
- 90.17 IKSlideShow.ItemAtIndex 4908

90.5.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 18th August 2014.

90.6 IKSlideShow.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.Clear" { ; Index })

Parameters

Index

Optional

The index of the item to remove. From 0 to IKSlideShow.Count-1.

If parameter is not provided, we clear all items.

0

Result Returns OK or error.

Description

See also

- 90.7 IKSlideShow.Count

4898

Example Databases

- [Mac only/Slideshow Example](#)

90.6.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 18th August 2014, last changed 3th August 2016.

90.7 IKSlideShow.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	6.4	Yes	No	No	No	No

MBS("IKSlideShow.Count")

Result Returns number or error.

Description

See also

- [90.6 IKSlideShow.Clear](#) 4897
- [90.17 IKSlideShow.ItemAtIndex](#) 4908
- [90.18 IKSlideShow.Run](#) 4910

90.7.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 3th August 2016, last changed 3th August 2016.

90.8 IKSlideShow.GetAudioFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	6.4	Yes	No	No	No	No

MBS("IKSlideShow.GetAudioFile")

Result Returns path or error.

Description

See also

- 90.19 IKSlideShow.SetAudioFile

4911

90.8.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 5th August 2016, last changed 5th August 2016.

90.9 IKSlideShow.GetMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	3.1	Yes	No	No	No	No

MBS("IKSlideShow.GetMode")

Result Returns current mode.

Description

A slideshow is in one of three modes. If used with the wrong mode, you are in trouble and the framework can crash.

See also

- 90.13 IKSlideShow.GetScreen 4904
- 90.20 IKSlideShow.SetMode 4912

90.9.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 18th August 2014.

90.10 IKSlideShow.GetPDFDisplayBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.GetPDFDisplayBox")

Result The current PDF display box.

Description

possible values:

kPDFDisplayBoxMediaBox = 0

kPDFDisplayBoxCropBox = 1

kPDFDisplayBoxBleedBox = 2

kPDFDisplayBoxTrimBox = 3

kPDFDisplayBoxArtBox = 4

See also

- 90.11 IKSlideShow.GetPDFDisplayMode 4902
- 90.12 IKSlideShow.GetPDFDisplaysAsBook 4903
- 90.21 IKSlideShow.SetPDFDisplayBox 4913
- 90.22 IKSlideShow.SetPDFDisplayMode 4914
- 90.23 IKSlideShow.SetPDFDisplaysAsBook 4915

Created 18th August 2014, last changed 18th August 2014.

90.11 IKSlideShow.GetPDFDisplayMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.GetPDFDisplayMode")

Result The current PDF display mode.

Description

Display modes:

kPDFDisplaySinglePage = 0

kPDFDisplaySinglePageContinuous = 1

kPDFDisplayTwoUp = 2

kPDFDisplayTwoUpContinuous = 3

See also

- 90.10 IKSlideShow.GetPDFDisplayBox 4901
- 90.12 IKSlideShow.GetPDFDisplaysAsBook 4903
- 90.21 IKSlideShow.SetPDFDisplayBox 4913
- 90.22 IKSlideShow.SetPDFDisplayMode 4914
- 90.23 IKSlideShow.SetPDFDisplaysAsBook 4915

Created 18th August 2014, last changed 18th August 2014.

90.12 IKSlideShow.GetPDFDisplaysAsBook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.GetPDFDisplaysAsBook")

Result Returns the current value as boolean.

Description

See also

- 90.10 IKSlideShow.GetPDFDisplayBox 4901
- 90.11 IKSlideShow.GetPDFDisplayMode 4902
- 90.21 IKSlideShow.SetPDFDisplayBox 4913
- 90.22 IKSlideShow.SetPDFDisplayMode 4914
- 90.23 IKSlideShow.SetPDFDisplaysAsBook 4915

Created 18th August 2014, last changed 18th August 2014.

90.13 IKSlideShow.GetScreen

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	6.4	Yes	No	No	No	No

MBS("IKSlideShow.GetScreen")

Result Returns number or error.

Description

-1 is default while 0 to Screen.Count-1 is an index to a screen.

See also

- [90.9 IKSlideShow.GetMode](#) 4900
- [90.24 IKSlideShow.SetScreen](#) 4916
- [141.1 Screen.Count](#) 6837

90.13.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 5th August 2016, last changed 5th August 2016.

90.14 IKSlideShow.GetStartIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.8	Yes	No	No	No	No

MBS("IKSlideShow.GetStartIndex")

Result Returns the index of the first slide.

Description

The index is 0 based. -1 is the default start index.

See also

- 90.15 IKSlideShow.GetStartPaused 4906
- 90.17 IKSlideShow.ItemAtIndex 4908
- 90.25 IKSlideShow.SetStartIndex 4917
- 90.26 IKSlideShow.SetStartPaused 4918

Created 18th August 2014, last changed 18th August 2014.

90.15 IKSlideShow.GetStartPaused

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.GetStartPaused")

Result Returns the current value for the start pause setting.

Description

Default value is false.

See also

- 90.14 IKSlideShow.GetStartIndex 4905
- 90.25 IKSlideShow.SetStartIndex 4917
- 90.26 IKSlideShow.SetStartPaused 4918

Created 18th August 2014, last changed 18th August 2014.

90.16 IKSlideShow.GetWrapAround

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.GetWrapAround")

Result a boolean value whether the slide show wraps around.

Description

See also

- [90.27 IKSlideShow.SetWrapAround](#)

4919

Example Databases

- [Mac only/Slideshow Example](#)

Created 18th August 2014, last changed 18th August 2014.

90.17 IKSlideShow.ItemAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	6.4	Yes	No	No	No	No

MBS("IKSlideShow.ItemAtIndex"; Index { ; Filename; Type })

Parameters

Index

From 0 to IKSlideShow.Count-1.

0

Filename

Optional

For PDF or image files returned an optional file name.

"test.jpg"

Type

Optional

For images the type you like to get. Can be JPEG, TIFF, PNG, GIF, BMP or PDF.

"JPEG"

Result Returns value or error.

Description

Examples

Add an item and query it back:

```
Set Variable [ $r; Value:MBS( "IKSlideShow.AddURL"; "http://www.mbsplugins.de/images/xdc2016.jpg"
) ]
Show Custom Dialog [ "Count"; MBS( "IKSlideShow.Count" ) ]
Show Custom Dialog [ "First item"; MBS( "IKSlideShow.ItemAtIndex"; 0 ) ]
```

See also

- 90.1 IKSlideShow.Add 4891
- 90.5 IKSlideShow.AddURL 4896
- 90.7 IKSlideShow.Count 4898
- 90.14 IKSlideShow.GetStartIndex 4905
- 90.25 IKSlideShow.SetStartIndex 4917

90.17.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

90.18 IKSlideShow.Run

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.Run")

Result Returns "OK" on success.

Description

See also

- [90.1 IKSlideShow.Add](#) 4891
- [90.7 IKSlideShow.Count](#) 4898

Example Databases

- [Mac only/Slideshow Example](#)

Created 18th August 2014, last changed 18th August 2014.

90.19 IKSlideShow.SetAudioFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	6.4	Yes	No	No	No	No

MBS("IKSlideShow.SetAudioFile"; Path)

Parameters

Path

The native file path to the audio file.

"/Users/cs/Desktop/test.m4a"

Result Returns OK or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 90.8 IKSlideShow.GetAudioFile 4899
- 121.2 Path.FileMakerPathToNativePath 6139

90.19.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 5th August 2016, last changed 5th August 2016.

90.20 IKSlideShow.SetMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	3.1	Yes	No	No	No	No

MBS("IKSlideShow.SetMode"; Mode)

Parameters

Mode

Can be images, PDF or mixed.

Result Returns OK on success.

Description

A slideshow is in one of three modes. Our Add methods set the mode automatically, so you may need to use this method to set the mode you want after adding items.

Examples

Set mode to PDF:

```
MBS( "IKSlideShow.SetMode"; "pdf" )
```

Set mode to Mixed:

```
MBS( "IKSlideShow.SetMode"; "Mixed" )
```

See also

- [90.9 IKSlideShow.GetMode](#) 4900
- [90.24 IKSlideShow.SetScreen](#) 4916

90.20.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)
- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 1st August 2016.

90.21 IKSlideShow.SetPDFDisplayBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.SetPDFDisplayBox"; display box)

Parameters

display box

The new display box value.

Result The current display box value or an error message.

Description

possible values:

kPDFDisplayBoxMediaBox = 0

kPDFDisplayBoxCropBox = 1

kPDFDisplayBoxBleedBox = 2

kPDFDisplayBoxTrimBox = 3

kPDFDisplayBoxArtBox = 4

See also

- 90.10 IKSlideShow.GetPDFDisplayBox 4901
- 90.11 IKSlideShow.GetPDFDisplayMode 4902
- 90.12 IKSlideShow.GetPDFDisplaysAsBook 4903
- 90.22 IKSlideShow.SetPDFDisplayMode 4914
- 90.23 IKSlideShow.SetPDFDisplaysAsBook 4915

Created 18th August 2014, last changed 18th August 2014.

90.22 IKSlideShow.SetPDFDisplayMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.SetPDFDisplayMode")

Result display mode The new display mode value.

Description

Display modes:

kPDFDisplaySinglePage = 0

kPDFDisplaySinglePageContinuous = 1

kPDFDisplayTwoUp = 2

kPDFDisplayTwoUpContinuous = 3

See also

- 90.10 IKSlideShow.GetPDFDisplayBox 4901
- 90.11 IKSlideShow.GetPDFDisplayMode 4902
- 90.12 IKSlideShow.GetPDFDisplaysAsBook 4903
- 90.21 IKSlideShow.SetPDFDisplayBox 4913
- 90.23 IKSlideShow.SetPDFDisplaysAsBook 4915

Created 18th August 2014, last changed 18th August 2014.

90.23 IKSlideShow.SetPDFDisplaysAsBook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.SetPDFDisplaysAsBook"; value)

Parameters**value**

The new setting value

1

Result Returns "OK" on success.

Description**See also**

- 90.10 IKSlideShow.GetPDFDisplayBox 4901
- 90.11 IKSlideShow.GetPDFDisplayMode 4902
- 90.12 IKSlideShow.GetPDFDisplaysAsBook 4903
- 90.21 IKSlideShow.SetPDFDisplayBox 4913
- 90.22 IKSlideShow.SetPDFDisplayMode 4914

Created 18th August 2014, last changed 18th August 2014.

90.24 IKSlideShow.SetScreen

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	6.4	Yes	No	No	No	No

MBS("IKSlideShow.SetScreen"; Index)

Parameters

Index

Pass index of screen. -1 is default screen, while 0 to Screen.Count-1 is an index to a screen.

0

Result Returns OK or error.

Description

See also

- [90.13 IKSlideShow.GetScreen](#) 4904
- [90.20 IKSlideShow.SetMode](#) 4912
- [141.1 Screen.Count](#) 6837

90.24.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 5th August 2016, last changed 5th August 2016.

90.25 **IKSlideShow.SetStartIndex**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.8	Yes	No	No	No	No

MBS("IKSlideShow.SetStartIndex"; Value)

Parameters

Value

The new start index.

0

Result Returns "OK" on success.

Description

Use -1 to use the default start index.

See also

- 90.14 IKSlideShow.GetStartIndex 4905
- 90.15 IKSlideShow.GetStartPaused 4906
- 90.17 IKSlideShow.ItemAtIndex 4908
- 90.26 IKSlideShow.SetStartPaused 4918

Created 18th August 2014, last changed 18th August 2014.

90.26 IKSlideShow.SetStartPaused

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.SetStartPaused"; value)

Parameters

value

The new value.

0

Description

Examples

Sets start paused off:

MBS("IKSlideShow.SetStartPaused"; 0)

See also

- [90.14 IKSlideShow.GetStartIndex](#) 4905
- [90.15 IKSlideShow.GetStartPaused](#) 4906
- [90.25 IKSlideShow.SetStartIndex](#) 4917

Created 18th August 2014, last changed 18th August 2014.

90.27 IKSlideShow.SetWrapAround

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
90 IKSlideShow	1.6	Yes	No	No	No	No

MBS("IKSlideShow.SetWrapAround"; value)

Parameters

value

The new wrap around value.

1

Result Returns "OK" on success.

Description

Default is true

See also

- 90.16 IKSlideShow.GetWrapAround

4907

Example Databases

- [Mac only/Slideshow Example](#)

Created 18th August 2014, last changed 18th August 2014.

Chapter 91

ImageCapture

Scan images from flatbed scanners on Mac.

Using the ImageKit framework from Apple to talk to flatbed or document feeder scanner.

91.1 IKDeviceBrowserPanel.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.Close")

Result Returns OK or error.

Description

Examples

Close window:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.Close" ) ]
```

See also

- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.13 IKDeviceBrowserPanel.Hide 4934
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.29 IKDeviceBrowserPanel.Show 4951

- 91.30 IKDeviceBrowserPanel.Visible

Created 7th November 2016, last changed 7th November 2016.

91.2 IKDeviceBrowserPanel.GetCancelButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetCancelButtonLabel")

Result Returns text.

Description

See also

- 91.10 IKDeviceBrowserPanel.GetSelectButtonLabel 4931
- 91.17 IKDeviceBrowserPanel.SetCancelButtonLabel 4938
- 91.25 IKDeviceBrowserPanel.SetSelectButtonLabel 4946

Created 7th November 2016, last changed 7th November 2016.

91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetDisplaysLocalCameras")

Result Returns 1, 0 or error.

Description

See also

- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942

Created 7th November 2016, last changed 7th November 2016.

91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetDisplaysLocalScanners")

Result Returns 1, 0 or error.

Description

See also

- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942

Created 7th November 2016, last changed 7th November 2016.

91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetDisplaysNetworkCameras")

Result Returns 1, 0 or error.

Description

See also

- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924
- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942

Created 7th November 2016, last changed 7th November 2016.

91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetDisplaysNetworkScanners")

Result Returns 1, 0 or error.

Description

See also

- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924
- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942

Created 7th November 2016, last changed 7th November 2016.

91.7 IKDeviceBrowserPanel.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetHeight")

Result Returns height value.

Description

See also IKDeviceBrowserPanel.SetWidth, IKDeviceBrowserPanel.GetWidth and IKDeviceBrowserPanel.SetHeight.

See also

- 91.9 IKDeviceBrowserPanel.GetPrompt 4930
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.13 IKDeviceBrowserPanel.Hide 4934
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.30 IKDeviceBrowserPanel.Visible 4953

Created 7th November 2016, last changed 7th November 2016.

91.8 IKDeviceBrowserPanel.GetMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetMode")

Result Returns OK or error.

Description

Value is Table, Outline or Icon.

See also

- 91.1 IKDeviceBrowserPanel.Close 4921
- 91.9 IKDeviceBrowserPanel.GetPrompt 4930
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.29 IKDeviceBrowserPanel.Show 4951
- 91.30 IKDeviceBrowserPanel.Visible 4953

Created 7th November 2016, last changed 7th November 2016.

91.9 IKDeviceBrowserPanel.GetPrompt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetPrompt")

Result Returns text.

Description

See also

- 91.7 IKDeviceBrowserPanel.GetHeight 4928
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.27 IKDeviceBrowserPanel.SetWidth 4949

Created 7th November 2016, last changed 7th November 2016.

91.10 IKDeviceBrowserPanel.GetSelectButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetSelectButtonLabel")

Result Returns text.

Description

See also

- 91.2 IKDeviceBrowserPanel.GetCancelButtonLabel 4923
- 91.17 IKDeviceBrowserPanel.SetCancelButtonLabel 4938
- 91.25 IKDeviceBrowserPanel.SetSelectButtonLabel 4946

Created 7th November 2016, last changed 7th November 2016.

91.11 IKDeviceBrowserPanel.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetWidth")

Result Returns width.

Description

See also `IKDeviceBrowserPanel.SetWidth`, `IKDeviceBrowserPanel.SetHeight` and `IKDeviceBrowserPanel.GetHeight`.

See also

- 91.7 `IKDeviceBrowserPanel.GetHeight` 4928
- 91.8 `IKDeviceBrowserPanel.GetMode` 4929
- 91.14 `IKDeviceBrowserPanel.Reset` 4935
- 91.22 `IKDeviceBrowserPanel.SetHeight` 4943
- 91.23 `IKDeviceBrowserPanel.SetMode` 4944
- 91.24 `IKDeviceBrowserPanel.SetPrompt` 4945
- 91.26 `IKDeviceBrowserPanel.SetTrigger` 4947
- 91.27 `IKDeviceBrowserPanel.SetWidth` 4949
- 91.28 `IKDeviceBrowserPanel.SetWindowTitle` 4950
- 91.30 `IKDeviceBrowserPanel.Visible` 4953

Created 7th November 2016, last changed 7th November 2016.

91.12 IKDeviceBrowserPanel.GetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.GetWindowTitle")

Result Returns text.

Description

See also

- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.28 IKDeviceBrowserPanel.SetWindowTitle 4950

Created 7th November 2016, last changed 7th November 2016.

91.13 IKDeviceBrowserPanel.Hide

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.Hide")

Result Returns OK or error.

Description

Examples

Hide window:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.Hide" ) ]
```

See also

- 91.1 IKDeviceBrowserPanel.Close 4921
- 91.7 IKDeviceBrowserPanel.GetHeight 4928
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.29 IKDeviceBrowserPanel.Show 4951
- 91.30 IKDeviceBrowserPanel.Visible 4953

Created 7th November 2016, last changed 7th November 2016.

91.14 IKDeviceBrowserPanel.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.Reset")

Result Returns OK or error.

Description

See also

- 91.1 IKDeviceBrowserPanel.Close 4921
- 91.9 IKDeviceBrowserPanel.GetPrompt 4930
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.13 IKDeviceBrowserPanel.Hide 4934
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.29 IKDeviceBrowserPanel.Show 4951
- 91.30 IKDeviceBrowserPanel.Visible 4953

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.15 IKDeviceBrowserPanel.SelectedDeviceID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SelectedDeviceID")

Result Returns text or error.

Description

See also

- 91.16 IKDeviceBrowserPanel.SelectedDeviceName

4937

Created 7th November 2016, last changed 7th November 2016.

91.16 IKDeviceBrowserPanel.SelectedDeviceName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SelectedDeviceName")

Result Returns text or error.

Description

Examples

Query selected device in triggered script:

```
Set Variable [ $Param; Value:Get(ScriptParameter) ]
If [ $Param = "Select" ]
Set Variable [ $name; Value:MBS("IKDeviceBrowserPanel.SelectedDeviceName") ]
Set Field [ ImageCapture Dialogs::ScannerName; $name ]
End If
```

See also

- 91.15 IKDeviceBrowserPanel.SelectedDeviceID 4936
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.17 IKDeviceBrowserPanel.SetCancelButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetCancelButtonLabel"; text)

Parameters

text

The new text.
"Cancel"

Result Returns OK or error.

Description

Examples

Set cancel button:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetCancelButtonLabel"; "Abbrechen" ) ]
```

See also

- [91.2 IKDeviceBrowserPanel.GetCancelButtonLabel](#) 4923
- [91.10 IKDeviceBrowserPanel.GetSelectButtonLabel](#) 4931
- [91.25 IKDeviceBrowserPanel.SetSelectButtonLabel](#) 4946
- [91.29 IKDeviceBrowserPanel.Show](#) 4951

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetDisplaysLocalCameras"; Value)

Parameters

Value

The new setting.

1

Result Returns OK or error.

Description

Examples

Enable local cameras:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetDisplaysLocalCameras"; 1 ) ]
```

See also

- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924
- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942
- 91.29 IKDeviceBrowserPanel.Show 4951

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetDisplaysLocalScanners"; Value)

Parameters

Value

The new setting.

1

Result Returns OK or error.

Description

Examples

Enable local scanners:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetDisplaysLocalScanners"; 1 ) ]
```

See also

- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924
- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942
- 91.29 IKDeviceBrowserPanel.Show 4951

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetDisplaysNetworkCameras"; Value)

Parameters**Value**

The new setting.

1

Result Returns OK or error.

Description**Examples**

Enable network cameras:

Set Variable [\$r; Value:MBS("IKDeviceBrowserPanel.SetDisplaysNetworkCameras"; 1)]

See also

- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924
- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942
- 91.29 IKDeviceBrowserPanel.Show 4951

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetDisplaysNetworkScanners"; Value)

Parameters

Value

The new setting.

1

Result Returns OK or error.

Description

Examples

Enable network scanners:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetDisplaysNetworkScanners"; 1 ) ]
```

See also

- 91.3 IKDeviceBrowserPanel.GetDisplaysLocalCameras 4924
- 91.4 IKDeviceBrowserPanel.GetDisplaysLocalScanners 4925
- 91.5 IKDeviceBrowserPanel.GetDisplaysNetworkCameras 4926
- 91.6 IKDeviceBrowserPanel.GetDisplaysNetworkScanners 4927
- 91.18 IKDeviceBrowserPanel.SetDisplaysLocalCameras 4939
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.29 IKDeviceBrowserPanel.Show 4951

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.22 IKDeviceBrowserPanel.SetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetHeight"; Height)

Parameters

Height

The desired height of the window.

400

Result Returns OK or error.

Description

See also IKDeviceBrowserPanel.SetWidth, IKDeviceBrowserPanel.GetWidth and IKDeviceBrowserPanel.GetHeight.

See also

- 91.7 IKDeviceBrowserPanel.GetHeight 4928
- 91.9 IKDeviceBrowserPanel.GetPrompt 4930
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.13 IKDeviceBrowserPanel.Hide 4934
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.30 IKDeviceBrowserPanel.Visible 4953

Created 7th November 2016, last changed 7th November 2016.

91.23 IKDeviceBrowserPanel.SetMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetMode"; Mode)

Parameters

Mode

The new mode. Can be Icon, Outline or Table.

"Icon"

Result Returns OK or error.

Description

Examples

Set mode to table:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetMode"; "table" ) ]
```

See also

- 91.1 IKDeviceBrowserPanel.Close 4921
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.29 IKDeviceBrowserPanel.Show 4951
- 91.30 IKDeviceBrowserPanel.Visible 4953

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.24 IKDeviceBrowserPanel.SetPrompt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetPrompt"; text)

Parameters

text

The new text.

"Please select an item:"

Result Returns OK or error.

Description

This text is shown on the top of the dialog over the listbox.

Examples

Set prompt:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetPrompt"; "Please choose scanner:" ) ]
```

See also

- [91.7 IKDeviceBrowserPanel.GetHeight](#) 4928
- [91.8 IKDeviceBrowserPanel.GetMode](#) 4929
- [91.9 IKDeviceBrowserPanel.GetPrompt](#) 4930
- [91.11 IKDeviceBrowserPanel.GetWidth](#) 4932
- [91.14 IKDeviceBrowserPanel.Reset](#) 4935
- [91.22 IKDeviceBrowserPanel.SetHeight](#) 4943
- [91.23 IKDeviceBrowserPanel.SetMode](#) 4944
- [91.26 IKDeviceBrowserPanel.SetTrigger](#) 4947
- [91.27 IKDeviceBrowserPanel.SetWidth](#) 4949
- [91.29 IKDeviceBrowserPanel.Show](#) 4951

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.25 IKDeviceBrowserPanel.SetSelectButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetSelectButtonLabel"; text)

Parameters

text

The new text.

"Select"

Result Returns OK or error.

Description

Examples

Localize select button:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetSelectButtonLabel"; "Auswählen" ) ]
```

See also

- [91.2 IKDeviceBrowserPanel.GetCancelButtonLabel](#) 4923
- [91.10 IKDeviceBrowserPanel.GetSelectButtonLabel](#) 4931
- [91.17 IKDeviceBrowserPanel.SetCancelButtonLabel](#) 4938
- [91.29 IKDeviceBrowserPanel.Show](#) 4951

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.26 IKDeviceBrowserPanel.SetTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetTrigger"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK or error.

Description

Script parameter will be Cancel, Select or Close depending what the user clicked.

Examples

Store selected scanner in triggered script:

```
Set Variable [ $Param; Value:Get(ScriptParameter) ]
If [ $Param = "Select" ]
Set Variable [ $name; Value:MBS("IKDeviceBrowserPanel.SelectedDeviceName") ]
Set Field [ ImageCapture Dialogs::ScannerName; $name ]
End If
```

Set trigger script:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetTrigger"; Get(FileName); "Scanner Selection Trigger" ) ]
```

See also

- 91.7 IKDeviceBrowserPanel.GetHeight 4928
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.16 IKDeviceBrowserPanel.SelectedDeviceName 4937
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945

- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.29 IKDeviceBrowserPanel.Show 4951
- 91.30 IKDeviceBrowserPanel.Visible 4953

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.27 IKDeviceBrowserPanel.SetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetWidth"; Width)

Parameters**Width**

The new desired width.

600

Result Returns OK or error.

Description

See also IKDeviceBrowserPanel.SetHeight, IKDeviceBrowserPanel.GetWidth and IKDeviceBrowserPanel.GetHeight.

See also

- 91.7 IKDeviceBrowserPanel.GetHeight 4928
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.24 IKDeviceBrowserPanel.SetPrompt 4945
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.28 IKDeviceBrowserPanel.SetWindowTitle 4950
- 91.29 IKDeviceBrowserPanel.Show 4951
- 91.30 IKDeviceBrowserPanel.Visible 4953

Created 7th November 2016, last changed 7th November 2016.

91.28 IKDeviceBrowserPanel.SetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.SetWindowTitle"; text)

Parameters

text

The new text.
"Your Choice"

Result Returns OK or error.

Description

Examples

Set window title:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetWindowTitle"; "Scanner Choice" ) ]
```

See also

- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.12 IKDeviceBrowserPanel.GetWindowTitle 4933
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.29 IKDeviceBrowserPanel.Show 4951

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.29 IKDeviceBrowserPanel.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.Show")

Result Returns OK or Cancel.

Description

This is not a dialog, so please have the script end with this command as the window will stay open while other script steps run.

Before calling this function, make sure you called ImageCapture.Initialize once.

Examples

Show the device browser window:

```
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.Reset" ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetCancelButtonLabel"; "Cancel" ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetSelectButtonLabel"; "Select" ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetWindowTitle"; "Scanner Choice" ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetDisplaysLocalScanners"; 1 ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetDisplaysLocalCameras"; 1 ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetDisplaysNetworkCameras"; 1 ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetDisplaysNetworkScanners"; 1 ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetMode"; "table" ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetPrompt"; "Please choose scanner:" ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.SetTrigger"; Get(FileName); "Select Scanner Dialog Trigger" ) ]
Set Variable [ $r; Value:MBS( "IKDeviceBrowserPanel.Show" ) ]
```

See also

- 91.1 IKDeviceBrowserPanel.Close 4921
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.19 IKDeviceBrowserPanel.SetDisplaysLocalScanners 4940
- 91.20 IKDeviceBrowserPanel.SetDisplaysNetworkCameras 4941
- 91.21 IKDeviceBrowserPanel.SetDisplaysNetworkScanners 4942
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.28 IKDeviceBrowserPanel.SetWindowTitle 4950

- 91.30 IKDeviceBrowserPanel.Visible 4953
- 91.76 ImageCapture.Initialize 5007

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.30 IKDeviceBrowserPanel.Visible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKDeviceBrowserPanel.Visible")

Result Returns 0, 1 or error.

Description

Returns 1 if visible or 0 if hidden.

See also

- 91.7 IKDeviceBrowserPanel.GetHeight 4928
- 91.8 IKDeviceBrowserPanel.GetMode 4929
- 91.11 IKDeviceBrowserPanel.GetWidth 4932
- 91.13 IKDeviceBrowserPanel.Hide 4934
- 91.14 IKDeviceBrowserPanel.Reset 4935
- 91.22 IKDeviceBrowserPanel.SetHeight 4943
- 91.23 IKDeviceBrowserPanel.SetMode 4944
- 91.26 IKDeviceBrowserPanel.SetTrigger 4947
- 91.27 IKDeviceBrowserPanel.SetWidth 4949
- 91.29 IKDeviceBrowserPanel.Show 4951

Created 7th November 2016, last changed 7th November 2016.

91.31 IKScannerDevicePanel.ClearImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.ClearImage")

Result Returns OK or error.

Description

See also

- 91.32 IKScannerDevicePanel.Close 4955
- 91.33 IKScannerDevicePanel.GetCombine 4956
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.46 IKScannerDevicePanel.NextImage 4969
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982

Created 7th November 2016, last changed 7th November 2016.

91.32 IKScannerDevicePanel.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.Close")

Result Returns OK or error.

Description**Examples**

Close window:

Set Variable [\$r; Value:MBS("IKScannerDevicePanel.Close")]

See also

- 91.31 IKScannerDevicePanel.ClearImage 4954
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.44 IKScannerDevicePanel.Hide 4967
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.61 IKScannerDevicePanel.Show 4986
- 91.62 IKScannerDevicePanel.Visible 4988

Created 7th November 2016, last changed 7th November 2016.

91.33 IKScannerDevicePanel.GetCombine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetCombine")

Result Returns OK or error.

Description

See also

- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.46 IKScannerDevicePanel.NextImage 4969
- 91.48 IKScannerDevicePanel.SetCloseTrigger 4971
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.60 IKScannerDevicePanel.SetWindowTitle 4985
- 91.62 IKScannerDevicePanel.Visible 4988

Created 11st December 2016, last changed 19th December 2016.

91.34 IKScannerDevicePanel.GetDocumentName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetDocumentName")

Result Returns text or error.

Description

See also

- 91.33 IKScannerDevicePanel.GetCombine 4956
- 91.50 IKScannerDevicePanel.SetDocumentName 4974

Created 7th November 2016, last changed 7th November 2016.

91.35 IKScannerDevicePanel.GetDownloadsDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetDownloadsDirectory")

Result Returns path or error.

Description

See also

- 91.51 IKScannerDevicePanel.SetDownloadsDirectory 4975

Created 7th November 2016, last changed 7th November 2016.

91.36 IKScannerDevicePanel.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetHeight")

Result Returns height value.

Description

See also IKScannerDevicePanel.SetWidth, IKScannerDevicePanel.GetWidth and IKScannerDevicePanel.SetHeight.

See also

- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.45 IKScannerDevicePanel.ImageCount 4968
- 91.46 IKScannerDevicePanel.NextImage 4969
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.62 IKScannerDevicePanel.Visible 4988

Created 7th November 2016, last changed 7th November 2016.

91.37 IKScannerDevicePanel.GetMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetMode")

Result Returns text or error.

Description

Can be Simple or Advanced.

See also

- 91.32 IKScannerDevicePanel.Close 4955
- 91.33 IKScannerDevicePanel.GetCombine 4956
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.61 IKScannerDevicePanel.Show 4986
- 91.62 IKScannerDevicePanel.Visible 4988

Created 7th November 2016, last changed 7th November 2016.

91.38 IKScannerDevicePanel.GetOverviewControlLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetOverviewControlLabel")

Result Returns text or error.

Description

Returns empty text if you never set it.

See also

- [91.39 IKScannerDevicePanel.GetScanControlLabel](#) 4962
- [91.54 IKScannerDevicePanel.SetOverviewControlLabel](#) 4978
- [91.55 IKScannerDevicePanel.SetScanControlLabel](#) 4979

91.38.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

Created 19th November 2016, last changed 19th November 2016.

91.39 IKScannerDevicePanel.GetScanControlLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetScanControlLabel")

Result Returns text or error.

Description

Returns empty text if you never set it.

See also

- [91.38 IKScannerDevicePanel.GetOverviewControlLabel](#) 4961
- [91.40 IKScannerDevicePanel.GetScannerDeviceID](#) 4963
- [91.54 IKScannerDevicePanel.SetOverviewControlLabel](#) 4978
- [91.55 IKScannerDevicePanel.SetScanControlLabel](#) 4979
- [91.56 IKScannerDevicePanel.SetScannerDeviceID](#) 4980

91.39.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

Created 19th November 2016, last changed 19th November 2016.

91.40 IKScannerDevicePanel.GetScannerDeviceID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetScannerDeviceID")

Result Returns text or error.

Description

See also

- 91.39 IKScannerDevicePanel.GetScanControlLabel 4962
- 91.41 IKScannerDevicePanel.GetScannerDeviceName 4964
- 91.55 IKScannerDevicePanel.SetScanControlLabel 4979
- 91.56 IKScannerDevicePanel.SetScannerDeviceID 4980
- 91.57 IKScannerDevicePanel.SetScannerDeviceName 4981

Created 7th November 2016, last changed 7th November 2016.

91.41 IKScannerDevicePanel.GetScannerDeviceName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetScannerDeviceName")

Result Returns text or error.

Description

See also

- 91.40 IKScannerDevicePanel.GetScannerDeviceID 4963
- 91.56 IKScannerDevicePanel.SetScannerDeviceID 4980
- 91.57 IKScannerDevicePanel.SetScannerDeviceName 4981

Created 7th November 2016, last changed 7th November 2016.

91.42 IKScannerDevicePanel.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetWidth")

Result Returns width.

Description

See also IKScannerDevicePanel.SetWidth, IKScannerDevicePanel.SetHeight and IKScannerDevicePanel.GetHeight.

See also

- 91.36 IKScannerDevicePanel.GetHeight 4959
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.60 IKScannerDevicePanel.SetWindowTitle 4985
- 91.62 IKScannerDevicePanel.Visible 4988

Created 7th November 2016, last changed 7th November 2016.

91.43 IKScannerDevicePanel.GetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.GetWindowTitle")

Result Returns text.

Description

See also

- 91.33 IKScannerDevicePanel.GetCombine 4956
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.60 IKScannerDevicePanel.SetWindowTitle 4985

Created 7th November 2016, last changed 7th November 2016.

91.44 IKScannerDevicePanel.Hide

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.Hide")

Result Returns OK or error.

Description**Examples**

Hide window:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.Hide" ) ]
```

See also

- 91.32 IKScannerDevicePanel.Close 4955
- 91.36 IKScannerDevicePanel.GetHeight 4959
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.61 IKScannerDevicePanel.Show 4986
- 91.62 IKScannerDevicePanel.Visible 4988

Created 7th November 2016, last changed 7th November 2016.

91.45 IKScannerDevicePanel.ImageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.ImageCount")

Result Returns number or error.

Description

Either you use the trigger and process each image there or you can call later `IKScannerDevicePanel.ImageCount` and `IKScannerDevicePanel.NextImage` to get the images.

See also

- 91.33 `IKScannerDevicePanel.GetCombine` 4956
- 91.36 `IKScannerDevicePanel.GetHeight` 4959
- 91.46 `IKScannerDevicePanel.NextImage` 4969
- 91.49 `IKScannerDevicePanel.SetCombine` 4973
- 91.52 `IKScannerDevicePanel.SetHeight` 4976
- 91.58 `IKScannerDevicePanel.SetTrigger` 4982

Created 7th November 2016, last changed 7th November 2016.

91.46 IKScannerDevicePanel.NextImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.NextImage")

Result Returns path or error.

Description

Either you use the trigger and process each image there or you can call later `IKScannerDevicePanel.ImageCount` and `IKScannerDevicePanel.NextImage` to get the images.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

See also

- 91.31 `IKScannerDevicePanel.ClearImage` 4954
- 91.36 `IKScannerDevicePanel.GetHeight` 4959
- 91.37 `IKScannerDevicePanel.GetMode` 4960
- 91.42 `IKScannerDevicePanel.GetWidth` 4965
- 91.49 `IKScannerDevicePanel.SetCombine` 4973
- 91.52 `IKScannerDevicePanel.SetHeight` 4976
- 91.58 `IKScannerDevicePanel.SetTrigger` 4982
- 91.59 `IKScannerDevicePanel.SetWidth` 4984
- 91.62 `IKScannerDevicePanel.Visible` 4988
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 7th November 2016, last changed 7th November 2016.

91.47 IKScannerDevicePanel.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.Reset")

Result Returns OK or error.

Description**See also**

- 91.32 IKScannerDevicePanel.Close 4955
- 91.36 IKScannerDevicePanel.GetHeight 4959
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.44 IKScannerDevicePanel.Hide 4967
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.61 IKScannerDevicePanel.Show 4986
- 91.62 IKScannerDevicePanel.Visible 4988

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.48 IKScannerDevicePanel.SetCloseTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.1	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetCloseTrigger"; FileName; ScriptName { ; Parameter })

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Parameter

Optional

The optional script parameter.

Result Returns OK or error.

Description

This script will be called whenever the panel closes.

Either by code or by user clicking close button.

If the normal trigger run and you delayed work on the files, you can process them now.

Examples

Set close trigger script:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetCloseTrigger"; Get(FileName); "Scanner Dialog Close Trigger" ) ]
```

Clear close trigger script:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetCloseTrigger"; "" ; "" ) ]
```

See also

- 91.33 IKScannerDevicePanel.GetCombine 4956
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.60 IKScannerDevicePanel.SetWindowTitle 4985

91.48.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr5](#)

Created 24th February 2018, last changed 26th February 2018.

91.49 IKScannerDevicePanel.SetCombine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetCombine"; Flag)

Parameters**Flag**

The new setting. 1 to combine. 0 to not combine.

1

Result Returns OK or error.

Description

This is a checkbox in the advanced options and defines whether for PDF output all pages are merged into one file.

See also

- 91.33 IKScannerDevicePanel.GetCombine 4956
- 91.46 IKScannerDevicePanel.NextImage 4969
- 91.48 IKScannerDevicePanel.SetCloseTrigger 4971
- 91.50 IKScannerDevicePanel.SetDocumentName 4974
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.60 IKScannerDevicePanel.SetWindowTitle 4985
- 91.62 IKScannerDevicePanel.Visible 4988

Created 11st December 2016, last changed 19th December 2016.

91.50 IKScannerDevicePanel.SetDocumentName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetDocumentName"; Name)

Parameters

Name

The file name to use. File extensions and numbers may be added.
"Scan"

Result Returns OK or error.

Description

Please set before the panel opens.

In 8.2 or newer, you can set it while panel is open, too.

Examples

Set the file name:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetDocumentName"; "Scan" ) ]
```

See also

- [91.34 IKScannerDevicePanel.GetDocumentName](#) 4957
- [91.49 IKScannerDevicePanel.SetCombine](#) 4973
- [91.61 IKScannerDevicePanel.Show](#) 4986

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

91.50.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 7th November 2016, last changed 15th May 2018.

91.51 IKScannerDevicePanel.SetDownloadsDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetDownloadsDirectory"; Path)

Parameters

Path

The native path to the folder to store images.

Result Returns OK or error.

Description

Please make sure you can write to this folder.
We recommend a temporary folder.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Scan to desktop folder:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetDownloadsDirectory"; MBS("Folders.UserDesktop") ) ]
```

See also

- [81.8 Folders.UserDesktop](#) 4177
- [91.35 IKScannerDevicePanel.GetDownloadsDirectory](#) 4958
- [91.61 IKScannerDevicePanel.Show](#) 4986
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.52 IKScannerDevicePanel.SetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetHeight"; Height)

Parameters

Height

The desired height of the window.

400

Result Returns OK or error.

Description

See also IKScannerDevicePanel.SetWidth, IKScannerDevicePanel.GetWidth and IKScannerDevicePanel.GetHeight.

See also

- 91.36 IKScannerDevicePanel.GetHeight 4959
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.45 IKScannerDevicePanel.ImageCount 4968
- 91.46 IKScannerDevicePanel.NextImage 4969
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.62 IKScannerDevicePanel.Visible 4988

Created 7th November 2016, last changed 7th November 2016.

91.53 IKScannerDevicePanel.SetMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetMode"; Mode)

Parameters**Mode**

The new mode.

"Advanced"

Result Returns OK or error.

Description

Can be Simple or Advanced.

See also

- 91.32 IKScannerDevicePanel.Close 4955
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.61 IKScannerDevicePanel.Show 4986
- 91.62 IKScannerDevicePanel.Visible 4988

Created 7th November 2016, last changed 7th November 2016.

91.54 IKScannerDevicePanel.SetOverviewControlLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetOverviewControlLabel"; Label)

Parameters

Label

The new label text.

"Übersicht"

Result Returns OK or error.

Description

If empty or never set, we use the default, which is localized.

See also

- [91.38 IKScannerDevicePanel.GetOverviewControlLabel](#) 4961
- [91.39 IKScannerDevicePanel.GetScanControlLabel](#) 4962
- [91.55 IKScannerDevicePanel.SetScanControlLabel](#) 4979

91.54.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

Created 19th November 2016, last changed 19th November 2016.

91.55 IKScannerDevicePanel.SetScanControlLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetScanControlLabel"; Label)

Parameters

Label

The new label text.

"Scannen"

Result Returns OK or error.

Description

If empty or never set, we use the default, which is localized.

See also

- 91.38 IKScannerDevicePanel.GetOverviewControlLabel 4961
- 91.39 IKScannerDevicePanel.GetScanControlLabel 4962
- 91.40 IKScannerDevicePanel.GetScannerDeviceID 4963
- 91.54 IKScannerDevicePanel.SetOverviewControlLabel 4978
- 91.56 IKScannerDevicePanel.SetScannerDeviceID 4980

91.55.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

Created 19th November 2016, last changed 19th November 2016.

91.56 IKScannerDevicePanel.SetScannerDeviceID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetScannerDeviceID"; ID)

Parameters

ID

Pass identifier for the scanner you want to use.
"61B0A8E1-61B0-A8E1-61B0-A8E161B0A8E1"

Result Returns OK or error.

Description

Examples

Select scanner by ID:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetScannerDeviceID"; "61B0A8E1-61B0-A8E1-61B0-A8E161B0A8E1" ) ]
```

Select scanner by name:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetScannerDeviceName"; "Brother DCP-8085DN" ) ]
```

See also

- 91.39 IKScannerDevicePanel.GetScanControlLabel 4962
- 91.40 IKScannerDevicePanel.GetScannerDeviceID 4963
- 91.41 IKScannerDevicePanel.GetScannerDeviceName 4964
- 91.55 IKScannerDevicePanel.SetScanControlLabel 4979
- 91.57 IKScannerDevicePanel.SetScannerDeviceName 4981

Created 7th November 2016, last changed 7th November 2016.

91.57 IKScannerDevicePanel.SetScannerDeviceName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetScannerDeviceName"; Name)

Parameters

Name

The name of the scanner to use.

"Brother DCP-8085DN"

Result Returns OK or error.

Description

Examples

Select scanner by name:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetScannerDeviceName"; "Brother DCP-8085DN" ) ]
```

Select scanner by ID:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetScannerDeviceID"; "61B0A8E1-61B0-A8E1-61B0-A8E161B0A8E1" ) ]
```

See also

- 91.40 IKScannerDevicePanel.GetScannerDeviceID 4963
- 91.41 IKScannerDevicePanel.GetScannerDeviceName 4964
- 91.56 IKScannerDevicePanel.SetScannerDeviceID 4980
- 91.61 IKScannerDevicePanel.Show 4986

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.58 IKScannerDevicePanel.SetTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetTrigger"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK or error.

Description

You get a call for each picture as user may import several.

The parameter to your script is the native file path to the image file.

If scan is to PDF and we use document feeder, be aware that you may get a trigger with same file path again if a new page is added.

Either you use the trigger and process each image there or you can call later IKScannerDevicePanel.ImageCount and IKScannerDevicePanel.NextImage to get the images.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Set trigger script:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetTrigger"; Get(FileName); "Scanner Dialog Trigger" ) ]
```

Import image in triggered script:

```
Set Variable [ $Path; Value:Get(ScriptParameter) ]
Set Variable [ $Image; Value:MBS("Container.ReadFile"; $path) ]
If [ MBS("ISError") = 0 ]
New Record/Request
Set Field [ ImageCapture Dialogs::Image; $Image ]
Commit Records/Requests [ No dialog ]
End If
```

Clear trigger script:

91.58. *IKSCANNERDEVICEPANEL.SETTRIGGER* 4983
Set Variable [\$r; Value:MBS("IKScannerDevicePanel.SetTrigger"; ""; "")]

See also

- 91.36 IKScannerDevicePanel.GetHeight 4959
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.45 IKScannerDevicePanel.ImageCount 4968
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.61 IKScannerDevicePanel.Show 4986
- 91.62 IKScannerDevicePanel.Visible 4988
- 124.6 IsError 6266

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 22nd December 2019.

91.59 IKScannerDevicePanel.SetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetWidth"; Width)

Parameters

Width

The new desired width.

600

Result Returns OK or error.

Description

See also IKScannerDevicePanel.SetHeight, IKScannerDevicePanel.GetWidth and IKScannerDevicePanel.GetHeight.

See also

- 91.36 IKScannerDevicePanel.GetHeight 4959
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.60 IKScannerDevicePanel.SetWindowTitle 4985
- 91.61 IKScannerDevicePanel.Show 4986
- 91.62 IKScannerDevicePanel.Visible 4988

Created 7th November 2016, last changed 7th November 2016.

91.60 IKScannerDevicePanel.SetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.SetWindowTitle"; text)

Parameters**text**

The new text.
"Your Choice"

Result Returns OK or error.

Description**Examples**

Set window title:

Set Variable [\$r; Value:MBS("IKScannerDevicePanel.SetWindowTitle"; "Scanner")]

See also

- 91.33 IKScannerDevicePanel.GetCombine 4956
- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.43 IKScannerDevicePanel.GetWindowTitle 4966
- 91.48 IKScannerDevicePanel.SetCloseTrigger 4971
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.61 IKScannerDevicePanel.Show 4986

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.61 IKScannerDevicePanel.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.Show")

Result Returns OK or error.

Description

This is not a dialog, so please have the script end with this command as the window will stay open while other script steps run.

Before calling this function, make sure you called ImageCapture.Initialize once, best in your start script.

Examples

Show scan window:

```
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.Reset" ) ]
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetWindowTitle"; "Scanner" ) ]
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetDocumentName"; "Scan" ) ]
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetDownloadsDirectory"; MBS("Folders.UserDesktop") ) ]
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetScannerDeviceName"; ImageCapture Dialogs::ScannerName ) ]
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.SetTrigger"; Get(FileName); "Scanner Dialog Trigger" ) ]
Set Variable [ $r; Value:MBS( "IKScannerDevicePanel.Show" ) ]
```

See also

- 81.8 Folders.UserDesktop 4177
- 91.37 IKScannerDevicePanel.GetMode 4960
- 91.44 IKScannerDevicePanel.Hide 4967
- 91.50 IKScannerDevicePanel.SetDocumentName 4974
- 91.51 IKScannerDevicePanel.SetDownloadsDirectory 4975
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.60 IKScannerDevicePanel.SetWindowTitle 4985
- 91.62 IKScannerDevicePanel.Visible 4988
- 91.76 ImageCapture.Initialize 5007

Example Databases

- [Mac only/ImageCapture/ImageCapture Dialogs](#)

Created 7th November 2016, last changed 7th November 2016.

91.62 IKScannerDevicePanel.Visible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.5	Yes	No	No	No	No

MBS("IKScannerDevicePanel.Visible")

Result Returns 0, 1 or error.

Description

Returns 1 if visible or 0 if hidden.

See also

- 91.42 IKScannerDevicePanel.GetWidth 4965
- 91.44 IKScannerDevicePanel.Hide 4967
- 91.46 IKScannerDevicePanel.NextImage 4969
- 91.47 IKScannerDevicePanel.Reset 4970
- 91.49 IKScannerDevicePanel.SetCombine 4973
- 91.52 IKScannerDevicePanel.SetHeight 4976
- 91.53 IKScannerDevicePanel.SetMode 4977
- 91.58 IKScannerDevicePanel.SetTrigger 4982
- 91.59 IKScannerDevicePanel.SetWidth 4984
- 91.61 IKScannerDevicePanel.Show 4986

Created 7th November 2016, last changed 7th November 2016.

91.63 ImageCapture.CameraInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.CameraInfo"; Selector)

Parameters

Selector

Which value to query.
"name"

Result Returns OK or error.

Description

Selector	Description
tetheredCaptureEnabled	This property is set to 1 when tethered capture is enabled on the device. Use ImageCapture.RequestEnableTethering and ImageCapture.RequestDisableTethering to enable or disable tethered capture on the device.
batteryLevelAvailable	Indicates if the device has reported battery charge level.
batteryLevel	Indicates the battery charge level. Its value ranges from 0 to 100.
contentCatalogPercentCompleted	Indicates the percentage of content cataloging completed on the device. Its value ranges from 0 to 100.
timeOffset	Indicates the time offset, in seconds, between the camera's clock and the computer's clock. This value is positive if the camera's clock is ahead of the computer's clock. This property should be ignored if the camera's capabilities property does not contain ICCameraDeviceCanSyncClock.
isAccessRestrictedAppleDevice	Set to 1 if the device is made by Apple and is pass-coded locked and connected to an untrusted host.
mountPoint	Filesystem mount point for a device with transportType of ICTransportType-MassStorage. This will be "" for all other devices.

See also

- [91.66 ImageCapture.DeviceInfo](#) 4993
- [91.83 ImageCapture.RequestDisableTethering](#) 5015
- [91.84 ImageCapture.RequestEnableTethering](#) 5016

Example Databases

- [Mac only/ImageCapture/Camera Import](#)

91.63.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

- [Import images from cameras on MacOS with FileMaker](#)

Created 4th June 2018, last changed 4th June 2018.

91.64 ImageCapture.CloseDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.CloseDevice" { ; Wait })

Parameters

Wait

Optional

Pass 1 to wait till complete. Or pass 0 to return immediately. Default is 1 to wait.

0

Result Returns OK or error.

Description

Added 20 seconds timeout for version 8.5.

Examples

Closes device:

Set Variable [\$r; Value:MBS("ImageCapture.CloseDevice")]

See also

- [91.79 ImageCapture.OpenDevice](#)

5010

Example Databases

- [Mac only/ImageCapture/ImageCapture](#)

91.64.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)
- [MBS FileMaker Plugin, version 8.3pr3](#)

Created 11st September 2016, last changed 14th November 2018.

91.65 ImageCapture.Contents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.Contents")

Result Returns JSON or error.

Description

The structure of the elements in this JSON array will reflect the folder structure of the storage reported by the camera. Each item in this array will correspond to a storage on the camera.

The plugin provides all details as a big JSON block for your analyzes.

See also

- [91.70 ImageCapture.Features](#) 4999

91.65.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 4th June 2018, last changed 4th June 2018.

MBS("ImageCapture.DeviceInfo"; 0; "serialNumberString")

Query location description for a device:

MBS("ImageCapture.DeviceInfo"; "61B0A8E1-61B0-A8E1-61B0-A8E161B0A8E1"; "locationDescription")

Query capabilities for a device:

MBS("ImageCapture.DeviceInfo"; "61B0A8E1-61B0-A8E1-61B0-A8E161B0A8E1"; "capabilities")

See also

- 91.63 ImageCapture.CameraInfo 4989
- 91.67 ImageCapture.Devices 4995
- 91.68 ImageCapture.DevicesJSON 4997
- 91.79 ImageCapture.OpenDevice 5010
- 91.81 ImageCapture.PreferredDevice 5013

Example Databases

- [Mac only/ImageCapture/Camera Import](#)
- [Mac only/ImageCapture/ImageCapture](#)

Created 11st September 2016, last changed 6th June 2018.

91.67 ImageCapture.Devices

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.Devices" { ; Filter })

Parameters

Filter

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

You can filter devices by passing criteria here. The filter string can contain camera, scanner, local, remote, Bonjour, bluetooth or shared to only show those devices.

"Camera, local"

Result Returns UUIDs or error.

Description

Returns a list of UUIDs for devices.

Please pass the UUIDs to the ImageCapture.DeviceInfo function to query details.

Before calling this function, make sure you called ImageCapture.Initialize once, best in your start script.

Version 10.0 or later filters duplicates away.

Examples

List devices:

```
Set Variable [ $Devices; Value:MBS("ImageCapture.Devices") ]
# loop over entries
Set Variable [ $Count; Value:ValueCount($Devices) ]
If [ $Count >0 ]
Set Variable [ $Index; Value:1 ]
Loop
# Check Device
Set Variable [ $ID; Value:GetValue($Devices; $index) ]
New Record/Request
Set Field [ Devices::Name; MBS("ImageCapture.DeviceInfo"; $ID; "name") ]
Set Field [ Devices::ID; $ID ]
Set Field [ Devices::Remote; Let ( [ r = MBS("ImageCapture.DeviceInfo"; $ID; "remote") ] ; If(r = 1; "yes"; "no") ) ]
Set Field [ Devices::Shared; Let ( [ r = MBS("ImageCapture.DeviceInfo"; $ID; "shared") ] ; If(r = 1; "yes"; "no") ) ]
Set Field [ Devices::transportType; MBS("ImageCapture.DeviceInfo"; $ID; "transportType") ]
Set Field [ Devices::serialNumberString; MBS("ImageCapture.DeviceInfo"; $ID; "serialNumberString") ]
Set Field [ Devices::locationDescription; MBS("ImageCapture.DeviceInfo"; $ID; "locationDescription") ]
Set Field [ Devices::persistentIDString; MBS("ImageCapture.DeviceInfo"; $ID; "persistentIDString") ]
```

```
Set Field [ Devices::icon; MBS("ImageCapture.DeviceInfo"; $ID; "icon") ]
Set Field [ Devices::capabilities; MBS("ImageCapture.DeviceInfo"; $ID; "capabilities") ]
Commit Records/Requests [ No dialog ]
# next
Set Variable [ $Index; Value:$index + 1 ]
Exit Loop If [ $index >$Count ]
End Loop
End If
```

See also

- [91.66 ImageCapture.DeviceInfo](#) 4993
- [91.68 ImageCapture.DevicesJSON](#) 4997
- [91.70 ImageCapture.Features](#) 4999
- [91.76 ImageCapture.Initialize](#) 5007
- [91.79 ImageCapture.OpenDevice](#) 5010

Example Databases

- [Mac only/ImageCapture/Camera Import](#)
- [Mac only/ImageCapture/ImageCapture](#)

91.67.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr8](#)

Created 11st September 2016, last changed 10th January 2020.

91.68 ImageCapture.DevicesJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.DevicesJSON" { ; Filter })

Parameters

Filter

Optional

You can filter devices by passing criteria here. The filter string can contain camera, scanner, local, remote, bonjour, bluetooth or shared to only show those devices.

"Camera, local"

Result Returns JSON or error.

Description

The JSON includes names & IDs of the devices.

Please pass the index or UUIDs to the ImageCapture.DeviceInfo function to query details.

Keys include UUIDString, Name, persistentIDString, serialNumberString, locationDescription, index, remote and shared.

Examples

Check devices:

MBS("ImageCapture.DevicesJSON")

See also

- [91.66 ImageCapture.DeviceInfo](#) 4993
- [91.67 ImageCapture.Devices](#) 4995

91.68.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr4](#)
- [MBS FileMaker Plugin, version 8.3pr5](#)

Created 26th June 2018, last changed 26th June 2018.

91.69 ImageCapture.Download

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.Download"; FileName { ; Folder; DeleteAfterDownload })

Parameters

FileName

The file name of the media file to download.

"IMG1234.JPG"

Folder

Optional

Path of destination folder. If empty, we use temporary folder.

"/Users/cs/Download"

DeleteAfterDownload

Optional

Pass 1 to delete file on device after successful download.

0

Result Returns file path or error.

Description

On success returns native file path of downloaded file.

You can import file e.g. with Files.ReadFile.

You can use ImageCapture.MediaFileNames to learn list of file names.

See also

- [78.45 Files.ReadFile](#) 3844
- [91.77 ImageCapture.MediaFileNames](#) 5008

Example Databases

- [Mac only/ImageCapture/Camera Import](#)

91.69.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [Import images from cameras on MacOS with FileMaker](#)

Created 4th June 2018, last changed 1st August 2019.

91.70 ImageCapture.Features

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.Features")

Result Returns list or error.

Description

See also

- 91.65 ImageCapture.Contents 4992
- 91.67 ImageCapture.Devices 4995
- 91.72 ImageCapture.GetFeatures 5001
- 91.78 ImageCapture.MediaFiles 5009

Example Databases

- [Mac only/ImageCapture/ImageCapture](#)

Created 11st September 2016, last changed 11st September 2016.

91.71 ImageCapture.GetFeatureValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.GetFeatureValue"; FeatureName; Selector)

Parameters

FeatureName

The name of the feature.

\$name

Selector

What value to query.

"value"

Result Returns value or error.

Description

Selector	Description	Value
type	The type of feature. Can be Enumeration, Range, Boolean or Template.	„Boolean“
internalName	The internal name of this feature.	
humanReadableName	The human readable name of this feature.	
tooltip	Tooltip text describing the feature.	
value	The value of this feature. (boolean values)	
currentValue	The current value. Attempting to set the current value to a value that is not coincident with a step will result in a value corresponding to the nearest step being assigned to the current value.	
defaultValue	The default value. Attempting to set the default value to a value that is not coincident with a step will result in a value corresponding to the nearest step being assigned to the default value.	
minValue	The minimum value.	0
maxValue	The maximum value.	100
stepSize	The step size.	5
menuItemLabels	The human readable menu item labels to be used in a menu to allow the user to select the current value from an array of possible values. (enumeration)	
menuItemLabelsFootprints	Tooltip text associated with the menu items. (enumeration)	
values	An array of possible values. All items in this array must be of same type. (enumeration)	

See also

- [91.72 ImageCapture.GetFeatures](#) 5001
- [91.90 ImageCapture.SetFeatureValue](#) 5025

Created 11st September 2016, last changed 4th June 2018.

91.72 ImageCapture.GetFeatures

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.GetFeatures")

Result Returns JSON or error.

Description

See also

- [91.70 ImageCapture.Features](#) 4999
- [91.71 ImageCapture.GetFeatureValue](#) 5000
- [91.73 ImageCapture.GetParameter](#) 5002
- [91.74 ImageCapture.GetParameters](#) 5005
- [91.90 ImageCapture.SetFeatureValue](#) 5025

91.72.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 17th June 2018, last changed 17th June 2018.

91.73 ImageCapture.GetParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.GetParameter"; Selector)

Parameters

Selector

Which value to query.

”name”

Result Returns OK or error.

Description

<p>acceptThreshold@BlackAndWhiteScanning availableFunctionalUnitType bitDepth currentDocumentName defaultThreshold@BlackAndWhiteScanning documentHeight documentLoaded documentName documentSize documentType documentUnit documentWidth downloadDirectory duplexScanningEnabled evenPageOrientation maxMemory@Scan measurementUnit nativeResolution nativeYResolution oddPageOrientation overviewImage overviewResolution overviewScannedProgress physicalHeight physicalSize physicalWidth preferredUnitType preferredResolution preferredScaleFactor reverseOrderPageOrder scanArea scanAreaOrientation scanProgress@PercentDone start supportedBitDepth supportedDocumentTypes supportedMeasurementUnits supportedResolutions supportedScaleFactors supportedScanning threshold@BlackAndWhiteScanning transferMode useThreshold@BlackAndWhiteScanning</p>	<p>Description Indicates if this functional unit accepts threshold value to be used when performing a scan in black & white. The bit depth to use when performing the final scan. This can include Flatbed, DocumentFeeder, NegativeTransparency or PositiveTransparency. The bit depth to use when performing the final scan. This will always be one of the supported bit depths. Indicates if this functional unit can perform an overview scan. Not all functional units can perform an overview scan. For example, a document feeder or a sheet feeder unit cannot perform an overview scan. Default threshold value used when performing a scan in black & white. This value is from 0 to 255. The document height. Indicates whether the feeder has documents to scan. This value will change when the document is loaded or removed from the feeder, if the scanner module has the capability to detect this state. The document name. Document size of the current document type expressed in current measurement unit. Current document type. The document unit. The document width. The download directory. Indicates whether duplex scanning is enabled. Desired orientation of the even pages of the scanned document. The total maximum load size requested when performing a memory-based transfer. Current measurement unit. Can be Inches, Centimeters, Picas, Points, Twips or Pixels. Optical resolution along the X axis. Optical resolution along the Y axis. Desired orientation of the odd pages of the scanned document. Overview scan image. This property will be empty for functional units that do not support overview scans. Overview image resolution. Value returned to this will be contained by resolution allowed by the device. Indicates if an overview scan is in progress. Physical height of the scan area in current measurement unit. Physical size of the scan area in current measurement unit. Physical width of the scan area in current measurement unit. The pixel data type. Can be BW, Gray, RGB, Palette, CMYK, CMYK_VIV, YUVK or CMYKZ. Preferred scan resolution in DPI. Preferred scale factor in percentage. Indicates whether the document feeder feeds pages from back to front. Current scan resolution. This will always be one of the supported resolution values. Current scale factor. This will always be one of the supported scale factor values. The area to scan. This property along with scanAreaOrientation describes the area to be scanned. Desired orientation of the scan area. This property along with scanArea describes the area to be scanned. 1 for Normal, 2 Flipped horizontally, 3 Rotated 180°, 4 Flipped vertically, 5 Rotated 90° CCW and flipped vertically, 6 Rotated 90° CCW, 7 Rotated 90° CW and flipped vertically, 8 Rotated 90° CW. Indicates percentage of scan completed. Indicates the current state of the functional unit. 1 for Ready, Add 2 for Scan In Progress, Add 4 for Overview Scan in Progress Supported bit depths. Can include 1, 8 or 16. Supported document types. Supported measurement units. Can be Inches, Centimeters, Picas, Points, Twips or Pixels. Supported scan resolution in DPI. Supported scale factors in percentage. Indicates whether duplex scanning is supported. Threshold value to be used when performing a scan in black & white. This value should be from 0 to 255. The transfer mode for scanned document. Can be File or Memory, but Plugins only supports File. Indicates if this functional unit uses threshold value to be used when performing a scan in black & white.</p>	<p>Example "Flatbed@DocumentFeeder" 8 127 1 "Scan" "A1" "JPEG" "/Users/ry/Desktop" 1 "Inches" 1 "1024" 100 100 300 100 1 0.5 2 "18" "Inches" "RGB@Image" "100" 1 127 "File" 1</p>
---	--	---

Examples

Query available functional unit types:

MBS("ImageCapture.GetParameter"; "availableFunctionalUnitTypes")

Example result: Flatbed

DocumentFeeder

Query supported resolutions:

Set Variable [\$supportedResolutions; Value:MBS("ImageCapture.GetParameter"; "supportedResolutions")]

Example result: 100

150

200

300

400

600

Query supported document types:

MBS("ImageCapture.GetParameter"; "supportedDocumentTypes")

Example result: A4

B5

USLetter

USLegal

A5

USExecutive

Query supported bit depths:

MBS("ImageCapture.GetParameter"; "supportedBitDepths")

Example result: 1

8

Set scan area to physical size:

Set Variable [\$physicalWidth; Value:MBS("ImageCapture.GetParameter"; "physicalWidth")]

Set Variable [\$physicalHeight; Value:MBS("ImageCapture.GetParameter"; "physicalHeight")]

Set Variable [\$r; Value:MBS("ImageCapture.SetParameter"; "scanArea"; 0; 0; \$physicalWidth; \$physical-Height)]

Query folder path for image files:

MBS("ImageCapture.GetParameter"; "downloadsDirectory")

Example result: "/Users/cs/Pictures"

See also

- 91.72 ImageCapture.GetFeatures 5001
- 91.74 ImageCapture.GetParameters 5005
- 91.86 ImageCapture.RequestScan 5018
- 91.87 ImageCapture.RequestSelectFunctionalUnit 5021
- 91.91 ImageCapture.SetParameter 5026

Example Databases

- [Mac only/ImageCapture/ImageCapture](#)

91.73.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)
- [Scanning Options](#)

- [ImageCapture functions for Mac OS X](#)

Created 11st September 2016, last changed 13th December 2019.

91.74 ImageCapture.GetParameters

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.GetParameters")

Result Returns JSON or error.

Description

See also

- [91.72 ImageCapture.GetFeatures](#) 5001
- [91.73 ImageCapture.GetParameter](#) 5002
- [91.91 ImageCapture.SetParameter](#) 5026

91.74.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 17th June 2018, last changed 17th June 2018.

91.75 ImageCapture.ImagePaths

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.ImagePaths")

Result Returns list or error.

Description

After you scanned, you can use this function to query list of image file paths.

File paths are returned as native file paths.

Please use Container.ReadFile to read file and Files.Delete to delete them if needed.

Examples

Query images and import them:

```

Set Variable [ $Paths; Value:MBS("ImageCapture.ImagePaths") ]
Set Variable [ $Count; Value:ValueCount ( $Paths ) ]
Set Variable [ $Index; Value:1 ]
Loop
Set Variable [ $Path; Value:GetValue($Paths; $index) ]
New Record/Request
Set Field [ Images::Image; MBS("Container.ReadFile"; $path) ]
Set Variable [ $r; Value:MBS( "Files.Delete"; $Path ) ]
Commit Records/Requests [ No dialog ]
Set Variable [ $Index; Value:$index + 1 ]
Exit Loop If [ $index >$count ]
End Loop

```

See also

- 55.28 Container.ReadFile 1645
- 78.14 Files.Delete 3792
- 91.86 ImageCapture.RequestScan 5018
- 91.91 ImageCapture.SetParameter 5026

Example Databases

- [Mac only/ImageCapture/ImageCapture](#)

91.75.1 Blog Entries

- [ImageCapture functions for Mac OS X](#)

Created 11st September 2016, last changed 11st September 2016.

91.76 ImageCapture.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.Initialize")

Result Returns OK or error.

Description

The plugin will now browse for devices and wait till at least till all local devices have been found. Network devices may be discovered a second later. So call this in your start script or first time user goes to scanning. Device count may change over time as devices are discovered or go away.

Examples

Initialize:

```
Set Variable [ $r; Value:MBS("ImageCapture.Initialize") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Initialize"; $r ]
Exit Script [ ]
End If
```

See also

- [91.29 IKDeviceBrowserPanel.Show](#) 4951
- [91.61 IKScannerDevicePanel.Show](#) 4986
- [91.67 ImageCapture.Devices](#) 4995
- [124.6 IsError](#) 6266

Example Databases

- [Mac only/ImageCapture/Camera Import](#)
- [Mac only/ImageCapture/ImageCapture Dialogs](#)
- [Mac only/ImageCapture/ImageCapture](#)

Created 11st September 2016, last changed 7th November 2016.

91.77 ImageCapture.MediaFileNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.MediaFileNames")

Result Returns list or error.

Description

All media filenames on the device as one big list.

See also

- 91.69 ImageCapture.Download 4998
- 91.78 ImageCapture.MediaFiles 5009

91.77.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 4th June 2018, last changed 4th June 2018.

91.78 ImageCapture.MediaFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.MediaFiles")

Result Returns JSON or error.

Description

These files are returned as a single JSON array without regard to the folder hierarchy used to store these files on the camera.

The plugin provides all details as a big JSON block for your analyzes.

See also

- [91.70 ImageCapture.Features](#) 4999
- [91.77 ImageCapture.MediaFileNames](#) 5008

Example Databases

- [Mac only/ImageCapture/Camera Import](#)

91.78.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [Import images from cameras on MacOS with FileMaker](#)

Created 4th June 2018, last changed 4th June 2018.

91.79 ImageCapture.OpenDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.OpenDevice"; Device { ; Wait })

Parameters

Device

The device ID. Can be zero based index in device list. Or UUID, Name or persitent ID string.

0

Wait

Optional

Pass 1 to wait till complete. Or pass 0 to return immediately. Default is 1 to wait.

0

Result Returns OK or error.

Description

A client MUST open a session on a device in order to use the device.

If needed closes current device to open new device.

Added 20 seconds timeout for version 8.1.

With ImageCapture.DeviceInfo you can query hasOpenSession later to verify you have a session open.

Examples

Open device:

```
Set Variable [ $r; Value:MBS("ImageCapture.OpenDevice"; Images::Device) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed to open"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ ]
End If
```

See also

- 91.64 ImageCapture.CloseDevice 4991
- 91.66 ImageCapture.DeviceInfo 4993
- 91.67 ImageCapture.Devices 4995
- 91.86 ImageCapture.RequestScan 5018
- 91.87 ImageCapture.RequestSelectFunctionalUnit 5021
- 124.6 IsError 6266

91.79. *IMAGECAPTURE.OPENDEVICE*

5011

- 164.57 `Text.RemovePrefix`

7854

Example Databases

- [Mac only/ImageCapture/Camera Import](#)
- [Mac only/ImageCapture/ImageCapture](#)

91.79.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr6](#)
- [MBS FileMaker Plugin, version 8.3pr3](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin v8.1 with 5100 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.1](#)
- [MBS FileMaker Plugin, version 8.1pr4](#)

Created 11st September 2016, last changed 4th February 2020.

91.80 ImageCapture.PDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	9.1	Yes	No	No	No	No

MBS("ImageCapture.PDF" { ; FileName })

Parameters

FileName

Optional

The filename to use.

"scan.pdf"

Result Returns PDF container value or error.

Description

We get the file path list and create a new PDF document, add all the images and than return the PDF. You can store it in a container field or export to a file (with Container.WriteFile).

Examples

Get a PDF into a field:

```
Set Variable [ $pdf; MBS("ImageCapture.PDF") ]
If [ MBS("IsError") = ]
Set Field [ MyTable::MyPDF; $pdf]
End If
```

See also

- [55.35 Container.WriteFile](#) 1658
- [124.6 IsError](#) 6266

91.80.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr2](#)

Created 11st February 2019, last changed 19th September 2019.

91.81 ImageCapture.PreferredDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.PreferredDevice")

Result Returns UUID or error.

Description

You can pass the UUID to other functions to select device or query information.

Examples

Show name of preferred device:

```
Set Variable [ $PreferredDevice; Value:MBS( "ImageCapture.PreferredDevice" ) ]
Set Variable [ $Name; Value:MBS( "ImageCapture.DeviceInfo"; $PreferredDevice; "name" ) ]
Show Custom Dialog [ "Preferred Device"; $name ]
```

See also

- 91.66 ImageCapture.DeviceInfo 4993

Example Databases

- [Mac only/ImageCapture/ImageCapture](#)

Created 11st September 2016, last changed 11st September 2016.

91.82 ImageCapture.RequestDeleteFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.RequestDeleteFiles"; FileNames { ; Wait })

Parameters

FileNames

The list of filenames.

Wait

Optional

Pass 1 to wait till complete. Or pass 0 to return immediately. Default is 1 to wait.

0

Result Returns OK or error.

Description

91.82.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)
- [Import images from cameras on MacOS with FileMaker](#)

Created 4th June 2018, last changed 20th June 2018.

91.83 ImageCapture.RequestDisableTethering

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.RequestDisableTethering")

Result Returns OK or error.

Description

Send this message to disable tethered capture on the camera device if the camera has the ICCameraDevice-CanTakePicture capability and if your process has already sent a requestEnableTethering with ImageCapture.RequestEnableTethering function to it.

See also

- 91.63 ImageCapture.CameraInfo 4989
- 91.84 ImageCapture.RequestEnableTethering 5016

91.83.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 4th June 2018, last changed 4th June 2018.

91.84 ImageCapture.RequestEnableTethering

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.RequestEnableTethering")

Result Returns OK or error.

Description

Send this message to enable tethered capture on the camera device if the camera has the ICCameraDevice-CanTakePicture capability.

See also

- [91.63 ImageCapture.CameraInfo](#) 4989
- [91.83 ImageCapture.RequestDisableTethering](#) 5015
- [91.89 ImageCapture.RequestTakePicture](#) 5024

Example Databases

- [Mac only/ImageCapture/Camera Import](#)

91.84.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 4th June 2018, last changed 4th June 2018.

91.85 ImageCapture.RequestOverviewScan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.RequestOverviewScan" { ; Wait })

Parameters

Wait

Optional

Pass 1 to wait till complete. Or pass 0 to return immediately. Default is 1 to wait.

0

Result Returns OK or error.

Description

If a progress dialog from our plugin is visible, the plugin will keep it updated with progress.

MBS Plugin 8.5 and newer observes progress and returns timeout error if scanner didn't do anything for 60 seconds.

91.85.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)

Created 11st September 2016, last changed 19th November 2018.

91.86 ImageCapture.RequestScan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

```
MBS( "ImageCapture.RequestScan" { ; Wait } )
```

Parameters

Wait

Optional

Pass 1 to wait till complete. Or pass 0 to return immediately. Default is 1 to wait.

0

Result Returns OK or error.

Description

If a progress dialog from our plugin is visible, the plugin will keep it updated with progress.

Please use ImageCapture.SetParameter to configure scanner before requesting the scan, e.g. for duplex.

MBS Plugin 8.5 and newer observes progress and returns timeout error if scanner didn't do anything for 60 seconds.

Please call ImageCapture.OpenDevice to open device before requesting a scan.

Examples

Scan images:

```
# set parameters
Set Variable [ $physicalWidth; Value:MBS("ImageCapture.GetParameter"; "physicalWidth") ]
Set Variable [ $physicalHeight; Value:MBS("ImageCapture.GetParameter"; "physicalHeight") ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "scanArea"; 0; 0; $physicalWidth; $physical-
Height) ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "documentType"; "USLetter") ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "documentName"; "Scan") ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "resolution"; 300) ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "bitDepth"; 8) ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "pixelDataType"; "RGB") ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "documentUTI"; "jpeg") ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "downloadsDirectory"; "temp") ]
Set Variable [ $p; Value:MBS( "ProgressDialog.Reset") ]
Set Variable [ $p; Value:MBS( "ProgressDialog.SetTitle"; "Scanning" ) ]
Set Variable [ $p; Value:MBS( "ProgressDialog.SetBottomText"; "" ) ]
Set Variable [ $p; Value:MBS( "ProgressDialog.SetTopText"; "Scan from Flatbet scanner." ) ]
Set Variable [ $p; Value:MBS( "ProgressDialog.SetButtonCaption"; "Cancel" ) ]
Set Variable [ $p; Value:MBS( "ProgressDialog.SetProgress"; -1 ) ]
```

```

Set Variable [ $p; Value:MBS( "ProgressDialog.Show" ) ]
Set Variable [ $r; Value:MBS("ImageCapture.requestScan" ) ]
Set Variable [ $p; Value:MBS( "ProgressDialog.Hide" ) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed start scan"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ ]
End If
Set Variable [ $Paths; Value:MBS("ImageCapture.ImagePaths" ) ]
Set Variable [ $Count; Value:ValueCount ( $Paths ) ]
Set Variable [ $Index; Value:1 ]
Loop
Set Variable [ $Path; Value:GetValue($Paths; $index) ]
New Record/Request
Set Field [ Images::Image; MBS("Container.ReadFile"; $path) ]
Set Variable [ $r; Value:MBS( "Files.Delete"; $Path ) ]
Commit Records/Requests [ No dialog ]
Set Variable [ $Index; Value:$index + 1 ]
Exit Loop If [ $index >$count ]
End Loop

```

Run scan with duplex:

```

# set parameters
Set Variable [ $physicalWidth ; Value: MBS("ImageCapture.GetParameter"; "physicalWidth" ) ]
Set Variable [ $physicalHeight ; Value: MBS("ImageCapture.GetParameter"; "physicalHeight" ) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "documentType"; "A4" ) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "documentName"; "Scan" ) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "resolution"; 300) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "bitDepth"; 8) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "pixelDataType"; "RGB" ) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "documentUTI"; "jpeg" ) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "downloadsDirectory"; "temp" ) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "duplexScanningEnabled"; 1) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "scanArea"; 0; 0; $physicalWidth; $physicalHeight) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.Reset" ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetTitle"; "Scanning" ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetBottomText"; "" ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetTopText"; "Scan from Flatbet scanner." ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetButtonCaption"; "Cancel" ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetProgress"; -1 ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.Show" ) ]
Set Variable [ $r ; Value: MBS("ImageCapture.requestScan" ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.Hide" ) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed start scan" ; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ Text Result: ]
End If

```

```

#
# read images
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $Paths ; Value: MBS("ImageCapture.ImagePaths") ]
If [ Length ( $Paths ) >0 ]
Set Variable [ $Count ; Value: ValueCount ( $Paths ) ]
If [ $Count >0 ]
Set Variable [ $Index ; Value: 1 ]
Loop
Set Variable [ $Path ; Value: GetValue($Paths; $index) ]
New Record/Request
Set Field [ Images::Image ; MBS("Container.ReadFile"; $path) ]
Set Variable [ $r ; Value: MBS( "Files.Delete"; $Path ) ]
Commit Records/Requests [ With dialog: Off ]
Set Variable [ $Index ; Value: $index + 1 ]
Exit Loop If [ $index >$count ]
End Loop
End If
End If

```

See also

- 91.93 ImageCapture.cancelScan 5031
- 91.79 ImageCapture.OpenDevice 5010
- 91.88 ImageCapture.RequestSyncClock 5023
- 91.91 ImageCapture.SetParameter 5026
- 130.14 ProgressDialog.Hide 6508
- 130.16 ProgressDialog.SetBottomText 6511
- 130.17 ProgressDialog.SetButtonCaption 6513
- 130.25 ProgressDialog.SetProgress 6525
- 130.27 ProgressDialog.SetTitle 6529
- 164.57 Text.RemovePrefix 7854

91.86.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr3](#)
- [MBS FileMaker Plugin, version 8.3pr3](#)
- [MBS FileMaker Plugin, version 7.0pr1](#)
- [ImageCapture functions for Mac OS X](#)

91.87 ImageCapture.RequestSelectFunctionalUnit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.RequestSelectFunctionalUnit"; Unit { ; Wait })

Parameters**Unit**

The functional unit to request. Can be Flatbed, PositiveTransparency, NegativeTransparency or Document-Feeder.

"Flatbed"

Wait

Optional

Pass 1 to wait till complete. Or pass 0 to return immediately. Default is 1 to wait.

0

Result Returns OK or error.

Description**Examples**

Request flatbed unit:

```
Set Variable [ $r; Value:MBS("ImageCapture.requestSelectFunctionalUnit"; "Flatbed") ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed to get flatbed?"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ ]
End If
```

Request document feeder:

```
MBS("ImageCapture.requestSelectFunctionalUnit"; "DocumentFeeder")
```

Open device and request document feeder:

```
Set Variable [ $r ; Value: MBS("ImageCapture.OpenDevice"; Images::Device) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed to open" ; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ Text Result: ]
End If
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $r ; Value: MBS("ImageCapture.GetParameter"; "availableFunctionalUnitTypes") ]
If [ Length ( $r ) >0 ]
# if we have more than one, pick one
Set Variable [ $r ; Value: MBS("ImageCapture.requestSelectFunctionalUnit"; "DocumentFeeder") ]
If [ MBS("iserror") ]
```

```
Show Custom Dialog [ "Failed to get flatbed?" ; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ Text Result: ]
End If
End If
```

See also

- [91.73 ImageCapture.GetParameter](#) 5002
- [91.79 ImageCapture.OpenDevice](#) 5010
- [124.6 IsError](#) 6266
- [164.57 Text.RemovePrefix](#) 7854

91.87.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr8](#)
- [MBS FileMaker Plugin, version 8.3pr3](#)
- [Scanning Options](#)

Created 11st September 2016, last changed 19th November 2018.

91.88 ImageCapture.RequestSyncClock

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.RequestSyncClock")

Result Returns OK or error.

Description

Synchronize camera's clock with the computer's clock. You should send this request only if the camera has the ICCameraDeviceCanSyncClock capability.

See also

- 91.86 ImageCapture.RequestScan

5018

91.88.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 4th June 2018, last changed 4th June 2018.

91.89 ImageCapture.RequestTakePicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.RequestTakePicture")

Result Returns OK or error.

Description

Works only if the camera capabilities include ICCameraDeviceCanTakePicture.
You MUST call ImageCapture.RequestEnableTethering before requesting take picture.

You may need to add a script pause after this to let the camera do the work.

See also

- [91.84 ImageCapture.RequestEnableTethering](#) 5016

Example Databases

- [Mac only/ImageCapture/Camera Import](#)

91.89.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [Import images from cameras on MacOS with FileMaker](#)

Created 4th June 2018, last changed 1st August 2019.

91.90 ImageCapture.SetFeatureValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.SetFeatureValue"; FeatureName; Selector; Value)

Parameters**FeatureName**

The name of the feature.

\$name

Selector

What value to set. Can be "value" for boolean values or "currentValue" for range or enumeration values.
"value"

Value

The new value.

Result Returns OK or error.

Description**See also**

- 91.72 ImageCapture.GetFeatures 5001
- 91.71 ImageCapture.GetFeatureValue 5000

Created 11st September 2016, last changed 4th June 2018.

91.91 ImageCapture.SetParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.SetParameter"; Selector; Value)

Parameters

Selector

The value to set.
"documentName"

Value

The value to set.

Result Returns OK or error.

Description

Selector	Description	Example
bitDepth	The bit depth to use when performing the final scan. This will always be one of the supported bit depths.	8
documentName	The document name.	."Scan"
documentType	Current document type.	."A4"
documentUTI	The document UTI. Can be set using JPEG, JPES2000, PDF, TIFF or PNG.	."JPEG"
downloadDirectory	The download directory. If you pass "temp", we use the user's temp folder.	."/Users/ev/Desktop"
maxMemoryUsageSize	The total maximum hard size requested when performing a memory based transfer.	."100000000"
measurementUnit	Current measurement unit. Can be inches, Centimeters, Pica, Points, Picas or EmAs.	."Inches"
overviewResolution	Overview image resolution. Value assigned to this will be constrained by resolution allowed by the device.	300
resolution	Current main resolution. This will always be one of the supported resolution values.	127
thresholdOffBlackAndWhiteScanning	Threshold value to be used when performing a scan in black & white. This value should be from 0 to 255.	."100"
transferMode	The transfer mode for scanned document. Can be File or Stream, but Plugins only supports File.	1
useThresholdOffBlackAndWhiteScanning	Indicator if this function will use threshold value to be used when performing a scan in black & white.	1
validationMethod	Current color method. This will always be one of the supported color format names.	."RGB"
validationType	The pixel data type. Can be BW, Gray, RGB, Palette, CMY, CMYK, YUV, YUVK or CMYKZ.	."RGB"
widthOfOrientation	Default orientation of the scan area. This property along with scanArea describes the area to be scanned. 1 for Normal, 2 Flipped horizontally, 3 Rotated 180°, 4 Flipped vertically, 5 Rotated 90° CCW and Flipped vertically, 6 Rotated 90° CW, 7 Rotated 90° CW and Flipped vertically, 8 Rotated 90° CW.	1
widthOfPageOrientation	Default orientation of the full page of the scanned document.	1
widthOfPageOrientation	Default orientation of the cover page of the scanned document.	1
scanArea	Four parameters with X, Y, Width and Height to define scan.	

For scan area, please pass x, y, width and height as separate parameters.

Default folder for files is temporary folder.

List of valid document types: Default, A4, B5, USLetter, USLegal, A5, ISOB4, ISOB6, USLedger, USExecutive, A3, ISOB3, A6, C4, C5, C6, 4A0, 2A0, A0, A1, A2, A7, A8, A9, 10, ISOB0, ISOB1, ISOB2, ISOB5, ISOB7, ISOB8, ISOB9, ISOB10, JISB0, JISB1, JISB2, JISB3, JISB4, JISB6, JISB7, JISB8, JISB9, JISB10, C0, C1, C2, C3, C7, C8, C9, C10, USStatement, BusinessCard, E, 3R, 4R, 5R, 6R, 8R, S8R, 10R, S10R, 11R, 12R, S12R, 110, APSH, APSC, APSP, 135, MF, LF.

Examples

Set scan area to physical size:

```
Set Variable [ $physicalWidth; Value:MBS("ImageCapture.GetParameter"; "physicalWidth") ]
Set Variable [ $physicalHeight; Value:MBS("ImageCapture.GetParameter"; "physicalHeight") ]
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "scanArea"; 0; 0; $physicalWidth; $physical-Height) ]
```

Set to US Letter format:

```
MBS("ImageCapture.SetParameter"; "documentType"; "USLetter")
```

Set document name:

```
MBS("ImageCapture.SetParameter"; "documentName"; "Scan")
```

Set resolution to 300 dpi:

```
MBS("ImageCapture.SetParameter"; "resolution"; 300)
```

Set to scan 8 bit RGB picture:

```
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "bitDepth"; 8) ]  
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "pixelDataType"; "RGB") ]
```

Set JPEG image type:

```
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "documentUTI"; "jpeg") ]
```

Use temporary folder for temp files:

```
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "downloadsDirectory"; "temp") ]
```

Set scan area:

```
MBS( "ImageCapture.SetParameter"; "scanArea"; $x; $y; $w; $h )
```

Enable duplex:

```
MBS("ImageCapture.SetParameter"; "duplexScanningEnabled"; 1)
```

Set to A4 format:

```
MBS("ImageCapture.SetParameter"; "documentType"; "A4")
```

Switch to color or gray:

```
If [ $gray ]  
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "bitDepth"; 8) ]  
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "pixelDataType"; "Gray") ]  
Else  
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "bitDepth"; 8) ]  
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "pixelDataType"; "RGB") ]  
End If
```

Run scan with duplex:

```
# set parameters  
Set Variable [ $physicalWidth ; Value: MBS("ImageCapture.GetParameter"; "physicalWidth") ]  
Set Variable [ $physicalHeight ; Value: MBS("ImageCapture.GetParameter"; "physicalHeight") ]
```

```

Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "documentType"; "A4") ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "documentName"; "Scan") ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "resolution"; 300) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "bitDepth"; 8) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "pixelDataType"; "RGB") ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "documentUTI"; "jpeg") ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "downloadsDirectory"; "temp") ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "duplexScanningEnabled"; 1) ]
Set Variable [ $r ; Value: MBS("ImageCapture.SetParameter"; "scanArea"; 0; 0; $physicalWidth; $physicalHeight) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.Reset") ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetTitle"; "Scanning" ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetBottomText"; "" ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetTopText"; "Scan from Flatbet scanner." ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetButtonCaption"; "Cancel" ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.SetProgress"; -1 ) ]
Set Variable [ $p ; Value: MBS("ProgressDialog.Show" ) ]
Set Variable [ $r ; Value: MBS("ImageCapture.requestScan") ]
Set Variable [ $p ; Value: MBS("ProgressDialog.Hide" ) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed start scan" ; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ Text Result: ]
End If
#
# read images
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $Paths ; Value: MBS("ImageCapture.ImagePaths") ]
If [ Length ( $Paths ) >0 ]
Set Variable [ $Count ; Value: ValueCount ( $Paths ) ]
If [ $Count >0 ]
Set Variable [ $Index ; Value: 1 ]
Loop
Set Variable [ $Path ; Value: GetValue($Paths; $index) ]
New Record/Request
Set Field [ Images::Image ; MBS("Container.ReadFile"; $path) ]
Set Variable [ $r ; Value: MBS( "Files.Delete"; $Path ) ]
Commit Records/Requests [ With dialog: Off ]
Set Variable [ $Index ; Value: $index + 1 ]
Exit Loop If [ $index >$count ]
End Loop
End If
End If

```

Set PNG image type:

```
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "documentUTI"; "png") ]
```


91.91. IMAGECAPTURE.SETPARAMETER

5029

Set to scan black and white picture:

```
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "bitDepth"; 1) ]
```

```
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "pixelDataType"; "BW") ]
```

Set PDF image type:

```
Set Variable [ $r; Value:MBS("ImageCapture.SetParameter"; "documentUTI"; "pdf") ]
```

See also

- [91.73 ImageCapture.GetParameter](#) 5002
- [91.74 ImageCapture.GetParameters](#) 5005
- [91.75 ImageCapture.ImagePaths](#) 5006
- [91.86 ImageCapture.RequestScan](#) 5018
- [124.6 IsError](#) 6266
- [130.14 ProgressDialog.Hide](#) 6508
- [130.16 ProgressDialog.SetBottomText](#) 6511
- [130.25 ProgressDialog.SetProgress](#) 6525
- [130.27 ProgressDialog.SetTitle](#) 6529
- [130.29 ProgressDialog.SetTopText](#) 6533

Example Databases

- [Mac only/ImageCapture/ImageCapture](#)

91.91.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)
- [Scanning Options](#)
- [MBS FileMaker Plugin, version 6.5pr7](#)
- [ImageCapture functions for Mac OS X](#)

Created 11st September 2016, last changed 11st September 2019.

91.92 ImageCapture.Thumbnail

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	8.3	Yes	No	No	No	No

MBS("ImageCapture.Thumbnail"; FileName { ; ImageType; Filename })

Parameters

FileName

The file name of the media file to download.

"IMG1234.JPG"

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

Example Databases

- [Mac only/ImageCapture/Camera Import](#)

91.92.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 4th June 2018, last changed 4th June 2018.

91.93 ImageCapture.cancelScan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
91 ImageCapture	6.4	Yes	No	No	No	No

MBS("ImageCapture.cancelScan")

Result Returns OK or error.

Description

Examples

Cancel scan:

```
Set Variable [ $r; Value:MBS("ImageCapture.cancelScan") ]
```

See also

- 91.86 ImageCapture.RequestScan

5018

Created 11st September 2016, last changed 12nd September 2016.

Chapter 92

ImagePicker

A panel for iOS to select or take picture.

You can take a new picture via camera, record video or pick an existing picture.

92.1 ContinuityCamera.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.Clear")

Result Returns OK or error.

Description

See also

- 92.2 ContinuityCamera.Import 5034
- 92.4 ContinuityCamera.Result 5037

Created 3th April 2019, last changed 6th January 2020.

92.2 ContinuityCamera.Import

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.Import"; Type)

Parameters

Type

Pass 0 for Photo (default) or 1 for document.

0

Result Returns OK or error.

Description

Examples

Import photo:

```
Set Variable [ $r ; Value: MBS("ContinuityCamera.Import";0) ]
```

Import document:

```
Set Variable [ $r ; Value: MBS("ContinuityCamera.Import"; 1) ]
```

See also

- [92.1 ContinuityCamera.Clear](#) 5033
- [92.4 ContinuityCamera.Result](#) 5037

Example Databases

- [Mac only/ContinuityCamera](#)

92.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr2](#)
- [Continuity Camera for FileMaker](#)

92.2.2 FileMaker Magazin

- Ausgabe 6/2019, Seite 36

Created 3th April 2019, last changed 6th January 2020.

92.3 ContinuityCamera.PopupMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.PopupMenu"; mode { ; x; y; window; item; objectName })

Parameters

mode

The mode to use. Can be "mouse", "screen" or "window". Default is mouse for leaving away the parameter or passing empty text. Version 8.3 adds mode "content" to make it relative to the content part of the window, below toolbars.

"mouse"

x

Optional

The relative x coordinates for the position relative to the mouse, screen or window.

0

y

Optional

The relative y coordinates for the position relative to the mouse, screen or window.

0

window

Optional

The window reference for the showing menu relative to a window.

\$window

item

Optional

The menu item to be positioned at the specified location in the view.

\$item

objectName

Optional

The object name for mode=object.

"web"

Result Returns 1, 0 or error.

Description

Returns 1 if item was selected or 0 if not.

Example Databases

- [Mac only/ContinuityCamera](#)

92.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr3](#)

92.3.2 FileMaker Magazin

- Ausgabe 6/2019, Seite 37

Created 7th April 2019, last changed 6th January 2020.

92.4 ContinuityCamera.Result

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.Result" { ; FileName })

Parameters

FileName

Optional

File name to use.

"test.jpg"

Result Returns container value or error.

Description

The result may be PNG, PDF, JPEG or TIFF document.

Usually documents come as PDF and images as JPEG.

Examples

Write result to container field:

Set Field [ContinuityCamera::Image ; MBS("ContinuityCamera.Result")]

See also

- [92.1 ContinuityCamera.Clear](#) 5033
- [92.2 ContinuityCamera.Import](#) 5034

Example Databases

- [Mac only/ContinuityCamera](#)

92.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr2](#)
- [Continuity Camera for FileMaker](#)

92.4.2 FileMaker Magazin

- Ausgabe 6/2019, Seite 37
- Ausgabe 6/2019, Seite 36

Created 3th April 2019, last changed 6th January 2020.

92.5 ContinuityCamera.SetScriptTrigger

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92	ImagePicker 56 ContinuityCamera	9.2	Yes	No	No	No	No

MBS("ContinuityCamera.SetScriptTrigger"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

When some picture or document is available, we call the script.

Parameter to the script is currently the document type, e.g. JPEG, TIFF or PDF.

Examples

Set trigger:

```
Set Variable [ $r ; Value: MBS("ContinuityCamera.SetScriptTrigger"; Get(FileName); "ContinuityCamera-Trigger") ]
```

Example Databases

- [Mac only/ContinuityCamera](#)

92.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr2](#)
- [Continuity Camera for FileMaker](#)

92.5.2 FileMaker Magazin

- [Ausgabe 6/2019, Seite 36](#)

Created 31st March 2019, last changed 6th January 2020.

92.6 UIImagePickerController.AvailableCaptureModesForCameraDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 UIImagePickerController	7.3	No	No	No	No	Yes

MBS("UIImagePickerController.AvailableCaptureModesForCameraDevice"; CameraDevice)

Parameters**CameraDevice**

The new setting. Can be front or rear.
"front"

Result Returns list or error.

Description

List contains Photo if photo is available and video if video is available.
Created 17th June 2017, last changed 18th June 2017.

92.7 UIImagePickerController.AvailableMediaTypesForSourceType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 UIImagePickerController	7.3	No	No	No	No	Yes

MBS("UIImagePickerController.AvailableMediaTypesForSourceType"; sourceType)

Parameters

sourceType

The source to use to pick an image. Can be PhotoLibrary, Camera or SavedPhotosAlbum. "Camera"

Result Returns list or error.

Description

Some iOS devices support video recording. Use this method, along with the UIImagePickerController.isSourceTypeAvailable function, to determine if video recording is available on a device. The availability of video recording is indicated by the presence of the kUTTypeMovie (public.movie) media type for the camera source type.

See also

- 92.25 UIImagePickerController.IsSourceTypeAvailable

5058

Created 17th June 2017, last changed 18th June 2017.

92.8 ImagePicker.ClearMedia

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.ClearMedia")

Result Returns OK or error.

Description

This is optional and can be called when you are done with current video or image, so plugin can release memory.

See also

- 92.9 ImagePicker.ClearOverlay 5042
- 92.21 ImagePicker.HasMedia 5054

Created 17th June 2017, last changed 18th June 2017.

92.9 ImagePicker.ClearOverlay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	8.3	No	No	No	No	Yes

MBS("ImagePicker.ClearOverlay")

Result Returns OK or error.

Description

See also

- 92.8 ImagePicker.ClearMedia

5041

92.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)
- [Overlay image for Image Picker](#)

Created 25th May 2018, last changed 25th May 2018.

92.10 ImagePicker.Dismiss

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.Dismiss")

Result Returns OK or error.

Description

Something you can call in a script to cancel the message creation.

Examples

Close picker:

```
Set Variable [ $r ; Value: MBS( "ImagePicker.Dismiss" ) ]
```

Example Databases

- [iOS/iOS ImagePicker](#)

92.10.1 Blog Entries

- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 20th June 2017.

92.11 ImagePicker.GetAllowsEditing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetAllowsEditing")

Result Returns value or error.

Description

A Boolean value indicating whether the user is allowed to edit a selected still image or movie. This property is set to 0 by default.

See also

- 92.38 ImagePicker.SetAllowsEditing

5074

Created 17th June 2017, last changed 18th June 2017.

92.12 ImagePicker.GetCameraCaptureMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetCameraCaptureMode")

Result Returns value or error.

Description

The capture mode used by the camera.

See also

- [92.14 ImagePicker.GetCameraFlashMode](#) 5047
- [92.39 ImagePicker.SetCameraCaptureMode](#) 5075
- [92.41 ImagePicker.SetCameraFlashMode](#) 5077

Created 17th June 2017, last changed 18th June 2017.

92.13 ImagePicker.GetCameraDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetCameraDevice")

Result Returns OK or error.

Description

The camera used by the image picker controller.

Default is Rear.

See also

- 92.14 ImagePicker.GetCameraFlashMode 5047
- 92.40 ImagePicker.SetCameraDevice 5076

Created 17th June 2017, last changed 18th June 2017.

92.14 ImagePicker.GetCameraFlashMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetCameraFlashMode")

Result Returns value or error.

Description

The flash mode used by the active camera.

The value of this property specifies the behavior of the still-image flash when the value of the cameraCaptureMode property is photo, and specifies the behavior of the video torch when cameraCaptureMode is video.

See also

- 92.12 ImagePicker.GetCameraCaptureMode 5045
- 92.13 ImagePicker.GetCameraDevice 5046
- 92.39 ImagePicker.SetCameraCaptureMode 5075
- 92.41 ImagePicker.SetCameraFlashMode 5077

Created 17th June 2017, last changed 18th June 2017.

92.15 ImagePicker.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetEvaluate")

Result Returns expression or error.

Description

See also

- 92.16 ImagePicker.GetFileName 5049
- 92.42 ImagePicker.SetEvaluate 5078

Created 17th June 2017, last changed 18th June 2017.

92.16 ImagePicker.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetFileName")

Result Returns text or error.

Description

See also

- [92.15 ImagePicker.GetEvaluate](#) 5048
- [92.17 ImagePicker.GetScriptName](#) 5050

Created 17th June 2017, last changed 18th June 2017.

92.17 ImagePicker.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetScriptName")

Result Returns text or error.

Description

See also

- 92.16 ImagePicker.GetFileName 5049
- 92.44 ImagePicker.SetScript 5080

Created 17th June 2017, last changed 18th June 2017.

92.18 ImagePicker.GetShowsCameraControls

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetShowsCameraControls")

Result Returns value or error.

Description

Indicates whether the image picker displays the default camera controls.

The default value of this property is 1, which specifies that the default camera controls are visible in the picker. Set it to 0 to hide the default controls if you want to instead provide a custom overlay view using the cameraOverlayView property.

If you set this property to 0 and provide your own custom controls, you can take multiple pictures before dismissing the image picker interface. However, if you set this property to 1, your delegate must dismiss the image picker interface after the user takes one picture or cancels the operation.

You can access this property only when the source type of the image picker is set to Camera. Attempting to access this property for other source types results in an error. Depending on the value you assign to the mediaTypes property, the default controls display the still camera or movie camera interface, or a selection control that lets the user choose the picker interface.

See also

- 92.45 ImagePicker.SetShowsCameraControls

5081

Created 17th June 2017, last changed 18th June 2017.

92.19 ImagePicker.GetSourceType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetSourceType")

Result Returns value or error.

Description

The type of picker interface to be displayed by the controller.

Prior to running the picker interface, set this value to the desired source type. The source type you set must be available and an error will be returned if it is not. If you change this property while the picker is visible, the picker interface changes to match the new value in this property.

The default value is PhotoLibrary.

See also

- 92.46 ImagePicker.SetSourceType

5082

Created 17th June 2017, last changed 18th June 2017.

92.20 ImagePicker.GetVideoMaximumDuration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.GetVideoMaximumDuration")

Result Returns value or error.

Description

The maximum duration, in seconds, for a video recording.

The default value for this property is 10 minutes (600 seconds). When a user taps the Share button to send a movie to MMS, MobileMe, YouTube, or another destination, an appropriate duration limit and an appropriate video quality are enforced.

This property is available only if the `mediaTypes` property's value array includes the `kUTTypeMovie` (public.movie) media type.

See also

- 92.47 `ImagePicker.SetVideoMaximumDuration`

5083

Created 17th June 2017, last changed 18th June 2017.

92.21 ImagePicker.HasMedia

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.HasMedia")

Result Returns 1, 0 or error.

Description

Returns 1 if there was an image or video selected, else 0.

See also

- [92.8 ImagePicker.ClearMedia](#) 5041
- [92.30 ImagePicker.MediaOriginalImage](#) 5064

Example Databases

- [iOS/iOS ImagePicker](#)

92.21.1 Blog Entries

- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.22 ImagePicker.IsCameraDeviceAvailable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.IsCameraDeviceAvailable"; CameraDevice)

Parameters

CameraDevice

The new setting. Can be front or rear.
"front"

Result Returns 1, 0 or error.

Description

Returns a Boolean value that indicates whether a given camera is available.

See also

- 92.25 ImagePicker.IsSourceTypeAvailable

5058

Created 17th June 2017, last changed 18th June 2017.

92.23 ImagePicker.IsFlashAvailableForCameraDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.IsFlashAvailableForCameraDevice"; CameraDevice)

Parameters

CameraDevice

Which camera to check. Can be front or rear.

"front"

Result Returns 1, 0 or error.

Description

Indicates whether a given camera has flash illumination capability.

Returns 1 if flash is available or 0 if not.

Created 17th June 2017, last changed 18th June 2017.

92.24 ImagePicker.IsPresented

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.IsPresented")

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if not.

See also

- 92.37 ImagePicker.Present

5073

Created 17th June 2017, last changed 18th June 2017.

92.25 UIImagePickerController.IsSourceTypeAvailable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 UIImagePickerController	7.3	No	No	No	No	Yes

MBS("UIImagePickerController.IsSourceTypeAvailable"; sourceType)

Parameters

sourceType

The source to use to pick an image. Can be PhotoLibrary, Camera or SavedPhotosAlbum. "Camera"

Result Returns OK or error.

Description

Returns a Boolean value indicating whether the device supports picking media using the specified source type.

1 if the device supports the specified source type; 0 if the specified source type is not available.

Because a media source may not be present or may be unavailable, devices may not always support all source types. For example, if you attempt to pick an image from the user's library and the library is empty, this method returns 0. Similarly, if the camera is already in use, this method returns 0.

Before attempting to use an UIImagePickerController object to pick an image, you must call this method to ensure that the desired source type is available.

Examples

Check for source type being available:

```
Set Variable [ $SourceType ; Value: Get( ScriptParameter ) ]
Set Variable [ $r ; Value: MBS( "UIImagePickerController.IsSourceTypeAvailable"; $sourceType ) ]
If [ $r = 1 ]
Show Custom Dialog [ "Can't pick picture." ; "The source " & $sourceType & " is not available." ]
Exit Script [ Text Result: "failed" ]
End If
```

See also

- 92.7 UIImagePickerController.AvailableMediaTypesForSourceType 5040
- 92.22 UIImagePickerController.IsCameraDeviceAvailable 5055

Example Databases

- [iOS/iOS UIImagePickerController](#)

92.25.1 Blog Entries

- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

92.25. *IMAGEPICKER.ISSOURCETYPEAVAILABLE*

5059

Created 17th June 2017, last changed 20th June 2017.

92.26 ImagePicker.MediaCropRect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaCropRect")

Result Returns list or error.

Description

If defined, gives a list with x, y, width and height values.

See also

- 92.29 ImagePicker.MediaIsVideo 5063
- 92.33 ImagePicker.MediaType 5068
- 92.34 ImagePicker.MediaTypes 5069

Created 17th June 2017, last changed 18th June 2017.

92.27 ImagePicker.MediaEditedImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaEditedImage" { ; ImageType; FileName; WithEXIF })

Parameters

ImageType

Optional

The image type to return. Can be png or jpeg.

"jpeg"

FileName

Optional

The file name to include in container value.

"test.jpg"

WithEXIF

Optional

Pass 1 to include metadata in image. Default is 0 for no metadata.

0

Result Returns OK or error.

Description

If no image is available, we return empty result.

See also

- [92.28 ImagePicker.MediaIsImage](#) 5062
- [92.30 ImagePicker.MediaOriginalImage](#) 5064

Example Databases

- [iOS/iOS ImagePicker](#)

92.27.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr7](#)
- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 14th May 2019.

92.28 ImagePicker.MediaIsImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaIsImage")

Result Returns 1, 0 or error.

Description

Returns 1 if media is image.

See also

- 92.27 ImagePicker.MediaEditedImage 5061
- 92.29 ImagePicker.MediaIsVideo 5063
- 92.31 ImagePicker.MediaPath 5066
- 92.33 ImagePicker.MediaType 5068

Created 17th June 2017, last changed 18th June 2017.

92.29 ImagePicker.MediaIsVideo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaIsVideo")

Result Returns 1, 0 or error.

Description

Returns 1 if media is video.

See also

- 92.26 ImagePicker.MediaCropRect 5060
- 92.28 ImagePicker.MediaIsImage 5062
- 92.33 ImagePicker.MediaType 5068
- 92.34 ImagePicker.MediaTypes 5069

Created 17th June 2017, last changed 18th June 2017.

92.30 UIImagePickerController.MediaTypeOriginalImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 UIImagePickerController	7.3	No	No	No	No	Yes

MBS("UIImagePickerController" { ; ImageType; FileName; WithEXIF })

Parameters

ImageType

Optional

The image type to return. Can be png or jpeg.

"jpeg"

FileName

Optional

The file name to include in container value.

"test.jpg"

WithEXIF

Optional

Pass 1 to include metadata in image. Default is 0 for no metadata.

0

Result Returns OK or error.

Description

If no image is available, we return empty result.

Examples

Store image:

```

If [ MBS( "UIImagePickerController" ) ]
New Record/Request
Set Variable [ $Image ; Value: MBS( "UIImagePickerController"; "PNG" ) ]
If [ IsEmpty ( $image ) ]
Set Variable [ $Image ; Value: MBS( "UIImagePickerController"; "PNG" ) ]
End If
Set Field [ UIImagePickerController::Picture ; $image ]
Commit Records/Requests [ With dialog: Off ]
End If

```

See also

- 92.21 UIImagePickerController.HasMedia 5054
- 92.27 UIImagePickerController.MediaTypeOriginalImage 5061

Example Databases

- [iOS/iOS UIImagePickerController](#)

92.30.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr7](#)
- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 14th May 2019.

92.31 ImagePicker.MediaPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaPath")

Result Returns text or error.

Description

If video or image is stored somewhere else on disk, you can get the native file path here.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

See also

- 92.28 `ImagePicker.MediaIsImage` 5062
- 92.33 `ImagePicker.MediaType` 5068
- 92.34 `ImagePicker.MediaTypes` 5069
- 92.35 `ImagePicker.MediaURL` 5070
- 121.2 `Path.FileMakerPathToNativePath` 6139

Created 18th June 2017, last changed 18th June 2017.

92.32 ImagePicker.MediaReferenceURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaReferenceURL")

Result Returns text or error.

Description

If video or image is stored somewhere else on disk, you can get the URL here.

This may be reference to other application.

Created 17th June 2017, last changed 18th June 2017.

92.33 ImagePicker.MediaType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaType")

Result Returns text or error.

Description

See also

- 92.26 ImagePicker.MediaCropRect 5060
- 92.28 ImagePicker.MediaIsImage 5062
- 92.29 ImagePicker.MediaIsVideo 5063
- 92.31 ImagePicker.MediaPath 5066
- 92.34 ImagePicker.MediaTypes 5069
- 92.35 ImagePicker.MediaURL 5070

Created 17th June 2017, last changed 18th June 2017.

92.34 ImagePicker.MediaTypees

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaTypees")

Result Returns list or error.

Description

A list indicating the media types to be accessed by the media picker controller.

See also

- 92.26 ImagePicker.MediaCropRect 5060
- 92.29 ImagePicker.MediaIsVideo 5063
- 92.31 ImagePicker.MediaPath 5066
- 92.33 ImagePicker.MediaType 5068
- 92.35 ImagePicker.MediaURL 5070

Created 17th June 2017, last changed 18th June 2017.

92.35 ImagePicker.MediaTypeURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.MediaTypeURL")

Result Returns text or error.

Description

If video or image is stored somewhere else on disk, you can get the URL here.

See also

- 92.31 ImagePicker.MediaTypePath 5066
- 92.33 ImagePicker.MediaType 5068
- 92.34 ImagePicker.MediaTypees 5069

Created 17th June 2017, last changed 18th June 2017.

92.36 ImagePicker.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.New")

Result Returns OK or error.

Description

Examples

Show picker for camera:

```
Set Variable [ $r ; Value: MBS( "ImagePicker.New" ) ]
Set Variable [ $r ; Value: MBS( "ImagePicker.SetScript"; Get(FileName); "GotImage" ) ]
Set Variable [ $r ; Value: MBS( "ImagePicker.SetSourceType"; "Camera" ) ]
Set Variable [ $r ; Value: MBS( "ImagePicker.SetAllowsEditing"; 1 ) ]
Set Variable [ $r ; Value: MBS( "ImagePicker.SetCameraCaptureMode"; "Photo" ) ]
Set Variable [ $r ; Value: MBS( "ImagePicker.SetCameraDevice"; "Front" ) ]
Set Variable [ $r ; Value: MBS( "ImagePicker.SetCameraFlashMode"; "Auto" ) ]
Set Variable [ $r ; Value: MBS( "ImagePicker.SetShowsCameraControls"; 1 ) ]
Set Variable [ $r ; Value: MBS( "ImagePicker.Present" ) ]
```

See also

- [92.37 ImagePicker.Present](#) 5073
- [92.38 ImagePicker.SetAllowsEditing](#) 5074
- [92.39 ImagePicker.SetCameraCaptureMode](#) 5075
- [92.40 ImagePicker.SetCameraDevice](#) 5076
- [92.41 ImagePicker.SetCameraFlashMode](#) 5077
- [92.43 ImagePicker.SetOverlayImage](#) 5079
- [92.44 ImagePicker.SetScript](#) 5080
- [92.45 ImagePicker.SetShowsCameraControls](#) 5081
- [92.46 ImagePicker.SetSourceType](#) 5082

Example Databases

- [iOS/iOS ImagePicker](#)

92.36.1 Blog Entries

- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 20th June 2017.

92.37 ImagePicker.Present

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.Present")

Result Returns OK or error.

Description

This will show the user interface and start the process.

Your script may call this in a script and than wait for the script trigger.

See also

- [92.24 ImagePicker.IsPresented](#) 5057
- [92.36 ImagePicker.New](#) 5071
- [92.43 ImagePicker.SetOverlayImage](#) 5079

Example Databases

- [iOS/iOS ImagePicker](#)

92.37.1 Blog Entries

- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.38 ImagePicker.SetAllowsEditing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.SetAllowsEditing"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

0

Result Returns OK or error.

Description

A Boolean value indicating whether the user is allowed to edit a selected still image or movie.

This property is set to 0 by default.

See also

- [92.11 ImagePicker.GetAllowsEditing](#) 5044
- [92.36 ImagePicker.New](#) 5071

Example Databases

- [iOS/iOS ImagePicker](#)

92.38.1 Blog Entries

- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.39 ImagePicker.SetCameraCaptureMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.SetCameraCaptureMode"; Mode)

Parameters

Mode

The mode. Can be Photo or Video.

"Photo"

Result Returns OK or error.

Description

The capture mode used by the camera.

See also

- [92.12 ImagePicker.GetCameraCaptureMode](#) 5045
- [92.14 ImagePicker.GetCameraFlashMode](#) 5047
- [92.36 ImagePicker.New](#) 5071
- [92.41 ImagePicker.SetCameraFlashMode](#) 5077
- [92.43 ImagePicker.SetOverlayImage](#) 5079

Example Databases

- [iOS/iOS ImagePicker](#)

92.39.1 Blog Entries

- [Overlay image for Image Picker](#)
- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.40 UIImagePickerController.SetCameraDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 UIImagePickerController	7.3	No	No	No	No	Yes

MBS("UIImagePickerController"; CameraDevice)

Parameters

CameraDevice

The new setting. Can be front or rear.
"front"

Result Returns OK or error.

Description

The camera used by the image picker controller.
Default is Rear.

See also

- [92.13 UIImagePickerController.GetCameraDevice](#) 5046
- [92.36 UIImagePickerController.New](#) 5071
- [92.41 UIImagePickerController.SetCameraFlashMode](#) 5077
- [92.48 UIImagePickerController.StartVideoCapture](#) 5084

Example Databases

- [iOS/iOS UIImagePickerController](#)

92.40.1 Blog Entries

- [Overlay image for Image Picker](#)
- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.41 ImagePicker.SetCameraFlashMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.SetCameraFlashMode"; Value)

Parameters

Value

The new setting. Can be On, Off and Auto.

"Auto"

Result Returns OK or error.

Description

The flash mode used by the active camera.

The value of this property specifies the behavior of the still-image flash when the value of the cameraCaptureMode property is photo, and specifies the behavior of the video torch when cameraCaptureMode is video.

See also

- [92.12 ImagePicker.GetCameraCaptureMode](#) 5045
- [92.14 ImagePicker.GetCameraFlashMode](#) 5047
- [92.36 ImagePicker.New](#) 5071
- [92.39 ImagePicker.SetCameraCaptureMode](#) 5075
- [92.40 ImagePicker.SetCameraDevice](#) 5076

Example Databases

- [iOS/iOS ImagePicker](#)

92.41.1 Blog Entries

- [Overlay image for Image Picker](#)
- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.42 ImagePicker.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.SetEvaluate"; Expression)

Parameters

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

Result Returns OK or error.

Description

Parameter may be "Cancel" if user canceled the dialog or "Image" if something was picked.

See also

- 92.15 ImagePicker.GetEvaluate

5048

Created 17th June 2017, last changed 4th April 2018.

92.43 UIImagePickerController.SetOverlayImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 UIImagePickerController	8.3	No	No	No	No	Yes

MBS("UIImagePickerController"; Image)

Parameters

Image

The new overlay image. Proportional stretched to screen size. But you can use different images for different devices for best results.

Result Returns OK or error.

Description

This can be used to show additional framing rectangle or instructions to the user.

Examples

Show image picker with overlay:

```
Set Variable [ $r ; Value: MBS( "UIImagePickerController.New" ) ]
Set Variable [ $r ; Value: MBS( "UIImagePickerController.SetCameraCaptureMode"; "Photo" ) ]
Set Variable [ $r ; Value: MBS( "UIImagePickerController.SetShowsCameraControls"; 1 ) ]
Set Variable [ $r ; Value: MBS( "UIImagePickerController.SetSourceType"; "Camera" ) ]
Set Variable [ $r ; Value: MBS( "UIImagePickerController.SetOverlayImage"; Placeholder::Container ) ]
Set Variable [ $r ; Value: MBS( "UIImagePickerController.Present" ) ]
```

See also

- [92.36 UIImagePickerController.New](#) 5071
- [92.37 UIImagePickerController.Present](#) 5073
- [92.39 UIImagePickerController.SetCameraCaptureMode](#) 5075
- [92.45 UIImagePickerController.SetShowsCameraControls](#) 5081
- [92.46 UIImagePickerController.SetSourceType](#) 5082

92.43.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)
- [Overlay image for Image Picker](#)

Created 25th May 2018, last changed 25th May 2018.

92.44 ImagePicker.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.SetScript"; FileName; ScriptName)

Parameters

FileName

The file name for the script to trigger.

"test.fmp12"

ScriptName

The script name of the script to launch.

"EmailComposerFinished"

Result Returns OK or error.

Description

Parameter may be "Cancel" if user canceled the dialog or "Image" if something was picked.

See also

- [92.17 ImagePicker.GetScriptName](#) 5050
- [92.36 ImagePicker.New](#) 5071

Example Databases

- [iOS/iOS ImagePicker](#)

92.44.1 Blog Entries

- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.45 ImagePicker.SetShowsCameraControls

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.SetShowsCameraControls"; Value)

Parameters

Value

The new setting. Pass 1 to show camera controls or 0 to hide.

1

Result Returns OK or error.

Description

Indicates whether the image picker displays the default camera controls.

The default value of this property is 1, which specifies that the default camera controls are visible in the picker. Set it to 0 to hide the default controls if you want to instead provide a custom overlay view using the `cameraOverlayView` property.

If you set this property to 0 and provide your own custom controls, you can take multiple pictures before dismissing the image picker interface. However, if you set this property to 1, your delegate must dismiss the image picker interface after the user takes one picture or cancels the operation.

You can access this property only when the source type of the image picker is set to Camera. Attempting to access this property for other source types results in an error. Depending on the value you assign to the `mediaTypes` property, the default controls display the still camera or movie camera interface, or a selection control that lets the user choose the picker interface.

See also

- [92.18 ImagePicker.GetShowsCameraControls](#) 5051
- [92.36 ImagePicker.New](#) 5071
- [92.43 ImagePicker.SetOverlayImage](#) 5079

Example Databases

- [iOS/iOS ImagePicker](#)

92.45.1 Blog Entries

- [Overlay image for Image Picker](#)
- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.46 UIImagePickerController

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 UIImagePickerController	7.3	No	No	No	No	Yes

MBS("UIImagePickerController"; sourceType)

Parameters

sourceType

The source to use to pick an image. Can be PhotoLibrary, Camera or SavedPhotosAlbum. "Camera"

Result Returns OK or error.

Description

The type of picker interface to be displayed by the controller.

Prior to running the picker interface, set this value to the desired source type. The source type you set must be available and an error will be returned if it is not. If you change this property while the picker is visible, the picker interface changes to match the new value in this property.

The default value is PhotoLibrary.

See also

- [92.19 UIImagePickerController](#) 5052
- [92.36 UIImagePickerController](#) 5071
- [92.43 UIImagePickerController](#) 5079

Example Databases

- [iOS/iOS UIImagePickerController](#)

92.46.1 Blog Entries

- [Overlay image for Image Picker](#)
- [Image Picker for FileMaker iOS SDK apps with MBS Plugin](#)

Created 17th June 2017, last changed 18th June 2017.

92.47 ImagePicker.SetVideoMaximumDuration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.SetVideoMaximumDuration"; Value)

Parameters**Value**

The new maximum length in seconds.

300

Result Returns OK or error.

Description

The maximum duration, in seconds, for a video recording.

The default value for this property is 10 minutes (600 seconds). When a user taps the Share button to send a movie to MMS, MobileMe, YouTube, or another destination, an appropriate duration limit and an appropriate video quality are enforced.

This property is available only if the `mediaTypes` property's value array includes the `kUTTypeMovie` (`public.movie`) media type.

See also

- 92.20 `ImagePicker.GetVideoMaximumDuration`

5053

Created 17th June 2017, last changed 18th June 2017.

92.48 ImagePicker.StartVideoCapture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.StartVideoCapture")

Result Returns OK or error.

Description

Select the camera via ImagePicker.SetCameraDevice function.

Returns OK on success or "Failed" on failure. This method may return a value of "Failed" for various reasons, among them the following:

- Movie capture is already in progress
- The device does not support movie capture
- The device is out of disk space

Use this function in conjunction to initiate the programmatic capture of a movie. You can take more than one movie without leaving the interface, but to do so requires you to hide the default image picker controls. Calling this method while a movie is being captured has no effect. You must call the ImagePicker.stopVideoCapture function, and then wait until the associated script trigger is run, before you can capture another movie.

Calling this method when the source type of the image picker is set to a value other than Camera results in an error.

See also

- 92.40 ImagePicker.SetCameraDevice 5076
- 92.49 ImagePicker.StopVideoCapture 5085

Created 17th June 2017, last changed 18th June 2017.

92.49 ImagePicker.StopVideoCapture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.StopVideoCapture")

Result Returns OK or error.

Description

After you call this method to stop video capture, the system calls the script trigger.

See also

- 92.48 ImagePicker.StartVideoCapture

5084

Created 17th June 2017, last changed 18th June 2017.

92.50 ImagePicker.TakePicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.TakePicture")

Result Returns OK or error.

Description

Use this method in conjunction to initiate the programmatic capture of a still image. This supports taking more than one picture without leaving the interface, but requires that you hide the default image picker controls.

Calling this method while an image is being captured has no effect. You must wait until the script trigger is run before you can capture another picture.

Calling this method when the source type of the image picker is set to a value other than Camera results in an error.

Created 17th June 2017, last changed 18th June 2017.

92.51 ImagePicker.VideoIsCompatibleWithSavedPhotosAlbum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.VideoIsCompatibleWithSavedPhotosAlbum"; FilePath)

Parameters**FilePath**

The file path to the video file.

Result Returns 1, 0 or error.

Description

Is a specific video eligible to be saved to the saved photos album?

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

See also

- 121.2 `Path.FileMakerPathToNativePath`

6139

Created 17th June 2017, last changed 18th June 2017.

92.52 ImagePicker.WriteImageToSavedPhotosAlbum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.WriteImageToSavedPhotosAlbum"; Image { ; FileName; ScriptName; Parameter })

Parameters

Image

The image container to add to photo roll.

FileName

Optional

The file name for the script.

Get(FileName)

ScriptName

Optional

The script name for the trigger.

Parameter

Optional

The script parameter to use.

Result Returns OK or error.

Description

The work is done in background and we can optionally trigger a script when done.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Add image to saved photos:

```
If [ IsEmpty ( ImagePicker::Picture ) ]
```

```
Show Custom Dialog [ "No image?" ]
```

```
Else
```

```
Set Variable [ $path ; Value: MBS( "ImagePicker.WriteImageToSavedPhotosAlbum"; ImagePicker::Picture;
```

```
Get(FileName); "AddedToCameraRoll" ) ]
```

```
End If
```

See also

- 92.53 ImagePicker.WriteVideoToSavedPhotosAlbum 5090
- 121.2 Path.FileMakerPathToNativePath 6139

Example Databases

- [iOS/iOS UIImagePickerController](#)

Created 17th June 2017, last changed 20th June 2017.

92.53 ImagePicker.WriteVideoToSavedPhotosAlbum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
92 ImagePicker	7.3	No	No	No	No	Yes

MBS("ImagePicker.WriteVideoToSavedPhotosAlbum"; FilePath { ; FileName; ScriptName; Parameter })

Parameters

FilePath

The file path to the video file.

FileName

Optional

The file name for the script.

Get(FileName)

ScriptName

Optional

The script name for the trigger.

Parameter

Optional

The script parameter to use.

Result Returns OK or error.

Description

The work is done in background and we can optionally trigger a script when done.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 92.52 ImagePicker.WriteImageToSavedPhotosAlbum 5088
- 121.2 Path.FileMakerPathToNativePath 6139

Created 17th June 2017, last changed 18th June 2017.

Chapter 93

ImageView

A control to show images with animation on a layout on macOS and iOS.

You can use this instead of a webviewer to show GIF animations.

93.1 ImageView.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.Clear"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns OK or error.

Description

See also

- 93.12 ImageView.Release

5104

Created 14th September 2017, last changed 14th September 2017.

93.2 ImageView.CreateWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.CreateWithControl"; WindowRef; ControlName { ; DX; DY })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move drop area more to left or right.

0

DY

Optional

A delta to move drop area more to top or bottom.

0

Result Returns image view reference number or error.

Description

Use ImageView.Release later to destroy the image view.

If you use a register (tab controls) on the window, be aware that the image view actually is in front of the register (tab controls). So you need to check in the script which register page is current and should show what image view. Or by a trigger you turn the visibility on and off.

Image view reference numbers are starting at 74000 and counting up for each new image view.

If you create a control on a new window, you may do window update command in your script first to have FileMaker actually build the window with controls and display it. A short script pause or using FM.RunScriptLater with 0.1 delay can help having all controls draw themselves. Then you can use this command to put our control on top. We use GetControl() to query left, top, width and height and this gives empty value if control is not yet here.

Examples

Create image view with control as placeholder:


```

# Query size of image
Set Variable [ $Image ; Value: MBS( "GMImage.NewFromContainer"; ImageView::ImageContainer ) ]
Set Variable [ $w ; Value: MBS( "GMImage.GetWidth"; $Image ) ]
Set Variable [ $h ; Value: MBS( "GMImage.GetHeight"; $Image ) ]
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $Image ) ]

# We play half size for retina screen resolution
Set Variable [ $h ; Value: Round($h/2;0) ]
Set Variable [ $w ; Value: Round($w/2;0) ]

# We play half size for retina screen resolution
Set Variable [ $$ImageView ; Value: MBS("ImageView.CreateWithControl"; 0; "Placeholder") ]
Set Variable [ $r ; Value: MBS("ImageView.SetImage"; $$ImageView; ImageView::ImageContainer) ]

```

See also

- 69.6 DragDrop.CreateWithControl 2487
- 79.52 FM.RunScript 3986
- 79.54 FM.RunScriptLater 3990
- 85.123 GMImage.GetHeight 4501
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612
- 93.3 ImageView.CreateWithSize 5094
- 93.4 ImageView.CreateWithWindow 5096
- 93.16 ImageView.SetImage 5108

Example Databases

- [Mac and iOS/ImageView](#)

Created 14th September 2017, last changed 9th December 2019.

93.3 ImageView.CreateWithSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.CreateWithSize"; WindowRef; x; y; w; h)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

x

The left coordinate in the window.

0

y

The top coordinate in the window.

0

w

The width of the image view in the window.

100

h

The height of the image view in the window.

100

Result Returns image view reference number or error.

Description

Use ImageView.Release later to destroy the image view.

If you use a register (tab controls) on the window, be aware that the image view actually is in front of the register (tab controls). So you need to check in the script which register page is current and should show what image view. Or by a trigger you turn the visibility on and off.

Image view reference numbers are starting at 74000 and counting up for each new image view.

Examples

Create image view with size:

```
# Query size of image
Set Variable [ $Image ; Value: MBS( "GMImage.NewFromContainer"; ImageView::ImageContainer ) ]
Set Variable [ $w ; Value: MBS( "GMImage.GetWidth"; $Image ) ]
Set Variable [ $h ; Value: MBS( "GMImage.GetHeight"; $Image ) ]
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $Image ) ]
```

```
# We play half size for retina screen resolution
Set Variable [ $h ; Value: Round($h/2;0) ]
Set Variable [ $w ; Value: Round($w/2;0) ]
```

```
# We play half size for retina screen resolution
Set Variable [ $$ImageView ; Value: MBS("ImageView.CreateWithSize"; 0; 100; 100; $w; $h) ]
Set Variable [ $r ; Value: MBS("ImageView.SetImage"; $$ImageView; ImageView::ImageContainer) ]
```

See also

- 85.169 *GUIImage.GetWidth* 4550
- 85.191 *GUIImage.New* 4580
- 85.193 *GUIImage.NewFromContainer* 4584
- 85.214 *GUIImage.Release* 4612
- 93.2 *ImageView.CreateWithControl* 5092
- 93.4 *ImageView.CreateWithWindow* 5096
- 93.16 *ImageView.SetImage* 5108
- 106.9 *MapView.CreateWithSize* 5652
- 165.6 *TextView.CreateWithSize* 7884
- 182.16 *Window.FindByTitle* 8552

Example Databases

- [Mac and iOS/ImageView](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

Created 14th September 2017, last changed 21st December 2018.

93.4 ImageView.CreateWithWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.CreateWithWindow"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns image view reference number or error.

Description

Use ImageView.Release later to destroy the image view.

If you use a register (tab controls) on the window, be aware that the image view actually is in front of the register (tab controls). So you need to check in the script which register page is current and should show what image view. Or by a trigger you turn the visibility on and off.

Image view reference numbers are starting at 74000 and counting up for each new image view.

See also

- 69.8 DragDrop.CreateWithWindow 2492
- 93.2 ImageView.CreateWithControl 5092
- 93.3 ImageView.CreateWithSize 5094
- 93.12 ImageView.Release 5104
- 165.7 TextView.CreateWithWindow 7885
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Created 14th September 2017, last changed 14th September 2017.

93.5 **ImageView.GetHeight**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.GetHeight"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns height or error.

Description

See also

- 93.6 [ImageView.GetLeft](#) 5098
- 93.11 [ImageView.GetWidth](#) 5103
- 106.18 [MapView.GetHeight](#) 5662
- 165.12 [TextView.GetHeight](#) 7890

Created 14th September 2017, last changed 14th September 2017.

93.6 ImageView.GetLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.GetLeft"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns x coordinate or error.

Description

See also

- 93.5 ImageView.GetHeight 5097
- 93.7 ImageView.GetTag 5099
- 93.9 ImageView.GetTop 5101
- 93.11 ImageView.GetWidth 5103
- 106.19 MapView.GetLeft 5663

Created 14th September 2017, last changed 14th September 2017.

93.7 **ImageView.GetTag**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.GetTag"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns the stored tag value or an error.

Description

See also

- 93.6 [ImageView.GetLeft](#) 5098
- 93.9 [ImageView.GetTop](#) 5101
- 93.16 [ImageView.SetImage](#) 5108
- 93.17 [ImageView.SetTag](#) 5109
- 106.40 [MapView.GetTag](#) 5685

Created 14th September 2017, last changed 14th September 2017.

93.8 ImageView.GetToolTip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	No

MBS("ImageView.GetToolTip"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns text or error.

Description

The tooltip is visible on Mac when mouse stays over control. There are no tooltips for iOS.

See also

- 93.9 ImageView.GetTop 5101
- 93.18 ImageView.SetToolTip 5110
- 106.41 MapView.GetToolTip 5686
- 106.88 MapView.SetToolTip 5738

Created 14th September 2017, last changed 14th September 2017.

93.9 **ImageView.GetTop**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.GetTop"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns y coordinate or error.

Description

As Cocoa framework uses zero for the bottom coordinate, we have to swap for the normal topdown coordinates to be used.

See also

- 93.6 [ImageView.GetLeft](#) 5098
- 93.7 [ImageView.GetTag](#) 5099
- 93.8 [ImageView.GetToolTip](#) 5100
- 93.17 [ImageView.SetTag](#) 5109
- 106.42 [MapView.GetTop](#) 5687

Created 14th September 2017, last changed 14th September 2017.

93.10 ImageView.GetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.GetVisible"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if hidden.

See also

- 93.19 ImageView.SetVisible 5111
- 106.43 MapView.GetVisible 5688
- 106.89 MapView.SetVisible 5739
- 165.22 TextView.GetVisible 7900

Created 14th September 2017, last changed 14th September 2017.

93.11 ImageView.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.GetWidth"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns width or error.

Description

See also

- 93.5 ImageView.GetHeight 5097
- 93.6 ImageView.GetLeft 5098
- 106.45 MapView.GetWidth 5690
- 165.23 TextView.GetWidth 7901

Created 14th September 2017, last changed 14th September 2017.

93.12 ImageView.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.Release"; ImageView)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Result Returns OK on success.

Description

Examples

Close image view:

```
If [ Length ( $$ImageView ) >0 ]
Set Variable [ $r ; Value: MBS("ImageView.Release"; $$ImageView) ]
Set Variable [ $$ImageView ; Value: "" ]
End If
```

See also

- 93.1 ImageView.Clear 5091
- 93.2 ImageView.CreateWithControl 5092
- 93.3 ImageView.CreateWithSize 5094
- 93.4 ImageView.CreateWithWindow 5096
- 93.13 ImageView.ReleaseAll 5105
- 93.14 ImageView.SetFrame 5106
- 93.16 ImageView.SetImage 5108
- 106.53 MapView.Release 5699

Example Databases

- [Mac and iOS/ImageView](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

Created 14th September 2017, last changed 14th September 2017.

93.13 **ImageView.ReleaseAll**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.ReleaseAll")

Result Returns number of views released.

Description

See also

- 93.12 [ImageView.Release](#) 5104
- 106.54 [MapView.ReleaseAll](#) 5700
- 165.28 [TextView.ReleaseAll](#) 7906

Example Databases

- [Mac and iOS/ImageView](#)

Created 14th September 2017, last changed 14th September 2017.

93.14 `UIImageView.SetFrame`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 UIImageView	7.4	Yes	No	No	No	Yes

MBS("UIImageView.SetFrame"; UIImageView; X; Y; Width; Height { ; swap })

Parameters

UIImageView

The image view reference number.

\$\$UIImageView

X

The x coordinate.

Y

The y coordinate.

Width

The width of the control.

Height

The height of the control.

swap

Optional

Whether to swap y coordinate. By default we swap them. Pass 0 to disable or 1 to swap.

1

Result Returns OK or error.

Description

As Cocoa framework uses zero for the bottom coordinate, we have to swap for the normal topdown coordinates to be used.

See also

- 93.12 `UIImageView.Release` 5104
- 93.16 `UIImageView.SetImage` 5108
- 93.17 `UIImageView.SetTag` 5109
- 106.68 `MapView.SetFrame` 5716
- 165.32 `TextView.SetFrame` 7911

Created 14th September 2017, last changed 14th September 2017.

93.15 **ImageView.SetFrameWithControl**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	9.0	Yes	No	No	No	Yes

MBS("ImageView.SetFrameWithControl"; ImageView; ControlName { ; DX; DY })

Parameters

ImageView

The image view reference number.

\$\$ImageView

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move drop area more to left or right.

0

DY

Optional

A delta to move drop area more to top or bottom.

0

Result Returns OK or error.

Description

If you moved control in layout mode, this can move the drop area back to the new position.

Also useful to switch between different locations on the layout.

See also

- 69.44 [DragDrop.SetFrameWithControl](#) 2541
- 93.2 [ImageView.CreateWithControl](#) 5092
- 106.69 [MapView.SetFrameWithControl](#) 5717
- 165.33 [TextView.SetFrameWithControl](#) 7912

93.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr9](#)

Created 16th January 2019, last changed 16th January 2019.

93.16 `ImageView.SetImage`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.SetImage"; ImageView; image)

Parameters

ImageView

The image view reference number.

\$\$ImageView

image

the image to use. For best results, pass a container value with a PNG image. For animation, pass a GIF image.

Result Returns OK or error.

Description

We treat GIF images special and animate them.

Examples

Sets image:

```
Set Variable [ $r ; Value: MBS("ImageView.SetImage"; $$ImageView; ImageView::ImageContainer) ]
```

See also

- [93.2 ImageView.CreateWithControl](#) 5092
- [93.3 ImageView.CreateWithSize](#) 5094
- [93.7 ImageView.GetTag](#) 5099
- [93.12 ImageView.Release](#) 5104
- [93.14 ImageView.SetFrame](#) 5106
- [93.17 ImageView.SetTag](#) 5109

Example Databases

- [Mac and iOS/ImageView](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)

Created 14th September 2017, last changed 14th September 2017.

93.17 **ImageView.SetTag**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.SetTag"; ImageView; tag)

Parameters

ImageView

The image view reference number.

\$\$ImageView

tag

A string you want to associate with the image view.

Result Returns OK or error message.

Description

Use the tag to store whatever value you want to associate with the image view. You can later query it using `ImageView.GetTag`.

See also

- 93.7 `ImageView.GetTag` 5099
- 93.9 `ImageView.GetTop` 5101
- 93.14 `ImageView.SetFrame` 5106
- 93.16 `ImageView.SetImage` 5108
- 106.87 `MapView.SetTag` 5737

Created 14th September 2017, last changed 14th September 2017.

93.18 `ImageView.SetToolTip`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	No

MBS("ImageView.SetToolTip"; ImageView; Tooltip)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Tooltip

The new help text.

"Hello"

Result Returns OK or error.

Description

The tooltip is visible on Mac when mouse stays over control. There are no tooltips for iOS.

See also

- 93.8 `ImageView.GetToolTip` 5100
- 106.41 `MapView.GetToolTip` 5686
- 106.88 `MapView.SetToolTip` 5738

Created 14th September 2017, last changed 14th September 2017.

93.19 **ImageView.SetVisible**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
93 ImageView	7.4	Yes	No	No	No	Yes

MBS("ImageView.SetVisible"; ImageView; Visible)

Parameters

ImageView

The image view reference number.

\$\$ImageView

Visible

The new visible state.

1

Result Returns OK or error.

Description

By default we create it visible, but you can hide it if it's on a register and the user clicked to other tab.

See also

- [93.10 ImageView.GetVisible](#) 5102
- [106.43 MapView.GetVisible](#) 5688
- [106.89 MapView.SetVisible](#) 5739
- [165.42 TextView.SetVisible](#) 7921

Example Databases

- [Mac and iOS/ImageView](#)

Created 14th September 2017, last changed 14th September 2017.

Chapter 94

iOSApp

App wide setting for iOS applications.

94.1 iOSApp.GetDidBecomeActiveEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	8.2	No	No	No	No	Yes

MBS("iOSApp.GetDidBecomeActiveEvaluate")

Result Returns expression or error.

Description

See also

- 94.7 iOSApp.GetWillResignActiveEvaluate 5119
- 94.8 iOSApp.SetDidBecomeActiveEvaluate 5120
- 94.9 iOSApp.SetDidBecomeActiveScript 5121
- 94.19 iOSApp.SetWillResignActiveEvaluate 5131

94.1.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 15th May 2018, last changed 15th May 2018.

94.2 iOSApp.GetDidEnterBackgroundEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.GetDidEnterBackgroundEvaluate")

Result Returns expression or error.

Description

See also

- 94.6 iOSApp.GetWillEnterForegroundEvaluate 5118
- 94.10 iOSApp.SetDidEnterBackgroundEvaluate 5122
- 94.11 iOSApp.SetDidEnterBackgroundScript 5123
- 94.17 iOSApp.SetWillEnterForegroundEvaluate 5129

Created 23th September 2017, last changed 23th September 2017.

94.3 iOSApp.GetDidReceiveMemoryWarningEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.GetDidReceiveMemoryWarningEvaluate")

Result Returns expression or error.

Description

See also

- 94.12 iOSApp.SetDidReceiveMemoryWarningEvaluate 5124
- 94.13 iOSApp.SetDidReceiveMemoryWarningScript 5125

Created 23th September 2017, last changed 23th September 2017.

94.4 iOSApp.GetIdleTimerDisabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	10.1	No	No	No	No	Yes

MBS("iOSApp.GetIdleTimerDisabled")

Result Returns 1, 0 or error.

Description

See also

- 94.14 iOSApp.SetIdleTimerDisabled

5126

94.4.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 17th January 2020, last changed 17th January 2020.

94.5 iOSApp.GetSignificantTimeChangeEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.GetSignificantTimeChangeEvaluate")

Result Returns expression or error.

Description

See also

- 94.15 iOSApp.SetSignificantTimeChangeEvaluate 5127
- 94.16 iOSApp.SetSignificantTimeChangeScript 5128

Created 23th September 2017, last changed 23th September 2017.

94.6 iOSApp.GetWillEnterForegroundEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.GetWillEnterForegroundEvaluate")

Result Returns OK or error.

Description

See also

- 94.2 iOSApp.GetDidEnterBackgroundEvaluate 5114
- 94.10 iOSApp.SetDidEnterBackgroundEvaluate 5122
- 94.17 iOSApp.SetWillEnterForegroundEvaluate 5129
- 94.18 iOSApp.SetWillEnterForegroundScript 5130

Created 23th September 2017, last changed 23th September 2017.

94.7 iOSApp.GetWillResignActiveEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	8.2	No	No	No	No	Yes

MBS("iOSApp.GetWillResignActiveEvaluate")

Result Returns expression or error.

Description

See also

- 94.1 iOSApp.GetDidBecomeActiveEvaluate 5113
- 94.8 iOSApp.SetDidBecomeActiveEvaluate 5120
- 94.19 iOSApp.SetWillResignActiveEvaluate 5131
- 94.20 iOSApp.SetWillResignActiveScript 5132

94.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 15th May 2018, last changed 15th May 2018.

94.8 iOSApp.SetDidBecomeActiveEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	8.2	No	No	No	No	Yes

MBS("iOSApp.SetDidBecomeActiveEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

An app is active when it is receiving events. An active app can be said to have focus. It gains focus after being launched, loses focus when an overlay window pops up or when the device is locked, and gains focus when the device is unlocked.

See also

- [94.1 iOSApp.GetDidBecomeActiveEvaluate](#) 5113
- [94.7 iOSApp.GetWillResignActiveEvaluate](#) 5119
- [94.9 iOSApp.SetDidBecomeActiveScript](#) 5121
- [94.19 iOSApp.SetWillResignActiveEvaluate](#) 5131

94.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 15th May 2018, last changed 15th May 2018.

94.9 iOSApp.SetDidBecomeActiveScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	8.2	No	No	No	No	Yes

MBS("iOSApp.SetDidBecomeActiveScript"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

The script parameter.

Result Returns OK or error.

Description

An app is active when it is receiving events. An active app can be said to have focus. It gains focus after being launched, loses focus when an overlay window pops up or when the device is locked, and gains focus when the device is unlocked.

See also

- [94.1 iOSApp.GetDidBecomeActiveEvaluate](#) 5113
- [94.8 iOSApp.SetDidBecomeActiveEvaluate](#) 5120
- [94.20 iOSApp.SetWillResignActiveScript](#) 5132

94.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 15th May 2018, last changed 15th May 2018.

94.10 iOSApp.SetDidEnterBackgroundEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.SetDidEnterBackgroundEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

Posted when the app enters the background.

See also

- 94.2 iOSApp.GetDidEnterBackgroundEvaluate 5114
- 94.6 iOSApp.GetWillEnterForegroundEvaluate 5118
- 94.11 iOSApp.SetDidEnterBackgroundScript 5123
- 94.17 iOSApp.SetWillEnterForegroundEvaluate 5129

Created 23th September 2017, last changed 23th September 2017.

94.11 iOSApp.SetDidEnterBackgroundScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.SetDidEnterBackgroundScript"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

The script parameter.

Result Returns OK or error.

Description

Posted when the app enters the background.

See also

- 94.2 iOSApp.GetDidEnterBackgroundEvaluate 5114
- 94.10 iOSApp.SetDidEnterBackgroundEvaluate 5122
- 94.18 iOSApp.SetWillEnterForegroundScript 5130

Created 23th September 2017, last changed 23th September 2017.

94.12 iOSApp.SetDidReceiveMemoryWarningEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.SetDidReceiveMemoryWarningEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

Posted when the app receives a warning from the operating system about low memory availability.

See also

- 94.3 iOSApp.GetDidReceiveMemoryWarningEvaluate 5115
- 94.13 iOSApp.SetDidReceiveMemoryWarningScript 5125

Created 23th September 2017, last changed 23th September 2017.

94.13 iOSApp.SetDidReceiveMemoryWarningScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.SetDidReceiveMemoryWarningScript"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

The script parameter.

Result Returns OK or error.

Description

Posted when the app receives a warning from the operating system about low memory availability.

Examples

Set trigger:

```
MBS( "iOSApp.SetDidReceiveMemoryWarningScript"; Get(Filename); "MemoryTrigger")
```

See also

- 94.3 iOSApp.GetDidReceiveMemoryWarningEvaluate 5115
- 94.12 iOSApp.SetDidReceiveMemoryWarningEvaluate 5124

Created 23th September 2017, last changed 23th September 2017.

94.14 iOSApp.SetIdleTimerDisabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	10.1	No	No	No	No	Yes

MBS("iOSApp.SetIdleTimerDisabled"; Value)

Parameters

Value

The new value. Pass 1 to disable idle sleep or pass 0 to enable.

1

Result Returns OK or error.

Description

The default value of this property is 0. When most apps have no touches as user input for a short period, the system puts the device into a "sleep" state where the screen dims. This is done for the purposes of conserving power. However, apps that don't have user input except for the accelerometer—games, for instance—can, by setting this property to 1, disable the "idle timer" to avert system sleep.

See also

- [94.4 iOSApp.GetIdleTimerDisabled](#) 5116

94.14.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 17th January 2020, last changed 17th January 2020.

94.15 iOSApp.SetSignificantTimeChangeEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.SetSignificantTimeChangeEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

Posted when there is a significant change in time, for example, change to a new day (midnight), carrier time update, and change to or from daylight savings time.

See also

- 94.5 iOSApp.GetSignificantTimeChangeEvaluate 5117
- 94.16 iOSApp.SetSignificantTimeChangeScript 5128

Created 23th September 2017, last changed 23th September 2017.

94.16 iOSApp.SetSignificantTimeChangeScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.SetSignificantTimeChangeScript"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

The script parameter.

Result Returns OK or error.

Description

Posted when there is a significant change in time, for example, change to a new day (midnight), carrier time update, and change to or from daylight savings time.

See also

- 94.5 iOSApp.GetSignificantTimeChangeEvaluate 5117
- 94.15 iOSApp.SetSignificantTimeChangeEvaluate 5127

Created 23th September 2017, last changed 23th September 2017.

94.17 iOSApp.SetWillEnterForegroundEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.SetWillEnterForegroundEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

Posted shortly before an app leaves the background state on its way to becoming the active app.

Examples

Show msgbox when app comes to foreground:

```
Set Variable [ $m ; Value: MBS( "iOSApp.SetWillEnterForegroundEvaluate"; "MBS(\`msgbox\`; \`Hello\`)" ) ]
```

See also

- 94.2 iOSApp.GetDidEnterBackgroundEvaluate 5114
- 94.6 iOSApp.GetWillEnterForegroundEvaluate 5118
- 94.10 iOSApp.SetDidEnterBackgroundEvaluate 5122
- 94.18 iOSApp.SetWillEnterForegroundScript 5130

Created 23th September 2017, last changed 27th January 2019.

94.18 iOSApp.SetWillEnterForegroundScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	7.4	No	No	No	No	Yes

MBS("iOSApp.SetWillEnterForegroundScript"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

The script parameter.

Result Returns OK or error.

Description

Posted shortly before an app leaves the background state on its way to becoming the active app.

See also

- 94.6 iOSApp.GetWillEnterForegroundEvaluate 5118
- 94.11 iOSApp.SetDidEnterBackgroundScript 5123
- 94.17 iOSApp.SetWillEnterForegroundEvaluate 5129

Created 23th September 2017, last changed 23th September 2017.

94.19 iOSApp.SetWillResignActiveEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	8.2	No	No	No	No	Yes

MBS("iOSApp.SetWillResignActiveEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

An app is active when it is receiving events. An active app can be said to have focus. It gains focus after being launched, loses focus when an overlay window pops up or when the device is locked, and gains focus when the device is unlocked.

See also

- 94.1 iOSApp.GetDidBecomeActiveEvaluate 5113
- 94.7 iOSApp.GetWillResignActiveEvaluate 5119
- 94.8 iOSApp.SetDidBecomeActiveEvaluate 5120
- 94.20 iOSApp.SetWillResignActiveScript 5132

94.19.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 15th May 2018, last changed 15th May 2018.

94.20 iOSApp.SetWillResignActiveScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
94 iOSApp	8.2	No	No	No	No	Yes

MBS("iOSApp.SetWillResignActiveScript"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

The script parameter.

Result Returns OK or error.

Description

An app is active when it is receiving events. An active app can be said to have focus. It gains focus after being launched, loses focus when an overlay window pops up or when the device is locked, and gains focus when the device is unlocked.

See also

- 94.7 iOSApp.GetWillResignActiveEvaluate 5119
- 94.9 iOSApp.SetDidBecomeActiveScript 5121
- 94.19 iOSApp.SetWillResignActiveEvaluate 5131

94.20.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 15th May 2018, last changed 15th May 2018.

Chapter 95

iOSDevice

iOS commands to query device details.

95.1 iOSDevice.BatteryLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.BatteryLevel")

Result Returns value or error.

Description

Battery level ranges from 0.0 (fully discharged) to 1.0 (100% charged). Before accessing this property, ensure that battery monitoring is enabled.

If battery monitoring is not enabled, battery state is Unknown and the value of this property is -1.0.

Examples

Show battery level:

Show Custom Dialog ["Battery Level" ; MBS("iOSDevice.BatteryLevel")]

See also

- 95.2 iOSDevice.BatteryState

5134

Created 18th March 2017, last changed 25th November 2017.

95.2 iOSDevice.BatteryState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.BatteryState")

Result Returns value or error.

Description

Value is Unknown, Unplugged, Charging or Full.

See also

- 95.1 iOSDevice.BatteryLevel

5133

Created 18th March 2017, last changed 18th March 2017.

95.3 iOSDevice.IdentifierForVendor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.IdentifierForVendor")

Result Returns UUID or error.

Description

The value of this property is the same for apps that come from the same vendor running on the same device. A different value is returned for apps on the same device that come from different vendors, and for apps on different devices regardless of vendor.

Examples

Show identifier:

Show Custom Dialog ["Identifier" ; MBS("iOSDevice.IdentifierForVendor")]

Created 18th March 2017, last changed 25th November 2017.

95.4 iOSDevice.IsBatteryMonitoringEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.IsBatteryMonitoringEnabled")

Result Returns 1, 0 or error.

Description

Returns 1 if enabled or 0 if disabled.

See also

- 95.11 iOSDevice.SetBatteryMonitoringEnabled

5143

Created 18th March 2017, last changed 18th March 2017.

95.5 iOSDevice.LocalizedModel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.LocalizedModel")

Result Returns text or error.

Description

The value of this property is a string that contains a localized version of the string returned from iOSDevice.Model.

See also

- 95.6 iOSDevice.Model

5138

Created 18th March 2017, last changed 18th March 2017.

95.6 iOSDevice.Model

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.Model")

Result Returns text or error.

Description

Possible examples of model strings are "iPhone" and "iPod touch".

Examples

Show model:

```
Show Custom Dialog [ "Model" ; MBS( "iOSDevice.Model" ) ]
```

See also

- 95.5 iOSDevice.LocalizedModel 5137
- 95.7 iOSDevice.Name 5139

Created 18th March 2017, last changed 25th November 2017.

95.7 iOSDevice.Name

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.Name")

Result Returns text or error.

Description

The value of this property is an arbitrary alphanumeric string that is associated with the device as an identifier. For example, you can find the name of an iOS device in the General >About settings.

Examples

Show name:

Show Custom Dialog ["Name" ; MBS("iOSDevice.Name")]

See also

- 95.6 iOSDevice.Model

95.8 iOSDevice.Orientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.Orientation")

Result Returns value or error.

Description

The value of the property is a constant that indicates the current orientation of the device. This value represents the physical orientation of the device and may be different from the current orientation of your application's user interface.

Value can be Portrait, PortraitUpsideDown, LandscapeLeft, LandscapeRight, FaceUp, FaceDown or Unknown.

Created 18th March 2017, last changed 18th March 2017.

95.9 iOSDevice.OrientationIsLandscape

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.OrientationIsLandscape")

Result Returns 1, 0 or error.

Description

See also

- 95.10 iOSDevice.OrientationIsPortrait

5142

Created 18th March 2017, last changed 18th March 2017.

95.10 iOSDevice.OrientationIsPortrait

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.OrientationIsPortrait")

Result Returns 1, 0 or error.

Description

See also

- 95.9 iOSDevice.OrientationIsLandscape

5141

Created 18th March 2017, last changed 18th March 2017.

95.11 iOSDevice.SetBatteryMonitoringEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.SetBatteryMonitoringEnabled"; State)

Parameters

State

The new state of monitoring. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Enable battery monitoring if your app needs to be notified of changes to the battery state, or if you want to check the battery charge level.

The default value of this property is 0, which:

- Disables the posting of battery-related notifications
- Disables the ability to read battery charge level and battery state

Examples

Enable battery monitoring:

MBS("iOSDevice.SetBatteryMonitoringEnabled"; 1)

See also

- 95.4 iOSDevice.IsBatteryMonitoringEnabled

5136

Created 18th March 2017, last changed 25th November 2017.

95.12 iOSDevice.SystemName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.SystemName")

Result Returns text or error.

Description

Examples

Show system name:

Show Custom Dialog ["Name" ; MBS("iOSDevice.SystemName")]

Created 18th March 2017, last changed 25th November 2017.

95.13 iOSDevice.SystemVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.SystemVersion")

Result Returns text or error.

Description

An example of the system version is @"1.2".

Examples

Show system version:

Show Custom Dialog ["Version" ; MBS("iOSDevice.SystemVersion")]

See also

- 124.62 Version

6338

Created 18th March 2017, last changed 25th November 2017.

95.14 iOSDevice.UserInterfaceIdiom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
95 iOSDevice	7.2	No	No	No	No	Yes

MBS("iOSDevice.UserInterfaceIdiom")

Result Returns value or error.

Description

For universal applications, you can use this property to tailor the behavior of your application for a specific type of device. For example, iPhone and iPad devices have different screen sizes, so you might want to create different views and controls based on the type of the current device.

Value is Phone, Pad, TV or CarPlay. FileMaker does not support all of those.

Created 18th March 2017, last changed 18th March 2017.

Chapter 96

iOSKeyboard

iOS Keyboard state and evaluation when it changes.

96.1 iOSKeyboard.GetDidHideEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.GetDidHideEvaluate")

Result Returns expression or error.

Description

See also

- 96.2 iOSKeyboard.GetDidShowEvaluate 5148
- 96.3 iOSKeyboard.GetWillHideEvaluate 5149
- 96.4 iOSKeyboard.GetWillShowEvaluate 5150
- 96.5 iOSKeyboard.SetDidHideEvaluate 5151
- 96.6 iOSKeyboard.SetDidShowEvaluate 5152
- 96.7 iOSKeyboard.SetWillHideEvaluate 5153
- 96.8 iOSKeyboard.SetWillShowEvaluate 5154

Created 19th September 2017, last changed 19th September 2017.

96.2 iOSKeyboard.GetDidShowEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.GetDidShowEvaluate")

Result Returns expression or error.

Description

See also

- 96.1 iOSKeyboard.GetDidHideEvaluate 5147
- 96.3 iOSKeyboard.GetWillHideEvaluate 5149
- 96.4 iOSKeyboard.GetWillShowEvaluate 5150
- 96.5 iOSKeyboard.SetDidHideEvaluate 5151
- 96.6 iOSKeyboard.SetDidShowEvaluate 5152
- 96.7 iOSKeyboard.SetWillHideEvaluate 5153
- 96.8 iOSKeyboard.SetWillShowEvaluate 5154

Created 19th September 2017, last changed 19th September 2017.

96.3 iOSKeyboard.GetWillHideEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.GetWillHideEvaluate")

Result Returns expression or error.

Description**See also**

- 96.1 iOSKeyboard.GetDidHideEvaluate 5147
- 96.2 iOSKeyboard.GetDidShowEvaluate 5148
- 96.4 iOSKeyboard.GetWillShowEvaluate 5150
- 96.5 iOSKeyboard.SetDidHideEvaluate 5151
- 96.6 iOSKeyboard.SetDidShowEvaluate 5152
- 96.7 iOSKeyboard.SetWillHideEvaluate 5153
- 96.8 iOSKeyboard.SetWillShowEvaluate 5154

Created 19th September 2017, last changed 19th September 2017.

96.4 iOSKeyboard.GetWillShowEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.GetWillShowEvaluate")

Result Returns expression or error.

Description

See also

- 96.1 iOSKeyboard.GetDidHideEvaluate 5147
- 96.2 iOSKeyboard.GetDidShowEvaluate 5148
- 96.3 iOSKeyboard.GetWillHideEvaluate 5149
- 96.5 iOSKeyboard.SetDidHideEvaluate 5151
- 96.6 iOSKeyboard.SetDidShowEvaluate 5152
- 96.7 iOSKeyboard.SetWillHideEvaluate 5153
- 96.8 iOSKeyboard.SetWillShowEvaluate 5154

Created 19th September 2017, last changed 19th September 2017.

96.5 iOSKeyboard.SetDidHideEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.SetDidHideEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

The plugin can evaluate this expression to set variables, call plugin functions to trigger other things.

Examples

Set variable when keyboard hides:

```
MBS("iOSKeyboard.SetDidHideEvaluate"; "Let( [ $$keyboardVisible=0 ] ;0)")
```

See also

- 96.1 iOSKeyboard.GetDidHideEvaluate 5147
- 96.2 iOSKeyboard.GetDidShowEvaluate 5148
- 96.3 iOSKeyboard.GetWillHideEvaluate 5149
- 96.4 iOSKeyboard.GetWillShowEvaluate 5150
- 96.6 iOSKeyboard.SetDidShowEvaluate 5152
- 96.7 iOSKeyboard.SetWillHideEvaluate 5153
- 96.8 iOSKeyboard.SetWillShowEvaluate 5154

Created 19th September 2017, last changed 19th September 2017.

96.6 iOSKeyboard.SetDidShowEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.SetDidShowEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

The plugin can evaluate this expression to set variables, call plugin functions to trigger other things.

Examples

Set variable when keyboard shows:

```
MBS("iOSKeyboard.SetDidShowEvaluate"; "Let( [ $$keyboardVisible=1 ] ;0)")
```

See also

- 96.1 iOSKeyboard.GetDidHideEvaluate 5147
- 96.2 iOSKeyboard.GetDidShowEvaluate 5148
- 96.3 iOSKeyboard.GetWillHideEvaluate 5149
- 96.4 iOSKeyboard.GetWillShowEvaluate 5150
- 96.5 iOSKeyboard.SetDidHideEvaluate 5151
- 96.7 iOSKeyboard.SetWillHideEvaluate 5153
- 96.8 iOSKeyboard.SetWillShowEvaluate 5154

Created 19th September 2017, last changed 19th September 2017.

96.7 iOSKeyboard.SetWillHideEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.SetWillHideEvaluate"; Expression)

Parameters**Expression**

The expression to evaluate.

Result Returns OK or error.

Description

The plugin can evaluate this expression to set variables, call plugin functions to trigger other things.

See also

- 96.1 iOSKeyboard.GetDidHideEvaluate 5147
- 96.2 iOSKeyboard.GetDidShowEvaluate 5148
- 96.3 iOSKeyboard.GetWillHideEvaluate 5149
- 96.4 iOSKeyboard.GetWillShowEvaluate 5150
- 96.5 iOSKeyboard.SetDidHideEvaluate 5151
- 96.6 iOSKeyboard.SetDidShowEvaluate 5152
- 96.8 iOSKeyboard.SetWillShowEvaluate 5154

Created 19th September 2017, last changed 19th September 2017.

96.8 iOSKeyboard.SetWillShowEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.SetWillShowEvaluate"; Expression)

Parameters

Expression

The expression to evaluate.

Result Returns OK or error.

Description

The plugin can evaluate this expression to set variables, call plugin functions to trigger other things.

See also

- 96.1 iOSKeyboard.GetDidHideEvaluate 5147
- 96.2 iOSKeyboard.GetDidShowEvaluate 5148
- 96.3 iOSKeyboard.GetWillHideEvaluate 5149
- 96.4 iOSKeyboard.GetWillShowEvaluate 5150
- 96.5 iOSKeyboard.SetDidHideEvaluate 5151
- 96.6 iOSKeyboard.SetDidShowEvaluate 5152
- 96.7 iOSKeyboard.SetWillHideEvaluate 5153

Created 19th September 2017, last changed 19th September 2017.

96.9 iOSKeyboard.State

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
96 iOSKeyboard	7.4	No	No	No	No	Yes

MBS("iOSKeyboard.State")

Result Returns number or error.

Description

State is 0 for hidden, 1 for showing animation, 2 for showing, 3 for hiding animation.
Created 19th September 2017, last changed 19th September 2017.

Chapter 97

Java

Execute code in java classes.

You can initialize Java VM with a list of jar files. Than create objects, call methods, set and query fields.

97.1 Java.CallObjectMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.CallObjectMethod"; JObject; MethodName; Signature { ; Params })

Parameters

JObject

The java object reference number.

\$j

MethodName

The name of the method.

"test"

Signature

The java signature of the method. This describes the parameter types. Please use "javap -s test.class" with file path to class file to show the signatures for a class.

" [] "

Params

Optional

The parameters to pass. Pass one parameter in FileMaker for each parameter to pass.

Result Returns OK or error.

Description

Parameters and return type is detected by plugin automatically from signature.
Please call later `Java.Release` to release an object if this function returns one.

Java is only available if you call `Java.Initialize` before to load the java runtime.
Supported data types include: void, int, long, boolean, string, double, float, char, byte, object, byte array (for container), char array (using FileMaker text).

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

Init a class and a call a method:

```
Set Variable [ $j; Value:MBS( "Java.NewClassObject"; "test"; "<init>"; "()V" ) ]
Set Variable [ $r; Value:MBS( "Java.CallObjectMethod"; $j; "getValue"; "(I)" ) ]
Show Custom Dialog [ "value"; $r ]
Set Variable [ $r; Value:MBS( "Java.Release"; $j ) ]
```

Call method passing parameter and another to query:

```
Set Variable [ $j; Value:MBS( "Java.NewClassObject"; "test"; "<init>"; "()V" ) ]
Set Variable [ $r; Value:MBS( "Java.CallObjectMethod"; $j; "setValue"; "(IV"; 1234 ) ]
Set Variable [ $r; Value:MBS( "Java.CallObjectMethod"; $j; "getValue"; "(I)" ) ]
Show Custom Dialog [ "value"; $r ]
Set Variable [ $r; Value:MBS( "Java.Release"; $j ) ]
```

Call a void method

```
// public void DoSomething()
Set Variable [ $r; Value:MBS( "Java.CallObjectMethod"; $j; "DoSomething"; "()V" ) ]
```

See also

- [97.2 Java.CallStaticMethod](#) 5159
- [97.6 Java.Initialize](#) 5166
- [97.8 Java.NewClassObject](#) 5170
- [97.10 Java.Release](#) 5173

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

Created 2nd October 2016, last changed 22nd November 2018.

97.2 Java.CallStaticMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.CallStaticMethod"; ClassName; MethodName; Signature { ; Params })

Parameters

ClassName

The name of the java class.
"com.mbs.test"

MethodName

The name of the method.
"test"

Signature

The java signature of the method. This describes the parameter types. Please use "javap -s test.class" with file path to class file to show the signatures for a class.
" [] "

Params

Optional

The parameters to pass. Pass one parameter in FileMaker for each parameter to pass.

Result Returns result or error.

Description

Parameters and return type is detected by plugin automatically from signature.
Please call later Java.Release to release an object if this function returns one.

Java is only available if you call Java.Initialize before to load the java runtime.

Supported data types include: void, int, long, boolean, string, double, float, char, byte, object, byte array (for container), char array (using FileMaker text).

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

Call Function GetString:

```
MBS( "Java.CallStaticMethod"; "test"; "GetString"; "()Ljava/lang/String;" )
```

Call function returning an integer:

```
// public static int method_int(int a, double b, char c, long d, short e)
Set Variable [ $r; Value:MBS( "Java.CallStaticMethod"; "tests"; "method_int"; "(IDCJS)I"; 10000; 2000; 300; 40; 5 ) ]
```

```
If [ MBS("IsError") or ($r 12345) ]  
Show Custom Dialog [ "Java Error"; $r ]  
Exit Script [ Result: "Static int method failed" ]  
End If
```

Call function returning a double value:

```
// public static double method_double(int a, double b, char c, long d, short e)  
Set Variable [ $r; Value:MBS( "Java.CallStaticMethod"; "tests"; "method_double"; "(IDCJS)D"; 10000;  
2000; 300; 40; 5 ) ]  
If [ MBS("IsError") or ($r 12345) ]  
Show Custom Dialog [ "Java Error"; $r ]  
Exit Script [ Result: "Static double method failed" ]  
End If
```

See also

- 124.6 IsError 6266
- 97.1 Java.CallObjectMethod 5157
- 97.6 Java.Initialize 5166
- 97.10 Java.Release 5173

Example Databases

- [Java/Java Tests/Java Tests](#)

Created 2nd October 2016, last changed 22nd November 2018.

97.3 Java.GetContainerFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.GetContainerFileName")

Result Returns text or error.

Description

See also

- 97.12 Java.SetContainerFileName

5175

Created 13th October 2016, last changed 13th October 2016.

97.4 Java.GetObjectField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.GetObjectField"; JObject; FieldName; Signature)

Parameters

JObject

The java object reference number.

\$j

FieldName

The name of the field.

"test"

Signature

The java signature of the field. This describes the data type of the field.

"I"

Result Returns OK or error.

Description

Data type is automatically detected by plugin from signature.

If you read an object value, please call Java.Release later for it.

Java is only available if you call Java.Initialize before to load the java runtime.

Supported data types include: void, int, long, boolean, string, double, float, char, byte, object, byte array (for container), char array (using FileMaker text).

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

Test object field:

```
Set Variable [ $j; Value:MBS( "Java.NewClassObject"; "test"; "<init>"; "()" ) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "value"; "I"; 2345 ) ]
```

```
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "value"; "I" ) ]
```

```
Show Custom Dialog [ "value"; $r ]
```

```
Set Variable [ $r; Value:MBS( "Java.Release"; $j ) ]
```

Queries various fields:

```
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_boolean"; "Z" ) ]
```

```
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_byte"; "B" ) ]
```

```
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_byteArray"; " [ B" ) ]
```

```
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_char"; "C" ) ]
```

```
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_charArray"; " [ C" ) ]  
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_double"; "D" ) ]  
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_float"; "F" ) ]  
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_int"; "I" ) ]  
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_long"; "J" ) ]  
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_short"; "S" ) ]  
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "property_string"; "Ljava/lang/String;" ) ]
```

See also

- [97.6 Java.Initialize](#) 5166
- [97.8 Java.NewClassObject](#) 5170
- [97.10 Java.Release](#) 5173
- [97.13 Java.SetObjectField](#) 5176

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

Created 2nd October 2016, last changed 17th August 2018.

97.5 Java.GetStaticField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.GetStaticField"; ClassName; FieldName; Signature)

Parameters

ClassName

The name of the java class.
"com.mbs.test"

FieldName

The name of the field.
"test"

Signature

The java signature of the field. This describes the data type of the field.
"I"

Result Returns value or error.

Description

This is like a global variable as there is only one value for all objects of the class.
Data type is automatically detected by plugin from signature.
If you read an object value, please call Java.Release later for it.

Java is only available if you call Java.Initialize before to load the java runtime.

Supported data types include: void, int, long, boolean, string, double, float, char, byte, object, byte array (for container), char array (using FileMaker text).

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

Test static field:

```
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "test"; "n"; "I"; 3456 ) ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "test"; "n"; "I" ) ]
Show Custom Dialog [ "value"; $r ]
```

Query various static fields:

```
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_boolean"; "Z" ) ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_byte"; "B" ) ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_byteArray"; " [ B" ) ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_char"; "C" ) ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_charArray"; " [ C" ) ]
```



```
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_double"; "D") ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_float"; "F") ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_int"; "I") ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_long"; "J") ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_short"; "S") ]
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "tests"; "static_property_string"; "Ljava/lang/String;")
]
```

See also

- [97.6 Java.Initialize](#) 5166
- [97.10 Java.Release](#) 5173
- [97.14 Java.SetStaticField](#) 5178

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

Created 2nd October 2016, last changed 17th August 2018.

97.6 Java.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.Initialize" { ; LibPath; ClassPathList; Option })

Parameters

LibPath

Optional

Path to java library (e.g. jvm.dll) If empty, the plugin uses the Java framework on Mac and looks into registry on Windows to find newest Java installation.

e.g. on Windows: "C:\Program Files\Java\jre1.8.0_101\bin\server\jvm.dll"
""

ClassPathList

Optional

The list of native paths to the jar files to load. Please pass here all jar files you want to use.

"/Users/cs/Desktop/test.jar"

Option

Optional

Pass a parameter for each additional option to pass to Java VM initialization.

Result Returns OK or error.

Description

You can either pass path to jvm library file or let the plugin look for it. To access classes, you need to pass paths to the jar and class files you want to use.

Returns error if already a JavaVM is initialized.

Please be aware that you can only have one VM running at a given time, so you can't use Java in other plugin and our plugin together.

This should work fine for any Java version starting with 1.4 or newer. Tested with 1.7 and 1.8.

May not initialize probably if other plugin initialized Java before.

Returns "Using existing Java VM." in case an existing Java VM initialized by other plugin is used. In that case we can't pass your class paths or other options!

On Windows, we look into Local Machine\SOFTWARE\JavaSoft\Java Runtime Environment in registry to find the newest entry and the path to the jvm.dll file. Please note that on Windows you can install 32-bit and 64-bit version of Java and you need the matching bit number to FileMaker application.

If you get error 126 on Windows, maybe MSVCR100.DLL is missing. So install Visual Studio 2010 runtime libraries. You can download them from Microsoft website. Do not download them from other websites

spreading malware!

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Initialize java:

```
Set Variable [ $r ; Value: MBS("Java.Initialize") ]
If [ MBS("Java.Initialized") ]
Show Custom anzeigen [ "Java" ; "Java initialized." ]
Else
Show Custom anzeigen [ "Java" ; "Java failed to initialize" & $r ]
End If
```

Initialize on Linux:

```
Set Variable [ $r ; Value: MBS("Java.Initialize"; "/home/cs/jrel.6.0_05/lib/x64/client/libjvm.so"; "/java/test.jar$/java/drive" ) ]
```

Init with three class path entries:

```
MBS("Java.Initialize"; Java Test::Path to Java Library; Java Test::ClassPath1 & $r & Java Test::ClassPath2 & $r & Java Test::ClassPath3)
```

See also

- 97.1 `Java.CallObjectMethod` 5157
- 97.2 `Java.CallStaticMethod` 5159
- 97.4 `Java.GetObjectField` 5162
- 97.7 `Java.Initialized` 5169
- 97.13 `Java.SetObjectField` 5176
- 97.14 `Java.SetStaticField` 5178
- 121.2 `Path.FileMakerPathToNativePath` 6139
- 131.2 `Proj.Initialize` 6546
- 163.21 `TAPI.Initialize` 7748
- 181.12 `WIA.Initialize` 8511

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

97.6.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr8](#)
- [MBS FileMaker Plugin, version 9.4pr2](#)
- [MBS FileMaker Plugin, version 6.5pr4](#)

Created 2nd October 2016, last changed 13th January 2020.

97.7 Java.Initialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.Initialized")

Result Returns 1, 0 or error.

Description

Examples

Check if Java is initialized:

```
MBS("Java.Initialized")
```

Initialize java:

```
Set Variable [ $r ; Value: MBS("Java.Initialize") ]
If [ MBS("Java.Initialized") ]
Show Custom anzeigen [ "Java" ; "Java initialized." ]
Else
Show Custom anzeigen [ "Java" ; "Java failed to initialize" & $r ]
End If
```

See also

- [97.6 Java.Initialize](#)

5166

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

Created 2nd October 2016, last changed 2nd October 2016.

97.8 Java.NewClassObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.NewClassObject"; ClassName; ConstructorName; Signature { ; Params })

Parameters

ClassName

The name of the java class.

"com.mbs.test"

ConstructorName

The name of the constructor.

"test"

Signature

The java signature of the method. This describes the parameter types.

"()"

Params

Optional

The parameters to pass. Pass one parameter in FileMaker for each parameter to pass.

Result Returns object reference or error.

Description

Parameters and return type is detected by plugin automatically from signature.

Please call later Java.Release to release the object.

Java is only available if you call Java.Initialize before to load the java runtime.

Examples

Create a new test object with default constructor:

```
MBS( "Java.NewClassObject"; "test"; "<init>"; "()" )
```

See also

- 97.1 Java.CallObjectMethod 5157
- 97.4 Java.GetObjectField 5162
- 97.6 Java.Initialize 5166
- 97.9 Java.ObjectClassName 5172
- 97.10 Java.Release 5173
- 97.13 Java.SetObjectField 5176

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

97.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 2nd October 2016, last changed 13th October 2016.

97.9 Java.ObjectClassName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.ObjectClassName"; JObject)

Parameters

JObject

The java object reference number.

\$j

Result Returns text or error.

Description

Examples

Query object name:

```
MBS( "Java.ObjectClassName"; $j )
```

Create object and query class name:

```
Set Variable [ $j; Value:MBS( "Java.NewClassObject"; "test"; "<init>"; "()V" ) ]
```

```
Set Variable [ $r; Value:MBS( "Java.ObjectClassName"; $j ) ]
```

```
Show Custom Dialog [ "value"; $r ]
```

```
Set Variable [ $r; Value:MBS( "Java.Release"; $j ) ]
```

See also

- 97.8 Java.NewClassObject 5170
- 97.10 Java.Release 5173

Created 2nd October 2016, last changed 2nd October 2016.

97.10 Java.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.Release"; JObject)

Parameters

JObject

The java object reference number.

\$j

Result Returns OK or error.

Description

Please call that for all java objects to release memory.

Examples

Release object in \$j:

Set Variable [\$r; Value:MBS("Java.Release"; \$j)]

See also

- 97.1 Java.CallObjectMethod 5157
- 97.2 Java.CallStaticMethod 5159
- 97.4 Java.GetObjectField 5162
- 97.5 Java.GetStaticField 5164
- 97.8 Java.NewClassObject 5170
- 97.9 Java.ObjectClassName 5172
- 97.11 Java.ReleaseAll 5174
- 97.13 Java.SetObjectField 5176
- 100.66 JSON.Release 5336

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

Created 2nd October 2016, last changed 2nd October 2016.

97.11 Java.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.ReleaseAll")

Result Returns OK or error.

Description

This is called for you in Java.Close.

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

See also

- 97.10 Java.Release 5173
- 100.67 JSON.ReleaseAll 5338
- 112.24 Menu.ReleaseAll 5888
- 163.29 TAPI.ReleaseAll 7756
- 191.30 XML.ReleaseAll 9300

Created 2nd October 2016, last changed 9th January 2020.

97.12 Java.SetContainerFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.SetContainerFileName"; FileName)

Parameters

FileName

The file name to use for container.

"test.jpg"

Result Returns OK or error.

Description

When a function call to Java returns a ByteArray, we pack it into a container using this file name. The file name than determents for FileMaker the type of file.

Examples

Set file name:

MBS("Java.SetContainerFileName"; "Logo.jpg")

See also

- [97.3 Java.GetContainerFileName](#)

5161

Example Databases

- [Java/Java Tests/Java Tests](#)

Created 13th October 2016, last changed 6th September 2019.

97.13 Java.SetObjectField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.SetObjectField"; JObject; FieldName; Signature; Value)

Parameters

JObject

The java object reference number.

\$j

FieldName

The name of the field.

"test"

Signature

The java signature of the field. This describes the data type of the field.

"I"

Value

The value to use for the field.

123

Result Returns OK or error.

Description

Data type is automatically detected by plugin from signature.

Java is only available if you call Java.Initialize before to load the java runtime.

Supported data types include: void, int, long, boolean, string, double, float, char, byte, object, byte array (for container), char array (using FileMaker text).

Examples

Test object field:

```
Set Variable [ $j; Value:MBS( "Java.NewClassObject"; "test"; "<init>"; "()"V" ) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "value"; "I"; 2345) ]
```

```
Set Variable [ $r; Value:MBS( "Java.GetObjectField"; $j; "value"; "I" ) ]
```

```
Show Custom Dialog [ "value"; $r ]
```

```
Set Variable [ $r; Value:MBS( "Java.Release"; $j) ]
```

Sets various fields:

```
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_boolean"; "Z"; 1) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_byte"; "B"; 123) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_byteArray"; "[ B"; Java Test::TestContainer) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_char"; "C"; 123) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_charArray"; " [ C"; "123") ]
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_double"; "D"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_float"; "F"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_int"; "I"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_long"; "J"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_short"; "S"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetObjectField"; $j; "property_string"; "Ljava/lang/String;"; "123") ]
```

See also

- 97.4 Java.GetObjectField 5162
- 97.6 Java.Initialize 5166
- 97.8 Java.NewClassObject 5170
- 97.10 Java.Release 5173

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

Created 2nd October 2016, last changed 18th October 2016.

97.14 Java.SetStaticField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
97 Java	6.5	Yes	Yes	Yes	Yes	No

MBS("Java.SetStaticField"; ClassName; FieldName; Signature; Value)

Parameters

ClassName

The name of the java class.
"com.mbs.test"

FieldName

The name of the field.
"test"

Signature

The java signature of the field. This describes the data type of the field.
"I"

Value

The value to use for the field.
123

Result Returns OK or error.

Description

This is like a global variable as there is only one value for all objects of the class.
Data type is automatically detected by plugin from signature.

Java is only available if you call Java.Initialize before to load the java runtime.

Supported data types include: void, int, long, boolean, string, double, float, char, byte, object, byte array (for container), char array (using FileMaker text).

Examples

Test static field:

```
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "test"; "n"; "I"; 3456) ]
```

```
Set Variable [ $r; Value:MBS( "Java.GetStaticField"; "test"; "n"; "I") ]
```

```
Show Custom Dialog [ "value"; $r ]
```

Set various static fields:

```
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_boolean"; "Z"; 1) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_byte"; "B"; 123) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_byteArray"; " [ B"; Java  
Test::TestContainer) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_char"; "C"; 123) ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_charArray"; " [ C"; "123") ]
```

```
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_double"; "D"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_float"; "F"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_int"; "I"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_long"; "J"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_short"; "S"; 123) ]
Set Variable [ $r; Value:MBS( "Java.SetStaticField"; "tests"; "static_property_string"; "Ljava/lang/String;";
"123") ]
```

See also

- [97.5 Java.GetStaticField](#) 5164
- [97.6 Java.Initialize](#) 5166

Example Databases

- [Java/Java Example/Java Example](#)
- [Java/Java Tests/Java Tests](#)

Created 2nd October 2016, last changed 18th October 2016.

Chapter 98

JavaScript

Run Javascript without Webviewer cross-platform, even on server.

98.1 JS.AddFileMakerEvaluateFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.AddFileMakerEvaluateFunction"; JSRef; Name)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the function.

"test"

Result Returns OK or error.

Description

The function will take string parameter and evaluate the result in FileMaker. Result is returned as text to JavaScript.

For increased security we prefer all FileMaker developers define their own function name, so if you get some foreign JavaScript, it can't know the function name and mess with FileMaker.

Examples

Evaluate something with FileMaker in JavaScript:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]  
Set Variable [ $r ; Value: MBS( "JS.AddFileMakerEvaluateFunction"; $js; "FMEval" ) ]  
Show Custom Dialog [ "Result" ; MBS( "JS.Evaluate"; $JS; " \"got AccountName: \" + FMEval(\ "Get(Ac-  
countName)\")" ) ]  
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

See also

- 98.2 JS.AddFileMakerRunScriptFunction 5183
- 98.6 JS.Evaluate 5190
- 98.8 JS.Free 5196
- 98.11 JS.New 5201

Example Databases

- [JavaScript/JavaScript](#)

Created 7th December 2019, last changed 12nd December 2019.

98.2 JS.AddFileMakerRunScriptFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.AddFileMakerRunScriptFunction"; JSRef; Name)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the function.

"test"

Result Returns OK or error.

Description

Scripts are queued and run later when JavaScript finished.

The function in JavaScript returns the error code from FileMaker, which is zero for success.

For increased security we prefer all FileMaker developers define their own function name, so if you get some foreign JavaScript, it can't know the function name and mess with FileMaker. Be aware that this function may launch any script in the solution, even those not shown in the menu.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Run a script from JavaScript:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
```

```
Set Variable [ $r ; Value: MBS( "JS.AddFileMakerRunScriptFunction"; $js; "FMRun" ) ]
```

```
Show Custom Dialog [ "Result" ; MBS( "JS.Evaluate"; $JS; " \start script: \ + FMRun(\ "JavaScript.fmp12\ ", \ "testRun\ ", \ "Hello World\ ") ) ]
```

```
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

See also

- 98.1 JS.AddFileMakerEvaluateFunction 5181
- 98.6 JS.Evaluate 5190
- 98.8 JS.Free 5196
- 98.11 JS.New 5201

Example Databases

- [JavaScript/JavaScript](#)

Created 7th December 2019, last changed 8th December 2019.

98.3 JS.AddFileMakerSQLFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.AddFileMakerSQLFunction"; JSRef; Name)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the function.

"test"

Result Returns OK or error.

Description

The function will take string parameter with file name and SQL and evaluate the result in FileMaker. Result is returned as text to JavaScript. You can pass additional parameters for filling parameters in SQL.

For increased security we prefer all FileMaker developers define their own function name, so if you get some foreign JavaScript, it can't know the function name and mess with FileMaker. Be aware that users may run commands like DELETE to delete all records of a table!

Examples

Run SQL from JavaScript:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
```

```
Set Variable [ $r ; Value: MBS( "JS.AddFileMakerSQLFunction"; $js; "FMSQL" ) ]
```

```
Show Custom Dialog [ "Result" ; MBS( "JS.Evaluate"; $JS; " \"got SQL result: \" + FMSQL( \"JavaScript.fmp12\", \"SELECT COUNT(*) FROM JavaScript\" ) ) ]
```

```
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

See also

- 98.6 JS.Evaluate 5190
- 98.8 JS.Free 5196
- 98.11 JS.New 5201

Example Databases

- [JavaScript/JavaScript](#)

Created 7th December 2019, last changed 8th December 2019.

98.4 JS.AddFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.AddFunction"; JSRef; Name; JavaScript)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the function.

"test"

JavaScript

The JavaScript code.

"function (x,y) { return x+y; } "

Result Returns OK or error.

Description

Optional provide a file name to show in stack traces.

Function source code may contain a function name, but we use only the name parameter to register the function as global one.

Examples

Define a function and call it:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.AddFunction"; $js; "adder"; "function (x,y) { return x+y; } " ) ]
Show Custom Dialog [ "Result" ; MBS( "JS.CallFunction"; $JS; "adder"; 3; 4 ) ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

Initialize JavaScript environment with two functions:

```
If [ Length($$js) = 0 ]
Set Variable [ $$js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.AddFunction"; $$js; "makeCRCTable"; "function makeCRCTable() {
var c;
var crcTable = [ ] ;
for(var n =0; n <256; n++) {
c = n;
for(var k =0; k <8; k++) {
c = ((c& 1) ? (0xEDB88320 ^ (c »>1)) : (c »>1));
}
crcTable [ n ] = c;
}
}
```

```
return crcTable;
} ” ]
Set Variable [ $r ; Value: MBS( "JS.AddFunction"; $$js; "crc32"; "function crc32(str) {
var crcTable = crcTable || (crcTable = makeCRCTable());
var crc = 0 ^(-1);

for (var i = 0; i <str.length; i++ ) {
crc = (crc »>8) ^crcTable [ (crc ^str.charCodeAt(i)) & 0xFF ] ;
}

return (crc ^(-1)) »>0;
} ” ]
End If
```

See also

- [98.5 JS.CallFunction](#) 5188
- [98.8 JS.Free](#) 5196
- [98.11 JS.New](#) 5201

Example Databases

- [JavaScript/CoordinatDistance](#)
- [JavaScript/JavaScript](#)

Created 7th December 2019, last changed 15th January 2020.

98.5 JS.CallFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.CallFunction"; JSRef; Name; Parameters)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the function.

"test"

Parameters

JSON to pass as parameter.

Result Returns JSON or error.

Description

Parameters are passed to the function. Please pass as many parameters in FileMaker as needed.

If the function needs more parameter, undefined values are used to fill up.

If the function needs less parameters, additional ones are dropped.

Returns the result of the function converted to a JSON value.

Examples

Define a function and call it:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.AddFunction"; $js; "adder"; "function (x,y) { return x+y; } " ) ]
Show Custom Dialog [ "Result" ; MBS( "JS.CallFunction"; $JS; "adder"; 3; 4 ) ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

Concat strings:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.AddFunction"; $js; "Concat"; "function (x,y) { return x+\\" \"+y; } " ) ]
Show Custom Dialog [ "Result" ; MBS( "JS.CallFunction"; $JS; "Concat"; "\\"Hello\\""; "\\"World\\"" ) ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

Call a function:

```
If [ Length($js) >0 ]
Set Variable [ $p ; Value: MBS( "JSON.CreateString"; test::Input ) ]
Set Field [ test::Output ; MBS( "JS.CallFunction"; $js; "crc32"; $p ) ]
End If
```


See also

- 98.4 JS.AddFunction 5186
- 98.8 JS.Free 5196
- 98.11 JS.New 5201
- 100.28 JSON.CreateString 5281

Example Databases

- [JavaScript/CoordinatDistance](#)
- [JavaScript/JavaScript](#)

Created 7th December 2019, last changed 15th January 2020.

98.6 JS.Evaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.Evaluate"; JSRef; JavaScript)

Parameters

JSRef

The JavaScript reference number.

\$js

JavaScript

A JavaScript expression.

"1+2"

Result Returns JSON or error.

Description

This may include definition of functions and objects and using them.

Result is converted to JSON and returned.

Examples

Evaluate some expressions:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.Evaluate"; $js; "4+5" ) ]
Show Custom Dialog [ "Result" ; $r ]
Set Variable [ $r ; Value: MBS( "JS.SetGlobalProperty"; $JS; "test"; "\"Hello World\"" ) ]
Set Variable [ $r ; Value: MBS( "JS.Evaluate"; $js; "test + test;" ) ]
Show Custom Dialog [ "Result" ; $r ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

Defines and runs a function in JavaScript:

```
Let( [
f = "
function makeCRCTable() {
var c;
var crcTable = [ ] ;
for(var n =0; n <256; n++) {
c = n;
for(var k =0; k <8; k++) {
c = ((c& 1) ? (0xEDB88320 ^ (c »>1)) : (c »>1));
}
crcTable [ n ] = c;
}
return crcTable;
```

```

}

function crc32(str) {
var crcTable = crcTable || (crcTable = makeCRCTable());
var crc = 0 ^(-1);

for (var i = 0; i <str.length; i++) {
crc = (crc »>8) ^crcTable [ (crc ^str.charCodeAt(i) & 0xFF ) ;
}

return (crc ^(-1)) »>0;
};

crc32(InputChange);";
j = MBS( "JS.New" );
r = MBS( "JS.SetGlobalPropertyValue"; j; "InputChange"; "Hello World" );
r = MBS( "JS.Evaluate"; j; f );
x = MBS( "JS.Free"; j )
];r)

```

Initialize JavaScript environment with two functions:

```

If [ Length($$js) = 0 ]
Set Variable [ $$js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.Evaluate"; $$js;
"function makeCRCTable() {
var c;
var crcTable = [ ] ;
for(var n=0; n <256; n++) {
c = n;
for(var k=0; k <8; k++) {
c = ((c& 1) ? (0xEDB88320 ^ (c »>1)) : (c »>1));
}
crcTable [ n ] = c;
}
return crcTable;
}

function crc32(str) {
var crcTable = crcTable || (crcTable = makeCRCTable());
var crc = 0 ^(-1);

for (var i = 0; i <str.length; i++) {
crc = (crc »>8) ^crcTable [ (crc ^str.charCodeAt(i) & 0xFF ) ;
}

return (crc ^(-1)) »>0;
};"} ]

```

End If

List global properties:

```
MBS( "JS.Evaluate"; $$JS; "Object.keys(globalThis);" )
```

Query now in JavaScript:

```
MBS( "JS.Evaluate"; $$JS; "performance.now();" )
```

Measure tikem for a test function:

```
MBS("JS.Evaluate"; $js; "function testFunction() {
for (var i = 0; i <1e6; i++) { }
}")
```

```
var t1 = performance.now();
testFunction();
var t2 = performance.now();
```

```
('test took: ' + (t2 - t1) + ' milliseconds');
```

See also

- 79.17 FM.Evaluate 3907
- 98.1 JS.AddFileMakerEvaluateFunction 5181
- 98.2 JS.AddFileMakerRunScriptFunction 5183
- 98.3 JS.AddFileMakerSQLFunction 5185
- 98.7 JS.EvaluateToString 5194
- 98.8 JS.Free 5196
- 98.11 JS.New 5201
- 98.14 JS.SetGlobalProperty 5205
- 98.15 JS.SetGlobalPropertyValue 5207

Example Databases

- [JavaScript/JavaScript](#)
- [List/Sort Benchmark](#)

98.6.1 Blog Entries

- [Tips for our JavaScript functions](#)
- [CRC function in FileMaker using JavaScript](#)
- [Our JavaScript engine for FileMaker](#)

Created 7th December 2019, last changed 30th January 2020.

98.7 JS.EvaluateToString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.EvaluateToString"; JSRef; JavaScript)

Parameters

JSRef

The JavaScript reference number.

\$js

JavaScript

A JavaScript expression.

"1+2"

Result Returns text or error.

Description

This may include definition of functions and objects and using them.

Result is converted to string and returned.

Examples

Evaluate some text:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.EvaluateToString"; $js; "e = \"test\"; e + String.fromCharCode(33)" ) ]
Show Custom Dialog [ "Result" ; $r ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

Defines and runs a function in JavaScript:

```
Let( [
f = "
function makeCRCTable() {
var c;
var crcTable = [ ] ;
for(var n =0; n <256; n++) {
c = n;
for(var k =0; k <8; k++) {
c = ((c& 1) ? (0xEDB88320 ^ (c »>1)) : (c »>1));
}
crcTable [ n ] = c;
}
return crcTable;
}
```

```
function crc32(str) {
var crcTable = crcTable || (crcTable = makeCRCTable());
var crc = 0 ^(-1);

for (var i = 0; i <str.length; i++) {
crc = (crc »>8) ^crcTable [ (crc ^str.charCodeAt(i) & 0xFF) ];
}

return (crc ^(-1)) »>0;
};

crc32(InputChange);";
j = MBS( "JS.New" );
r = MBS( "JS.SetGlobalPropertyValue"; j; "InputChange"; "Hello World" );
r = MBS( "JS.EvaluateToString"; j; f );
x = MBS( "JS.Free"; j )
];r)
```

See also

- [98.6 JS.Evaluate](#) 5190
- [98.8 JS.Free](#) 5196
- [98.11 JS.New](#) 5201
- [98.14 JS.SetGlobalProperty](#) 5205
- [98.15 JS.SetGlobalPropertyValue](#) 5207

Example Databases

- [JavaScript/CoordinatDistance](#)
- [JavaScript/JavaScript](#)
- [JavaScript/RichTextToJSON](#)

98.7.1 Blog Entries

- [Our JavaScript engine for FileMaker](#)

Created 7th December 2019, last changed 9th January 2020.

98.8 JS.Free

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.Free"; JSRef)

Parameters

JSRef

The JavaScript reference number.

\$js

Result Returns OK or error.

Description

Examples

Evaluate some expressions:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.Evaluate"; $js; "4+5" ) ]
Show Custom Dialog [ "Result" ; $r ]
Set Variable [ $r ; Value: MBS( "JS.SetGlobalProperty"; $JS; "test"; "\"Hello World\"" ) ]
Set Variable [ $r ; Value: MBS( "JS.Evaluate"; $js; "test + test;" ) ]
Show Custom Dialog [ "Result" ; $r ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

Cleanup script:

```
If [ Length($$js) >0 ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $$js ) ]
Set Variable [ $$js ; Value: "" ]
End If
```

See also

- 98.1 JS.AddFileMakerEvaluateFunction 5181
- 98.2 JS.AddFileMakerRunScriptFunction 5183
- 98.3 JS.AddFileMakerSQLFunction 5185
- 98.4 JS.AddFunction 5186
- 98.5 JS.CallFunction 5188
- 98.6 JS.Evaluate 5190
- 98.7 JS.EvaluateToString 5194

98.8. <i>JS.FREE</i>	5197
• 98.9 JS.GetGlobalProperty	5198
• 98.11 JS.New	5201
• 98.14 JS.SetGlobalProperty	5205

Example Databases

- [JavaScript/CoordinatDistance](#)
- [JavaScript/JavaScript](#)
- [JavaScript/RichTextToJSON](#)
- [List/Sort Benchmark](#)

98.8.1 Blog Entries

- [Our JavaScript engine for FileMaker](#)

Created 7th December 2019, last changed 15th January 2020.

98.9 JS.GetGlobalProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.GetGlobalProperty"; JSRef; Name)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the variable.

"test"

Result Returns JSON value or error.

Description

Returns value as JSON encoded.

Examples

Get and set some properties:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
# try number
Set Variable [ $r ; Value: MBS( "JS.SetGlobalProperty"; $JS; "v1"; 123 ) ]
Set Variable [ $v1 ; Value: MBS( "JS.GetGlobalProperty"; $JS; "v1" ) ]
# try some JSON array
Set Variable [ $r ; Value: MBS( "JS.SetGlobalProperty"; $JS; "v2"; " [ 1,2,3 ] " ) ]
Set Variable [ $v2 ; Value: MBS( "JS.GetGlobalProperty"; $JS; "v2" ) ]
# try some text
Set Variable [ $r ; Value: MBS( "JS.SetGlobalProperty"; $JS; "v3"; "\"test\"" ) ]
Set Variable [ $v3 ; Value: MBS( "JS.GetGlobalProperty"; $JS; "v3" ) ]
# show results
Show Custom Dialog [ "Property" ; $v1 & §& $v2 & §& $v3 ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

See also

- 98.8 JS.Free 5196
- 98.10 JS.GetGlobalPropertyValue 5200
- 98.11 JS.New 5201
- 98.14 JS.SetGlobalProperty 5205

Example Databases

- [JavaScript/JavaScript](#)

Created 7th December 2019, last changed 7th December 2019.

98.10 JS.GetGlobalPropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.GetGlobalPropertyValue"; JSRef; Name)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the variable.

"test"

Result Returns value or error.

Description

Returns value as number, text or JSON encoded.

This is a simplified version of JS.GetGlobalProperty to avoid extra JSON encoding for simple values. Objects are still returned JSON encoded.

Examples

Queries a number value:

```
MBS( "JS.GetGlobalPropertyValue"; $js; "Hello")
```

See also

- [98.9 JS.GetGlobalProperty](#) 5198
- [98.15 JS.SetGlobalPropertyValue](#) 5207

Example Databases

- [List/Sort Benchmark](#)

98.10.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr4](#)

Created 17th December 2019, last changed 26th December 2019.

98.11 JS.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.New")

Result Returns JS reference number or error.

Description

This object contains all the functions and properties you defined. Please release the object later with the JS.Free function.

Your own JavaScript engine is useful for:

- Running some snippet of JavaScript code without web viewer.
- Using various JavaScript libraries
- Providing a scripting language to your own solution.
- Doing JavaScript on server side.
- Working with JSON data
- Enjoy using regular expressions, unicode text functions, number parsing and formatting with no platform dependencies

Examples

Evaluate a bit of JavaScript:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
Set Variable [ $r ; Value: MBS( "JS.Evaluate"; $js; "4+5" ) ]
Show Custom Dialog [ "Result" ; $r ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

See also

- 98.1 JS.AddFileMakerEvaluateFunction 5181
- 98.3 JS.AddFileMakerSQLFunction 5185
- 98.5 JS.CallFunction 5188
- 98.6 JS.Evaluate 5190
- 98.7 JS.EvaluateToString 5194

5202

CHAPTER 98. JAVASCRIPT

- 98.8 JS.Free 5196
- 98.9 JS.GetGlobalProperty 5198
- 98.12 JS.Now 5203
- 98.14 JS.SetGlobalProperty 5205
- 98.19 JS.UTCDateToTime 5213

Example Databases

- [JavaScript/CoordinatDistance](#)
- [JavaScript/JavaScript](#)
- [JavaScript/RichTextToJSON](#)
- [List/Sort Benchmark](#)

98.11.1 Blog Entries

- [Our JavaScript engine for FileMaker](#)

Created 7th December 2019, last changed 9th December 2019.

98.12 JS.Now

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.1	Yes	Yes	Yes	Yes	Yes

MBS("JS.Now"; JSRef)

Parameters

JSRef

The JavaScript reference number.

\$js

Result Returns number or error.

Description

This is seconds since 1st January 1970 multiplied by 1000 and may contain fraction with microseconds.

Get current time in POSIX milliseconds, as seen by the ECMAScript environment. The return value matches Date.now() with the reservation that sub-millisecond resolution may be available.

Examples

Query current time:

MBS("JS.Now"; \$\$JS)

Example result: 1579438706835.8249512

See also

- 98.11 JS.New 5201
- 98.17 JS.TimeToDateComponents 5210
- 98.18 JS.TimeToUTCDate 5212

98.12.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 19th January 2020, last changed 19th January 2020.

98.13 JS.ObjectCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.1	Yes	Yes	Yes	Yes	Yes

MBS("JS.ObjectCount")

Result Returns number or error.

Description

A fresh JavaScript engine already has about 400 objects for the built-in functionality.

98.13.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr2](#)

Created 31st January 2020, last changed 31st January 2020.

98.14 JS.SetGlobalProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.SetGlobalProperty"; JSRef; Name; Value)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the variable.

"test"

Value

The JSON value.

" [1,2,3] "

Result Returns OK or error.

Description

Please pass value as JSON value.

Examples

Get and set some properties:

```
Set Variable [ $js ; Value: MBS( "JS.New" ) ]
# try number
Set Variable [ $r ; Value: MBS( "JS.SetGlobalProperty"; $JS; "v1"; 123 ) ]
Set Variable [ $v1 ; Value: MBS( "JS.GetGlobalProperty"; $JS; "v1" ) ]
# try some JSON array
Set Variable [ $r ; Value: MBS( "JS.SetGlobalProperty"; $JS; "v2"; " [ 1,2,3 ] " ) ]
Set Variable [ $v2 ; Value: MBS( "JS.GetGlobalProperty"; $JS; "v2" ) ]
# try some text
Set Variable [ $r ; Value: MBS( "JS.SetGlobalProperty"; $JS; "v3"; "\"test\"" ) ]
Set Variable [ $v3 ; Value: MBS( "JS.GetGlobalProperty"; $JS; "v3" ) ]
# show results
Show Custom Dialog [ "Property" ; $v1 & $& $v2 & $& $v3 ]
Set Variable [ $r ; Value: MBS( "JS.Free"; $JS ) ]
```

See also

- 98.6 JS.Evaluate 5190
- 98.7 JS.EvaluateToString 5194
- 98.8 JS.Free 5196

- 98.9 JS.GetGlobalProperty 5198
- 98.11 JS.New 5201
- 98.15 JS.SetGlobalPropertyValue 5207

Example Databases

- [JavaScript/CoordinatDistance](#)
- [JavaScript/JavaScript](#)

Created 7th December 2019, last changed 8th December 2019.

98.15 JS.SetGlobalPropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JS.SetGlobalPropertyValue"; JSRef; Name; Value)

Parameters

JSRef

The JavaScript reference number.

\$js

Name

The name of the variable.

"test"

Value

The number or text value.

123

Result Returns OK or error.

Description

Please pass value as number or text.

Container, date, time and timestamp are converted to text.

This is a simplified version of JS.SetGlobalProperty to avoid extra JSON encoding for simple values.

Examples

Sets a variable with name:

MBS("JS.SetGlobalPropertyValue"; \$js; "Hello"; 123,45)

See also

- [98.6 JS.Evaluate](#) 5190
- [98.7 JS.EvaluateToString](#) 5194
- [98.10 JS.GetGlobalPropertyValue](#) 5200
- [98.14 JS.SetGlobalProperty](#) 5205

Example Databases

- [JavaScript/CoordinatDistance](#)
- [List/Sort Benchmark](#)

98.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr4](#)

Created 17th December 2019, last changed 26th December 2019.

98.16 JS.StringCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.1	Yes	Yes	Yes	Yes	Yes

MBS("JS.StringCount")

Result Returns number or error.

Description

A fresh JavaScript engine already has about 1000 strings.

98.16.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr2](#)

Created 31st January 2020, last changed 31st January 2020.

98.17 JS.TimeToDateComponents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.1	Yes	Yes	Yes	Yes	Yes

MBS("JS.TimeToDateComponents"; JSRef; Time)

Parameters

JSRef

The JavaScript reference number.

\$js

Time

The time value.

1579438861538

Result Returns JSON or error.

Description

Convert a time value to components (year, month, day, hour, minute, second) interpreted in UTC. If the time value is invalid, e.g. beyond the valid ECMAScript time range, an error is thrown.

Examples

Query date components for now:

```
MBS( "JS.TimeToDateComponents"; $$JS; MBS( "JS.Now"; $$JS ) )
```

```
Example result: {
  "year": 2020,
  "month": 1,
  "day": 19,
  "hours": 12,
  "minutes": 59,
  "seconds": 13,
  "milliseconds": 806,
  "weekday": 0,
  "timezone": "UTC",
  "weekdayText": "Sunday"
}
```

See also

- 98.12 JS.Now 5203
- 98.19 JS.UTCDateToTime 5213

98.17.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

98.18 JS.TimeToUTCDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.1	Yes	Yes	Yes	Yes	Yes

MBS("JS.TimeToUTCDate"; JSRef; Time)

Parameters

JSRef

The JavaScript reference number.

\$js

Time

The time value.

1579438861538

Result Returns timestamp or error.

Description

Examples

Query now as timestamp:

```
MBS( "JS.TimeToUTCDate"; $$JS; MBS( "JS.Now"; $$JS ) )
```

Example result: 19.01.2020 12:59:46

See also

- [98.12 JS.Now](#)

5203

98.18.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 19th January 2020, last changed 19th January 2020.

98.19 JS.UTCDateToTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
98 JavaScript	10.1	Yes	Yes	Yes	Yes	Yes

MBS("JS.UTCDateToTime"; JSRef; TS)

Parameters

JSRef

The JavaScript reference number.

\$js

TS

The timestamp to convert. Must be in UTC timezone.

Result Returns double or error.

Description

Convert components (year, month, day, hour, minute, seconds) in timestamp, interpreted in UTC, into a time value.

Examples

Tests time functions:

```
Let( [
c = MBS( "JS.New" );
r = MBS( "JS.UTCDateToTime"; c; Get(CurrentTimeStamp) );
d = MBS( "JS.TimeToDateComponents"; c; r )
]; r & $& d)
```

Example result: 1582121231000

```
{
"year": 2020,
"month": 2,
"day": 19,
"hours": 14,
"minutes": 7,
"seconds": 11,
"milliseconds": 0,
"weekday": 3,
"timezone": "UTC",
"weekdayText": "Wednesday"
}
```

See also

- 98.11 JS.New 5201
- 98.17 JS.TimeToDateComponents 5210

98.19.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 19th January 2020, last changed 19th January 2020.

Chapter 99

JavaScriptMac

Run Javascript without Webviewer on Mac/iOS, even on server.

Supported for iOS with MBS Plugin 7.5 or newer.

99.1 JavaScript.CheckScriptSyntax

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.CheckScriptSyntax"; JavaScriptContext; Script { ; URL; startingLineNumber })

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

Script

The script to evaluate.

URL

Optional

The source URL for this script. A URL for the script's source file. Used by debuggers and when reporting exceptions. This parameter is informative only: it does not change the behavior of the script.

startingLineNumber

Optional

An integer value specifying the script's starting line number in the file located at sourceURL. This is only used when reporting exceptions. The value is one-based, so the first line is line 1 and invalid values are clamped to 1.

1

Result Returns OK or error.

Description

Returns OK on success or error message.

Examples

Check syntax:

```
Set Variable [ $js ; Value: MBS( "JavaScript.New" ) ]  
Set Variable [ $r ; Value: MBS( "JavaScript.CheckScriptSyntax"; $js; "test+++++" ) ]  
Show Custom Dialog [ "Result" ; $r ]  
Set Variable [ $r ; Value: MBS( "JavaScript.Release"; $js ) ]
```

See also

- 99.5 JavaScript.New 5222
- 99.10 JavaScript.Release 5229

Created 5th November 2015, last changed 9th January 2020.

99.2 JavaScript.EvaluateScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.EvaluateScript"; JavaScriptContext; Script { ; URL; startingLineNumber })

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

Script

The script to evaluate.

URL

Optional

The source URL for this script. A URL for the script's source file. Used by debuggers and when reporting exceptions. This parameter is informative only: it does not change the behavior of the script.

startingLineNumber

Optional

An integer value specifying the script's starting line number in the file located at sourceURL. This is only used when reporting exceptions. The value is one-based, so the first line is line 1 and invalid values are clamped to 1.

1

Result Returns text or error.

Description

See also `WebView.RunJavaScript` or `WebView.Evaluate` for use with web viewer.

Examples

Set variables and use them in the script:

```
Set Variable [ $js ; Value: MBS( "JavaScript.New" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.SetProperty"; $js; "FirstName"; "Joe" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.SetProperty"; $js; "LastName"; "Miller" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.EvaluateScript"; $js; "FirstName + ' ' + LastName;" ) ]
Show Custom Dialog [ "Result" ; $r ]
Set Variable [ $r ; Value: MBS( "JavaScript.Release"; $js ) ]
```

Evaluate in javascript the FileMaker get function:

```
Set Variable [ $js ; Value: MBS( "JavaScript.New" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.RegisterEvaluateFunction"; $js; "FMEvaluate" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.EvaluateScript"; $js; "FMEvaluate('Get(AccountName)') + '
from javascript'" ) ]
Show Custom Dialog [ "Result" ; $r ]
```

```
Set Variable [ $r ; Value: MBS( "JavaScript.Release"; $js ) ]
```

Defines and runs a function in JavaScript:

```
Let( [
f = "
function makeCRCTable() {
var c;
var crcTable = [ ] ;
for(var n =0; n <256; n++) {
c = n;
for(var k =0; k <8; k++) {
c = ((c& 1) ? (0xEDB88320 ^ (c »>1)) : (c »>1));
}
crcTable [ n ] = c;
}
return crcTable;
}

function crc32(str) {
var crcTable = crcTable || (crcTable = makeCRCTable());
var crc = 0 ^(-1);

for (var i = 0; i <str.length; i++ ) {
crc = (crc »>8) ^crcTable [ (crc ^str.charCodeAt(i)) & 0xFF ] ;
}

return (crc ^(-1)) »>0;
} ;

crc32(InputChange);";
j = MBS( "JavaScript.New" );
r = MBS( "JavaScript.SetProperty"; j; "InputChange"; "Hello World" );
r = MBS( "JavaScript.EvaluateScript"; j; f );
x = MBS( "JavaScript.Release"; j )
] ;r)
```

See also

- 99.5 JavaScript.New 5222
- 99.6 JavaScript.RegisterEvaluateFunction 5223
- 99.10 JavaScript.Release 5229
- 99.11 JavaScript.SetProperty 5230
- 180.44 WebView.Evaluate 8333

99.2. *JAVASCRIPT.EVALUATESCRIPT*

5219

- 180.109 WebView.RunJavaScript

8423

Example Databases

- [JavaScript/RichTextToJSON](#)

Created 5th November 2015, last changed 9th January 2020.

99.3 JavaScript.GetProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.GetProperty"; JavaScriptContext; PropertyName)

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

PropertyName

The name of the property.

"FirstName"

Result Returns text or error.

Description

Examples

Set and query property:

```
Set Variable [ $js ; Value: MBS( "JavaScript.New" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.SetProperty"; $js; "FirstName"; "Joe" ) ]
Show Custom Dialog [ "Result" ; MBS( "JavaScript.GetProperty"; $js; "FirstName" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.Release"; $js ) ]
```

See also

- [99.4 JavaScript.HasProperty](#) 5221
- [99.5 JavaScript.New](#) 5222
- [99.10 JavaScript.Release](#) 5229
- [99.11 JavaScript.SetProperty](#) 5230

Example Databases

- [Mac and iOS/JavaScript](#)

Created 5th November 2015, last changed 9th January 2020.

99.4 JavaScript.HasProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.HasProperty"; JavaScriptContext; PropertyName)

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

PropertyName

The name of the property.

"FirstName"

Result Returns 0, 1 or error.

Description

See also

- 99.3 JavaScript.GetProperty 5220
- 99.11 JavaScript.SetProperty 5230

Example Databases

- [Mac and iOS/JavaScript](#)

Created 5th November 2015, last changed 9th January 2020.

99.5 JavaScript.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.New")

Result Returns reference number or error.

Description

Reference numbers start at 47000.

Works in FileMaker 32-bit and 64-bit.

Supported for iOS with MBS Plugin 7.5.

Check JS Functions for JavaScript engine cross platform.

See also

- 99.1 JavaScript.CheckScriptSyntax 5215
- 99.2 JavaScript.EvaluateScript 5217
- 99.3 JavaScript.GetProperty 5220
- 99.6 JavaScript.RegisterEvaluateFunction 5223
- 99.11 JavaScript.SetProperty 5230

Example Databases

- [JavaScript/RichTextToJSON](#)
- [Mac and iOS/JavaScript](#)

Created 5th November 2015, last changed 9th January 2020.

99.6 JavaScript.RegisterEvaluateFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.RegisterEvaluateFunction"; JavaScriptContext; FunctionName)

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

FunctionName

The name for the new function.

"Evaluate"

Result Returns OK or error.

Description

The javascript function takes one parameter which is expression to evaluate. Returns the text of the expression result.

Call later like this: FMEvaluate("Get(AccountName)")

Examples

Register function:

```
MBS( "JavaScript.RegisterEvaluateFunction"; $$Context; "FMEvaluate" )
```

```
# later:
```

```
# FMEvaluate("Get(AccountName)")
```

Evaluate in javascript the FileMaker get function:

```
Set Variable [ $js ; Value: MBS( "JavaScript.New" ) ]
```

```
Set Variable [ $r ; Value: MBS( "JavaScript.RegisterEvaluateFunction"; $js; "FMEvaluate" ) ]
```

```
Set Variable [ $r ; Value: MBS( "JavaScript.EvaluateScript"; $js; "FMEvaluate('Get(AccountName)') + ' from javascript'" ) ]
```

```
Show Custom Dialog [ "Result" ; $r ]
```

```
Set Variable [ $r ; Value: MBS( "JavaScript.Release"; $js ) ]
```

See also

- 99.2 JavaScript.EvaluateScript 5217
- 99.5 JavaScript.New 5222
- 99.7 JavaScript.RegisterFunction 5225
- 99.8 JavaScript.RegisterRunScriptFunction 5227

- 99.9 JavaScript.RegisterSQLQueryFunction 5228
- 99.10 JavaScript.Release 5229

Example Databases

- [Mac and iOS/JavaScript](#)

Created 7th November 2015, last changed 9th January 2020.

99.7 JavaScript.RegisterFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.RegisterFunction"; JavaScriptContext; FunctionName { ; ParameterNames; Body; SourceURL; startingLineNumber })

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

FunctionName

The name for the new function.

"test"

ParameterNames

Optional

The names for the parameters.

"Value\$Count"

Body

Optional

The body of the function.

"return value;"

SourceURL

Optional

A text containing a URL for the script's source file. This is only used when reporting exceptions. Pass empty text if you do not care to include source file information in exceptions.

startingLineNumber

Optional

An integer value specifying the script's starting line number in the file located at sourceURL. This is only used when reporting exceptions. The value is one-based, so the first line is line 1 and invalid values are clamped to 1.

1

Result Returns OK or error.

Description

Examples

Register a function:

```
Set Variable [ $r; Value:MBS( "JavaScript.RegisterFunction"; $$Context; "Test"; "Value$Count"; "return Value * Count;" ) ]
```

See also

- 99.6 JavaScript.RegisterEvaluateFunction 5223
- 99.9 JavaScript.RegisterSQLQueryFunction 5228

Example Databases

- [Mac and iOS/JavaScript](#)

Created 7th November 2015, last changed 9th January 2020.

99.8 JavaScript.RegisterRunScriptFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.RegisterRunScriptFunction"; JavaScriptContext; FunctionName)

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

FunctionName

The name for the new function.

"StartScript"

Result Returns OK or error.

Description

The javascript function takes first parameter the filename, second parameter the script name. Optionally third parameter is passed as text to the script.

Call for example like this: FMRunScript('Javascript.fp7', 'test', 'Hello World')

Examples

Register RunScript function:

```
Set Variable [ $r; Value:MBS( "JavaScript.RegisterRunScriptFunction"; $$Context; "FMRunScript" ) ]
```

```
# later:
```

```
# FMRunScript('Javascript.fp7', 'test', 'Hello World')
```

See also

- 99.6 JavaScript.RegisterEvaluateFunction 5223
- 99.9 JavaScript.RegisterSQLQueryFunction 5228

Example Databases

- [Mac and iOS/JavaScript](#)

Created 7th November 2015, last changed 9th January 2020.

99.9 JavaScript.RegisterSQLQueryFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.RegisterSQLQueryFunction"; JavaScriptContext; FunctionName)

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

FunctionName

The name for the new function.

"SQLQuery"

Result Returns OK or error.

Description

The javascript function has as parameter first the SQL expression. Second optional parameter is the file name to limit query to only this FileMaker database file. Third and fourth parameter are separators for column or row which can be text or number. Default is column = tab and row = return. Fifth and following parameters are passed as parameters to SQL.

Call like this:

```
FMQuery('select * from Hello')
```

or

```
FMQuery('select * from Hello where "Count"=?', 'JavaScript.fmp12', 9, 13, 2)
```

Examples

Register query function:

```
MBS( "JavaScript.RegisterSQLQueryFunction"; $$Context; "FMQuery" )
```

See also

- [99.6 JavaScript.RegisterEvaluateFunction](#) 5223
- [99.7 JavaScript.RegisterFunction](#) 5225
- [99.8 JavaScript.RegisterRunScriptFunction](#) 5227

Example Databases

- [Mac and iOS/JavaScript](#)

Created 7th November 2015, last changed 9th January 2020.

99.10 JavaScript.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.Release"; JavaScriptContext)

Parameters

JavaScriptContext

The reference number of the javascript context.
\$Context

Result Returns OK or error.

Description

See also

- [99.1 JavaScript.CheckScriptSyntax](#) 5215
- [99.2 JavaScript.EvaluateScript](#) 5217
- [99.3 JavaScript.GetProperty](#) 5220
- [99.6 JavaScript.RegisterEvaluateFunction](#) 5223
- [99.11 JavaScript.SetProperty](#) 5230

Example Databases

- [JavaScript/RichTextToJSON](#)
- [Mac and iOS/JavaScript](#)

Created 5th November 2015, last changed 9th January 2020.

99.11 JavaScript.SetProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
99 JavaScriptMac	5.4	Yes	No	Yes, macOS only	No	Yes

MBS("JavaScript.SetProperty"; JavaScriptContext; PropertyName; Value)

Parameters

JavaScriptContext

The reference number of the javascript context.

\$Context

PropertyName

The name of the property.

"FirstName"

Value

The new text value.

"Joe"

Result Returns OK or error.

Description

Examples

Set and query property:

```
Set Variable [ $js ; Value: MBS( "JavaScript.New" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.SetProperty"; $js; "FirstName"; "Joe" ) ]
Show Custom Dialog [ "Result" ; MBS( "JavaScript.GetProperty"; $js; "FirstName" ) ]
Set Variable [ $r ; Value: MBS( "JavaScript.Release"; $js ) ]
```

See also

- 99.2 JavaScript.EvaluateScript 5217
- 99.3 JavaScript.GetProperty 5220
- 99.4 JavaScript.HasProperty 5221
- 99.5 JavaScript.New 5222
- 99.10 JavaScript.Release 5229

Example Databases

- [Mac and iOS/JavaScript](#)

Created 5th November 2015, last changed 9th January 2020.

Chapter 100

JSON

Parse or build JSON texts.

100.1 Dictionary.ToJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary 100 JSON	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.ToJSON"; DictionaryRef)

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.
\$dic

Result Returns OK or error.

Description

This is useful for passing data from dictionary to some javascript.

Examples

Test exporting dictionaries:

```
#  
#  
# Create new Dictionary  
#  
Set Variable [ $param; Value:MBS( "Dictionary.Create" ) ]  
#  
# Fill in values  
#
```

```

Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "text"; Pass Parameters with Dictionary::TextField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "number"; Pass Parameters with Dictionary::NumberField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "date"; Pass Parameters with Dictionary::DateField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "time"; Pass Parameters with Dictionary::TimeField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "timestamp"; Pass Parameters with Dictionary::TimeStampField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "container"; Pass Parameters with Dictionary::ContainerField ) ]
#
# Call save xml, json and text
#
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToXML"; $param; 1); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.xml"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToText"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.txt"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToJSON"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.json.txt"); "UTF8" ) ]
#
# free memory
#
Set Variable [ $r; Value:MBS("Dictionary.Release"; $param) ]

```

See also

- 65.1 Dictionary.AddSQL 2397
- 80.1 Dictionary.AddSQLRecord 4065
- 80.2 Dictionary.AddSQLRecords 4067
- 65.7 Dictionary.Create 2407
- 65.14 Dictionary.Release 2417
- 65.22 Dictionary.ToText 2429
- 191.1 Dictionary.ToXML 9253
- 81.8 Folders.UserDesktop 4177
- 121.1 Path.AddPathComponent 6135
- 164.68 Text.WriteTextFile 7871

100.1.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 25th February 2016, last changed 20th February 2018.

100.2 FM.SQL.JSONRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 100 JSON	8.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.JSONRecord"; SQLref; Row; FieldNames { ; Flags })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Row

The row you like to get.

1

FieldNames

A list of field names for the JSON.

"Model\$Names"

Flags

Optional

The flags for the json creation. Pass 1 to get all values as text. Pass 2 to get all dates, times and timestamps in SQL format.

1+2

Result Returns JSON text or error.

Description

You provide list of field names, which should be in same order as fields in SQL result.

Optionally we can return SQL dates, times and timestamps as SQL format.

Containers are returned as Base64 encoded data.

Examples

Query JSON record:

```
Set Variable [ $sql ; Value: MBS( "FM.SQL.Execute"; "" ; "SELECT \"First\", \"Last\", Birthday, \"Photo Container\" FROM Contacts" ) ]
```

```
Set Variable [ $json ; Value: MBS( "FM.SQL.JSONRecord"; $sql; 0; "First$Last$Birthday$Photo"; 2 ) ]
```

```
Show Custom Dialog [ "JSON" ; $json ]
```

```
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $sql ) ]
```

Query record as JSON:

```
Let ( [
```

```
fields = MBS( "FM.QueryFieldsForTableName"; "Contacts");
```

```
Records = MBS( "FM.SQL.Execute"; "" ; "SELECT \"\" & substitute(fields; $; \"\", \") & \"\" FROM \"Contacts\" WHERE \"First\" = ?"; "Joe");
```

100.2. *FM.SQL.JSONRECORD*

5235

```
json = MBS( "FM.SQL.JSONRecord"; Records; 0; fields);  
r = MBS( "FM.SQL.Release"; Records ) ]  
; json )
```

See also

- 79.48 *FM.QueryFieldsForTableName* 3980
- 80.26 *FM.SQL.Execute* 4138
- 100.3 *FM.SQL.JSONRecords* 5236
- 80.34 *FM.SQL.Release* 4155
- 156.10 *SQL.Execute* 7309

100.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 4th March 2018, last changed 8th April 2019.

100.3 FM.SQL.JSONRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 100 JSON	8.1	Yes	Yes	Yes	Yes	Yes

MBS("FM.SQL.JSONRecords"; SQLref; FieldNames { ; Flags })

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

FieldNames

A list of field names for the JSON.

"Model\$Names"

Flags

Optional

The flags for the json creation. Pass 1 to get all values as text. Pass 2 to get all dates, times and timestamps in SQL format.

1+2

Result Returns JSON text or error.

Description

You provide list of field names, which should be in same order as fields in SQL result.

Optionally we can return SQL dates, times and timestamps as SQL format.

Containers are returned as Base64 encoded data.

Examples

Query JSON:

```
Set Variable [ $sql ; Value: MBS( "FM.SQL.Execute"; "" ; "SELECT \"First\", \"Last\", Birthday, \"Photo Container\" FROM Contacts" ) ]
```

```
Set Variable [ $json ; Value: MBS( "FM.SQL.JSONRecords"; $sql; "First$Last$Birthday$Photo"; 2 ) ]
```

```
Show Custom Dialog [ "JSON" ; $json ]
```

```
Set Variable [ $r ; Value: MBS( "FM.SQL.Release"; $sql ) ]
```

Make a JSON query in one Let statment:

```
Let (
```

```
[
```

```
$sdat = "10/1/2019 00:00";
```

```
$edat = "10/10/2019 00:00";
```

```
sku = "'PARbh50','PARgy50'";
```

```
sql1 = MBS("FM.SQL.Execute"; "" ; "Select docnum,linetotal,db from \"MyTable\" where ItemCode in (\" & sku & \") and DocDate between ? and ?"; $sdat; $edat);
```

```
json = MBS( "FM.SQL.JSONRecords"; sql1; "DocNum$LineTotal$DB"; 1);
```

```
r = MBS( "FM.SQL.Release"; sql1 )
```


100.3. *FM.SQL.JSONRECORDS*

5237

```
] ; json  
)
```

See also

- 80.26 *FM.SQL.Execute* 4138
- 100.2 *FM.SQL.JSONRecord* 5234
- 80.34 *FM.SQL.Release* 4155
- 156.10 *SQL.Execute* 7309

100.3.1 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 4th March 2018, last changed 16th December 2019.

100.4 JSON.AddBooleanToObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.AddBooleanToObject"; json; name; value)

Parameters

json

A JSON text or reference.

[false,true,false]

name

The name of the key.

"Hello"

value

The boolean to be added. Pass 1 for true and 0 for false.

1

Result Returns JSON code or error.

Description

Same as JSON.AddItemToArray, but calls JSON.CreateBoolean automatically for you.

With version 6, you can pass several parameters to add several entries to the array. When adding to a JSON reference, the function returns that reference number.

Examples

Add a boolean to object:

```
Set Variable [ $json; Value:MBS( "JSON.Parse"; " { \"Hello\": \"World\" } " ) ]
Set Variable [ $json; Value:MBS( "JSON.AddBooleanToObject"; $json; "test"; 1 ) ]
Show Custom Dialog [ $json; MBS("JSON.Format"; $json) ]
Set Variable [ $r; Value:MBS( "JSON.Release"; $json) ]
```

Add a value:

```
MBS( "JSON.AddBooleanToObject"; " { } "; "test"; 1 )
```

```
Example result: {
  "test": true
}
```

See also

- 100.5 JSON.AddFalseToObject 5240
- 100.6 JSON.AddItemToArray 5242

<i>100.4. JSON.ADDBOOLEANTOOBJECT</i>	5239
• 100.10 JSON.AddNumberToObject	5251
• 100.18 JSON.CreateArrayRef	5265
• 100.19 JSON.CreateBool	5268
• 100.20 JSON.CreateBoolean	5269
• 100.27 JSON.CreateObjectRef	5278
• 100.34 JSON.DeleteItemFromObject	5287
• 100.39 JSON.Format	5295
• 100.66 JSON.Release	5336

100.4.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 5th January 2016, last changed 11st December 2016.

100.5 JSON.AddFalseToObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.AddFalseToObject"; json; name)

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

name

The name of the Object property.

```
"length"
```

Result Returns JSON code.

Description

With version 6, you can pass several parameters to add several entries to the object. When adding to a JSON reference, the function returns that reference number.

Examples

Adds two entries with false to empty array:

```
MBS( "JSON.AddFalseToObject"; " { } "; "hello"; "world" )
```

```
Example result: {
"hello": false,
"world": false
}
```

Adds false to object:

```
MBS( "JSON.AddFalseToObject"; " { } "; "test" )
```

```
Example result: {
"test": false
}
```

See also

- 100.4 JSON.AddBooleanToObject 5238
- 100.7 JSON.AddItemToObject 5244
- 100.8 JSON.AddNullToObject 5247
- 100.10 JSON.AddNumberToObject 5251
- 100.12 JSON.AddStringToObject 5255

100.5. *JSON.ADDFALSETOOBJECT*

5241

- 100.13 JSON.AddTrueToObject

5258

Created 18th August 2014, last changed 11st December 2016.

100.6 JSON.AddItemToArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.AddItemToArray"; json; json2)

Parameters

json

A JSON text or reference.

[1,2,3]

json2

A JSON text or reference.

4

Result Returns JSON code.

Description

With version 6, you can pass several parameters to add several entries to the array. When adding to a JSON reference, the function returns that reference number.

Examples

Adds an item to array:

```
MBS( "JSON.AddItemToArray"; " [ 1,2,3 ] "; MBS("JSON.CreateNumber"; 4) )
```

Example result: [1, 2, 3, 4]

Add three items to empty array:

```
MBS( "JSON.AddItemToArray"; " [ ] "; "1"; "2"; "\"Heinz\"")
```

Example result: [1, 2, "Heinz"]

Adds an item to the array:

```
MBS( "JSON.AddItemToArray"; " [ ] "; 67 )
```

Example result: [67]

See also

- 100.4 JSON.AddBooleanToObject 5238
- 100.9 JSON.AddNumberToArray 5249
- 100.11 JSON.AddStringToArray 5253
- 100.18 JSON.CreateArrayRef 5265
- 100.25 JSON.CreateNumber 5274

100.6. *JSON.ADDITEMTOARRAY*

5243

- 100.27 *JSON.CreateObjectRef*

5278

Example Databases

- [JSON/JSON Benchmark](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)
- [Proj/PROJ Library](#)

Created 18th August 2014, last changed 11st December 2016.

100.7 JSON.AddItemToObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.AddItemToObject"; json; name; json2 )
```

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

name

The name of the Object property.

```
"length"
```

json2

The JSON text for the item.

```
50
```

Result Returns JSON code.

Description

With version 6, you can pass several parameters to add several entries to the object.

When adding to a JSON reference, the function returns that reference number.

Examples

Build nested objects:

```
Set Variable [ $j1; MBS( "JSON.CreateObject" ) ]
Set Variable [ $j2; MBS( "JSON.AddStringToObject"; $j1; "name"; "" ) ]
Set Variable [ $j3; MBS( "JSON.AddStringToObject"; $j2; "record_type"; "MX" ) ]
Display Dialog [ "JSON"; $j3 ]
Set Variable [ $j4; MBS( "JSON.CreateObject" ) ]
Set Variable [ $j5; MBS( "JSON.AddItemToObject"; $j4; "record"; $j3 ) ]
Display Dialog [ "JSON"; $j4 ]
```

Add two items to an object:

```
MBS( "JSON.AddItemToObject"; " { } "; "Values"; " [ 1,2 ] "; "Name"; " { \"FirstName\": \"Heinz\" } " )
```

```
Example result: {
  "Values": [ 1, 2 ],
  "Name": {
    "FirstName": "Heinz"
  }
}
```

Add big number:


```
MBS( "JSON.AddItemToObject"; " { } "; "test"; "12063660878882855000013426248015578834577" )
```

```
Example result: {
  "test": 12063660878882855000013426248015578834577
}
```

Create JSON with values in fields on current layout:

```
Let ( [
  // Create object as reference
  j = MBS( "JSON.CreateObjectRef" );
  // List fields in current layout
  fields = FieldNames ( get(FileName) ; get(LayoutName) );
  // how many?
  c = ValueCount ( fields );
  // make a loop to add field values
  r = While ( i = 1 ; i < c ; [ name = GetValue ( fields ; i ); r = MBS( "JSON.AddItemToObject"; j; name;
  MBS( "JSON.CreateValue"; GetField ( name ) ); i = i + 1 ] ; i );
  // format the result
  text = MBS( "JSON.Format"; j );
  // free json
  r = MBS( "JSON.Release"; j )
];
// return result as text
text )
```

```
Example result: {
  "First": "John",
  "Last": "Miller",
  "Group": "",
  "Company": "Some Ltd.",
  "ID": 12
}
```

See also

- 61.387 [CURL.SetupOAuth](#) 2324
- 100.8 [JSON.AddNullToObject](#) 5247
- 100.12 [JSON.AddStringToObject](#) 5255
- 100.13 [JSON.AddTrueToObject](#) 5258
- 100.18 [JSON.CreateArrayRef](#) 5265
- 100.26 [JSON.CreateObject](#) 5276
- 100.27 [JSON.CreateObjectRef](#) 5278
- 100.39 [JSON.Format](#) 5295

- 100.66 JSON.Release 5336
- 106.95 MapView.Snapshot 5746

Example Databases

- [JSON/JSON Test](#)
- [Mac and iOS/MapKit/MapKit Snapshots](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)

100.7.1 Blog Entries

- [JSON with large integers](#)
- [Generate JSON with MBS Plugin](#)

Created 18th August 2014, last changed 22nd July 2019.

100.8 JSON.AddNullToObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.AddNullToObject"; json; name)

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

name

The name of the Object property.

"length"

Result Returns JSON code.

Description

With version 6, you can pass several parameters to add several entries to the object. When adding to a JSON reference, the function returns that reference number.

Examples

Add two null entries:

```
MBS( "JSON.AddNullToObject"; " { } "; "hello"; "test")
```

```
Example result: {
"hello": null,
"test": null
}
```

Adds a NULL value:

```
MBS( "JSON.AddNullToObject"; " { } "; "test" )
```

```
Example result: {
"test": null
}
```

See also

- 100.5 JSON.AddFalseToObject 5240
- 100.7 JSON.AddItemToObject 5244
- 100.10 JSON.AddNumberToObject 5251
- 100.13 JSON.AddTrueToObject 5258
- 100.18 JSON.CreateArrayRef 5265

- 100.27 JSON.CreateObjectRef

Created 18th August 2014, last changed 11st December 2016.

100.9 JSON.AddNumberToArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.3	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.AddNumberToArray"; json; value )
```

Parameters

json

A JSON text or reference.

```
[ 1,2,3 ]
```

value

The number to be added

```
5
```

Result Returns JSON code or error.

Description

Same as JSON.AddItemToArray, but calls JSON.CreateNumber automatically for you.

With version 6, you can pass several parameters to add several entries to the array.

When adding to a JSON reference, the function returns that reference number.

Examples

Adds an item to array:

```
MBS( "JSON.AddItemToArray"; " [ 1,2,3 ] "; 4)
```

Example result: [1, 2, 3, 4]

Add 4 numbers to an array:

```
MBS( "JSON.AddNumberToArray"; " [ ] "; 1; 2; 3; 4 )
```

Example result: [1, 2, 3, 4]

Add big number:

```
MBS( "JSON.AddNumberToArray"; " [ ] "; 12063660878882855000013426248015578834577 )
```

Example result: [12063660878882855000013426248015578834577]

Use While loop to create JSON array:

```
Let ( [
// Create array object
j = MBS( "JSON.CreateArrayRef" );
// make a loop to add numbers
r = While ( $i = 0 ; $i < 10 ; [ r = MBS( "JSON.AddNumberToArray"; j; $i ); $i = $i + 1 ] ; $i );
```

```
// format the result
text = MBS( "JSON.Format"; j );
// free json
r = MBS( "JSON.Release"; j )
];
// return result as text
text )
```

See also

- [100.6 JSON.AddItemToArray](#) 5242
- [100.10 JSON.AddNumberToObject](#) 5251
- [100.11 JSON.AddStringToArray](#) 5253
- [100.17 JSON.CreateArray](#) 5264
- [100.18 JSON.CreateArrayRef](#) 5265
- [100.25 JSON.CreateNumber](#) 5274
- [100.39 JSON.Format](#) 5295
- [100.66 JSON.Release](#) 5336

100.9.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)
- [Fun with While function in FileMaker](#)
- [MBS FileMaker Plugin, version 8.2pr7](#)
- [JSON with large integers](#)
- [MBS Filemaker Plugin, version 4.3pr8](#)

Created 26th August 2014, last changed 22nd July 2019.

100.10 JSON.AddNumberToObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.AddNumberToObject"; json; name; value)

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

name

The name of the Object property.

```
"length"
```

value

The number value to add.

```
123.45
```

Result Returns JSON code.

Description

With version 6, you can pass several parameters to add several entries to the object.

When adding to a JSON reference, the function returns that reference number.

Examples

Adds two number entries to an object:

```
MBS( "JSON.AddNumberToObject"; " { } "; "hello"; 1; "test"; 5)
```

Example result: {

```
"hello": 1,
```

```
"test": 5
```

```
}
```

Adds number:

```
MBS( "JSON.AddNumberToObject"; " { } "; "test"; 123 )
```

Example result: {

```
"test": 123
```

```
}
```

Add big number:

```
MBS( "JSON.AddNumberToObject"; " { } "; "zahl"; 12063660878882855000013426248015578834577 )
```

Example result: {

```
"zahl": 12063660878882855000013426248015578834577
```

```
}
```

See also

- 100.4 JSON.AddBooleanToObject 5238
- 100.5 JSON.AddFalseToObject 5240
- 100.7 JSON.AddItemToObject 5244
- 100.8 JSON.AddNullToObject 5247
- 100.9 JSON.AddNumberToArray 5249
- 100.12 JSON.AddStringToObject 5255
- 100.13 JSON.AddTrueToObject 5258
- 100.18 JSON.CreateArrayRef 5265
- 100.27 JSON.CreateObjectRef 5278
- 106.95 MapView.Snapshot 5746

Example Databases

- [CURL/CURL FMS Admin API](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [Mac and iOS/MapKit/MapKit Snapshots](#)

100.10.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr7](#)
- [JSON with large integers](#)

Created 18th August 2014, last changed 11st May 2018.

100.11 JSON.AddStringToArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.3	Yes	Yes	Yes	Yes	Yes

MBS("JSON.AddStringToArray"; json; value)

Parameters

json

A JSON text or reference.

["1","2"]

value

The new text.

"Hello"

Result Returns JSON code.

Description

Same as JSON.AddItemToArray, but calls JSON.CreateString automatically for you.

With version 6, you can pass several parameters to add several entries to the array.

When adding to a JSON reference, the function returns that reference number.

Examples

Adds a string to an array:

```
MBS( "JSON.AddStringToArray"; " [ \"1\", \"2\", \"3\" ] "; "4")
```

Example result: ["1", "2", "3", "4"]

Adds 4 strings to an array:

```
MBS( "JSON.AddStringToArray"; " [ ] "; "1"; "2"; "3"; "4" )
```

Example result: ["1", "2", "3", "4"]

See also

- 100.6 JSON.AddItemToArray 5242
- 100.9 JSON.AddNumberToArray 5249
- 100.12 JSON.AddStringToObject 5255
- 100.18 JSON.CreateArrayRef 5265
- 100.28 JSON.CreateString 5281

100.11.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr8](#)

Created 26th August 2014, last changed 11st December 2016.

100.12 JSON.AddStringToObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.AddStringToObject"; json; name; value)

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

name

The name of the Object property.

```
"length"
```

value

The text value to add.

```
"Hello"
```

Result Returns JSON code.

Description

With version 6, you can pass several parameters to add several entries to the object.

When adding to a JSON reference, the function returns that reference number.

Examples

Create object, add content and pick value:

```
Let(
[
j = MBS( "JSON.CreateObject" );
j = MBS( "JSON.AddStringToObject"; j; "hello"; "world" );
r = MBS( "JSON.GetObjectItem"; j; "hello" )
];
r)
```

Example result: "world"

Build nested objects:

```
Set Variable [ $j1; MBS( "JSON.CreateObject" ) ]
Set Variable [ $j2; MBS( "JSON.AddStringToObject"; $j1; "name"; "" ) ]
Set Variable [ $j3; MBS( "JSON.AddStringToObject"; $j2; "record_type"; "MX" ) ]
Display Dialog [ "JSON"; $j3 ]
Set Variable [ $j4; MBS( "JSON.CreateObject" ) ]
Set Variable [ $j5; MBS( "JSON.AddItemToObject"; $j4; "record"; $j3 ) ]
Display Dialog [ "JSON"; $j4 ]
```

Add two entries in one call:

```
MBS( "JSON.AddStringToObject"; " { } "; "hello"; "world"; "test"; "entry")
```

```
Example result: {
"hello": "world",
"test": "entry"
}
```

Adds string to object:

```
MBS( "JSON.AddStringToObject"; " { } "; "test"; "Hello World" )
```

```
Example result: {
"test": "Hello World"
}
```

See also

- [100.5 JSON.AddFalseToObject](#) 5240
- [100.7 JSON.AddItemToObject](#) 5244
- [100.10 JSON.AddNumberToObject](#) 5251
- [100.13 JSON.AddTrueToObject](#) 5258
- [100.18 JSON.CreateArrayRef](#) 5265
- [100.26 JSON.CreateObject](#) 5276
- [100.27 JSON.CreateObjectRef](#) 5278
- [100.46 JSON.GetObjectItem](#) 5306
- [106.4 MapView.AddPoint](#) 5643
- [106.95 MapView.Snapshot](#) 5746

Example Databases

- [CURL/CURL FMS Admin API](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/CURL FMS Admin API v18](#)
- [Mac and iOS/MapKit/MapKit Snapshots](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

100.12.1 **Blog Entries**

- [Generate JSON with MBS Plugin](#)

Created 18th August 2014, last changed 11st December 2016.

100.13 JSON.AddTrueToObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.AddTrueToObject"; json; name)

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

name

The name of the Object property.

```
"length"
```

Result Returns JSON code.

Description

With version 6, you can pass several parameters to add several entries to the object. When adding to a JSON reference, the function returns that reference number.

Examples

Adds two entries with true to empty array:

```
MBS( "JSON.AddTrueToObject"; " { } "; "hello"; "world"
```

```
Example result: {
  "hello": true,
  "world": true
}
```

Adds true to object:

```
MBS( "JSON.AddTrueToObject"; " { } "; "test" )
```

```
Example result: {
  "test": true
}
```

See also

- 100.5 JSON.AddFalseToObject 5240
- 100.7 JSON.AddItemToObject 5244
- 100.8 JSON.AddNullToObject 5247
- 100.10 JSON.AddNumberToObject 5251
- 100.12 JSON.AddStringToObject 5255

100.13. *JSON.ADDTRUETOOBJECT*

5259

- 100.27 *JSON.CreateObjectRef*

5278

Created 18th August 2014, last changed 11st December 2016.

100.14 JSON.Clone

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.1	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Clone"; JSON)

Parameters

JSON

The JSON text or reference number.

" [1,2,3] "

Result Returns reference number or error.

Description

A new reference number with a new json object or array behind and all content copied.

100.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 5th March 2016, last changed 5th March 2016.

100.15 JSON.Colorize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	8.2	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Colorize"; json)

Parameters

json

A JSON text.

```
{ "key": "value" }
```

Result Returns formatted text or error.

Description

This colorizes an existing JSON text to show to user.

Keys get blue, text value purple, numbers and others orange and brackets black.

Text is returned only with colors. You can apply text font and font size with normal FileMaker functions. Processing time is linear to length, so should be faster than custom functions.

Examples

Colorize a field:

```
Set Field [ Data::JSON ; MBS("JSON.Colorize"; Data::JSON) ]
```

See also

- 36.2 Archive.Content 946
- 36.4 Archive.FileList 949
- 54.14 CNContact.JSON 1544
- 54.26 CNContactStore.AddContact 1562
- 54.50 CNContactStore.NewContact 1590
- 54.57 CNContactStore.UnifiedMeContact 1599
- 61.20 CURL.FileInfos 1793
- 78.4 Files.AudioTags 3775
- 100.18 JSON.CreateArrayRef 5265
- 164.1 Text.AddLineNumbers 7767

Example Databases

- [Barcode/Barcode Generation JSON](#)
- [CURL/Email/IMAP Email List](#)
- [CURL/FTP/CURL FTP Directory Listing](#)
- [Files/Audio File Tags](#)
- [JSON/JSON to HTML](#)
- [Mac and iOS/Contacts/Contacts](#)
- [Network/Bonjour](#)
- [SmartCard/SmartCard ReadFile](#)
- [Text functions/Text Styles](#)
- [XML/XML to JSON](#)

100.15.1 Blog Entries

- [With JSON in excellent form](#)
- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [Colorize JSON or XML in FileMaker with line numbers](#)
- [MBS FileMaker Plugin, version 8.2pr2](#)
- [Colorize JSON in FileMaker](#)

Created 6th April 2018, last changed 8th April 2018.

100.16 JSON.Compact

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Compact"; json)

Parameters

json

A JSON text or reference.

" [1,2,3] "

Result Returns JSON code.

Description

Examples

Creates compact text of JSON with spaces:

MBS("JSON.Compact"; " [1, 3, 4] ")

Example result: [1,3,4]

Compacts JSON and removes spaces:

MBS("JSON.Compact"; " [1 , 2 , 3] ")

Example result: [1,2,3]

See also

- [100.18 JSON.CreateArrayRef](#)

5265

Example Databases

- [Text functions/Text Styles](#)

100.16.1 Blog Entries

- [With JSON in excellent form](#)
- [JSON with large integers](#)
- [Generate JSON with MBS Plugin](#)

Created 18th August 2014, last changed 11st December 2016.

100.17 JSON.CreateArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateArray")

Result Returns JSON code.

Description

Examples

Creates a new empty array:

```
$a = MBS("JSON.CreateArray")
```

Example result: []

See also

- 100.9 JSON.AddNumberToArray 5249
- 100.18 JSON.CreateArrayRef 5265
- 100.27 JSON.CreateObjectRef 5278
- 100.31 JSON.CreateTrue 5284

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 18th August 2014, last changed 11st December 2016.

100.18 JSON.CreateArrayRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.0	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.CreateArrayRef" )
```

Result Returns reference number or error.

Description

Please use JSON.Release later to free the json object.

You can pass the reference number to all MBS JSON functions instead of JSON text.

Examples

Test array reference functions:

```
# create array reference
$ref = MBS( "JSON.CreateArrayRef" )
# add some numbers
$r = MBS( "JSON.AddNumberToArray"; $ref; 1; 2; 3 )
# add some texts
$r = MBS( "JSON.AddStringToArray"; $ref; "Hello"; "World" )
# get JSON text for this array:
$text = MBS( "JSON.Compact"; $ref )
# free memory
$r = MBS( "JSON.Release"; $ref )
```

Use While loop to create JSON array:

```
Let ( [
// Create array object
j = MBS( "JSON.CreateArrayRef" );
// make a loop to add numbers
r = While ( $i = 0 ; $i <10 ; [ r = MBS( "JSON.AddNumberToArray"; j; $i ); $i = $i + 1 ] ; $i );
// format the result
text = MBS( "JSON.Format"; j );
// free json
r = MBS( "JSON.Release"; j )
];
// return result as text
text )
```

Example result: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

Create complex JSON:

```
Set Variable [ $a ; Value: MBS( "JSON.CreateArrayRef" ) ]
#
# first entry
```

```

Set Variable [ $o ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $o; "FieldType"; 11 ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNullToObject"; $o; "FieldName" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddStringToObject"; $o; "Value"; "Julien" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddBooleanToObject"; $o; "EmptyMatch"; False ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddItemToArray"; $a; $o ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $o ) ]
#
# second entry
Set Variable [ $o ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $o; "FieldType"; 23 ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNullToObject"; $o; "FieldName" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddStringToObject"; $o; "Value"; "Stadel" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddBooleanToObject"; $o; "EmptyMatch"; False ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddItemToArray"; $a; $o ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $o ) ]
#
# surrounding object
Set Variable [ $o ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddItemToObject"; $o; "Data"; $a ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $o; "Id"; 123 ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $a ) ]
#
# put in final object
Set Variable [ $j ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddItemToObject"; $j; "Address"; $o ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $o ) ]
#
Set Field [ JSON::JSON ; MBS("JSON.Colorize"; MBS("JSON.Format"; $j)) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $j ) ]

```

See also

- 100.4 JSON.AddBooleanToObject 5238
- 100.9 JSON.AddNumberToArray 5249
- 100.10 JSON.AddNumberToObject 5251
- 100.11 JSON.AddStringToArray 5253
- 100.15 JSON.Colorize 5261
- 100.16 JSON.Compact 5263
- 100.26 JSON.CreateObject 5276
- 100.27 JSON.CreateObjectRef 5278
- 100.39 JSON.Format 5295

100.18. *JSON.CREATEARRAYREF*

5267

- 100.66 *JSON.Release*

5336

Example Databases

- [JSON/JSON Benchmark](#)

100.18.1 Blog Entries

- [Fun with While function in FileMaker](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 5th January 2016, last changed 20th November 2019.

100.19 JSON.CreateBool

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateBool"; value)

Parameters

value

The boolean value.

1

Result Returns JSON code.

Description

Examples

Creates true node:

```
MBS( "JSON.CreateBool"; 1 )
```

Example result: true

Creates false node:

```
MBS( "JSON.CreateBool"; 0 )
```

Example result: false

See also

- 100.4 JSON.AddBooleanToObject 5238
- 100.20 JSON.CreateBoolean 5269
- 100.24 JSON.CreateNull 5273
- 100.31 JSON.CreateTrue 5284

Created 18th August 2014, last changed 11st December 2016.

100.20 JSON.CreateBoolean

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateBoolean"; Value)

Parameters

Value

The boolean value. Pass 1 for true and 0 for false.

1

Result Returns JSON or error.

Description

As we pass JSON in JSON around, you can simply write "false" directly instead of calling one of this functions.

Examples

Create a boolean with an expression:

```
Set Variable [ $json; Value:MBS( "JSON.CreateBoolean"; Length($text) >0 ) ]
```

Example result: true

See also

- 100.4 JSON.AddBooleanToObject 5238
- 100.19 JSON.CreateBool 5268

100.20.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 5th January 2016, last changed 11st December 2016.

100.21 JSON.CreateDoubleArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateDoubleArray" { ; values })

Parameters

values

Optional

Optional parameters for the array values. Pass one parameter per item to be added to the array.

1

Result Returns JSON code.

Description

This is for creating an array with floating point numbers.
For integer numbers, please use JSON.CreateIntegerArray.

Examples

Creates number array:

```
MBS( "JSON.CreateDoubleArray"; 1; 2; 3)
```

Example result: [1, 2, 3]

See also

- 100.23 JSON.CreateIntegerArray 5272
- 100.29 JSON.CreateStringArray 5282
- 100.33 JSON.DeleteItemFromArray 5286
- 100.40 JSON.GetArrayItem 5297
- 100.54 JSON.GetType 5319

Created 18th August 2014, last changed 7th June 2017.

100.22 JSON.CreateFalse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateFalse")

Result Returns JSON code.

Description

As we pass JSON in JSON around, you can simply write "false" directly instead of calling one of this functions.

Examples

Creates false:

MBS("JSON.CreateFalse")

Example result: false

See also

- 100.24 JSON.CreateNull 5273
- 100.31 JSON.CreateTrue 5284
- 100.32 JSON.CreateValue 5285

Created 18th August 2014, last changed 11st December 2016.

100.23 JSON.CreateIntegerArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.3	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.CreateIntegerArray" { ; values } )
```

Parameters

values

Optional

Optional parameters for the array values. Pass one parameter per item to be added to the array.

1

Result Returns JSON code.

Description

For floating point numbers, please use `JSON.CreateDoubleArray`.

Examples

Creates number array:

```
MBS( "JSON.CreateIntegerArray"; 1; 2; 3)
```

Example result: [1, 2, 3]

Adds an item to the object with an integer array:

```
MBS( "JSON.AddItemToObject"; " { } "; "test"; MBS( "JSON.CreateIntegerArray"; 1; 2; 3 ) )
```

Example result: {

```
"test": [ 1, 2, 3 ]
```

```
}
```

See also

- [100.7 JSON.AddItemToObject](#) 5244
- [100.21 JSON.CreateDoubleArray](#) 5270
- [100.29 JSON.CreateStringArray](#) 5282

100.23.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr8](#)

Created 26th August 2014, last changed 11st December 2016.

100.24 JSON.CreateNull

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateNull")

Result Returns JSON code which is "null" text.

Description

As we pass JSON in JSON around, you can simply write "null" directly instead of calling one of this functions.

Examples

Creates NULL node:

```
MBS("JSON.CreateNull")
```

Example result: null

See also

- 100.19 JSON.CreateBool 5268
- 100.22 JSON.CreateFalse 5271
- 100.25 JSON.CreateNumber 5274
- 100.31 JSON.CreateTrue 5284
- 100.32 JSON.CreateValue 5285

Created 18th August 2014, last changed 11st December 2016.

100.25 JSON.CreateNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateNumber"; value)

Parameters

value

The number value.

123.4

Result Returns JSON code.

Description

Version 10.0 or newer preserve formatting if you pass a text with a number containing digits with optionally one dot and one minus.

Examples

Creates a number:

```
MBS( "JSON.CreateNumber"; 123 )
```

Example result: 123

Create big number:

```
MBS( "JSON.CreateNumber"; 12063660878882855000013426248015578834577 )
```

Pass through vs. number parsing:

```
MBS( "JSON.CreateNumber"; "123.5" ) & §& MBS( "JSON.CreateNumber"; 123,5 )
// in German with comma as separator second one is parsed as double precision value.
```

Example result: 123.5

123.500000

See also

- 100.6 JSON.AddItemToArray 5242
- 100.9 JSON.AddNumberToArray 5249
- 100.24 JSON.CreateNull 5273

Example Databases

- [JavaScript/CoordinatDistance](#)

100.25.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.6pr1](#)
- [MBS FileMaker Plugin, version 7.6pr1](#)

Created 18th August 2014, last changed 27th November 2019.

100.26 JSON.CreateObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateObject")

Result Returns JSON code.

Description

Examples

Creates empty object:

```
MBS( "JSON.CreateObject" )
```

Example result: { }

Build nested objects:

```
Set Variable [ $j1; MBS( "JSON.CreateObject" ) ]
Set Variable [ $j2; MBS( "JSON.AddStringToObject"; $j1; "name"; "" ) ]
Set Variable [ $j3; MBS( "JSON.AddStringToObject"; $j2; "record_type"; "MX" ) ]
Display Dialog [ "JSON"; $j3 ]
Set Variable [ $j4; MBS( "JSON.CreateObject" ) ]
Set Variable [ $j5; MBS( "JSON.AddItemToObject"; $j4; "record"; $j3 ) ]
Display Dialog [ "JSON"; $j4 ]
```

See also

- [100.7 JSON.AddItemToObject](#) 5244
- [100.12 JSON.AddStringToObject](#) 5255
- [100.18 JSON.CreateArrayRef](#) 5265
- [100.27 JSON.CreateObjectRef](#) 5278
- [100.46 JSON.GetObjectItem](#) 5306
- [106.95 MapView.Snapshot](#) 5746

Example Databases

- [JSON/JSON Test](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

100.26.1 **Blog Entries**

- [Generate JSON with MBS Plugin](#)

Created 18th August 2014, last changed 11st December 2016.

100.27 JSON.CreateObjectRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.0	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.CreateObjectRef" )
```

Result Returns reference number or error.

Description

Please use JSON.Release later to free the json object.

You can pass the reference number to all MBS JSON functions instead of JSON text.

Examples

Try object reference functions:

```
# create object reference
$ref = MBS( "JSON.CreateObjectRef" )
# add some texts
$r = MBS("JSON.AddStringToObject"; $ref; "FirstName"; "Joe"; "LastName"; "Miller")
# add some number
$r = MBS("JSON.AddNumberToObject"; $ref; "Age"; 50)
# add a true value:
$r = MBS( "JSON.AddTrueToObject"; $ref; "married" )
# get the text
$text = MBS( "JSON.Format"; $ref)
# free memory
$r = MBS( "JSON.release"; $ref)
```

Create JSON with values in fields on current layout:

```
Let ( [
// Create object as reference
j = MBS( "JSON.CreateObjectRef" );
// List fields in current layout
fields = FieldNames ( get(FileName) ; get(LayoutName) );
// how many?
c = ValueCount ( fields );
// make a loop to add field values
r = While ( i = 1 ; i < c ; [ name = GetValue ( fields ; i ); r = MBS( "JSON.AddItemToObject"; j; name;
MBS( "JSON.CreateValue"; GetField ( name ) ); i = i + 1 ] ; i );
// format the result
text = MBS( "JSON.Format"; j );
// free json
r = MBS( "JSON.Release"; j )
];
// return result as text
text )
```

```
Example result: {
  "First": "John",
  "Last": "Miller",
  "Group": "",
  "Company": "Some Ltd.",
  "ID": 12
}
```

Create complex JSON:

```
Set Variable [ $a ; Value: MBS( "JSON.CreateArrayRef" ) ]
#
# first entry
Set Variable [ $o ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $o; "FieldType"; 11 ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNullToObject"; $o; "FieldName" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddStringToObject"; $o; "Value"; "Julien" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddBooleanToObject"; $o; "EmptyMatch"; False ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddItemToArray"; $a; $o ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $o ) ]
#
# second entry
Set Variable [ $o ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $o; "FieldType"; 23 ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNullToObject"; $o; "FieldName" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddStringToObject"; $o; "Value"; "Stadel" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddBooleanToObject"; $o; "EmptyMatch"; False ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddItemToArray"; $a; $o ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $o ) ]
#
# surrounding object
Set Variable [ $o ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddItemToObject"; $o; "Data"; $a ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $o; "Id"; 123 ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $a ) ]
#
# put in final object
Set Variable [ $j ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddItemToObject"; $j; "Address"; $o ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $o ) ]
#
Set Field [ JSON::JSON ; MBS("JSON.Colorize"; MBS("JSON.Format"; $j)) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $j ) ]
```

```
Example result: {
  "Address": {
    "Data": [
      {
```

```

"FieldType": 11,
"FieldName": null,
"Value": "Julien",
"EmptyMatch": false
},
{
"FieldType": 23,
"FieldName": null,
"Value": "Stadel",
"EmptyMatch": false
}
],
"Id": 123
}
}

```

See also

- 100.4 JSON.AddBooleanToObject 5238
- 100.6 JSON.AddItemToArray 5242
- 100.7 JSON.AddItemToObject 5244
- 100.8 JSON.AddNullToObject 5247
- 100.10 JSON.AddNumberToObject 5251
- 100.13 JSON.AddTrueToObject 5258
- 100.15 JSON.Colorize 5261
- 100.17 JSON.CreateArray 5264
- 100.18 JSON.CreateArrayRef 5265
- 106.95 MapView.Snapshot 5746

Example Databases

- [Mac and iOS/MapKit/MapKit Snapshots](#)

100.27.1 Blog Entries

- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 5th January 2016, last changed 20th November 2019.

100.28 JSON.CreateString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateString"; Text)

Parameters

Text

The text to use.

"Hello World"

Result Returns JSON code.

Description

The text is escaped.

Examples

Creates new text node:

MBS("JSON.CreateString"; "Hello World")

Example result: "Hello World"

See also

- [61.142 CURL.Perform](#) 1954
- [61.270 CURL.SetOptionPost](#) 2153
- [98.5 JS.CallFunction](#) 5188
- [100.11 JSON.AddStringToArray](#) 5253
- [100.29 JSON.CreateStringArray](#) 5282
- [100.30 JSON.CreateStringArrayWithList](#) 5283

Example Databases

- [JavaScript/JavaScript](#)
- [JSON/JSON Benchmark](#)
- [JSON/JSON Test](#)

100.28.1 Blog Entries

- [Using CURL with Rosette web service](#)

Created 18th August 2014, last changed 11st December 2016.

100.29 JSON.CreateStringArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateStringArray" { ; values })

Parameters

values

Optional

Optional parameters for the array values. Pass one parameter per item to be added to the array.
"Hello"

Result Returns JSON code.

Description

Examples

Creates string array:

MBS("JSON.CreateStringArray"; "Hello"; "World")

Example result: ["Hello", "World"]

See also

- [100.21 JSON.CreateDoubleArray](#) 5270
- [100.23 JSON.CreateIntegerArray](#) 5272
- [100.28 JSON.CreateString](#) 5281
- [100.30 JSON.CreateStringArrayWithList](#) 5283

Example Databases

- [JSON/JSON Test](#)

Created 18th August 2014, last changed 11st December 2016.

100.30 JSON.CreateStringArrayWithList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.1	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateStringArrayWithList"; valueList)

Parameters**valueList**

List of values separated by return character.

"Hello\$World"

Result Returns JSON code or error.

Description**Examples**

Create a list:

MBS("JSON.CreateStringArrayWithList"; "Hello\$World\$Test")

See also

- 100.28 JSON.CreateString 5281
- 100.29 JSON.CreateStringArray 5282

100.30.1 Blog Entries

- [MBS Filemaker Plugin, version 4.1pr5](#)

Created 18th August 2014, last changed 18th August 2014.

100.31 JSON.CreateTrue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateTrue")

Result Returns JSON code.

Description

As we pass JSON in JSON around, you can simply write "true" directly instead of calling one of this functions.

Examples

Creates false:

```
MBS( "JSON.CreateTrue"
```

Example result: true

See also

- 100.17 JSON.CreateArray 5264
- 100.19 JSON.CreateBool 5268
- 100.22 JSON.CreateFalse 5271
- 100.24 JSON.CreateNull 5273
- 100.32 JSON.CreateValue 5285

Created 18th August 2014, last changed 11st December 2016.

100.32 JSON.CreateValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	9.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.CreateValue"; Value)

Parameters

Value

The value to pass. Can be number, date, time, timestamp or text.

"Hello"

Result Returns JSON or error.

Description

Convenience function to either create text or number depending on FileMaker data type.

Examples

Create with number:

MBS("JSON.CreateValue"; 123)

Example result: 123

Create with string:

MBS("JSON.CreateValue"; "Hello" & §& "World" & char(9) & "test")

Example result: "Hello\rWorld\ttest"

See also

- 100.7 JSON.AddItemToObject 5244
- 100.22 JSON.CreateFalse 5271
- 100.24 JSON.CreateNull 5273
- 100.27 JSON.CreateObjectRef 5278
- 100.31 JSON.CreateTrue 5284

100.32.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr4](#)

Created 14th December 2018, last changed 14th December 2018.

100.33 JSON.DeleteItemFromArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.DeleteItemFromArray"; json; index)

Parameters

json

A JSON text or reference.

[1,2,3]

index

The zero based index of the value.

1

Result Returns JSON code.

Description

Returns the JSON reference number if called with reference number. Otherwise returns new JSON text.

Examples

Create array with numbers and delete last entry:

```
Let(
[
j = MBS( "JSON.CreateDoubleArray"; 1; 2; 3);
r = MBS( "JSON.DeleteItemFromArray"; j; MBS( "JSON.GetArraySize"; j )-1 )
];
r)
```

See also

- 100.21 JSON.CreateDoubleArray 5270
- 100.34 JSON.DeleteItemFromArray 5287
- 100.43 JSON.GetArraySize 5303

Created 18th August 2014, last changed 15th November 2019.

100.34 JSON.DeleteItemFromObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.DeleteItemFromObject"; json; name)

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

name

The name of the item.

```
"key"
```

Result Returns JSON code.

Description

Returns the JSON reference number if called with reference number. Otherwise returns new JSON text.

Examples

Add and delete item:

```
Set Variable [ $json; Value:MBS( "JSON.Parse"; " { \"Hello\": \"World\" } " ) ]
Set Variable [ $r; Value:MBS( "JSON.AddBooleanToObject"; $json; "test"; 1 ) ]
Show Custom Dialog [ $json; MBS("JSON.Format"; $json) ]
Set Variable [ $r; Value:MBS( "JSON.DeleteItemFromObject"; $json; "test" ) ]
Show Custom Dialog [ $json; MBS("JSON.Format"; $json) ]
Set Variable [ $r; Value:MBS( "JSON.Release"; $json) ]
```

See also

- [100.4 JSON.AddBooleanToObject](#) 5238
- [100.33 JSON.DeleteItemFromArray](#) 5286
- [100.39 JSON.Format](#) 5295
- [100.65 JSON.Parse](#) 5333
- [100.66 JSON.Release](#) 5336

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 18th August 2014, last changed 15th November 2019.

100.35 JSON.EqualContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	10.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.EqualContent"; json1; json2)

Parameters

json1

A JSON text or reference.

```
{ "key": "value" }
```

json2

A JSON text or reference.

```
{ "key": "value" }
```

Result Returns 1, 0 or error.

Description

We compare recursively all nodes.

If structure and values are the same, we return 1, otherwise 0.

Objects do not need to have same order for entries.

While JSON.Equals checks the type, this function does check the content.

Examples

Compare 123 with text to it as number:

```
MBS( "JSON.EqualContent"; "\"123\""; "123")
```

Example result: 1

See also

- [100.36 JSON.Equals](#)

5289

100.35.1 Blog Entries

- [The new JSON.EqualContent function](#)
- [MBS FileMaker Plugin, version 10.0pr8](#)

Created 10th January 2020, last changed 10th January 2020.

100.36 JSON.Equals

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	9.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Equals"; json1; json2)

Parameters

json1

A JSON text or reference.

```
{ "key": "value" }
```

json2

A JSON text or reference.

```
{ "key": "value" }
```

Result Returns 1, 0 or error.

Description

We compare recursively all nodes.

If structure and values are the same, we return 1, otherwise 0.

Objects do not need to have same order for entries.

Examples

Compare two numbers:

```
MBS( "JSON.Equals"; 1; 1 )
```

Example result: 1

Comparing strings:

```
MBS( "JSON.Equals"; "\"Hello\""; "\"World\"" ) &
MBS( "JSON.Equals"; "\"Hello\""; "\"Hello\"" )
```

Example result: 01

Comparing booleans:

```
MBS( "JSON.Equals"; true; true ) &
MBS( "JSON.Equals"; false; false ) &
MBS( "JSON.Equals"; true; false ) &
MBS( "JSON.Equals"; false; true )
```

Example result: 1100

Compare objects:

```
MBS( "JSON.Equals"; " { \"key\": \"value\" } "; " { \"key\": \"value\" } " ) & MBS( "JSON.Equals"; "
{ \"key\": \"value\" } "; " { \"key\": \"Value\" } " )
```

5290

CHAPTER 100. JSON

Example result: 10

See also

- 100.35 JSON.EqualContent 5288

100.36.1 Blog Entries

- [The new JSON.EqualContent function](#)

Created 14th December 2018, last changed 20th February 2020.

100.37 JSON.FindValueInArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	9.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.FindValueInArray"; json; find { ; byContent })

Parameters**json**

A JSON text or reference.

```
{ "key": "value" }
```

find

A JSON text or reference to find.

```
{ "key": "value" }
```

byContent

Optional

Compare JSON by content, so number can be found via text. Default is 0, so type counts first.

1

Result Returns index or error.

Description

Returns zero based index or -1 if not found.

Version 10.0 or newer finds optionally by content, so number can be found via text.

Examples

Find value in an array of numbers:

```
MBS( "JSON.FindValueInArray"; " [ 5,6,7,1,4,3,7 ] "; 3)
```

Example result: 5

Find text:

```
MBS( "JSON.FindValueInArray"; " [ \"Hello\", \"World\", \"Test\" ] "; "\"World\"")
```

Example result: 1

Find objects:

```
MBS( "JSON.FindValueInArray"; " [ { \"Hello\":123 } , { \"World\":234 } , { \"Test\":345 } ] "; " { \"World\":234 } ")
```

Example result: 1

See also

- 100.38 JSON.FindValueInObjectArray

100.37.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr8](#)
- [MBS FileMaker Plugin, version 8.6pr4](#)

Created 14th December 2018, last changed 10th January 2020.

100.38 JSON.FindValueInObjectArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	9.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.FindValueInObjectArray"; json; Label; find { ; byContent })

Parameters

json

A JSON text or reference.

" [{ \"key\": 1 }] "

Label

The label for the value in the object to compare.

"key"

find

A JSON text or reference to find.

1

byContent

Optional

Compare JSON by content, so number can be found via text. Default is 0, so type counts first.

1

Result Returns index or error.

Description

Returns zero based index or -1 if not found.

We look into each object in the array, check if it has a value for the given label and compare that to the one to find.

Version 10.0 or newer finds optionally by content, so number can be found via text.

Examples

Find item:

MBS("JSON.FindValueInObjectArray"; " [{ \"key\": 1 }] "; "key"; 1)

Example result: 0

See also

- 100.37 JSON.FindValueInArray

5291

100.38.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr8](#)

- [MBS FileMaker Plugin, version 8.6pr4](#)

Created 14th December 2018, last changed 10th January 2020.

100.39 JSON.Format

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.4	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Format"; json)

Parameters

json

A JSON text or reference.

" [1,2,3] "

Result Returns JSON code.

Description

Examples

Format some object:

```
Set Variable [ $json; Value:MBS( "JSON.Format"; " { \"Hello\": \"World\" } " ) ]
Show Custom Dialog [ $json ]
```

Parse some JSON, display it formatted and release:

```
Set Variable [ $json; Value:MBS( "JSON.Parse"; " { \"Hello\": \"World\" } " ) ]
Show Custom Dialog [ $json; MBS("JSON.Format"; $json) ]
Set Variable [ $r; Value:MBS( "JSON.Release"; $json) ]
```

See also

- 54.14 CNContact.JSON 1544
- 54.50 CNContactStore.NewContact 1590
- 100.4 JSON.AddBooleanToObject 5238
- 100.7 JSON.AddItemToObject 5244
- 100.9 JSON.AddNumberToArray 5249
- 100.18 JSON.CreateArrayRef 5265
- 100.34 JSON.DeleteItemFromObject 5287
- 100.65 JSON.Parse 5333
- 100.66 JSON.Release 5336
- 106.95 MapView.Snapshot 5746

Example Databases

- [Barcode/Barcode Generation JSON](#)
- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)
- [Files/Audio File Tags](#)
- [JSON/JSON Benchmark](#)
- [JSON/JSON Colored](#)
- [Mac and iOS/Contacts/Contacts](#)
- [Mac and iOS/MapKit/MapKit Snapshots](#)
- [Network/Bonjour](#)

100.39.1 Blog Entries

- [With JSON in excellent form](#)
- [MBS FileMaker Plugin, version 9.4pr1](#)
- [Fun with While function in FileMaker](#)
- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [Colorize JSON or XML in FileMaker with line numbers](#)
- [MBS Filemaker Plugin, version 4.4pr6](#)

Created 18th October 2014, last changed 10th February 2016.

100.40 JSON.GetArrayItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetArrayItem"; json; index { ; AsReference })

Parameters

json

A JSON text or reference.

" [1,2,3] "

index

The index of the array element.

0

AsReference

Optional

Whether to return a reference number (1) instead of the JSON text (0). Default is 0 for JSON text.

0

Result Returns JSON code.

Description

Index is zero based.

Examples

Create array and pick second item:

```
Let(
[
j = MBS( "JSON.CreateDoubleArray"; 1; 2; 3);
r = MBS( "JSON.GetArrayItem"; j; 1 )
];
r)
```

See also

- 100.21 JSON.CreateDoubleArray 5270
- 100.41 JSON.GetArrayItemsAsList 5299
- 100.42 JSON.GetArrayPathItems 5301
- 100.43 JSON.GetArraySize 5303

Example Databases

- [CURL/Email/IMAP Email List](#)

- [CURL/Email/IMAP Email](#)
- [CURL/WebServices/WeatherBit.io test](#)
- [JSON/JSON Order Parsing](#)
- [JSON/JSON Test](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)
- [Mac only/ImageCapture/Camera Import](#)

100.40.1 Blog Entries

- [Face detection via CoreImage in FileMaker](#)

Created 18th August 2014, last changed 3th February 2016.

100.41 JSON.GetArrayItemsAsList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.2	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.GetArrayItemsAsList"; json { ; ReturnValues } )
```

Parameters

json

A JSON text or reference.

```
" [ 1,2,3 ] "
```

ReturnValues

Optional

Available in MBS FileMaker Plugin 8.1 or newer.

Pass 1 to return values instead of keeping strings in quotes.

1

Result Returns list or error.

Description

Intended for arrays containing text or numbers.

Broken in version 6.0. Please use 6.1. Version 6.5 and newer doesn't add an extra newline any more.

Examples

Query a list from JSON array:

```
MBS( "JSON.GetArrayItemsAsList"; " [ 1,2,3 ] " )
```

Now a list of strings:

```
MBS( "JSON.GetArrayItemsAsList"; " [ \"Hello\", \"World\", \"Test\" ] " )
```

Now an array with objects:

```
MBS( "JSON.GetArrayItemsAsList"; " [ \"Hello\", \"World\", { \"Hello\": \"test\" } ] " )
```

See also

- 100.40 JSON.GetArrayItem

5297

100.41.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)
- [MBS FileMaker Plugin, version 8.1pr1](#)

- [MBS FileMaker Plugin, version 6.5pr8](#)
- [MBS FileMaker Plugin, version 6.1pr1](#)
- [MBS FileMaker Plugin, version 5.2pr2](#)
- [MBS Filemaker Plugin, version 4.2pr4](#)

Created 18th August 2014, last changed 30th January 2018.

100.42 JSON.GetArrayPathItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	7.1	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.GetArrayPathItems"; json; Path { ; AsValue } )
```

Parameters

json

A JSON text or reference.

```
" { \"people\": [ { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } ] } "
```

Path

The path through the json hierarchy as list. For object, pass name of item to choose. For array pass index.
"people\$0\$last"

AsValue

Optional

Pass 1 to return as value, e.g. text or number. Pass 0 (or nothing) to return as JSON.

Result Returns OK or error.

Description

The path describes the way through the hierarchy to find the JSON node to return.

Result can be JSON or the value.

Examples

Query all test values in objects in array:

```
MBS("JSON.GetArrayPathItems"; JSON Test::JSON; "test")
```

Lookup items in array:

```
MBS( "JSON.GetArrayPathItems"; " [ { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } , { \"first\": \"Peter\", \"last\": \"Miller\", \"city\": \"New York\" } ] "; "first"; 0 )
```

Example result: "Christian"

"Peter"

Lookup item values in array:

```
MBS( "JSON.GetArrayPathItems"; " [ { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } , { \"first\": \"Peter\", \"last\": \"Miller\", \"city\": \"New York\" } ] "; "first"; 1 )
```

Example result: Christian

Peter

See also

- 100.40 JSON.GetArrayItem

100.42.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

Created 27th January 2017, last changed 28th June 2017.

100.43 JSON.GetArraySize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetArraySize"; json)

Parameters

json

A JSON text or reference.

" [1,2,3] "

Result Returns number of array entries.

Description

Examples

Checks number of array elements:

MBS("JSON.GetArraySize"; " [1, 2, 3, 4] ")

See also

- [100.33 JSON.DeleteItemFromArray](#) 5286
- [100.40 JSON.GetArrayItem](#) 5297
- [100.65 JSON.Parse](#) 5333

Example Databases

- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)
- [JSON/JSON Benchmark](#)
- [JSON/JSON Order Parsing](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac only/ImageCapture/Camera Import](#)

100.43.1 Blog Entries

- [Sum up values in JSON with MBS FileMaker Plugin](#)
- [Face detection via CoreImage in FileMaker](#)

Created 18th August 2014, last changed 3th February 2016.

100.44 JSON.GetDoubleValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetDoubleValue"; json)

Parameters

json

A JSON text or reference.

"3.4"

Result Returns the value.

Description

Examples

Queries double value:

MBS("JSON.GetDoubleValue"; "3.4")

See also

- 100.55 JSON.GetValue

5320

Created 18th August 2014, last changed 3th February 2016.

100.45 JSON.GetIntegerValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetIntegerValue"; json)

Parameters

json

A JSON text or reference.

" [1,2,3] "

Result Returns the value.

Description

Examples

Queries integer value:

MBS("JSON.GetIntegerValue"; "3")

Created 18th August 2014, last changed 3th February 2016.

100.46 JSON.GetObjectItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.GetObjectItem"; json; name { ; AsReference } )
```

Parameters

json

A JSON text or reference.

```
" [ 1,2,3 ] "
```

name

The name of the key to query.

```
"test"
```

AsReference

Optional

Whether to return a reference number (1) instead of the JSON text (0). Default is 0 for JSON text.

```
0
```

Result Returns JSON code.

Description

You still need functions like `JSON.GetStringValue` to get back the decoded string.

Examples

Create object, add content and pick value:

```
Let(
[
j = MBS( "JSON.CreateObject" );
j = MBS( "JSON.AddStringToObject"; j; "hello"; "world" );
r = MBS( "JSON.GetObjectItem"; j; "hello" )
];
r)
```

Pick a text from a JSON dictionary:

```
set $json to " { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } "
set $first to MBS("JSON.GetObjectItem"; $json; "first")
set $firstText to MBS("JSON.GetStringValue"; $first)
display dialog $firstText
```

Extract error details from JSON:

```
# JSON in field:
# {
# "error": {
```

```

# "message": "Your card's expiration year is invalid.",
# "type": "card_error",
# "param": "exp_year",
# "code": "invalid_expiry_year"
# }
# }
# get it in variable
Set Variable [ $json; Value:test::input ]
# pick error node
Set Variable [ $error; Value:MBS("JSON.GetObjectItem"; $json; "error") ]
If [ $error = "" ]
Show Custom Dialog [ "No error"; "No error node in the JSON." ]
Else
# get message node
Set Variable [ $message; Value:MBS("JSON.GetObjectItem"; $error; "message") ]
# decode text
Set Variable [ $messageText; Value:MBS("JSON.GetStringValue"; $message) ]
# get code node
Set Variable [ $code; Value:MBS("JSON.GetObjectItem"; $error; "code") ]
# decode text
Set Variable [ $codeText; Value:MBS("JSON.GetStringValue"; $code) ]
# show result
Show Custom Dialog [ "Got error"; "Message: " & $messageText & §& "Code: " & $codeText ]
End If

```

See also

- 100.12 *JSON.AddStringToObject* 5255
- 100.26 *JSON.CreateObject* 5276
- 100.47 *JSON.GetObjectItemTree* 5309
- 100.48 *JSON.GetObjectItemTreeRef* 5310
- 100.49 *JSON.GetObjectName* 5311
- 100.51 *JSON.GetObjectSize* 5313
- 100.53 *JSON.GetStringValue* 5317

Example Databases

- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)
- [CURL/WebServices/TinyURL](#)
- [CURL/WebServices/WeatherBit.io test](#)

- [JSON/JSON Order Parsing](#)
- [JSON/JSON Test](#)

Created 18th August 2014, last changed 3th February 2016.

100.47 JSON.GetObjectItemTree

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	3.2	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetObjectItemTree"; json; names)

Parameters

json

A JSON text or reference.

" [1,2,3] "

names

The names for keys to query. Pass several parameters to go down an object tree. For arrays you can pass index.

"test"

Result Returns JSON or error.

Description

You still need functions like JSON.GetStringValue to get back the decoded string.

Works also for arrays where you pass in index.

Examples

Query properties object and inside it the lastname object and there the value property:

```
MBS("JSON.GetObjectItemTree"; JSON Test::JSON; "properties"; "lastname"; "value")
```

Look into object tree, pick addresses, first address, than value and there the content of street:

```
MBS("JSON.GetStringValue"; MBS( "JSON.GetObjectItemTree"; test::JSON ; "addresses"; 0; "value"; "streetAddress" ))
```

See also

- 100.46 JSON.GetObjectItem 5306
- 100.48 JSON.GetObjectItemTreeRef 5310
- 100.53 JSON.GetStringValue 5317

100.47.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr7](#)
- [MBS Filemaker Plugin, version 3.2pr8](#)

Created 18th August 2014, last changed 3th February 2016.

100.48 JSON.GetObjectItemTreeRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetObjectItemTreeRef"; json; names)

Parameters

json

A JSON text or reference.

" [1,2,3] "

names

The names for keys to query. Pass several parameters to go down an object tree. For arrays you can pass index.

"test"

Result Returns reference number or error.

Description

You still need functions like JSON.GetStringValue to get back the decoded string.

Works also for arrays where you pass in index.

Same as JSON.GetObjectItemTree, but returns reference number.

See also

- 100.46 JSON.GetObjectItem 5306
- 100.47 JSON.GetObjectItemTree 5309
- 100.53 JSON.GetStringValue 5317

Created 7th January 2016, last changed 3th February 2016.

100.49 JSON.GetObjectName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetObjectName"; json; index)

Parameters

json

A JSON text or reference.

" { \"a\": \"b\", \"c\": \"d\" } "

index

The index of the item to get the name from. From 0 to JSON.GetObjectSize-1.

0

Result Returns name of item.

Description

Examples

Gets first object item's name:

MBS("JSON.GetObjectName"; " { \"a\": \"b\", \"c\": \"d\" } "; 0)

See also

- 100.46 JSON.GetObjectItem 5306
- 100.50 JSON.GetObjectNameList 5312
- 100.51 JSON.GetObjectSize 5313

100.49.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 3th February 2016.

100.50 JSON.GetObjectNameList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.0	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.GetObjectNameList"; json )
```

Parameters

json

A JSON text or reference.

```
" { \"a\": \"b\", \"c\": \"d\" } "
```

Result Returns name of items as list.

Description

Examples

Gets first object item's name:

```
MBS( "JSON.GetObjectNameList"; " { \"a\": \"b\", \"c\": \"d\" } " )
// return a and b as list.
```

See also

- [100.49 JSON.GetObjectName](#)

5311

100.50.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr7](#)

Created 18th August 2014, last changed 3th February 2016.

100.51 JSON.GetObjectSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetObjectSize"; json)

Parameters

json

A JSON text or reference.

" { \"a\": \"b\", \"c\": \"d\" } "

Result Returns number of object entries.

Description

Examples

Checks number of object elements:

MBS("JSON.GetObjectSize"; " { \"a\": \"b\", \"c\": \"d\" } ")

Example result: 2

See also

- 100.46 JSON.GetObjectItem 5306
- 100.49 JSON.GetObjectName 5311

100.51.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 11st December 2016.

100.52 JSON.GetPathItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.1	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.GetPathItem"; json; Path { ; Flags } )
```

Parameters

json

A JSON text or reference.

```
" { \"people\": [ { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } ] } "
```

Path

The path through the json hierarchy as list. For object, pass name of item to choose. For array pass index. "people\$0\$last"

Flags

Optional

Pass 1 to return as value, e.g. text or number. Pass 0 (or nothing) to return as JSON.

Add 2 to return empty in case of error, e.g. value not existing. (new in 7.5)

Result Returns value or error.

Description

The path describes the way through the hierarchy to find the JSON node to return.

Result can be JSON or the value.

If path ends with # in an array, we return number of elements.

Examples

Query people ->first entry:

```
MBS( "JSON.GetPathItem"; " { \"people\": [ { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } ] } "; "people$0")
```

Query people ->first entry ->last name:

```
MBS( "JSON.GetPathItem"; " { \"people\": [ { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } ] } "; "people$0$last")
```

Query people:

```
MBS( "JSON.GetPathItem"; " { \"people\": [ { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } ] } "; "people")
```

Query IP via ipinfo.io:

Go to Layout ["Table"]

New Record/Request

```

# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "http://ipinfo.io") ]
# RUN now
Set Variable [ $result; Value:MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ Table::DebugLog; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ Table::Result; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
If [ $result = "OK" ]
# Check HTTP error code
Set Variable [ $response; Value:MBS("CURL.GetResponseCode"; $curl) ]
If [ $response = 200 ]
# Query values from JSON
Set Variable [ $json; Value:MBS( "JSON.Parse"; Table::Result ) ]
Set Field [ Table::IP; MBS("JSON.GetPathItem"; $json; "ip"; 1) ]
Set Field [ Table::Hostname; MBS("JSON.GetPathItem"; $json; "hostname"; 1) ]
Set Field [ Table::City; MBS("JSON.GetPathItem"; $json; "city"; 1) ]
Set Field [ Table::Region; MBS("JSON.GetPathItem"; $json; "region"; 1) ]
Set Field [ Table::Country; MBS("JSON.GetPathItem"; $json; "country"; 1) ]
Set Field [ Table::Location; MBS("JSON.GetPathItem"; $json; "loc"; 1) ]
Set Field [ Table::Company or Provider; MBS("JSON.GetPathItem"; $json; "org"; 1) ]
Set Variable [ $r; Value:MBS( "JSON.Release"; $json ) ]
End If
End If
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
Commit Records/Requests [ No dialog ]

```

Query number of entries in array:

```
MBS( "JSON.GetPathItem"; " { \"IDs\": [ 1,5,8,2,5 ] } "; "IDs$# ")
```

Example result: 5

See also

- 59.13 CoreML.PredictionFromFeatures 1727
- 61.9 CURL.Cleanup 1772
- 61.44 CURL.GetDebugAsText 1831
- 61.111 CURL.GetResponseCode 1905
- 61.139 CURL.New 1947
- 61.142 CURL.Perform 1954
- 61.370 CURL.SetOptionURL 2288

- 100.65 JSON.Parse 5333
- 100.70 JSON.SetPathItem 5341
- 115.1 MetaDataQuery.AttributesForFile 6031

Example Databases

- [CURL/CURL FMS Admin API](#)
- [CURL/WebServices/AdobeSign WebService](#)
- [CURL/WebServices/CURL FMS Admin API v17](#)
- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [CURL/WebServices/Query IP and Country](#)
- [CURL/WebServices/WeatherBit.io test](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Mac and iOS/Machine Learning/CoreML](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

100.52.1 Blog Entries

- [Sum up values in JSON with MBS FileMaker Plugin](#)
- [Query URL from downloaded file](#)
- [MBS FileMaker Plugin, version 8.1pr6](#)
- [MBS FileMaker Plugin, version 7.5pr5](#)
- [Face detection via CoreImage in FileMaker](#)
- [Query geolocation in FileMaker via MBS Plugin and Google Maps API](#)

Created 3th February 2016, last changed 18th July 2019.

100.53 JSON.GetStringValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.GetStringValue"; json )
```

Parameters

json

A JSON text or reference.

" [1,2,3] "

Result Returns text.

Description

Examples

Get string value:

```
MBS( "JSON.GetStringValue"; "\"Hello\rjust a test\"" )
```

Example result: Hello

just a test

Extract error details from JSON:

```
# JSON in field:
# {
# "error": {
# "message": "Your card's expiration year is invalid.",
# "type": "card_error",
# "param": "exp_year",
# "code": "invalid_expiry_year"
# }
# }
# get it in variable
Set Variable [ $json; Value:test::input ]
# pick error node
Set Variable [ $error; Value:MBS("JSON.GetObjectItem"; $json; "error") ]
If [ $error = "" ]
Show Custom Dialog [ "No error"; "No error node in the JSON." ]
Else
# get message node
Set Variable [ $message; Value:MBS("JSON.GetObjectItem"; $error; "message") ]
# decode text
Set Variable [ $messageText; Value:MBS("JSON.GetStringValue"; $message) ]
# get code node
Set Variable [ $code; Value:MBS("JSON.GetObjectItem"; $error; "code") ]
# decode text
```

```
Set Variable [ $codeText; Value:MBS("JSON.GetStringValue"; $code) ]
# show result
Show Custom Dialog [ "Got error"; "Message: " & $messageText & $& "Code: " & $codeText ]
End If
```

Decode string with unicode text:

```
MBS( "JSON.GetStringValue"; "\"Hello \u00e4\"" )
```

See also

- [100.46 JSON.GetObjectItem](#) 5306
- [100.47 JSON.GetObjectItemTree](#) 5309
- [100.48 JSON.GetObjectItemTreeRef](#) 5310
- [100.55 JSON.GetValue](#) 5320

Example Databases

- [CURL/WebServices/TinyURL](#)
- [JSON/JSON Order Parsing](#)
- [JSON/JSON Test](#)

Created 18th August 2014, last changed 17th February 2017.

100.54 JSON.GetType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	2.7	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetType"; json)

Parameters

json

A JSON text or reference.

" [1,2,3] "

Result Returns type: false, true, null, string, array, object or number.

Description

Examples

Creates array and queries type:

MBS("JSON.GetType"; MBS("JSON.CreateDoubleArray"; 1; 2; 3))

Example result: array

Query type of value:

MBS("JSON.GetType"; 123)

Example result: number

Query type of value:

MBS("JSON.GetType"; " [] ")

Example result: array

See also

- 100.21 JSON.CreateDoubleArray

5270

Created 18th August 2014, last changed 11st December 2016.

100.55 JSON.GetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.1	Yes	Yes	Yes	Yes	Yes

MBS("JSON.GetValue"; json)

Parameters

json

A JSON text or reference.

"1.3"

Result Returns value or error.

Description

This is same as using JSON.GetDoubleValue or JSON.GetStringValue, but automatically detect type.

For boolean value return 0 or 1.

For object or array returns JSON text.

Numbers are returned as numbers.

Examples

Returns 5 for a numeric value:

MBS("JSON.GetValue"; "5")

Example result: 5

Returns text:

MBS("JSON.GetValue"; "\"Test JSON\"")

Example result: Test JSON

Returns 1 for boolean:

MBS("JSON.GetValue"; "true")

Example result: 1

See also

- 100.44 JSON.GetDoubleValue 5304
- 100.53 JSON.GetStringValue 5317

100.55.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr5](#)
- [MBS FileMaker Plugin, version 6.1pr2](#)

100.56 JSON.Import

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	5.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "JSON.Import"; JSON; InsertFileName { ; TableNamePrefix } )
```

Parameters

JSON

The JSON data to import. Please pass text, not reference numbers.

InsertFileName

The file name of where the insert table is inside. Can be empty.

Get(FileName)

TableNamePrefix

Optional

The prefix to put in front of all tables.

"Import"

Result Returns number or error.

Description

This function can import any JSON into FileMaker tables with all fields and attributes.

Returns number of records to be added. This function prefers the import and runs it later at idle time. In a script please call JSON.Import and then loop and do script pauses. Then use JSON.Import.Status to check regularly for updates. When you get back Finished as status, the script can continue with other work.

If you have a JSON file you need to import regularly into FileMaker and you have no XSLT to transform it for FileMaker, you can use this plugin function. On the first run, it creates for a sample JSON file the required tables and fields. Then you can define any layout or script to process values, e.g. copy into your tables. On further runs the plugin may add more fields (if newer JSON file has more fields) and import newer records.

All tables have three default fields. `_RecordUUID` is a unique identifier for the record. `_ParentRecordUUID` provides a link to the record one level higher in the JSON. This can be used to find child/parent records. The `_CreationTimeStamp` is the creation date, so you can distinguish different imports.

As a lot of records with a lot of data is imported and you may not need everything, you may want to put the imports in an extra FileMaker file. You decide if you clear tables before import or you want to keep history of all imports.

If the JSON has errors like a missing `<` in the JSON, you get an error. If you switch on IgnoreError parameter, the plugin reads everything until the error is reached which may give less records than possible.

This function works at idle time which is currently (FM 14) not supported on server.

Requires FileMaker 12 or newer.

On Server, please add a loop calling JSON.Import.Work to make progress.

See also XML.Import.SetBaseFields and XML.Import.SetExtraField.

Examples

Imports test.json into FileMaker:

```
Set Variable [ $text; Value:MBS("Text.ReadTextFile"; "/Users/cs/Desktop/test.json"; "UTF-8") ]
Set Variable [ $r; Value:MBS("JSON.Import"; $text; ""; "") ]
Set Variable [ $text; Value:"" ]
If [ MBS("IsError") = 0 ]
Set Variable [ $total; Value:MBS("JSON.Import.Total") ]
Loop
Set Variable [ $todo; Value:MBS("JSON.Import.TODO") ]
Pause/Resume Script [ Duration (seconds): 1 ]
Set Variable [ $s; Value:MBS("JSON.Import.Status") ]
Exit Loop If [ $s "Working" ]
End Loop
Show Custom Dialog [ "JSON Import"; $r & " " & $s ]
End If
```

Import script with progress bar for importing JSON with Windows ANSI encoding:

```
Go to Layout [ "JSON Import" (Import2Row) ]
Delete All Records [ No dialog ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetBottomText"; "") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetTopText"; "Importiere JSON") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetTitle"; "Import...") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetButtonCaption"; "Abbrechen") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetProgress"; -1) ]
Set Variable [ $r; Value:MBS("ProgressDialog.Show") ]
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $text; Value:MBS("Text.ReadTextFile"; "/Users/cs/Desktop/test.JSON"; "Windows") ]
Set Variable [ $r; Value:MBS("JSON.Import"; $text; ""; "Import2") ]
Set Variable [ $text; Value:"" ]
If [ MBS("IsError") = 0 ]
Set Variable [ $total; Value:MBS("JSON.Import.Total") ]
Loop
Set Variable [ $todo; Value:MBS("JSON.Import.TODO") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetProgress"; ($total - $todo) * 100 / $total) ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetBottomText"; "Schritt " & ($total - $todo) & " von " & $total) ]
Pause/Resume Script [ Duration (seconds): 1 ]
Set Variable [ $s; Value:MBS("JSON.Import.Status") ]
Exit Loop If [ $s "Working" ]
If [ MBS("ProgressDialog.GetCancel") = 1 ]
Set Variable [ $r; Value:MBS("ProgressDialog.Hide") ]
```

```

Set Variable [ $r; Value:MBS("JSON.Import.Cancel") ]
Exit Script [ ]
End If
End Loop
Set Variable [ $r; Value:MBS("ProgressDialog.Hide") ]
Show Custom Dialog [ "JSON Import"; $r & " " & $s ]
End If
Set Variable [ $r; Value:MBS("ProgressDialog.Hide") ]

```

See also

- 100.61 JSON.Import.TODO 5329
- 100.62 JSON.Import.Total 5330
- 130.4 ProgressDialog.GetCancel 6497
- 130.14 ProgressDialog.Hide 6508
- 130.17 ProgressDialog.SetButtonCaption 6513
- 130.25 ProgressDialog.SetProgress 6525
- 130.29 ProgressDialog.SetTopText 6533
- 130.30 ProgressDialog.Show 6535
- 191.12 XML.Import 9273
- 191.16 XML.Import.SetBaseFields 9280

Example Databases

- [JSON/JSON Import](#)

100.56.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

100.56.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 25
- Ausgabe 5/2018, Seite 24

100.57 JSON.Import.Cancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	5.4	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Import.Cancel")

Result Returns OK.

Description

See also

- [100.56 JSON.Import](#) 5322
- [100.62 JSON.Import.Total](#) 5330
- [191.13 XML.Import.Cancel](#) 9277

Example Databases

- [JSON/JSON Import](#)

Created 26th October 2015, last changed 26th October 2015.

100.58 JSON.Import.ErrorCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	9.3	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Import.ErrorCount")

Result Returns number or error.

Description

Should be zero if we had no errors while importing.

See also

- [100.59 JSON.Import.Errors](#) 5327
- [191.14 XML.Import.ErrorCount](#) 9278

100.58.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 18th June 2019, last changed 18th June 2019.

100.59 JSON.Import.Errors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	9.3	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Import.Errors")

Result Returns list or error.

Description

We remove duplicates, so you may not see all errors.

See also

- 100.58 JSON.Import.ErrorCount 5326
- 100.60 JSON.Import.Status 5328
- 100.63 JSON.Import.Work 5331
- 191.15 XML.Import.Errors 9279

100.59.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 18th June 2019, last changed 18th June 2019.

100.60 JSON.Import.Status

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	5.4	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Import.Status")

Result Returns status value.

Description

Returns Working, Finished or Unknown depending of the state.

So before first import, it is unknown. Than with first import it switches to working. Now when it's ready, you get back Finished.

See also

- [100.56 JSON.Import](#) 5322
- [100.59 JSON.Import.Errors](#) 5327
- [100.62 JSON.Import.Total](#) 5330
- [191.18 XML.Import.Status](#) 9282

Example Databases

- [JSON/JSON Import](#)

Created 26th October 2015, last changed 26th October 2015.

100.61 JSON.Import.TODO

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	5.4	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Import.TODO" { ; Selector })

Parameters

Selector

Optional

Which value to return. By default we return number of records to create. You can pass here "Tables" to get number of tables, "Fields" to get number of fields or "Records" to get number of records.

Result Returns number.

Description

See also

- [100.56 JSON.Import](#) 5322
- [100.62 JSON.Import.Total](#) 5330
- [100.63 JSON.Import.Work](#) 5331
- [191.19 XML.Import.TODO](#) 9283

Example Databases

- [JSON/JSON Import](#)

100.61.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 26th October 2015, last changed 10th November 2015.

100.62 JSON.Import.Total

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	5.4	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Import.Total")

Result Returns number.

Description

See also

- 100.56 JSON.Import 5322
- 100.57 JSON.Import.Cancel 5325
- 100.60 JSON.Import.Status 5328
- 100.61 JSON.Import.TODO 5329
- 100.63 JSON.Import.Work 5331
- 191.20 XML.Import.Total 9284

Example Databases

- [JSON/JSON Import](#)

Created 26th October 2015, last changed 26th October 2015.

100.63 JSON.Import.Work

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	5.4	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Import.Work")

Result Returns OK or error.

Description

Normally we do import on idle while a script pause. But on server this does not work.

You can call this method in a loop to do the inserts for the import.

But it will not create the tables and fields required for import.

See also

- 100.56 JSON.Import 5322
- 100.59 JSON.Import.Errors 5327
- 100.61 JSON.Import.TODO 5329
- 100.62 JSON.Import.Total 5330
- 191.21 XML.Import.Work 9285

100.63.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 10th November 2015, last changed 10th November 2015.

100.64 JSON.IsValid

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.3	Yes	Yes	Yes	Yes	Yes

MBS("JSON.IsValid"; JSON)

Parameters

JSON

The JSON text to parse.

" [1,2,3] "

Result Returns 1, 0 or error.

Description

This parses the JSON text and returns 1 on success or 0 on failure.

Examples

Checks validity:

MBS("JSON.IsValid"; " [1,2,3] ")

Example result: 1

Checks with error:

MBS("JSON.IsValid"; " [1,hello,3] ")

Example result: 0

100.64.1 Blog Entries

- [With JSON in excellent form](#)
- [MBS FileMaker Plugin, version 6.3pr4](#)

Created 23th June 2016, last changed 11st December 2016.

100.65 JSON.Parse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Parse"; JSON)

Parameters

JSON

The JSON text to parse.

" [1,2,3] "

Result Returns reference number or error.

Description

Please use JSON.Release later to free the json object.

You can pass the reference number to all MBS JSON functions instead of JSON text.

Examples

Parse an array:

```
# parse some json
$ref = MBS( "JSON.Parse"; " [ 1,2,3 ] " )
# query array size:
MBS( "JSON.GetArraySize"; $ref)
# free memory
MBS( "JSON.Release"; $ref)
```

Parse some JSON, display it formatted and release:

```
Set Variable [ $json; Value:MBS( "JSON.Parse"; " { \"Hello\": \"World\" } " ) ]
Show Custom Dialog [ $json; MBS("JSON.Format"; $json) ]
Set Variable [ $r; Value:MBS( "JSON.Release"; $json) ]
```

Query IP via ipinfo.io:

```
Go to Layout [ "Table" ]
New Record/Request
# Start new session
Set Variable [ $curl; Value:MBS("CURL.New") ]
# Set URL to load (HTTP, HTTPS, FTP, FTPS, SFTP, etc.)
Set Variable [ $result; Value:MBS("CURL.SetOptionURL"; $curl; "http://ipinfo.io") ]
# RUN now
Set Variable [ $result; Value:MBS("CURL.Perform"; $curl) ]
# Check result
Set Field [ Table::DebugLog; MBS("CURL.GetDebugAsText"; $curl) ]
Set Field [ Table::Result; MBS("CURL.GetResultAsText"; $curl; "UTF8") ]
If [ $result = "OK" ]
```

```

# Check HTTP error code
Set Variable [ $response; Value:MBS("CURL.GetResponseCode"; $curl) ]
If [ $response = 200 ]
# Query values from JSON
Set Variable [ $json; Value:MBS( "JSON.Parse"; Table::Result ) ]
Set Field [ Table::IP; MBS("JSON.GetPathItem"; $json; "ip"; 1) ]
Set Field [ Table::Hostname; MBS("JSON.GetPathItem"; $json; "hostname"; 1) ]
Set Field [ Table::City; MBS("JSON.GetPathItem"; $json; "city"; 1) ]
Set Field [ Table::Region; MBS("JSON.GetPathItem"; $json; "region"; 1) ]
Set Field [ Table::Country; MBS("JSON.GetPathItem"; $json; "country"; 1) ]
Set Field [ Table::Location; MBS("JSON.GetPathItem"; $json; "loc"; 1) ]
Set Field [ Table::Company or Provider; MBS("JSON.GetPathItem"; $json; "org"; 1) ]
Set Variable [ $r; Value:MBS( "JSON.Release"; $json ) ]
End If
End If
# Cleanup
Set Variable [ $result; Value:MBS("CURL.Cleanup"; $curl) ]
Commit Records/Requests [ No dialog ]

```

See also

- [61.9 CURL.Cleanup](#) 1772
- [61.111 CURL.GetResponseCode](#) 1905
- [61.121 CURL.GetResultAsText](#) 1926
- [61.139 CURL.New](#) 1947
- [61.142 CURL.Perform](#) 1954
- [61.370 CURL.SetOptionURL](#) 2288
- [100.4 JSON.AddBooleanToObject](#) 5238
- [100.34 JSON.DeleteItemFromObject](#) 5287
- [100.43 JSON.GetArraySize](#) 5303
- [100.66 JSON.Release](#) 5336

Example Databases

- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)
- [CURL/WebServices/Query IP and Country](#)
- [JSON/JSON Benchmark](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)

100.65.1 **Blog Entries**

- [JSON with large integers](#)
- [Face detection via CoreImage in FileMaker](#)
- [MBS FileMaker Plugin 6.0 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 5th January 2016, last changed 2nd September 2016.

100.66 JSON.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Release"; JSONRef)

Parameters

JSONRef

The JSON reference number.

\$json

Result Returns OK or error.

Description

Examples

Parse some JSON, display it formatted and release:

```
Set Variable [ $json; Value:MBS( "JSON.Parse"; " { \"Hello\": \"World\" } " ) ]
Show Custom Dialog [ $json; MBS("JSON.Format"; $json) ]
Set Variable [ $r; Value:MBS( "JSON.Release"; $json) ]
```

See also

- 61.142 [CURL.Perform](#) 1954
- 97.10 [Java.Release](#) 5173
- 100.4 [JSON.AddBooleanToObject](#) 5238
- 100.7 [JSON.AddItemToObject](#) 5244
- 100.9 [JSON.AddNumberToArray](#) 5249
- 100.18 [JSON.CreateArrayRef](#) 5265
- 100.34 [JSON.DeleteItemFromObject](#) 5287
- 100.39 [JSON.Format](#) 5295
- 100.65 [JSON.Parse](#) 5333
- 106.95 [MapView.Snapshot](#) 5746

Example Databases

- [CURL/Email/IMAP Email List](#)
- [CURL/Email/IMAP Email](#)

- [CURL/WebServices/Query IP and Country](#)
- [JSON/JSON Benchmark](#)
- [Mac and iOS/Machine Learning/Core Image Detection](#)
- [Mac and iOS/MapKit/MapKit Snapshots](#)
- [Mac only/ImageCapture/Camera Import](#)

100.66.1 Blog Entries

- [Fun with While function in FileMaker](#)
- [Face detection via CoreImage in FileMaker](#)
- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 5th January 2016, last changed 10th February 2016.

100.67 JSON.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.0	Yes	Yes	Yes	Yes	Yes

MBS("JSON.ReleaseAll")

Result Returns OK or error.

Description

After this call all reference numbers are invalid.

This is useful if you start a script which creates dozens of JSON reference numbers and you don't want to keep track of those IDs.

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

Examples

Release all JSON objects:

```
Set Variable [ $r; Value:MBS( "JSON.ReleaseAll" ) ]
```

See also

- 97.11 Java.ReleaseAll 5174
- 100.66 JSON.Release 5336
- 112.24 Menu.ReleaseAll 5888
- 163.29 TAPI.ReleaseAll 7756
- 191.30 XML.ReleaseAll 9300

Created 11st January 2016, last changed 9th January 2020.

100.68 JSON.ReplaceItemInArray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.3	Yes	Yes	Yes	Yes	Yes

MBS("JSON.ReplaceItemInArray"; json; index; json2)

Parameters**json**

A JSON text or reference.

" [1,2,3,4] "

index

The index of the array item.

2

json2

The new json item for the array.

5

Result Returns JSON code.

Description**Examples**

Replace a value in array:

MBS("JSON.ReplaceItemInArray"; " [1,2,3,4] "; 2; "5")

Example result: [1, 2, 5, 4]

See also

- 100.69 JSON.ReplaceItemInObject

5340

100.68.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr8](#)

Created 26th August 2014, last changed 11st December 2016.

100.69 JSON.ReplaceItemInObject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	4.3	Yes	Yes	Yes	Yes	Yes

MBS("JSON.ReplaceItemInObject"; json; name; json2)

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

name

The name of the Object property.

```
"key"
```

json2

The JSON text for the item.

```
"Hello"
```

Result Returns JSON code.

Description

Examples

Replace key with new Value:

```
MBS( "JSON.ReplaceItemInObject"; " { \"key\": \"value\" } "; "key"; "\"Hello\"" )
```

Example result: {

```
"key": "Hello"
```

```
}
```

See also

- [100.68 JSON.ReplaceItemInArray](#)

5339

100.69.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr8](#)

Created 26th August 2014, last changed 11st December 2016.

100.70 JSON.SetPathItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	6.1	Yes	Yes	Yes	Yes	Yes

MBS("JSON.SetPathItem"; json; Path; Value)

Parameters

json

A JSON text or reference.

" [1,2,3] "

Path

The path through the json hierarchy as list. For object, pass name of item to choose. For array pass index. For last array you can use special value "append" to add an entry.

"people\$0\$last"

Value

The new value as JSON.

"\"Hello\""

Result Returns JSON or error.

Description

The path describes the way through the hierarchy to find the JSON node to return.

Please pass in new value as JSON.

Version 9.2 automatically creates missing object/array entries. The value parameter will be treated as text if it is not a valid JSON instead of reporting an error.

Examples

Adds an entry with country:

```
MBS( "JSON.SetPathItem"; " { \"people\": [ { \"first\": \"Christian\", \"last\": \"Schmitz\", \"city\": \"Nickenich\" } ] } "; "people$0$country"; "\"Germany\"" )
```

```
Example result: {
  "people": [ {
    "first": "Christian",
    "last": "Schmitz",
    "city": "Nickenich",
    "country": "Germany"
  } ]
}
```

Sets an entry in an array:

```
MBS( "JSON.SetPathItem"; " [ 1,2,3 ] "; "1"; 5)
```

Example result: [1, 5, 3]

Adds an entry to array in object:

```
MBS( "JSON.SetPathItem"; " { \"test\": [ 1,2,3 ] } "; "test$append"; 5)
```

Example result: {
 "test": [1, 2, 3, 5]
}

Sets hierarchical item:

```
MBS( "JSON.SetPathItem"; " { } "; "Hello$World$Test"; "Hello" )
```

Example result: {
 "Hello": {
 "World": {
 "Test": "Hello"
 }
 }
}

Create missing array entries and add our new one:

```
MBS( "JSON.SetPathItem"; " [ ] "; "5"; "6th item" )
```

Example result: [null, null, null, null, null, 6]

See also

- 100.52 JSON.GetPathItem

5314

100.70.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr2](#)

100.70.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 20

Created 3th February 2016, last changed 3th April 2019.

100.71 JSON.Sort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	9.3	Yes	Yes	Yes	Yes	Yes

MBS("JSON.Sort"; json)

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

Result Returns JSON code.

Description

Examples

Sort an array of numbers:

```
MBS( "JSON.Sort"; " [ 9,4,3.2,3.1,123 ] " )
```

Sort text values:

```
MBS( "JSON.Sort"; " [ \"123\", \"Hello\", \"FileMaker\", \"World\" ] " )
```

Sort keys in object:

```
MBS( "JSON.Sort"; " { \"last\":123, \"first\":456 } " )
```

100.71.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [JSON Sort](#)
- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 15th June 2019, last changed 15th June 2019.

100.72 JSON.ToHTML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
100 JSON	8.2	Yes	Yes	Yes	Yes	Yes

MBS("JSON.ToHTML"; json { ; Flags; CSS Style })

Parameters

json

A JSON text or reference.

```
{ "key": "value" }
```

Flags

Optional

The flags for processing. Currently you can pass 1 to exclude html header and just get a HTML table.

0

CSS Style

Optional

Extra CSS / HTML to include.

Result Returns HTML text or error.

Description

We build for you a HTML with tables for each array and object. We include values and tag rows with even/odd CSS classes.

Examples

Convert some JSON:

```
MBS("JSON.ToHTML"; JSON Input; 0;
/* CSS style to include */
"<style>
td
{
vertical-align:top;
}

.odd
{
background-color: white;
}

.even
{
background-color: # DDD;
}
</style>")
```

Example Databases

- [JSON/JSON to HTML](#)

100.72.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr7](#)
- [MBS FileMaker Plugin, version 8.4pr9](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin, version 8.2pr5](#)
- [Converting JSON to HTML for display](#)

Created 26th April 2018, last changed 26th April 2018.

100.73 LDAP.AddJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP 100 JSON	8.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.AddJSON"; LDAPRef; dn; JSON)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

dn

The name of the entry to add.

JSON

The JSON to parse. Must be a JSON array with entries. Each entry has an element operation with Add, Replace, Delete or Increment. Also a node with name "type" and the type to set. Then you can pass with value a single value or with values a list of values.

Result Returns OK or error.

Description

The parent of the entry being added must already exist or the parent must be empty (equal to the root distinguished name) for an add operation to succeed.

Sample JSON for structure:

```
[ {
  "operation": "Add",
  "type": "xxx",

  "values": [ "Hello", "World" ]

} ,
{
  "operation": "Add",
  "type": "yyy",
  "value": "Other"
} ]
```

Type is the name of the attribute, e.g. cn.

Version 10.1 or newer accepts name instead of type for the key to match the search results.

Examples

Add a new employee to LDAP:

```
Set Variable [ $ldap ; Value: MBS("LDAP.Connect"; "ldap.test.de"; 0; 389 ) ]
Set Variable [ $r ; Value: MBS("LDAP.Bind"; $ldap; "cn=admin,dc=ldap,dc=test,dc=de"; "S2A2S@home";
"simple" ) ]
Set Variable [ $r ; Value: MBS("LDAP.AddJSON"; $ldap; Employee::_LDAP.Entry.CN; Employee::_LDAP.JSON.Add)
]
Set Variable [ $r ; Value: MBS("LDAP.Release"; $ldap) ]
```

Example result: Input JSON used:

```
[
{
"operation": "Add",
"name": "objectClass",
"values": [
"posixAccount",
"shadowAccount",
"top",
"inetOrgPerson",
"organizationalPerson",
"person"
]
},
{
"operation": "Add",
"name": "uid",
"value": "bob.miller"
},
{
"operation": "Add",
"name": "uidNumber",
"value": "1"
},
{
"operation": "Add",
"name": "cn",
"value": "Bob Miller"
},
{
"operation": "Add",
"name": "mail",
"value": "bob.miller@test.de"
},
{
"operation": "Add",
"name": "homeDirectory",
"value": "/usr/local/var/"
}
]
```

```

{
  "operation": "Add",
  "name": "sn",
  "value": "Miller"
},
{
  "operation": "Add",
  "name": "employeeType",
  "value": "Employee"
},
{
  "operation": "Add",
  "name": "givenName",
  "value": "Bob"
},
{
  "operation": "Add",
  "name": "employeeNumber",
  "value": "77"
},
{
  "operation": "Add",
  "name": "userPassword",
  "value": "xxxx"
},
{
  "operation": "Add",
  "name": "gidNumber",
  "value": "100"
}
]

```

See also

- 102.1 LDAP.Add 5363
- 102.3 LDAP.AddList 5369
- 102.4 LDAP.AddRecord 5371
- 102.5 LDAP.Bind 5373
- 102.6 LDAP.Connect 5375
- 102.12 LDAP.JSON 5383
- 102.16 LDAP.Release 5393

100.73.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)

- [MBS FileMaker Plugin, version 8.0pr9](#)
- [MBS FileMaker Plugin, version 7.6pr2](#)
- [LDAP with JSON](#)

Created 11st December 2017, last changed 29th February 2020.

100.74 LDAP.JSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP 100 JSON	8.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.JSON"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Result Returns OK or error.

Description

Please first search, then query here the result as JSON.

Examples

Query JSON:

```
# Connect
Set Variable [ $r ; Value: MBS("LDAP.Connect"; "ldap.forumsys.com"; 0; 389) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "LDAP error" ; "Failed to connect." & $r ]
Else
Set Variable [ $ldap ; Value: $r ]
# Login
Set Variable [ $r ; Value: MBS("LDAP.Bind"; $ldap; "uid=tesla,dc=example,dc=com"; "password"; "simple") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "LDAP error" ; "Failed to authenticate." & $r ]
Else
# Search
Set Variable [ $r ; Value: MBS("LDAP.Search"; $ldap; "dc=example,dc=com"; "subtree"; "(givenName=*)"; "" ; 0; 20; 999) ]
# Check results
Show Custom Dialog [ "JSON" ; MBS("LDAP.JSON"; $ldap) ]
End If
# Cleanup
Set Variable [ $r ; Value: MBS("LDAP.Release"; $ldap) ]
End If
```

```
Example result: [ {
  "dn": "uid=test,dc=example,dc=com",
  "attributes": [ {
    "name": "objectClass",
    "values": [ "posixAccount", "top", "inetOrgPerson" ]
  } , {
```

```

"name": "gidNumber",
"values": [ "0" ]
}, {
"name": "givenName",
"values": [ "Test" ]
}, {
"name": "sn",
"values": [ "Test" ]
}, {
"name": "displayName",
"values": [ "Test" ]
}, {
"name": "uid",
"values": [ "test" ]
}, {
"name": "initials",
"values": [ "TS" ]
}, {
"name": "homeDirectory",
"values": [ "home" ]
}, {
"name": "cn",
"values": [ "Test" ]
}, {
"name": "uidNumber",
"values": [ "24601" ]
}, {
"name": "o",
"values": [ "Company" ]
} ]
} ]

```

Query a person via JSON:

```

Set Variable [ $ldap ; Value: MBS("LDAP.Connect"; "ldap.test.de"; 0; 389 ) ]
Set Variable [ $r ; Value: MBS("LDAP.Bind"; $ldap; "cn=admin,dc=ldap,dc=test,dc=de"; "S2A2S@home";
"simple" ) ]
Set Variable [ $r ; Value: MBS("LDAP.Search"; $ldap; "ou=Users,dc=ldap,dc=test,dc=de"; "Subtree"; "";
""; 0; 20; 999) ]
Set Field [ Employee::_LDAP.JSON.QUERY ; MBS("LDAP.JSON"; $ldap) ]
Set Variable [ $r ; Value: MBS("LDAP.Release"; $ldap) ]

```

Example result: [

```

{
"dn": "ou=Users,dc=ldap,dc=test,dc=de",
"attributes": [
{
"name": "objectClass",
"values": [

```

```
"organizationalUnit",
"top"
]
},
{
"name": "ou",
"values": [
"Users"
]
}
],
},
{
"dn": "uid=bob.miller,ou=Users,dc=ldap,dc=test,dc=de",
"attributes": [
{
"name": "objectClass",
"values": [
"posixAccount",
"shadowAccount",
"top",
"inetOrgPerson",
"organizationalPerson",
"person"
]
},
{
"name": "uid",
"values": [
"bob.miller"
]
},
{
"name": "uidNumber",
"values": [ "1" ]
},
{
"name": "cn",
"values": [
"Bob Miller"
]
},
{
"name": "mail",
"values": [
"bob.miller@test.de"
]
},
},
}
```

```
{
  "name": "homeDirectory",
  "values": [
    "/usr/local/var/"
  ],
  {
    "name": "sn",
    "values": [
      "Miller"
    ],
    {
      "name": "employeeType",
      "values": [
        "Employee"
      ],
      {
        "name": "givenName",
        "values": [
          "Bob"
        ],
        {
          "name": "employeeNumber",
          "values": [ "77" ]
        },
        {
          "name": "userPassword",
          "values": [
            "xxxx"
          ],
          {
            "name": "gidNumber",
            "values": [ "100" ]
          }
        ]
      }
    ]
  }
}
```

See also

- 124.6 IsError 6266
- 102.2 LDAP.AddJSON 5365
- 102.5 LDAP.Bind 5373

- 102.6 LDAP.Connect 5375
- 102.16 LDAP.Release 5393
- 102.18 LDAP.Search 5395

100.74.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)
- [LDAP with JSON](#)

Created 11st December 2017, last changed 29th February 2020.

100.75 LDAP.ModifyJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP 100 JSON	8.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.ModifyJSON"; LDAPRef; dn; JSON)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

dn

The name of the entry to add.

JSON

The JSON to parse. Must be a JSON array with entries. Each entry has an element operation with Add, Replace, Delete or Increment. Also a node with name "type" and the type to set. Than you can pass with value a single value or with values a list of values.

Result Returns OK or error.

Description

If values are being added to or replaced in the entry, the function creates the attribute, if necessary. If values are being deleted, the function removes the attribute if no values remain.

Sample JSON for structure:

```
[ {
  "operation": "Add",
  "type": "xxx",

  "values": [ "Hello", "World" ]

},
{
  "operation": "Replace",
  "type": "yyy",
  "value": "Other"
},
{
  "operation": "Delete",
  "type": "zzz"
} ]
```

Version 10.1 or newer accepts name instead of type for the key to match the search results.

See also

- [102.13 LDAP.Modify](#) 5388
- [102.15 LDAP.ModifyRecord](#) 5391

100.75.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [MBS FileMaker Plugin, version 7.6pr2](#)
- [LDAP with JSON](#)

Created 11st December 2017, last changed 29th February 2020.

Chapter 101

Keychain

Manage passwords in Mac & iOS Keychain

101.1 Keychain.AddPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
101 Keychain	8.4	Yes	No	No	No	Yes

MBS("Keychain.AddPassword"; Name; Location; Username; Password)

Parameters

Name

The name of the entry.

"MyDatabase"

Location

The location where the database is. Must be prefixed with FMP. e.g. "FMP: " or "FMPADMIN: " followed with the name or IP.

"FMPADMIN: mbs.test.ifmcloud.com"

Username

The user name.

"Admin"

Password

The password to store.

"HelloWorld"

Result Returns OK or error.

Description

Only if FileMaker you provide correct entries for FileMaker, it will find the entry.

So please check what FileMaker writes for your entry there.

Examples

Add a new password:

```
MBS("Keychain.AddPassword"; "Anlagen"; "FMP: Anlagen"; "Admin"; "HelloWorld")
```

See also

- 101.5 Keychain.UpdatePassword

5362

Created 25th August 2018, last changed 26th August 2018.

101.2 Keychain.DeletePassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
101 Keychain	8.4	Yes	No	No	No	Yes

MBS("Keychain.DeletePassword"; Location; Username)

Parameters

Location

The location where the database is. Must be prefixed with FMP. e.g. "FMP: " or "FMPADMIN: " followed with the name or IP.

"FMPADMIN: mbs.test.ifmcloud.com"

Username

The user name.

"Admin"

Result Returns OK or error.

Description

We look for a FileMaker password with given account name and location.

Examples

Deletes a password:

MBS("Keychain.DeletePassword"; "FMP: Anlagen"; "Admin")

See also

- 101.5 Keychain.UpdatePassword

101.3 Keychain.ListAccounts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
101 Keychain	8.4	Yes	No	No	No	Yes

MBS("Keychain.ListAccounts"; Location)

Parameters

Location

The location where the database is. Must be prefixed with FMP. e.g. "FMP: " or "FMPADMIN: " followed with the name or IP.

"FMPADMIN: mbs.test.ifmcloud.com"

Result Returns OK or error.

Description

Examples

Lists my accounts in Cloud:

MBS("Keychain.ListAccounts"; "FMPADMIN: monkeybread.fmi.filemaker-cloud.com")

Created 25th August 2018, last changed 25th August 2018.

101.4 Keychain.ListDatabases

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
101 Keychain	8.4	Yes	No	No	No	Yes

MBS("Keychain.ListDatabases")

Result Returns OK or error.

Description

Examples

Lists my databases:

MBS("Keychain.ListDatabases")

Created 25th August 2018, last changed 25th August 2018.

101.5 Keychain.UpdatePassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
101 Keychain	8.4	Yes	No	No	No	Yes

MBS("Keychain.UpdatePassword"; Location; Username; Password)

Parameters

Location

The location where the database is. Must be prefixed with FMP. e.g. "FMP: " or "FMPADMIN: " followed with the name or IP.

"FMPADMIN: mbs.test.ifmcloud.com"

Username

The user name.

"Admin"

Password

The new password to store.

"New password"

Result Returns OK or error.

Description

Examples

Updates account with new password:

MBS("Keychain.UpdatePassword"; "FMP: Anlagen"; "Admin"; "NewPassword")

See also

- 101.1 Keychain.AddPassword 5357
- 101.2 Keychain.DeletePassword 5359

Created 25th August 2018, last changed 25th August 2018.

Chapter 102

LDAP

Query LDAP or Active Directory servers to manager user accounts.

The plugin can query, modify, add and delete values.

FileMaker can use LDAP or Active Directory for authentication. You can manage users in FileMaker database and send updates to your authentication server via our plugin.

102.1 LDAP.Add

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.Add"; LDAPRef; dn; Type { ; Value })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

dn

The name of the entry to add.

Type

The name of the attribute to add.

Value

Optional

The value for the attribute.

Result Returns OK or error.

Description

The parent of the entry being added must already exist or the parent must be empty (equal to the root distinguished name) for an add operation to succeed.

With 6.4 plugin you can pass several more value parameters to form a list of values.
Deprecated. Please use LDAP.AddJSON instead.

Examples

Add a value:

```
MBS( "LDAP.Add"; $ldap; "test"; "cn"; "Hello" )
```

Add a value with 3 values:

```
MBS( "LDAP.Add"; $ldap; "test"; "cn"; "Hello"; "World"; "test" )
```

See also

- [102.2 LDAP.AddJSON](#) 5365
- [102.3 LDAP.AddList](#) 5369
- [102.4 LDAP.AddRecord](#) 5371

102.1.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [MBS FileMaker Plugin, version 6.4pr2](#)

Created 15th December 2015, last changed 29th February 2020.

102.2 LDAP.AddJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP 100 JSON	8.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.AddJSON"; LDAPRef; dn; JSON)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

dn

The name of the entry to add.

JSON

The JSON to parse. Must be a JSON array with entries. Each entry has an element operation with Add, Replace, Delete or Increment. Also a node with name "type" and the type to set. Then you can pass with value a single value or with values a list of values.

Result Returns OK or error.

Description

The parent of the entry being added must already exist or the parent must be empty (equal to the root distinguished name) for an add operation to succeed.

Sample JSON for structure:

```
[ {
  "operation": "Add",
  "type": "xxx",

  "values": [ "Hello", "World" ]

} ,
{
  "operation": "Add",
  "type": "yyy",
  "value": "Other"
} ]
```

Type is the name of the attribute, e.g. cn.

Version 10.1 or newer accepts name instead of type for the key to match the search results.

Examples

Add a new employee to LDAP:

```
Set Variable [ $ldap ; Value: MBS("LDAP.Connect"; "ldap.test.de"; 0; 389 ) ]
Set Variable [ $r ; Value: MBS("LDAP.Bind"; $ldap; "cn=admin,dc=ldap,dc=test,dc=de"; "S2A2S@home";
"simple" ) ]
Set Variable [ $r ; Value: MBS("LDAP.AddJSON"; $ldap; Employee::_LDAP.Entry.CN; Employee::_LDAP.JSON.Add)
]
Set Variable [ $r ; Value: MBS("LDAP.Release"; $ldap) ]
```

Example result: Input JSON used:

```
[
{
"operation": "Add",
"name": "objectClass",
"values": [
"posixAccount",
"shadowAccount",
"top",
"inetOrgPerson",
"organizationalPerson",
"person"
]
},
{
"operation": "Add",
"name": "uid",
"value": "bob.miller"
},
{
"operation": "Add",
"name": "uidNumber",
"value": "1"
},
{
"operation": "Add",
"name": "cn",
"value": "Bob Miller"
},
{
"operation": "Add",
"name": "mail",
"value": "bob.miller@test.de"
},
{
"operation": "Add",
"name": "homeDirectory",
"value": "/usr/local/var/"
},
]
```

```

{
"operation": "Add",
"name": "sn",
"value": "Miller"
},
{
"operation": "Add",
"name": "employeeType",
"value": "Employee"
},
{
"operation": "Add",
"name": "givenName",
"value": "Bob"
},
{
"operation": "Add",
"name": "employeeNumber",
"value": "77"
},
{
"operation": "Add",
"name": "userPassword",
"value": "xxxx"
},
{
"operation": "Add",
"name": "gidNumber",
"value": "100"
}
]

```

See also

- 102.1 LDAP.Add 5363
- 102.3 LDAP.AddList 5369
- 102.4 LDAP.AddRecord 5371
- 102.5 LDAP.Bind 5373
- 102.6 LDAP.Connect 5375
- 102.12 LDAP.JSON 5383
- 102.16 LDAP.Release 5393

102.2.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)

- [MBS FileMaker Plugin, version 8.0pr9](#)
- [MBS FileMaker Plugin, version 7.6pr2](#)
- [LDAP with JSON](#)

Created 11st December 2017, last changed 29th February 2020.

102.3 LDAP.AddList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.4	Yes	Yes	Yes	Yes	No

MBS("LDAP.AddList"; LDAPRef; dn; Type; List)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

dn

The name of the entry to add.

Type

The name of the attribute to add.

List

The value for the attribute as a list.

"Hello\$World"

Result Returns OK or error.

Description

The parent of the entry being added must already exist or the parent must be empty (equal to the root distinguished name) for an add operation to succeed.

The list of values are transformed into a list for LDAP.

Deprecated. Please use LDAP.AddJSON instead.

Examples

Add a list of values to a value:

```
MBS("LDAP.AddList"; $$connectLDAP; "CN=Test_FMPRO_TEMPO2,OU=Eleves,DC=mss,DC=qc,DC=ca";
"objectClass"; "user$top$person$organizationalPerson")
```

See also

- 102.1 LDAP.Add 5363
- 102.2 LDAP.AddJSON 5365

102.3.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [MBS FileMaker Plugin, version 6.4pr2](#)

102.4 LDAP.AddRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	7.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.AddRecord"; LDAPRef; dn; Type { ; Value; TypeN; ValueN })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

dn

The name of the entry to add.

Type

The name of the attribute to add.

Value

Optional

The value for the attribute.

TypeN

Optional

nth attribute name.

ValueN

Optional

nth attribute value.

Result Returns OK or error.

Description

The parent of the entry being added must already exist or the parent must be empty (equal to the root distinguished name) for an add operation to succeed.

This version of the Add can add several keys and values with simple text values.

So please pass as many parameters as you need, always with key and value.

Deprecated. Please use LDAP.AddJSON instead.

Examples

Add two values:

MBS("LDAP.Add"; \$ldap; "test"; "cn"; "Hello"; "fn"; "World")

See also

- 102.1 LDAP.Add

- 102.2 LDAP.AddJSON

102.4.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [MBS FileMaker Plugin, version 7.0pr2](#)

Created 5th January 2017, last changed 29th February 2020.

102.5 LDAP.Bind

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.Bind"; LDAPRef; DN; Cred; AuthMethod { ; Domain })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

DN

Test that contains the distinguished name of the entry used to bind. This can be a DN, a UPN, a WinNT style user name, or other name that the directory server will accept as an identifier.

Cred

The credentials with which to authenticate. Arbitrary credentials can be passed using this parameter. The format and content of the credentials depends on the setting of the method parameter.

AuthMethod

The authentication method to use. Can be simple, SASL or Negotiate. On Mac OS X, also none, KRBv4, KRBv41 and KRBv42 are accepted. On Windows, also Sicily, MSN, NTLM, DPA, SSPI, Digest and External are accepted.

"simple"

Domain

Optional

Domain for Windows.

Result Returns OK or error.

Description

See also SystemInfo.ADSYSTEMINFO function to query details about logged in computer user.

Examples

Authenticate connection:

```
Set Variable [ $r; Value:MBS("LDAP.Bind"; $ldap; $UserName; $Password; $AuthMethod) ]
```

See also

- 102.2 LDAP.AddJSON 5365
- 102.6 LDAP.Connect 5375
- 102.12 LDAP.JSON 5383
- 161.1 SystemInfo.ADSYSTEMINFO 7651

Example Databases

- [LDAP Query](#)

102.5.1 Blog Entries

- [LDAP with JSON](#)
- [MBS FileMaker Plugin, version 6.1pr2](#)
- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 18th October 2019.

102.6 LDAP.Connect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.Connect"; IP; SSL; Port)

Parameters

IP

The IP or domain name of the server. If prefixed with ldap:// or ldaps://, the plugin will remove that prefix. If prefix is ldaps://, the plugin will assume SSL is enabled.

"192.168.2.222"

SSL

Whether to use SSL. 1 to enable or 0 to not enable.

1

Port

The port to use. If zero or undefined, the default port is used. e.g. 636 for LDAPS or 389 for LDAP.

Result Returns reference number or error.

Description

Returns the references number which you pass to other LDAP functions.

Please call LDAP.Release later to close connection.

Examples

Connect to local LDAP server:

```
MBS( "LDAP.Connect"; "localhost"; 0; 389 )
```

Connect to LDAP server:

```
MBS( "LDAP.Connect"; "ldap.internal"; 1)
```

Connect via IP and special port:

```
MBS( "LDAP.Connect"; "192.168.1.123"; 1; 3636)
```

Connect using URL:

```
MBS( "LDAP.Connect"; "ldaps://192.168.1.123")
```

Connect and Query:

```
Delete All Records [ No dialog ]
```

```
# Connect
```

```

Set Variable [ $r; Value:MBS("LDAP.Connect"; LDAP Query::Server; LDAP Query::SSL; LDAP Query::Port)
]
If [ MBS("IsError") ]
Show Custom Dialog [ "LDAP error"; "Failed to connect." & $r ]
Exit Script [ ]
Else
Set Variable [ $ldap; Value:$r ]
# Login
Set Variable [ $r; Value:MBS("LDAP.Bind"; $ldap; LDAP Query::UserName; LDAP Query::Password;
LDAP Query::AuthMethod) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "LDAP error"; "Failed to authenticate." & $r ]
Else
# Search
Set Variable [ $r; Value:MBS("LDAP.Search"; $ldap; LDAP Query::Base; LDAP Query::Scope; LDAP
Query::Filter; ""; 0; 20; 999) ]
# Check results
Set Variable [ $EntryCount; Value:MBS("LDAP.SearchResult.Count"; $ldap) ]
# Walk over all entries
Set Field [ LDAP Query::Entry Count; $EntryCount ]
If [ $EntryCount >0 ]
Set Variable [ $EntryIndex; Value:0 ]
Loop
Set Variable [ $EntryName; Value:MBS("LDAP.SearchResult.DistinguishedName"; $ldap; $EntryIndex) ]
# Walk over all attributes
Set Variable [ $AttributeCount; Value:MBS("LDAP.SearchResult.AttributeCount"; $ldap; $EntryIndex) ]
If [ $AttributeCount ]
Set Variable [ $AttributeIndex; Value:0 ]
Loop
# Check attribute name and value:
Set Variable [ $AttributeName; Value:MBS("LDAP.SearchResult.AttributeName"; $ldap; $EntryIndex; $At-
tributeIndex) ]
Set Variable [ $AttributeValues; Value:MBS("LDAP.SearchResult.AttributeValues"; $ldap; $EntryIndex;
$AttributeIndex; 1) ]
# Store in a record:
New Record/Request
Set Field [ LDAP Query::Entry; $EntryName ]
Set Field [ LDAP Query::Attribute; $AttributeName ]
Set Field [ LDAP Query::Values; $AttributeValues ]
Commit Records/Requests [ No dialog ]
# next attribute
Set Variable [ $AttributeIndex; Value:$AttributeIndex + 1 ]
Exit Loop If [ $AttributeIndex = $AttributeCount ]
End Loop
End If
# next entry
Set Variable [ $EntryIndex; Value:$EntryIndex + 1 ]
Exit Loop If [ $EntryIndex = $EntryCount ]

```

102.6. LDAP.CONNECT

5377

```
End Loop
End If
End If
# Cleanup
Set Variable [ $r; Value:MBS("LDAP.Release"; $ldap) ]
End If
```

See also

- [102.2 LDAP.AddJSON](#) 5365
- [102.5 LDAP.Bind](#) 5373
- [102.12 LDAP.JSON](#) 5383
- [102.16 LDAP.Release](#) 5393
- [102.19 LDAP.SearchResult.AttributeCount](#) 5397
- [102.20 LDAP.SearchResult.AttributeName](#) 5399
- [102.22 LDAP.SearchResult.AttributeValue](#) 5401
- [102.24 LDAP.SearchResult.AttributeValues](#) 5403
- [102.26 LDAP.SearchResult.Count](#) 5407
- [102.27 LDAP.SearchResult.DistinguishedName](#) 5409

Example Databases

- [LDAP Query](#)

102.6.1 Blog Entries

- [LDAP with JSON](#)
- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 20th November 2017.

102.7 LDAP.Delete

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.Delete"; LDAPRef; dn)

Parameters

LDAPRef

The reference number for the LDAP connection.
\$ldap

dn

The distinguished name of the entry to delete.

Result Returns OK or error.

Description

Be aware that LDAP does not support deletion of entire subtrees in a single operation. When connecting to an LDAP 2 server, the application must perform a bind operation first.

See also

- 102.16 LDAP.Release

5393

Created 15th December 2015, last changed 15th December 2015.

102.8 LDAP.GetNetworkTimeOut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	No	Yes	Yes	No

MBS("LDAP.GetNetworkTimeOut"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Result Returns number or error.

Description

See also

- 102.28 LDAP.SetNetworkTimeOut

5410

102.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 18th December 2015, last changed 17th June 2018.

102.9 LDAP.GetProtocolVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.GetProtocolVersion"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.
\$ldap

Result Returns value or error.

Description

See also

- 102.29 LDAP.SetProtocolVersion

5411

Created 15th December 2015, last changed 15th December 2015.

102.10 LDAP.GetReferrals

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.GetReferrals"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.
\$ldap

Result Returns number or error.

Description

See also

- 102.30 LDAP.SetReferrals

5412

Created 18th December 2015, last changed 18th December 2015.

102.11 LDAP.GetTimeOut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	No	Yes	Yes	No

MBS("LDAP.GetTimeOut"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Result Returns number or error.

Description

See also

- 102.31 LDAP.SetTimeOut

5413

102.11.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 18th December 2015, last changed 17th June 2018.

102.12 LDAP.JSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP 100 JSON	8.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.JSON"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Result Returns OK or error.

Description

Please first search, then query here the result as JSON.

Examples

Query JSON:

```
# Connect
Set Variable [ $r ; Value: MBS("LDAP.Connect"; "ldap.forumsys.com"; 0; 389) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "LDAP error" ; "Failed to connect." & $r ]
Else
Set Variable [ $ldap ; Value: $r ]
# Login
Set Variable [ $r ; Value: MBS("LDAP.Bind"; $ldap; "uid=tesla,dc=example,dc=com"; "password"; "simple") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "LDAP error" ; "Failed to authenticate." & $r ]
Else
# Search
Set Variable [ $r ; Value: MBS("LDAP.Search"; $ldap; "dc=example,dc=com"; "subtree"; "(givenName=*)"; "" ; 0; 20; 999) ]
# Check results
Show Custom Dialog [ "JSON" ; MBS("LDAP.JSON"; $ldap) ]
End If
# Cleanup
Set Variable [ $r ; Value: MBS("LDAP.Release"; $ldap) ]
End If
```

```
Example result: [ {
"dn": "uid=test,dc=example,dc=com",
"attributes": [ {
"name": "objectClass",
"values": [ "posixAccount", "top", "inetOrgPerson" ]
} , {
```

```

"name": "gidNumber",
"values": [ "0" ]
}, {
"name": "givenName",
"values": [ "Test" ]
}, {
"name": "sn",
"values": [ "Test" ]
}, {
"name": "displayName",
"values": [ "Test" ]
}, {
"name": "uid",
"values": [ "test" ]
}, {
"name": "initials",
"values": [ "TS" ]
}, {
"name": "homeDirectory",
"values": [ "home" ]
}, {
"name": "cn",
"values": [ "Test" ]
}, {
"name": "uidNumber",
"values": [ "24601" ]
}, {
"name": "o",
"values": [ "Company" ]
} ]
} ]

```

Query a person via JSON:

```

Set Variable [ $ldap ; Value: MBS("LDAP.Connect"; "ldap.test.de"; 0; 389 ) ]
Set Variable [ $r ; Value: MBS("LDAP.Bind"; $ldap; "cn=admin,dc=ldap,dc=test,dc=de"; "S2A2S@home";
"simple" ) ]
Set Variable [ $r ; Value: MBS("LDAP.Search"; $ldap; "ou=Users,dc=ldap,dc=test,dc=de"; "Subtree"; "";
""; 0; 20; 999) ]
Set Field [ Employee::_LDAP.JSON.QUERY ; MBS("LDAP.JSON"; $ldap) ]
Set Variable [ $r ; Value: MBS("LDAP.Release"; $ldap) ]

```

Example result: [

```

{
"dn": "ou=Users,dc=ldap,dc=test,dc=de",
"attributes": [
{
"name": "objectClass",
"values": [

```

```
"organizationalUnit",
"top"
]
},
{
"name": "ou",
"values": [
"Users"
]
}
],
},
{
"dn": "uid=bob.miller,ou=Users,dc=ldap,dc=test,dc=de",
"attributes": [
{
"name": "objectClass",
"values": [
"posixAccount",
"shadowAccount",
"top",
"inetOrgPerson",
"organizationalPerson",
"person"
]
},
{
"name": "uid",
"values": [
"bob.miller"
]
},
{
"name": "uidNumber",
"values": [ "1" ]
},
{
"name": "cn",
"values": [
"Bob Miller"
]
},
{
"name": "mail",
"values": [
"bob.miller@test.de"
]
},
},
}
```

```

{
  "name": "homeDirectory",
  "values": [
    "/usr/local/var/"
  ]
},
{
  "name": "sn",
  "values": [
    "Miller"
  ]
},
{
  "name": "employeeType",
  "values": [
    "Employee"
  ]
},
{
  "name": "givenName",
  "values": [
    "Bob"
  ]
},
{
  "name": "employeeNumber",
  "values": [ "77" ]
},
{
  "name": "userPassword",
  "values": [
    "xxxx"
  ]
},
{
  "name": "gidNumber",
  "values": [ "100" ]
}
]

```

See also

- 124.6 IsError 6266
- 102.2 LDAP.AddJSON 5365
- 102.5 LDAP.Bind 5373

<i>102.12. LDAP.JSON</i>	5387
• 102.6 LDAP.Connect	5375
• 102.16 LDAP.Release	5393
• 102.18 LDAP.Search	5395

102.12.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)
- [LDAP with JSON](#)

Created 11st December 2017, last changed 29th February 2020.

102.13 LDAP.Modify

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.Modify"; LDAPRef; OperationType; dn; Type { ; Value })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

OperationType

What to do. Can be Delete, Replace or Add.

"Replace"

dn

The name of the entry to modify.

Type

The name of the attribute to modify.

Value

Optional

The value for the attribute.

Result Returns OK or error.

Description

If values are being added to or replaced in the entry, the function creates the attribute, if necessary. If values are being deleted, the function removes the attribute if no values remain.

Deprecated. Please use LDAP.ModifyJSON instead.

See also

- 102.14 LDAP.ModifyJSON 5389
- 102.15 LDAP.ModifyRecord 5391

102.13.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)

Created 15th December 2015, last changed 29th February 2020.

102.14 LDAP.ModifyJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP 100 JSON	8.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.ModifyJSON"; LDAPRef; dn; JSON)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

dn

The name of the entry to add.

JSON

The JSON to parse. Must be a JSON array with entries. Each entry has an element operation with Add, Replace, Delete or Increment. Also a node with name "type" and the type to set. Than you can pass with value a single value or with values a list of values.

Result Returns OK or error.

Description

If values are being added to or replaced in the entry, the function creates the attribute, if necessary. If values are being deleted, the function removes the attribute if no values remain.

Sample JSON for structure:

```
[ {
  "operation": "Add",
  "type": "xxx",

  "values": [ "Hello", "World" ]

},
{
  "operation": "Replace",
  "type": "yyy",
  "value": "Other"
},
{
  "operation": "Delete",
  "type": "zzz"
} ]
```

Version 10.1 or newer accepts name instead of type for the key to match the search results.

See also

- [102.13 LDAP.Modify](#) 5388
- [102.15 LDAP.ModifyRecord](#) 5391

102.14.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [MBS FileMaker Plugin, version 7.6pr2](#)
- [LDAP with JSON](#)

Created 11st December 2017, last changed 29th February 2020.

102.15 LDAP.ModifyRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	7.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.ModifyRecord"; LDAPRef; OperationType; dn; Type { ; Value; TypeN; ValueN })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

OperationType

What to do. Can be Delete, Replace or Add.

"Replace"

dn

The name of the entry to modify.

Type

The name of the attribute to modify.

Value

Optional

The value for the attribute.

TypeN

Optional

nth attribute name.

ValueN

Optional

nth attribute value.

Result Returns OK or error.

Description

If values are being added to or replaced in the entry, the function creates the attribute, if necessary. If values are being deleted, the function removes the attribute if no values remain.

This version of the Modify can add several keys and values with simple text values.

So please pass as many parameters as you need, always with key and value.

Deprecated. Please use LDAP.ModifyJSON instead.

See also

- 102.13 LDAP.Modify 5388
- 102.14 LDAP.ModifyJSON 5389

102.15.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [MBS FileMaker Plugin, version 7.0pr2](#)

Created 5th January 2017, last changed 29th February 2020.

102.16 LDAP.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.Release"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Result Returns OK or error.

Description

Examples

Close connection:

MBS("LDAP.Release"; \$ldap)

See also

- [102.2 LDAP.AddJSON](#) 5365
- [102.6 LDAP.Connect](#) 5375
- [102.7 LDAP.Delete](#) 5378
- [102.12 LDAP.JSON](#) 5383
- [102.17 LDAP.Rename](#) 5394
- [163.28 TAPI.Release](#) 7755
- [187.17 WMFP.Release](#) 8785

Example Databases

- [LDAP Query](#)

102.16.1 Blog Entries

- [LDAP with JSON](#)
- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 16th December 2015.

102.17 LDAP.Rename

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.Rename"; LDAPRef; DN; NewRDN { ; NewParent; DeleteOldRdn })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

DN

The distinguished name of the entry to be renamed.

NewRDN

The new relative distinguished name.

NewParent

Optional

The distinguished name of the new parent for this entry. This parameter enables you to move the entry to a new parent container. Can be empty.

DeleteOldRdn

Optional

1 if the old relative distinguished name should be deleted; 0 if the old relative distinguished name should be retained.

1

Result Returns OK or error.

Description

This function is available effective with LDAP 3.

See also

- 102.16 LDAP.Release

5393

Created 15th December 2015, last changed 15th December 2015.

102.18 LDAP.Search

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.Search"; LDAPRef; Base; Scope; Filter; Attributes; AttributesOnly { ; Timeout; Size Limit })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Base

the distinguished name of the entry at which to start the search.

Scope

Value to indicate the search scope. Can be:

Base: Search the base entry only. OneLevel: Search all entries in the first level below the base entry, excluding the base entry. Subtree: Search the base entry and all entries in the tree below the base.

On Mac can also be Children.

"Subtree"

Filter

A text that specifies the search filter.

Attributes

List indicating which attributes to return for each matching entry.

"cn\$sn"

AttributesOnly

Boolean value that should be 0 if both attribute types and values are to be returned, 1 if only types are required.

0

Timeout

Optional

Timeout in seconds. Specifies both the local search time-out value, in seconds, and the operation time limit that is sent to the server within the search request.

10

Size Limit

Optional

Limit on the number of entries to return from the search. A value of zero indicates no limit.

Result Returns OK or error.

Description

Searches the LDAP directory and returns a requested set of attributes for each matched entry.

On success, you can use `LDAP.SearchResult.Count` to find out the number of entries found.

Examples

Search for name:

```
MBS( "LDAP.Search"; $ldap; "dc=example,dc=com"; "Subtree"; "(sn=Jensen)")
```

Find entries with a givenName:

```
MBS("LDAP.Search"; $ldap; ""; "Subtree"; "(givenName=*)"; ""; 0; 20; 999)
```

See also

- [102.6 LDAP.Connect](#) 5375
- [102.12 LDAP.JSON](#) 5383
- [102.19 LDAP.SearchResult.AttributeCount](#) 5397
- [102.20 LDAP.SearchResult.AttributeName](#) 5399
- [102.22 LDAP.SearchResult.AttributeValue](#) 5401
- [102.23 LDAP.SearchResult.AttributeValueCount](#) 5402
- [102.24 LDAP.SearchResult.AttributeValues](#) 5403
- [102.25 LDAP.SearchResult.AttributeValuesByName](#) 5405
- [102.26 LDAP.SearchResult.Count](#) 5407
- [102.27 LDAP.SearchResult.DistinguishedName](#) 5409

Example Databases

- [LDAP Query](#)

102.18.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr7](#)
- [LDAP with JSON](#)
- [MBS FileMaker Plugin, version 7.0pr4](#)
- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 4th April 2019.

102.19 LDAP.SearchResult.AttributeCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.AttributeCount"; LDAPRef; EntryIndex)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

EntryIndex

The index in the search results. Range from 0 to LDAP.SearchResult.EntryCount-1.

\$index

Result Returns number or error.

Description

Examples

Query number of attributes in an entry:

```
Set Variable [ $AttributeCount; Value:MBS("LDAP.SearchResult.AttributeCount"; $ldap; $EntryIndex) ]
```

See also

- 102.6 LDAP.Connect 5375
- 102.18 LDAP.Search 5395
- 102.20 LDAP.SearchResult.AttributeName 5399
- 102.21 LDAP.SearchResult.AttributeNames 5400
- 102.22 LDAP.SearchResult.AttributeValue 5401
- 102.23 LDAP.SearchResult.AttributeValueCount 5402
- 102.24 LDAP.SearchResult.AttributeValues 5403
- 102.26 LDAP.SearchResult.Count 5407

Example Databases

- [LDAP Query](#)

102.19.1 Blog Entries

- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 16th December 2015.

102.20 LDAP.SearchResult.AttributeName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.AttributeName"; LDAPRef; EntryIndex; AttributeIndex)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

EntryIndex

The index in the search results. Range from 0 to LDAP.SearchResult.EntryCount-1.

\$index

AttributeIndex

The index of the attribute. From 0 to LDAP.SearchResult.AttributeCount-1.

0

Result Returns value or error.

Description

See also

- 102.6 LDAP.Connect 5375
- 102.18 LDAP.Search 5395
- 102.19 LDAP.SearchResult.AttributeCount 5397
- 102.21 LDAP.SearchResult.AttributeNames 5400
- 102.22 LDAP.SearchResult.AttributeValue 5401
- 102.23 LDAP.SearchResult.AttributeValueCount 5402
- 102.24 LDAP.SearchResult.AttributeValues 5403
- 102.25 LDAP.SearchResult.AttributeValuesByName 5405
- 102.26 LDAP.SearchResult.Count 5407

Example Databases

- [LDAP Query](#)

102.20.1 Blog Entries

- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 15th December 2015.

102.21 LDAP.SearchResult.AttributeNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.AttributeNames"; LDAPRef; EntryIndex { ; NoReturnEnding })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

EntryIndex

The index in the search results. Range from 0 to LDAP.SearchResult.EntryCount-1.

\$index

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Examples

Query names of attributes as list:

MBS("LDAP.SearchResult.AttributeNames"; \$ldap; \$EntryIndex)

See also

- 102.18 LDAP.Search 5395
- 102.19 LDAP.SearchResult.AttributeCount 5397
- 102.20 LDAP.SearchResult.AttributeName 5399
- 102.22 LDAP.SearchResult.AttributeValue 5401
- 102.23 LDAP.SearchResult.AttributeValueCount 5402
- 102.24 LDAP.SearchResult.AttributeValues 5403
- 102.25 LDAP.SearchResult.AttributeValuesByName 5405

Created 15th December 2015, last changed 16th December 2015.

102.22 LDAP.SearchResult.AttributeValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.AttributeValue"; LDAPRef; EntryIndex; AttributeIndex; ValueIndex)

Parameters**LDAPRef**

The reference number for the LDAP connection.

\$ldap

EntryIndex

The index in the search results. Range from 0 to LDAP.SearchResult.EntryCount-1.

\$index

AttributeIndex

The index of the attribute. From 0 to LDAP.SearchResult.AttributeCount-1.

0

ValueIndex

The index of the value. Must be range from zero to LDAP.SearchResult.AttributeValueCount-1.

0

Result Returns OK or error.

Description**See also**

- 102.6 LDAP.Connect 5375
- 102.18 LDAP.Search 5395
- 102.19 LDAP.SearchResult.AttributeCount 5397
- 102.20 LDAP.SearchResult.AttributeName 5399
- 102.21 LDAP.SearchResult.AttributeNames 5400
- 102.23 LDAP.SearchResult.AttributeValueCount 5402
- 102.24 LDAP.SearchResult.AttributeValues 5403
- 102.25 LDAP.SearchResult.AttributeValuesByName 5405
- 102.26 LDAP.SearchResult.Count 5407

Created 15th December 2015, last changed 15th December 2015.

102.23 LDAP.SearchResult.AttributeValueCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.AttributeValueCount"; LDAPRef; EntryIndex; AttributeIndex)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

EntryIndex

The index in the search results. Range from 0 to LDAP.SearchResult.EntryCount-1.

\$index

AttributeIndex

The index of the attribute. From 0 to LDAP.SearchResult.AttributeCount-1.

0

Result Returns number or error.

Description

If the plugin has no value, this is zero. If the attribute is a list and has more than one entry, the result is >1.

Examples

Query attribute values as list:

```
Set Variable [ $AttributeValues; Value:MBS("LDAP.SearchResult.AttributeValues"; $ldap; $EntryIndex; $AttributeIndex; 1) ]
```

See also

- 102.18 LDAP.Search 5395
- 102.19 LDAP.SearchResult.AttributeCount 5397
- 102.20 LDAP.SearchResult.AttributeName 5399
- 102.21 LDAP.SearchResult.AttributeNames 5400
- 102.22 LDAP.SearchResult.AttributeValue 5401
- 102.24 LDAP.SearchResult.AttributeValues 5403
- 102.25 LDAP.SearchResult.AttributeValuesByName 5405

Created 15th December 2015, last changed 16th December 2015.

102.24 LDAP.SearchResult.AttributeValues

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.AttributeValues"; LDAPRef; EntryIndex; AttributeIndex { ; NoReturnEnding })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

EntryIndex

The index in the search results. Range from 0 to LDAP.SearchResult.EntryCount-1.

\$index

AttributeIndex

The index of the attribute. From 0 to LDAP.SearchResult.AttributeCount-1.

0

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 1 to include none, so a list with one value behaves as a text value.

1

Result Returns list or error.

Description

See also

- 102.6 LDAP.Connect 5375
- 102.18 LDAP.Search 5395
- 102.19 LDAP.SearchResult.AttributeCount 5397
- 102.20 LDAP.SearchResult.AttributeName 5399
- 102.21 LDAP.SearchResult.AttributeNames 5400
- 102.22 LDAP.SearchResult.AttributeValue 5401
- 102.23 LDAP.SearchResult.AttributeValueCount 5402
- 102.25 LDAP.SearchResult.AttributeValuesByName 5405
- 102.26 LDAP.SearchResult.Count 5407

Example Databases

- [LDAP Query](#)

102.24.1 Blog Entries

- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 7th September 2017.

102.25 LDAP.SearchResult.AttributeValuesByName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	7.4	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.AttributeValuesByName"; LDAPRef; EntryIndex; AttributeName { ; NoReturnEnding })

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

EntryIndex

The index in the search results. Range from 0 to LDAP.SearchResult.EntryCount-1.

\$index

AttributeName

The name of the attribute.

"FirstName"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 1 to include none, so a list with one value behaves as a text value.

1

Result Returns value, list or error.

Description

This function searches attributes by name instead of index.

If nothing is found, you get empty result.

See also

- 102.18 LDAP.Search 5395
- 102.20 LDAP.SearchResult.AttributeName 5399
- 102.21 LDAP.SearchResult.AttributeNames 5400
- 102.22 LDAP.SearchResult.AttributeValue 5401
- 102.23 LDAP.SearchResult.AttributeValueCount 5402
- 102.24 LDAP.SearchResult.AttributeValues 5403

102.25.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr5](#)

102.26 LDAP.SearchResult.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.Count"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.
\$ldap

Result Returns number or error.

Description

Examples

Query number of search results:

```
Set Variable [ $EntryCount; Value:MBS("LDAP.SearchResult.Count"; $ldap) ]
```

Loop over search results:

```
# loop over entries
Set Variable [ $EntryCount; Value:MBS("LDAP.SearchResult.Count"; $ldap) ]
Set Field [ LDAP Query::Entry Count; $EntryCount ]
If [ $EntryCount >0 ]
Set Variable [ $EntryIndex; Value:0 ]
Loop
# get info for entry
Set Variable [ $EntryName; Value:MBS("LDAP.SearchResult.DistinguishedName"; $ldap; $EntryIndex) ]
# loop over attributes
Set Variable [ $AttributeCount; Value:MBS("LDAP.SearchResult.AttributeCount"; $ldap; $EntryIndex) ]
If [ $AttributeCount ]
Set Variable [ $AttributeIndex; Value:0 ]
Loop
# get detail for attribute
Set Variable [ $AttributeCount; Value:MBS("LDAP.SearchResult.AttributeCount"; $ldap; $EntryIndex) ]
Set Variable [ $EntryName; Value:MBS("LDAP.SearchResult.DistinguishedName"; $ldap; $EntryIndex) ]
Set Variable [ $AttributeName; Value:MBS("LDAP.SearchResult.AttributeName"; $ldap; $EntryIndex; $AttributeIndex) ]
Set Variable [ $AttributeValues; Value:MBS("LDAP.SearchResult.AttributeValues"; $ldap; $EntryIndex; $AttributeIndex; 1) ]
# store in a record
New Record/Request
Set Field [ LDAP Query::Entry; $EntryName ]
Set Field [ LDAP Query::Attribute; $AttributeName ]
Set Field [ LDAP Query::Values; $AttributeValues ]
```

```
Commit Records/Requests [ No dialog ]
# next
Set Variable [ $AttributeIndex; Value:$AttributeIndex + 1 ]
Exit Loop If [ $AttributeIndex = $AttributeCount ]
End Loop
End If
Set Variable [ $EntryIndex; Value:$EntryIndex + 1 ]
Exit Loop If [ $EntryIndex = $EntryCount ]
End Loop
End If
```

See also

- [102.6 LDAP.Connect](#) 5375
- [102.18 LDAP.Search](#) 5395
- [102.19 LDAP.SearchResult.AttributeCount](#) 5397
- [102.20 LDAP.SearchResult.AttributeName](#) 5399
- [102.22 LDAP.SearchResult.AttributeValue](#) 5401
- [102.24 LDAP.SearchResult.AttributeValues](#) 5403
- [102.27 LDAP.SearchResult.DistinguishedName](#) 5409

Example Databases

- [LDAP Query](#)

102.26.1 Blog Entries

- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 16th December 2015.

102.27 LDAP.SearchResult.DistinguishedName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SearchResult.DistinguishedName"; LDAPRef; EntryIndex)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

EntryIndex

The index in the search results. Range from 0 to LDAP.SearchResult.EntryCount-1.

\$index

Result Returns value or error.

Description

This is like the unique record ID for this entry.

Examples

Query distinguished name for an entry:

Set Variable [\$EntryName; Value:MBS("LDAP.SearchResult.DistinguishedName"; \$ldap; \$EntryIndex)]

See also

- [102.6 LDAP.Connect](#) 5375
- [102.18 LDAP.Search](#) 5395
- [102.26 LDAP.SearchResult.Count](#) 5407

Example Databases

- [LDAP Query](#)

102.27.1 Blog Entries

- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 16th December 2015.

102.28 LDAP.SetNetworkTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	No	Yes	Yes	No

MBS("LDAP.SetNetworkTimeout"; LDAPRef; Timeout)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Timeout

The new timeout in seconds.

5

Result Returns OK or error.

Description

This function sets the socket level timeout.

Value is in seconds. Resolution is in microseconds.

Examples

Sets network timeout:

```
Variable setzen [ $r ; Wert: MBS("LDAP.SetNetworkTimeout"; $ldap; 3) ]
```

See also

- 102.8 LDAP.GetNetworkTimeout

5379

102.28.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 18th December 2015, last changed 20th March 2019.

102.29 LDAP.SetProtocolVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SetProtocolVersion"; LDAPRef; Version)

Parameters**LDAPRef**

The reference number for the LDAP connection.

\$ldap

Version

Can be 1, 2 or 3 to specify LDAP version.

3

Result Returns OK or error.

Description**Examples**

Sets version 3:

MBS("LDAP.SetProtocolVersion"; \$ldap; 3)

See also

- 102.9 LDAP.GetProtocolVersion

5380

Created 15th December 2015, last changed 15th December 2015.

102.30 LDAP.SetReferrals

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SetReferrals"; LDAPRef; Value)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Value

The new setting.

0

Result Returns OK or error.

Description

Specifies whether to automatically follow referrals returned by the LDAP server.

See also

- 102.10 LDAP.GetReferrals

5381

Created 18th December 2015, last changed 18th December 2015.

102.31 LDAP.SetTimeOut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	No	Yes	Yes	No

MBS("LDAP.SetTimeOut"; LDAPRef; Timeout)

Parameters

LDAPRef

The reference number for the LDAP connection.
\$ldap

Timeout

The new timeout in seconds.
5

Result Returns OK or error.

Description

This sets the default timeout for the ldap connection.
Value is in seconds. Resolution is in microseconds.

Examples

Sets timeout to 3 seconds:

```
Variable setzen [ $r ; Wert: MBS("LDAP.SetTimeOut"; $ldap; 3) ]
```

See also

- [102.11 LDAP.GetTimeOut](#) 5382
- [151.3 SNMP.SetTimeout](#) 7126

102.31.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 18th December 2015, last changed 20th March 2019.

102.32 LDAP.SimpleBind

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	6.0	Yes	Yes	Yes	Yes	No

MBS("LDAP.SimpleBind"; LDAPRef; dn; Password)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

dn

The name of the user to bind as. The bind operation uses the dn and password parameters to authenticate the user.

Password

The password of the user specified in the dn parameter.

Result Returns OK or error.

Description

Examples

Binds anonymously to the server:

```
MBS( "LDAP.SimpleBind"; $ldap)
```

102.32.1 Blog Entries

- [LDAP in FileMaker](#)

Created 15th December 2015, last changed 15th December 2015.

102.33 LDAP.StartTLS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
102 LDAP	9.3	Yes	Yes	Yes	Yes	No

MBS("LDAP.StartTLS"; LDAPRef)

Parameters

LDAPRef

The reference number for the LDAP connection.

\$ldap

Result Returns OK or error.

Description

Sends a StartTLS request to a server, waits for the reply, and then installs TLS handlers on the session if the request succeeded.

Created 13th August 2019, last changed 13th August 2019.

102.34 SystemInfo.ADSystemInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo 102 LDAP	9.3	No	Yes	No	No	No

MBS("SystemInfo.ADSystemInfo")

Result Returns JSON or error.

Description

This call may take a second if a query needs to be sent to server.

Returns JSON with details including UserName, ComputerName, SiteName, DomainShortName, DomainDNSName, ForestDNSName, PDCRoleOwner, SchemaRoleOwner, IsNativeMode, DCName and DCSiteName.

The result is an empty JSON object in case of no Active Directory in use.

Examples

Query Active Directory details on Windows:

MBS("SystemInfo.ADSystemInfo")

Example result: {

"UserName": "CN=John Doe,OU=2SH User,DC=2SXXX,DC=2S",

"ComputerName": "CN=2SMBP16W10,CN=Computers,DC=2SXXX,DC=2S",

"SiteName": "Default-First-Site-Name",

"DomainShortName": "2SXXX",

"DomainDNSName": "2SXXX.2S",

"ForestDNSName": "2SXXX.2S",

"PDCRoleOwner": "CN=NTDS Settings,CN=2SDCERP,CN=Servers,CN=Default-First-Site-Name,CN=Sites,CN=Configuration,DC=2SXXX,DC=2S",

"SchemaRoleOwner": "CN=NTDS Settings,CN=2SDCERP,CN=Servers,CN=Default-First-Site-Name,CN=Sites,CN=Configuration,DC=2SXXX,DC=2S",

"IsNativeMode": true,

"DCName": "2SDCSTORAGE.2SXXX.2S",

"DCSiteName": "Default-First-Site-Name"

}

See also

- [102.5 LDAP.Bind](#) 5373
- [161.31 SystemInfo.SystemFont](#) 7684

102.34.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr2](#)

Created 4th June 2019, last changed 18th October 2019.

Chapter 103

List

Text functions for working with lists.

For big lists, our QuickList functions are much faster. Because the list is only parsed once and stored indexed in memory.

103.1 List.AddPostfix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("List.AddPostfix"; List; Postfix { ; NoReturnEnding })

Parameters

List

The list to process.

"Hello\$World"

Postfix

The text to append.

"!"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Examples

Add postfix to list:

```
MBS( "List.AddPostfix"; "Hello$World"; "!")
```

See also

- 103.2 List.AddPrefix 5419
- 103.42 QuickList.AddPostfix 5478
- 103.43 QuickList.AddPrefix 5480

103.1.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

103.2 List.AddPrefix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("List.AddPrefix"; List; Prefix { ; NoReturnEnding })

Parameters

List

The list to process.

"Hello\$World"

Prefix

The text to prepend.

"!"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Examples

Add prefix to list:

MBS("List.AddPrefix"; "Hello\$World"; "!")

See also

- 103.1 List.AddPostfix 5417
- 103.42 QuickList.AddPostfix 5478
- 103.43 QuickList.AddPrefix 5480

103.2.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 12nd March 2016.

103.3 List.AddValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.1	Yes	Yes	Yes	Yes	Yes

MBS("List.AddValue"; List; Text)

Parameters

List

The list to process.

"Hello" §" §"World"

Text

The text to add.

"Hello"

Result Returns list or error.

Description

For big lists, using QuickList functions is much faster. The list is only parsed once and stored in memory.

See also

- 103.14 List.GetValue 5436
- 103.16 List.HasValue 5438
- 103.17 List.InsertValue 5440
- 103.33 List.SetValue 5463
- 103.41 QuickList.AddMultiValue 5476
- 103.46 QuickList.AddValue 5485
- 103.64 QuickList.InsertValue 5513

Created 11st March 2017, last changed 11st March 2017.

103.4 List.And

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("List.And"; List1; List2 { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Performs a logical AND operation.

Examples

Perform logical AND on list:

MBS("List.AND"; "1§2§3§4"; "3§4§5§6")

See also

- [103.5 List.AndColumn](#) 5422
- [103.47 QuickList.And](#) 5487
- [103.48 QuickList.AndColumn](#) 5489

103.4.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr3](#)

Created 25th September 2014, last changed 25th September 2014.

103.5 List.AndColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	10.0	Yes	Yes	Yes	Yes	Yes

MBS("List.AndColumn"; List1; List2; Separator; Column { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

Separator

The separator text. Can be multiple characters. For tab separated text, pass Char(9). For CSV separated text, pass ";" or ",".

Char(9)

Column

The index of the column to compare. Starts with 0 for first column.

0

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Performs a logical AND operation.

Checks the given column in both lists too compare.

If Separator is empty, this is same as List.And, but slower.

Examples

And two lists based on 2 column:

```
MBS( "List.AndColumn";
"1 test 3$a b c$d$e f";
"2 test 4$a f c$d b";
" "; 1 )
```

Example result: 2 test 4

a f c

103.5. *LIST.ANDCOLUMN* 5423
d b

See also

- 103.4 List.And 5421
- 103.21 List.NotColumn 5444
- 103.23 List.OrColumn 5447
- 103.39 List.XOrColumn 5472

103.5.1 Blog Entries

- [New in the MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 23th December 2019, last changed 23th December 2019.

103.6 List.BestMatch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.0	Yes	Yes	Yes	Yes	Yes

MBS("List.BestMatch"; List; SearchText)

Parameters

List

The list to process.

"Hello" §" §"World"

SearchText

The text to search.

"Hello"

Result Returns best match, empty or error.

Description

If not found, returns empty result, so FileMaker function isEmpty() will tell you if it's empty (instead of just having no text).

Uses internally the Text.LevenshteinDistance function to compare all items and look for best match.

If no entry matches over 50% , this may return empty text.

See also QuickList.BestMatch in case you need to query several times and want to load list only once.

Examples

Looking for best match for Hilo will find Hello:

MBS("List.BestMatch"; "Test\$Hello\$World\$Hallo"; "Hilo")

See also

- 103.24 List.RegExMatch 5449
- 103.49 QuickList.BestMatch 5491
- 164.43 Text.LevenshteinDistance 7836

103.6.1 Blog Entries

- [MBS FileMaker Plugin debugging help](#)
- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 11st December 2014, last changed 25th June 2019.

103.7 List.CSVSplit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.4	Yes	Yes	Yes	Yes	Yes

MBS("List.CSVSplit"; Text { ; Delimiter })

Parameters

Text

The CSV text.

"Hello;World"

Delimiter

Optional

Available in MBS FileMaker Plugin 8.5 or newer.

The delimiter to use. If empty, we auto detect it.

","

Result Returns list or error.

Description

Plugin automatically detects if comma or semicolon is used.

Returns list with all values.

Version 8 can detect tab character, too.

Examples

Split with one value:

```
MBS("List.CSVSplit"; "hello")
```

Split with three values:

```
MBS("List.CSVSplit"; "\hello\";\test\";\CSV\")
```

Split with 3 rows and 3 values:

```
MBS("List.CSVSplit"; "\hello1\";\test\";\CSV\">$\"hello2\";\test\";\CSV\">$\"hello3\";\test\";\CSV\")
```

See also

- 80.19 FM.InsertRecordCSV 4119
- 103.50 QuickList.CSVSplit 5492
- 164.49 Text.ReadTextFile 7843

103.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr3](#)
- [MBS FileMaker Plugin, version 8.5pr7](#)
- [MBS FileMaker Plugin, version 8.5pr4](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)
- [MBS FileMaker Plugin, version 8.0pr8](#)
- [Parsing VCard file](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 7.4pr8](#)

Created 21st September 2017, last changed 22nd October 2018.

103.8 List.CountValues

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	8.1	Yes	Yes	Yes	Yes	Yes

MBS("List.CountValues"; List)

Parameters

List

The list to process.

"Hello" §" §"World"

Result Returns list or error.

Description

The result contains count, tab and the word and is not sorted.

Examples

List values:

MBS("List.CountValues"; "Hello\$World\$Hello")

Example result: 1 World

2 Hello

See also

- [164.44 Text.ListWords](#)

7837

Example Databases

- [Text functions/Word Count functions](#)

103.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr2](#)

Created 5th February 2018, last changed 5th February 2018.

103.9 List.CrossProduct

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("List.CrossProduct"; List1; List2 { ; Prefix; Midfix; Postfix; Flags })

Parameters

List1

The first list to process.
"Hello\$World"

List2

The second list to process.
"1\$2"

Prefix

Optional
The prefix to use

Midfix

Optional
The middle to use. This text is put between texts from both lists.

Postfix

Optional
The postfix to use

Flags

Optional
Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists. Add 2 for a diagonal cross, so we combine each element of first list with the same element index from the second list.
1

Result Returns list or error.

Description

Optionally adds prefix, postfix and midfix.
Returns empty list if one of the lists are empty!

Examples

Test with all parameters:

```
MBS( "List.CrossProduct"; "Hello$World"; "1$2"; "before"; "middle"; "after" )
```

Combine elements from lists:

```
MBS( "List.CrossProduct"; "Hello$World"; "1$2"; "before"; "middle"; "after"; 2 )
```


103.9. *LIST.CROSSPRODUCT*

5429

See also

- 103.54 QuickList.CrossProduct 5497
- 103.90 QuickList.SortWith 5552

103.9.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr1](#)
- [New functions for MBS FileMaker Plugin coming soon](#)
- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 17th March 2016.

103.10 List.DeCombine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.3	Yes	Yes	Yes	Yes	Yes

MBS("List.DeCombine"; List; ColumnDelimiter; StartColumn; EndColumn { ; NoReturnEnding })

Parameters

List

The list to process.

"Hello" §" §"World"

ColumnDelimiter

The delimiter between columns. This is also used in result.

" | "

StartColumn

Index of column to start. First is 0.

0

EndColumn

Index of column to end. First is 0. If you only want one column, please pass same value for start and end column.

0

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

This function combines values from a list by picking only given columns.

Examples

Queries second word in each entry:

```
MBS( "List.DeCombine"; "Hello | The | World$Thats | What | WeMake$YUPP | Thats | Fun"; " | "; 1; 1;1 )
```

Example result: "The\$What\$Thats"

Query fist word in each entry:

```
MBS( "List.DeCombine"; "Hello | The | World$Thats | What | WeMake$YUPP | Thats | Fun"; " | "; 0; 0;1 )
```

Example result: "Hello\$Thats\$YUPP"

Query first adn second word in each entry:

103.10. *LIST.DECOMBINE*

5431

MBS("List.DeCombine"; "Hello | The | World\$Thats | What | WeMake\$YUPP | Thats | Fun"; " | "; 0; 1 ;1)

Example result: "Hello | The\$Thats | What\$YUPP | Thats"

See also

- 103.55 QuickList.DeCombine 5499
- 103.90 QuickList.SortWith 5552

103.10.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)
- [MBS FileMaker Plugin, version 6.3pr5](#)

Created 25th June 2016, last changed 11st December 2016.

103.11 List.Deserialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.2	Yes	Yes	Yes	Yes	Yes

MBS("List.Deserialize"; Text { ; NoReturnEnding })

Parameters

Text

The serialized data as text.

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Examples

Save and restore a list:

```
Set Variable [ $list; Value:"Hello$World$1234$Just a test!" ]
```

```
Set Variable [ $text; Value:MBS("List.Serialize"; $list) ]
```

```
Show Custom Dialog [ "List"; "Encoded: " & $text & $& $& "Decoded: " & MBS("List.Deserialize"; $text) ]
```

See also

- 103.32 List.Serialize 5462
- 103.56 QuickList.Deserialize 5501
- 103.86 QuickList.Serialize 5545
- 164.24 Text.Deserialize 7809

103.11.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 6th July 2015, last changed 27th September 2017.

103.12 List.FindEquals

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.2	Yes	Yes	Yes	Yes	Yes

MBS("List.FindEquals"; List1; List2 { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns new list.

Description

Examples

Find equal entries in both lists:

MBS("List.FindEquals"; "Hello" §"World"; "Hello" §"Friends")

See also

- 103.13 List.FindUnequals

5434

Example Databases

- [Text functions/Lists](#)

103.12.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr11](#)

Created 18th August 2014, last changed 21st September 2014.

103.13 List.FindUnequals

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.2	Yes	Yes	Yes	Yes	Yes

MBS("List.FindUnequals"; List1; List2 { ; NoReturnEnding; NotFromSecondList })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

NotFromSecondList

Optional

Pass 1 to only returns items from first list not present in second list. Default is 0 to get items from both lists.

0

Result Returns new list.

Description

Examples

Find non equal entries in both lists:

```
MBS( "List.FindUnequals"; "Hello§World"; "Hello§Friends"; 1 )
```

Example result: "World

Friends"

Find items in first list which are not in second list:

```
MBS( "List.FindUnequals"; "Hello§World"; "Hello§Friends"; 1; 1 )
```

Example result: "Hello"

See also

- 103.12 List.FindEquals 5433
- 103.58 QuickList.FindUnequals 5503

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [Mac and iOS/Events/Events Changes](#)
- [Text functions/Lists](#)

103.13.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)
- [MBS Filemaker Plugin, version 4.2pr11](#)

Created 18th August 2014, last changed 27th May 2017.

103.14 List.GetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.1	Yes	Yes	Yes	Yes	Yes

MBS("List.GetValue"; List; Index)

Parameters

List

The list to process.

"Hello" §" §"World"

Index

The index of the value to get. Must be in range from 0 to QuickList.Count-1.

\$index

Result Returns list or error.

Description

If you enable tracing with Trace command, this function will be much slower due to the debug output.

See also

- 103.3 List.AddValue 5420
- 103.16 List.HasValue 5438
- 103.33 List.SetValue 5463
- 103.53 QuickList.Count 5495
- 103.61 QuickList.GetValue 5508

Created 11st March 2017, last changed 11st March 2017.

103.15 List.HasDuplicateItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.5	Yes	Yes	Yes	Yes	Yes

MBS("List.HasDuplicateItems"; List)

Parameters

List

The list to process.

"Hello" §"Hello" §"World"

Result Returns 1, 0 or error.

Description

Returns 1 if duplicate lines are found or 0 if not.

See also

- 103.26 List.RemoveDuplicateItems 5452
- 103.62 QuickList.HasDuplicateItems 5510

103.15.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 21st October 2017, last changed 21st October 2017.

103.16 List.HasValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.4	Yes	Yes	Yes	Yes	Yes

MBS("List.HasValue"; List; Value)

Parameters

List

The list to process.
"Hello" §" §"World"

Value

The value to check.
"Hello"

Result Returns 1, 0 or error.

Description

Returns 1 if value is found or 0 if not. Text comparison is case sensitive.

Examples

Check if value is in list:

```
MBS( "List.HasValue"; "1§2§3"; "2" )
```

Print what user selected:

```
# Show dialog to select something
Set Variable [ $r; Value:MBS("ListDialog.ClearList") ]
Set Variable [ $r; Value:MBS("ListDialog.SetPrompt"; "Please select items to print:") ]
# We use tags as the visible titles may be localized.
Set Variable [ $r; Value:MBS("ListDialog.AddItemToList"; "Werbung§Angebot§Rechnung§Erinnerung"; "Flyer§Of-fer§Invoice§Reminder") ]
Set Variable [ $r; Value:MBS("ListDialog.SetAllowMultipleSelection"; 1) ]
Set Variable [ $r; Value:MBS("ListDialog.SetSelectedTitle"; "Offer") ]
# Show dialog
Set Variable [ $r; Value:MBS("ListDialog.ShowDialog") ]
# now do things
Set Variable [ $selected; Value:MBS("ListDialog.GetSelectedTag") ]
If [ MBS("List.HasValue"; $selected; "Flyer") ]
# print flyer
End If
If [ MBS("List.HasValue"; $selected; "Invoice") ]
# print invoice
End If
If [ MBS("List.HasValue"; $selected; "Offer") ]
# print offer
```

103.16. *LIST.HASVALUE* 5439

```
End If  
If [ MBS("List.HasValue"; $selected; "Reminder") ]  
# print reminder  
End If
```

See also

- 103.3 List.AddValue 5420
- 103.14 List.GetValue 5436
- 103.33 List.SetValue 5463
- 104.5 ListDialog.ClearList 5568
- 104.18 ListDialog.GetSelectedTag 5581
- 104.27 ListDialog.SetAllowMultipleSelection 5590
- 104.37 ListDialog.SetPrompt 5600
- 104.40 ListDialog.SetSelectedTitle 5603
- 104.43 ListDialog.ShowDialog 5606
- 103.63 QuickList.HasValue 5511

103.16.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr8](#)

Created 16th September 2016, last changed 16th September 2016.

103.17 List.InsertValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.1	Yes	Yes	Yes	Yes	Yes

MBS("List.InsertValue"; List; Index; Text)

Parameters

List

The list to process.

"Hello" §" §"World"

Index

the index where to insert.

0

Text

The text to add.

"Hello"

Result Returns list or error.

Description

Please note that List.AddValue is more efficient than inserting.

See also

- 103.3 List.AddValue

5420

103.17.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr1](#)

Created 11st March 2017, last changed 11st March 2017.

103.18 List.MatchesPostfix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.4	Yes	Yes	Yes	Yes	Yes

MBS("List.MatchesPostfix"; List; Text { ; NoReturnEnding })

Parameters

List

The list of texts to search.

"Hello"

Text

The text to find.

"Hello"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns new list or error.

Description

Comparison is case insensitive.

Examples

Finds list entries with matching postfixes:

MBS("List.MatchesPostfix"; "Hello\$auto\$World"; "o")

See also

- 78.37 Files.List 3828
- 103.19 List.MatchesPrefix 5442
- 103.66 QuickList.MatchesPostfix 5515

103.18.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr7](#)

Created 20th November 2015, last changed 20th November 2015.

103.19 List.MatchesPrefix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.4	Yes	Yes	Yes	Yes	Yes

MBS("List.MatchesPrefix"; List; Text { ; NoReturnEnding })

Parameters

List

The list of texts to search.

"Hello"

Text

The text to find.

"Hello"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns new list or error.

Description

Comparison is case insensitive.

Examples

Finds matching prefixes:

MBS("List.MatchesPrefix"; "Hello\$www\$World"; "w")

See also

- 61.59 [CURL.GetHeaderAsText](#) 1850
- 61.112 [CURL.GetResultAsContainer](#) 1907
- 103.18 [List.MatchesPostfix](#) 5441
- 103.67 [QuickList.MatchesPrefix](#) 5517

103.19.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr7](#)

Created 20th November 2015, last changed 20th November 2015.

103.20 List.Not

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("List.Not"; List1; List2 { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns OK or error.

Description

Performs a logical NOT operation.

Examples

Operate not on two lists:

MBS("List.Not"; "Abc\$Def\$Ghi\$Jkl"; "Abc\$Jkl\$Zui\$Edf")

See also

- 103.21 List.NotColumn 5444
- 103.34 List.Sort 5464
- 103.71 QuickList.NotColumn 5525

103.20.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr5](#)

Created 8th October 2014, last changed 8th October 2014.

103.21 List.NotColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	10.0	Yes	Yes	Yes	Yes	Yes

MBS("List.NotColumn"; List1; List2; Separator; Column { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

Separator

The separator text. Can be multiple characters. For tab separated text, pass Char(9). For CSV separated text, pass ";" or ",".

Char(9)

Column

The index of the column to compare. Starts with 0 for first column.

0

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Performs a logical NOT operation.

Checks the given column in both lists too compare.

If Separator is empty, this is same as List.Not, but slower.

See also

- 103.5 List.AndColumn 5422
- 103.20 List.Not 5443
- 103.23 List.OrColumn 5447
- 103.39 List.XOrColumn 5472

103.21.1 **Blog Entries**

- [New in the MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 23th December 2019, last changed 23th December 2019.

103.22 List.Or

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("List.Or"; List1; List2 { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Performs a logical OR operation.

Examples

Perform logical OR on list:

MBS("List.Or"; "1§2§3§4"; "3§4§5§6")

See also

- 103.23 List.OrColumn 5447
- 103.38 List.XOr 5471
- 103.72 QuickList.Or 5527
- 103.73 QuickList.OrColumn 5529

103.22.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr3](#)

Created 25th September 2014, last changed 25th September 2014.

103.23 List.OrColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	10.0	Yes	Yes	Yes	Yes	Yes

MBS("List.OrColumn"; List1; List2; Separator; Column { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

Separator

The separator text. Can be multiple characters. For tab separated text, pass Char(9). For CSV separated text, pass ";" or ",".

Char(9)

Column

The index of the column to compare. Starts with 0 for first column.

0

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Performs a logical OR operation.

Checks the given column in both lists too compare.

If Separator is empty, this is same as List.Or, but slower.

Examples

Trying OR based on second column:

MBS("List.OrColumn"; "1 test 3\$a b c\$d\$e f"; "2 test 4\$a f c\$d b"; " "; 1)

Example result: 1 test 3

a b c

d

e f

2 test 4

See also

- 103.5 List.AndColumn 5422
- 103.21 List.NotColumn 5444
- 103.22 List.Or 5446
- 103.39 List.XOrColumn 5472

103.23.1 Blog Entries

- [New in the MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 23th December 2019, last changed 23th December 2019.

103.24 List.RegExMatch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("List.RegExMatch"; List; Pattern; CompilerOptions; ExecuteOptions { ; NoReturnEnding })

Parameters

List

The list of texts to search.

"Hello"

Pattern

The pattern to use.

"H(*)"

CompilerOptions

A number for the options to use. e.g. 1 for case insensitive or 512 for ungreedy.

512+1

ExecuteOptions

The options for executing.

0

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

This compiles the pattern, executes it and looks if we have a match or not for each list item.

Returns the list items which match.

Examples

Match Hello with pattern:

```
MBS( "List.RegExMatch"; "Hello$Test$World$House$Test"; "H(*)o")
```

same without return on end of result:

```
MBS( "List.RegExMatch"; "Hello$Test$World$House$Test"; "H(*)o"; 0; 0; 1)
```

See also

- 103.6 List.BestMatch

103.24.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr9](#)

Created 2nd November 2014, last changed 29th June 2015.

103.25 List.Remove

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.1	Yes	Yes	Yes	Yes	Yes

MBS("List.Remove"; List; Index)

Parameters

List

The list to process.

"Hello" §" §"World"

Index

The index of the item to remove. Range from 0 to QuickList.Count-1.

0

Result Returns list or error.

Description

Returns a new list where the value is missing.

For big lists, using QuickList functions is much faster. The list is only parsed once and stored in memory.

See also

- 103.26 List.RemoveDuplicateItems 5452
- 103.27 List.RemoveEmptyItems 5454
- 103.28 List.RemovePostfix 5455
- 103.29 List.RemovePrefix 5457
- 103.30 List.RemoveValue 5459
- 103.53 QuickList.Count 5495
- 103.81 QuickList.RemovePostfix 5538
- 103.82 QuickList.RemovePrefix 5540
- 159.1 SyntaxColoring.AddContextMenuCommand 7553

Created 11st March 2017, last changed 13th November 2017.

103.26 List.RemoveDuplicateItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.2	Yes	Yes	Yes	Yes	Yes

MBS("List.RemoveDuplicateItems"; List { ; NoReturnEnding; RemoveAll })

Parameters

List

The list to process.

"Hello" §"Hello" §"World"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

RemoveAll

Optional

If duplicate is found also remove the first occurrence. Set to 1 to enable or 0 to disable. Default is disabled.

1

Result Returns new list.

Description

Similar to UniqueValues function in FileMaker to find unique values.

Examples

Remove duplicates:

```
MBS( "List.RemoveDuplicateItems"; "Hello$World$Hello" )
```

Remove all duplicates

```
MBS( "List.RemoveDuplicateItems"; "Hello$World$Hello"; 0; 1 )
```

See also

- 103.15 List.HasDuplicateItems 5437
- 103.25 List.Remove 5451
- 103.79 QuickList.RemoveDuplicateItems 5536

Example Databases

- [Text functions/Lists](#)

103.26.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr3](#)
- [MBS Filemaker Plugin, version 4.2pr11](#)

Created 18th August 2014, last changed 6th February 2018.

103.27 List.RemoveEmptyItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.2	Yes	Yes	Yes	Yes	Yes

MBS("List.RemoveEmptyItems"; List { ; NoReturnEnding })

Parameters

List

The list to process.

"Hello" §" §"World"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns new list.

Description

Examples

Remove empty lines:

MBS("List.RemoveEmptyItems"; "Hello" §" §"World")

See also

- [103.25 List.Remove](#) 5451
- [103.80 QuickList.RemoveEmptyItems](#) 5537

Example Databases

- [Text functions/Lists](#)

103.27.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr11](#)

Created 18th August 2014, last changed 21st September 2014.

103.28 List.RemovePostfix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("List.RemovePostfix"; List; Postfix { ; NoReturnEnding; CaseSensitive })

Parameters

List

The list to process.

"Hello\$World"

Postfix

The text to remove.

"llo"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

CaseSensitive

Optional

Whether to match with case sensitive comparison. Default is 0 for case insensitive. You can pass 1 to have a case sensitive comparison.

0

Result Returns list or error.

Description

Examples

Remove postfix from list:

MBS("List.RemovePostfix"; "Hello?\$Other\$World?"; "?")

See also

- 103.25 List.Remove 5451
- 103.29 List.RemovePrefix 5457
- 103.81 QuickList.RemovePostfix 5538
- 103.82 QuickList.RemovePrefix 5540
- 159.1 SyntaxColoring.AddContextMenuCommand 7553
- 164.56 Text.RemovePostfix 7853

103.28.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

103.29 List.RemovePrefix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("List.RemovePrefix"; List; Prefix { ; NoReturnEnding; CaseSensitive })

Parameters

List

The list to process.

"Hello\$World"

Prefix

The text to remove.

"H"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

CaseSensitive

Optional

Whether to match with case sensitive comparison. Default is 0 for case insensitive. You can pass 1 to have a case sensitive comparison.

0

Result Returns list or error.

Description

Examples

Remove prefix from list:

```
MBS( "List.RemovePrefix"; "testHello$Other$testWorld"; "test")
```

List files with relative paths:

```
MBS( "List.RemovePrefix"; MBS( "Files.ListRecursive"; "/Users/Shared/"); "/Users/Shared/")
```

See also

- 78.37 Files.List 3828
- 78.38 Files.ListRecursive 3831
- 103.25 List.Remove 5451
- 103.28 List.RemovePostfix 5455

5458

CHAPTER 103. LIST

- 103.81 QuickList.RemovePostfix 5538
- 103.82 QuickList.RemovePrefix 5540
- 164.57 Text.RemovePrefix 7854

103.29.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 27th April 2019.

103.30 List.RemoveValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.1	Yes	Yes	Yes	Yes	Yes

MBS("List.RemoveValue"; List; Value { ; All })

Parameters

List

The list to process.

"Hello" §" §"World"

Value

The value to remove.

"Hello"

All

Optional

Optional, pass 1 to remove all values with the given value. Pass 0 (default) to remove only the first matching value.

0

Result Returns list or error.

Description

Examples

Remove one value:

MBS("List.RemoveValue"; "Hello§123§World§123§abc"; "123")

Example result: Hello

World

123

abc

Remove all values:

MBS("List.RemoveValue"; "Hello§123§World§123§abc"; "123"; 1)

Example result: Hello

World

abc

See also

- 103.25 List.Remove

103.30.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr3](#)

Created 11st March 2017, last changed 28th July 2019.

103.31 List.Reverse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("List.Reverse"; List { ; NoReturnEnding })

Parameters

List

The list to sort.

"Hello" §"World"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns OK or error.

Description

Examples

Reverse list:

MBS("List.Reverse"; "Hello\$World\$Test")

103.31.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr5](#)
- [MBS Filemaker Plugin, version 4.4pr3](#)

Created 29th September 2014, last changed 29th September 2014.

103.32 List.Serialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.2	Yes	Yes	Yes	Yes	Yes

MBS("List.Serialize"; List)

Parameters

List

The list to process.

"Hello" §" §"World"

Result Returns text or error.

Description

The dictionary content is stored in a base64 encoded string which the plugin function List.Deserialize and QuickList.Deserialize can read.

Using this function allows to store a list in a text field or transmit it with Socket functions, SerialPort functions or by writing it to a file.

Examples

Save and restore a list:

```
Set Variable [ $list; Value:"Hello$World$1234$Just a test!" ]
```

```
Set Variable [ $text; Value:MBS("List.Serialize"; $list) ]
```

```
Show Custom Dialog [ "List"; "Encoded: " & $text & §& §& "Decoded: " & MBS("List.Deserialize"; $text) ]
```

See also

- 103.11 List.Deserialize 5432
- 103.56 QuickList.Deserialize 5501
- 103.86 QuickList.Serialize 5545
- 164.60 Text.Serialize 7860

103.32.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 6th July 2015, last changed 6th July 2015.

103.33 List.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.1	Yes	Yes	Yes	Yes	Yes

MBS("List.SetValue"; List; Index; Text)

Parameters

List

The list to process.

"Hello" §" §"World"

Index

The index of the value to set. Must be in range from 0 to ValueCount(List).

\$index

Text

The text to add.

"Hello"

Result Returns list or error.

Description

If index is equal to count, we append the text to the list.

For big lists, using QuickList functions is much faster. The list is only parsed once and stored in memory.

See also

- 103.3 List.AddValue 5420
- 103.14 List.GetValue 5436
- 103.16 List.HasValue 5438
- 103.88 QuickList.SetValue 5548

Created 11st March 2017, last changed 29th March 2019.

103.34 List.Sort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.2	Yes	Yes	Yes	Yes	Yes

MBS("List.Sort"; List { ; Flags; NoReturnEnding })

Parameters

List

The list to sort.
"Hello" §"World"

Flags

Optional

Optional, whether to sort case insensitive or descending. Pass 1 to sort case insensitive or 0 to sort case sensitive. Add 2 to sort descending. Add 4 for sorting dates in DD.MM.YYYY style and 8 for sorting dates in MM.DD.YYYY style. Add 16 for number sorting (new in 7.5).

1

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns new list.

Description

Version 6.2 adds new modes for date sorting. Mode 4 for DD.MM.YYYY style and mode 8 for MM.DD.YYYY style.

Version 7.5 adds number sorting.

Examples

Sort case sensitive:

```
MBS( "List.Sort"; "Hello$World$Test" )
```

Sort case insensitive:

```
MBS( "List.Sort"; "Hello$World$test"; 1 )
```

Sort case sensitive and descending:

```
MBS( "List.Sort"; "Hello$World$Test"; 2 )
```

Sort case insensitive and descending:

```
MBS( "List.Sort"; "Hello$World$test"; 3 )
```

Sort German dates:

```
Show Custom Dialog [ MBS("List.Sort"; "01.01.2001§12.04.1981§01.04.1981§12.07.1981§12.01.1981§23.11.2014";  
4; 0) ]
```

Sort US dates:

```
Show Custom Dialog [ MBS("List.Sort"; "01/01/2001§04/12/1981§04/01/1981§07/12/1981§01/12/1981§11/23/2014";  
8; 0) ]
```

Sort numbers

```
MBS( "List.Sort"; "1§555§7"; 16 )
```

Example result: "1

7

555

"

See also

- [78.37 Files.List](#) 3828
- [82.7 FontManager.ListFontFamilies](#) 4203
- [82.8 FontManager.ListFonts](#) 4204
- [103.20 List.Not](#) 5443
- [103.55 QuickList.DeCombine](#) 5499
- [103.89 QuickList.Sort](#) 5550
- [103.90 QuickList.SortWith](#) 5552

Example Databases

- [List/List Sorting](#)
- [List/Sort Benchmark](#)
- [Text functions/Lists](#)

103.34.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin, version 7.5pr5](#)

- MBS FileMaker Plugin, version 6.2pr1
- New functions for MBS FileMaker Plugin coming soon
- MBS Filemaker Plugin, version 4.4pr4
- MBS Filemaker Plugin, version 4.4pr3
- MBS Filemaker Plugin, version 4.2pr11

Created 18th August 2014, last changed 1st November 2017.

103.35 List.SubList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.5	Yes	Yes	Yes	Yes	Yes

MBS("List.SubList"; List; Index; Count { ; NoReturnEnding })

Parameters

List

The list to process.

"Hello" §"" §"World"

Index

The zero based index where to start. Or in other words: How many entries to skip.

3

Count

How many entries to copy. If negative, we pick the other items left.

5

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns OK or error.

Description

Examples

Get first item:

```
MBS( "List.SubList"; "Hello"; 0; 1; 1)
```

Example result: "Hello"

Get all items:

```
MBS( "List.SubList"; "a$b$c$d$e"; 0; -1)
```

Example result: "a

b

c

d

e

"

Get 2 items starting at offset 2:

```
MBS( "List.SubList"; "a$b$c$d$e"; 2; 2)
```

Example result: "c
d
"

103.35.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr1](#)

Created 27th September 2017, last changed 27th September 2017.

103.36 List.Trim

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.5	Yes	Yes	Yes	Yes	Yes

MBS("List.Trim"; List { ; NoReturnEnding })

Parameters**List**

The list to sort.

"Hello" §"World"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns OK or error.

Description**Examples**

Trim list values:

MBS("List.Trim"; " Hello §With tab §")

Created 21st October 2017, last changed 21st October 2017.

103.37 List.ValueIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.4	Yes	Yes	Yes	Yes	Yes

MBS("List.ValueIndex"; List; Value)

Parameters

List

The list of texts to search.

"Hello"

Value

The text to find.

"Hello"

Result Returns index, nothing or error.

Description

Returns zero based index (0 = first list value).

Returns empty result if not found.

Comparison is case insensitive.

Examples

Searches a word in a list:

Returns 4

MBS("List.ValueIndex"; "Hello\$1\$2\$3\$World"; "world")

103.37.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr7](#)

Created 20th November 2015, last changed 20th November 2015.

103.38 List.XOr

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("List.XOr"; List1; List2 { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Performs an exclusive logical OR operation.

Examples

Perform logical XOR on list:

MBS("List.XOr"; "1§2§3§4"; "3§4§5§6")

See also

- 103.22 List.Or 5446
- 103.39 List.XOrColumn 5472
- 103.95 QuickList.XOrColumn 5560

103.38.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr3](#)

Created 25th September 2014, last changed 25th September 2014.

103.39 List.XOrColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	10.0	Yes	Yes	Yes	Yes	Yes

MBS("List.XOrColumn"; List1; List2; Separator; Column { ; NoReturnEnding })

Parameters

List1

The first list.

"Hello" §"World"

List2

The second list.

"Hello" §"Friends"

Separator

The separator text. Can be multiple characters. For tab separated text, pass Char(9). For CSV separated text, pass ";" or ",".

Char(9)

Column

The index of the column to compare. Starts with 0 for first column.

0

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Performs an exclusive logical OR operation.

Checks the given column in both lists too compare.

If Separator is empty, this is same as List.XOr, but slower.

See also

- 103.5 List.AndColumn 5422
- 103.21 List.NotColumn 5444
- 103.23 List.OrColumn 5447
- 103.38 List.XOr 5471

103.39.1 **Blog Entries**

- [New in the MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 23th December 2019, last changed 23th December 2019.

103.40 QuickList.AddList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.AddList"; List1; List2 { ; Separator })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The list to add.

\$List2

Separator

Optional

Available in MBS FileMaker Plugin 8.5 or newer.

The separator to use. Can be ASCII character number (e.g. 9 for tab) or a text where we use first character as separator. Default is newline character.

" | "

Result Returns OK or error.

Description

Examples

Create a quicklist and add a list:

```
Set Variable [ $q; Value:MBS("QuickList.New"; "Hello$World") ]
Set Variable [ $r; Value:MBS("QuickList.AddList"; $q; "Hello$World") ]
Show Custom Dialog [ MBS("QuickList.GetList"; $q) ]
Set Variable [ $r; Value:MBS("QuickList.Free"; $q) ]
```

See also

- 103.44 QuickList.AddQuickList 5482
- 103.45 QuickList.AddSQL 5483
- 103.46 QuickList.AddValue 5485
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.65 QuickList.List 5514
- 103.69 QuickList.New 5521

<i>103.40. QUICKLIST.ADDLIST</i>	5475
• 103.75 QuickList.PopFirst	5532
• 103.87 QuickList.SetList	5547
• 103.91 QuickList.SubList	5555

103.40.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)
- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 12nd November 2014, last changed 27th September 2018.

103.41 QuickList.AddMultiValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.2	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.AddMultiValue"; ListRef; Text; Count { ; Separator })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Text

The text to add. Can be a list itself.

"Hello"

Count

The number of times to add the value/list. Default is 0.

5

Separator

Optional

Available in MBS FileMaker Plugin 8.5 or newer.

The separator to use. Can be ASCII character number (e.g. 9 for tab) or a text where we use first character as separator. Default is newline.

" | "

Result Returns OK or error.

Description

Examples

Create a list:

```
Let ( [
q = MBS( "QuickList.New" );
r = MBS( "QuickList.AddValue"; q; "First" );
r = MBS( "QuickList.AddMultiValue"; q; "Middle"; 10 );
r = MBS( "QuickList.AddValue"; q; "Last" );
list = MBS("QuickList.GetList"; q);
r = MBS( "QuickList.Free"; q )
]; list )
```

Example result: First

Middle

Middle

Middle

Middle

Middle

Middle

Middle

Middle

Middle

Middle

Last

Create list from list:

```
Let ( [  
q = MBS( "QuickList.New" );  
r = MBS( "QuickList.AddMultiValue"; q; "Hello$World"; 3 );  
list = MBS("QuickList.GetList"; q);  
r = MBS( "QuickList.Free"; q )  
] ; list )
```

Example result: Hello

World

Hello

World

Hello

World

See also

- [103.3 List.AddValue](#) 5420
- [103.46 QuickList.AddValue](#) 5485
- [103.59 QuickList.Free](#) 5504
- [103.60 QuickList.GetList](#) 5506
- [103.69 QuickList.New](#) 5521

103.41.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 15th March 2017, last changed 27th September 2018.

103.42 QuickList.AddPostfix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.AddPostfix"; ListRef; Postfix { ; ReturnNewList })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Postfix

The text to append.

"!"

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.
Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list or error.

Description

Examples

Try in one Let statement:

```
Let( [
list = MBS("QuickList.New"; "Hello$World");
e = MBS("QuickList.AddPrefix"; list; ">");
e = MBS("QuickList.AddPostfix"; list; "<");
r = MBS("QuickList.GetList"; list);
d = MBS("QuickList.Free"; list)
]; r)
```

See also

- 103.1 List.AddPostfix 5417
- 103.2 List.AddPrefix 5419
- 103.40 QuickList.AddList 5474
- 103.43 QuickList.AddPrefix 5480
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506

103.42. *QUICKLIST.ADDPOSTFIX*

5479

- 103.69 QuickList.New

5521

103.42.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

103.43 QuickList.AddPrefix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.AddPrefix"; ListRef; Prefix { ; ReturnNewList })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Prefix

The text to prepend.

"!"

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.
Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list or error.

Description

Examples

Try in one Let statement:

```
Let( [
list = MBS("QuickList.New"; "Hello$World");
e = MBS("QuickList.AddPrefix"; list; ">");
e = MBS("QuickList.AddPostfix"; list; "<");
r = MBS("QuickList.GetList"; list);
d = MBS("QuickList.Free"; list)
]; r)
```

See also

- 103.1 List.AddPostfix 5417
- 103.2 List.AddPrefix 5419
- 103.42 QuickList.AddPostfix 5478
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521

103.43.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 5th June 2016.

103.44 QuickList.AddQuickList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.AddQuickList"; ListRef; ListRef2)

Parameters

ListRef

The reference to the list returned from QuickList.New function.
\$List

ListRef2

The reference to the list returned from QuickList.New function.
\$List

Result Returns OK or error.

Description

Examples

Build two quicklists and add one to other:

```
Set Variable [ $q; Value:MBS("QuickList.New"; "Hello$World") ]
Set Variable [ $o; Value:MBS("QuickList.New"; "1$2") ]
Set Variable [ $r; Value:MBS("QuickList.AddQuickList"; $q; $o) ]
Show Custom Dialog [ MBS("QuickList.GetList"; $q) ]
Set Variable [ $r; Value:MBS("QuickList.Free"; $q) ]
Set Variable [ $r; Value:MBS("QuickList.Free"; $o) ]
```

See also

- 103.40 QuickList.AddList 5474
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521

103.44.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 12nd November 2014, last changed 12nd December 2014.

103.45 QuickList.AddSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.1	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.AddSQL"; ListRef; SQL Statement; FileName { ; Params })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

SQL Statement

SQL Statement as a Text string

FileName

The target database name. Can be empty to not limit query to one database.

""

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns number of items added or error.

Description

All values in the result set are added as text to the list.

Returns error in case of SQL error with error message.

This function is currently only supported for FileMaker 11 and newer. If you need it for older versions, please contact us.

Examples

Fill a list and return it:

```
# create new list
$list = MBS("QuickList.New")
# add values via SQL
MBS("QuickList.AddSQL"; $list; "SELECT TextField FROM \"Test Table\"")
# query list content for displaying
$text = MBS("QuickList.GetList"; $list)
# and free it
MBS("QuickList.Free"; $list )
```

Add values based on SQL query in current file and one parameter:

```
MBS("QuickList.AddSQL"; "12002"; "SELECT TextField FROM \"Test Table\" WHERE NumberField>?";
```

```
Get(FileName); 1 )
```

Run query with quoted names and parameters for value:

```
Set Variable [ $Text ; Value: MBS("QuickList.AddSQL"; $ListNum; "SELECT \"MyField\" from \"MyTable\"  
Where \"SomeField\" = ?"; Get(FileName); "xyz") ]
```

See also

- 103.40 QuickList.AddList 5474
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521

103.45.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 12nd March 2015, last changed 17th June 2018.

103.46 QuickList.AddValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.AddValue"; ListRef; Text)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Text

The text to add.

"Hello"

Result Returns OK or error.

Description

Building list via plugin can be much faster than building using FileMaker internal functions.

Examples

Add items to a list:

```
$listID = MBS( "QuickList.New"; "Hello$World" )
$r = MBS( "QuickList.AddValue"; $listID; "1234" )
$r = MBS( "QuickList.AddValue"; $listID; "5678" )
$list = MBS( "QuickList.GetList"; $listID )
$r = MBS( "QuickList.Free"; $listID )
```

See also

- 103.3 List.AddValue 5420
- 103.40 QuickList.AddList 5474
- 103.48 QuickList.AndColumn 5489
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.61 QuickList.GetValue 5508
- 103.63 QuickList.HasValue 5511
- 103.64 QuickList.InsertValue 5513
- 103.69 QuickList.New 5521
- 103.88 QuickList.SetValue 5548

Example Databases

- [DynaPDF/Invoice/Invoice](#)
- [List/QuickList Test](#)
- [List/Sort Benchmark](#)

103.46.1 Blog Entries

- [Quicklist - Fast lists for FileMaker](#)

Created 21st September 2014, last changed 21st September 2014.

103.47 QuickList.And

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.And"; List1; List2 { ; ReturnNewList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

Performs a logical AND operation.

Examples

Performs And on two quicklists:

```
$list1 = MBS( "QuickList.New"; "a$b$c$d" )
$list2 = MBS( "QuickList.New"; "a$d" )
$list3 = MBS( "QuickList.And"; $list1; $list2; 1 )
$list = MBS( "QuickList.GetList"; $list3 )
$r = MBS( "QuickList.Free"; $list1 )
$r = MBS( "QuickList.Free"; $list2 )
$r = MBS( "QuickList.Free"; $list3 )
```

See also

- 103.4 List.And 5421
- 103.48 QuickList.AndColumn 5489
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521

- 103.70 QuickList.Not 5523
- 103.72 QuickList.Or 5527
- 103.74 QuickList.Pop 5531
- 103.94 QuickList.XOr 5559

103.47.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr5](#)

Created 8th October 2014, last changed 8th October 2014.

103.48 QuickList.AndColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	10.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.AndColumn"; List1; List2; Separator; Column { ; ReturnNewList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

Separator

The separator text. Can be multiple characters. For tab separated text, pass Char(9). For CSV separated text, pass ";" or ",".

Char(9)

Column

The index of the column to compare. Starts with 0 for first column.

0

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

Performs a logical AND operation.

Checks the given column in both lists too compare.

If Separator is empty, this is same as QuickList.And, but slower.

See also

- 103.4 List.And 5421
- 103.46 QuickList.AddValue 5485
- 103.47 QuickList.And 5487
- 103.59 QuickList.Free 5504
- 103.71 QuickList.NotColumn 5525

- 103.73 QuickList.OrColumn 5529
- 103.95 QuickList.XOrColumn 5560

103.48.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 23th December 2019, last changed 23th December 2019.

103.49 QuickList.BestMatch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.BestMatch"; ListRef; SearchText)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

SearchText

The text to search.

"Hello"

Result Returns best match, empty or error.

Description

If not found, returns empty result, so FileMaker function isEmpty() will tell you if it's empty (instead of just having no text).

Uses internally the Text.LevenshteinDistance function to compare all items and look for best match.

If no entry matches over 50% , this may return empty text.

See also

- 103.6 List.BestMatch 5424
- 103.69 QuickList.New 5521
- 103.77 QuickList.RegExMatch 5534
- 164.43 Text.LevenshteinDistance 7836

103.49.1 Blog Entries

- [MBS FileMaker Plugin debugging help](#)
- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 11st December 2014, last changed 25th June 2019.

103.50 QuickList.CSVSplit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.CSVSplit"; Text { ; Delimiter })

Parameters

Text

The CSV text.

"Hello;World"

Delimiter

Optional

Available in MBS FileMaker Plugin 8.5 or newer.

The delimiter to use. If empty, we auto detect it.

","

Result Returns QuickList reference number or error.

Description

Plugin automatically detects if comma or semicolon is used.

Returns list with all values.

Version 8 can detect tab character, too.

Examples

Try with 3 values:

```
MBS("QuickList.CSVSplit"; "\hello\";\test\";\CSV\")
```

See also

- [103.7 List.CSVSplit](#)

5425

103.50.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr3](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 7.4pr8](#)

Created 21st September 2017, last changed 22nd October 2018.

103.51 QuickList.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Clear"; ListRef)

Parameters**ListRef**

The reference to the list returned from QuickList.New function.
\$List

Result Returns OK or error.

Description**See also**

- 103.52 QuickList.Clone 5494
- 103.53 QuickList.Count 5495
- 103.59 QuickList.Free 5504
- 103.69 QuickList.New 5521

Created 21st September 2014, last changed 21st September 2014.

103.52 QuickList.Clone

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Clone"; List)

Parameters

List

The reference to the quicklist.

\$List

Result Returns reference number or error.

Description

A new reference number with a new list object or array behind and all content copied.

See also

- 103.51 QuickList.Clear 5493
- 103.53 QuickList.Count 5495
- 103.59 QuickList.Free 5504
- 103.78 QuickList.Remove 5535
- 103.89 QuickList.Sort 5550

103.52.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 5th March 2016, last changed 5th March 2016.

103.53 QuickList.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Count"; ListRef)

Parameters**ListRef**

The reference to the list returned from QuickList.New function.

\$List

Result Returns OK or error.

Description**See also**

- 103.14 List.GetValue 5436
- 103.25 List.Remove 5451
- 103.51 QuickList.Clear 5493
- 103.52 QuickList.Clone 5494
- 103.61 QuickList.GetValue 5508
- 103.69 QuickList.New 5521
- 103.70 QuickList.Not 5523
- 103.76 QuickList.Push 5533
- 103.78 QuickList.Remove 5535
- 103.88 QuickList.SetValue 5548

Example Databases

- [List/QuickList Test](#)

103.53.1 Blog Entries

- [Quicklist - Fast lists for FileMaker](#)

103.53.2 FileMaker Magazin

- Ausgabe 1/2015, Seite 20
- Ausgabe 1/2015, Seite 19

Created 21st September 2014, last changed 21st September 2014.

103.54 QuickList.CrossProduct

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.CrossProduct"; List1; List2 { ; Prefix; Midfix; Postfix; Flags })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

Prefix

Optional

The prefix to use

Midfix

Optional

The middle to use. This text is put between texts from both lists.

Postfix

Optional

The postfix to use

Flags

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function. Pass 0 (Default) to modify the list in the List1 parameter. Add 2 for a diagonal cross, so we combine each element of first list with the same element index from the second list.

0

Result Returns list or error.

Description

Optionally adds prefix, postfix and midfix.

Returns empty list if one of the lists are empty!

Examples

Try in a Let statement:

```
Let( [
list1 = MBS("QuickList.New"; "Hello$World");
list2 = MBS("QuickList.New"; "1$2");
e = MBS("QuickList.CrossProduct"; list1; list2);
r = MBS("QuickList.GetList"; list1);
d = MBS("QuickList.Free"; list1);
```

```
d = MBS("QuickList.Free"; list2)
]; r)
```

See also

- 103.9 List.CrossProduct 5428
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521

103.54.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)
- [Evaluate vs. Script Trigger](#)

Created 4th March 2016, last changed 17th March 2016.

103.55 QuickList.DeCombine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.5	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.DeCombine"; ListRef; ColumnDelimiter; StartColumn; EndColumn { ; ReturnNewList; NoReturnEnding })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

ColumnDelimiter

The delimiter between cols. This is also used in result.

" | "

StartColumn

Index of column to start. First is 0.

0

EndColumn

Index of column to end. First is 0. If you only want one column, please pass same value for start and end column.

0

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to return a text list.

0

NoReturnEnding

Optional

If you passed 0 for ReturnNewList, decides about new list: Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns new list or error.

Description

This function combines values from a list by picking only given columns.

Examples

Sort a list column:

```
Set Variable [ $List ; Value: "65412 | Schreiber | Klaus | 459oz8235" & §& "76542 | Abraham | Hermmann | 38957zf" & §& "85112 | Behrens | Robert | 489748hj" ]
```

```
Set Variable [ $QuickList1 ; Value: MBS( "QuickList.New"; $list ) ]
```

```
#
```

```

Set Variable [ $QuickList2 ; Value: MBS( "QuickList.DeCombine"; $QuickList1; " | "; 1 /* StartColumn*/;
1 /* EndColumn */; 1 /* New List*/ ) ]
Set Variable [ $List2 ; Value: MBS( "QuickList.GetList"; $QuickList2) ]
Set Variable [ $r ; Value: MBS( "QuickList.SortWith"; $QuickList2; 1; $QuickList1 ) ]
Set Variable [ $List1 ; Value: MBS( "QuickList.GetList"; $QuickList1) ]
#
Set Variable [ $r ; Value: MBS( "QuickList.Free"; $QuickList1 ) ]
Set Variable [ $r ; Value: MBS( "QuickList.Free"; $QuickList2 ) ]

```

See also

- 103.10 List.DeCombine 5430
- 103.34 List.Sort 5464
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521
- 103.89 QuickList.Sort 5550
- 103.90 QuickList.SortWith 5552

103.55.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr1](#)

Created 29th September 2017, last changed 21st December 2018.

103.56 QuickList.Deserialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.2	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Deserialize"; Text)

Parameters

Text

The serialized data as text.

Result Returns quick list reference number or error.

Description

Examples

Create and save a list to restore it:

```
Set Variable [ $list; Value:MBS( "QuickList.New"; "Hello$World$1234$Just a test!" ) ]
Set Variable [ $text; Value:MBS("Quicklist.Serialize"; $list) ]
Set Variable [ $secondList; Value:MBS("Quicklist.Deserialize"; $text) ]
Show Custom Dialog [ "List"; "Encoded: " & $text & $& $& "Decoded: " & MBS("QuickList.GetList";
$secondList) ]
Set Variable [ $r; Value:MBS("Quicklist.Free"; $list) ]
Set Variable [ $r; Value:MBS("Quicklist.Free"; $secondList) ]
```

See also

- 103.11 List.Deserialize 5432
- 103.32 List.Serialize 5462
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.64 QuickList.InsertValue 5513
- 103.69 QuickList.New 5521
- 103.86 QuickList.Serialize 5545

103.56.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 6th July 2015, last changed 1st August 2015.

103.57 QuickList.FindEquals

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.FindEquals"; List1; List2 { ; ReturnNewList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.
Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

See also

- 103.58 QuickList.FindUnequals 5503
- 103.59 QuickList.Free 5504

Created 8th October 2014, last changed 8th October 2014.

103.58 QuickList.FindUnequals

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.FindUnequals"; List1; List2 { ; ReturnNewList; NotFromSecondList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function. Pass 0 (Default) to modify the list in the List1 parameter.

0

NotFromSecondList

Optional

Pass 1 to only returns items from first list not present in second list. Default is 0 to get items from both lists.

0

Result Returns list, OK or error.

Description

See also

- 103.13 List.FindUnequals 5434
- 103.57 QuickList.FindEquals 5502
- 103.59 QuickList.Free 5504

103.58.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 8th October 2014, last changed 27th May 2017.

103.59 QuickList.Free

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Free"; ListRef)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Result Returns OK or error.

Description

Please call this for each list to make sure you don't run out of memory.

Examples

Creates list and frees it:

```
$list = MBS( "QuickList.New"; "Hello$World$Test" )
$r = MBS( "QuickList.Free"; $list)
```

See also

- [103.72 QuickList.Or](#) 5527
- [103.73 QuickList.OrColumn](#) 5529
- [103.76 QuickList.Push](#) 5533
- [103.77 QuickList.RegExMatch](#) 5534
- [103.82 QuickList.RemovePrefix](#) 5540
- [103.86 QuickList.Serialize](#) 5545
- [103.88 QuickList.SetValue](#) 5548
- [103.91 QuickList.SubList](#) 5555
- [103.92 QuickList.Trim](#) 5557
- [103.94 QuickList.XOr](#) 5559

Example Databases

- [DynaPDF/Invoice/Invoice](#)
- [List/QuickList Test](#)
- [List/Sort Benchmark](#)

103.59.1 Blog Entries

- [Evaluate vs. Script Trigger](#)
- [Quicklist - Fast lists for FileMaker](#)

103.59.2 FileMaker Magazin

- Ausgabe 1/2015, Seite 20
- Ausgabe 1/2015, Seite 19

Created 21st September 2014, last changed 21st September 2014.

103.60 QuickList.GetList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.GetList"; ListRef { ; NoReturnEnding; Delimiter })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Delimiter

Optional

The delimiter to use. Can be empty to have no delimiter. Common use is to pass "§", ", " or "; ".
", "

Result Returns text or error.

Description

Lines are separated by return character.

Examples

Create a list and query it:

```
$listID = MBS( "QuickList.New"; "Hello$World" )
$list = MBS( "QuickList.GetList"; $listID )
$r = MBS( "QuickList.Free"; $listID )
```

Try with delimiter:

```
Set Variable [ $listID; Value:MBS( "QuickList.New"; "Hello$World" ) ]
Set Variable [ $list1; Value:MBS( "QuickList.GetList"; $listID ) ]
Show Custom Dialog [ "Result default"; $list1 ]
Set Variable [ $list2; Value:MBS( "QuickList.GetList"; $listID; 0; "" ) ]
Show Custom Dialog [ "Result with empty delimiter"; $list2 ]
Set Variable [ $list3; Value:MBS( "QuickList.GetList"; $listID; 0; " " ) ]
Show Custom Dialog [ "Result with space delimiter"; $list3 ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $listID ) ]
```

See also

<i>103.60. QUICKLIST.GETLIST</i>	5507
• 103.61 QuickList.GetValue	5508
• 103.65 QuickList.List	5514
• 103.75 QuickList.PopFirst	5532
• 103.76 QuickList.Push	5533
• 103.81 QuickList.RemovePostfix	5538
• 103.82 QuickList.RemovePrefix	5540
• 103.86 QuickList.Serialize	5545
• 103.87 QuickList.SetList	5547
• 103.90 QuickList.SortWith	5552
• 103.91 QuickList.SubList	5555

Example Databases

- [List/QuickList Test](#)
- [List/Sort Benchmark](#)

103.60.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr4](#)
- [Evaluate vs. Script Trigger](#)
- [Quicklist - Fast lists for FileMaker](#)

103.60.2 FileMaker Magazin

- [Ausgabe 1/2015, Seite 19](#)

Created 21st September 2014, last changed 7th April 2016.

103.61 QuickList.GetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.GetValue"; ListRef; Index)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Index

The index of the value to get. Must be in range from 0 to QuickList.Count-1.

\$index

Result Returns OK or error.

Description

Using our QuickList functions is much faster than using GetValue(listOfValues;valueNumber) function in FileMaker for large lists.

If you enable tracing with Trace command, this function will be much slower due to the debug output.

Examples

Query values from List:

```
$listID = MBS( "QuickList.New"; "Hello$World" )
$v1 = MBS( "QuickList.GetValue"; $listID; 1 )
$v2 = MBS( "QuickList.GetValue"; $listID; 2 )
$r = MBS("QuickList.Free"; $listID)
```

See also

- 103.14 List.GetValue 5436
- 103.46 QuickList.AddValue 5485
- 103.53 QuickList.Count 5495
- 103.59 QuickList.Free 5504
- 103.63 QuickList.HasValue 5511
- 103.64 QuickList.InsertValue 5513
- 103.69 QuickList.New 5521
- 103.83 QuickList.RemoveValue 5542
- 103.86 QuickList.Serialize 5545

103.61. *QUICKLIST.GETVALUE*

5509

- 103.88 QuickList.SetValue

5548

Example Databases

- [DynaPDF/Invoice/Invoice](#)
- [List/QuickList Test](#)

103.61.1 Blog Entries

- [Quicklist - Fast lists for FileMaker](#)

103.61.2 FileMaker Magazin

- Ausgabe 1/2015, Seite 20
- Ausgabe 1/2015, Seite 19

Created 21st September 2014, last changed 4th October 2014.

103.62 QuickList.HasDuplicateItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.5	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.HasDuplicateItems"; ListRef)

Parameters

ListRef

The reference to the list returned from QuickList.New function.
\$List

Result Returns 1, 0 or error.

Description

Returns 1 if duplicate lines are found or 0 if not.

See also

- [103.15 List.HasDuplicateItems](#) 5437
- [103.69 QuickList.New](#) 5521
- [103.79 QuickList.RemoveDuplicateItems](#) 5536

103.62.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 21st October 2017, last changed 26th October 2017.

103.63 QuickList.HasValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.HasValue"; ListRef; Value)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Value

The value to check.

"Hello"

Result Returns 1, 0 or error.

Description

Returns 1 if value is found or 0 if not. Text comparison is case sensitive.

Examples

Checks if list contains value:

```
Set Variable [ $q; Value:MBS("QuickList.New"; "Hello$World") ]
Show Custom Dialog [ "Contains World"; MBS("QuickList.HasValue"; $q; "World") ]
Show Custom Dialog [ "Contains Test"; MBS("QuickList.HasValue"; $q; "Test") ]
Set Variable [ $r; Value:MBS("QuickList.Free"; $q) ]
```

See also

- 103.16 List.HasValue 5438
- 103.46 QuickList.AddValue 5485
- 103.59 QuickList.Free 5504
- 103.61 QuickList.GetValue 5508
- 103.64 QuickList.InsertValue 5513
- 103.69 QuickList.New 5521
- 103.88 QuickList.SetValue 5548

103.63.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr2](#)
- [MBS Filemaker Plugin, version 4.5pr1](#)

103.64 QuickList.InsertValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.2	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.InsertValue"; ListRef; Index; Text)

Parameters**ListRef**

The reference to the list returned from QuickList.New function.

\$List

Index

the index where to insert.

0

Text

The text to add.

"Hello"

Result Returns OK or error.

Description

Please note that QuickList.AddValue is more efficient than inserting.

See also

- 103.3 List.AddValue 5420
- 103.46 QuickList.AddValue 5485
- 103.56 QuickList.Deserialize 5501
- 103.61 QuickList.GetValue 5508
- 103.63 QuickList.HasValue 5511
- 103.69 QuickList.New 5521
- 103.83 QuickList.RemoveValue 5542
- 103.88 QuickList.SetValue 5548

Created 2nd August 2015, last changed 2nd August 2015.

103.65 QuickList.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.3	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.List")

Result Returns list or error.

Description

This helps debugging, especially finding scripts which do not release their objects properly.

See also

- 103.40 QuickList.AddList 5474
- 103.53 QuickList.Count 5495
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.70 QuickList.Not 5523
- 103.76 QuickList.Push 5533
- 103.87 QuickList.SetList 5547
- 103.89 QuickList.Sort 5550
- 103.91 QuickList.SubList 5555
- 103.92 QuickList.Trim 5557

103.65.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr4](#)

Created 21st September 2015, last changed 21st September 2015.

103.66 QuickList.MatchesPostfix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.MatchesPostfix"; ListRef; Text { ; Flags })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Text

The text to find.

"Hello"

Flags

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function. Pass 0 (Default) to modify the list in the List1 parameter. Add 2 to split. This is only useful with first option together (so pass 3 for both). Matching entries will be in new list and non matching entries will stay in old list. Add 4 to reverse operation (NOT).

0

Result Returns OK, list or error.

Description

Comparison is case insensitive.

Examples

Finds list entries with same postfixes:

```
Set Variable [ $list; Value:MBS( "QuickList.New"; "Hello$World$auto" ) ]
Set Variable [ $matchesList; Value:MBS( "QuickList.MatchesPostfix"; $list; "o"; 0 ) ]
Set Variable [ $text; Value:MBS( "QuickList.GetList"; $list ) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $list ) ]
Show Custom Dialog [ "result"; $text ]
```

See also

- 103.18 List.MatchesPostfix 5441
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.67 QuickList.MatchesPrefix 5517
- 103.68 QuickList.MatchesSubString 5519

- 103.69 QuickList.New 5521
- 103.81 QuickList.RemovePostfix 5538

103.66.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr5](#)
- [MBS FileMaker Plugin, version 5.4pr7](#)

Created 20th November 2015, last changed 30th December 2015.

103.67 QuickList.MatchesPrefix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.MatchesPrefix"; ListRef; Text { ; Flags })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Text

The text to find.

"Hello"

Flags

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function. Pass 0 (Default) to modify the list in the List1 parameter. Add 2 to split. This is only useful with first option together (so pass 3 for both). Matching entries will be in new list and non matching entries will stay in old list. Add 4 to reverse operation (NOT).

0

Result Returns OK, list or error.

Description

Comparison is case insensitive.

Examples

Finds list entries with same prefixes:

```
Set Variable [ $list; Value:MBS( "QuickList.New"; "Hello$World$auto" ) ]
Set Variable [ $matchesList; Value:MBS( "QuickList.MatchesPrefix"; $list; "w"; 0 ) ]
Set Variable [ $text; Value:MBS( "QuickList.GetList"; $list ) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $list ) ]
Show Custom Dialog [ "result"; $text ]
```

Find entries not matching in prefix:

```
Set Variable [ $list; Value:MBS( "QuickList.New"; "Hello$World$auto" ) ]
Set Variable [ $matchesList; Value:MBS( "QuickList.MatchesPrefix"; $list; "w"; 4 ) ]
Set Variable [ $text; Value:MBS( "QuickList.GetList"; $list ) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $list ) ]
Show Custom Dialog [ "Result"; $text ]
```

See also

- 103.19 List.MatchesPrefix 5442
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.66 QuickList.MatchesPostfix 5515
- 103.69 QuickList.New 5521
- 103.82 QuickList.RemovePrefix 5540

103.67.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr5](#)
- [MBS FileMaker Plugin, version 5.4pr7](#)

Created 20th November 2015, last changed 30th December 2015.

103.68 QuickList.MatchesSubString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.MatchesSubString"; ListRef; Text { ; Flags })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Text

The text to find.

"Hello"

Flags

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function. Pass 0 (Default) to modify the list in the List1 parameter. Add 2 to split. This is only useful with first option together (so pass 3 for both). Matching entries will be in new list and non matching entries will stay in old list. Add 4 to reverse operation (NOT).

0

Result Returns OK, list or error.

Description

Comparison is case insensitive. (currently case sensitive on Windows)

Examples

Split a list matching substring:

```
Set Variable [ $list; Value:MBS( "QuickList.New"; "Hello$World$auto" ) ]
Set Variable [ $matchesList; Value:MBS( "QuickList.MatchesSubString"; $list; "orl"; 3 ) ]
Set Variable [ $text1; Value:MBS( "QuickList.GetList"; $list ) ]
Set Variable [ $text2; Value:MBS( "QuickList.GetList"; $matchesList ) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $list ) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $matchesList ) ]
Show Custom Dialog [ "Result"; "Matches: " & $text1 & $r "Others: " & $text2 ]
```

See also

- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.66 QuickList.MatchesPostfix 5515
- 103.69 QuickList.New 5521

103.68.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)
- [MBS FileMaker Plugin, version 6.0pr5](#)

Created 30th December 2015, last changed 1st January 2016.

103.69 QuickList.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.New" { ; Text; Separator; RefNum })

Parameters

Text

Optional

Initial list content.

"Hello\$World\$Test"

Separator

Optional

The separator to use. Can be ASCII character number (e.g. 9 for tab) or a text where we use first character as separator. Default is newline.

" | "

RefNum

Optional

The desired reference number. Leave empty for default.

"IDs"

Result Returns reference number or error.

Description

You can provide whatever separator you need. Default is new line characters. But works also fine with comma, semicolon or tab characters.

Please use QuickList.Free to release the list later.

QuickList reference numbers are starting at 12000 and counting up for each new list.

Examples

Creates new list:

```
MBS( "QuickList.New"; "Hello$World$Test" )
```

Create list with | as separator:

```
MBS("QuickList.New"; "Hello | World"; " | ")
```

Parse with newline as separator:

```
MBS("QuickList.GetList"; MBS( "QuickList.New"; "1$2" & Char(10) & "3" & Char(13) & "4" ))
```

accepts CR and LF as delimiter.

See also

- 103.72 QuickList.Or 5527
- 103.75 QuickList.PopFirst 5532
- 103.76 QuickList.Push 5533
- 103.81 QuickList.RemovePostfix 5538
- 103.82 QuickList.RemovePrefix 5540
- 103.85 QuickList.Reverse 5544
- 103.87 QuickList.SetList 5547
- 103.90 QuickList.SortWith 5552
- 103.91 QuickList.SubList 5555
- 103.94 QuickList.XOr 5559

Example Databases

- [DynaPDF/Invoice/Invoice](#)
- [List/QuickList Test](#)
- [List/Sort Benchmark](#)

103.69.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr6](#)
- [Data structures in FileMaker with MBS Plugins](#)
- [Evaluate vs. Script Trigger](#)
- [Quicklist - Fast lists for FileMaker](#)

103.69.2 FileMaker Magazin

- [Ausgabe 1/2015, Seite 20](#)
- [Ausgabe 1/2015, Seite 19](#)

103.70 QuickList.Not

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Not"; List1; List2 { ; ReturnNewList })

Parameters**List1**

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

Performs a logical NOT operation.

See also

- 103.47 QuickList.And 5487
- 103.53 QuickList.Count 5495
- 103.59 QuickList.Free 5504
- 103.65 QuickList.List 5514
- 103.69 QuickList.New 5521
- 103.71 QuickList.NotColumn 5525
- 103.72 QuickList.Or 5527
- 103.74 QuickList.Pop 5531
- 103.89 QuickList.Sort 5550
- 103.94 QuickList.XOr 5559

103.70.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr5](#)

Created 8th October 2014, last changed 8th October 2014.

103.71 QuickList.NotColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	10.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.NotColumn"; List1; List2; Separator; Column { ; ReturnNewList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

Separator

The separator text. Can be multiple characters. For tab separated text, pass Char(9). For CSV separated text, pass ";" or ",".

Char(9)

Column

The index of the column to compare. Starts with 0 for first column.

0

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function. Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

Performs a logical NOT operation.

Checks the given column in both lists too compare.

If Separator is empty, this is same as QuickList.Not, but slower.

See also

- 103.20 List.Not 5443
- 103.48 QuickList.AndColumn 5489
- 103.59 QuickList.Free 5504
- 103.70 QuickList.Not 5523
- 103.73 QuickList.OrColumn 5529
- 103.95 QuickList.XOrColumn 5560

103.71.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 23th December 2019, last changed 23th December 2019.

103.72 QuickList.Or

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Or"; List1; List2 { ; ReturnNewList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

Performs a logical OR operation.

Examples

Creates two lists and combines them:

```
$list1 = MBS( "QuickList.New"; "Hello$World")
```

```
$list2 = MBS( "QuickList.New"; "a$b")
```

```
$list3 = MBS( "QuickList.Or"; $list1; $list2; 1 )
```

```
$list = MBS( "QuickList.GetList"; $list3)
```

```
$r = MBS("QuickList.Free"; $list1)
```

```
$r = MBS("QuickList.Free"; $list2)
```

```
$r = MBS("QuickList.Free"; $list3)
```

See also

- 103.22 List.Or 5446
- 103.47 QuickList.And 5487
- 103.59 QuickList.Free 5504
- 103.69 QuickList.New 5521
- 103.70 QuickList.Not 5523

5528

CHAPTER 103. LIST

- 103.73 QuickList.OrColumn 5529
- 103.74 QuickList.Pop 5531
- 103.89 QuickList.Sort 5550
- 103.92 QuickList.Trim 5557
- 103.94 QuickList.XOr 5559

103.72.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr5](#)

Created 8th October 2014, last changed 8th October 2014.

103.73 QuickList.OrColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	10.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.OrColumn"; List1; List2; Separator; Column { ; ReturnNewList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

Separator

The separator text. Can be multiple characters. For tab separated text, pass Char(9). For CSV separated text, pass ";" or ",".

Char(9)

Column

The index of the column to compare. Starts with 0 for first column.

0

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function. Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

Performs a logical OR operation.

Checks the given column in both lists too compare.

If Separator is empty, this is same as QuickList.Or, but slower.

See also

- 103.22 List.Or 5446
- 103.48 QuickList.AndColumn 5489
- 103.59 QuickList.Free 5504
- 103.71 QuickList.NotColumn 5525
- 103.72 QuickList.Or 5527
- 103.95 QuickList.XOrColumn 5560

103.73.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 23th December 2019, last changed 23th December 2019.

103.74 QuickList.Pop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.2	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Pop"; ListRef)

Parameters

ListRef

The reference to the list returned from QuickList.New function.
\$List

Result Returns value or error.

Description

Examples

Push and pop:

```
Set Variable [ $list; Value:MBS( "QuickList.New" ) ]
Set Variable [ $r; Value:MBS( "QuickList.Push"; $list; "Hello" ) ]
Set Variable [ $r; Value:MBS( "QuickList.Push"; $list; "World" ) ]
Show Custom Dialog [ "List"; MBS( "QuickList.Pop"; $list ) ]
Show Custom Dialog [ "List"; MBS( "QuickList.Pop"; $list ) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $list ) ]
```

See also

- 103.47 QuickList.And 5487
- 103.59 QuickList.Free 5504
- 103.69 QuickList.New 5521
- 103.70 QuickList.Not 5523
- 103.72 QuickList.Or 5527
- 103.75 QuickList.PopFirst 5532
- 103.76 QuickList.Push 5533
- 103.89 QuickList.Sort 5550
- 103.94 QuickList.XOr 5559

Created 2nd August 2015, last changed 2nd August 2015.

103.75 QuickList.PopFirst

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.2	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.PopFirst"; ListRef)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Result Returns value or error.

Description

Please note that QuickList.Pop is more efficient than QuickList.PopFirst.

Examples

Push and pop first:

```
Set Variable [ $list; Value:MBS( "QuickList.New" ) ]
Set Variable [ $r; Value:MBS( "QuickList.Push"; $list; "Hello" ) ]
Set Variable [ $r; Value:MBS( "QuickList.Push"; $list; "World" ) ]
Show Custom Dialog [ "List"; MBS( "QuickList.PopFirst"; $list ) ]
Show Custom Dialog [ "List"; MBS( "QuickList.PopFirst"; $list ) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $list ) ]
```

See also

- 103.40 QuickList.AddList 5474
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521
- 103.74 QuickList.Pop 5531
- 103.76 QuickList.Push 5533
- 103.87 QuickList.SetList 5547
- 103.91 QuickList.SubList 5555

Created 2nd August 2015, last changed 2nd August 2015.

103.76 QuickList.Push

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.2	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Push"; ListRef; Text)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Text

The text to add.

"Hello"

Result Returns OK or error.

Description

Examples

Trying push:

```
Set Variable [ $list; Value:MBS( "QuickList.New" ) ]
Set Variable [ $r; Value:MBS( "QuickList.Push"; $list; "Hello" ) ]
Set Variable [ $r; Value:MBS( "QuickList.Push"; $list; "World" ) ]
Show Custom Dialog [ "List"; MBS( "QuickList.GetList"; $list ) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $list ) ]
```

See also

- 103.53 QuickList.Count 5495
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.65 QuickList.List 5514
- 103.69 QuickList.New 5521
- 103.74 QuickList.Pop 5531
- 103.75 QuickList.PopFirst 5532
- 103.89 QuickList.Sort 5550
- 103.92 QuickList.Trim 5557

Created 2nd August 2015, last changed 2nd August 2015.

103.77 QuickList.RegExMatch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "QuickList.RegExMatch"; ListRef; Pattern; CompilerOptions; ExecuteOptions { ; ReturnNewList }
)
```

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Pattern

The pattern to use.

"H(.*)"

CompilerOptions

A number for the options to use. e.g. 1 for case insensitive or 512 for ungreedy.

512+1

ExecuteOptions

The options for executing.

0

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list or error.

Description

This compiles the pattern, executes it and looks if we have a match or not for each list item.

Returns the list items which match.

See also

- 103.49 QuickList.BestMatch 5491
- 103.59 QuickList.Free 5504
- 103.69 QuickList.New 5521

103.77.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr9](#)

Created 2nd November 2014, last changed 8th November 2014.

103.78 QuickList.Remove

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Remove"; ListRef; Index)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Index

The index of the item to remove. Range from 0 to QuickList.Count-1.

0

Result Returns OK or error.

Description

See also

- 103.52 QuickList.Clone 5494
- 103.53 QuickList.Count 5495
- 103.69 QuickList.New 5521
- 103.81 QuickList.RemovePostfix 5538
- 103.82 QuickList.RemovePrefix 5540
- 103.84 QuickList.Reserve 5543
- 103.85 QuickList.Reverse 5544

103.78.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 12nd November 2014, last changed 12nd December 2014.

103.79 QuickList.RemoveDuplicateItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.RemoveDuplicateItems"; ListRef)

Parameters

ListRef

The reference to the list returned from QuickList.New function.
\$List

Result Returns OK or error.

Description

Similar to UniqueValues function in FileMaker to find unique values.

See also

- 103.26 List.RemoveDuplicateItems 5452
- 103.62 QuickList.HasDuplicateItems 5510
- 103.69 QuickList.New 5521
- 103.80 QuickList.RemoveEmptyItems 5537

Created 21st September 2014, last changed 6th February 2018.

103.80 QuickList.RemoveEmptyItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.RemoveEmptyItems"; ListRef)

Parameters

ListRef

The reference to the list returned from QuickList.New function.
\$List

Result Returns OK or error.

Description

See also

- 103.27 List.RemoveEmptyItems 5454
- 103.69 QuickList.New 5521
- 103.79 QuickList.RemoveDuplicateItems 5536

Created 21st September 2014, last changed 21st September 2014.

103.81 QuickList.RemovePostfix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.RemovePostfix"; ListRef; Postfix { ; ReturnNewList; CaseSensitive })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Postfix

The text to remove.

"llo"

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to modify the list in the List1 parameter.

0

CaseSensitive

Optional

Whether to match with case sensitive comparison. Default is 0 for case insensitive. You can pass 1 to have a case sensitive comparison.

0

Result Returns list or error.

Description

Examples

Try in one let statement:

```
Let( [
list = MBS("QuickList.New"; ">Hello<$>World<");
e = MBS("QuickList.RemovePrefix"; list; ">");
e = MBS("QuickList.RemovePostfix"; list; "<");
r = MBS("QuickList.GetList"; list);
d = MBS("QuickList.Free"; list)
]; r)
```

See also

- 103.25 List.Remove 5451
- 103.28 List.RemovePostfix 5455
- 103.29 List.RemovePrefix 5457

<i>103.81. QUICKLIST.REMOVEPOSTFIX</i>	5539
• 103.59 QuickList.Free	5504
• 103.60 QuickList.GetList	5506
• 103.66 QuickList.MatchesPostfix	5515
• 103.69 QuickList.New	5521
• 103.78 QuickList.Remove	5535
• 103.82 QuickList.RemovePrefix	5540

103.81.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

103.82 QuickList.RemovePrefix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.1	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.RemovePrefix"; ListRef; Prefix { ; ReturnNewList; CaseSensitive })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Prefix

The text to remove.

"H"

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to modify the list in the List1 parameter.

0

CaseSensitive

Optional

Whether to match with case sensitive comparison. Default is 0 for case insensitive. You can pass 1 to have a case sensitive comparison.

0

Result Returns list or error.

Description

Examples

Try in one let statement:

```
Let( [
list = MBS("QuickList.New"; ">Hello<$>World<");
e = MBS("QuickList.RemovePrefix"; list; ">");
e = MBS("QuickList.RemovePostfix"; list; "<");
r = MBS("QuickList.GetList"; list);
d = MBS("QuickList.Free"; list)
]; r)
```

See also

- 103.25 List.Remove 5451
- 103.28 List.RemovePostfix 5455
- 103.29 List.RemovePrefix 5457

<i>103.82. QUICKLIST.REMOVEPREFIX</i>	5541
• 103.59 QuickList.Free	5504
• 103.60 QuickList.GetList	5506
• 103.67 QuickList.MatchesPrefix	5517
• 103.69 QuickList.New	5521
• 103.78 QuickList.Remove	5535
• 103.81 QuickList.RemovePostfix	5538
• 103.83 QuickList.RemoveValue	5542

103.82.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

103.83 QuickList.RemoveValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.RemoveValue"; ListRef; Value { ; All })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Value

The value to remove.

"Hello"

All

Optional

Optional, pass 1 to remove all values with the given value. Pass 0 (default) to remove only the first matching value.

0

Result Returns OK or error.

Description

See also

- 103.61 QuickList.GetValue 5508
- 103.64 QuickList.InsertValue 5513
- 103.69 QuickList.New 5521
- 103.82 QuickList.RemovePrefix 5540
- 103.88 QuickList.SetValue 5548

103.83.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr3](#)
- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 12nd November 2014, last changed 12nd December 2014.

103.84 QuickList.Reserve

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Reserve"; ListRef; Size)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Size

The new size in entries. So passing 100 will make sure we have space for 100 list entries at least. If more are added, the list grows automatically.

100

Result Returns OK or error.

Description

To ensure upfront that enough memory is available.

This will not change the count, just preallocate memory.

See also

- 103.69 QuickList.New 5521
- 103.78 QuickList.Remove 5535
- 103.85 QuickList.Reverse 5544

103.84.1 Blog Entries

- [Quicklist - Fast lists for FileMaker](#)

103.84.2 FileMaker Magazin

- Ausgabe 1/2015, Seite 19

Created 21st September 2014, last changed 18th December 2015.

103.85 QuickList.Reverse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Reverse"; ListRef)

Parameters

ListRef

The reference to the list returned from QuickList.New function.
\$List

Result Returns OK or error.

Description

See also

- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521
- 103.78 QuickList.Remove 5535
- 103.84 QuickList.Reserve 5543
- 103.87 QuickList.SetList 5547

103.85.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr5](#)
- [MBS Filemaker Plugin, version 4.4pr3](#)

Created 29th September 2014, last changed 29th September 2014.

103.86 QuickList.Serialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.2	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Serialize"; ListRef)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Result Returns text or error.

Description

The dictionary content is stored in a base64 encoded string which the plugin function List.Deserialize and QuickList.Deserialize can read.

Using this function allows to store a list in a text field or transmit it with Socket functions, SerialPort functions or by writing it to a file.

Examples

Create and save a list to restore it:

```
Set Variable [ $list; Value:MBS( "QuickList.New"; "Hello$World$1234$Just a test!" ) ]
Set Variable [ $text; Value:MBS("Quicklist.Serialize"; $list) ]
Set Variable [ $secondList; Value:MBS("Quicklist.Deserialize"; $text) ]
Show Custom Dialog [ "List"; "Encoded: " & $text & $& $& "Decoded: " & MBS("QuickList.GetList";
$secondList) ]
Set Variable [ $r; Value:MBS("Quicklist.Free"; $list) ]
Set Variable [ $r; Value:MBS("Quicklist.Free"; $secondList) ]
```

See also

- 103.11 List.Deserialize 5432
- 103.32 List.Serialize 5462
- 103.56 QuickList.Deserialize 5501
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.61 QuickList.GetValue 5508
- 103.69 QuickList.New 5521
- 103.88 QuickList.SetValue 5548

103.86.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 6th July 2015, last changed 1st August 2015.

103.87 QuickList.SetList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.SetList"; ListRef; Text { ; Separator })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Text

New content for the list.

"Hello\$World\$Test"

Separator

Optional

The separator to use. Can be ASCII character number (e.g. 9 for tab) or a text where we use first character as separator.

" | "

Result Returns OK or error.

Description

See also

- 103.40 QuickList.AddList 5474
- 103.60 QuickList.GetList 5506
- 103.65 QuickList.List 5514
- 103.69 QuickList.New 5521
- 103.75 QuickList.PopFirst 5532
- 103.85 QuickList.Reverse 5544
- 103.88 QuickList.SetValue 5548
- 103.90 QuickList.SortWith 5552
- 103.91 QuickList.SubList 5555

103.87.1 Blog Entries

- [Quicklist - Fast lists for FileMaker](#)

Created 21st September 2014, last changed 23th September 2014.

103.88 QuickList.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.SetValue"; ListRef; Index; Text)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Index

The index of the value to get. Must be in range from 0 to QuickList.Count-1.

\$index

Text

The text to add.

"Hello"

Result Returns OK or error.

Description

If index is equal to count, we append the text to the list.

Examples

Tries set value:

```
Variable setzen [ $list; Wert:MBS( "QuickList.New"; "Hello$World$Test" ) ]
Variable setzen [ $r; Wert:MBS( "QuickList.SetValue"; $list; 0; "Element 0" ) ]
Eigenes Dialogfeld anzeigen [ "List contains"; MBS( "QuickList.GetList"; $list) ]
Variable setzen [ $r; Wert:MBS( "QuickList.Free"; $list) ]
```

See also

- 103.33 List.SetValue 5463
- 103.46 QuickList.AddValue 5485
- 103.53 QuickList.Count 5495
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.63 QuickList.HasValue 5511
- 103.64 QuickList.InsertValue 5513
- 103.83 QuickList.RemoveValue 5542

103.88. <i>QUICKLIST.SETVALUE</i>	5549
• 103.86 QuickList.Serialize	5545
• 103.87 QuickList.SetList	5547

Created 21st September 2014, last changed 19th March 2016.

103.89 QuickList.Sort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Sort"; ListRef { ; Flags })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Flags

Optional

Optional, whether to sort case insensitive or descending. Pass 1 to sort case insensitive or 0 to sort case sensitive. Add 2 to sort descending. Add 4 for sorting dates in DD.MM.YYYY style and 8 for sorting dates in MM.DD.YYYY style.

1

Result Returns OK or error.

Description

Version 6.2 adds new modes for date sorting. Mode 4 for DD.MM.YYYY style and mode 8 for MM.DD.YYYY style.

Examples

Sort a list:

```
Let
( [
l = MBS("QuickList.New"; "aßeä$1");
r = MBS("QuickList.Sort"; l);
list = MBS("QuickList.GetList"; l);
r = MBS("QuickList.Free"; l)
]; list )
```

Sort a list ascending case sensitive:

```
Let
( [
l = MBS("QuickList.New"; "Aßeä$1");
r = MBS("QuickList.Sort"; l);
list = MBS("QuickList.GetList"; l);
r = MBS("QuickList.Free"; l)
]; list )
```

Sort a list descending case insensitive:

103.89. QUICKLIST.SORT

5551

```
Let  
( [  
l = MBS("QuickList.New"; "A§e§ä§Ä§9§1");  
r = MBS("QuickList.Sort"; l; 3);  
list = MBS("QuickList.GetList"; l);  
r = MBS("QuickList.Free"; l)  
]; list )
```

See also

- [103.34 List.Sort](#) 5464
- [103.53 QuickList.Count](#) 5495
- [103.60 QuickList.GetList](#) 5506
- [103.65 QuickList.List](#) 5514
- [103.70 QuickList.Not](#) 5523
- [103.72 QuickList.Or](#) 5527
- [103.74 QuickList.Pop](#) 5531
- [103.76 QuickList.Push](#) 5533
- [103.90 QuickList.SortWith](#) 5552
- [103.94 QuickList.XOr](#) 5559

103.89.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr1](#)
- [New functions for MBS FileMaker Plugin coming soon](#)
- [MBS Filemaker Plugin, version 4.4pr3](#)

Created 21st September 2014, last changed 16th March 2016.

103.90 QuickList.SortWith

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	6.2	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.SortWith"; ListRef; Flags; List1 { ; List2 })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Flags

Optional, whether to sort case insensitive or descending. Pass 1 to sort case insensitive or 0 to sort case sensitive. Add 2 to sort descending. Add 4 for sorting dates in DD.MM.YYYY style and 8 for sorting dates in MM.DD.YYYY style.

1

List1

The first list to sort with.

\$list1

List2

Optional

The second list to sort with.

\$list2

Result Returns OK or error.

Description

We sort the first list and move all items in other lists as well to match the order.

You can pass as many lists in the parameters as needed, not just 2.

Examples

Test sorting with four lists:

```
# build some lists
Set Variable [ $keys; Value:MBS( "QuickList.New"; "234$123$545$152" ) ]
Set Variable [ $firstnames; Value:MBS( "QuickList.New"; "Bob$John$Bill$Chris" ) ]
Set Variable [ $lastnames; Value:MBS( "QuickList.New"; "Miller$Jones$Becks$Meyer" ) ]
Set Variable [ $cities; Value:MBS( "QuickList.New"; "New York$Santa Clara$San Francisco$Atlanta" ) ]
# show before
Set Variable [ $r1; Value:MBS( "List.CrossProduct"; MBS("QuickList.GetList"; $keys); MBS("QuickList.GetList"; $firstnames); "" ; " ; "" ; 2) ]
Set Variable [ $r2; Value:MBS( "List.CrossProduct"; MBS("QuickList.GetList"; $lastnames); MBS("QuickList.GetList"; $cities); "" ; " ; "" ; 2) ]
Set Variable [ $r3; Value:MBS( "List.CrossProduct"; $r1; $r2; "" ; " ; "" ; 2) ]
# sort
Set Variable [ $r; Value:MBS( "QuickList.SortWith"; $keys; 0; $firstnames; $lastnames; $cities) ]
```

```
# show result:
Set Variable [ $r1; Value:MBS( "List.CrossProduct"; MBS("QuickList.GetList"; $keys); MBS("QuickList.GetList"; $firstnames); ""; ", "; ""; 2) ]
Set Variable [ $r2; Value:MBS( "List.CrossProduct"; MBS("QuickList.GetList"; $lastnames); MBS("QuickList.GetList"; $cities); ""; ", "; ""; 2) ]
Set Variable [ $r4; Value:MBS( "List.CrossProduct"; $r1; $r2; ""; ", "; ""; 2) ]
Show Custom Dialog [ "Sort results"; "Before: " & $r3 & $r4 & "Sorted: " & $r4 ]
# cleanup memory
Set Variable [ $r; Value:MBS( "QuickList.Free"; $keys) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $cities) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $firstnames) ]
Set Variable [ $r; Value:MBS( "QuickList.Free"; $lastnames) ]
```

Sort a list column:

```
Set Variable [ $List ; Value: "65412 | Schreiber | Klaus | 459oz8235" & $r3 & "76542 | Abraham | Hermmann | 38957zf" & $r4 & "85112 | Behrens | Robert | 489748hj" ]
Set Variable [ $QuickList1 ; Value: MBS( "QuickList.New"; $List ) ]
#
Set Variable [ $QuickList2 ; Value: MBS( "QuickList.DeCombine"; $QuickList1; " | "; 1 /* StartColumn*/; 1 /* EndColumn */; 1 /* New List*/ ) ]
Set Variable [ $List2 ; Value: MBS( "QuickList.GetList"; $QuickList2) ]
Set Variable [ $r ; Value: MBS( "QuickList.SortWith"; $QuickList2; 1; $QuickList1 ) ]
Set Variable [ $List1 ; Value: MBS( "QuickList.GetList"; $QuickList1) ]
#
Set Variable [ $r ; Value: MBS( "QuickList.Free"; $QuickList1 ) ]
Set Variable [ $r ; Value: MBS( "QuickList.Free"; $QuickList2 ) ]
```

See also

- 103.9 List.CrossProduct 5428
- 103.10 List.DeCombine 5430
- 103.34 List.Sort 5464
- 103.55 QuickList.DeCombine 5499
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.69 QuickList.New 5521
- 103.87 QuickList.SetList 5547
- 103.89 QuickList.Sort 5550

103.90.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 25th March 2016, last changed 21st December 2018.

103.91 QuickList.SubList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.5	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.SubList"; ListRef; Index; Count { ; ReturnNewList; NoReturnEnding })

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Index

The zero based index where to start. Or in other words: How many entries to skip.

3

Count

How many entries to copy. If negative, we pick the other items left.

5

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.

Pass 0 (Default) to return a text list.

0

NoReturnEnding

Optional

If you passed 0 for ReturnNewList, decides about new list: Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns OK or error.

Description

Can return new QuickList or normal list.

See also

- 103.40 QuickList.AddList 5474
- 103.59 QuickList.Free 5504
- 103.60 QuickList.GetList 5506
- 103.65 QuickList.List 5514
- 103.69 QuickList.New 5521
- 103.75 QuickList.PopFirst 5532
- 103.87 QuickList.SetList 5547

103.91.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr1](#)

Created 27th September 2017, last changed 30th September 2017.

103.92 QuickList.Trim

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	7.5	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.Trim"; ListRef)

Parameters**ListRef**

The reference to the list returned from QuickList.New function.
\$List

Result Returns OK or error.

Description**See also**

- 103.59 QuickList.Free 5504
- 103.65 QuickList.List 5514
- 103.69 QuickList.New 5521
- 103.72 QuickList.Or 5527
- 103.76 QuickList.Push 5533
- 103.89 QuickList.Sort 5550

Created 21st October 2017, last changed 26th October 2017.

103.93 QuickList.ValueIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	5.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.ValueIndex"; ListRef; Value)

Parameters

ListRef

The reference to the list returned from QuickList.New function.

\$List

Value

The text to find.

"Hello"

Result Returns index, nothing or error.

Description

Returns zero based index (0 = first list value).

Returns empty result if not found.

Comparison is case insensitive.

See also

- 103.69 QuickList.New

5521

103.93.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr7](#)

Created 20th November 2015, last changed 20th November 2015.

103.94 QuickList.XOr

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	4.4	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.XOr"; List1; List2 { ; ReturnNewList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function.
Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

Performs an exclusive logical OR operation.

See also

- 103.47 QuickList.And 5487
- 103.59 QuickList.Free 5504
- 103.69 QuickList.New 5521
- 103.70 QuickList.Not 5523
- 103.72 QuickList.Or 5527
- 103.74 QuickList.Pop 5531
- 103.89 QuickList.Sort 5550
- 103.95 QuickList.XOrColumn 5560

103.94.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr5](#)

Created 8th October 2014, last changed 8th October 2014.

103.95 QuickList.XOrColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
103 List	10.0	Yes	Yes	Yes	Yes	Yes

MBS("QuickList.XOrColumn"; List1; List2; Separator; Column { ; ReturnNewList })

Parameters

List1

The reference to the first quicklist.

\$List1

List2

The reference to the second quicklist.

\$List2

Separator

The separator text. Can be multiple characters. For tab separated text, pass Char(9). For CSV separated text, pass ";" or ",".

Char(9)

Column

The index of the column to compare. Starts with 0 for first column.

0

ReturnNewList

Optional

Pass 1 to return result as new QuickList. This new list must be freed later using QuickList.Free function. Pass 0 (Default) to modify the list in the List1 parameter.

0

Result Returns list, OK or error.

Description

Performs an exclusive logical OR operation.

Checks the given column in both lists too compare.

If Separator is empty, this is same as QuickList.XOr, but slower.

See also

- 103.38 List.XOr 5471
- 103.48 QuickList.AndColumn 5489
- 103.59 QuickList.Free 5504
- 103.71 QuickList.NotColumn 5525
- 103.73 QuickList.OrColumn 5529
- 103.94 QuickList.XOr 5559

103.95.1 **Blog Entries**

- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 23th December 2019, last changed 23th December 2019.

Chapter 104

ListDialog

Functions for a dialog to pick items from a list.

104.1 ListDialog.AddItemToList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

```
MBS( "ListDialog.AddItemToList"; title { ; tag; Header } )
```

Parameters

title

The title to show.

"Hello World"

tag

Optional

The tag, e.g. the record ID.

"1234"

Header

Optional

Pass 1 to make this an header item, which is shown differently.

1

Result Returns OK.

Description

Examples

Clears list and adds three lines:

```
MBS( "ListDialog.ClearList" )  
MBS( "ListDialog.AddItemToList"; "Bob"; 1 )  
MBS( "ListDialog.AddItemToList"; "Joe"; 2 )  
MBS( "ListDialog.AddItemToList"; "Tim"; 3 )
```

See also

- 103.16 List.HasValue 5438
- 104.2 ListDialog.AddItemToList 5565
- 104.5 ListDialog.ClearList 5568
- 104.43 ListDialog.ShowDialog 5606

Example Databases

- [List/ListDialog](#)

104.1.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)

Created 18th August 2014, last changed 21st March 2015.

104.2 ListDialog.AddItemstoList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.AddItemstoList"; titles { ; tags })

Parameters

titles

The titles to add.

"Hello World"

tags

Optional

The tags, e.g. the record ID.

"1234"

Result Returns number of items.

Description

You can pass a list of items (separated with new line character)

If tag for an item is # , plugin will mark this entry as header item.

Examples

Add two items

```
MBS( "ListDialog.AddItemstoList"; "Hello$World" )
```

Add header with two items

```
MBS( "ListDialog.AddItemstoList"; "Names$Steve$Joe$Geoff"; "# §1§2§3" )
```

See also

- 104.1 ListDialog.AddItemtoList 5563
- 159.1 SyntaxColoring.AddContextMenuCommand 7553

Example Databases

- [List/ListDialog Grouping](#)
- [List/ListDialog](#)

Created 18th August 2014, last changed 21st March 2015.

104.3 ListDialog.AddSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	5.1	Yes	Yes	No	No	No

MBS("ListDialog.AddSQL"; SQL Statement; FileName { ; Params })

Parameters

SQL Statement

SQL Statement as a Text string

FileName

The target database name. Can be empty to not limit query to one database.

””

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns number of items added or error.

Description

First field from SQL result is used as text, second as tag and third as header flag.

Tag and header columns are optional.

Examples

Add items:

MBS("ListDialog.AddSQL"; "select Text, Tag, Header from Liste")

104.3.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr2](#)

Created 21st March 2015, last changed 12nd August 2016.

104.4 ListDialog.ClearColumnHeaders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.2	Yes	Yes	No	No	No

MBS("ListDialog.ClearColumnHeaders")

Result Returns OK or error.

Description

If no header text is set, we hide the headers.

See also

- 104.10 ListDialog.GetColumnHeader 5573
- 104.25 ListDialog.Reset 5588
- 104.30 ListDialog.SetColumnHeader 5593

104.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr5](#)

Created 27th April 2019, last changed 27th April 2019.

104.5 ListDialog.ClearList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.ClearList")

Result Returns OK.

Description

Also clears the selection.

Examples

Clears list and adds three lines:

```
MBS( "ListDialog.ClearList" )
MBS( "ListDialog.AddItemToList"; "Bob"; 1 )
MBS( "ListDialog.AddItemToList"; "Joe"; 2 )
MBS( "ListDialog.AddItemToList"; "Tim"; 3 )
```

See also

- [103.16 List.HasValue](#) 5438
- [104.1 ListDialog.AddItemToList](#) 5563
- [104.25 ListDialog.Reset](#) 5588
- [104.43 ListDialog.ShowDialog](#) 5606

Example Databases

- [List/ListDialog Grouping](#)
- [List/ListDialog](#)

104.5.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)

Created 18th August 2014, last changed 18th August 2014.

104.6 ListDialog.ColumnCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.2	Yes	Yes	No	No	No

MBS("ListDialog.ColumnCount")

Result Returns number or error.

Description

See also

- 104.29 ListDialog.SetColumnCount

5592

104.6.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr5](#)

Created 27th April 2019, last changed 27th April 2019.

104.7 ListDialog.GetAllowEmptySelection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	5.0	Yes	Yes	No	No	No

MBS("ListDialog.GetAllowEmptySelection")

Result Returns 1 if allowed, 0 if not allowed.

Description

See also

- [104.8 ListDialog.GetAllowMultipleSelection](#) 5571
- [104.26 ListDialog.SetAllowEmptySelection](#) 5589
- [104.27 ListDialog.SetAllowMultipleSelection](#) 5590

104.7.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 29th November 2014, last changed 29th November 2014.

104.8 ListDialog.GetAllowMultipleSelection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.GetAllowMultipleSelection")

Result Returns 1 if allowed, 0 if not allowed.

Description

See also

- 104.7 ListDialog.GetAllowEmptySelection 5570
- 104.26 ListDialog.SetAllowEmptySelection 5589
- 104.27 ListDialog.SetAllowMultipleSelection 5590

Created 18th August 2014, last changed 18th August 2014.

104.9 ListDialog.GetCancelButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.GetCancelButtonLabel")

Result Returns text.

Description

See also

- 104.13 ListDialog.GetOtherButtonLabel 5576
- 104.17 ListDialog.GetSelectButtonLabel 5580
- 104.28 ListDialog.SetCancelButtonLabel 5591
- 104.33 ListDialog.SetOtherButtonLabel 5596
- 104.38 ListDialog.SetSelectButtonLabel 5601

Created 18th August 2014, last changed 18th August 2014.

104.10 ListDialog.GetColumnHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.2	Yes	Yes	No	No	No

MBS("ListDialog.GetColumnHeader"; Index)

Parameters

Index

The index of the column starting with zero for the first one.

0

Result Returns text or error.

Description

See also

- [104.4 ListDialog.ClearColumnHeaders](#) 5567
- [104.29 ListDialog.SetColumnCount](#) 5592
- [104.30 ListDialog.SetColumnHeader](#) 5593

104.10.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr5](#)

Created 27th April 2019, last changed 27th April 2019.

104.11 ListDialog.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.3	Yes	Yes	No	No	No

MBS("ListDialog.GetHeight")

Result Returns height value.

Description

See also ListDialog.SetWidth, ListDialog.GetWidth and ListDialog.SetHeight.

See also

- 104.16 ListDialog.GetPrompt 5579
- 104.20 ListDialog.GetWidth 5583
- 104.31 ListDialog.SetHeight 5594
- 104.41 ListDialog.SetWidth 5604

Created 18th August 2014, last changed 18th August 2014.

104.12 ListDialog.GetOtherButtonEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.5	Yes	Yes	No	No	No

MBS("ListDialog.GetOtherButtonEvaluate")

Result Returns OK or error.

Description

See also

- [104.13 ListDialog.GetOtherButtonLabel](#) 5576
- [104.32 ListDialog.SetOtherButtonEvaluate](#) 5595
- [104.33 ListDialog.SetOtherButtonLabel](#) 5596

104.12.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr3](#)

Created 11st October 2019, last changed 11st October 2019.

104.13 ListDialog.GetOtherButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.5	Yes	Yes	No	No	No

MBS("ListDialog.GetOtherButtonLabel")

Result Returns text.

Description

See also

- 104.9 ListDialog.GetCancelButtonLabel 5572
- 104.12 ListDialog.GetOtherButtonEvaluate 5575
- 104.17 ListDialog.GetSelectButtonLabel 5580
- 104.28 ListDialog.SetCancelButtonLabel 5591
- 104.32 ListDialog.SetOtherButtonEvaluate 5595
- 104.33 ListDialog.SetOtherButtonLabel 5596
- 104.38 ListDialog.SetSelectButtonLabel 5601

104.13.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr3](#)

Created 11st October 2019, last changed 11st October 2019.

104.14 ListDialog.GetPositionX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	6.5	Yes	Yes	No	No	No

MBS("ListDialog.GetPositionX")

Result Returns number or error.

Description

After dialog is shown, you can ask here for current position.

See also

- [104.15 ListDialog.GetPositionY](#) 5578
- [104.34 ListDialog.SetPosition](#) 5597
- [104.35 ListDialog.SetPositionX](#) 5598
- [104.36 ListDialog.SetPositionY](#) 5599

104.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

Created 15th November 2016, last changed 15th November 2016.

104.15 ListDialog.GetPositionY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	6.5	Yes	Yes	No	No	No

MBS("ListDialog.GetPositionY")

Result Returns number or error.

Description

After dialog is shown, you can ask here for current position.

See also

- 104.14 ListDialog.GetPositionX 5577
- 104.34 ListDialog.SetPosition 5597
- 104.35 ListDialog.SetPositionX 5598
- 104.36 ListDialog.SetPositionY 5599

104.15.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

Created 15th November 2016, last changed 15th November 2016.

104.16 ListDialog.GetPrompt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.GetPrompt")

Result Returns text.

Description

See also

- 77.21 FileDialog.GetPrompt 3731
- 77.40 FileDialog.SetPrompt 3761
- 104.11 ListDialog.GetHeight 5574
- 104.37 ListDialog.SetPrompt 5600

Created 18th August 2014, last changed 7th November 2016.

104.17 ListDialog.GetSelectButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.GetSelectButtonLabel")

Result Returns text.

Description

See also

- 104.9 ListDialog.GetCancelButtonLabel 5572
- 104.13 ListDialog.GetOtherButtonLabel 5576
- 104.28 ListDialog.SetCancelButtonLabel 5591
- 104.33 ListDialog.SetOtherButtonLabel 5596
- 104.38 ListDialog.SetSelectButtonLabel 5601

Created 18th August 2014, last changed 11st October 2019.

104.18 ListDialog.GetSelectedTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.GetSelectedTag")

Result Returns text.

Description

The tag allows you to store anything with the list like a record ID.

Text is empty if nothing is selected.

This can be a list if used with multiple selection.

See also

- 103.16 List.HasValue 5438
- 104.19 ListDialog.GetSelectedTitle 5582
- 104.39 ListDialog.SetSelectedTag 5602
- 104.40 ListDialog.SetSelectedTitle 5603
- 104.43 ListDialog.ShowDialog 5606
- 159.1 SyntaxColoring.AddContextMenuCommand 7553

Example Databases

- [List/ListDialog Grouping](#)
- [List/ListDialog](#)

Created 18th August 2014, last changed 18th August 2014.

104.19 ListDialog.GetSelectedTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.GetSelectedTitle")

Result Returns text.

Description

Text is empty if nothing is selected.
This can be a list if used with multiple selection.

See also

- [104.18 ListDialog.GetSelectedTag](#) 5581
- [104.39 ListDialog.SetSelectedTag](#) 5602
- [104.40 ListDialog.SetSelectedTitle](#) 5603
- [104.43 ListDialog.ShowDialog](#) 5606

Example Databases

- [List/ListDialog Grouping](#)
- [List/ListDialog](#)

Created 18th August 2014, last changed 18th August 2014.

104.20 ListDialog.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.3	Yes	Yes	No	No	No

MBS("ListDialog.GetWidth")

Result Returns width.

Description

See also ListDialog.SetWidth, ListDialog.SetHeight and ListDialog.GetHeight.

See also

- 104.11 ListDialog.GetHeight 5574
- 104.31 ListDialog.SetHeight 5594
- 104.41 ListDialog.SetWidth 5604

Created 18th August 2014, last changed 18th August 2014.

104.21 ListDialog.GetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.GetWindowTitle")

Result Returns text.

Description

See also

- 63.26 Dialog.GetWindowTitle 2365
- 63.48 Dialog.SetWindowTitle 2391
- 77.26 FileDialog.GetWindowTitle 3736
- 77.46 FileDialog.SetWindowTitle 3768
- 104.42 ListDialog.SetWindowTitle 5605

Created 18th August 2014, last changed 18th August 2014.

104.22 ListDialog.ListCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.ListCount")

Result Returns number or error.

Description

See also

- 104.23 ListDialog.ListItem 5586
- 104.24 ListDialog.ListTag 5587

Created 18th August 2014, last changed 18th August 2014.

104.23 ListDialog.ListItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.ListItem"; Index)

Parameters

Index

The index from 0 to ListDialog.ListCount-1.

\$index

Result Returns text.

Description

See also

- 104.22 ListDialog.ListCount 5585
- 104.24 ListDialog.ListTag 5587

Created 18th August 2014, last changed 18th August 2014.

104.24 ListDialog.ListTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.ListTag"; Index)

Parameters

Index

The index from 0 to ListDialog.ListCount-1.

\$index

Result Returns text.

Description

The tag allows you to store anything with the list like a record ID.

See also

- 104.22 ListDialog.ListCount 5585
- 104.23 ListDialog.ListItem 5586

Created 18th August 2014, last changed 18th August 2014.

104.25 ListDialog.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	10.0	Yes	Yes	No	No	No

MBS("ListDialog.Reset")

Result Returns OK or error.

Description

Includes ListDialog.ClearList and ListDialog.ClearColumnHeaders.

See also

- 77.28 FileDialog.Reset 3740
- 104.4 ListDialog.ClearColumnHeaders 5567
- 104.5 ListDialog.ClearList 5568
- 104.44 ListDialog.Sort 5608
- 159.1 SyntaxColoring.AddContextMenuCommand 7553

104.25.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 20th November 2019, last changed 20th November 2019.

104.26 ListDialog.SetAllowEmptySelection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	5.0	Yes	Yes	No	No	No

MBS("ListDialog.SetAllowEmptySelection"; value)

Parameters

value

Whether to allow empty selections. Pass 1 to allow and 0 to disallow.

1

Result Returns OK or error.

Description

Examples

Enable empty selection:

```
MBS( "ListDialog.SetAllowEmptySelection"; 1 )
```

Disable empty selection:

```
MBS( "ListDialog.SetAllowEmptySelection"; 0 )
```

See also

- [104.7 ListDialog.GetAllowEmptySelection](#) 5570
- [104.8 ListDialog.GetAllowMultipleSelection](#) 5571
- [104.27 ListDialog.SetAllowMultipleSelection](#) 5590

104.26.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 29th November 2014, last changed 1st December 2014.

104.27 ListDialog.SetAllowMultipleSelection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.SetAllowMultipleSelection"; value)

Parameters

value

Whether to allow multiple selections. Pass 1 to allow and 0 to disallow.

1

Result Returns OK.

Description

Examples

Enable multiple selection:

```
MBS( "ListDialog.SetAllowMultipleSelection"; 1 )
```

Disable multiple selection:

```
MBS( "ListDialog.SetAllowMultipleSelection"; 0 )
```

See also

- 103.16 List.HasValue 5438
- 104.7 ListDialog.GetAllowEmptySelection 5570
- 104.8 ListDialog.GetAllowMultipleSelection 5571
- 104.26 ListDialog.SetAllowEmptySelection 5589
- 104.43 ListDialog.ShowDialog 5606

Example Databases

- [List/ListDialog Grouping](#)
- [List/ListDialog](#)

104.27.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)

Created 18th August 2014, last changed 18th August 2014.

104.28 ListDialog.SetCancelButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.SetCancelButtonLabel"; text)

Parameters**text**

The new text.
"Cancel"

Result Returns OK.

Description**Examples**

Sets label:

MBS("ListDialog.SetCancelButtonLabel"; "Abbrechen")

See also

- 104.9 ListDialog.GetCancelButtonLabel 5572
- 104.13 ListDialog.GetOtherButtonLabel 5576
- 104.17 ListDialog.GetSelectButtonLabel 5580
- 104.33 ListDialog.SetOtherButtonLabel 5596
- 104.38 ListDialog.SetSelectButtonLabel 5601

Created 18th August 2014, last changed 18th August 2014.

104.29 ListDialog.SetColumnCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.2	Yes	Yes	No	No	No

MBS("ListDialog.SetColumnCount"; Value)

Parameters

Value

The new column count.

2

Result Returns OK or error.

Description

Currently we support up to 5 columns.
Default is 1 column unless you change it.

Examples

Set column headers:

```
Variable setzen [ $r ; Wert: MBS("ListDialog.SetColumnCount"; 2) ]
Variable setzen [ $r ; Wert: MBS("ListDialog.SetColumnHeader"; 0; "Column left") ]
Variable setzen [ $r ; Wert: MBS("ListDialog.SetColumnHeader"; 1; "Column right") ]
```

See also

- [104.6 ListDialog.ColumnCount](#) 5569
- [104.10 ListDialog.GetColumnHeader](#) 5573
- [104.30 ListDialog.SetColumnHeader](#) 5593

104.29.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr5](#)
- [List Dialogs with headers](#)
- [List Dialogs with multiple columns](#)

Created 27th April 2019, last changed 28th April 2019.

104.30 ListDialog.SetColumnHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.2	Yes	Yes	No	No	No

MBS("ListDialog.SetColumnHeader"; Index; Text)

Parameters

Index

The index of the column starting with zero for the first one.

0

Text

The text for the column header.

"Hello"

Result Returns OK or error.

Description

Examples

Set column headers:

```
Variable setzen [ $r ; Wert: MBS("ListDialog.SetColumnCount"; 2) ]
```

```
Variable setzen [ $r ; Wert: MBS("ListDialog.SetColumnHeader"; 0; "Column left") ]
```

```
Variable setzen [ $r ; Wert: MBS("ListDialog.SetColumnHeader"; 1; "Column right") ]
```

See also

- 104.4 ListDialog.ClearColumnHeaders 5567
- 104.10 ListDialog.GetColumnHeader 5573
- 104.29 ListDialog.SetColumnCount 5592

104.30.1 Blog Entries

- [List Dialogs with headers](#)

Created 27th April 2019, last changed 28th April 2019.

104.31 ListDialog.SetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.3	Yes	Yes	No	No	No

MBS("ListDialog.SetHeight")

Result Returns OK.

Description

See also ListDialog.SetWidth, ListDialog.GetWidth and ListDialog.GetHeight.

Examples

Set size to 800x600:

```
MBS( "ListDialog.SetWidth"; 800 )
```

```
MBS( "ListDialog.SetHeight"; 600 )
```

See also

- 104.11 ListDialog.GetHeight 5574
- 104.20 ListDialog.GetWidth 5583
- 104.37 ListDialog.SetPrompt 5600
- 104.41 ListDialog.SetWidth 5604

Created 18th August 2014, last changed 18th August 2014.

104.32 ListDialog.SetOtherButtonEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.5	Yes	Yes	No	No	No

MBS("ListDialog.SetOtherButtonEvaluate")

Result Returns OK or error.

Description

If set, we run this expression instead of closing the dialog.

This can be useful to start action while dialog stays open. Please note you can't run a script while dialog is open.

Other button is only visible if the label is set.

Examples

Add a button and let it run showurl to open website:

```
Set Variable [ $r ; Value: MBS("ListDialog.SetOtherButtonLabel"; "Help") ]
```

```
Set Variable [ $r ; Value: MBS("ListDialog.SetOtherButtonEvaluate"; "MBS( \"ShowURL\"; \"https://mb-splugins.eu\" )" ) ]
```

See also

- [63.40 Dialog.SetOtherButton](#) 2381
- [104.12 ListDialog.GetOtherButtonEvaluate](#) 5575
- [104.13 ListDialog.GetOtherButtonLabel](#) 5576
- [104.33 ListDialog.SetOtherButtonLabel](#) 5596

104.32.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)
- [MBS FileMaker Plugin, version 9.5pr3](#)

Created 11st October 2019, last changed 11st October 2019.

104.33 ListDialog.SetOtherButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	9.5	Yes	Yes	No	No	No

MBS("ListDialog.SetOtherButtonLabel"; text)

Parameters

text

The new text.

"Help"

Result Returns OK or error.

Description

Other button is only visible if the label is set.

If expression to evaluate is set, the evaluate happens when button is clicked. If no expression is set, the result for running the dialog and clicking this button is "Other".

Examples

Add a button and let it run showurl to open website:

```
Set Variable [ $r ; Value: MBS("ListDialog.SetOtherButtonLabel"; "Help") ]
```

```
Set Variable [ $r ; Value: MBS("ListDialog.SetOtherButtonEvaluate"; "MBS( \"ShowURL\"; \"https://mb-plugins.eu\" )" ) ]
```

See also

- 63.40 Dialog.SetOtherButton 2381
- 104.9 ListDialog.GetCancelButtonLabel 5572
- 104.12 ListDialog.GetOtherButtonEvaluate 5575
- 104.13 ListDialog.GetOtherButtonLabel 5576
- 104.17 ListDialog.GetSelectButtonLabel 5580
- 104.28 ListDialog.SetCancelButtonLabel 5591
- 104.32 ListDialog.SetOtherButtonEvaluate 5595
- 104.38 ListDialog.SetSelectButtonLabel 5601

104.33.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)
- [MBS FileMaker Plugin, version 9.5pr3](#)

Created 11st October 2019, last changed 11st October 2019.

104.34 ListDialog.SetPosition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	6.5	Yes	Yes	No	No	No

MBS("ListDialog.SetPosition"; X; Y)

Parameters

X

The x position.

Y

The y position.

Result Returns OK or error.

Description

Examples

Set position:

```
Set Variable [ $r; Value:MBS("ListDialog.SetPosition"; 200; 200) ]
```

See also

- 104.14 ListDialog.GetPositionX 5577
- 104.15 ListDialog.GetPositionY 5578
- 104.35 ListDialog.SetPositionX 5598
- 104.36 ListDialog.SetPositionY 5599

104.34.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

Created 15th November 2016, last changed 15th November 2016.

104.35 ListDialog.SetPositionX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	6.5	Yes	Yes	No	No	No

MBS("ListDialog.SetPositionX"; X)

Parameters

X

The x position.

Result Returns OK or error.

Description

See also

- 104.14 ListDialog.GetPositionX 5577
- 104.15 ListDialog.GetPositionY 5578
- 104.34 ListDialog.SetPosition 5597
- 104.36 ListDialog.SetPositionY 5599

104.35.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

Created 15th November 2016, last changed 15th November 2016.

104.36 ListDialog.SetPositionY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	6.5	Yes	Yes	No	No	No

MBS("ListDialog.SetPositionY"; Y)

Parameters

Y

The y position.

Result Returns OK or error.

Description

See also

- 104.14 ListDialog.GetPositionX 5577
- 104.15 ListDialog.GetPositionY 5578
- 104.34 ListDialog.SetPosition 5597
- 104.35 ListDialog.SetPositionX 5598

104.36.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

Created 15th November 2016, last changed 15th November 2016.

104.37 ListDialog.SetPrompt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.SetPrompt"; text)

Parameters

text

The new text.

"Please select an item:"

Result Returns OK.

Description

This text is shown on the top of the dialog over the listbox.

Examples

Sets label:

MBS("ListDialog.SetPrompt"; "Bitte einen Namen wählen:")

See also

- [77.21 FileDialog.GetPrompt](#) 3731
- [77.40 FileDialog.SetPrompt](#) 3761
- [103.16 List.HasValue](#) 5438
- [104.16 ListDialog.GetPrompt](#) 5579
- [104.31 ListDialog.SetHeight](#) 5594
- [104.43 ListDialog.ShowDialog](#) 5606
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

Example Databases

- [List/ListDialog Grouping](#)
- [List/ListDialog](#)

104.37.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)

Created 18th August 2014, last changed 18th August 2014.

104.38 ListDialog.SetSelectButtonLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.SetSelectButtonLabel"; text)

Parameters**text**

The new text.

"Select"

Result Returns OK or error.

Description**Examples**

Sets label:

MBS("ListDialog.SetSelectButtonLabel"; "Auswählen")

See also

- 104.9 ListDialog.GetCancelButtonLabel 5572
- 104.13 ListDialog.GetOtherButtonLabel 5576
- 104.17 ListDialog.GetSelectButtonLabel 5580
- 104.28 ListDialog.SetCancelButtonLabel 5591
- 104.33 ListDialog.SetOtherButtonLabel 5596

Created 18th August 2014, last changed 11st October 2019.

104.39 ListDialog.SetSelectedTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.SetSelectedTag"; text)

Parameters

text

The text to select.

"1234"

Result Returns OK.

Description

You can preselect one or more items using this function.

This can be a list if used with multiple selection.

See also

- 104.18 ListDialog.GetSelectedTag 5581
- 104.19 ListDialog.GetSelectedTitle 5582
- 104.40 ListDialog.SetSelectedTitle 5603

Created 18th August 2014, last changed 18th August 2014.

104.40 ListDialog.SetSelectedTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.SetSelectedTitle"; text)

Parameters

text

The text to select.

"Hello World"

Result Returns OK.

Description

You can preselect one or more items using this function.

This can be a list if used with multiple selection.

Examples

Define to pick an item from the list by default via title:

```
MBS( "ListDialog.SetSelectedTitle"; "Hello World" )
```

See also

- 103.16 List.HasValue 5438
- 104.18 ListDialog.GetSelectedTag 5581
- 104.19 ListDialog.GetSelectedTitle 5582
- 104.39 ListDialog.SetSelectedTag 5602
- 104.43 ListDialog.ShowDialog 5606

Example Databases

- [List/ListDialog Grouping](#)
- [List/ListDialog](#)

104.40.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 18th August 2014, last changed 18th August 2014.

104.41 ListDialog.SetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.3	Yes	Yes	No	No	No

MBS("ListDialog.SetWidth")

Result Returns OK.

Description

See also ListDialog.SetHeight, ListDialog.GetWidth and ListDialog.GetHeight.

Minimum width in 4.3/4.4 is 300 pixel which was lowed to 260 in plugin version 4.5.

Examples

Set size to 800x600:

```
MBS( "ListDialog.SetWidth"; 800 )
```

```
MBS( "ListDialog.SetHeight"; 600 )
```

See also

- 104.11 ListDialog.GetHeight 5574
- 104.20 ListDialog.GetWidth 5583
- 104.31 ListDialog.SetHeight 5594

Created 18th August 2014, last changed 29th November 2014.

104.42 ListDialog.SetWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.SetWindowTitle"; text)

Parameters**text**

The new text.
"Your Choice"

Result Returns OK.

Description**Examples**

Sets window title:

MBS("ListDialog.SetWindowTitle"; "Freunde wählen")

See also

- [63.26 Dialog.GetWindowTitle](#) 2365
- [63.48 Dialog.SetWindowTitle](#) 2391
- [77.26 FileDialog.GetWindowTitle](#) 3736
- [77.46 FileDialog.SetWindowTitle](#) 3768
- [104.21 ListDialog.GetWindowTitle](#) 5584

Created 18th August 2014, last changed 18th August 2014.

104.43 ListDialog.ShowDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	4.2	Yes	Yes	No	No	No

MBS("ListDialog.ShowDialog" { ; TopMost })

Parameters

TopMost

Optional

Available in MBS FileMaker Plugin 10.1 or newer.

Whether the dialog will get top most flag on Windows. Pass 1 to make it topmost, pass 0 or nothing for normal behavior.

Result Returns OK or Cancel.

Description

Examples

Shows a dialog:

```
Set Variable [ $r; Value:MBS("ListDialog.ClearList") ]
Set Variable [ $r; Value:MBS("ListDialog.SetPrompt"; "Please select an item:") ]
Set Variable [ $r; Value:MBS("ListDialog.AddItemToList"; "First Item"; "1234") ]
Set Variable [ $r; Value:MBS("ListDialog.SetAllowMultipleSelection"; 1) ]
Set Variable [ $r; Value:MBS("ListDialog.SetSelectedTitle"; "1234") ]
Set Variable [ $r; Value:MBS("ListDialog.ShowDialog") ]
Set Field [ ListDialog::Result; $r ]
Set Field [ ListDialog::Selected Tag; MBS("ListDialog.GetSelectedTag") ]
Set Field [ ListDialog::Selected; MBS("ListDialog.GetSelectedTitle") ]
```

See also

- 103.16 List.HasValue 5438
- 104.1 ListDialog.AddItemToList 5563
- 104.5 ListDialog.ClearList 5568
- 104.18 ListDialog.GetSelectedTag 5581
- 104.19 ListDialog.GetSelectedTitle 5582
- 104.27 ListDialog.SetAllowMultipleSelection 5590
- 104.37 ListDialog.SetPrompt 5600
- 104.40 ListDialog.SetSelectedTitle 5603
- 159.1 SyntaxColoring.AddContextMenuCommand 7553

Example Databases

- [List/ListDialog Grouping](#)
- [List/ListDialog](#)

104.43.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)

Created 18th August 2014, last changed 17th January 2020.

104.44 ListDialog.Sort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
104 ListDialog	7.5	Yes	Yes	No	No	No

MBS("ListDialog.Sort" { ; Descending })

Parameters

Descending

Optional

Pass 1 for descending sort. Default is 0 for ascending.

0

Result Returns OK or error.

Description

Sorts ignoring case, by default ascending.

See also

- 104.25 ListDialog.Reset

5588

104.44.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)

Created 6th November 2017, last changed 6th November 2017.

Chapter 105

MailComposer

A panel for iOS to edit and send an email.

You can add attachments and optionally html content.

105.1 MailComposer.AddAttachmentContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.AddAttachmentContainer"; Container; Name { ; MimeType })

Parameters

Container

The container to attach to email.

Attachment::Container

Name

The name for the attachment.

"sample.pdf"

MimeType

Optional

The mime type to use. e.g. "application/pdf" for PDF files. If missing, we use "application/octet-stream".
"application/octet-stream"

Result Returns OK or error.

Description

You can use `Text.FileExtensionToMimeType` to find the mime type for a file extension.

You can use `AddAttachment` several times to add several attachments.

Examples

Adds an attachment:

```

Set Variable [ $FieldName ; Value: Get(ScriptParameter) ]
Set Variable [ $Container ; Value: GetField ( $FieldName) ]
If [ IsEmpty ( $container ) = 0 ]
Set Variable [ $path ; Value: GetAsText ( $Container ) ]
Set Variable [ $name ; Value: MBS( "Path.LastPathComponent"; $path) ]
Set Variable [ $extension ; Value: MBS( "Files.FileExtension"; $name ) ]
Set Variable [ $mimeType ; Value: MBS( "Text.FileExtensionToMimeType"; $extension ) ]
#
Set Variable [ $r ; Value: MBS( "MailComposer.AddAttachmentContainer"; $container; $name; $mime-
Type) ]
End If

```

See also

- 78.20 Files.FileExtension 3803
- 105.2 MailComposer.AddAttachmentFile 5611
- 105.3 MailComposer.AddAttachmentText 5612
- 114.1 MessageComposer.AddAttachmentContainer 6005
- 121.5 Path.LastPathComponent 6144
- 164.37 Text.FileExtensionToMimeType 7828

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.2 MailComposer.AddAttachmentFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.AddAttachmentFile"; Path; Name { ; mimeType })

Parameters

Path

The native file path to the file to include as attachment.

"/Users/cs/Desktop/sample.pdf"

Name

The name for the attachment.

"sample.pdf"

MimeType

Optional

The mime type to use. e.g. "application/pdf" for PDF files. If missing, we use "application/octet-stream".
"application/octet-stream"

Result Returns OK or error.

Description

Attachments over 100 MB are not supported.

You can use `Text.FileExtensionToMimeType` to find the mime type for a file extension.

You can use `AddAttachment` several times to add several attachments.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

See also

- 105.1 MailComposer.AddAttachmentContainer 5609
- 105.3 MailComposer.AddAttachmentText 5612
- 114.2 MessageComposer.AddAttachmentFile 6007
- 121.2 Path.FileMakerPathToNativePath 6139
- 164.37 Text.FileExtensionToMimeType 7828

Created 10th June 2017, last changed 10th June 2017.

105.3 MailComposer.AddAttachmentText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.AddAttachmentText"; Text; Encoding; Name { ; MimeType })

Parameters

Text

The text to use for the attachment.

"Hello World"

Encoding

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Name

The name for the attachment. If empty, version 6.2 or newer uses file name from file path.

"sample.txt"

MimeType

Optional

The mime type to use. e.g. "application/pdf" for PDF files. If missing, we use "text/plain".

"text/plain"

Result Returns OK or error.

Description

Attachments over 100 MB are not supported.

You can use `Text.FileExtensionToMimeType` to find the mime type for a file extension.

You can use `AddAttachment` several times to add several attachments.

See also

- 105.1 MailComposer.AddAttachmentContainer 5609
- 105.2 MailComposer.AddAttachmentFile 5611
- 164.37 Text.FileExtensionToMimeType 7828

Created 10th June 2017, last changed 10th June 2017.

105.4 MailComposer.CanSendMail

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.CanSendMail")

Result Returns 1, 0 or error.

Description

Returns 1 if the user has set up the device for sending email.

The client may continue to set the recipients and content if the return value was 1. If 0 was the result, the client has a couple options. It may choose to simply notify the user of the inability to send mail, or it may issue a "mailto" URL via Open URL.

This function can be called before having a composer initialized.

Examples

Checks whether we can email:

```
Set Variable [ $r ; Value: MBS( "MailComposer.CanSendMail" ) ]
If [ $r = 1 ]
Show Custom Dialog [ "Can't send emails." ; "This iOS device is not configured to send emails." ]
Exit Script [ Text Result: "failed" ]
End If
```

See also

- 105.17 MailComposer.Present

5626

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 18th June 2017.

105.5 MailComposer.Dismiss

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.Dismiss")

Result Returns OK or error.

Description

Something you can call in a script to cancel the email creation.

See also

- 114.7 MessageComposer.Dismiss 6012
- 153.4 SocialComposer.Dismiss 7163

Created 10th June 2017, last changed 10th June 2017.

105.6 MailComposer.Error

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.Error")

Result Returns error text or empty.

Description

Returns empty result if there was no error.

Examples

Show result in a field:

```
Set Variable [ $result ; Value: MBS( "MailComposer.Result" ) ]
Set Variable [ $error ; Value: MBS( "MailComposer.Error" ) ]
Set Field [ Placeholder::Result ; $result & ": " & $error ]
```

See also

- 105.18 MailComposer.Result 5628
- 105.21 MailComposer.SetEvaluate 5631
- 105.23 MailComposer.SetScript 5633
- 153.18 SocialComposer.SetEvaluate 7179
- 153.20 SocialComposer.SetScript 7181

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.7 MailComposer.GetBCCRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.GetBCCRecipients")

Result Returns text or error.

Description

See also

- 105.8 MailComposer.GetCCRecipients 5617
- 105.14 MailComposer.GetTORecipients 5623
- 105.19 MailComposer.SetBCCRecipients 5629
- 105.20 MailComposer.SetCCRecipients 5630
- 105.25 MailComposer.SetTORecipients 5636
- 114.11 MessageComposer.GetRecipients 6016

Created 11st June 2017, last changed 11st June 2017.

105.8 MailComposer.GetCCRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.GetCCRecipients")

Result Returns text or error.

Description**See also**

- 105.7 MailComposer.GetBCCRecipients 5616
- 105.14 MailComposer.GetTORecipients 5623
- 105.19 MailComposer.SetBCCRecipients 5629
- 105.20 MailComposer.SetCCRecipients 5630
- 105.25 MailComposer.SetTORecipients 5636
- 114.11 MessageComposer.GetRecipients 6016
- 114.20 MessageComposer.SetRecipients 6026

Created 11st June 2017, last changed 11st June 2017.

105.9 MailComposer.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.GetEvaluate")

Result Returns expression or error.

Description

See also

- 105.10 MailComposer.GetFileName 5619
- 105.21 MailComposer.SetEvaluate 5631
- 114.8 MessageComposer.GetEvaluate 6013
- 114.18 MessageComposer.SetEvaluate 6024
- 153.5 SocialComposer.GetEvaluate 7164
- 153.18 SocialComposer.SetEvaluate 7179

Created 10th June 2017, last changed 10th June 2017.

105.10 MailComposer.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.GetFileName")

Result Returns text or error.

Description

See also

- 105.9 MailComposer.GetEvaluate 5618
- 105.12 MailComposer.GetScriptName 5621
- 105.21 MailComposer.SetEvaluate 5631
- 114.9 MessageComposer.GetFileName 6014
- 153.6 SocialComposer.GetFileName 7165

Created 10th June 2017, last changed 10th June 2017.

105.11 MailComposer.GetMessageBody

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.GetMessageBody")

Result Returns text or error.

Description

Can be HTML or plain text.

See also

- 105.22 MailComposer.SetMessageBody 5632
- 114.10 MessageComposer.GetMessageBody 6015
- 114.19 MessageComposer.SetMessageBody 6025

Created 11st June 2017, last changed 11st June 2017.

105.12 MailComposer.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.GetScriptName")

Result Returns text or error.

Description

See also

- 105.10 MailComposer.GetFileName 5619
- 105.23 MailComposer.SetScript 5633
- 114.12 MessageComposer.GetScriptName 6017
- 153.8 SocialComposer.GetScriptName 7167

Created 10th June 2017, last changed 10th June 2017.

105.13 MailComposer.GetSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.GetSubject")

Result Returns text or error.

Description

See also

- 105.23 MailComposer.SetScript 5633
- 105.24 MailComposer.SetSubject 5635
- 114.13 MessageComposer.GetSubject 6018
- 114.22 MessageComposer.SetSubject 6029

Created 11st June 2017, last changed 11st June 2017.

105.14 MailComposer.GetTORecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.GetTORecipients")

Result Returns text or error.

Description**See also**

- 105.7 MailComposer.GetBCCRecipients 5616
- 105.8 MailComposer.GetCCRecipients 5617
- 105.19 MailComposer.SetBCCRecipients 5629
- 105.20 MailComposer.SetCCRecipients 5630
- 105.25 MailComposer.SetTORecipients 5636
- 114.11 MessageComposer.GetRecipients 6016
- 114.20 MessageComposer.SetRecipients 6026

Created 11st June 2017, last changed 11st June 2017.

105.15 MailComposer.IsPresented

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.IsPresented")

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if not.

See also

- 105.17 MailComposer.Present 5626
- 114.14 MessageComposer.IsPresented 6019
- 153.11 SocialComposer.IsPresented 7170

Created 10th June 2017, last changed 10th June 2017.

105.16 MailComposer.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.New")

Result Returns OK or error.

Description

Resets last error and clears last email content.

Examples

Start a new email:

```
Set Variable [ $r ; Value: MBS( "MailComposer.New" ) ]
```

```
Set Variable [ $r ; Value: MBS( "MailComposer.SetSubject"; Placeholder::Subject ) ]
```

See also

- 105.17 MailComposer.Present 5626
- 105.24 MailComposer.SetSubject 5635
- 153.12 SocialComposer.New 7171

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.17 MailComposer.Present

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.Present")

Result Returns OK or error.

Description

This will show the user interface and start the process.

Your script may call this in a script and then wait for the script trigger.

Examples

Setups email and send:

```

Set Variable [ $r ; Value: MBS( "MailComposer.CanSendMail" ) ]
If [ $r = 1 ]
Show Custom Dialog [ "Can't send emails." ; "This iOS device is not configured to send emails." ]
Exit Script [ Text Result: "failed" ]
End If
Set Variable [ $r ; Value: MBS( "MailComposer.New" ) ]
Set Variable [ $r ; Value: MBS( "MailComposer.SetSubject"; Placeholder::Subject ) ]
Set Variable [ $r ; Value: MBS( "MailComposer.SetScript"; Get(FileName); "Sent" ) ]
If [ Length ( Placeholder::Body ) > 0 ]
Set Variable [ $r ; Value: MBS( "MailComposer.SetMessageBody"; Placeholder::Body; Position ( Placeholder::Body ; "<html>" ; 1 ; 1 ) > 0 ) ]
End If
If [ Length ( Placeholder::CCRecipients ) > 0 ]
Set Variable [ $r ; Value: MBS( "MailComposer.SetCCRecipients"; Placeholder::CCRecipients ) ]
End If
If [ Length ( Placeholder::BCCRecipients ) > 0 ]
Set Variable [ $r ; Value: MBS( "MailComposer.SetBCCRecipients"; Placeholder::BCCRecipients ) ]
End If
If [ Length ( Placeholder::TORecipients ) > 0 ]
Set Variable [ $r ; Value: MBS( "MailComposer.SetTORecipients"; Placeholder::TORecipients ) ]
End If
Perform Script [ "AddAttachment" ; Parameter: GetFieldName ( Placeholder::Attachment1 ) ]
Perform Script [ "AddAttachment" ; Parameter: GetFieldName ( Placeholder::Attachment2 ) ]
Perform Script [ "AddAttachment" ; Parameter: GetFieldName ( Placeholder::Attachment3 ) ]
Set Variable [ $r ; Value: MBS( "MailComposer.Present" ) ]

```

See also

- 105.4 MailComposer.CanSendMail 5613
- 105.15 MailComposer.IsPresented 5624
- 105.16 MailComposer.New 5625

<i>105.17. MAILCOMPOSER.PRESENT</i>	5627
• 105.18 MailComposer.Result	5628
• 105.19 MailComposer.SetBCCRecipients	5629
• 105.23 MailComposer.SetScript	5633
• 105.24 MailComposer.SetSubject	5635
• 105.25 MailComposer.SetTORecipients	5636
• 114.16 MessageComposer.Present	6021
• 153.13 SocialComposer.Present	7173

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.18 MailComposer.Result

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.Result")

Result Returns value or error.

Description

If email composer is not yet finished, the result is empty.
Status can be Cancelled, Saved, Sent, Failed.

Examples

Show result in a field:

```
Set Variable [ $result ; Value: MBS( "MailComposer.Result" ) ]
Set Variable [ $error ; Value: MBS( "MailComposer.Error" ) ]
Set Field [ Placeholder::Result ; $result & ": " & $error ]
```

See also

- 105.6 MailComposer.Error 5615
- 105.17 MailComposer.Present 5626
- 105.21 MailComposer.SetEvaluate 5631
- 105.23 MailComposer.SetScript 5633
- 114.17 MessageComposer.Result 6023
- 153.16 SocialComposer.Result 7177
- 153.18 SocialComposer.SetEvaluate 7179
- 153.20 SocialComposer.SetScript 7181

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.19 MailComposer.SetBCCRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.SetBCCRecipients"; Recipients)

Parameters

Recipients

List of recipients.

Result Returns OK or error.

Description

Will set the BCC header for the email message. This should be called prior to display.

Recipient addresses should be specified as per RFC5322.

After the view has been presented to the user, this method will no longer change the value.

See also

- 105.7 MailComposer.GetBCCRecipients 5616
- 105.8 MailComposer.GetCCRecipients 5617
- 105.14 MailComposer.GetTORecipients 5623
- 105.17 MailComposer.Present 5626
- 105.20 MailComposer.SetCCRecipients 5630
- 105.25 MailComposer.SetTORecipients 5636
- 114.20 MessageComposer.SetRecipients 6026

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.20 MailComposer.SetCCRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.SetCCRecipients"; Recipients)

Parameters

Recipients

List of recipients.

Result Returns OK or error.

Description

Will set the CC header for the email message. This should be called prior to display.

Recipient addresses should be specified as per RFC5322.

After the view has been presented to the user, this method will no longer change the value.

See also

- 105.7 MailComposer.GetBCCRecipients 5616
- 105.8 MailComposer.GetCCRecipients 5617
- 105.14 MailComposer.GetTORecipients 5623
- 105.17 MailComposer.Present 5626
- 105.19 MailComposer.SetBCCRecipients 5629
- 105.25 MailComposer.SetTORecipients 5636
- 114.11 MessageComposer.GetRecipients 6016
- 114.20 MessageComposer.SetRecipients 6026

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.21 MailComposer.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.SetEvaluate"; Expression)

Parameters**Expression**

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

Result Returns OK or error.

Description

In the script you can check with MailComposer.Result and MailComposer.Error what happened.

See also

- 105.6 MailComposer.Error 5615
- 105.9 MailComposer.GetEvaluate 5618
- 105.10 MailComposer.GetFileName 5619
- 105.18 MailComposer.Result 5628
- 114.8 MessageComposer.GetEvaluate 6013
- 114.18 MessageComposer.SetEvaluate 6024
- 153.5 SocialComposer.GetEvaluate 7164
- 153.18 SocialComposer.SetEvaluate 7179

Created 10th June 2017, last changed 4th April 2018.

105.22 MailComposer.SetMessageBody

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.SetMessageBody"; Body; IsHTML)

Parameters

Body

The text containing the body contents of the email message.

IsHTML

A boolean value indicating if the body argument is to be interpreted as HTML content. Pass 1 if Body is html or 0 for plain text. Default is 0 for plain text.

0

Result Returns OK or error.

Description

This method will set the body of the email message. This should be called prior to display. The user's signature, if specified, will be added after the body content.

See also

- 105.11 MailComposer.GetMessageBody 5620
- 105.17 MailComposer.Present 5626
- 114.10 MessageComposer.GetMessageBody 6015
- 114.19 MessageComposer.SetMessageBody 6025

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.23 MailComposer.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.SetScript"; FileName; ScriptName { ; Parameter })

Parameters

FileName

The file name for the script to trigger.

"test.fmp12"

ScriptName

The script name of the script to launch.

"EmailComposerFinished"

Parameter

Optional

The parameter to pass to the script.

Result Returns OK or error.

Description

In the script you can check with MailComposer.Result and MailComposer.Error what happened.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Set script:

```
Set Variable [ $r ; Value: MBS( "MailComposer.SetScript"; Get(FileName); "Sent") ]
```

See also

- 105.6 MailComposer.Error 5615
- 105.12 MailComposer.GetScriptName 5621
- 105.13 MailComposer.GetSubject 5622
- 105.17 MailComposer.Present 5626
- 105.18 MailComposer.Result 5628
- 105.24 MailComposer.SetSubject 5635
- 114.21 MessageComposer.SetScript 6027

- 153.20 SocialComposer.SetScript

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.24 MailComposer.SetSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.SetSubject"; Subject)

Parameters

Subject

The new subject.
"Hello World"

Result Returns OK or error.

Description

This method will set the Subject header for the email message. This should be called prior to display. Newlines are removed from the parameter. After the view has been presented to the user, this method will no longer change the value.

Examples

Start a new email:

```
Set Variable [ $r ; Value: MBS( "MailComposer.New" ) ]
```

```
Set Variable [ $r ; Value: MBS( "MailComposer.SetSubject"; Placeholder::Subject ) ]
```

See also

- 105.13 MailComposer.GetSubject 5622
- 105.16 MailComposer.New 5625
- 105.17 MailComposer.Present 5626
- 105.23 MailComposer.SetScript 5633
- 114.13 MessageComposer.GetSubject 6018
- 114.22 MessageComposer.SetSubject 6029

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

105.25 MailComposer.SetTORecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
105 MailComposer	7.3	No	No	No	No	Yes

MBS("MailComposer.SetTORecipients"; Recipients)

Parameters

Recipients

List of recipients.

Result Returns OK or error.

Description

Set the To header for the email message. This should be called prior to display.

Recipient addresses should be specified as per RFC5322.

After the view has been presented to the user, this method will no longer change the value.

See also

- 105.7 MailComposer.GetBCCRecipients 5616
- 105.8 MailComposer.GetCCRecipients 5617
- 105.14 MailComposer.GetTORecipients 5623
- 105.17 MailComposer.Present 5626
- 105.19 MailComposer.SetBCCRecipients 5629
- 105.20 MailComposer.SetCCRecipients 5630
- 114.11 MessageComposer.GetRecipients 6016
- 114.20 MessageComposer.SetRecipients 6026

Example Databases

- [iOS/iOS Email Sending](#)

Created 10th June 2017, last changed 10th June 2017.

Chapter 106

MapView

MapKit functions for MacOS to show maps.

106.1 MapView.AddCircle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.AddCircle"; MapView; JSON)

Parameters

MapView

The map view reference number.

\$\$MapView

JSON

The JSON to describe the circle.

```
{ "address": "Nickenich", "radius": 500, "title": "Monkeybread Software", "subtitle": "MBS is here", "color": "# FF000077" }
```

Result Returns identifier or error.

Description

The JSON may contain the following entries:

You can either pass latitude and longitude together or pass the address and we lookup it to find coordinates.

Examples

Add circle for MBS with address string:

```
Set Variable [ $r ; Value: MBS( "MapView.AddCircle"; $$MapView; " { \"address\": \"Nickenich\",
```

latitude	The latitude of the coordinate.
longitude	The longitude of the coordinate.
address	The address to lookup to find latitude or longitude.
radius	The radius in meter.
title	The title for the circle.
subtitle	The subtitle for the item.
strokeColor	The stroke color as name or hex notation.
fillColor	The fill color as name or hex notation.
identifier	The identifier to use. Can be empty to get new identifier auto assigned.

```
\”radius\”: 500, \”title\”: \”Monkeybread Software\”, \”subtitle\”: \”MBS is here\”, \”color\”: \”#FF000077\” } ”) ]
```

Add circle for MBS with coordinates:

```
Set Variable [ $r ; Value: MBS( ”MapView.AddCircle”; $$MapView; ” { \”longitude\”: 7.329722, \”latitude\”: 50.413333, \”radius\”: 500, \”title\”: \”Monkeybread Software\”, \”subtitle\”: \”MBS is here\”, \”color\”: \”# FF000077\” } ”) ]
```

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS FileMaker Plugin, version 9.4pr6](#)

Created 7th September 2019, last changed 11st September 2019.

106.2 MapView.AddPin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.AddPin"; MapView; Latitude; Longitude { ; Title; Subtitle; Identifier; color })

Parameters

MapView

The map view reference number.

\$\$MapView

Latitude

The latitude of the coordinate.

Longitude

The longitude of the coordinate.

Title

Optional

The title for the pin.

Subtitle

Optional

The subtitle for the pin.

Identifier

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The identifier for the pin to use with script trigger.

color

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The color to use. Can be a color name or hex notation like in HTML.

"# FF0000"

Result Returns identifier or error.

Description

Deprecated. Please use MapView.AddPoint function instead for more options.

See also

- 106.4 MapView.AddPoint

5643

106.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr6](#)

- [MBS FileMaker Plugin, version 9.3pr2](#)
- [More on MapViews in FileMaker](#)
- [Apple Maps in FileMaker on iOS](#)

Created 14th January 2019, last changed 11st September 2019.

106.3 MapView.AddPinWithAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.AddPinWithAddress"; MapView; Address { ; Title; Subtitle; Identifier; color })

Parameters

MapView

The map view reference number.

\$\$MapView

Address

The address to lookup.”

”New York”

Title

Optional

The title for the pin.

Subtitle

Optional

The subtitle for the pin.

Identifier

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The identifier for the pin to use with script trigger.

color

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The color to use. Can be a color name or hex notation like in HTML.

”# FF0000”

Result Returns identifier or error.

Description

Deprecated. Please use MapView.AddPoint function instead for more options.

See also

- 106.4 MapView.AddPoint

Example Databases

- [Mac and iOS/MapKit/MapView](#)

106.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr6](#)
- [MBS FileMaker Plugin, version 9.3pr2](#)
- [More on MapViews in FileMaker](#)
- [MBS FileMaker Plugin, version 9.1pr2](#)

Created 14th January 2019, last changed 11st September 2019.

106.4 MapView.AddPoint

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.AddPoint"; MapView; JSON)

Parameters

MapView

The map view reference number.

\$\$MapView

JSON

The JSON to describe the point.

Result Returns identifier or error.

Description

The JSON may contain the following entries:

latitude	The latitude of the coordinate.
longitude	The longitude of the coordinate.
address	The address to lookup to find latitude or longitude.
radius	The radius in meter.
title	The title for the pin.
subtitle	The subtitle for the item.
color	The color as name or hex notation for the pin.
identifier	The identifier to use. Can be empty to get new identifier auto assigned.
image	The base64 encoded image data to use.
imageWidth	Optional the image width to use.
imageHeight	Optional the image height to use.
clusteringIdentifier	Optionally an identifier that determines whether the annotation view participates in clustering.
displayPriority	Optionally the display priority of this annotation view. Can be Required, High, Low or Default.

New in 9.5 are some boolean keys named `enabled`, `draggable` and `canShowCallout` to customize behavior.

You can either pass latitude and longitude together or pass the address and we lookup it to find coordinates.

Examples

Create MBS Pin on map with custom image:

```
Set Variable [ $json ; Value: " { \"address\": \"Nickenich\", \"title\": \"Monkeybread Software\", \"subtitle\": \"MBS is here\", \"imageWidth\": 40, \"imageHeight\": 40 } "
```

```
# add image from container field to JSON
Set Variable [ $json ; Value: MBS( "JSON.AddStringToObject"; $json; "image"; Base64Encode ( MapView::image ) ) ]
# show
Set Variable [ $r ; Value: MBS( "MapView.AddPoint"; $$MapView; $JSON) ]
```

Adds simple pin for Hamburg:

```
Set Variable [ $r ; Value: MBS( "MapView.AddPoint"; $$MapView; " { \"address\": \"Hamburg, Germany\", \"title\": \"Hamburg\" } ") ]
```

See also

- 100.12 JSON.AddStringToObject 5255
- 106.2 MapView.AddPin 5639
- 106.3 MapView.AddPinWithAddress 5641
- 106.6 MapView.AddPolyline 5647

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)

106.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 10th September 2019, last changed 20th September 2019.

106.5 MapView.AddPolygon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.AddPolygon"; MapView; JSON)

Parameters

MapView

The map view reference number.

\$\$MapView

JSON

The JSON to describe the circle.

Result Returns identifier or error.

Description

The JSON may contain the following entries:

coordinates	The JSON array with the objects for the coordinates. Each entry can contain either longitude & latitude pair, x and y pair or address value.
title	The title for the polygon.
subtitle	The subtitle for the item.
fillColor	The fill color as name or hex notation for the polygon.
strokeColor	The stroke color as name or hex notation for the polygon.
identifier	The identifier to use. Can be empty to get new identifier auto assigned.
lineWidth	The line width to use. Default 5 point.

You can either pass latitude and longitude together or pass the address and we lookup it to find coordinates.

Examples

Add polygon from Hamburg to Munich and Cologne:

```
Set Variable [ $r ; Value: MBS( "MapView.AddPolygon"; $$MapView; " { \"coordinates\": [ { \"address\": \"Hamburg, Germany\" } , { \"address\": \"Munich, Germany\" } , { \"address\": \"Cologne, Germany\" } ] , \"strokeColor\": \"# FF00077\" } ) ]
```

Add polygon with some coordinates:

```
Set Variable [ $r ; Value: MBS( "MapView.AddPolygon"; $$MapView; " { \"coordinates\": [ { \"longitude\": 7.3, \"latitude\": 50.4 } , { \"longitude\": 7.3, \"latitude\": 50.5 } ,
```

```
{ \"longitude\": 7.4, \"latitude\": 50.5 } ,  
{ \"longitude\": 7.4, \"latitude\": 50.4 }  
],  
\"strokeColor\": \"# FF000077\"  
} ” ]
```

See also

- 106.6 MapView.AddPolyline

5647

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)

106.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 11st September 2019, last changed 20th September 2019.

106.6 MapView.AddPolyline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.AddPolyline"; MapView; JSON)

Parameters

MapView

The map view reference number.

\$\$MapView

JSON

The JSON to describe the circle.

Result Returns identifier or error.

Description

The JSON may contain the following entries:

coordinates	The JSON array with the objects for the coordinates. Each entry can contain either longitude & latitude pair or address value.
title	The title for the poly line.
subtitle	The subtitle for the item.
fillColor	The fill color as name or hex notation for the line.
strokeColor	The stroke color as name or hex notation for the line.
identifier	The identifier to use. Can be empty to get new identifier auto assigned.
lineWidth	The line width to use. Default 5 point.

You can either pass latitude and longitude together or pass the address and we lookup it to find coordinates.

Examples

Add poly line from Hamburg to Munich and Cologne:

```
Set Variable [ $r ; Value: MBS( "MapView.AddPolyline"; $$MapView; " { \"coordinates\": [ { \"address\": \"Hamburg, Germany\" } , { \"address\": \"Munich, Germany\" } , { \"address\": \"Cologne, Germany\" } ] , \"strokeColor\": \"# FF00077\" } )" ]
```

See also

- 106.4 MapView.AddPoint 5643
- 106.5 MapView.AddPolygon 5645

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.6.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 11st September 2019, last changed 11st September 2019.

106.7 MapView.Annotations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.Annotations"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns list of identifiers or error.

Description

Examples

Queries annotations:

MBS("MapView.Annotations"; 78001)

106.7.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr6](#)

Created 7th September 2019, last changed 7th September 2019.

106.8 MapView.CreateWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.CreateWithControl"; WindowRef; ControlName { ; DX; DY })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move drop area more to left or right.

0

DY

Optional

A delta to move drop area more to top or bottom.

0

Result Returns map view reference number or error.

Description

Use MapView.Release later to destroy the image view.

If you use a register (tab controls) on the window, be aware that the image view actually is in front of the register (tab controls). So you need to check in the script which register page is current and should show what image view. Or by a trigger you turn the visibility on and off.

Image view reference numbers are starting at 78000 and counting up for each new map view.

Not supported for MacOS 32-bit.

Does not work for WebDirect.

When creating on a card window, please pass reference to parent window or just 0 for front window. On MacOS you may need to pass delta y value to adjust position.

If you create a control on a new window, you may do window update command in your script first to

106.8. MAPVIEW.CREATEWITHCONTROL 5651

have FileMaker actually build the window with controls and display it. A short script pause or using FM.RunScriptLater with 0.1 delay can help having all controls draw themselves. Then you can use this command to put our control on top. We use GetControl() to query left, top, width and height and this gives empty value if control is not yet here.

See also

- 69.6 DragDrop.CreateWithControl 2487
- 79.52 FM.RunScript 3986
- 79.54 FM.RunScriptLater 3990
- 93.2 ImageView.CreateWithControl 5092
- 106.53 MapView.Release 5699
- 106.69 MapView.SetFrameWithControl 5717
- 106.85 MapView.SetShowsUserLocation 5734
- 165.5 TextView.CreateWithControl 7882
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [iOS/MapKit iOS](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)
- [Mac and iOS/MapKit/MapView](#)
- [Mac and iOS/MapView](#)

106.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr4](#)
- [MBS FileMaker Plugin, version 9.1pr1](#)

Created 14th January 2019, last changed 9th December 2019.

106.9 MapView.CreateWithSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.CreateWithSize"; WindowRef; x; y; w; h)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

x

The left coordinate in the window.

0

y

The top coordinate in the window.

0

w

The width of the image view in the window.

100

h

The height of the image view in the window.

100

Result Returns map view reference number or error.

Description

Use MapView.Release later to destroy the image view.

If you use a register (tab controls) on the window, be aware that the image view actually is in front of the register (tab controls). So you need to check in the script which register page is current and should show what image view. Or by a trigger you turn the visibility on and off.

Image view reference numbers are starting at 78000 and counting up for each new map view.

Not supported for MacOS 32-bit.

Does not work for WebDirect.

See also

- 93.3 ImageView.CreateWithSize 5094
- 106.53 MapView.Release 5699

<i>106.9. MAPVIEW.CREATEWITHSIZE</i>	5653
• 165.6 TextView.CreateWithSize	7884
• 182.15 Window.FindByIndex	8550
• 182.16 Window.FindByTitle	8552

Example Databases

- [Mac and iOS/MapKit/MapView](#)
- [Mac and iOS/MapView](#)

Created 14th January 2019, last changed 16th January 2020.

106.10 MapView.FormatDistance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.2	Yes	No	Yes, macOS only	No	Yes

MBS("MapView.FormatDistance"; distance)

Parameters

distance

The distance in meters to format.

123

Result Returns text or error.

Description

Uses current locale for formatting, so it uses km in Europe and miles in USA.

Examples

Format a distance:

MBS("MapView.FormatDistance"; 9555)

Example result: "9,6 km"

See also

- [106.51 MapView.ParseDistance](#)

5696

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.10.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 17th March 2019, last changed 17th March 2019.

106.11 MapView.GetAnnotationCoordinate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.GetAnnotationCoordinate"; MapView; Annotation Identifier)

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation to remove.

"82001"

Result Returns JSON or error.

Description

Returns JSON with longitude and latitude.

See also

- 106.12 MapView.GetAnnotationDragImage 5656
- 106.61 MapView.SetAnnotationCoordinate 5708

106.11.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 12nd September 2019, last changed 12nd September 2019.

106.12 MapView.GetAnnotationDragImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.GetAnnotationDragImage"; MapView; Annotation Identifier { ; ImageType; Filename })

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation.

"82001"

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns container value or error.

Description

Only for point annotations with image.

See also

- 106.11 MapView.GetAnnotationCoordinate 5655
- 106.13 MapView.GetAnnotationImage 5657
- 106.14 MapView.GetAnnotationSelectedImage 5658
- 106.62 MapView.SetAnnotationDragImage 5709
- 106.63 MapView.SetAnnotationImage 5710

106.12.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 23th September 2019, last changed 23th September 2019.

106.13 MapView.GetAnnotationImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.GetAnnotationImage"; MapView; Annotation Identifier { ; ImageType; Filename })

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation.

"82001"

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns container value or error.

Description

Only for point annotations with image.

See also

- 106.12 MapView.GetAnnotationDragImage 5656
- 106.62 MapView.SetAnnotationDragImage 5709
- 106.63 MapView.SetAnnotationImage 5710

106.13.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 20th September 2019, last changed 20th September 2019.

106.14 MapView.GetAnnotationSelectedImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.GetAnnotationSelectedImage"; MapView; Annotation Identifier { ; ImageType; Filename })

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation.

"82001"

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns container value or error.

Description

Only for point annotations with image.

See also

- 106.12 MapView.GetAnnotationDragImage 5656
- 106.64 MapView.SetAnnotationSelectedImage 5711

106.14.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 23th September 2019, last changed 23th September 2019.

106.15 MapView.GetAutoResizingMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetAutoResizingMask"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns number or error.

Description

This defines whether web viewer changes its size based on the surrounding window.

Name	Value	Description
NotSizable	0	The view cannot be resized.
MinXMargin	1	The left margin between the view and its superview is flexible.
WidthSizable	2	The view's width is flexible.
MaxXMargin	4	The right margin between the view and its superview is flexible.
MinYMargin	8	The bottom margin between the view and its superview is flexible.
HeightSizable	16	The view's height is flexible.
MaxYMargin	32	The top margin between the view and its superview is flexible.

e.g. the value 18 means the view can resize both horizontally and vertically with the parent view (window).

See also

- 69.9 DragDrop.GetAutoResizingMask 2493
- 69.38 DragDrop.SetAutoResizingMask 2530
- 106.65 MapView.SetAutoResizingMask 5712
- 165.10 TextView.GetAutoResizingMask 7888
- 165.30 TextView.SetAutoResizingMask 7908
- 180.52 WebView.GetAutoResizingMask 8347
- 180.122 WebView.SetAutoResizingMask 8449

106.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr9](#)

Created 16th January 2019, last changed 16th January 2019.

106.16 MapView.GetCenterCoordinateLatitude

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetCenterCoordinateLatitude"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns number or error.

Description

See also

- 106.17 MapView.GetCenterCoordinateLongitude

5661

Created 14th January 2019, last changed 15th January 2019.

106.17 MapView.GetCenterCoordinateLongitude

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetCenterCoordinateLongitude"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns number or error.

Description

See also

- 106.16 MapView.GetCenterCoordinateLatitude

5660

Created 14th January 2019, last changed 15th January 2019.

106.18 MapView.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetHeight"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns height or error.

Description

See also

- 93.5 ImageView.GetHeight 5097
- 106.19 MapView.GetLeft 5663
- 106.26 MapView.GetRegion 5671
- 106.45 MapView.GetWidth 5690
- 106.76 MapView.SetRegion 5724
- 165.12 TextView.GetHeight 7890

Created 14th January 2019, last changed 15th January 2019.

106.19 MapView.GetLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetLeft"; MapView)

Parameters**MapView**

The map view reference number.

\$\$MapView

Result Returns x coordinate or error.

Description**See also**

- 93.6 ImageView.GetLeft 5098
- 106.18 MapView.GetHeight 5662
- 106.40 MapView.GetTag 5685
- 106.42 MapView.GetTop 5687
- 106.45 MapView.GetWidth 5690
- 165.13 TextView.GetLeft 7891

Created 14th January 2019, last changed 15th January 2019.

106.20 MapView.GetMapType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetMapType"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns text or error.

Description

Value can be Standard, Satellite, Hybrid, SatelliteFlyover, HybridFlyover or MutedStandard.

See also

- 106.70 MapView.SetMapType

5718

Created 14th January 2019, last changed 15th January 2019.

106.21 MapView.GetOverlayFillColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.GetOverlayFillColor"; MapView; Overlay Identifier)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay to use.

"82001"

Result Returns color or error.

Description

See also

- 106.22 MapView.GetOverlayLineWidth 5666
- 106.24 MapView.GetOverlayStrokeColor 5669
- 106.71 MapView.SetOverlayFillColor 5719
- 106.74 MapView.SetOverlayStrokeColor 5722

106.21.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 19th September 2019, last changed 19th September 2019.

106.22 MapView.GetOverlayLineWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.GetOverlayLineWidth"; MapView; Overlay Identifier)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay to use.

"82001"

Result Returns line width or error.

Description

See also

- 106.21 MapView.GetOverlayFillColor 5665
- 106.23 MapView.GetOverlayPoints 5667
- 106.72 MapView.SetOverlayLineWidth 5720

106.22.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 19th September 2019, last changed 19th September 2019.

106.23 MapView.GetOverlayPoints

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.GetOverlayPoints"; MapView; Overlay Identifier)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay.

"82001"

Result Returns JSON or error.

Description

Only for polygon and poly line overlays.

Returns JSON with points (x/y) and coordinates (longitude/latitude).

Examples

Queries points for an overlay:

MBS("MapView.GetOverlayPoints"; \$\$MapView; 82002)

```
Example result: {
  "points" : [
    {
      "y" : 90572524.642136484,
      "latitude" : 50.399999999999984,
      "x" : 139661002.52444446,
      "longitude" : 7.3000000000000114
    },
    {
      "y" : 90455421.722824365,
      "latitude" : 50.499999999999993,
      "x" : 139661002.52444446,
      "longitude" : 7.3000000000000114
    },
    {
      "y" : 90455421.722824365,
      "latitude" : 50.499999999999993,
      "x" : 139735567.92888889,
      "longitude" : 7.4000000000000057
    },
    {
      "y" : 90572524.642136484,
```

5668

```
"latitude" : 50.399999999999984,  
"x" : 139735567.92888889,  
"longitude" : 7.4000000000000057  
}  
],  
"pointCount" : 4  
}
```

See also

- 106.22 `MapView.GetOverlayLineWidth` 5666
- 106.73 `MapView.SetOverlayPoints` 5721

Example Databases

- [Mac and iOS/MapKit/MapView Click Polygons](#)

106.23.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 20th September 2019, last changed 20th September 2019.

106.24 MapView.GetOverlayStrokeColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.GetOverlayStrokeColor"; MapView; Overlay Identifier)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay to use.

"82001"

Result Returns color or error.

Description

See also

- 106.21 MapView.GetOverlayFillColor 5665
- 106.71 MapView.SetOverlayFillColor 5719
- 106.74 MapView.SetOverlayStrokeColor 5722

106.24.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 19th September 2019, last changed 19th September 2019.

106.25 MapView.GetPitchEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetPitchEnabled"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns OK or error.

Description

A Boolean value indicating whether the map camera's pitch information is used.

See also

- 106.31 MapView.GetRotateEnabled 5676
- 106.32 MapView.GetScrollEnabled 5677
- 106.46 MapView.GetZoomEnabled 5691
- 106.75 MapView.SetPitchEnabled 5723
- 106.77 MapView.SetRotateEnabled 5725
- 106.91 MapView.SetZoomEnabled 5741

Created 14th January 2019, last changed 15th January 2019.

106.26 MapView.GetRegion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetRegion"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns OK or error.

Description

Examples

Query region:

MBS("MapView.GetRegion"; \$\$MapView)

Example result: {

```
"longitude" : 9.3726796999999955,
"longitudeDelta" : 2.0140728459134323,
"latitude" : 53.6798862999999907,
"latitudeDelta" : 0.63485953767546732
}
```

See also

- 106.18 MapView.GetHeight 5662
- 106.76 MapView.SetRegion 5724

Created 14th January 2019, last changed 15th January 2019.

106.27 MapView.GetRegionLatitude

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetRegionLatitude"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns value or error.

Description

See also

- 106.28 MapView.GetRegionLatitudeSpan 5673
- 106.29 MapView.GetRegionLongitude 5674
- 106.30 MapView.GetRegionLongitudeSpan 5675

Created 14th January 2019, last changed 15th January 2019.

106.28 MapView.GetRegionLatitudeSpan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetRegionLatitudeSpan"; MapView)

Parameters**MapView**

The map view reference number.

\$\$MapView

Result Returns value or error.

Description**See also**

- 106.27 MapView.GetRegionLatitude 5672
- 106.29 MapView.GetRegionLongitude 5674
- 106.30 MapView.GetRegionLongitudeSpan 5675

Created 14th January 2019, last changed 15th January 2019.

106.29 MapView.GetRegionLongitude

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetRegionLongitude"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns value or error.

Description

See also

- 106.27 MapView.GetRegionLatitude 5672
- 106.28 MapView.GetRegionLatitudeSpan 5673
- 106.30 MapView.GetRegionLongitudeSpan 5675

Created 14th January 2019, last changed 15th January 2019.

106.30 MapView.GetRegionLongitudeSpan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetRegionLongitudeSpan"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns value or error.

Description

See also

- 106.27 MapView.GetRegionLatitude 5672
- 106.28 MapView.GetRegionLatitudeSpan 5673
- 106.29 MapView.GetRegionLongitude 5674

Created 14th January 2019, last changed 15th January 2019.

106.31 MapView.GetRotateEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetRotateEnabled"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean value indicating whether the map camera's heading information is used.

See also

- 106.25 MapView.GetPitchEnabled 5670
- 106.32 MapView.GetScrollEnabled 5677
- 106.46 MapView.GetZoomEnabled 5691
- 106.75 MapView.SetPitchEnabled 5723
- 106.77 MapView.SetRotateEnabled 5725
- 106.79 MapView.SetScrollEnabled 5728
- 106.91 MapView.SetZoomEnabled 5741

Created 14th January 2019, last changed 15th January 2019.

106.32 MapView.GetScrollEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetScrollEnabled"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean value that determines whether the user may scroll around the map.

See also

- 106.25 MapView.GetPitchEnabled 5670
- 106.31 MapView.GetRotateEnabled 5676
- 106.46 MapView.GetZoomEnabled 5691
- 106.77 MapView.SetRotateEnabled 5725
- 106.79 MapView.SetScrollEnabled 5728
- 106.91 MapView.SetZoomEnabled 5741

Created 14th January 2019, last changed 15th January 2019.

106.33 MapView.GetShowsBuildings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetShowsBuildings"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean indicating whether the map displays extruded building information.

See also

- 106.80 MapView.SetShowsBuildings

5729

Created 14th January 2019, last changed 15th January 2019.

106.34 MapView.GetShowsCompass

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetShowsCompass"; MapView)

Parameters**MapView**

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean indicating whether the map displays a compass control.

See also

- 106.36 MapView.GetShowsScale 5681
- 106.81 MapView.SetShowsCompass 5730

Created 14th January 2019, last changed 15th January 2019.

106.35 MapView.GetShowsPointsOfInterest

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetShowsPointsOfInterest"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean indicating whether the map displays point-of-interest information.

See also

- 106.82 MapView.SetShowsPointsOfInterest

5731

Created 14th January 2019, last changed 15th January 2019.

106.36 MapView.GetShowsScale

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetShowsScale"; MapView)

Parameters**MapView**

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean indicating whether the map shows scale information.

See also

- 106.34 MapView.GetShowsCompass 5679
- 106.37 MapView.GetShowsTraffic 5682
- 106.83 MapView.SetShowsScale 5732

Created 14th January 2019, last changed 15th January 2019.

106.37 MapView.GetShowsTraffic

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetShowsTraffic"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean value indicating whether the map displays traffic information.

See also

- 106.36 MapView.GetShowsScale 5681
- 106.84 MapView.SetShowsTraffic 5733

Created 14th January 2019, last changed 15th January 2019.

106.38 MapView.GetShowsUserLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetShowsUserLocation"; MapView)

Parameters**MapView**

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean value indicating whether the map should try to display the user's location.

See also

- 106.85 MapView.SetShowsUserLocation

5734

Created 14th January 2019, last changed 15th January 2019.

106.39 MapView.GetShowsZoomControls

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	No

MBS("MapView.GetShowsZoomControls"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean indicating whether the map displays zoom controls.

See also

- 106.86 MapView.SetShowsZoomControls

5736

Created 14th January 2019, last changed 15th January 2019.

106.40 MapView.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetTag"; MapView)

Parameters**MapView**

The map view reference number.

\$\$MapView

Result Returns the stored tag value or an error.

Description**See also**

- 93.7 ImageView.GetTag 5099
- 106.19 MapView.GetLeft 5663
- 106.42 MapView.GetTop 5687
- 106.87 MapView.SetTag 5737
- 165.20 TextView.GetTag 7898

Created 14th January 2019, last changed 15th January 2019.

106.41 MapView.GetToolTip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	No

MBS("MapView.GetToolTip"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns text or error.

Description

The tooltip is visible on Mac when mouse stays over control. There are no tooltips for iOS.

See also

- 93.8 [ImageView.GetToolTip](#) 5100
- 93.18 [ImageView.SetToolTip](#) 5110
- 106.42 [MapView.GetTop](#) 5687
- 106.88 [MapView.SetToolTip](#) 5738

Created 14th January 2019, last changed 15th January 2019.

106.42 MapView.GetTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetTop"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns y coordinate or error.

Description

As Cocoa framework uses zero for the bottom coordinate, we have to swap for the normal topdown coordinates to be used.

See also

- 93.9 ImageView.GetTop 5101
- 106.19 MapView.GetLeft 5663
- 106.40 MapView.GetTag 5685
- 106.41 MapView.GetToolTip 5686
- 106.87 MapView.SetTag 5737
- 165.21 TextView.GetTop 7899

Created 14th January 2019, last changed 15th January 2019.

106.43 MapView.GetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetVisible"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if hidden.

See also

- 93.10 ImageView.GetVisible 5102
- 93.19 ImageView.SetVisible 5111
- 106.44 MapView.GetVisibleMapRect 5689
- 106.89 MapView.SetVisible 5739
- 165.22 TextView.GetVisible 7900
- 165.42 TextView.SetVisible 7921

Created 14th January 2019, last changed 15th January 2019.

106.44 MapView.GetVisibleMapRect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetVisibleMapRect"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns map rect as JSON or error.

Description

This property represents the same basic information as the region property but specified as a map rectangle instead of a region.

Examples

Queries map rect:

MBS("MapView.GetVisibleMapRect"; \$\$MapView)

```
Example result: {
"x" : 140455603.74390683,
"height" : 799234.62509903312,
"y" : 86194618.191567183,
"width" : 1501801.5633610785
}
```

See also

- 106.43 MapView.GetVisible 5688
- 106.90 MapView.SetVisibleMapRect 5740

Created 14th January 2019, last changed 15th January 2019.

106.45 MapView.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetWidth"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns width or error.

Description

See also

- 93.11 ImageView.GetWidth 5103
- 106.18 MapView.GetHeight 5662
- 106.19 MapView.GetLeft 5663
- 165.23 TextView.GetWidth 7901

Created 14th January 2019, last changed 15th January 2019.

106.46 MapView.GetZoomEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.GetZoomEnabled"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns 0, 1 or error.

Description

A Boolean value that determines whether the user may use pinch gestures to zoom in and out of the map.

See also

- 106.25 MapView.GetPitchEnabled 5670
- 106.31 MapView.GetRotateEnabled 5676
- 106.32 MapView.GetScrollEnabled 5677
- 106.75 MapView.SetPitchEnabled 5723
- 106.77 MapView.SetRotateEnabled 5725
- 106.79 MapView.SetScrollEnabled 5728
- 106.91 MapView.SetZoomEnabled 5741

Created 14th January 2019, last changed 15th January 2019.

106.47 MapView.GetZoomLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.GetZoomLevel"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns number or error.

Description

See also

- 106.92 MapView.SetZoomLevel

5742

106.47.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr8](#)
- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 20th September 2019, last changed 20th September 2019.

106.48 MapView.IsUserLocationVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.IsUserLocationVisible"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns OK or error.

Description

This property tells you whether the icon used to represent the user's current location is visible in the map view. When determining whether the current location is visible, this property factors in the horizontal accuracy of the location data. Specifically, if the rectangle represented by the user's current location plus or minus the horizontal accuracy of that location intersects the map's visible rectangle, this property contains the value 1. If that location rectangle does not intersect the map's visible rectangle, this property contains the value 0.

If the user's location cannot be determined, this property contains the value 0.

See also

- 106.85 MapView.SetShowsUserLocation

5734

Created 14th January 2019, last changed 15th January 2019.

106.49 MapView.MouseCoordinate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	No

MBS("MapView.MouseCoordinate"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns JSON or error.

Description

Returns JSON with latitude and longitude.

See also

- [106.67 MapView.SetCoordinate](#)

5715

106.49.1 Blog Entries

- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 18th September 2019, last changed 23th September 2019.

106.50 MapView.Overlays

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.Overlays"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns list of identifiers or error.

Description

106.50.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS FileMaker Plugin, version 9.4pr6](#)

Created 7th September 2019, last changed 7th September 2019.

106.51 MapView.ParseDistance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.2	Yes	No	Yes, macOS only	No	Yes

MBS("MapView.ParseDistance"; text)

Parameters

text

The text to parse.

"8 km"

Result Returns number or error.

Description

Uses current locale, so may use miles in US and km in Europe.

Returns distance in meters.

Examples

Parse 8 km:

MBS("MapView.ParseDistance"; "8 km")

Example result: 8000

See also

- 106.10 MapView.FormatDistance

5654

106.51.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 17th March 2019, last changed 17th March 2019.

106.52 MapView.PlanRoute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.2	Yes	No	Yes, macOS only	No	Yes

MBS("MapView.PlanRoute"; MapView; SourceAddress; DestinationAddress; Mode { ; TransportType; StartIdentifier; EndIdentifier; StartColor; EndColor })

Parameters

MapView

The map view reference number.

\$\$MapView

SourceAddress

The address where to start.

"Köln"

DestinationAddress

The address where to end.

"München"

Mode

Various options. Add 1 to show route on map. Add 2 to show alternative routes on the map. Add 4 to show start of route with a pin. Add 8 to show end of route with a pin. Add 16 to zoom map to show whole of the router. Add 32 to return result as JSON. Add 64 to include poly lines in JSON.

1+4+8+16

TransportType

Optional

The type of transportation to use. Value can be a combination of 1 for car, 2 for walk. Default is by car.

1

StartIdentifier

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The identifier for the pin to use with script trigger. If empty, the plugin assigns a number automatically.

EndIdentifier

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The identifier for the pin to use with script trigger. If empty, the plugin assigns a number automatically.

StartColor

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The color to use. Can be a color name or hex notation like in HTML.

"# FF0000"

EndColor

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The color to use. Can be a color name or hex notation like in HTML.
”# FF0000”

Result Returns result or error.

Description

The plugin will lookup coordinates for the given addresses and request a route calculation. Then we may add show routes and optionally return JSON with results.

Examples

Plan a route and store JSON:

```
Set Variable [ $r ; Value: MBS(”MapView.PlanRoute”; $$MapView; ”Köln”; ”München”; 1+2+4+8+16+32; 1+2+4) ]
```

```
Set Field [ MapView::Route ; $r ]
```

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView](#)
- [Mac and iOS/MapView](#)

106.52.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr2](#)
- [More on MapViews in FileMaker](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [Adding route planing for MapView in FileMaker](#)

Created 17th March 2019, last changed 14th October 2019.

106.53 MapView.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.Release"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns OK or error.

Description

See also

- [93.12 ImageView.Release](#) 5104
- [106.8 MapView.CreateWithControl](#) 5650
- [106.9 MapView.CreateWithSize](#) 5652
- [106.54 MapView.ReleaseAll](#) 5700
- [165.27 TextView.Release](#) 7905
- [180.103 WebView.Release](#) 8415

Example Databases

- [iOS/MapKit iOS](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)
- [Mac and iOS/MapKit/MapView](#)
- [Mac and iOS/MapView](#)

Created 14th January 2019, last changed 15th January 2019.

106.54 MapView.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.ReleaseAll")

Result Returns number of views released.

Description

See also

- [93.13 ImageView.ReleaseAll](#) 5105
- [106.53 MapView.Release](#) 5699
- [165.28 TextView.ReleaseAll](#) 7906

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)
- [Mac and iOS/MapKit/MapView](#)
- [Mac and iOS/MapView](#)

Created 14th January 2019, last changed 15th January 2019.

106.55 MapView.RemoveAnnotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.RemoveAnnotation"; MapView; Annotation Identifier)

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation to remove.

"82001"

Result Returns OK or error.

Description

See also MapView.RemoveOverlay for overlays.

Examples

Remove an annotation:

MBS("MapView.RemoveAnnotation"; \$MapView; \$AnnotationIdentifier)

See also

- [106.56 MapView.RemoveAnnotations](#) 5702
- [106.57 MapView.RemoveOverlay](#) 5703
- [106.60 MapView.SelectedAnnotations](#) 5707

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.55.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr6](#)

Created 7th September 2019, last changed 7th September 2019.

106.56 MapView.RemoveAnnotations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.1	Yes	No	No	No	Yes

MBS("MapView.RemoveAnnotations"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns OK or error.

Description

See also

- [106.55 MapView.RemoveAnnotation](#) 5701
- [106.60 MapView.SelectedAnnotations](#) 5707
- [106.94 MapView.ShowAllAnnotations](#) 5745

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)
- [Mac and iOS/MapKit/MapView](#)
- [Mac and iOS/MapView](#)

106.56.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)

Created 23th January 2019, last changed 18th June 2019.

106.57 MapView.RemoveOverlay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.RemoveOverlay"; MapView; Overlay Identifier)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay to remove.

"82001"

Result Returns OK or error.

Description

See also

- 106.55 MapView.RemoveAnnotation 5701
- 106.58 MapView.RemoveOverlays 5704

106.57.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr6](#)

Created 7th September 2019, last changed 7th September 2019.

106.58 MapView.RemoveOverlays

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.1	Yes	No	Yes, macOS only	No	Yes

MBS("MapView.RemoveOverlays"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns OK or error.

Description

See also

- [106.57 MapView.RemoveOverlay](#) 5703

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)
- [Mac and iOS/MapView](#)

106.58.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)

Created 23th January 2019, last changed 18th June 2019.

106.59 MapView.Screenshot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.3	Yes	No	No	No	Yes

MBS("MapView.Screenshot"; MapView { ; ImageType; Filename })

Parameters

MapView

The map view reference number.

\$\$MapView

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns container or error.

Description

This includes annotations and overlays as they are visible.

Examples

Save screenshot to deektop:

```
If [ Length ( $$MapView ) > 0 ]
```

```
Set Variable [ $screenshot ; Value: MBS("MapView.Screenshot"; $$MapView; "PNG") ]
```

```
Set Variable [ $file ; Value: MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ); "mapview.png" ) ]
```

```
Set Variable [ $r ; Value: MBS( "Container.WriteFile"; $screenshot; $file ) ]
```

```
End If
```

See also

- 55.35 Container.WriteFile 1658
- 81.8 Folders.UserDesktop 4177
- 121.1 Path.AddPathComponent 6135
- 180.111 WebView.Screenshot 8435

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView](#)

106.59.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr1](#)

Created 1st June 2019, last changed 1st June 2019.

106.60 MapView.SelectedAnnotations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SelectedAnnotations"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns list of identifiers or error.

Description

Examples

Queries annotations:

MBS("MapView.SelectedAnnotations"; 78001)

See also

- 106.55 MapView.RemoveAnnotation 5701
- 106.56 MapView.RemoveAnnotations 5702
- 106.94 MapView.ShowAllAnnotations 5745

106.60.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 23th September 2019, last changed 23th September 2019.

106.61 MapView.SetAnnotationCoordinate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.SetAnnotationCoordinate"; MapView; Annotation Identifier; JSON)

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation to remove.

"82001"

JSON

The JSON to describe the coordinate. Can include keys longitude and latitude with values or a key address with address string.

" { \"address\": \"Restaurant Waldfrieden, Nickenich\" } "

Result Returns OK or error.

Description

Examples

Changes position of Pin:

```
Set Variable [ $json ; Value: " { \"address\": \"Restaurant Waldfrieden, Nickenich\" } " ]
```

```
Set Variable [ $r ; Value: MBS( "MapView.SetAnnotationCoordinate"; $$MapView; "82001"; $JSON) ]
```

See also

- 106.11 MapView.GetAnnotationCoordinate 5655
- 106.62 MapView.SetAnnotationDragImage 5709

106.61.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 12nd September 2019, last changed 12nd September 2019.

106.62 MapView.SetAnnotationDragImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SetAnnotationDragImage"; MapView; Annotation Identifier; Image)

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation.

"82001"

Image

The image to use. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Only for point annotations.

See also

- 106.12 MapView.GetAnnotationDragImage 5656
- 106.13 MapView.GetAnnotationImage 5657
- 106.61 MapView.SetAnnotationCoordinate 5708
- 106.63 MapView.SetAnnotationImage 5710
- 106.64 MapView.SetAnnotationSelectedImage 5711

106.62.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 23th September 2019, last changed 23th September 2019.

106.63 MapView.SetAnnotationImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SetAnnotationImage"; MapView; Annotation Identifier; Image)

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation.

"82001"

Image

The image to use. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Only for point annotations.

Examples

Update image:

```
Set Variable [ $r ; Value: MBS( "MapView.SetAnnotationImage"; $$MapView; 82001; MapView::Image2; 40; 40 ) ]
```

See also

- 106.12 MapView.GetAnnotationDragImage 5656
- 106.13 MapView.GetAnnotationImage 5657
- 106.62 MapView.SetAnnotationDragImage 5709

106.63.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 20th September 2019, last changed 20th September 2019.

106.64 MapView.SetAnnotationSelectedImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SetAnnotationSelectedImage"; MapView; Annotation Identifier; Image)

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation.

"82001"

Image

The image to use. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Only for point annotations.

See also

- 106.14 MapView.GetAnnotationSelectedImage 5658
- 106.62 MapView.SetAnnotationDragImage 5709

106.64.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 23th September 2019, last changed 23th September 2019.

106.65 MapView.SetAutoResizingMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetAutoResizingMask"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting.

4+8

Result Returns OK or error.

Description

This defines whether web viewer changes its size based on the surrounding window.

Name	Value	Description
NotSizable	0	The view cannot be resized.
MinXMargin	1	The left margin between the view and its superview is flexible.
WidthSizable	2	The view's width is flexible.
MaxXMargin	4	The right margin between the view and its superview is flexible.
MinYMargin	8	The bottom margin between the view and its superview is flexible.
HeightSizable	16	The view's height is flexible.
MaxYMargin	32	The top margin between the view and its superview is flexible.

e.g. the value 18 means the view can resize both horizontally and vertically with the parent view (window).

Examples

Make mapview resizable:

MBS("MapView.SetAutoResizingMask"; \$\$MapView; 2+16)

See also

- 69.9 DragDrop.GetAutoResizingMask 2493
- 69.38 DragDrop.SetAutoResizingMask 2530
- 106.15 MapView.GetAutoResizingMask 5659
- 165.10 TextView.GetAutoResizingMask 7888

<i>106.65. MAPVIEW.SETAUTORESIZINGMASK</i>	5713
• 165.30 <code>TextView.SetAutoResizingMask</code>	7908
• 180.52 <code>WebView.GetAutoResizingMask</code>	8347
• 180.122 <code>WebView.SetAutoResizingMask</code>	8449

Example Databases

- [iOS/MapKit iOS](#)

106.65.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr9](#)

Created 16th January 2019, last changed 16th January 2019.

106.66 MapView.SetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.4	Yes	No	No	No	Yes

MBS("MapView.SetColor"; MapView; Annotation Identifier; color)

Parameters

MapView

The map view reference number.

\$\$MapView

Annotation Identifier

The identifier for the annotation.

"82001"

color

The color to use. Can be a color name or hex notation like in HTML.

"# FF0000"

Result Returns OK or error.

Description

Examples

Changes color to blue:

MBS("MapView.SetColor"; "78001"; "82001"; "# 0000FF")

Created 7th September 2019, last changed 9th September 2019.

106.67 MapView.SetCoordinate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetCoordinate"; MapView; Latitude; Longitude { ; ZoomLevel; Animated })

Parameters

MapView

The map view reference number.

\$\$MapView

Latitude

The latitude of the coordinate.

Longitude

The longitude of the coordinate.

ZoomLevel

Optional

Optional zoom level in range from 0 to 20.

Animated

Optional

Whether to animate the change. Default is 1 to animate.

1

Result Returns OK or error.

Description

See also

- 106.49 MapView.MouseCoordinate

5694

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)

Created 14th January 2019, last changed 28th November 2019.

106.68 MapView.SetFrame

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetFrame"; MapView; X; Y; Width; Height { ; swap })

Parameters

MapView

The map view reference number.

\$\$MapView

X

The x coordinate.

Y

The y coordinate.

Width

The width of the control.

Height

The height of the control.

swap

Optional

Whether to swap y coordinate. By default we swap them. Pass 0 to disable or 1 to swap.

1

Result Returns OK or error.

Description

As Cocoa framework uses zero for the bottom coordinate, we have to swap for the normal topdown coordinates to be used.

See also

- 93.14 `ImageView.SetFrame` 5106
- 106.87 `MapView.SetTag` 5737
- 165.32 `TextView.SetFrame` 7911

Created 14th January 2019, last changed 15th January 2019.

106.69 MapView.SetFrameWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetFrameWithControl"; MapView; ControlName { ; DX; DY })

Parameters

MapView

The map view reference number.

\$\$MapView

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move drop area more to left or right.

0

DY

Optional

A delta to move drop area more to top or bottom.

0

Result Returns OK or error.

Description

If you moved control in layout mode, this can move the drop area back to the new position.

Also useful to switch between different locations on the layout.

See also

- 69.44 DragDrop.SetFrameWithControl 2541
- 93.15 ImageView.SetFrameWithControl 5107
- 106.8 MapView.CreateWithControl 5650
- 165.33 TextView.SetFrameWithControl 7912

106.69.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr9](#)

Created 16th January 2019, last changed 16th January 2019.

106.70 MapView.SetMapType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetMapType"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new map type. Can be Standard, Satellite, Hybrid, SatelliteFlyover, HybridFlyover or MutedStandard. "Hybrid"

Result Returns OK or error.

Description

Examples

Switch to hybrid flyover:

MBS("MapView.SetMapType"; \$\$MapView; "HybridFlyover")

See also

- 106.20 MapView.GetMapType

5664

Example Databases

- [iOS/MapKit iOS](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 14th January 2019, last changed 16th January 2019.

106.71 MapView.SetOverlayFillColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SetOverlayFillColor"; MapView; Overlay Identifier; color)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay to use.

"82001"

color

A color value. This can be a common color name or color in hex notation: # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"# FF0000"

Result Returns OK or error.

Description

Examples

Change color to red:

MBS("MapView.SetOverlayFillColor"; \$\$MapView; "82001"; "# FF0000")

See also

- 106.21 MapView.GetOverlayFillColor 5665
- 106.24 MapView.GetOverlayStrokeColor 5669
- 106.72 MapView.SetOverlayLineWidth 5720
- 106.74 MapView.SetOverlayStrokeColor 5722

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.71.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 19th September 2019, last changed 19th September 2019.

106.72 MapView.SetOverlayLineWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SetOverlayLineWidth"; MapView; Overlay Identifier; LineWidth)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay to use.

"82001"

LineWidth

The new line width to use. Zero is default for width of street.

5

Result Returns OK or error.

Description

Examples

Make a thick line:

```
MBS( "MapView.SetOverlayLineWidth"; $$MapView; "82001"; 10 )
```

See also

- 106.22 MapView.GetOverlayLineWidth 5666
- 106.71 MapView.SetOverlayFillColor 5719
- 106.73 MapView.SetOverlayPoints 5721

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.72.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 19th September 2019, last changed 19th September 2019.

106.73 MapView.SetOverlayPoints

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SetOverlayPoints"; MapView; Overlay Identifier; JSON)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay.

"82001"

JSON

The JSON array with points. Can be given with objects for the coordinates. Each entry can contain either longitude & latitude pair, x and y pair or address value.

```
" [ { \"latitude\" : 50.4, \"longitude\" : 7.3 } , { \"latitude\" : 50.5, \"longitude\" : 7.3 } , { \"latitude\" : 50.49, \"longitude\" : 7.4 } , { \"latitude\" : 50.4, \"longitude\" : 7.4 } ] "
```

Result Returns OK or error.

Description

Only for polygon and poly line overlays.

Examples

Change coordiantes for a polygon:

```
MBS( "MapView.SetOverlayPoints"; $$MapView; 82002; $NewCoordinates )
```

See also

- 106.23 MapView.GetOverlayPoints 5667
- 106.72 MapView.SetOverlayLineWidth 5720

Example Databases

- [Mac and iOS/MapKit/MapView Click Polygons](#)

106.73.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 20th September 2019, last changed 20th September 2019.

106.74 MapView.SetOverlayStrokeColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SetOverlayStrokeColor"; MapView; Overlay Identifier; color)

Parameters

MapView

The map view reference number.

\$\$MapView

Overlay Identifier

The identifier for the overlay to use.

"82001"

color

A color value. This can be a common color name or color in hex notation: # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"# FF0000"

Result Returns OK or error.

Description

Examples

Change color to transparent blue:

```
MBS( "MapView.SetOverlayStrokeColor"; $$MapView; "82001"; "# 0000FF77" )
```

See also

- 106.21 MapView.GetOverlayFillColor 5665
- 106.24 MapView.GetOverlayStrokeColor 5669
- 106.71 MapView.SetOverlayFillColor 5719

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.74.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 19th September 2019, last changed 19th September 2019.

106.75 MapView.SetPitchEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetPitchEnabled"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean value indicating whether the map camera's pitch information is used.

See also

- 106.25 MapView.GetPitchEnabled 5670
- 106.31 MapView.GetRotateEnabled 5676
- 106.46 MapView.GetZoomEnabled 5691
- 106.77 MapView.SetRotateEnabled 5725
- 106.79 MapView.SetScrollEnabled 5728
- 106.91 MapView.SetZoomEnabled 5741

Example Databases

- [iOS/MapKit iOS](#)

Created 14th January 2019, last changed 15th January 2019.

106.76 MapView.SetRegion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetRegion"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

An JSON with region details. Can be degree or meter based for span. latitude and longitude to define center coordinate. Add latitudeMeters/longitudeMeters or latitudeDelta/longitudeDelta to define span. If there is an address key, we query coordiantes of the given address string instead of using coordinates.

Result Returns OK or error.

Description

Examples

Sets region:

```
MBS( "MapView.SetRegion"; $$MapView; " { \"longitude\" : 9.3726796999999955, \"longitudeDelta\" : 2.0140728459134323, \"latitude\" : 53.6798862999999907, \"latitudeDelta\" : 0.63485953767546732 } ")
```

See also

- 106.18 MapView.GetHeight 5662
- 106.26 MapView.GetRegion 5671
- 106.78 MapView.SetScript 5726

Created 14th January 2019, last changed 15th January 2019.

106.77 MapView.SetRotateEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetRotateEnabled"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean value indicating whether the map camera's heading information is used.

When this property is set to 1 and a valid camera is associated with the map, the camera's heading angle is used to rotate the plane of the map around its center point. When this property is set to false, the camera's heading angle is ignored and the map is always oriented so that true north is situated at the top of the map view.

See also

- 106.25 MapView.GetPitchEnabled 5670
- 106.31 MapView.GetRotateEnabled 5676
- 106.32 MapView.GetScrollEnabled 5677
- 106.46 MapView.GetZoomEnabled 5691
- 106.75 MapView.SetPitchEnabled 5723
- 106.79 MapView.SetScrollEnabled 5728
- 106.91 MapView.SetZoomEnabled 5741

Example Databases

- [iOS/MapKit iOS](#)

Created 14th January 2019, last changed 15th January 2019.

106.78 MapView.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.3	Yes	No	No	No	Yes

MBS("MapView.SetScript"; MapView { ; Filename; ScriptName })

Parameters

MapView

The map view reference number.

\$\$MapView

Filename

Optional

The database file name where the script is located.

"test.fmp12"

ScriptName

Optional

The script name.

"MyScript"

Result Returns OK or error.

Description

Script is called for pins with identifiers when clicked.

With version 9.5, we start passing JSON with various values included. Version 9.3 and 9.4 only pass annotation identifier.

The JSON includes mapViewID, annotationIdentifier, latitude, longitude, mouseInViewX, mouseInViewY, mouseInWindowX, mouseInWindowY, mouseLocationX, mouseLocationY, reason and overlayIdentifiers.

overlayIdentifiers are found by bounding rectangles, so we don't check polygons or circles exactly!

The JSON contains an entry reason for why the script was called including Touch, Click, AnnotationMoved, and AnnotationSelected.

Examples

Set script:

```
Set Variable [ $$MapView ; Value: MBS("MapView.CreateWithControl"; 0; "Placeholder") ]
Set Variable [ $r ; Value: MBS("MapView.SetScript"; $$MapView; Get(Filename); "PinClicked") ]
```

See also

- 106.8 MapView.CreateWithControl

106.78. *MAPVIEW.SETSCRIPT*

5727

- 106.76 `MapView.SetRegion`

5724

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView Click Polygons](#)

106.78.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr2](#)
- [More on MapViews in FileMaker](#)

Created 6th June 2019, last changed 23th September 2019.

106.79 MapView.SetScrollEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetScrollEnabled"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean value that determines whether the user may scroll around the map.

See also

- 106.31 MapView.GetRotateEnabled 5676
- 106.32 MapView.GetScrollEnabled 5677
- 106.46 MapView.GetZoomEnabled 5691
- 106.75 MapView.SetPitchEnabled 5723
- 106.77 MapView.SetRotateEnabled 5725
- 106.91 MapView.SetZoomEnabled 5741

Example Databases

- [iOS/MapKit iOS](#)

Created 14th January 2019, last changed 15th January 2019.

106.80 MapView.SetShowsBuildings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetShowsBuildings"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean indicating whether the map displays extruded building information.

When this property is set to 1 and the camera has a pitch angle greater than zero, the map extrudes buildings so that they extend above the map plane, creating a 3D effect. The mapType property must be set to Standard for extruded buildings to be displayed. The default value of this property is 1.

See also

- 106.33 MapView.GetShowsBuildings

5678

Example Databases

- [iOS/MapKit iOS](#)

Created 14th January 2019, last changed 15th January 2019.

106.81 MapView.SetShowsCompass

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetShowsCompass"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean indicating whether the map displays a compass control.

Use this property to show or hide a control that lets users change the heading orientation of the map.

See also

- 106.34 MapView.GetShowsCompass 5679
- 106.83 MapView.SetShowsScale 5732

Example Databases

- [iOS/MapKit iOS](#)

Created 14th January 2019, last changed 15th January 2019.

106.82 MapView.SetShowsPointsOfInterest

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetShowsPointsOfInterest"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean indicating whether the map displays point-of-interest information.

When this property is set to 1, the map displays icons and labels for restaurants, schools, and other relevant points of interest. The mapType property must be set to Standard or Hybrid for points of interest to be displayed. The default value of this property is 1.

See also

- 106.35 MapView.GetShowsPointsOfInterest

5680

Example Databases

- [iOS/MapKit iOS](#)

Created 14th January 2019, last changed 15th January 2019.

106.83 MapView.SetShowsScale

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetShowsScale"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean indicating whether the map shows scale information.

See also

- 106.36 MapView.GetShowsScale 5681
- 106.81 MapView.SetShowsCompass 5730
- 106.84 MapView.SetShowsTraffic 5733

Created 14th January 2019, last changed 15th January 2019.

106.84 MapView.SetShowsTraffic

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetShowsTraffic"; MapView; Value)

Parameters**MapView**

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean value indicating whether the map displays traffic information.

See also

- 106.37 MapView.GetShowsTraffic 5682
- 106.83 MapView.SetShowsScale 5732

Created 14th January 2019, last changed 15th January 2019.

106.85 MapView.SetShowsUserLocation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetShowsUserLocation"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean value indicating whether the map should try to display the user's location.

This property does not indicate whether the user's position is actually visible on the map, only whether the map view should try to display it. Setting this property to 1 causes the map view to use the Core Location framework to find the current location and try to display it on the map. As long as this property is 1, the map view continues to track the user's location and update it periodically. The default value of this property is 0.

Showing the user's location does not guarantee that the location is visible on the map. The user might have scrolled the map to a different point, causing the current location to be offscreen. To determine whether the user's current location is currently displayed on the map, use the `MapView.IsUserLocationVisible` function.

Examples

Create map view and show user location:

```
Set Variable [ $$MapView ; Value: MBS("MapView.CreateWithControl"; 0; "Placeholder") ]
Set Variable [ $r ; Value: MBS( "MapView.SetShowsUserLocation"; $$MapView; 1 ) ]
# may trigger dialog to ask for location permissions
```

See also

- 106.8 MapView.CreateWithControl 5650
- 106.38 MapView.GetShowsUserLocation 5683
- 106.48 MapView.IsUserLocationVisible 5693

Example Databases

- [iOS/MapKit iOS](#)

106.85. *MAPVIEW.SETSHOWSUSERLOCATION*

5735

Created 14th January 2019, last changed 2nd January 2020.

106.86 MapView.SetShowsZoomControls

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	No

MBS("MapView.SetShowsZoomControls"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean indicating whether the map displays zoom controls.

See also

- 106.39 MapView.GetShowsZoomControls

5684

Example Databases

- [iOS/MapKit iOS](#)

Created 14th January 2019, last changed 15th January 2019.

106.87 MapView.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetTag"; MapView; tag)

Parameters

MapView

The map view reference number.

\$\$MapView

tag

A string you want to associate with the map view.

Result Returns OK or error.

Description

Use the tag to store whatever value you want to associate with the image view. You can later query it using MapView.GetTag.

See also

- 93.17 ImageView.SetTag 5109
- 106.40 MapView.GetTag 5685
- 106.42 MapView.GetTop 5687
- 106.68 MapView.SetFrame 5716
- 165.41 TextView.SetTag 7920

Created 14th January 2019, last changed 15th January 2019.

106.88 MapView.SetToolTip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	No

MBS("MapView.SetToolTip"; MapView; Tooltip)

Parameters

MapView

The map view reference number.

\$\$MapView

Tooltip

The new help text.

"Hello"

Result Returns OK or error.

Description

The tooltip is visible on Mac when mouse stays over control. There are no tooltips for iOS.

See also

- 93.8 ImageView.GetToolTip 5100
- 93.18 ImageView.SetToolTip 5110
- 106.41 MapView.GetToolTip 5686

Created 14th January 2019, last changed 15th January 2019.

106.89 MapView.SetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetVisible"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new visible state. Can be 1 for visible and 0 for hidden.

1

Result Returns OK or error.

Description

By default we create it visible, but you can hide it if it's on a register and the user clicked to other tab.

See also

- [93.10 ImageView.GetVisible](#) 5102
- [93.19 ImageView.SetVisible](#) 5111
- [106.43 MapView.GetVisible](#) 5688
- [106.90 MapView.SetVisibleMapRect](#) 5740
- [165.22 TextView.GetVisible](#) 7900
- [165.42 TextView.SetVisible](#) 7921

Example Databases

- [Mac and iOS/MapKit/MapView Click Polygons](#)
- [Mac and iOS/MapKit/MapView](#)
- [Mac and iOS/MapView](#)

Created 14th January 2019, last changed 18th June 2019.

106.90 MapView.SetVisibleMapRect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetVisibleMapRect"; MapView; Rect)

Parameters

MapView

The map view reference number.

\$\$MapView

Rect

The map rectangle. A JSON with x, y, width and height.

Result Returns OK or error.

Description

Changes the currently visible portion of the map and optionally animates the change.

Examples

Sets visible rect:

```
MBS( "MapView.SetVisibleMapRect"; $$MapView; " { \"x\": 140455603.74390683, \"height\": 799234.62509903312, \"y\": 86194618.191567183, \"width\": 1501801.5633610785 } "
```

See also

- 106.44 MapView.GetVisibleMapRect 5689
- 106.89 MapView.SetVisible 5739

Created 14th January 2019, last changed 15th January 2019.

106.91 MapView.SetZoomEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.SetZoomEnabled"; MapView; Value)

Parameters

MapView

The map view reference number.

\$\$MapView

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

A Boolean value that determines whether the user may use pinch gestures to zoom in and out of the map.

See also

- 106.25 MapView.GetPitchEnabled 5670
- 106.31 MapView.GetRotateEnabled 5676
- 106.32 MapView.GetScrollEnabled 5677
- 106.46 MapView.GetZoomEnabled 5691
- 106.75 MapView.SetPitchEnabled 5723
- 106.77 MapView.SetRotateEnabled 5725
- 106.79 MapView.SetScrollEnabled 5728

Example Databases

- [iOS/MapKit iOS](#)

Created 14th January 2019, last changed 15th January 2019.

106.92 MapView.SetZoomLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.5	Yes	No	No	No	Yes

MBS("MapView.SetZoomLevel"; MapView; ZoomLevel { ; Animated })

Parameters

MapView

The map view reference number.

\$\$MapView

ZoomLevel

The new zoom level. Range 1 to 20.

5

Animated

Optional

Whether to animate. Pass 1 to animate or 0 to not animate. Default is animated.

1

Result Returns OK or error.

Description

Examples

Zoom one level in:

```
MBS( "MapView.SetZoomLevel"; $$MapView; MBS( "MapView.GetZoomLevel"; $$MapView ) + 1; 1)
```

Zoom out:

```
MBS( "MapView.SetZoomLevel"; $$MapView; 1; 1)
```

See also

- 106.47 MapView.GetZoomLevel

5692

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.92.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 20th September 2019, last changed 20th September 2019.

106.93 MapView.ShowAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	No	No	Yes

MBS("MapView.ShowAddress"; MapView; Address { ; addPin; Identifier; color })

Parameters

MapView

The map view reference number.

\$\$MapView

Address

The address to lookup.

"New York"

addPin

Optional

Whether to add a pin. Pass 0 to just show the area or 1 to add pin and show the area.

1

Identifier

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The identifier for the pin to use with script trigger.

color

Optional

Available in MBS FileMaker Plugin 9.3 or newer.

The color to use. Can be a color name or hex notation like in HTML.

"# FF0000"

Result Returns OK, identifier or error.

Description

Asynchronously queries coordinate for given address and shows it.

Examples

Show pin in New York in green:

```
MBS("MapView.ShowAddress"; $$MapView; "New York"; 1; ""; "# 00FF00")
```

Example Databases

- [iOS/MapKit iOS](#)
- [Mac and iOS/MapKit/MapView BeeExample](#)
- [Mac and iOS/MapKit/MapView](#)
- [Mac and iOS/MapView](#)

106.93.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr4](#)
- [MBS FileMaker Plugin, version 9.4pr6](#)
- [MBS FileMaker Plugin, version 9.3pr4](#)
- [MBS FileMaker Plugin, version 9.3pr2](#)
- [More on MapViews in FileMaker](#)
- [MBS FileMaker Plugin, version 9.1pr2](#)
- [Apple Maps in FileMaker on iOS](#)

Created 14th January 2019, last changed 9th September 2019.

106.94 MapView.ShowAllAnnotations

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.1	Yes	No	No	No	Yes

MBS("MapView.ShowAllAnnotations"; MapView)

Parameters

MapView

The map view reference number.

\$\$MapView

Result Returns OK or error.

Description

See also

- 106.56 MapView.RemoveAnnotations 5702
- 106.60 MapView.SelectedAnnotations 5707

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

106.94.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr2](#)

Created 11st February 2019, last changed 11st February 2019.

106.95 MapView.Snapshot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
106 MapView	9.0	Yes	No	Yes, macOS only	No	Yes

MBS("MapView.Snapshot"; Options { ; ImageType; Filename })

Parameters

Options

The options as JSON block. All values are optional and have default.

```
" { \"width\": 800, \"height\": 600 } "
```

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

Not sure if this works on server!

Keys in the JSON include:

width	The pixel width requested. Default is 256.
height	The pixel height requested. Default is 256.
scale	The scale of the display, defaults to screen scale. Only for iOS.
showsPointsOfInterest	Whether to show points of interests. Pass 1 to enable or 0 to disable.
showsBuildings	Show buildings. Pass 1 to enable or 0 to disable.
mapType	Pass Standard, Satellite, Hybrid, SatelliteFlyover, HybridFlyover or Muted-Standard.
mapRect	An object with x, y, width and height for the map rectangle to show in world coordinates.
region	An object with region details. Can be degree or meter based for span. latitude and longitude to define center coordinate. Add latitudeMeters/longitudeMeters or latitudeDelta/longitudeDelta to define span.
camera	The JSON object for camera specification.
appearance	Which appearance to use for MacOS 10.14. Can be Dark, Light or current. Default is current of Mac.

Camera specification includes center coordinate (latitude and longitude) and can be either looking from eye

point (eyeLatitude, eyeLongitude and altitude) or looking from distance (distance, pitch and heading).

Rendering may take a few seconds, but gets faster over time due to caching.

Examples

Make a snapshot with all options default:

```
Set Field [ Snapshots::Image ; MBS( "MapView.Snapshot"; " { } " ) ]
```

Snapshot with camera:

```
Set Variable [ $json ; Value: MBS( "JSON.CreateObjectRef" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $json; "width"; 800 ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $json; "height"; 600 ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddStringToObject"; $json; "mapType"; "HybridFlyover" ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $json; "showsBuildings"; 1 ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $json; "showsPointsOfInterest"; 1 ) ]
#
Set Variable [ $camera ; Value: MBS( "JSON.CreateObjectRef" ) ]
# The coordinate point on which the map should be centered.
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $camera; "latitude"; 40.7457172 ) ]
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $camera; "longitude"; -73.9941266 ) ]
#
# The line-of-sight distance from the camera to the center coordinate of the map.
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $camera; "distance"; 3000 ) ]
#
# The viewing angle of the camera, measured in degrees.
# A value of 0 results in a camera pointed straight down at the map. Angles greater than 0 result in a
camera that is pitched toward the horizon by the specified number of degrees. If the map type is satellite or
hybrid, the pitch value is clamped to 0.
# The value in this property may be clamped to a maximum value to maintain map readability. There is
no fixed maximum value, though, because the actual maximum value is dependent on the current altitude
of the camera.
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $camera; "pitch"; 70 ) ]
#
# The heading of the camera (measured in degrees) relative to true north.
# The value 0 means that the top edge of the map view corresponds to true north. The value 90 means the
top of the map is pointing due east. The value 180 means the top of the map points due south, and so on.
Set Variable [ $r ; Value: MBS( "JSON.AddNumberToObject"; $camera; "heading"; 28 ) ]
#
Set Variable [ $r ; Value: MBS( "JSON.AddItemToObject"; $json; "camera"; $camera ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $camera ) ]
#
Set Variable [ $options ; Value: MBS( "JSON.Format"; $json ) ]
Set Variable [ $r ; Value: MBS( "JSON.Release"; $json ) ]
Set Variable [ $image ; Value: MBS( "MapView.Snapshot"; $options; "PNG"; "map.png" ) ]
If [ MBS("isError") ]
Show Custom Dialog [ "Failed to render map" ; $image ]
```

```
Else  
Set Field [ Snapshots::Image ; $image ]  
End If
```

See also

- [124.6 IsError](#) 6266
- [100.7 JSON.AddItemToObject](#) 5244
- [100.10 JSON.AddNumberToObject](#) 5251
- [100.12 JSON.AddStringToObject](#) 5255
- [100.26 JSON.CreateObject](#) 5276
- [100.27 JSON.CreateObjectRef](#) 5278
- [100.39 JSON.Format](#) 5295
- [100.66 JSON.Release](#) 5336

Example Databases

- [Mac and iOS/MapKit/MapKit Snapshots](#)

106.95.1 Blog Entries

- [Apple Maps in FileMaker on iOS](#)
- [MBS FileMaker Plugin, version 9.0pr8](#)

Created 12nd January 2019, last changed 16th January 2019.

Chapter 107

MarkDown

Convert MarkDown code to HTML code.

107.1 MarkDown.CSS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
107 MarkDown	5.1	Yes	Yes	Yes	Yes	Yes

MBS("MarkDown.CSS"; MarkDownRef)

Parameters

MarkDownRef

The reference to the MarkDown object as returned by MarkDown.Create function.
\$ref

Result Returns text or error.

Description

See also

- 107.2 MarkDown.Create

5750

Example Databases

- [MarkDown](#)

Created 13th April 2015, last changed 14th April 2015.

107.2 Markdown.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
107 Markdown	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Markdown.Create"; MarkdownCode)

Parameters

MarkdownCode

The mark down code to process.

Result Returns reference number or error.

Description

Examples

Create and query html:

```
Set Variable [ $r ; Value: MBS("Markdown.Create"; "Text attributes italic, bold, 'monospace',
~~strikethrough~~.") ]
```

```
Set Variable [ $html ; Value: MBS("Markdown.HTML"; $r) ]
```

```
Set Variable [ $r ; Value: MBS("Markdown.Release"; $r) ]
```

See also

- 107.1 Markdown.CSS 5749
- 107.3 Markdown.HTML 5751
- 107.4 Markdown.Release 5752

Example Databases

- [Markdown](#)

Created 13th April 2015, last changed 4th June 2015.

107.3 Markdown.HTML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
107 Markdown	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Markdown.HTML"; MarkdownRef)

Parameters

MarkdownRef

The reference to the Markdown object as returned by Markdown.Create function.

\$ref

Result Returns text or error.

Description

Examples

Create and query html:

```
Set Variable [ $r ; Value: MBS("Markdown.Create"; "Text attributes italic, bold, 'monospace',
~~strikethrough~~.") ]
```

```
Set Variable [ $html ; Value: MBS("Markdown.HTML"; $r) ]
```

```
Set Variable [ $r ; Value: MBS("Markdown.Release"; $r) ]
```

See also

- 107.2 Markdown.Create 5750
- 107.4 Markdown.Release 5752

Example Databases

- [Markdown](#)

Created 13th April 2015, last changed 4th June 2015.

107.4 Markdown.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
107 Markdown	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Markdown.Release"; MarkdownRef)

Parameters

MarkdownRef

The reference to the Markdown object as returned by Markdown.Create function.

\$ref

Result Returns OK or error.

Description

Examples

Create and query html:

```
Set Variable [ $r ; Value: MBS("Markdown.Create"; "Text attributes italic, bold, 'monospace',
~~strikethrough~~.") ]
```

```
Set Variable [ $html ; Value: MBS("Markdown.HTML"; $r) ]
```

```
Set Variable [ $r ; Value: MBS("Markdown.Release"; $r) ]
```

See also

- 107.2 Markdown.Create 5750
- 107.3 Markdown.HTML 5751

Example Databases

- [Markdown](#)

Created 13th April 2015, last changed 4th June 2015.

Chapter 108

Math

Math functions.

108.1 Math.BitwiseAND

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Math.BitwiseAND"; value1; value2)

Parameters

value1

The first number.

5

value2

The second number.

6

Result Returns number.

Description

Only for integer numbers. You can pass several values to combine more than 2 values.

Updated to use 64-bit signed integers in version 7.3.

Examples

Applies bitwise and for three numbers which gives 16:

```
MBS("Math.BitwiseAND"; 255; 48; 18)
```

See also

- 70.209 DynaPDF.GetOCG 2855
- 70.256 DynaPDF.GetUsesTransparency 2912
- 108.2 Math.BitwiseNOT 5755
- 108.3 Math.BitwiseOR 5756
- 108.6 Math.BitwiseXOR 5759
- 126.4 Preferences.GetValue 6376
- 53.14 UnZipFile.ItemFlag 1488

Example Databases

- [SmartCard/SmartCard ReadFile](#)
- [SmartCard/SmartCard Signatures](#)
- [Win Only/Receive System Notifications](#)

108.1.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr7](#)
- [MBS Filemaker Plugin, version 4.1pr5](#)

Created 18th August 2014, last changed 14th July 2017.

108.2 Math.BitwiseNOT

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Math.BitwiseNOT"; value)

Parameters

value

The number to use.

255

Result Returns number.

Description

Only for integer number.

Updated to use 64-bit signed integers in version 7.3.

Examples

Calculates Bitwise NOT of 255:

MBS("Math.BitwiseNOT"; 255)

See also

- 108.1 Math.BitwiseAND 5753
- 108.3 Math.BitwiseOR 5756
- 108.6 Math.BitwiseXOR 5759

108.2.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr7](#)
- [MBS Filemaker Plugin, version 4.1pr5](#)

Created 18th August 2014, last changed 14th July 2017.

108.3 Math.BitwiseOR

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Math.BitwiseOR"; value1; value2)

Parameters

value1

The first number.

5

value2

The second number.

6

Result Returns number.

Description

Only for integer numbers. You can pass several values to combine more than 2 values.

Updated to use 64-bit signed integers in version 7.3.

Examples

Applies bitwise or for three numbers which gives 23:

```
MBS("Math.BitwiseOR"; 5; 6; 16)
```

See also

- [70.439 DynaPDF.SetViewerPreferences](#) 3244
- [108.1 Math.BitwiseAND](#) 5753
- [108.2 Math.BitwiseNOT](#) 5755
- [108.6 Math.BitwiseXOR](#) 5759

108.3.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr7](#)
- [MBS Filemaker Plugin, version 4.1pr5](#)

Created 18th August 2014, last changed 14th July 2017.

108.4 Math.BitwiseShiftLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Math.BitwiseShiftLeft"; value; steps)

Parameters

value

The number to shift.

2

steps

The number of steps to shift.

1

Result Returns number.

Description

Only for integer numbers.

Updated to use 64-bit signed integers in version 7.3.

Examples

Shifts number. 4 shifted by 2 to left results in 16.

MBS("Math.BitwiseShiftLeft"; 16; 2)

See also

- [108.5 Math.BitwiseShiftRight](#)

5758

108.4.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr7](#)
- [MBS Filemaker Plugin, version 4.1pr5](#)

Created 18th August 2014, last changed 14th July 2017.

108.5 Math.BitwiseShiftRight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Math.BitwiseShiftRight"; value; steps)

Parameters

value

The number to shift.

2

steps

The number of steps to shift.

1

Result Returns number.

Description

Only for integer numbers.

Updated to use 64-bit signed integers in version 7.3.

Examples

Shifts number. 16 shifted by 2 to right results in 4

MBS("Math.BitwiseShiftRight"; 16; 2)

See also

- [108.4 Math.BitwiseShiftLeft](#)

5757

Example Databases

- [Win Only/Receive System Notifications](#)

108.5.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr7](#)
- [MBS Filemaker Plugin, version 4.1pr5](#)

Created 18th August 2014, last changed 14th July 2017.

108.6 Math.BitwiseXOR

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Math.BitwiseXOR"; value1; value2)

Parameters

value1

The first number.

5

value2

The second number.

6

Result Returns number.

Description

Only for integer numbers. You can pass several values to combine more than 2 values.

Updated to use 64-bit signed integers in version 7.3.

Examples

Applies bitwise or for three numbers which gives 19:

```
MBS("Math.BitwiseXOR"; 5; 6; 16)
```

See also

- [108.1 Math.BitwiseAND](#) 5753
- [108.2 Math.BitwiseNOT](#) 5755
- [108.3 Math.BitwiseOR](#) 5756

108.6.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr7](#)
- [MBS Filemaker Plugin, version 4.1pr5](#)

Created 18th August 2014, last changed 14th July 2017.

108.7 Math.DecToHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	2.5	Yes	Yes	Yes	Yes	Yes

MBS("Math.DecToHex"; number { ; NoLeadingZeros })

Parameters

number

The number you want to convert to hexadecimal.
1234

NoLeadingZeros

Optional
Optional, whether to avoid leading zeros. Default is 0.
0

Result Returns the hexadecimal number.

Description

Works with 32 bit integers.

Examples

Query number for 65535. Returns 0000FFFF.

MBS("Math.DecToHex"; 65535)

Query number without leading zeros for 4096. Returns 1000.

MBS("Math.DecToHex"; 4096)

Example Databases

- [Math/Hexadecimal numbers](#)

108.7.1 Blog Entries

- [MBS Filemaker Plugin, version 2.5pr3](#)

Created 18th August 2014, last changed 18th August 2014.

108.8 Math.DecodeNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	6.4	Yes	Yes	Yes	Yes	Yes

MBS("Math.DecodeNumber"; NumberType; Bits; Text { ; BigEndian })

Parameters

NumberType

Which type of number to encode. Can be "Float", "Integer" or "UnsignedInteger".
"Float"

Bits

The number of bits. Can be 32 or 64 for float. Can be 8, 16, 24, 32 or 64 for integers.
32

Text

The hex encoded binary data.
"14EF"

BigEndian

Optional
Pass 1 to encode big endian. Default is 0 for little endian.
0

Result Returns number or error.

Description

This may be useful for binary protocols with serial ports or sockets.

Examples

Decodes a 32-bit floating point number:

MBS("Math.DecodeNumber"; "Float"; 32; "79E9F642")

Decode a 8-bit integer number:

MBS("Math.DecodeNumber"; "Integer"; 8; "C8")

Decode a 64-bit unsigned integer:

MBS("Math.DecodeNumber"; "UnsignedInteger"; 64; "C0BA8A3CD5620400")

Decode big endian 64-bit:

MBS("Math.DecodeNumber"; "Integer"; 64; "0000000000000001"; 1)

See also

- 108.9 Math.EncodeNumber 5763
- 108.20 Math.TextToNumber 5776

108.8.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)
- [MBS FileMaker Plugin, version 6.4pr1](#)

Created 14th July 2016, last changed 1st August 2016.

108.9 Math.EncodeNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	6.4	Yes	Yes	Yes	Yes	Yes

MBS("Math.EncodeNumber"; NumberType; Bits; Number { ; BigEndian })

Parameters

NumberType

Which type of number to encode. Can be "Float", "Integer" or "UnsignedInteger".
"Float"

Bits

The number of bits. Can be 32 or 64 for float. Can be 8, 16, 24, 32 or 64 for integers.
32

Number

The number to encode.
123

BigEndian

Optional
Pass 1 to encode big endian. Default is 0 for little endian.
0

Result Returns hex text or error.

Description

You can use Math.DecodeNumber to decode it again.

Examples

Encodes a 32-bit floating point number:

```
MBS( "Math.EncodeNumber"; "Float"; 32; 123.456 )
// 79E9F642
```

Encode 8 bit signed integer:

```
MBS( "Math.EncodeNumber"; "Integer"; 8; -56 )
// C8
```

Encode 64-bit unsigned integer:

```
MBS( "Math.EncodeNumber"; "UnsignedInteger"; 64; 1234567890123456)
// C0BA8A3CD5620400
```

Encodes number with big/little endian:

```
MBS( "Math.EncodeNumber"; "Float"; 32; 123,456; 1 ) & §& MBS( "Math.EncodeNumber"; "Float"; 32;
```

5764

123,456; 0)

Encode number with big endian and extended to 16 bytes:

```
"000000000000000000000000" & MBS( "Math.EncodeNumber"; "Integer"; 32; 1234567;1 )
```

See also

- 108.8 Math.DecodeNumber

5761

108.9.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)
- [MBS FileMaker Plugin, version 6.4pr1](#)

Created 14th July 2016, last changed 11st October 2016.

108.10 Math.HexToDec

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	2.5	Yes	Yes	Yes	Yes	Yes

MBS("Math.HexToDec"; hexNumber)

Parameters

hexNumber

The hex number you want to convert to hexadecimal.

FEDC

Result Returns the decimal number.

Description

Works with 32 bit integers, so hex number has a maximal length of 8 characters.

Examples

Query number for hex number FFFF (returns 65535)

MBS("Math.HexToDec"; "FFFF")

Example Databases

- [Color Panel](#)
- [Math/Hexadecimal numbers](#)

108.10.1 Blog Entries

- [Using Emojis in FileMaker](#)
- [MBS Filemaker Plugin, version 2.5pr3](#)

Created 18th August 2014, last changed 18th August 2014.

108.11 Math.InchToPixel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	3.4	Yes	Yes	Yes	Yes	Yes

MBS("Math.InchToPixel"; Value; Resolution)

Parameters

Value

The value to convert.

123

Resolution

The resolution used in dpi. Default is 72 dpi.

72

Result Return value or error.

Description

The formula is: $\text{result} = \text{value} * \text{resolution}$.

Examples

Convert 3 inches to pixel:

```
MBS( "Math.InchToPixel"; 3 )
```

108.11.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr7](#)

Created 18th August 2014, last changed 18th August 2014.

108.12 Math.InsidePolygon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	2.2	Yes	Yes	Yes	Yes	Yes

MBS("Math.InsidePolygon"; X; Y; Values)

Parameters

X

The X coordinate

30

Y

The Y coordinate

30

Values

The list of x and y values. Delimiter is semicolon. Numbers in US format.

"10;20;30;20;30;40;10;40"

Description

Examples

Check if point is inside polygon:

```
$result = MBS("Math.InsidePolygon"; 30; 30; "10;20;30;20;30;40;10;40")
```

Check with GPS coordinates:

```
MBS("Math.InsidePolygon"; 45.787; 4.831;
"45.78603562364937;4.830036163330078;
45.788691544176785;4.830873012542725;
45.78536975331141;4.833780527114868;
45.7881753329116;4.834917783737183")
```

Example Databases

- [Math/Polygon test](#)

108.12.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)
- [MBS Filemaker Plugin, version 2.2pr2](#)

Created 18th August 2014, last changed 24th May 2017.

108.13 Math.IsValidCC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Math.IsValidCC"; text)

Parameters

text

The text with the number.

"12345678"

Result Returns 1 on success or 0 on failure.

Description

This function implements the Luhn algorithm. This is a simple checksum formula used to validate a variety of identification numbers, such as credit card numbers, IMEI numbers, National Provider Identifier numbers in US and Canadian Social Insurance Numbers.

If this function returns 0, you can be sure the number is not valid. But if the function returns 1, you may want to check the number online with some database.

Example Databases

- [Math/Validate CC numbers](#)

108.13.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr3](#)

Created 18th August 2014, last changed 18th August 2014.

108.14 Math.MillimeterToPixel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	3.4	Yes	Yes	Yes	Yes	Yes

MBS("Math.MillimeterToPixel"; Value; Resolution)

Parameters

Value

The value to convert.

123

Resolution

The resolution used in dpi. Default is 72 dpi.

72

Result Return value or error.

Description

The formula is: $\text{result} = \text{value} / 25.4 * \text{resolution}$.

Examples

Convert 300 millimeter to pixel:

MBS("Math.MillimeterToPixel"; 300)

108.14.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr7](#)

Created 18th August 2014, last changed 18th August 2014.

108.15 Math.NumberToText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Math.NumberToText"; value)

Parameters

value

Some numerical value you want to convert.

1234

Result Returns text.

Description

This function always uses english system (dot as decimal separator).

See [Math.TextToNumber](#) for the reverse.

See also

- [108.20 Math.TextToNumber](#)

5776

108.15.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr1](#)

Created 18th August 2014, last changed 8th September 2018.

108.16 Math.PixelToInch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	3.4	Yes	Yes	Yes	Yes	Yes

MBS("Math.PixelToInch"; Value; Resolution)

Parameters

Value

The value to convert.

123

Resolution

The resolution used in dpi. Default is 72 dpi.

72

Result Return value or error.

Description

The formula is: $\text{result} = \text{value} / \text{resolution}$.

Examples

Convert 300 pixel to inch:

MBS("Math.PixelToInch"; 300)

108.16.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr7](#)

Created 18th August 2014, last changed 18th August 2014.

108.17 Math.PixelToMillimeter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	3.4	Yes	Yes	Yes	Yes	Yes

MBS("Math.PixelToMillimeter"; Value; Resolution)

Parameters

Value

The value to convert.

123

Resolution

The resolution used in dpi. Default is 72 dpi.

72

Result Return value or error.

Description

The formula is: $\text{result} = \text{value} * 25.4 / \text{resolution}$.

Examples

Convert 300 pixels to millimeter:

```
MBS("Math.PixelToMillimeter"; 300)
```

Convert 72 pixels at 72 dpi resulting in 25.4 millimeter:

```
MBS("Math.PixelToMillimeter"; 72; 72)
```

108.17.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr7](#)

Created 18th August 2014, last changed 18th August 2014.

108.18 Math.PolylineDecode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Math.PolylineDecode"; Text)

Parameters

Text

The coordinate value to decode.

"~ps | U"

Result Returns number or error.

Description

We decode the number stored in the given text and return the numeric value. Precision is just 5 digits after comma.

See

<https://developers.google.com/maps/documentation/utilities/polylinealgorithm>

Examples

Decode a number:

MBS("Math.PolylineDecode"; "~ps | U")

Example result: -120.20

See also

- 108.19 Math.PolylineEncode

5774

108.18.1 Blog Entries

- [Was gibt es neues bei MBS Version 9.2](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [Encoded Polyline Algorithm Format](#)

Created 31st March 2019, last changed 31st March 2019.

108.19 Math.PolylineEncode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Math.PolylineEncode"; Value)

Parameters

Value

The value to encode.

40,7

Result Returns text or error.

Description

We take a number (latitude or longitude) and encode it as an ASCII text.

See

<https://developers.google.com/maps/documentation/utilities/polylinealgorithm>

Examples

Encode number:

```
MBS("Math.PolylineEncode"; 38.5)
```

Example result: `_p~iF`

Encode another value:

```
MBS("Math.PolylineEncode"; -120.2)
```

Example result: `~ps | U`

Encode a polyline with 3 points:

```
// Points: (38.5, -120.2), (40.7, -120.95), (43.252, -126.453)
```

```
MBS("Math.PolylineEncode"; 38.5) & MBS("Math.PolylineEncode"; -120.20) &
```

```
MBS("Math.PolylineEncode"; 40.7 - 38.5) & MBS("Math.PolylineEncode"; -120.95 - -120.2) &
```

```
MBS("Math.PolylineEncode"; 43.252 - 40.7) & MBS("Math.PolylineEncode"; -126.453 - -120.95)
```

Example result: `_p~iF~ps | U_ulLnnqC_mqNvxq'@`

See also

- 108.18 Math.PolylineDecode

5773

108.19.1 Blog Entries

- [Was gibt es neues bei MBS Version 9.2](#)

- [MBS FileMaker Plugin, version 9.2pr1](#)
- [Encoded Polyline Algorithm Format](#)

Created 31st March 2019, last changed 31st March 2019.

108.20 Math.TextToNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
108 Math	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Math.TextToNumber"; text { ; detect })

Parameters

text

Some text value where you want to get the number back.

"123.456"

detect

Optional

Pass 1 to detect comma vs. dot and interpret number right.

1

Result Returns number.

Description

This function always uses english system (dot as decimal separator).

Examples

Detect that number has dot as decimal divider and read number:

```
MBS("Math.TextToNumber"; "123,456.789"; 1)
```

Detect that number has comma as decimal divider and read number:

```
MBS("Math.TextToNumber"; "123.456,789"; 1)
```

See also

- 85.78 [GUIImage.FontTypeMetrics](#) 4450
- 108.8 [Math.DecodeNumber](#) 5761
- 108.15 [Math.NumberToText](#) 5770

Example Databases

- [DynaPDF/Form/Form](#)
- [DynaPDF/List Annotations](#)
- [GraphicsMagick/Text Wrap](#)

108.20.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 2.9pr1](#)

Created 18th August 2014, last changed 16th March 2015.

Chapter 109

Matrix

Matrix functions

Two dimensionals lists.

109.1 Matrix.AddColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.AddColumn"; MatrixRef)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Result Returns OK or error.

Description

Examples

Add a column and fill it with values:

```
Set Variable [ $r ; Value: MBS( "Matrix.AddColumn"; $matrix) ]
```

```
Set Variable [ $r ; Value: MBS( "Matrix.SetColumn"; $matrix; 3; "2§4§12" ) ]
```

See also

- 109.2 Matrix.AddColumnns 5781
- 109.12 Matrix.GetColumn 5792

- 109.28 Matrix.SetColumn

109.1.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.1.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 31

Created 8th April 2019, last changed 17th December 2019.

109.2 Matrix.AddColumns

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.AddColumns"; MatrixRef { ; Count })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Count

Optional

The number of columns to add. Default is 1.

2

Result Returns OK or error.

Description

Examples

Add columns and set values:

```
Set Variable [ $r ; Value: MBS( "Matrix.AddColumns"; $matrix ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetColumn"; $matrix; 3; "2$4$12" ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetColumn"; $matrix; 4; "6$8$39" ) ]
```

See also

- [109.1 Matrix.AddColumn](#) 5779
- [109.12 Matrix.GetColumn](#) 5792
- [109.28 Matrix.SetColumn](#) 5812

109.2.1 Blog Entries

- [Matrix functions for FileMaker](#)

Created 8th April 2019, last changed 17th December 2019.

109.3 Matrix.AddRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.AddRow"; MatrixRef)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Result Returns OK or error.

Description

Examples

Add row and set values:

```
Set Variable [ $r ; Value: MBS( "Matrix.AddRow";$matrix) ]
```

```
Set Variable [ $r ; Value: MBS( "Matrix.SetRow"; $matrix; 3; "98$43$12$69" ) ]
```

See also

- 109.4 Matrix.AddRows 5783
- 109.13 Matrix.GetRow 5793
- 109.29 Matrix.SetRow 5814

109.3.1 Blog Entries

- [Matrix functions for FileMaker](#)

Created 8th April 2019, last changed 17th December 2019.

109.4 Matrix.AddRows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.AddRows"; MatrixRef { ; Count })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Count

Optional

The number of rows to add. Default is 1.

2

Result Returns OK or error.

Description

Examples

Add rows and set values:

```
Set Variable [ $r ; Value: MBS( "Matrix.AddRows";$matrix; 2 ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetRow"; $matrix; 3; "98$43$12$69" ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetRow"; $matrix; 4; "89$466$45$8" ) ]
```

See also

- 109.3 Matrix.AddRow 5782
- 109.29 Matrix.SetRow 5814

109.4.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.4.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 31

Created 8th April 2019, last changed 17th December 2019.

109.5 Matrix.Avg

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Avg"; MatrixRef; Column { ; firstRow; lastRow })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Column

The index of the column. Default is 0.

0

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

Result Returns number or error.

Description

You got a record set in memory and we can walk over a column in a given row range to add the sum value and later divide by number of values.

Examples

Calculate average:

Set Variable [\$r ; Value: MBS("Matrix.Avg"; \$matrix; 1;2;5)]

See also

- 80.35 FM.SQL.RowCount

4157

Created 8th April 2019, last changed 17th December 2019.

109.6 Matrix.CSV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.CSV"; MatrixRef { ; firstRow; lastRow; firstCol; lastCol; rowSeparator; colSeparator })

Parameters

MatrixRef

The matrix reference number.

\$matrix

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is Matrix.Height-1.

5

firstCol

Optional

The index of first column. Default is 0.

0

lastCol

Optional

The index of last column. Default is Matrix.Width-1.

6

rowSeparator

Optional

The row separator. Default is CR.

Char(13)

colSeparator

Optional

The column separator. Default is semicolon.

”;"

Result Returns text or error.

Description

You can use this method to quickly get all values in a given area as text.

If needed, we put values in quotes and escape quotes and newlines.

Please use Text.WriteTextFile to write to text file if you need CSV export.

Examples

Show matrix in dialog as CSV:

Show Custom Dialog [“The Matrix” ; MBS("Matrix.CSV"; \$matrix; 0; 2; 0; 2; Char(13); " ")]

See also

- 109.16 Matrix.Height 5797
- 109.33 Matrix.Width 5822
- 164.68 Text.WriteTextFile 7871

109.6.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.6.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 17th December 2019.

109.7 Matrix.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Clear"; MatrixRef)

Parameters**MatrixRef**

The matrix reference number.

\$matrix

Result Returns OK or error.

Description

Removes all values from it and sets size to 0/0.

Examples

Clear and check:

```
Set Variable [ $r ; Value: MBS("Matrix.Clear"; $matrix) ]
```

```
// After this step the width and height of the matrix are 0
```

```
Show Custom Dialog [ "Matrix Height"; MBS("Matrix.Height";$matrix) & "=" & MBS("Matrix.width";$matrix) ]
```

See also

- 109.8 Matrix.ClearValues 5788
- 109.9 Matrix.Clone 5789
- 109.16 Matrix.Height 5797
- 109.33 Matrix.Width 5822

Created 8th April 2019, last changed 17th December 2019.

109.8 Matrix.ClearValues

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.ClearValues"; MatrixRef)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Result Returns OK or error.

Description

Keeps size of the matrix.

Examples

Clear values:

Set Variable [\$r ; Value: MBS("Matrix.ClearValues";\$matrix)]

See also

- 109.7 Matrix.Clear

5787

Created 8th April 2019, last changed 17th December 2019.

109.9 Matrix.Clone

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Clone"; MatrixRef)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Result Returns matrix reference number or error.

Description

Please call Matrix.Free later to free object.

Examples

Clone matrix:

```
Set Variable [ $CloneMatrix ; Value: MBS("Matrix.Clone"; $Matrix) ]
```

See also

- 109.7 Matrix.Clear 5787
- 109.11 Matrix.Free 5791

109.9.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.9.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 17th December 2019.

109.10 Matrix.DataType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.DataType"; MatrixRef; Row; Column)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Row

The row number from 0 to Archive.Height-1.

\$row

Column

The column number from 0 to Archive.Width-1.

\$col

Result Returns text or error.

Description

Returns text, date, number, time, timestamp, boolean, container or invalid.

Examples

Check data type:

```
Set Variable [ $matrix ; Value: MBS("Matrix.New";3;3) ]
```

```
Set Variable [ $r ; Value: MBS( "Matrix.SetColumn"; $matrix; 0;"Hello$Time$left" ) ]
```

```
Show Custom Dialog [ "Datatypes" ; "Hello: " & MBS("Matrix.Datatype"; $matrix; 0; 0 ) ]
```

See also

- 109.23 Matrix.New 5806
- 109.24 Matrix.NewWithSQL 5808
- 109.28 Matrix.SetColumn 5812

Created 8th April 2019, last changed 17th December 2019.

109.11 Matrix.Free

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Free"; MatrixRef)

Parameters**MatrixRef**

The matrix reference number.

\$matrix

Result Returns OK or error.

Description**Examples**

Frees matrix:

Set Variable [\$r ; Value: MBS("Matrix.Free"; \$matrix)]

See also

- 109.9 Matrix.Clone 5789
- 109.15 Matrix.GetValue 5795
- 109.23 Matrix.New 5806
- 109.24 Matrix.NewWithSQL 5808
- 109.27 Matrix.Resize 5811
- 109.30 Matrix.SetValue 5816
- 109.31 Matrix.Sum 5818

109.11.1 FileMaker Magazin

- Ausgabe 4/2019, Seite 31

Created 8th April 2019, last changed 17th December 2019.

109.12 Matrix.GetColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.GetColumn"; MatrixRef; Column)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Column

The zero based column number.

2

Result Returns text or error.

Description

Returns list of values.

Examples

Queries column:

```
Set Variable [ $Column ; Value: MBS("Matrix.getColumn"; $matrix; 0) ]
```

See also

- 109.1 Matrix.AddColumn 5779
- 109.2 Matrix.AddColumnns 5781
- 109.15 Matrix.GetValue 5795
- 109.28 Matrix.SetColumn 5812

Created 8th April 2019, last changed 17th December 2019.

109.13 Matrix.GetRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.GetRow"; MatrixRef; Row)

Parameters**MatrixRef**

The matrix reference number.

\$matrix

Row

The zero based row number.

2

Result Returns text or error.

Description

Returns list of values.

Examples

Queries row values:

```
Set Variable [ $row ; Value: MBS("Matrix.getRow"; $Matrix;0) ]
```

See also

- 109.3 Matrix.AddRow 5782
- 109.29 Matrix.SetRow 5814

Created 8th April 2019, last changed 17th December 2019.

109.14 Matrix.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.GetText"; MatrixRef { ; Delimiter })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Delimiter

Optional

The column delimiter. Default is empty text.

Char(9)

Result Returns text or error.

Description

Returns list of row values.

Examples

Queries text of a column:

```
Set Variable [ $matrix ; Value: MBS("Matrix.New";3;3) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetColumn"; $matrix; 0;"15§07§92" ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetColumn"; $matrix; 1;"17§3§60" ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetColumn"; $matrix; 2;"15§1§87" ) ]
Show Custom Dialog [ "Unser Matrix" ; MBS("Matrix.GetText"; $matrix) ]
```

See also

- 109.23 Matrix.New 5806
- 109.28 Matrix.SetColumn 5812
- 109.32 Matrix.Text 5820

109.14.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.14.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 29

Created 8th April 2019, last changed 17th December 2019.

109.15 Matrix.GetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.GetValue"; MatrixRef; Row; Column)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Row

The zero based row number.

2

Column

The zero based column number.

2

Result Returns value or error.

Description

Retains original data type.

Examples

Test setting and getting values:

```
Set Variable [ $matrix ; Value: MBS( "Matrix.New"; 3; 4 ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetValue"; $matrix; 0; 0; "Hello" ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetValue"; $matrix; 1; 0; 123,456 ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetValue"; $matrix; 2; 0; Get(CurrentTimestamp) ) ]
Set Variable [ $t ; Value: MBS( "Matrix.GetValue"; $matrix; 0; 0 ) ]
Set Variable [ $v ; Value: MBS( "Matrix.GetValue"; $matrix; 1; 0 ) ]
Set Variable [ $z ; Value: MBS( "Matrix.GetValue"; $matrix; 2; 0 ) ]
Show Custom Dialog [ "Results" ; $t & $v & $z ]
Show Custom Dialog [ "Results" ; MBS("FM.DataType"; $t) & $v & MBS("FM.DataType"; $v) & $z ]
Set Variable [ $r ; Value: MBS( "Matrix.Free"; $matrix ) ]
```

See also

- 79.10 FM.DataType 3896
- 109.11 Matrix.Free 5791
- 109.12 Matrix.GetColumn 5792
- 109.23 Matrix.New 5806

5796

CHAPTER 109. MATRIX

- 109.24 Matrix.NewWithSQL 5808
- 109.30 Matrix.SetValue 5816

109.15.1 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 8th April 2019.

109.16 Matrix.Height

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Height"; MatrixRef)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Result Returns number or error.

Description

Examples

Check size of matrix:

```
If [ MBS("Matrix.Height"; $matrix) = MBS("Matrix.Width"; $Matrix) ]
Show Custom Dialog [ "The matrix is square" ; "number of rows and columns are equal!" ]
End If
```

See also

- 109.7 Matrix.Clear 5787
- 109.6 Matrix.CSV 5785
- 109.23 Matrix.New 5806
- 109.24 Matrix.NewWithSQL 5808
- 109.27 Matrix.Resize 5811
- 109.33 Matrix.Width 5822

109.16.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.16.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 17th December 2019.

109.17 Matrix.InsertRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

```
MBS( "Matrix.InsertRecords"; MatrixRef; InsertFileName; InsertTableName; FieldNames { ; StartRow; EndRow } )
```

Parameters

MatrixRef

The matrix reference number.

\$matrix

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model"

StartRow

Optional

The index of the start row in the current recordset. First row is 0.

0

EndRow

Optional

The index of the end row in the current recordset. First row is 0. Last Row would be FM.SQL.RowCount-1.

0

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from a query in FileMaker database into a FileMaker table.

Please provide field names in FileMaker. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

Function will fail if data types in source and dest fields do not match for assignment. e.g. date and time fields will not work, only timestamp fields.

For insert from SQL Connection into FileMaker database, please use SQL.InsertRecords.

109.17. *MATRIX.INSERTRECORDS* 5799

See also

- 80.8 FM.ExecuteSQL 4088
- 80.9 FM.ExecuteSQL.LastError 4094
- 80.10 FM.ExecuteSQL.LastErrorMessage 4096
- 80.35 FM.SQL.RowCount 4157
- 109.18 Matrix.InsertRecordsToSQL 5800
- 156.69 SQL.InsertRecords 7397

Created 8th April 2019, last changed 8th April 2019.

109.18 Matrix.InsertRecordsToSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.InsertRecordsToSQL"; MatrixRef; Connection; InsertTableName; FieldNames { ; StartRow; EndRow; Replace })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

InsertTableName

The name of the table to insert record into.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model\$Names"

StartRow

Optional

The index of the start row. First row is 0. Pass -1 or nothing for default which is starting with row 0.

-1

EndRow

Optional

The index of the end row. First row is 0. Last Row would be FM.SQL.RowCount-1. Pass -1 to use all rows and the plugin will internally use RowCount-1.

-1

Replace

Optional

Set to 1 to replace existing entries. Currently available for MySQL and databases with same syntax.

0

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from a query in FileMaker database into a SQL database. Please provide field names in other table. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Reports an error if field name list doesn't match column count of the query result.

Function will fail if data types in source and dest fields do not match for assignment. e.g. date and time

109.18. *MATRIX.INSERTRECORDSTOSQL*

5801

fields will not work, only timestamp fields.

For insert within FileMaker, please use Matrix.InsertRecords.

See also

- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 80.35 FM.SQL.RowCount 4157
- 109.17 Matrix.InsertRecords 5798
- 156.80 SQL.NewConnection 7412

Created 8th April 2019, last changed 8th April 2019.

109.19 Matrix.JSONRecord

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.JSONRecord"; MatrixRef; Row { ; FieldNames; Flags })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Row

The row you like to get.

1

FieldNames

Optional

A list of field names for the JSON.

"Model\$Names"

Flags

Optional

The flags for the json creation. Pass 1 to get all values as text. Pass 2 to get all dates, times and timestamps in SQL format.

1+2

Result Returns JSON text or error.

Description

You provide list of field names, which should be in same order as fields in matrix.

Optionally we can return SQL dates, times and timestamps as SQL format.

Containers are returned as Base64 encoded data.

Examples

Query JSON:

```
Set Variable [ $JSON ; Value: MBS( "Matrix.JSONRecord"; $result; 1; "a$b$c" ) ]
```

See also

- 109.20 Matrix.JSONRecords

5803

Created 8th April 2019, last changed 17th December 2019.

109.20 Matrix.JSONRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.JSONRecords"; MatrixRef; FieldNames { ; Flags })

Parameters

MatrixRef

The matrix reference number.

\$matrix

FieldNames

A list of field names for the JSON.

"Model\$Names"

Flags

Optional

The flags for the json creation. Pass 1 to get all values as text. Pass 2 to get all dates, times and timestamps in SQL format.

1+2

Result Returns JSON text or error.

Description

You provide list of field names, which should be in same order as fields in matrix.

Optionally we can return SQL dates, times and timestamps as SQL format.

Containers are returned as Base64 encoded data.

Examples

Query matrix as JSON:

```
# Matrix as JSON object
```

```
Set Variable [ $JSON ; Value: MBS( "Matrix.JSONRecords"; $result; "a$b$c" ) ]
```

```
Show Custom Dialog [ "Matrix as JSON" ; $JSON ]
```

See also

- 109.19 Matrix.JSONRecord

5802

109.20.1 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 17th December 2019.

109.21 Matrix.Max

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Max"; MatrixRef; Column { ; firstRow; lastRow })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Column

The index of the column. Default is 0.

0

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

Result Returns number or error.

Description

You got a record set in memory and we can walk over a column in a given row range to find the maximum value.

Examples

Calculate max:

Set Variable [\$Max; Value: MBS("Matrix.Max"; \$matrix; 1)]

See also

- 80.35 FM.SQL.RowCount 4157
- 109.22 Matrix.Min 5805

109.21.1 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 17th December 2019.

109.22 Matrix.Min

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Min"; MatrixRef; Column { ; firstRow; lastRow })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Column

The index of the column. Default is 0.

0

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

Result Returns number or error.

Description

You got a record set in memory and we can walk over a column in a given row range to find the minimum value.

Examples

Calculate minimum:

Set Variable [\$Min; Value: MBS("Matrix.Min"; \$matrix; 5; 4; 8)]

See also

- 80.35 FM.SQL.RowCount 4157
- 109.21 Matrix.Max 5804

109.22.1 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 17th December 2019.

109.23 Matrix.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.New"; Height; Width)

Parameters

Height

The height of the matrix.

3

Width

The width of the matrix.

4

Result Returns matrix reference number or error.

Description

Please call Matrix.Free later to free the matrix object.

Internally we store all data in FileMaker data types, so times, dates, timestamps, numbers and containers are preserved as they are and not converted to texts.

Examples

Creates a matrix:

```
Set Variable [ $matrix ; Value: MBS( "Matrix.New"; 3; 4 ) ]
Show Custom Dialog [ "Size" ; MBS( "Matrix.Width"; $matrix ) & " x " & MBS( "Matrix.Height"; $matrix ) ]
Set Variable [ $r ; Value: MBS( "Matrix.Free"; $matrix ) ]
```

Create and set columns:

```
Set Variable [ $matrix; Value: MBS("Matrix.New";3;3) ]
# Set the values of the matrix
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 0;"15$07$92" ) ]
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 1;"17$3$60" ) ]
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 2;"15$1$87" ) ]
```

See also

- 109.10 Matrix.DataType 5790
- 109.11 Matrix.Free 5791
- 109.14 Matrix.GetText 5794

<i>109.23. MATRIX.NEW</i>	5807
• 109.15 Matrix.GetValue	5795
• 109.16 Matrix.Height	5797
• 109.27 Matrix.Resize	5811
• 109.28 Matrix.SetColumn	5812
• 109.30 Matrix.SetValue	5816
• 109.31 Matrix.Sum	5818
• 109.33 Matrix.Width	5822

109.23.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.23.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 30
- Ausgabe 4/2019, Seite 29

Created 8th April 2019, last changed 17th December 2019.

109.24 Matrix.NewWithSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.NewWithSQL"; FileName; SQL Statement { ; Params })

Parameters

FileName

The target database name. Can be empty to not limit query to one database.
””

SQL Statement

SQL Statement as a Text string

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns matrix reference number or error.

Description

Returns a matrix reference number, so you can use functions like Matrix.Height, Matrix.Width, Matrix.GetValue and Matrix.DataType to query result. Don't forget to use Matrix.Free to release the result from memory when you are done with it.

See also

- 109.10 Matrix.DataType 5790
- 109.11 Matrix.Free 5791
- 109.15 Matrix.GetValue 5795
- 109.16 Matrix.Height 5797
- 109.33 Matrix.Width 5822

Created 8th April 2019, last changed 8th April 2019.

109.25 Matrix.RemoveColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.RemoveColumn"; MatrixRef; Column)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Column

The zero based column number.

2

Result Returns OK or error.

Description

Examples

Remove a column:

```
Set Variable [ $r; Value: MBS( "Matrix.RemoveColumn"; $matrix; 1 ) ]
```

Created 8th April 2019, last changed 17th December 2019.

109.26 Matrix.RemoveRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.RemoveRow"; MatrixRef; Row)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Row

The zero based row number.

2

Result Returns OK or error.

Description

Examples

Remove a row:

```
Set Variable [ $r; Value: MBS( "Matrix.RemoveRow"; $matrix; 2 ) ]
```

Created 8th April 2019, last changed 17th December 2019.

109.27 Matrix.Resize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Resize"; MatrixRef; Height; Width)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Height

The height of the matrix.

3

Width

The width of the matrix.

4

Result Returns OK or error.

Description

Examples

Try resize:

```
Set Variable [ $matrix ; Value: MBS( "Matrix.New"; 3; 4 ) ]
```

```
Set Variable [ $r ; Value: MBS( "Matrix.Resize"; $matrix; 7; 8 ) ]
```

```
Show Custom Dialog [ "Size" ; MBS( "Matrix.Width"; $matrix ) & " x " & MBS( "Matrix.Height"; $matrix ) ]
```

```
Set Variable [ $r ; Value: MBS( "Matrix.Free"; $matrix ) ]
```

Resizes a matrix:

```
Set Variable [ $r; Value: MBS( "Matrix.Resize"; $matrix; 3; 4 ) ]
```

See also

- 109.11 Matrix.Free 5791
- 109.16 Matrix.Height 5797
- 109.23 Matrix.New 5806
- 109.33 Matrix.Width 5822

Created 8th April 2019, last changed 17th December 2019.

109.28 Matrix.SetColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.SetColumn"; MatrixRef; Column { ; Values })

Parameters

MatrixRef

The matrix reference number.
\$matrix

Column

The zero based column number.
2

Values

Optional
The list of values.
"1\$2"

Result Returns OK or error.

Description

If less values are given, the other values in the column are filled with empty values.

Examples

Creates matrix and sets columns:

```
Set Variable [ $matrix; Value: MBS("Matrix.New";3;3) ]
# Set the values of the matrix
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 0;"15$07$92" ) ]
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 1;"17$3$60" ) ]
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 2;"15$1$87" ) ]
```

See also

- 109.1 Matrix.AddColumn 5779
- 109.2 Matrix.AddColumns 5781
- 109.10 Matrix.DataType 5790
- 109.12 Matrix.GetColumn 5792
- 109.14 Matrix.GetText 5794
- 109.23 Matrix.New 5806
- 109.30 Matrix.SetValue 5816
- 109.31 Matrix.Sum 5818

109.28.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.28.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 31
- Ausgabe 4/2019, Seite 29

Created 8th April 2019, last changed 17th December 2019.

109.29 Matrix.SetRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.SetRow"; MatrixRef; Row { ; Values })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Row

The zero based row number.

2

Values

Optional

The list of values.

"1\$2"

Result Returns OK or error.

Description

If less values are given, the other values in the column are filled with empty values.

Examples

Sets rows:

```
Set Variable [ $r; Value: MBS( "Matrix.SetRow"; $result; 3; "98$43$12$69" ) ]
```

```
Set Variable [ $r; Value: MBS( "Matrix.SetRow"; $result; 4; "89$466$45$8" ) ]
```

See also

- 109.3 Matrix.AddRow 5782
- 109.4 Matrix.AddRows 5783
- 109.13 Matrix.GetRow 5793

109.29.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.29.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 31

109.30 Matrix.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.SetValue"; MatrixRef; Row; Column { ; Value })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Row

The zero based row number.

2

Column

The zero based column number.

2

Value

Optional

The new value.

"Hello"

Result Returns OK or error.

Description

The original data type is retained.

Examples

Test set and get:

```
Set Variable [ $m ; Value: MBS( "Matrix.New"; 2; 2 ) ]
Set Variable [ $r ; Value: MBS( "Matrix.SetValue"; $m; 0; 0; Contacts::Company ) ]
Set Field [ Contacts::Job Title ; MBS( "Matrix.GetValue"; $m; 0; 0 ) ]
Set Variable [ $r ; Value: MBS( "Matrix.Free"; $m ) ]
```

Sets a value:

```
Set Variable [ $r; Value: MBS("Matrix.SetValue"; $matrix;1;1;40) ]
```

See also

- 109.11 Matrix.Free 5791
- 109.15 Matrix.GetValue 5795
- 109.23 Matrix.New 5806

109.30. *MATRIX.SETVALUE*

5817

- 109.28 Matrix.SetColumn

5812

109.30.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.30.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 17th December 2019.

109.31 Matrix.Sum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Sum"; MatrixRef; Column { ; firstRow; lastRow })

Parameters

MatrixRef

The matrix reference number.

\$matrix

Column

The index of the column. Default is 0.

0

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

Result Returns number or error.

Description

You got a record set in memory and we can walk over a column in a given row range to add the sum value.

Examples

Sums the values in a matrix:

```
Set Variable [ $matrix; Value: MBS("Matrix.New";3;3) ]
# Set the values of the matrix
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 0;"15$07$92" ) ]
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 1;"17$3$60" ) ]
Set Variable [ $r; Value: MBS( "Matrix.SetColumn"; $matrix; 2;"15$1$87" ) ]
# Add all numbers in the matrix (3x3)
Set Variable [ $a; Value: MBS( "Matrix.Sum"; $matrix; 0 ) ]
Set Variable [ $b; Value: MBS( "Matrix.Sum"; $matrix; 1 ) ]
Set Variable [ $c; Value: MBS( "Matrix.Sum"; $matrix; 2 ) ]
Set Variable [ $sum; Value: $a+$b+$c ]
```

```
Set Variable [ $r; Value: MBS("Matrix.Free"; $matrix) ]
```

See also

<i>109.31. MATRIX.SUM</i>	5819
• 80.35 FM.SQL.RowCount	4157
• 109.11 Matrix.Free	5791
• 109.23 Matrix.New	5806
• 109.28 Matrix.SetColumn	5812

109.31.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.31.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 31

Created 8th April 2019, last changed 17th December 2019.

109.32 Matrix.Text

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Text"; MatrixRef { ; firstRow; lastRow; firstCol; lastCol; rowSeparator; colSeparator })

Parameters

MatrixRef

The matrix reference number.

\$matrix

firstRow

Optional

The index of first row. Default is 0.

0

lastRow

Optional

The index of last row. Default is FM.SQL.RowCount-1.

5

firstCol

Optional

The index of first column. Default is 0.

0

lastCol

Optional

The index of last column. Default is FM.SQL.FieldCount-1.

6

rowSeparator

Optional

The row separator. Default is CR.

Char(13)

colSeparator

Optional

The column separator. Default is tab character.

Char(9)

Result Returns text or error.

Description

You can use this method to quickly get all values in a given area as text.

This joins the values and removes text formatting.

See also

- 80.27 FM.SQL.Field

<i>109.32. MATRIX.TEXT</i>	5821
• 80.28 FM.SQL.FieldCount	4143
• 80.35 FM.SQL.RowCount	4157
• 109.14 Matrix.GetText	5794
• 156.16 SQL.FieldCount	7321

Created 8th April 2019, last changed 15th November 2019.

109.33 Matrix.Width

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
109 Matrix	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Matrix.Width"; MatrixRef)

Parameters

MatrixRef

The matrix reference number.

\$matrix

Result Returns number or error.

Description

Examples

Check size of matrix:

```
If [ MBS("Matrix.Height"; $matrix) = MBS("Matrix.Width"; $Matrix) ]
Show Custom Dialog [ "The matrix is square" ; "number of rows and columns are equal!" ]
End If
```

See also

- 109.7 Matrix.Clear 5787
- 109.6 Matrix.CSV 5785
- 109.16 Matrix.Height 5797
- 109.23 Matrix.New 5806
- 109.24 Matrix.NewWithSQL 5808
- 109.27 Matrix.Resize 5811

109.33.1 Blog Entries

- [Matrix functions for FileMaker](#)

109.33.2 FileMaker Magazin

- Ausgabe 4/2019, Seite 30

Created 8th April 2019, last changed 17th December 2019.

Chapter 110

MatrixDongle

Use and work with matrix dongles.

110.1 MatrixDongle.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.Count" { ; PortNumber })

Parameters

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns number or error.

Description

Examples

Count dongles:

```
Set Field [ MatrixDongle::CountResult; MBS( "MatrixDongle.Count" ) ]
```

See also

- 110.2 MatrixDongle.Find

5825

- 110.9 MatrixDongle.MemorySize 5833
- 110.10 MatrixDongle.Model 5834
- 110.11 MatrixDongle.ReadHex 5835
- 110.12 MatrixDongle.ReadSerialNumber 5837
- 110.13 MatrixDongle.ReadText 5838
- 110.15 MatrixDongle.SetDriverFlag 5841
- 110.16 MatrixDongle.Version 5843
- 110.17 MatrixDongle.WriteHex 5844
- 110.18 MatrixDongle.WriteText 5845

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 1st August 2015.

110.2 MatrixDongle.Find

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.Find")

Result Returns number or error.

Description

The LPT port at which the dongle was found is returned: 1 for LPT1, 2 for LPT 2 or 3 for LPT3 or 85 for USB.

Note: This function only supplies the first port at which a dongle is found, regardless of whether other dongles are available at other LPT or USB interfaces.

Use MatrixDongle.Count function for more details.

Examples

Find dongles:

```
Set Field [ MatrixDongle::FindResult; MBS( "MatrixDongle.Find" ) ]
```

See also

- 110.1 MatrixDongle.Count 5823
- 110.10 MatrixDongle.Model 5834

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 1st August 2015.

110.3 MatrixDongle.GetDriverFlag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.GetDriverFlag"; UserCode { ; DongleNumber; PortNumber })

Parameters

UserCode

This is your personal UserCode and must correspond with the internal UserCode from the dongle.

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns number or error.

Description

Returns value 1 (HID) or 0 (Driver) is the requested USB operating mode of the dongle.

See also

- 110.1 MatrixDongle.Count 5823
- 110.15 MatrixDongle.SetDriverFlag 5841

Created 1st August 2015, last changed 1st August 2015.

110.4 MatrixDongle.GetVersionAPI

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.GetVersionAPI")

Result Returns version number or error.

Description

Format is x.y using major and minor version number.

Examples

Queries version of API:

Set Field [MatrixDongle::VersionAPI; MBS("MatrixDongle.GetVersionAPI")]

See also

- 110.5 MatrixDongle.GetVersionDRV 5828
- 110.6 MatrixDongle.GetVersionDRV.USB 5829

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 1st August 2015.

110.5 MatrixDongle.GetVersionDRV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.GetVersionDRV")

Result Returns version number or error.

Description

Format is x.y using major and minor version number.

See also

- 110.4 MatrixDongle.GetVersionAPI 5827
- 110.6 MatrixDongle.GetVersionDRV.USB 5829

Created 1st August 2015, last changed 1st August 2015.

110.6 MatrixDongle.GetVersionDRV.USB

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.GetVersionDRV.USB")

Result Returns version number or error.

Description

Format is x.y using major and minor version number.

Examples

Queries driver version:

Set Field [MatrixDongle::DriverVersion; MBS("MatrixDongle.GetVersionDrv.USB")]

See also

- 110.4 MatrixDongle.GetVersionAPI 5827
- 110.5 MatrixDongle.GetVersionDRV 5828

Created 1st August 2015, last changed 1st August 2015.

110.7 MatrixDongle.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.Initialize"; LibraryPath)

Parameters

LibraryPath

The native file path to the matrix library file.

\$path

Result Returns OK or error.

Description

Loads the library files: matrix64.dll, matrix32.dll or libmxmac260.dylib from disk.

You need to pass the path to the dynapdf library and the plugin loads it.

The matrix dll/dylib files are included with the matrix dongle SDK.

Be sure to use right 32-bit/64-bit driver depending on which bit number FileMaker has!

You can pass just the filename of library and the plugin finds it in the Extensions folder or in FileMaker's application folder.

If you get a crash here on MacOS, please check if crash report says Code Signature Invalid. Then you may need to code sign the dylib yourself to match the code signature of your application.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Initialize dongle functions:

```

If [ MBS( "SystemInfo.isMacOSX" ) = 1 ]
Set Variable [ $path; Value:MatrixDongle::LibraryPathMac ]
Else
Set Variable [ $path; Value:MatrixDongle::LibraryPathWin ]
End If
Set Variable [ $r; Value:MBS("MatrixDongle.Initialize"; $path) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed to initialize"; $r ]
Else
Show Custom Dialog [ "Initialize OK"; "The dongle functions are ready to use." ]
End If

```

See also

<i>110.7. MATRIXDONGLE.INITIALIZE</i>	5831
• 124.6 IsError	6266
• 110.8 MatrixDongle.Initialized	5832
• 121.2 Path.FileMakerPathToNativePath	6139
• 161.52 SystemInfo.isMacOSX	7706

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 14th November 2019.

110.8 MatrixDongle.Initialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.Initialized")

Result Returns 0 to 1.

Description

Returns 1, if MatrixDongle.Initialize was called successfully.

See also

- 110.7 MatrixDongle.Initialize

5830

Created 1st August 2015, last changed 1st August 2015.

110.9 MatrixDongle.MemorySize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.MemorySize" { ; DongleNumber; PortNumber })

Parameters

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns number or error.

Description

The memory size in bytes is returned. For example, if the ML-60 is connected, the return value is 60. With the ML-12, the return value is 12 etc.

To know the number of data fields, divide the result by 4.

Examples

Queries memory size:

```
Set Field [ MatrixDongle::MemorySize; MBS( "MatrixDongle.MemorySize" ) ]
```

See also

- 110.1 MatrixDongle.Count

5823

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 1st August 2015.

110.10 MatrixDongle.Model

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.Model" { ; DongleNumber; PortNumber })

Parameters

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns model number or error.

Description

Examples

Queries model:

```
Set Field [ MatrixDongle::Model; MBS( "MatrixDongle.Model" ) ]
```

See also

- 110.1 MatrixDongle.Count 5823
- 110.2 MatrixDongle.Find 5825
- 110.11 MatrixDongle.ReadHex 5835

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 1st August 2015.

110.11 MatrixDongle.ReadHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.ReadHex"; UserCode; Pos; Count { ; DongleNumber; PortNumber })

Parameters

UserCode

This is your personal UserCode and must correspond with the internal UserCode from the dongle.

Pos

The position to write at. This value is in 4 byte data words, so for 12 bytes offset pass 3.

0

Count

Number of data words to read. 4 bytes per data word.

1

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns hex encoded data or error.

Description

Starts reading at the given position and reads count number of data words.

See also

- 110.1 MatrixDongle.Count 5823
- 110.10 MatrixDongle.Model 5834
- 110.13 MatrixDongle.ReadText 5838
- 110.14 MatrixDongle.Release 5840
- 110.17 MatrixDongle.WriteHex 5844

110.12 MatrixDongle.ReadSerialNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.ReadSerialNumber"; UserCode { ; DongleNumber; PortNumber })

Parameters

UserCode

This is your personal UserCode and must correspond with the internal UserCode from the dongle.

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns number or error.

Description

See also

- 110.1 MatrixDongle.Count

5823

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 1st August 2015.

110.13 MatrixDongle.ReadText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.ReadText"; UserCode; Pos; Count { ; Encoding; DongleNumber; PortNumber })

Parameters

UserCode

This is your personal UserCode and must correspond with the internal UserCode from the dongle.

Pos

The position to write at. This value is in 4 byte data words, so for 12 bytes offset pass 3.

0

Count

Number of data words to read. 4 bytes per data word.

1

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

UTF8

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns text or error.

Description

Starts reading at the given position and reads count number of data words.

See also

- 110.1 MatrixDongle.Count 5823
- 110.11 MatrixDongle.ReadHex 5835

110.13. *MATRIXDONGLE.READTEXT*

5839

- 110.18 MatrixDongle.WriteText

5845

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 12nd November 2015.

110.14 MatrixDongle.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.Release")

Result Returns OK or error.

Description

See also

- 110.11 MatrixDongle.ReadHex

5835

Created 1st August 2015, last changed 1st August 2015.

110.15 MatrixDongle.SetDriverFlag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.SetDriverFlag"; UserCode; Mode { ; DongleNumber; PortNumber })

Parameters

UserCode

This is your personal UserCode and must correspond with the internal UserCode from the dongle.

Mode

Can have the value 0 or 1:0 - "Driver-Mode" - with a proprietary USB driver. 1 - "HID-Mode" - without any proprietary USB driver.

1

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns OK or error.

Description

Examples

Sets HID mode:

```
Set Variable [ $r; Value:MBS( "MatrixDongle.SetDriverFlag"; MatrixDongle::UserCode; 1) ]
```

See also

- 110.1 MatrixDongle.Count 5823
- 110.3 MatrixDongle.GetDriverFlag 5826

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 1st August 2015.

110.16 MatrixDongle.Version

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.Version" { ; DongleNumber; PortNumber })

Parameters

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns version number or error.

Description

Format is x.y using major and minor version number.

Examples

Queries version:

```
Set Field [ MatrixDongle::Version; MBS( "MatrixDongle.Version" ) ]
```

See also

- 110.1 MatrixDongle.Count

5823

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 1st August 2015.

110.17 MatrixDongle.WriteHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.WriteHex"; UserCode; Text { ; Pos; DongleNumber; PortNumber })

Parameters

UserCode

This is your personal UserCode and must correspond with the internal UserCode from the dongle.

Text

The hex text to write.

"48656C6C6F20576F726C64"

Pos

Optional

The position to write at. This value is in 4 byte data words, so for 12 bytes offset pass 3.

0

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns OK or error.

Description

The plugin decodes the hex bytes and writes them to the dongle as bytes.

See also

- 110.1 MatrixDongle.Count 5823
- 110.11 MatrixDongle.ReadHex 5835
- 110.18 MatrixDongle.WriteText 5845

Created 1st August 2015, last changed 1st August 2015.

110.18 MatrixDongle.WriteText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
110 MatrixDongle	5.2	Yes	Yes	Yes	No	No

MBS("MatrixDongle.WriteText"; UserCode; Text { ; Encoding; Pos; DongleNumber; PortNumber })

Parameters

UserCode

This is your personal UserCode and must correspond with the internal UserCode from the dongle.

Text

The text to write.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

UTF8

Pos

Optional

The position to write at. This value is in 4 byte data words, so for 12 bytes offset pass 3.

0

DongleNumber

Optional

This is the dongle number when several dongles are plugged in one after the other. The maximum number of dongles available can be determined via the MatrixDongle.Count function. A maximum of 99 dongles can be connected to the LPT port and a maximum of 127 dongles to the USB connection. The plugin uses 1 if you don't pass this parameter.

1

PortNumber

Optional

With LPT dongles, this is the number of the LPT port to which the dongles are connected. With LPT dongles, the port number must be between 1 and 3. Example: 1 for LPT1, 2 for LPT2 or 3 for LPT3. With USB, this parameter must be 85. This variable is ignored with network calls. Default for MBS Plugin is 85 for USB.

85

Result Returns OK or error.

Description

See also

- 110.1 MatrixDongle.Count 5823
- 110.13 MatrixDongle.ReadText 5838

- 110.17 MatrixDongle.WriteHex

Example Databases

- [MatrixDongle](#)

Created 1st August 2015, last changed 12nd November 2015.

Chapter 111

MediaLibraryBrowser

The browser panel from Mac OS X 10.9 Mavericks for importing photos, music and videos.

111.1 MediaLibraryBrowser.getMediaLibraries

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
111 MediaLibraryBrowser	3.5	Yes	No	No	No	No

MBS("MediaLibraryBrowser.getMediaLibraries")

Result Returns value or error.

Description

Requires Mac OS X 10.9.

Value is 1 for Audio, 2 for Image or 4 for Video.

See also

- 111.4 MediaLibraryBrowser.setMediaLibraries

5850

Created 18th August 2014, last changed 18th August 2014.

111.2 MediaLibraryBrowser.getVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
111 MediaLibraryBrowser	3.5	Yes	No	No	No	No

MBS("MediaLibraryBrowser.getVisible")

Result Returns value or error.

Description

Requires Mac OS X 10.9.

See also

- 111.3 MediaLibraryBrowser.setFrame 5849
- 111.5 MediaLibraryBrowser.setVisible 5851

Created 18th August 2014, last changed 18th August 2014.

111.3 MediaLibraryBrowser.setFrame

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
111 MediaLibraryBrowser	3.5	Yes	No	No	No	No

MBS("MediaLibraryBrowser.setFrame"; x; y; w; h)

Parameters**x**

New X coordinate.

20

y

New Y coordinate.

200

w

New width of panel.

300

h

New height of panel.

200

Result Returns OK or error.

Description

Requires Mac OS X 10.9.

Uses bottom up coordinates, so 0/0 is bottom left of main screen.

See also

- 111.2 MediaLibraryBrowser.getVisible 5848
- 111.5 MediaLibraryBrowser.setVisible 5851

Created 18th August 2014, last changed 18th August 2014.

111.4 MediaLibraryBrowser.setMediaLibraries

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
111 MediaLibraryBrowser	3.5	Yes	No	No	No	No

MBS("MediaLibraryBrowser.setMediaLibraries"; value)

Parameters

value

The new media library selection.

1

Result Returns OK or error.

Description

Requires Mac OS X 10.9. Currently only one type of media is supported.

Value is 1 for Audio, 2 for Image or 4 for Video.

See also

- 111.1 MediaLibraryBrowser.getMediaLibraries 5847

Example Databases

- [Mac only/MediaLibraryBrowser](#)

Created 18th August 2014, last changed 18th August 2014.

111.5 MediaLibraryBrowser.setVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
111 MediaLibraryBrowser	3.5	Yes	No	No	No	No

MBS("MediaLibraryBrowser.setVisible"; value)

Parameters

value

the new visible state. Can be 1 for visible and 0 for invisible.

1

Result Returns OK or error.

Description

Requires Mac OS X 10.9.

See also

- [111.2 MediaLibraryBrowser.getVisible](#) 5848
- [111.3 MediaLibraryBrowser.setFrame](#) 5849

Example Databases

- [Mac only/MediaLibraryBrowser](#)

Created 18th August 2014, last changed 18th August 2014.

111.6 MediaLibraryBrowser.togglePanel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
111 MediaLibraryBrowser	3.5	Yes	No	No	No	No

MBS("MediaLibraryBrowser.togglePanel")

Result Returns OK or error.

Description

Shows or hides the panel depending on current state.

Requires Mac OS X 10.9.

Created 18th August 2014, last changed 18th August 2014.

Chapter 112

Menu

Functions to create menus and show them as popup menu.

112.1 Menu.AddItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

```
MBS( "Menu.AddItem"; menu; item )
```

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns OK or error.

Description

Thus, the receiver does not accept the menu item if it already belongs to another menu. After adding the menu item, the receiver updates itself.

Examples

Show a context menu based on a table with menu entries:

```
# go to layout with menu entries  
Go to Layout [ "REP" (REP Reports) ]  
# this script can be called with various groups
```

```

Set Variable [ $type ; Value: Get(ScriptParameter) ]
# make a new menu
Set Variable [ $menu ; Value: MBS( "Menu.CreateMenu" ) ]
# loop over records
Go to Record/Request/Page [ First ]
Loop
# if group matches
If [ REP Reports::Group = $type ]
# add new menu item with title from table
Set Variable [ $item ; Value: MBS( "MenuItem.CreateMenuItem"; REP Reports::LabelReport) ]
# define which script to call if menu item is selected
Set Variable [ $r ; Value: MBS( "MenuItem.SetScriptAction"; $item; Get(FileName); REP Reports::Script
) ]
# add item to menu
Set Variable [ $r ; Value: MBS( "Menu.AddItem"; $menu; $item ) ]
End If
# next record?
Go to Record/Request/Page [ Next ; Exit after last ]
End Loop
# switch layout back
Go to Layout [ original layout ]
# Show menu
Set Variable [ $r ; Value: MBS( "Menu.PopUp"; $menu; "mouse" ) ]
# Cleanup memory
Set Variable [ $r ; Value: MBS( "Menu.Release"; $menu) ]

```

See also

- 112.2 Menu.AddItem 5856
- 112.38 MenuItem.CreateSeparator 5905
- 112.86 MenuItem.SetFontColor 5956
- 112.88 MenuItem.SetFontSize 5960
- 112.91 MenuItem.SetImage 5964
- 112.93 MenuItem.SetKeyEquivalent 5968
- 112.102 MenuItem.SetScriptAction 5979
- 112.104 MenuItem.SetState 5982
- 112.111 MenuItem.SetUnderline 5990
- 112.110 MenuItem.SetURL 5989

Example Databases

- [Menu/Popup Menu](#)

112.1.1 Blog Entries

- [Tip of the day: Build contextual menu in FileMaker from a table](#)
- [Colors for Menus in FileMaker](#)

Created 18th August 2014, last changed 11st September 2015.

112.2 Menu.AddItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.AddItems"; menu; titles { ; tags })

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

titles

The list of titles for new menu items.

"Hello"

tags

Optional

The tags for the entries.

Result Returns OK or error.

Description

If the list of titles includes a line with "-" the plugin version 4.5 and newer will use a separator for this item.

Examples

Add two items

```
MBS( "Menu.AddItems"; $menu; "Hello$World" )
```

Add two items with tags

```
MBS( "Menu.AddItems"; $menu; "Hello$World"; "11$12" )
```

QuickMenu custom function:

```
/* Parameters: Items */
Let ( [
/* Create a menu */
menu = MBS( "Menu.CreateMenu" );
/* add items from our parameter */
m2 = MBS( "Menu.AddItems"; menu; Items );
/* show menu at mouse position */
m3 = MBS( "Menu.PopUp"; menu; "mouse"; 0; 0 );
/* query selected item */
selectedItem = MBS( "Menu.SelectedItem"; menu );
/* if something is selected, query its text */
result = If( Length(selectedItem) > 0; MBS( "MenuItem.GetTitle"; selectedItem ); "" );
/* Cleanup menu */
```

```
m5 = MBS( "Menu.Release"; menu; 1 )
```

```
];
```

```
/* return selection */
result )
```

QuickMenu custom function with tags

```
/* Parameters: Items, Tags */
```

```
Let ( [
```

```
/* Create a menu */
```

```
menu = MBS( "Menu.CreateMenu" );
```

```
/* add items from our parameter */
```

```
m2 = MBS( "Menu.AddItem"; menu; Items; Tags );
```

```
/* show menu at mouse position */
```

```
m3 = MBS( "Menu.PopUp"; menu; "mouse"; 0; 0 );
```

```
/* query selected item */
```

```
selectedItem = MBS( "Menu.SelectedItem"; menu );
```

```
/* if something is selected, query its text */
```

```
result = If( Length(selectedItem )>0; MBS( "MenuItem.GetTag"; selectedItem ); "" );
```

```
/* Cleanup menu */
```

```
m5 = MBS( "Menu.Release"; menu; 1 )
```

```
];
```

```
/* return selected tag */
result )
```

See also

- 112.1 Menu.AddItem 5853
- 112.3 Menu.CreateMenu 5859
- 112.22 Menu.PopUp 5882
- 112.23 Menu.Release 5886
- 112.28 Menu.SelectedItem 5892
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939

Example Databases

- [Menu/Popup Menu](#)

112.2.1 Blog Entries

- [QuickMenu function](#)
- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 18th August 2014, last changed 1st December 2014.

112.3 Menu.CreateMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.CreateMenu" { ; title })

Parameters

title

Optional

The title for the menu.

"Hello"

Result Return menu reference or error.

Description

You need to later release it with Menu.Release function.

Menu reference numbers are starting at 10000 and counting up for each new menu.

Examples

Show a context menu based on a table with menu entries:

```
# go to layout with menu entries
Go to Layout [ "REP" (REP Reports) ]
# this script can be called with various groups
Set Variable [ $type ; Value: Get(ScriptParameter) ]
# make a new menu
Set Variable [ $menu ; Value: MBS( "Menu.CreateMenu" ) ]
# loop over records
Go to Record/Request/Page [ First ]
Loop
# if group matches
If [ REP Reports::Group = $type ]
# add new menu item with title from table
Set Variable [ $item ; Value: MBS( "MenuItem.CreateMenuItem"; REP Reports::LabelReport) ]
# define which script to call if menu item is selected
Set Variable [ $r ; Value: MBS( "MenuItem.SetScriptAction"; $item; Get(FileName); REP Reports::Script
) ]
# add item to menu
Set Variable [ $r ; Value: MBS( "Menu.AddItem"; $menu; $item ) ]
End If
# next record?
Go to Record/Request/Page [ Next ; Exit after last ]
End Loop
# switch layout back
Go to Layout [ original layout ]
# Show menu
Set Variable [ $r ; Value: MBS( "Menu.PopUp"; $menu; "mouse" ) ]
```

```
# Cleanup memory  
Set Variable [ $r ; Value: MBS( "Menu.Release"; $menu) ]
```

See also

- [112.1 Menu.AddItem](#) 5853
- [112.22 Menu.PopUp](#) 5882
- [112.27 Menu.RemoveItemAtIndex](#) 5891
- [112.28 Menu.SelectedItem](#) 5892
- [112.29 Menu.SetAllowsContextMenuPlugIns](#) 5894
- [112.30 Menu.SetEvaluate](#) 5895
- [112.31 Menu.SetMinimumWidth](#) 5896
- [112.36 Menu.SetURL](#) 5902
- [112.70 MenuItem.GetTag](#) 5937
- [112.92 MenuItem.SetItalic](#) 5966

Example Databases

- [Menu/Popup Menu](#)

112.3.1 Blog Entries

- [Tip of the day: Build contextual menu in FileMaker from a table](#)
- [Colors for Menus in FileMaker](#)
- [QuickMenu function](#)

Created 18th August 2014, last changed 11st September 2015.

112.4 Menu.DefineQuickMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("Menu.DefineQuickMenu"; Name; Definition)

Parameters

Name

The title of the new menu.

"MainMenu"

Definition

The menu definition.

"Red;1\$Blue;2\$Yellow;3"

Result Returns menu reference or error.

Description

This function allows you to easily create a menu with a definition. The first two parameters are required. The "Name" parameter is the name of the menu.

The "Definition" parameter is a return-delimited list of menu items for this menu. Each line represents one item on the menu. You can specify a tag value for a menu item by appending a semi-colon and the value onto the end of the item name. For example, if you had "Blue;0000FF" on a line, your menu would have an item with the title "Blue" and when a user selected that item, the tag value "0000FF" could be used for your script. For sub-menus, specify the name of the sub-menu, followed by a greater-than sign (>) followed by the next sub-menu name or menu item. For example, if you had "Colors>Red" on a line, your menu would have a sub-menu named "Colors" with an item inside named "Red". Every sub-menu and menu item can be preceded with one or more special "meta tags" to specify different styles and marks for the sub-menu or item name as explained below:

You can specify more than one of the above for any item to set multiple attributes at once, with the exception of the check mark, bullet mark, and diamond mark. You can only have one mark defined for a menu item. For example, if you had "!# % Delete Record" on a line, your menu would have an item with the name "Delete Record" that appeared disabled, bold, and italicized. If you need to display a menu item that starts with one of these "meta tags", you can use the equals ("=") meta tag to skip the meta tag processing for the item. For example, if you had "=\$4.00" on a line, your menu would have an item with the name "\$4.00" instead of a menu named "4.00" that required you to press the shift key in order to make the item visible.

Not all features available on Windows!

With 5.2 plugin the name of the menu also defines the identifier to use. You can leave name empty to use reference number provided by plugin.

Examples

Define a menu:

!	The item will appear disabled.
\$	The item will require the shift key to be pressed in order to show up.
^	The item will require the control key to be pressed in order to show up.
~	The item will require the alt/option key to be pressed in order to show up. (this is the tilde character, which is shifted version of the key to the left of the 1 on English keyboards) (only available on Mac)
@	The item will require the command key to be pressed in order to show up. (only available on Mac)
#	The item will appear bold.
%	The item will appear italicized.
_	The item will appear underlined.
' or √	The item will appear with a check mark. (this is the backtick character, which is the key to the left of the 1 on English keyboards) (on Mac, you can also use opt-v to type an actual check mark)
* or •	The item will appear with a bullet mark. (On Mac, you can also use opt-8 to type an actual bullet mark)
+ or	The item will appear with a diamond mark. (On Mac, you can also use shift-opt-v to type an actual diamond mark)
=	disable the meta tag processing for the rest of the sub-menu or item name.
-	The item is a separator.

```
MBS( "Menu.DefineQuickMenu"; "ColorsMenu" ; "Red;1$Blue;2$Yellow;3" )
```

Define a menu with submenus:

```
MBS( "Menu.DefineQuickMenu"; "ColorsMenu"; "Warm colors>Red$Warm colors>Yellow$Warm colors>Orange$Cool colors>Blue$Cool colors>Green$Cool colors>Purple")
```

Define a menu with checkmark:

```
MBS( "Menu.DefineQuickMenu"; "Current Fruit"; "Banana;Cherry;'Grape;Orange" )
```

Choose from menu with one Let statement:

```
// show menu with one let statement
Let ( [
// some list of menu entries
valuelist = "xxx$yyy$zzz" ;
// create menu from definition
menu = MBS ( "Menu.DefineQuickmenu"; "x" ; valuelist ) ;
// show menu near mouse
result = MBS ( "Menu.popup" ; menu ; "mouse" ) ;
```

112.4. MENU.DEFINEQUICKMENU

5863

```
// query selected item number
item = IF ( result = 1 ; MBS("Menu.SelectedItem"; menu) ) ;
// query title for that item
title = IF ( Length ( item >0 ) ; MBS ( "MenuItem.GetTitle" ; item ) ) ;
// release memory
r = MBS ( "Menu.Release"; menu ) ] ;
// return the selected title
title )
```

See also

- [112.5 Menu.DefineQuickMenuXML](#) 5864
- [112.22 Menu.PopUp](#) 5882
- [112.23 Menu.Release](#) 5886
- [112.28 Menu.SelectedItem](#) 5892
- [112.71 MenuItem.GetTitle](#) 5939

Example Databases

- [Menu/DefineQuickMenu](#)

112.4.1 Blog Entries

- [MBS FileMaker Plugin IDs](#)
- [MBS FileMaker Plugin, version 6.3pr3](#)
- [MBS FileMaker Plugin, version 5.2pr6](#)
- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 18th June 2016.

112.5 Menu.DefineQuickMenuXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.2	Yes	Yes	No	No	No

MBS("Menu.DefineQuickMenuXML"; XML)

Parameters

XML

The description XML.

Result Returns menu reference or error.

Description

The xml has a root entry called "menu". Each menu entry can have attributes title, tag, groupID, scriptname, filename and modifierkeys. A menu can have subnodes of name menu or item. The item can have attributes title, tag, scriptname, filename, tag, enabled, selectable, Separator, mark, style, GroupID or modifierkeys.

Modifierkeys can include shift, control, option or command.

Mark can include mixed, bullet, diamond or checked.

Style can include bold, italic or underline.

If an item has name "-" or Separator=1 attribute, the plugin will mark it as being a separator.

If the root menu entry has a name, we can use that name as menu reference.

Added FontColor and BackColor in version 9.4.

Examples

Defines a quick menu with XML:

```
MBS( "Menu.DefineQuickMenuXML"; "<menu name=\"menue\">
<menuitem name=\"Red\" value=\"1\" />
<menuitem name=\"Blue\" value=\"2\" />
<menuitem name=\"Yellow\" value=\"3\" />
</menu>" )
```

Define a menu with submenus:

```
MBS( "Menu.DefineQuickMenuXML"; "<menu name=\"menue\">
<submenu name=\"Warm Colors\">
<menuitem name=\"Red\" value=\"1\" />
<menuitem name=\"Blue\" value=\"2\" />
<menuitem name=\"Yellow\" value=\"3\" />
</submenu>
<submenu name=\"Cool Colors\">
<menuitem name=\"Blue\" value=\"4\" />
<menuitem name=\"Green\" value=\"5\" />
<menuitem name=\"Purple\" value=\"6\" />
</submenu>
</menu>" )
```

112.5. MENU.DEFINEQUICKMENUXML

5865

```
</submenu>  
</menu>\”)” )
```

See also

- [112.4 Menu.DefineQuickMenu](#)

5861

Example Databases

- [Menu/DefineQuickMenu with XML](#)

112.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr1](#)
- [MBS FileMaker Plugin, version 5.2pr3](#)
- [MBS FileMaker Plugin, version 5.2pr2](#)

Created 6th June 2015, last changed 24th July 2019.

112.6 Menu.FindItemWithTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("Menu.FindItemWithTag"; menu; Tag)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.
\$menu

Tag

The tag text to search.

Result Returns reference number or error.

Description

See also MenuItem.GetTag and MenuItem.SetTag.

Examples

Find an item:

```
MBS("Menu.FindItemWithTag"; $menu; "Test")
```

See also

- 112.3 Menu.CreateMenu 5859
- 112.7 Menu.FindItemWithTitle 5867
- 112.70 MenuItem.GetTag 5937
- 112.107 MenuItem.SetTag 5986

112.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr7](#)

Created 29th April 2015, last changed 29th April 2015.

112.7 Menu.FindItemWithTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("Menu.FindItemWithTitle"; menu; Title)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.
\$menu

Title

The title text to search.

Result Returns reference number or error.

Description

See also MenuItem.GetTittle and MenuItem.SetTitle.

Examples

Find an item:

```
MBS("Menu.FindItemWithTitle"; $menu; "Test")
```

See also

- 112.3 Menu.CreateMenu 5859
- 112.6 Menu.FindItemWithTag 5866
- 112.108 MenuItem.SetTitle 5987

112.7.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr7](#)

Created 29th April 2015, last changed 29th April 2015.

112.8 Menu.GetAllowsContextMenuPlugIns

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("Menu.GetAllowsContextMenuPlugIns"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns 1, 0 or error.

Description

See also Menu.SetAllowsContextMenuPlugIns.

See also

- 112.3 Menu.CreateMenu 5859
- 112.29 Menu.SetAllowsContextMenuPlugIns 5894

Created 18th August 2014, last changed 18th August 2014.

112.9 Menu.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.1	Yes	Yes	No	No	No

MBS("Menu.GetEvaluate"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns OK or error.

Description

See also

- 112.3 Menu.CreateMenu 5859
- 112.30 Menu.SetEvaluate 5895
- 112.44 MenuItem.GetEvaluate 5911

112.9.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

112.10 Menu.GetMinimumWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("Menu.GetMinimumWidth"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns value or error.

Description

Available in OS X v10.6 and later.

The minimum width of the menu in screen coordinates.

See also Menu.SetMinimumWidth.

See also

- 112.3 Menu.CreateMenu 5859
- 112.31 Menu.SetMinimumWidth 5896

Created 18th August 2014, last changed 18th August 2014.

112.11 Menu.GetScriptFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.GetScriptFileName"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns file name or error.

Description

See also

- 88.9 HotKey.GetScriptFileName 4839
- 112.3 Menu.CreateMenu 5859
- 112.12 Menu.GetScriptName 5872
- 112.32 Menu.SetScriptAction 5897
- 112.64 MenuItem.GetScriptFileName 5931

Created 18th August 2014, last changed 31st August 2014.

112.12 Menu.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.GetScriptName"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns script name or error.

Description

See also

- 112.3 Menu.CreateMenu 5859
- 112.11 Menu.GetScriptFileName 5871
- 112.32 Menu.SetScriptAction 5897
- 112.65 MenuItem.GetScriptName 5932

Created 18th August 2014, last changed 31st August 2014.

112.13 Menu.GetShowsStateColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("Menu.GetShowsStateColumn"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns 0, 1 or error.

Description

Available in OS X v10.5 and later.

See also Menu.SetShowsStateColumn.

See also

- 112.3 Menu.CreateMenu 5859
- 112.33 Menu.SetShowsStateColumn 5899

Created 18th August 2014, last changed 18th August 2014.

112.14 Menu.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.GetTag"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns value or error.

Description

See also Menu.SetTag.

With the tag, we allow you to associate a text with the menu item, for example a record ID.

See also

- 112.3 Menu.CreateMenu 5859
- 112.16 Menu.GetURL 5876
- 112.34 Menu.SetTag 5900
- 112.107 MenuItem.SetTag 5986

Created 18th August 2014, last changed 31st August 2014.

112.15 Menu.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.GetTitle"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns title or error.

Description

See also Menu.SetTitle.

See also

- 112.3 Menu.CreateMenu 5859
- 112.35 Menu.SetTitle 5901

Created 18th August 2014, last changed 31st August 2014.

112.16 Menu.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	Yes	Yes	No	No	No

MBS("Menu.GetURL"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns text or error.

Description

See also

- [112.3 Menu.CreateMenu](#) 5859
- [112.14 Menu.GetTag](#) 5874
- [112.36 Menu.SetURL](#) 5902

112.16.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

112.17 Menu.InsertItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.InsertItem"; menu; item; index)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

index

An integer index identifying the location of the menu item in the menu.

0

Result Returns OK or error.

Description

See also

- 112.3 Menu.CreateMenu 5859
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905

112.17.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 18th August 2014, last changed 31st August 2014.

112.18 Menu.ItemAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.0	Yes	Yes	No	No	No

MBS("Menu.ItemAtIndex"; menu; Index)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Index

The index of the menu item to query.

0

Result Returns OK or error.

Description

Index is zero based and ranges from 0 to Menu.NumberOfItems-1.

See also

- 112.3 Menu.CreateMenu 5859
- 112.21 Menu.NumberOfItems 5881

112.18.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 1st December 2014, last changed 1st December 2014.

112.19 Menu.Items

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.0	Yes	Yes	No	No	No

MBS("Menu.Items"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns list of IDs or error.

Description

See also

- 112.3 Menu.CreateMenu

5859

112.19.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 1st December 2014, last changed 20th August 2015.

112.20 Menu.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	10.1	Yes	Yes	No	No	No

MBS("Menu.List")

Result Returns list or error.

Description

112.20.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr7](#)

Created 5th March 2020, last changed 5th March 2020.

112.21 Menu.NumberOfItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.NumberOfItems"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns number or error.

Description

See also

- 112.3 Menu.CreateMenu 5859
- 112.18 Menu.ItemAtIndex 5878
- 112.27 Menu.RemoveItemAtIndex 5891

Created 18th August 2014, last changed 31st August 2014.

112.22 Menu.PopUp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.PopUp"; menu; mode { ; x; y; window; item; objectName })

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

mode

The mode to use. Can be "mouse", "screen" or "window". Default is mouse for leaving away the parameter or passing empty text. Version 8.3 adds mode "content" to make it relative to the content part of the window, below toolbars.

"mouse"

x

Optional

The relative x coordinates for the position relative to the mouse, screen or window.

0

y

Optional

The relative y coordinates for the position relative to the mouse, screen or window.

0

window

Optional

The window reference for the showing menu relative to a window.

\$window

item

Optional

The menu item to be positioned at the specified location in the view.

\$item

objectName

Optional

The object name for mode=object.

"web"

Result Returns 1, 0 or error.

Description

The top left corner of the specified item (if specified, item must be present in the receiver) is positioned at the specified location in the specified view, interpreted in the view's own coordinate system.

If you call this on the server for webdirect, the menu will show on the server, not in the browser.

Returns 1 if item was selected or 0 if not.

If you like to show a context menu only when user did a right mouse click, you can use the EventMonitor.LastMouseClickedButton function to check mouse state.

Examples

Show a context menu based on a table with menu entries:

```
# go to layout with menu entries
Go to Layout [ "REP" (REP Reports) ]
# this script can be called with various groups
Set Variable [ $type ; Value: Get(ScriptParameter) ]
# make a new menu
Set Variable [ $menu ; Value: MBS( "Menu.CreateMenu" ) ]
# loop over records
Go to Record/Request/Page [ First ]
Loop
# if group matches
If [ REP Reports::Group = $type ]
# add new menu item with title from table
Set Variable [ $item ; Value: MBS( "MenuItem.CreateMenuItem"; REP Reports::LabelReport) ]
# define which script to call if menu item is selected
Set Variable [ $r ; Value: MBS( "MenuItem.SetScriptAction"; $item; Get(FileName); REP Reports::Script
) ]
# add item to menu
Set Variable [ $r ; Value: MBS( "Menu.AddItem"; $menu; $item ) ]
End If
# next record?
Go to Record/Request/Page [ Next ; Exit after last ]
End Loop
# switch layout back
Go to Layout [ original layout ]
# Show menu
Set Variable [ $r ; Value: MBS( "Menu.PopUp"; $menu; "mouse" ) ]
# Cleanup memory
Set Variable [ $r ; Value: MBS( "Menu.Release"; $menu) ]
```

Show menu and show selection:

```
Set Variable [ $menu; Value:MBS("Menu.CreateMenu" ) ]
# create menu items...
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Hello World" ) ]
Set Variable [ $r; Value:MBS("MenuItem.SetTag"; $item; "secret value" ) ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
#
# show menu
Set Variable [ $m; Value:MBS("Menu.PopUp"; $Menu; "mouse" ) ]
#
# you selected something?
If [ $m = 1 ]
```

```

Set Variable [ $selectedItem; Value:MBS("Menu.SelectedItem"; $menu) ]
Set Variable [ $selectedTitle; Value:MBS("MenuItem.GetTitle"; $selectedItem) ]
Set Variable [ $selectedTag; Value:MBS("MenuItem.GetTag"; $selectedItem) ]
#
Show Custom Dialog [ "Auswahl"; $selectedItem & §& $selectedTitle & §& $selectedTag ]
End If
Set Variable [ $m; Value:MBS("Menu.Release"; $Menu; 1) ]

```

Choose from menu with one Let statement:

```

// show menu with one let statement
Let ( [
// some list of menu entries
valuelist = "xxx$yyy$zzz" ;
// create menu from definition
menu = MBS ( "Menu.DefineQuickmenu"; "x" ; valuelist ) ;
// show menu near mouse
result = MBS ( "Menu.popup" ; menu ; "mouse" ) ;
// query selected item number
item = IF ( result = 1 ; MBS("Menu.SelectedItem"; menu) ) ;
// query title for that item
title = IF ( Length ( item >0 ) ; MBS ( "MenuItem.GetTitle" ; item ) ) ;
// release memory
r = MBS ( "Menu.Release"; menu ) ] ;
// return the selected title
title )

```

Run menu at logo object:

```
MBS("Menu.PopUp"; $Menu; "object"; 0; 0; Get(WindowName); "" ; "logo")
```

See also

- 75.5 EventMonitor.LastMouseClickedButton 3497
- 112.1 Menu.AddItem 5853
- 112.3 Menu.CreateMenu 5859
- 112.4 Menu.DefineQuickMenu 5861
- 112.23 Menu.Release 5886
- 112.28 Menu.SelectedItem 5892
- 112.37 MenuItem.CreateMenuItem 5903
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939

112.22. MENU.POPUP

5885

- 112.102 MenuItem.SetScriptAction

5979

Example Databases

- [Menu/DefineQuickMenu with XML](#)
- [Menu/DefineQuickMenu](#)
- [Menu/Popup Menu](#)

112.22.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [Tip of the day: Build contextual menu in FileMaker from a table](#)
- [QuickMenu function](#)
- [MBS Filemaker Plugin, version 4.1pr4](#)

Created 18th August 2014, last changed 7th April 2019.

112.23 Menu.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.Release"; menu { ; children })

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.
\$menu

children

Optional

If 1, releases all child menu items and child menus.
0

Result Returns OK or error.

Description

You need to release menus after you finished using it to avoid running out of memory.

See also

- 112.1 Menu.AddItem 5853
- 112.2 Menu.AddItems 5856
- 112.3 Menu.CreateMenu 5859
- 112.4 Menu.DefineQuickMenu 5861
- 112.22 Menu.PopUp 5882
- 112.24 Menu.ReleaseAll 5888
- 112.28 Menu.SelectedItem 5892
- 112.37 MenuItem.CreateMenuItem 5903
- 112.70 MenuItem.GetTag 5937

Example Databases

- [Menu/DefineQuickMenu with XML](#)
- [Menu/DefineQuickMenu](#)
- [Menu/Popup Menu](#)

112.23.1 Blog Entries

- [Tip of the day: Build contextual menu in FileMaker from a table](#)
- [QuickMenu function](#)

Created 18th August 2014, last changed 31st August 2014.

112.24 Menu.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.ReleaseAll")

Result Returns OK or error.

Description

You can call this method to release all previously created menus or menuitems before you build a new one.

See also

- 97.11 Java.ReleaseAll 5174
- 100.67 JSON.ReleaseAll 5338
- 112.23 Menu.Release 5886
- 163.29 TAPI.ReleaseAll 7756
- 191.30 XML.ReleaseAll 9300

Example Databases

- [Menu/Popup Menu](#)

Created 18th August 2014, last changed 31st August 2014.

112.25 Menu.RemoveAllItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.RemoveAllItems"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns OK or error.

Description

This function is more efficient than removing menu items individually.

See also

- 112.3 Menu.CreateMenu 5859
- 112.26 Menu.RemoveItem 5890

Created 18th August 2014, last changed 31st August 2014.

112.26 Menu.RemoveItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.RemoveItem"; menu; item)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

item

The reference to the menu item to be removed.

\$item

Result Returns OK or error.

Description

Please use Menu.RemoveItemAtIndex if you have the index and not the reference number.

See also

- 112.3 Menu.CreateMenu 5859
- 112.25 Menu.RemoveAllItems 5889
- 112.27 Menu.RemoveItemAtIndex 5891

Created 18th August 2014, last changed 29th April 2015.

112.27 Menu.RemoveItemAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.RemoveItemAtIndex"; menu; index)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

index

An integer index identifying the menu item. Index must be between 0 and Menu.NumberOfItems-1.

0

Result Returns OK or error.

Description

Please use Menu.RemoveItem if you have the reference number and not the index.

See also

- 112.3 Menu.CreateMenu 5859
- 112.21 Menu.NumberOfItems 5881
- 112.26 Menu.RemoveItem 5890

112.27.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)

Created 18th August 2014, last changed 29th April 2015.

112.28 Menu.SelectedItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.SelectedItem"; menu)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Result Returns reference number or error.

Description

Examples

Show menu and show selection:

```
Set Variable [ $menu; Value:MBS("Menu.CreateMenu") ]
# create menu items...
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Hello World") ]
Set Variable [ $r; Value:MBS("MenuItem.SetTag"; $item; "secret value") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
#
# show menu
Set Variable [ $m; Value:MBS("Menu.PopUp"; $Menu; "mouse") ]
#
# you selected something?
If [ $m = 1 ]
Set Variable [ $selectedItem; Value:MBS("Menu.SelectedItem"; $menu) ]
Set Variable [ $selectedTitle; Value:MBS("MenuItem.GetTitle"; $selectedItem) ]
Set Variable [ $selectedTag; Value:MBS("MenuItem.GetTag"; $selectedItem) ]
#
Show Custom Dialog [ "Auswahl"; $selectedItem & $& $selectedTitle & $& $selectedTag ]
End If
Set Variable [ $m; Value:MBS("Menu.Release"; $Menu; 1) ]
```

Choose from menu with one Let statement:

```
// show menu with one let statement
Let ( [
// some list of menu entries
valuelist = "xxx$yyy$zzz" ;
// create menu from definition
menu = MBS ( "Menu.DefineQuickmenu"; "x" ; valuelist ) ;
// show menu near mouse
result = MBS ( "Menu.popup" ; menu ; "mouse" ) ;
```


112.28. MENU.SELECTEDITEM

5893

```
// query selected item number
item = IF ( result = 1 ; MBS("Menu.SelectedItem"; menu ) ) ;
// query title for that item
title = IF ( Length ( item >0 ) ; MBS ( "MenuItem.GetTitle" ; item ) ) ;
// release memory
r = MBS ( "Menu.Release"; menu ) ] ;
// return the selected title
title )
```

See also

- [112.1 Menu.AddItem](#) 5853
- [112.2 Menu.AddItems](#) 5856
- [112.3 Menu.CreateMenu](#) 5859
- [112.4 Menu.DefineQuickMenu](#) 5861
- [112.22 Menu.PopUp](#) 5882
- [112.23 Menu.Release](#) 5886
- [112.37 MenuItem.CreateMenuItem](#) 5903
- [112.70 MenuItem.GetTag](#) 5937
- [112.71 MenuItem.GetTitle](#) 5939
- [112.107 MenuItem.SetTag](#) 5986

Example Databases

- [Menu/DefineQuickMenu with XML](#)
- [Menu/DefineQuickMenu](#)

112.28.1 Blog Entries

- [QuickMenu function](#)
- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 18th August 2014, last changed 18th June 2016.

112.29 Menu.SetAllowsContextMenuPlugIns

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("Menu.SetAllowsContextMenuPlugIns"; menu; value)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

value

1 if the popup menu should allow context menu plugin items to be appending, otherwise 0.

1

Result Returns OK or error.

Description

Contextual menu plugins are system-wide services provided by other applications. For example, a contextual menu plugin might provide an "Open URL..." service. By enabling context menu plugins your application's contextual menu will display the appropriate items for the currently selected data type.

See also Menu.GetAllowsContextMenuPlugIns.

See also

- 112.3 Menu.CreateMenu 5859
- 112.8 Menu.GetAllowsContextMenuPlugIns 5868

Created 18th August 2014, last changed 18th August 2014.

112.30 Menu.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.1	Yes	Yes	No	No	No

MBS("Menu.SetEvaluate"; menu; Expression)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the hotkey reference, so you can pass it to other functions if needed.

See also

- 112.3 Menu.CreateMenu 5859
- 112.9 Menu.GetEvaluate 5869
- 112.85 MenuItem.SetEvaluate 5955

112.30.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)
- [Evaluate vs. Script Trigger](#)

Created 4th March 2016, last changed 4th April 2018.

112.31 Menu.SetMinimumWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("Menu.SetMinimumWidth"; menu; width)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

width

The minimum width of the menu in screen coordinates.

0

Result Returns OK or error.

Description

The menu will not draw smaller than its minimum width, but may draw larger if it needs more space. The default value is 0.

See also Menu.GetMinimumWidth.

See also

- 112.3 Menu.CreateMenu 5859
- 112.10 Menu.GetMinimumWidth 5870

Created 18th August 2014, last changed 18th August 2014.

112.32 Menu.SetScriptAction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.SetScriptAction"; menu; FileName; ScriptName { ; ScriptParameter })

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

FileName

The filename of file which contains the script.

"Menus.fmp12"

ScriptName

The name of the script.

"MenuScript"

ScriptParameter

Optional

If you want a specific script parameter. Default is to leave empty and get the ID fo the menu item.

Result Returns OK or error.

Description

You can use MenuItem.SetScriptAction to associate a script with individual items or use this function for a whole menu.

See also Menu.GetScriptFileName and Menu.GetScriptName.

The script parameter is the MenuItem reference, so you can use functions like MenuItem.GetTitle to get the title or MenuItem.GetTag to get an associated value.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 112.3 Menu.CreateMenu 5859
- 112.11 Menu.GetScriptFileName 5871
- 112.12 Menu.GetScriptName 5872
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939
- 112.102 MenuItem.SetScriptAction 5979

Example Databases

- [Menu/Popup Menu](#)

112.32.1 Blog Entries

- [MBS FileMaker Plugin, version 5.5pr4](#)

Created 18th August 2014, last changed 27th January 2016.

112.33 Menu.SetShowsStateColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("Menu.SetShowsStateColumn"; menu; value)

Parameters**menu**

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

value

Pass 1 to show or 0 to hide the state column.

1

Result Returns OK or error.

Description

Available in OS X v10.5 and later.

See also Menu.GetShowsStateColumn.

See also

- 112.3 Menu.CreateMenu 5859
- 112.13 Menu.GetShowsStateColumn 5873

Created 18th August 2014, last changed 18th August 2014.

112.34 Menu.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.SetTag"; menu; value)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

value

The new tag value.

Get(RecordID)

Result Returns OK or error.

Description

See also Menu.GetTag.

With the tag, we allow you to associate a text with the menu item, for example a record ID.

See also

- 112.3 Menu.CreateMenu 5859
- 112.14 Menu.GetTag 5874
- 112.36 Menu.SetURL 5902
- 112.70 MenuItem.GetTag 5937

Created 18th August 2014, last changed 31st August 2014.

112.35 Menu.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("Menu.SetTitle"; menu; value)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

value

The new title.

"Hello"

Result Returns OK or error.

Description

See also Menu.GetTitle.

See also

- 112.3 Menu.CreateMenu 5859
- 112.15 Menu.GetTitle 5875

Created 18th August 2014, last changed 31st August 2014.

112.36 Menu.SetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	Yes	Yes	No	No	No

MBS("Menu.SetURL"; menu; URL)

Parameters

menu

The reference to the menu. Please create one with Menu.CreateMenu.

\$menu

URL

The URL to trigger.

Result Returns OK or error.

Description

\$\$ID\$\$ in the URL is replaced with menu ID.

Queries http/ftp/sftp URLs with CURL, other URLs passed to OS to open.

See also

- 112.3 Menu.CreateMenu 5859
- 112.16 Menu.GetURL 5876
- 112.34 Menu.SetTag 5900

112.36.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

112.37 MenuItem.CreateMenuItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.CreateMenuItem" { ; Title; keyEquivalent })

Parameters

Title

Optional

The title of the menu item.

"Hello World"

keyEquivalent

Optional

Optional, a string representing a keyboard key to be used as the key equivalent.

"T"

Result Returns menu item reference number or error.

Description

You later need to release it with MenuItem.Release.

Menu item reference numbers are starting at 11000 and counting up for each new menu item.

Examples

Show a context menu based on a table with menu entries:

```
# go to layout with menu entries
Go to Layout [ "REP" (REP Reports) ]
# this script can be called with various groups
Set Variable [ $type ; Value: Get(ScriptParameter) ]
# make a new menu
Set Variable [ $menu ; Value: MBS( "Menu.CreateMenu" ) ]
# loop over records
Go to Record/Request/Page [ First ]
Loop
# if group matches
If [ REP Reports::Group = $type ]
# add new menu item with title from table
Set Variable [ $item ; Value: MBS( "MenuItem.CreateMenuItem"; REP Reports::LabelReport) ]
# define which script to call if menu item is selected
Set Variable [ $r ; Value: MBS( "MenuItem.SetScriptAction"; $item; Get(FileName); REP Reports::Script
) ]
# add item to menu
Set Variable [ $r ; Value: MBS( "Menu.AddItem"; $menu; $item ) ]
End If
# next record?
Go to Record/Request/Page [ Next ; Exit after last ]
End Loop
```

```
# switch layout back
Go to Layout [ original layout ]
# Show menu
Set Variable [ $r ; Value: MBS( "Menu.PopUp"; $menu; "mouse" ) ]
# Cleanup memory
Set Variable [ $r ; Value: MBS( "Menu.Release"; $menu) ]
```

See also

- 112.84 MenuItem.SetEnabled 5954
- 112.101 MenuItem.SetRequireShift 5978
- 112.102 MenuItem.SetScriptAction 5979
- 112.104 MenuItem.SetState 5982
- 112.105 MenuItem.SetStrikeOut 5984
- 112.107 MenuItem.SetTag 5986
- 112.108 MenuItem.SetTitle 5987
- 112.109 MenuItem.SetToolTip 5988
- 112.111 MenuItem.SetUnderline 5990
- 112.110 MenuItem.SetURL 5989

Example Databases

- [Menu/Popup Menu](#)

112.37.1 Blog Entries

- [Tip of the day: Build contextual menu in FileMaker from a table](#)
- [Colors for Menus in FileMaker](#)

Created 18th August 2014, last changed 11st September 2015.

112.38 MenuItem.CreateSeparator

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.CreateSeparator")

Result Returns menu item reference or error.

Description

You later need to release it with MenuItem.Release.

Menu item reference numbers are starting at 11000 and counting up for each new menu item.

Examples

Add a separator to a menu:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateSeparator") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.92 MenuItem.SetItalic 5966
- 112.96 MenuItem.SetOffStateImage 5973
- 112.97 MenuItem.SetOnStateImage 5974
- 112.99 MenuItem.SetRequireControl 5976
- 112.100 MenuItem.SetRequireOption 5977
- 112.103 MenuItem.SetSelectable 5981
- 112.104 MenuItem.SetState 5982
- 112.106 MenuItem.SetSubMenu 5985
- 112.109 MenuItem.SetToolTip 5988
- 112.111 MenuItem.SetUnderline 5990

Example Databases

- [Menu/Popup Menu](#)

Created 18th August 2014, last changed 15th April 2015.

112.39 MenuItem.GetAlternate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.GetAlternate"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns value or error.

Description

See also MenuItem.SetAlternate.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.67 MenuItem.GetState 5934
- 112.74 MenuItem.GetUnderline 5942
- 112.80 MenuItem.SetAlternate 5948

Created 18th August 2014, last changed 18th August 2014.

112.40 MenuItem.GetAttributedTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.GetAttributedTitle"; item)

Parameters**item**

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns styled text or error.

Description

See also MenuItem.SetAttributedTitle.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.81 MenuItem.SetAttributedTitle 5949

Created 18th August 2014, last changed 18th August 2014.

112.41 MenuItem.GetBackColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	No	Yes	No	No	No

MBS("MenuItem.GetBackColor"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns text or error.

Description

Color is return as # encoded hex number, e.g. # FF0000 for red.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.45 MenuItem.GetFontColor 5912
- 112.82 MenuItem.SetBackColor 5950
- 112.86 MenuItem.SetFontColor 5956

112.41.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr1](#)

Created 1st October 2016, last changed 18th March 2017.

112.42 MenuItem.GetBold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetBold"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns value or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.59 MenuItem.GetPath 5926
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939
- 112.73 MenuItem.GetURL 5941
- 112.83 MenuItem.SetBold 5952

112.42.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 1st October 2016.

112.43 MenuItem.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetEnabled"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns 0, 1 or error.

Description

See also MenuItem.SetEnabled.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.50 MenuItem.GetImage 5917
- 112.51 MenuItem.GetItalic 5918
- 112.67 MenuItem.GetState 5934
- 112.71 MenuItem.GetTitle 5939
- 112.84 MenuItem.SetEnabled 5954

Created 18th August 2014, last changed 9th January 2015.

112.44 MenuItem.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.1	Yes	Yes	No	No	No

MBS("MenuItem.GetEvaluate"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns OK or error.

Description

See also

- 112.9 Menu.GetEvaluate 5869
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.67 MenuItem.GetState 5934
- 112.85 MenuItem.SetEvaluate 5955

112.44.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr5](#)

Created 4th March 2016, last changed 4th March 2016.

112.45 MenuItem.GetFontColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	Yes	Yes	No	No	No

MBS("MenuItem.GetFontColor"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns text or error.

Description

Color is return as # encoded hex number, e.g. # FF0000 for red.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.41 MenuItem.GetBackColor 5908
- 112.46 MenuItem.GetFontName 5913
- 112.47 MenuItem.GetFontSize 5914
- 112.82 MenuItem.SetBackColor 5950
- 112.86 MenuItem.SetFontColor 5956

112.45.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr1](#)

Created 1st October 2016, last changed 1st October 2016.

112.46 MenuItem.GetFontName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetFontName"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns font name or error.

Description

Empty means system font.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.45 MenuItem.GetFontColor 5912
- 112.47 MenuItem.GetFontSize 5914
- 112.65 MenuItem.GetScriptName 5932
- 112.67 MenuItem.GetState 5934
- 112.87 MenuItem.SetFontName 5958
- 112.88 MenuItem.SetFontSize 5960

112.46.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 1st October 2016.

112.47 MenuItem.GetFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetFontSize"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns font size or error.

Description

Font size 0 is to use system default size.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.45 MenuItem.GetFontColor 5912
- 112.46 MenuItem.GetFontName 5913
- 112.87 MenuItem.SetFontName 5958
- 112.88 MenuItem.SetFontSize 5960

112.47.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 1st October 2016.

112.48 MenuItem.GetGroupID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.2	Yes	Yes	No	No	No

MBS("MenuItem.GetGroupID"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns OK or error.

Description

If several menu items have the same group id, the plugin only shows the first one fulfilling all requirements like key modifiers.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.89 MenuItem.SetGroupID 5962

Created 6th June 2015, last changed 8th June 2015.

112.49 MenuItem.GetHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetHidden"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns 0, 1 or error.

Description

1 if the menu item is hidden, otherwise 0.

Available in OS X v10.5 and later.

See also MenuItem.SetHidden.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.50 MenuItem.GetImage 5917
- 112.67 MenuItem.GetState 5934
- 112.69 MenuItem.GetSubMenu 5936
- 112.71 MenuItem.GetTitle 5939
- 112.90 MenuItem.SetHidden 5963
- 112.108 MenuItem.SetTitle 5987

Created 18th August 2014, last changed 31st August 2014.

112.50 MenuItem.GetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetImage"; item { ; ImageType; Filename })

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.
"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.
"test.jpg"

Result Returns image or error.

Description

See also MenuItem.SetImage.

Please call GMImage.Release later to free memory for this image.

See also

- 85.214 GMImage.Release 4612
- 112.37 MenuItem.CreateMenuItem 5903
- 112.51 MenuItem.GetItalic 5918
- 112.59 MenuItem.GetPath 5926
- 112.67 MenuItem.GetState 5934
- 112.70 MenuItem.GetTag 5937
- 112.91 MenuItem.SetImage 5964
- 112.92 MenuItem.SetItalic 5966
- 112.107 MenuItem.SetTag 5986
- 112.108 MenuItem.SetTitle 5987

Created 18th August 2014, last changed 31st July 2019.

112.51 MenuItem.GetItalic

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetItalic"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns value or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.43 MenuItem.GetEnabled 5910
- 112.50 MenuItem.GetImage 5917
- 112.67 MenuItem.GetState 5934
- 112.71 MenuItem.GetTitle 5939
- 112.72 MenuItem.GetToolTip 5940
- 112.91 MenuItem.SetImage 5964
- 112.92 MenuItem.SetItalic 5966
- 112.104 MenuItem.SetState 5982

112.51.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 1st October 2016.

112.52 MenuItem.GetKeyEquivalent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.GetKeyEquivalent"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns text or error.

Description

The menuItem's unmodified keyboard equivalent, or the empty string if one hasn't been defined. Use MenuItem.GetKeyEquivalentModifierMask to determine the modifier mask for the key equivalent. See also MenuItem.SetKeyEquivalent.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.53 MenuItem.GetKeyEquivalentModifierMask 5920
- 112.75 MenuItem.GetUserKeyEquivalent 5943
- 112.93 MenuItem.SetKeyEquivalent 5968

Created 18th August 2014, last changed 18th August 2014.

112.53 MenuItem.GetKeyEquivalentModifierMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.GetKeyEquivalentModifierMask"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns mask value or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.52 MenuItem.GetKeyEquivalent 5919
- 112.94 MenuItem.SetKeyEquivalentModifierMask 5970

Created 18th August 2014, last changed 18th August 2014.

112.54 MenuItem.GetMixedStateImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetMixedStateImage"; item { ; ImageType; Filename })

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

A mixed state is useful for indicating a mix of "off" and "on" attribute values in a group of selected objects, such as a selection of text containing boldface and plain (non-boldface) words. By default this is a horizontal line.

Please call GImage.Release later to free memory for this image.

See also

- 85.214 GImage.Release 4612
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.55 MenuItem.GetOffStateImage 5922
- 112.56 MenuItem.GetOnStateImage 5923
- 112.95 MenuItem.SetMixedStateImage 5972
- 112.96 MenuItem.SetOffStateImage 5973
- 112.97 MenuItem.SetOnStateImage 5974

Created 18th August 2014, last changed 31st July 2019.

112.55 MenuItem.GetOffStateImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetOffStateImage"; item { ; ImageType; Filename })

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

The image used to depict the receiver's off state, or empty if the image has not been set.

Please call GImage.Release later to free memory for this image.

See also

- 85.214 GImage.Release 4612
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.54 MenuItem.GetMixedStateImage 5921
- 112.56 MenuItem.GetOnStateImage 5923
- 112.95 MenuItem.SetMixedStateImage 5972
- 112.96 MenuItem.SetOffStateImage 5973
- 112.97 MenuItem.SetOnStateImage 5974

Created 18th August 2014, last changed 31st July 2019.

112.56 MenuItem.GetOnStateImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetOnStateImage"; item { ; ImageType; Filename })

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

The image used to depict the receiver's "on" state, or empty if the image has not been set.

Please call GImage.Release later to free memory for this image.

See also

- 85.214 GImage.Release 4612
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.54 MenuItem.GetMixedStateImage 5921
- 112.55 MenuItem.GetOffStateImage 5922
- 112.95 MenuItem.SetMixedStateImage 5972
- 112.96 MenuItem.SetOffStateImage 5973
- 112.97 MenuItem.SetOnStateImage 5974

Created 18th August 2014, last changed 31st July 2019.

112.57 MenuItem.GetParentItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetParentItem"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns reference number or error.

Description

The parent menu item, or empty text if the receiver does not have a parent item.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.58 MenuItem.GetParentMenu 5925

Created 18th August 2014, last changed 31st August 2014.

112.58 MenuItem.GetParentMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.3	Yes	Yes	No	No	No

MBS("MenuItem.GetParentMenu"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns OK or error.

Description

The parent menu, or empty text if the item does not have a parent item.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.57 MenuItem.GetParentItem 5924

Created 2nd September 2014, last changed 5th September 2014.

112.59 MenuItem.GetPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.2	Yes	Yes	No	No	No

MBS("MenuItem.GetPath"; item; Mode { ; Delimiter })

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Mode

Can be Title, Tag or ID and defines which value to use.

"Title"

Delimiter

Optional

Which delimiter to use. Default is newline.

"/"

Result Returns text or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.42 MenuItem.GetBold 5909
- 112.50 MenuItem.GetImage 5917
- 112.67 MenuItem.GetState 5934
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939
- 112.73 MenuItem.GetURL 5941
- 112.104 MenuItem.SetState 5982
- 112.107 MenuItem.SetTag 5986

Created 8th July 2015, last changed 1st August 2015.

112.60 MenuItem.GetRequireCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetRequireCommand"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns OK or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.61 MenuItem.GetRequireControl 5928
- 112.62 MenuItem.GetRequireOption 5929
- 112.63 MenuItem.GetRequireShift 5930
- 112.98 MenuItem.SetRequireCommand 5975
- 112.99 MenuItem.SetRequireControl 5976
- 112.100 MenuItem.SetRequireOption 5977

112.60.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 11st May 2015.

112.61 MenuItem.GetRequireControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetRequireControl"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns OK or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.60 MenuItem.GetRequireCommand 5927
- 112.62 MenuItem.GetRequireOption 5929
- 112.63 MenuItem.GetRequireShift 5930
- 112.98 MenuItem.SetRequireCommand 5975
- 112.99 MenuItem.SetRequireControl 5976
- 112.100 MenuItem.SetRequireOption 5977

112.61.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 11st May 2015.

112.62 MenuItem.GetRequireOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetRequireOption"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns OK or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.60 MenuItem.GetRequireCommand 5927
- 112.61 MenuItem.GetRequireControl 5928
- 112.63 MenuItem.GetRequireShift 5930
- 112.98 MenuItem.SetRequireCommand 5975
- 112.99 MenuItem.SetRequireControl 5976
- 112.100 MenuItem.SetRequireOption 5977
- 112.101 MenuItem.SetRequireShift 5978

112.62.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 11st May 2015.

112.63 MenuItem.GetRequireShift

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetRequireShift"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns OK or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.60 MenuItem.GetRequireCommand 5927
- 112.61 MenuItem.GetRequireControl 5928
- 112.62 MenuItem.GetRequireOption 5929
- 112.100 MenuItem.SetRequireOption 5977
- 112.101 MenuItem.SetRequireShift 5978

112.63.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 11st May 2015.

112.64 MenuItem.GetScriptFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetScriptFileName"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns file name or error.

Description

See also

- 88.9 HotKey.GetScriptFileName 4839
- 112.11 Menu.GetScriptFileName 5871
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.65 MenuItem.GetScriptName 5932
- 112.102 MenuItem.SetScriptAction 5979

Created 18th August 2014, last changed 31st August 2014.

112.65 MenuItem.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetScriptName"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns script name or error.

Description

See also

- 112.12 Menu.GetScriptName 5872
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.46 MenuItem.GetFontName 5913
- 112.64 MenuItem.GetScriptFileName 5931
- 112.102 MenuItem.SetScriptAction 5979

Created 18th August 2014, last changed 31st August 2014.

112.66 MenuItem.GetSelectable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.3	Yes	Yes	No	No	No

MBS("MenuItem.GetSelectable"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns 0, 1 or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.103 MenuItem.SetSelectable 5981

112.66.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 17th June 2016, last changed 17th June 2016.

112.67 MenuItem.GetState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetState"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns on, off, mixed or error message.

Description

See also MenuItem.SetState.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.50 MenuItem.GetImage 5917
- 112.51 MenuItem.GetItalic 5918
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939
- 112.91 MenuItem.SetImage 5964
- 112.92 MenuItem.SetItalic 5966
- 112.104 MenuItem.SetState 5982
- 112.108 MenuItem.SetTitle 5987

Created 18th August 2014, last changed 31st August 2014.

112.68 MenuItem.GetStrikeOut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	Yes	Yes	No	No	No

MBS("MenuItem.GetStrikeOut"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns value or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.105 MenuItem.SetStrikeOut 5984

112.68.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr1](#)

Created 1st October 2016, last changed 1st October 2016.

112.69 MenuItem.GetSubMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetSubMenu"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns menu reference number or error.

Description

Returns empty text if no submenu is associated with it.
See also MenuItem.SetSubMenu.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.49 MenuItem.GetHidden 5916
- 112.67 MenuItem.GetState 5934
- 112.76 MenuItem.HasSubMenu 5944
- 112.106 MenuItem.SetSubMenu 5985

Created 18th August 2014, last changed 31st August 2014.

112.70 MenuItem.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetTag"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns value or error.

Description

See also Menu.SetTag.

With the tag, we allow you to associate a text with the menu item, for example a record ID.

Examples

Show menu and show selection:

```
Set Variable [ $menu; Value:MBS("Menu.CreateMenu") ]
# create menu items...
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Hello World") ]
Set Variable [ $r; Value:MBS("MenuItem.SetTag"; $item; "secret value") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
#
# show menu
Set Variable [ $m; Value:MBS("Menu.PopUp"; $Menu; "mouse") ]
#
# you selected something?
If [ $m = 1 ]
Set Variable [ $selectedItem; Value:MBS("Menu.SelectedItem"; $menu) ]
Set Variable [ $selectedTitle; Value:MBS("MenuItem.GetTitle"; $selectedItem) ]
Set Variable [ $selectedTag; Value:MBS("MenuItem.GetTag"; $selectedItem) ]
#
Show Custom Dialog [ "Auswahl"; $selectedItem & §& $selectedTitle & §& $selectedTag ]
End If
Set Variable [ $m; Value:MBS("Menu.Release"; $Menu; 1) ]
```

See also

- 112.22 Menu.PopUp 5882
- 112.23 Menu.Release 5886
- 112.28 Menu.SelectedItem 5892

- 112.32 Menu.SetScriptAction 5897
- 112.34 Menu.SetTag 5900
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.67 MenuItem.GetState 5934
- 112.73 MenuItem.GetURL 5941
- 112.91 MenuItem.SetImage 5964

Example Databases

- [Menu/DefineQuickMenu with XML](#)
- [Menu/DefineQuickMenu](#)

Created 18th August 2014, last changed 7th April 2016.

112.71 MenuItem.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.GetTitle"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns text or error.

Description

See also See also MenuItem.SetTitle.

See also

- 112.2 Menu.AddItem 5856
- 112.22 Menu.PopUp 5882
- 112.28 Menu.SelectedItem 5892
- 112.32 Menu.SetScriptAction 5897
- 112.50 MenuItem.GetImage 5917
- 112.70 MenuItem.GetTag 5937
- 112.72 MenuItem.GetToolTip 5940
- 112.91 MenuItem.SetImage 5964
- 112.104 MenuItem.SetState 5982
- 112.108 MenuItem.SetTitle 5987

Example Databases

- [Menu/DefineQuickMenu with XML](#)
- [Menu/DefineQuickMenu](#)
- [Menu/Popup Menu](#)

112.71.1 Blog Entries

- [QuickMenu function](#)

Created 18th August 2014, last changed 31st August 2014.

112.72 MenuItem.GetToolTip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.GetToolTip"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns text or error.

Description

See also MenuItem.SetToolTip.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.51 MenuItem.GetItalic 5918
- 112.71 MenuItem.GetTitle 5939
- 112.109 MenuItem.SetToolTip 5988

Created 18th August 2014, last changed 31st August 2014.

112.73 MenuItem.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	Yes	Yes	No	No	No

MBS("MenuItem.GetURL"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns text or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.42 MenuItem.GetBold 5909
- 112.59 MenuItem.GetPath 5926
- 112.70 MenuItem.GetTag 5937
- 112.107 MenuItem.SetTag 5986
- 112.110 MenuItem.SetURL 5989

112.73.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 15th October 2016.

112.74 MenuItem.GetUnderline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.GetUnderline"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns value or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.39 MenuItem.GetAlternate 5906
- 112.111 MenuItem.SetUnderline 5990

112.74.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)

Created 11st May 2015, last changed 1st October 2016.

112.75 MenuItem.GetUserKeyEquivalent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.GetUserKeyEquivalent"; item)

Parameters**item**

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns text or error.

Description**See also**

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.52 MenuItem.GetKeyEquivalent 5919
- 112.93 MenuItem.SetKeyEquivalent 5968

Created 18th August 2014, last changed 18th August 2014.

112.76 MenuItem.HasSubmenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.HasSubmenu"; item)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns 1, 0 or error.

Description

Value is 1 if there is a submenu.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.69 MenuItem.GetSubMenu 5936
- 112.106 MenuItem.SetSubMenu 5985

Created 18th August 2014, last changed 31st August 2014.

112.77 MenuItem.IsSeparatorItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.IsSeparatorItem"; item)

Parameters**item**

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Result Returns 1, 0 or error.

Description

1 if the menu item is a separator item (that is, a menu item used to visually segregate related menu items), otherwise 0.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905

Created 18th August 2014, last changed 31st August 2014.

112.78 MenuItem.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	10.1	Yes	Yes	No	No	No

MBS("MenuItem.List")

Result Returns list or error.

Description

You may use the list to loop over the entries and apply some styles to all.

112.78.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr7](#)

Created 5th March 2020, last changed 5th March 2020.

112.79 MenuItem.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.Release"; item { ; children })

Parameters**item**

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

children

Optional

If 1, releases all child menu items and child menus.

0

Result Returns OK or error.

Description

You need to release menu items after you finished using it to avoid running out of memory.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905

Created 18th August 2014, last changed 31st August 2014.

112.80 MenuItem.SetAlternate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.SetAlternate"; item; value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

value

1 if the receiver is an alternate to the previous menu item, 0 otherwise.

1

Result Returns OK or error.

Description

If the receiver has the same key equivalent as the previous item, but has different key equivalent modifiers, the items are folded into a single visible item and the appropriate item shows while tracking the menu, depending on what modifier key (if any) is pressed. The menu items may also have no key equivalent as long as the key equivalent modifiers are different.

See also MenuItem.GetAlternate.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.39 MenuItem.GetAlternate 5906
- 112.104 MenuItem.SetState 5982
- 112.111 MenuItem.SetUnderline 5990

Created 18th August 2014, last changed 18th August 2014.

112.81 MenuItem.SetAttributedTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.SetAttributedTitle"; item; text)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

text

The text with styles.

\$text

Result Returns OK or error.

Description

Supported styles are bold, italic, font name, font size, underline and colors.

See also MenuItem.GetAttributedTitle.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.40 MenuItem.GetAttributedTitle 5907

Example Databases

- [Menu/Popup Menu](#)

Created 18th August 2014, last changed 18th August 2014.

112.82 MenuItem.SetBackColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	No	Yes	No	No	No

MBS("MenuItem.SetBackColor"; item; Color)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 255. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red. "RGB 1 0 0"

Result Returns OK or error.

Description

Currently only used on Windows.

On Mac it would only color the area where the text is and not the whole menu item, so this feature is disabled for Mac.

Examples

Creates a menu item for background color:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Red Color") ]
Set Variable [ $r; Value:MBS("MenuItem.SetBackColor"; $item; "# FF0000") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.41 MenuItem.GetBackColor 5908
- 112.45 MenuItem.GetFontColor 5912
- 112.86 MenuItem.SetFontColor 5956

112.82.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.5pr1](#)

Created 1st October 2016, last changed 18th March 2017.

112.83 MenuItem.SetBold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetBold"; item; flag)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

flag

The bold state. Pass 1 to use bold font or 0 to disable.

1

Result Returns OK or error.

Description

Examples

Create bold menu item:

```
# create menu
Set Variable [ $menu ; Value: MBS("Menu.CreateMenu") ]
# create menu item...
Set Variable [ $item ; Value: MBS("MenuItem.CreateMenuItem"; "Bold item") ]
Set Variable [ $r ; Value: MBS("MenuItem.SetBold"; $item; 1) ]
Set Variable [ $r ; Value: MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.3 Menu.CreateMenu 5859
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.42 MenuItem.GetBold 5909
- 112.107 MenuItem.SetTag 5986
- 112.108 MenuItem.SetTitle 5987
- 112.110 MenuItem.SetURL 5989

Example Databases

- [Menu/Popup Menu](#)

112.83.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 25th November 2019.

112.84 MenuItem.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetEnabled"; item; flag)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

flag

The enabled state. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

See also MenuItem.GetEnabled.

Examples

Add a disabled menu item:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Hello World") ]
Set Variable [ $r; Value:MBS("MenuItem.SetEnabled"; $item; 0) ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.43 MenuItem.GetEnabled 5910
- 112.91 MenuItem.SetImage 5964
- 112.92 MenuItem.SetItalic 5966
- 112.104 MenuItem.SetState 5982
- 112.108 MenuItem.SetTitle 5987

Example Databases

- [Menu/Popup Menu](#)

Created 18th August 2014, last changed 15th April 2015.

112.85 MenuItem.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.1	Yes	Yes	No	No	No

MBS("MenuItem.SetEvaluate"; item; Expression)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the hotkey reference, so you can pass it to other functions if needed.

See also

- 112.30 Menu.SetEvaluate 5895
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.44 MenuItem.GetEvaluate 5911
- 112.104 MenuItem.SetState 5982

112.85.1 Blog Entries

- [Formatting and error checking expressions in FileMaker](#)
- [MBS FileMaker Plugin, version 6.1pr5](#)
- [Evaluate vs. Script Trigger](#)

Created 4th March 2016, last changed 4th April 2018.

112.86 MenuItem.SetFontColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	Yes	Yes	No	No	No

MBS("MenuItem.SetFontColor"; item; Color)

(old name: MenuItem.ApplyColor)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 255. Starting with version 5.4 of our plugin, you can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red. "RGB 1 0 0"

Result Returns OK or error.

Description

On Windows, a few features are not compatible with having a custom color.

Examples

Create menu item with font color:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Red Color") ]
Set Variable [ $r; Value:MBS("MenuItem.SetFontColor"; $item; "# FF0000") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.41 MenuItem.GetBackColor 5908
- 112.45 MenuItem.GetFontColor 5912
- 112.82 MenuItem.SetBackColor 5950
- 112.87 MenuItem.SetFontName 5958
- 112.88 MenuItem.SetFontSize 5960

112.86.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.5pr1](#)

Created 1st October 2016, last changed 1st October 2016.

112.87 MenuItem.SetFontName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetFontName"; item; FontName { ; FontSize })

(old name: MenuItem.ApplyFont)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

FontName

The font name to use.

"Arial"

FontSize

Optional

The font size to use. Use 0 for default system font size.

9

Result Returns OK or error.

Description

Leave empty for system font.

Examples

Create a menu entry with specific font:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "With Comic Sans Font") ]
```

```
Set Variable [ $r; Value:MBS("MenuItem.SetFontName"; $item; "Comic Sans MS"; 13) ]
```

```
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.46 MenuItem.GetFontName 5913
- 112.47 MenuItem.GetFontSize 5914
- 112.86 MenuItem.SetFontColor 5956
- 112.88 MenuItem.SetFontSize 5960

112.87. *MENUITEM.SETFONTNAME*

5959

- 112.104 MenuItem.SetState

5982

112.87.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 1st October 2016.

112.88 MenuItem.SetFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetFontSize"; item; FontSize)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

FontSize

The font size to use. Use 0 for default system font size.

9

Result Returns OK or error.

Description

Examples

Creates a menu item with a font size:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Font Size 20") ]
Set Variable [ $r; Value:MBS("MenuItem.SetFontSize"; $item; 20) ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.46 MenuItem.GetFontName 5913
- 112.47 MenuItem.GetFontSize 5914
- 112.86 MenuItem.SetFontColor 5956
- 112.87 MenuItem.SetFontName 5958

Example Databases

- [Menu/Popup Menu](#)

112.88.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 1st October 2016.

112.89 MenuItem.SetGroupID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.2	Yes	Yes	No	No	No

MBS("MenuItem.SetGroupID"; item; GroupID)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

GroupID

Any string to identify your groups.

"123"

Result Returns OK or error.

Description

If several menu items have the same group id, the plugin only shows the first one fulfilling all requirements like key modifiers.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.48 MenuItem.GetGroupID 5915

Created 6th June 2015, last changed 8th June 2015.

112.90 MenuItem.SetHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetHidden"; item; value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

value

1 if the menu item is to be hidden, otherwise 0.

1

Result Returns OK or error.

Description

Hidden menu items (or items with a hidden superitem) do not appear in a menu and do not participate in command key matching.

See also MenuItem.GetHidden.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.49 MenuItem.GetHidden 5916
- 112.71 MenuItem.GetTitle 5939
- 112.91 MenuItem.SetImage 5964
- 112.104 MenuItem.SetState 5982
- 112.106 MenuItem.SetSubMenu 5985
- 112.108 MenuItem.SetTitle 5987

Created 18th August 2014, last changed 31st August 2014.

112.91 MenuItem.SetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetImage"; item; Image)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Image

The image to use. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

See also MenuItem.GetImage.

Transparency is not supported on Windows.

Examples

Add a menu item with image:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Hello World") ]
Set Variable [ $r; Value:MBS("MenuItem.SetImage"; $item; MyTable::MyImage ) ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.50 MenuItem.GetImage 5917
- 112.67 MenuItem.GetState 5934
- 112.70 MenuItem.GetTag 5937
- 112.71 MenuItem.GetTitle 5939
- 112.90 MenuItem.SetHidden 5963
- 112.104 MenuItem.SetState 5982
- 112.107 MenuItem.SetTag 5986

Example Databases

- [Menu/Popup Menu](#)

Created 18th August 2014, last changed 10th September 2019.

112.92 MenuItem.SetItalic

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetItalic"; item; flag)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

flag

The italic state. Pass 1 to use italic font or 0 to disable.

1

Result Returns OK or error.

Description

Examples

Creates a menu item with italic font:

```
# create menu
Set Variable [ $menu ; Value: MBS("Menu.CreateMenu") ]
# create menu item...
Set Variable [ $item ; Value: MBS("MenuItem.CreateMenuItem"; "Italic item") ]
Set Variable [ $r ; Value: MBS("MenuItem.SetItalic"; $item; 1) ]
Set Variable [ $r ; Value: MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.3 Menu.CreateMenu 5859
- 112.37 MenuItem.CreateMenuItem 5903
- 112.50 MenuItem.GetImage 5917
- 112.51 MenuItem.GetItalic 5918
- 112.67 MenuItem.GetState 5934
- 112.84 MenuItem.SetEnabled 5954
- 112.91 MenuItem.SetImage 5964
- 112.104 MenuItem.SetState 5982
- 112.108 MenuItem.SetTitle 5987

112.92.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 25th November 2019.

112.93 MenuItem.SetKeyEquivalent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.SetKeyEquivalent"; item; text)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

text

A string containing a character code representing a keyboard key. If you want to remove the key equivalent from a menu item, pass an empty string.

"T"

Result Returns OK or error.

Description

This method considers the case of the letter passed to determine if it has a Shift modifier added. That is, "w" sets the key equivalent to Command-w, while "W" is Command-Shift-w. You use MenuItem.SetKeyEquivalentModifierMask to set the appropriate mask for the modifier keys for the key equivalent.

Examples

Add menu item with key T:

```
# set useful constants:
```

```
Set Variable [ $ShiftKeyMask; Value:131072 ]
```

```
Set Variable [ $ControlKeyMask; Value:262144 ]
```

```
Set Variable [ $AlternateKeyMask; Value:524288 ]
```

```
Set Variable [ $CommandKeyMask; Value:1048576 ]
```

```
# now make menu entry
```

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "With Key Equivalent") ]
```

```
Set Variable [ $r; Value:MBS("MenuItem.SetKeyEquivalent"; $item; "T") ]
```

```
Set Variable [ $r; Value:MBS("MenuItem.SetKeyEquivalentModifierMask"; $item; $ShiftKeyMask + $CommandKeyMask) ]
```

```
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905

<i>112.93. MENUITEM.SETKEYEQUIVALENT</i>	5969
• 112.52 MenuItem.GetKeyEquivalent	5919
• 112.75 MenuItem.GetUserKeyEquivalent	5943
• 112.94 MenuItem.SetKeyEquivalentModifierMask	5970

Example Databases

- [Menu/Popup Menu](#)

Created 18th August 2014, last changed 15th April 2015.

112.94 MenuItem.SetKeyEquivalentModifierMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.SetKeyEquivalentModifierMask"; item; mask)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

mask

The key masks indicate modifiers such as the Shift or Option keys. mask is a number and you can add the constants below.

524288

Result Returns OK or error.

Description

In general, you are strongly encouraged to always set NSCommandKeyMask in mask, although there may be some conventions where this is not required. For example, in an application that plays media, the Play command may be mapped to just " " (space), without the command key.

NSShiftKeyMask is a valid modifier for any key equivalent in mask. This allows you to specify key-equivalents such as Command-Shift-1 that are consistent across all keyboards. However, with a few exceptions (such as the German "ß" character), a lowercase character with NSShiftKeyMask is interpreted the same as the uppercase character without that mask. For example, Command-Shift-c and Command-C are considered to be identical key equivalents.

NSShiftKeyMask	131072	Shift Key
NSControlKeyMask	262144	Control Key
NSAlternateKeyMask	524288	Alternate/Option Key
NSCommandKeyMask	1048576	Command Key

Examples

Add menu item with key T:

```
# set useful constants:
```

```
Set Variable [ $ShiftKeyMask; Value:131072 ]
```

```
Set Variable [ $ControlKeyMask; Value:262144 ]
```

```
Set Variable [ $AlternateKeyMask; Value:524288 ]
```

```
Set Variable [ $CommandKeyMask; Value:1048576 ]
```

```
# now make menu entry
```

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "With Key Equivalent") ]
```

112.94. *MENUITEM.SETKEYEQUIVALENTMODIFIERMASK* 5971

Set Variable [\$r; Value:MBS("MenuItem.SetKeyEquivalent"; \$item; "T")]

Set Variable [\$r; Value:MBS("MenuItem.SetKeyEquivalentModifierMask"; \$item; \$ShiftKeyMask + \$CommandKeyMask)]

Set Variable [\$r; Value:MBS("Menu.AddItem"; \$menu; \$item)]

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.53 MenuItem.GetKeyEquivalentModifierMask 5920
- 112.93 MenuItem.SetKeyEquivalent 5968

Example Databases

- [Menu/Popup Menu](#)

Created 18th August 2014, last changed 15th April 2015.

112.95 MenuItem.SetMixedStateImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetMixedStateImage"; item; Image)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Image

The image to you. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Transparency is not supported on Windows.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.54 MenuItem.GetMixedStateImage 5921
- 112.55 MenuItem.GetOffStateImage 5922
- 112.56 MenuItem.GetOnStateImage 5923
- 112.96 MenuItem.SetOffStateImage 5973
- 112.97 MenuItem.SetOnStateImage 5974

Created 18th August 2014, last changed 31st August 2014.

112.96 MenuItem.SetOffStateImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetOffStateImage"; item; Image)

Parameters**item**

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Image

The image to you. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Transparency is not supported on Windows.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.54 MenuItem.GetMixedStateImage 5921
- 112.55 MenuItem.GetOffStateImage 5922
- 112.56 MenuItem.GetOnStateImage 5923
- 112.95 MenuItem.SetMixedStateImage 5972
- 112.97 MenuItem.SetOnStateImage 5974

Created 18th August 2014, last changed 31st August 2014.

112.97 MenuItem.SetOnStateImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetOnStateImage"; item; Image)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Image

The image to you. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Transparency is not supported on Windows.

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.54 MenuItem.GetMixedStateImage 5921
- 112.55 MenuItem.GetOffStateImage 5922
- 112.56 MenuItem.GetOnStateImage 5923
- 112.95 MenuItem.SetMixedStateImage 5972
- 112.96 MenuItem.SetOffStateImage 5973

Created 18th August 2014, last changed 31st August 2014.

112.98 MenuItem.SetRequireCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetRequireCommand"; item; Value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Value

The new setting. Pass 1 to require command key or 0 to not require it.

1

Result Returns OK or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.60 MenuItem.GetRequireCommand 5927
- 112.61 MenuItem.GetRequireControl 5928
- 112.62 MenuItem.GetRequireOption 5929
- 112.99 MenuItem.SetRequireControl 5976
- 112.100 MenuItem.SetRequireOption 5977
- 112.101 MenuItem.SetRequireShift 5978

112.98.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 11st May 2015.

112.99 MenuItem.SetRequireControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetRequireControl"; item; Value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Value

The new setting. Pass 1 to require control key or 0 to not require it.

1

Result Returns OK or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.60 MenuItem.GetRequireCommand 5927
- 112.61 MenuItem.GetRequireControl 5928
- 112.62 MenuItem.GetRequireOption 5929
- 112.98 MenuItem.SetRequireCommand 5975
- 112.100 MenuItem.SetRequireOption 5977
- 112.101 MenuItem.SetRequireShift 5978

112.99.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 11st May 2015.

112.100 MenuItem.SetRequireOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetRequireOption"; item; Value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Value

The new setting. Pass 1 to require option/alt key or 0 to not require it.

1

Result Returns OK or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.60 MenuItem.GetRequireCommand 5927
- 112.61 MenuItem.GetRequireControl 5928
- 112.62 MenuItem.GetRequireOption 5929
- 112.63 MenuItem.GetRequireShift 5930
- 112.98 MenuItem.SetRequireCommand 5975
- 112.99 MenuItem.SetRequireControl 5976
- 112.101 MenuItem.SetRequireShift 5978

112.100.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 11st May 2015.

112.101 MenuItem.SetRequireShift

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetRequireShift"; item; Value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Value

The new setting. Pass 1 to require shift key or 0 to not require it.

1

Result Returns OK or error.

Description

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.62 MenuItem.GetRequireOption 5929
- 112.63 MenuItem.GetRequireShift 5930
- 112.98 MenuItem.SetRequireCommand 5975
- 112.99 MenuItem.SetRequireControl 5976
- 112.100 MenuItem.SetRequireOption 5977

112.101.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 11st May 2015.

112.102 MenuItem.SetScriptAction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetScriptAction"; item; FileName; ScriptName { ; ScriptParameter })

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

FileName

The filename of file which contains the script.

"Menus.fmp12"

ScriptName

The name of the script.

"MenuScript"

ScriptParameter

Optional

If you want a specific script parameter. Default is to leave empty and get the ID fo the menu item. You can store a value with the menu item via MenuItem.SetTag.

Result Returns OK or error.

Description

You can use MenuItem.SetScriptAction to associate a script with individual items or use this function for a whole menu.

See also MenuItem.GetScriptFileName and MenuItem.GetScriptName.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Add menu item with script to be called:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Hello World") ]
Set Variable [ $r; Value:MBS("MenuItem.SetScriptAction"; $item; Get(FileName); "MenuScript") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.3 Menu.CreateMenu 5859

- 112.22 Menu.PopUp 5882
- 112.32 Menu.SetScriptAction 5897
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.64 MenuItem.GetScriptFileName 5931
- 112.65 MenuItem.GetScriptName 5932
- 112.107 MenuItem.SetTag 5986

Example Databases

- [Menu/Popup Menu](#)

112.102.1 Blog Entries

- [MBS FileMaker Plugin, version 5.5pr4](#)
- [Tip of the day: Build contextual menu in FileMaker from a table](#)

Created 18th August 2014, last changed 2nd December 2016.

112.103 MenuItem.SetSelectable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.3	Yes	Yes	No	No	No

MBS("MenuItem.SetSelectable"; item; Value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Value

The new setting. Pass 1 to make menu item selectable or 0 to disable selection.

0

Result Returns OK or error.

Description

By default on Mac you can select submenu's parent menu item. This function can be used to disable this behavior.

For the plugin all menu items are created selectable = true by default.

Currently this flag has no effect on Windows.

Examples

Disable selecting menuitem:

```
MBS("MenuItem.SetSelectable"; $item; 0)
```

See also

- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.66 MenuItem.GetSelectable 5933

112.103.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 17th June 2016, last changed 17th June 2016.

112.104 MenuItem.SetState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetState"; item; itemState)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

itemState

The new state; it should be one of Off, on or mixed.

"mixed"

Result Returns OK or error.

Description

The image associated with the new state is displayed to the left of the menu item.

See also MenuItem.GetState.

Mixed state is not supported on Windows.

On Mac the special values "bullet" and "diamond" sets state to on and switch to use bullet/diamond images.

Examples

Create menu item with mixed state:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "With State Mixed") ]
Set Variable [ $r; Value:MBS("MenuItem.SetState"; $item; "mixed") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

Create menu item with on state:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "With State On") ]
Set Variable [ $r; Value:MBS("MenuItem.SetState"; $item; "on") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 MenuItem.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.67 MenuItem.GetState 5934
- 112.84 MenuItem.SetEnabled 5954
- 112.85 MenuItem.SetEvaluate 5955

<i>112.104. MENUITEM.SETSTATE</i>	5983
• 112.90 MenuItem.SetHidden	5963
• 112.91 MenuItem.SetImage	5964
• 112.106 MenuItem.SetSubMenu	5985
• 112.107 MenuItem.SetTag	5986
• 112.108 MenuItem.SetTitle	5987

Example Databases

- [Menu/Popup Menu](#)

112.104.1 Blog Entries

- [More menu commands for FileMaker](#)

Created 18th August 2014, last changed 11st May 2015.

112.105 MenuItem.SetStrikeOut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	Yes	Yes	No	No	No

MBS("MenuItem.SetStrikeOut"; item; Value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

Value

The new setting.

1

Result Returns OK or error.

Description

The text will be down stroked out.

Examples

Creates a menu item with stroked out text:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Striked out") ]
Set Variable [ $r; Value:MBS("MenuItem.SetStrikeOut"; $item; 1) ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.68 MenuItem.GetStrikeOut 5935

112.105.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr1](#)

Created 1st October 2016, last changed 1st October 2016.

112.106 MenuItem.SetSubMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetSubMenu"; item; submenu)

Parameters**item**

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

submenu

The reference to the menu. Please create one with Menu.CreateMenu.

\$submenu

Result Returns OK or error.

Description

See also MenuItem.GetSubMenu.

See also

- 112.3 Menu.CreateMenu 5859
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.69 MenuItem.GetSubMenu 5936
- 112.76 MenuItem.HasSubMenu 5944
- 112.90 MenuItem.SetHidden 5963
- 112.104 MenuItem.SetState 5982

Created 18th August 2014, last changed 31st August 2014.

112.107 MenuItem.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetTag"; item; value)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

value

The new tag value.

Get(RecordID)

Result Returns OK or error.

Description

See also Menu.GetTag.

With the tag, we allow you to associate a text with the menu item, for example a record ID.

See also

- 112.6 Menu.FindItemWithTag 5866
- 112.14 Menu.GetTag 5874
- 112.22 Menu.PopUp 5882
- 112.28 Menu.SelectedItem 5892
- 112.37 MenuItem.CreateMenuItem 5903
- 112.70 MenuItem.GetTag 5937
- 112.102 MenuItem.SetScriptAction 5979
- 112.104 MenuItem.SetState 5982
- 112.108 MenuItem.SetTitle 5987
- 112.110 MenuItem.SetURL 5989

Created 18th August 2014, last changed 31st August 2014.

112.108 MenuItem.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	Yes	No	No	No

MBS("MenuItem.SetTitle"; item; text)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

text

The new title of the menu item. If you do not want a title, use an empty string.
"Hello"

Result Returns OK or error.

Description

See also See also MenuItem.GetTitle.

See also

- 112.7 Menu.FindItemWithTitle 5867
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.67 MenuItem.GetState 5934
- 112.83 MenuItem.SetBold 5952
- 112.84 MenuItem.SetEnabled 5954
- 112.90 MenuItem.SetHidden 5963
- 112.91 MenuItem.SetImage 5964
- 112.92 MenuItem.SetItalic 5966
- 112.107 MenuItem.SetTag 5986

Created 18th August 2014, last changed 31st August 2014.

112.109 MenuItem.SetToolTip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	4.1	Yes	No	No	No	No

MBS("MenuItem.SetToolTip"; item { ; text })

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

text

Optional

Optional, a short string that describes the menu item.

"Print document"

Result Returns OK or error.

Description

See also MenuItem.GetToolTip.

Examples

Add a menu item with tooltip:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Hello World") ]
Set Variable [ $r; Value:MBS("MenuItem.SetToolTip"; $item; "This is sample tooltip.") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.72 MenuItem.GetToolTip 5940
- 112.92 MenuItem.SetItalic 5966
- 112.108 MenuItem.SetTitle 5987

Example Databases

- [Menu/Popup Menu](#)

Created 18th August 2014, last changed 15th April 2015.

112.110 MenuItem.SetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	6.5	Yes	Yes	No	No	No

MBS("MenuItem.SetURL"; item; URL)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

URL

The URL to trigger.

Result Returns OK or error.

Description

\$\$ID\$\$ in the URL is replaced with menu ID.

Queries http/ftp/sftp URLs with CURL, other URLs passed to OS to open.

Examples

Create menu to open email application:

```
Set Variable [ $item; Value:MBS("MenuItem.CreateMenuItem"; "Send Email to Support") ]
Set Variable [ $r; Value:MBS("MenuItem.SetURL"; $item; "mailto:support@monkeybreadsoftware.test") ]
Set Variable [ $r; Value:MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.70 MenuItem.GetTag 5937
- 112.73 MenuItem.GetURL 5941
- 112.83 MenuItem.SetBold 5952
- 112.107 MenuItem.SetTag 5986

112.110.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 15th October 2016.

112.111 MenuItem.SetUnderline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
112 Menu	5.1	Yes	Yes	No	No	No

MBS("MenuItem.SetUnderline"; item; flag)

Parameters

item

The reference to the menu item. Please create one with MenuItem.CreateMenuItem or MenuItem.CreateSeparator.

\$item

flag

The underline state. Pass 1 to use underline font or 0 to disable.

1

Result Returns OK or error.

Description

Examples

Creates a menu item with underlined font:

```
# create menu
Set Variable [ $menu ; Value: MBS("Menu.CreateMenu") ]
# create menu item...
Set Variable [ $item ; Value: MBS("MenuItem.CreateMenuItem"; "Italic item") ]
Set Variable [ $r ; Value: MBS("MenuItem.SetUnderline"; $item; 1) ]
Set Variable [ $r ; Value: MBS("Menu.AddItem"; $menu; $item) ]
```

See also

- 112.1 Menu.AddItem 5853
- 112.3 Menu.CreateMenu 5859
- 112.37 MenuItem.CreateMenuItem 5903
- 112.38 MenuItem.CreateSeparator 5905
- 112.74 MenuItem.GetUnderline 5942
- 112.80 MenuItem.SetAlternate 5948

Example Databases

- [Menu/Popup Menu](#)

112.111.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr8](#)
- [More menu commands for FileMaker](#)

Created 11st May 2015, last changed 25th November 2019.

Chapter 113

Menubar

Functions to modify the FileMaker menu.

113.1 Menubar.HasMenuCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
113 Menubar	5.0	Yes	Yes	No	No	No

MBS("Menubar.HasMenuCommand"; Path)

Parameters

Path

The ID or path to the menu entry. Use `Menubar.ListMenuCommands` to find out the IDs and names.
49297

Result Returns 1 or error.

Description

Examples

Check if select all command is there in German:

```
MBS("FM.HasMenuCommand"; "Bearbeiten§Alles auswählen")
```

Do we have the New Database command?

```
MBS("Menubar.HasMenuCommand"; 57600)
```

See also

- 113.2 `Menubar.IsMenuCommandChecked`

5995

- 113.3 Menubar.ListMenuCommands 5997
- 113.4 Menubar.RemoveMenuCommand 5998
- 113.5 Menubar.RunMenuCommand 5999

113.1.1 Blog Entries

- [Tip of the day: Show debugger in FileMaker from within a script](#)

Created 15th November 2014, last changed 15th November 2014.

113.2 Menubar.IsMenuCommandChecked

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
113 Menubar	6.3	Yes	Yes	No	No	No

MBS("Menubar.IsMenuCommandChecked"; Path)

Parameters

Path

The ID or path to the menu entry. Use `Menubar.ListMenuCommands` to find out the IDs and names.
49297

Result Returns 0, 1 or error.

Description

Returns 1 if the menubar has a checkmark.

Examples

Checks if debugger is visible:

```
MBS( "Menubar.IsMenuCommandChecked"; 49260)
```

Show debugger from within a script:

```
# The menu command as we got it from Menubar.ListMenuCommands
Set Variable [ $DebuggerMenuID; Value:49260 ]
If [ MBS( "Menubar.HasMenuCommand"; $DebuggerMenuID ) = 1 ]
If [ MBS( "Menubar.IsMenuCommandChecked"; $DebuggerMenuID ) = 1 ]
# debugger already visible
Else
# show debugger
Set Variable [ $r; Value:MBS( "Menubar.RunMenuCommand"; $DebuggerMenuID ) ]
Pause/Resume Script [ Duration (seconds): ,1 ]
End If
Else
Show Custom Dialog [ "Debugger missing in Menubar?" ]
End If
# now follows your script that should always run in debugger
```

See also

- 113.1 `Menubar.HasMenuCommand` 5993
- 113.3 `Menubar.ListMenuCommands` 5997
- 113.5 `Menubar.RunMenuCommand` 5999

113.2.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)
- [Tip of the day: Show debugger in FileMaker from within a script](#)

Created 17th June 2016, last changed 17th June 2016.

113.3 Menubar.ListMenuCommands

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
113 Menubar	5.0	Yes	Yes	No	No	No

MBS("Menubar.ListMenuCommands")

Result Returns list or error.

Description

The result is a list with a line for each menu entry. The data is separated with tab character. First in each row is the command ID followed by the menu item names for the path to the item.

Works well in FileMaker 12 or newer, but not in FileMaker 11.

Examples

List menu commands:

```
MBS("Menubar.ListMenuCommands")
```

Write commands to disk:

```
MBS("Text.WriteTextFile"; MBS( "Menubar.ListMenuCommands" ); "/Users/cs/Desktop/menu.txt")
```

See also

- 113.1 Menubar.HasMenuCommand 5993
- 113.2 Menubar.IsMenuCommandChecked 5995
- 113.4 Menubar.RemoveMenuCommand 5998
- 113.5 Menubar.RunMenuCommand 5999
- 113.6 Menubar.SetMenuCommandShortcut 6001
- 113.7 Menubar.SetMenuCommandTitle 6002
- 113.8 Menubar.SetMenuCommandVisible 6003
- 164.68 Text.WriteTextFile 7871

113.3.1 Blog Entries

- [Tip of the day: Show debugger in FileMaker from within a script](#)

Created 15th November 2014, last changed 15th September 2016.

113.4 Menubar.RemoveMenuCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
113 Menubar	6.2	Yes	Yes	No	No	No

MBS("Menubar.RemoveMenuCommand"; Path)

Parameters

Path

The ID or path to the menu entry. Use Menubar.ListMenuCommands to find out the IDs and names.
49297

Result Returns OK or error.

Description

FileMaker may restore menu later.

Examples

Remove tools menu:

```
MBS("Menubar.RemoveMenuCommand"; "Tools")
```

See also

- [113.1 Menubar.HasMenuCommand](#) 5993
- [113.3 Menubar.ListMenuCommands](#) 5997
- [113.5 Menubar.RunMenuCommand](#) 5999

113.4.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 14th May 2016, last changed 14th May 2016.

113.5 Menubar.RunMenuCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
113 Menubar	5.0	Yes	Yes	No	No	No

MBS("Menubar.RunMenuCommand"; Path)

Parameters

Path

The ID or path to the menu entry. Use `Menubar.ListMenuCommands` to find out the IDs and names.
49297

Result Returns OK or error.

Description

The plugin searches menu command and invokes it.

For Windows, the command is run asynchronously, so the function returns before the command runs. You may need to make a script pause to run the command.

Examples

Run command to select all:

```
MBS("FM.RunMenuCommand"; "Bearbeiten$Alles auswählen")
```

Show debugger:

```
MBS("Menubar.RunMenuCommand"; "Werkzeuge$Script-Debugger")
```

Show debugger from within a script:

```
# The menu command as we got it from Menubar.ListMenuCommands
Set Variable [ $DebuggerMenuID; Value:49260 ]
If [ MBS( "Menubar.HasMenuCommand"; $DebuggerMenuID ) = 1 ]
If [ MBS( "Menubar.IsMenuCommandChecked"; $DebuggerMenuID ) = 1 ]
# debugger already visible
Else
# show debugger
Set Variable [ $r; Value:MBS( "Menubar.RunMenuCommand"; $DebuggerMenuID ) ]
Pause/Resume Script [ Duration (seconds): ,1 ]
End If
Else
Show Custom Dialog [ "Debugger missing in Menubar?" ]
End If
# now follows your script that should always run in debugger
```

Show/Hide format bar in German:

```
Set Variable [ $r ; Value: MBS( "Schedule.EvaluateAfterDelay"; ,1; "MBS( \"Menubar.RunMenuCom-
```

```
mand\"; Liste(\ "Ansicht\"; \ "Formatierungsleiste\" )" ) ]
```

Make snapshot link with F5 hotkey:

```
Set Variable [ $$Hotkey ; Value: MBS("Hotkey.Register"; "F5"; "") ]
Set Variable [ $r ; Value: MBS( "HotKey.SetEvaluate"; $$Hotkey; "MBS( \ "Menubar.RunMenuCommand\";
50285 )" ) ]
```

See also

- [88.13 HotKey.Register](#) 4843
- [88.15 HotKey.SetEvaluate](#) 4848
- [113.1 Menubar.HasMenuCommand](#) 5993
- [113.2 Menubar.IsMenuCommandChecked](#) 5995
- [113.3 Menubar.ListMenuCommands](#) 5997
- [113.4 Menubar.RemoveMenuCommand](#) 5998
- [127.4 PageSetupDialog.Enable](#) 6386
- [127.12 PageSetupDialog.Install](#) 6395
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553
- [168.2 TouchBar.AddButton](#) 7960

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)
- [Mac only/Print/Page Setup Dialog](#)
- [Mac only/TouchBar](#)

113.5.1 Blog Entries

- [Define hot keys for functions in the FileMaker development](#)
- [Add a search and replace command for FileMaker Script Workspace](#)
- [Custom context menu commands for FileMaker ScriptWorkspace](#)
- [Page Setup Dialog example](#)
- [Tip of the day: Show debugger in FileMaker from within a script](#)

Created 15th November 2014, last changed 20th November 2019.

113.6 Menubar.SetMenuCommandShortcut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
113 Menubar	5.0	Yes	No	No	No	No

MBS("Menubar.SetMenuCommandShortcut"; Path; Key; Modifiers)

Parameters

Path

The ID or path to the menu entry. Use `Menubar.ListMenuCommands` to find out the IDs and names.
49297

Key

Which key to use.
"D"

Modifiers

Which modifiers to use. can include command, option, shift or control.
"command shift"

Result Returns OK or error.

Description

Examples

Set Shortcut to "D" for the Data Viewer by ID:

```
MBS("Menubar.SetMenuCommandShortcut"; 49297; "D"; "shift command")
```

Set Shortcut to "D" for the Data Viewer by name in German:

```
MBS("FM.SetMenuCommandShortcut"; "Werkzeuge$Datenanzeige"; "D"; "command shift")
```

See also

- 113.3 `Menubar.ListMenuCommands` 5997
- 113.7 `Menubar.SetMenuCommandTitle` 6002
- 113.8 `Menubar.SetMenuCommandVisible` 6003

Created 15th November 2014, last changed 15th November 2014.

113.7 Menubar.SetMenuCommandTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
113 Menubar	6.1	Yes	Yes	No	No	No

MBS("Menubar.SetMenuCommandTitle"; Path; Title)

Parameters

Path

The ID or path to the menu entry. Use `Menubar.ListMenuCommands` to find out the IDs and names.
49297

Title

The new menu item title.
"Hello"

Result Returns OK or error.

Description

Examples

Rename menu entry on Mac:

```
MBS("Menubar.SetMenuCommandTitle"; "FileMaker Pro Advanced$FileMaker Pro Advanced ausblenden";
"Hello")
```

Sets a menu entry on Windows:

```
MBS("Menubar.SetMenuCommandTitle"; "Datei$Verwalten"; "Hello")
```

See also

- [113.3 Menubar.ListMenuCommands](#) 5997
- [113.6 Menubar.SetMenuCommandShortcut](#) 6001
- [113.8 Menubar.SetMenuCommandVisible](#) 6003

113.7.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr2](#)

Created 7th February 2016, last changed 7th February 2016.

113.8 Menubar.SetMenuCommandVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
113 Menubar	5.0	Yes	Yes	No	No	No

MBS("Menubar.SetMenuCommandVisible"; Path; Visible)

Parameters

Path

The ID or path to the menu entry. Use `Menubar.ListMenuCommands` to find out the IDs and names.
49297

Visible

The new visible state. Pass 1 to make visible and 0 to hide.

1

Result Returns OK or error.

Description

This allows you to remove menu entries by path/ID from the FileMaker menu, so user cannot longer use it. The change is not permanent and whenever FileMaker rebuilds the menu, all menu entries are back.

Examples

Hide preferences menu command:

```
MBS("Menubar.SetMenuCommandVisible"; 49153; 0)
```

Hide service menu in FileMaker Pro Advanced in German:

```
MBS("Menubar.SetMenuCommandVisible"; "FileMaker Pro Advanced$Dienste"; 0)
```

See also

- [113.3 Menubar.ListMenuCommands](#) 5997
- [113.6 Menubar.SetMenuCommandShortcut](#) 6001
- [113.7 Menubar.SetMenuCommandTitle](#) 6002

113.8.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 15th November 2014, last changed 17th June 2018.

Chapter 114

MessageComposer

A panel for iOS to edit and send an messages.

You can send text messages or iMessage with text and attachments.

114.1 MessageComposer.AddAttachmentContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.AddAttachmentContainer"; Container; Name { ; MimeType })

Parameters

Container

The container to attach to email.

Attachment::Container

Name

The name for the attachment.

"sample.pdf"

MimeType

Optional

The UTI, file extension or mime type to use. e.g. "application/pdf" for PDF files. If missing, we use "application/octet-stream".

"application/octet-stream"

Result Returns OK or error.

Description

You can use Text.FileExtensionToMimeType to find the mime type for a file extension.

You can use AddAttachment several times to add several attachments.

Examples

Adds an attachment:

```

Set Variable [ $FieldName ; Value: Get(ScriptParameter) ]
Set Variable [ $Container ; Value: GetField ( $FieldName) ]
If [ IsEmpty ( $container ) = 0 ]
Set Variable [ $path ; Value: GetAsText ( $Container ) ]
Set Variable [ $name ; Value: MBS( "Path.LastPathComponent"; $path) ]
Set Variable [ $extension ; Value: MBS( "Files.FileExtension"; $name ) ]
Set Variable [ $mimeType ; Value: MBS( "Text.FileExtensionToMimeType"; $extension ) ]
#
Set Variable [ $r ; Value: MBS( "MessageComposer.AddAttachmentContainer"; $container; $name; $mime-
Type) ]
End If

```

See also

- 78.20 Files.FileExtension 3803
- 105.1 MailComposer.AddAttachmentContainer 5609
- 114.2 MessageComposer.AddAttachmentFile 6007
- 114.3 MessageComposer.AttachmentCount 6008
- 121.5 Path.LastPathComponent 6144
- 164.37 Text.FileExtensionToMimeType 7828

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 10th June 2017.

114.2 MessageComposer.AddAttachmentFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.AddAttachmentFile"; Path; Name { ; MimeType })

Parameters

Path

The native file path to the file to include as attachment.

"/Users/cs/Desktop/sample.pdf"

Name

The name for the attachment.

"sample.pdf"

MimeType

Optional

The UTI, file extension or mime type to use. e.g. "application/pdf" for PDF files. If missing, we use "application/octet-stream".

"application/octet-stream"

Result Returns OK or error.

Description

Attachments over 100 MB are not supported.

You can use Text.FileExtensionToMimeType to find the mime type for a file extension.

You can use AddAttachment several times to add several attachments.

See also

- 105.2 MailComposer.AddAttachmentFile 5611
- 114.1 MessageComposer.AddAttachmentContainer 6005
- 114.3 MessageComposer.AttachmentCount 6008
- 164.37 Text.FileExtensionToMimeType 7828

Created 10th June 2017, last changed 10th June 2017.

114.3 MessageComposer.AttachmentCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.AttachmentCount")

Result Returns count or error.

Description

See also

- 114.1 MessageComposer.AddAttachmentContainer 6005
- 114.2 MessageComposer.AddAttachmentFile 6007

Created 11st June 2017, last changed 11st June 2017.

114.4 MessageComposer.CanSendAttachments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.CanSendAttachments")

Result Returns 1, 0 or error.

Description

Returns 1 if the user has set up the device for including attachments in messages.

This function can be called before having a composer initialized.

See also

- 114.23 MessageComposer.disableUserAttachments

6030

Created 10th June 2017, last changed 17th June 2018.

114.5 MessageComposer.CanSendSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.CanSendSubject")

Result Returns 1, 0 or error.

Description

Returns 1 if the user has set up the device for including subjects in messages.

This function can be called before having a composer initialized.

See also

- 114.6 MessageComposer.CanSendText 6011
- 114.13 MessageComposer.GetSubject 6018
- 114.22 MessageComposer.SetSubject 6029

Created 10th June 2017, last changed 17th June 2018.

114.6 MessageComposer.CanSendText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.CanSendText")

Result Returns 1, 0 or error.

Description

Returns 1 if the user has set up the device for sending text only messages.

If the return value is 1, the client can set the recipients and body of the message.

If the return value is 0, the client may notify the user of the failure, or the client may open an SMS URL via open URL command.

This function can be called before having a composer initialized.

Examples

Check whether message can be send:

```
Set Variable [ $r ; Value: MBS( "MessageComposer.CanSendText" ) ]
```

```
If [ $r = 1 ]
```

```
Show Custom Dialog [ "Can't send emails." ; "This iOS device is not configured to send text messages." ]
```

```
Exit Script [ Text Result: "failed" ]
```

```
End If
```

See also

- 114.5 MessageComposer.CanSendSubject 6010
- 114.16 MessageComposer.Present 6021

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 17th June 2018.

114.7 MessageComposer.Dismiss

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.Dismiss")

Result Returns OK or error.

Description

Something you can call in a script to cancel the message creation.

See also

- 105.5 MailComposer.Dismiss 5614
- 114.17 MessageComposer.Result 6023
- 153.4 SocialComposer.Dismiss 7163

Created 10th June 2017, last changed 10th June 2017.

114.8 MessageComposer.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.GetEvaluate")

Result Returns expression or error.

Description

See also

- 105.9 MailComposer.GetEvaluate 5618
- 105.21 MailComposer.SetEvaluate 5631
- 114.9 MessageComposer.GetFileName 6014
- 114.12 MessageComposer.GetScriptName 6017
- 114.13 MessageComposer.GetSubject 6018
- 114.18 MessageComposer.SetEvaluate 6024
- 153.5 SocialComposer.GetEvaluate 7164
- 153.18 SocialComposer.SetEvaluate 7179

Created 10th June 2017, last changed 10th June 2017.

114.9 MessageComposer.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.GetFileName")

Result Returns text or error.

Description

See also

- 105.10 MailComposer.GetFileName 5619
- 114.8 MessageComposer.GetEvaluate 6013
- 114.12 MessageComposer.GetScriptName 6017
- 114.18 MessageComposer.SetEvaluate 6024
- 153.6 SocialComposer.GetFileName 7165

Created 10th June 2017, last changed 10th June 2017.

114.10 MessageComposer.GetMessageBody

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.GetMessageBody")

Result Returns text or error.

Description

See also

- 105.11 MailComposer.GetMessageBody 5620
- 105.22 MailComposer.SetMessageBody 5632
- 114.19 MessageComposer.SetMessageBody 6025

Created 11st June 2017, last changed 11st June 2017.

114.11 MessageComposer.GetRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.GetRecipients")

Result Returns text or error.

Description

See also

- 105.7 MailComposer.GetBCCRecipients 5616
- 105.8 MailComposer.GetCCRecipients 5617
- 105.14 MailComposer.GetTORecipients 5623
- 105.20 MailComposer.SetCCRecipients 5630
- 105.25 MailComposer.SetTORecipients 5636
- 114.12 MessageComposer.GetScriptName 6017
- 114.20 MessageComposer.SetRecipients 6026

Created 11st June 2017, last changed 11st June 2017.

114.12 MessageComposer.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.GetScriptName")

Result Returns text or error.

Description

See also

- 105.12 MailComposer.GetScriptName 5621
- 114.8 MessageComposer.GetEvaluate 6013
- 114.9 MessageComposer.GetFileName 6014
- 114.11 MessageComposer.GetRecipients 6016
- 114.21 MessageComposer.SetScript 6027
- 153.8 SocialComposer.GetScriptName 7167

Created 10th June 2017, last changed 10th June 2017.

114.13 MessageComposer.GetSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.GetSubject")

Result Returns text or error.

Description

See also

- 105.13 MailComposer.GetSubject 5622
- 105.24 MailComposer.SetSubject 5635
- 114.5 MessageComposer.CanSendSubject 6010
- 114.8 MessageComposer.GetEvaluate 6013
- 114.21 MessageComposer.SetScript 6027
- 114.22 MessageComposer.SetSubject 6029

Created 11st June 2017, last changed 11st June 2017.

114.14 MessageComposer.IsPresented

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.IsPresented")

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if not.

See also

- 105.15 MailComposer.IsPresented 5624
- 114.16 MessageComposer.Present 6021
- 153.11 SocialComposer.IsPresented 7170

Created 10th June 2017, last changed 10th June 2017.

114.15 MessageComposer.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.New")

Result Returns OK or error.

Description

Resets last error and clears last message content.

There is only one message composer at all times, so starting a new one will clear last one.

Examples

Starts a new message:

```
Set Variable [ $r ; Value: MBS( "MessageComposer.New" ) ]
```

```
Set Variable [ $r ; Value: MBS( "MessageComposer.SetSubject"; Placeholder::Subject ) ]
```

See also

- 114.16 MessageComposer.Present 6021
- 114.17 MessageComposer.Result 6023
- 114.22 MessageComposer.SetSubject 6029

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 11st June 2017.

114.16 MessageComposer.Present

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.Present")

Result Returns OK or error.

Description

This will show the user interface and start the process.

Your script may call this in a script and than wait for the script trigger.

Examples

Send a message with options:

```
Set Variable [ $r ; Value: MBS( "MessageComposer.CanSendText" ) ]
If [ $r = 1 ]
Show Custom Dialog [ "Can't send emails." ; "This iOS device is not configured to send text messages." ]
Exit Script [ Text Result: "failed" ]
End If
Set Variable [ $r ; Value: MBS( "MessageComposer.New" ) ]
If [ Length ( Placeholder::Subject ) >0 ]
Set Variable [ $r ; Value: MBS( "MessageComposer.SetSubject"; Placeholder::Subject ) ]
End If
Set Variable [ $r ; Value: MBS( "MessageComposer.SetScript"; Get(FileName); "Sent" ) ]
If [ Length ( Placeholder::Body ) >0 ]
Set Variable [ $r ; Value: MBS( "MessageComposer.SetMessageBody"; Placeholder::Body ) ]
End If
If [ Length ( Placeholder::Recipients ) >0 ]
Set Variable [ $r ; Value: MBS( "MessageComposer.SetRecipients"; Placeholder::Recipients ) ]
End If
Perform Script [ "AddAttachment" ; Parameter: GetFieldName ( Placeholder::Attachment1 ) ]
Perform Script [ "AddAttachment" ; Parameter: GetFieldName ( Placeholder::Attachment2 ) ]
Perform Script [ "AddAttachment" ; Parameter: GetFieldName ( Placeholder::Attachment3 ) ]
Set Variable [ $r ; Value: MBS( "MessageComposer.Present" ) ]
```

See also

- 105.17 MailComposer.Present 5626
- 114.6 MessageComposer.CanSendText 6011
- 114.14 MessageComposer.IsPresented 6019
- 114.15 MessageComposer.New 6020
- 114.17 MessageComposer.Result 6023
- 114.19 MessageComposer.SetMessageBody 6025

- 114.20 MessageComposer.SetRecipients 6026
- 114.21 MessageComposer.SetScript 6027
- 114.22 MessageComposer.SetSubject 6029
- 153.13 SocialComposer.Present 7173

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 10th June 2017.

114.17 MessageComposer.Result

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.Result")

Result Returns value or error.

Description

If email composer is not yet finished, the result is empty.
Status can be Cancelled, Sent, Failed.

Examples

Check status:

```
Set Variable [ $result ; Value: MBS( "MessageComposer.Result" ) ]
Set Field [ Placeholder::Result ; $result ]
```

See also

- 105.18 MailComposer.Result 5628
- 114.7 MessageComposer.Dismiss 6012
- 114.15 MessageComposer.New 6020
- 114.16 MessageComposer.Present 6021
- 114.18 MessageComposer.SetEvaluate 6024
- 114.21 MessageComposer.SetScript 6027
- 153.16 SocialComposer.Result 7177

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 10th June 2017.

114.18 MessageComposer.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.SetEvaluate"; Expression)

Parameters

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

Result Returns OK or error.

Description

In the script you can check with MessageComposer.Result what happened.

See also

- 105.9 MailComposer.GetEvaluate 5618
- 105.21 MailComposer.SetEvaluate 5631
- 114.8 MessageComposer.GetEvaluate 6013
- 114.9 MessageComposer.GetFileName 6014
- 114.17 MessageComposer.Result 6023
- 114.21 MessageComposer.SetScript 6027
- 114.22 MessageComposer.SetSubject 6029
- 153.5 SocialComposer.GetEvaluate 7164
- 153.18 SocialComposer.SetEvaluate 7179

Created 10th June 2017, last changed 4th April 2018.

114.19 MessageComposer.SetMessageBody

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.SetMessageBody"; Body)

Parameters

Body

The text containing the body contents of the email message.

Result Returns OK or error.

Description

This method will set the body of the email message. This should be called prior to display. The user's signature, if specified, will be added after the body content.

Examples

Set the message text:

MBS("MessageComposer.SetMessageBody"; "Hello World")

See also

- 105.11 MailComposer.GetMessageBody 5620
- 105.22 MailComposer.SetMessageBody 5632
- 114.10 MessageComposer.GetMessageBody 6015
- 114.16 MessageComposer.Present 6021

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 6th March 2020.

114.20 MessageComposer.SetRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.SetRecipients"; Recipients)

Parameters

Recipients

List of recipients.

Result Returns OK or error.

Description

Sets the initial value of the To field for the message to the specified addresses.

Examples

Send to two emails:

MBS("MessageComposer.SetRecipients"; \$Email1 & \$& \$Email2)

See also

- 105.8 MailComposer.GetCCRecipients 5617
- 105.14 MailComposer.GetTORecipients 5623
- 105.19 MailComposer.SetBCCRecipients 5629
- 105.20 MailComposer.SetCCRecipients 5630
- 105.25 MailComposer.SetTORecipients 5636
- 114.11 MessageComposer.GetRecipients 6016
- 114.16 MessageComposer.Present 6021
- 114.21 MessageComposer.SetScript 6027

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 6th March 2020.

114.21 MessageComposer.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.SetScript"; FileName; ScriptName { ; Parameter })

Parameters

FileName

The file name for the script to trigger.

"test.fmp12"

ScriptName

The script name of the script to launch.

"EmailComposerFinished"

Parameter

Optional

The parameter to pass to the script.

Result Returns OK or error.

Description

In the script you can check with MessageComposer.Result what happened.

Examples

Sets script:

```
Set Variable [ $r ; Value: MBS( "MessageComposer.SetScript"; Get(FileName); "Sent" ) ]
```

See also

- 105.23 MailComposer.SetScript 5633
- 114.12 MessageComposer.GetScriptName 6017
- 114.13 MessageComposer.GetSubject 6018
- 114.16 MessageComposer.Present 6021
- 114.17 MessageComposer.Result 6023
- 114.18 MessageComposer.SetEvaluate 6024
- 114.20 MessageComposer.SetRecipients 6026
- 114.22 MessageComposer.SetSubject 6029
- 153.20 SocialComposer.SetScript 7181

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 10th June 2017.

114.22 MessageComposer.SetSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.SetSubject"; Subject)

Parameters

Subject

The new subject.
"Hello World"

Result Returns OK or error.

Description

This method will set the Subject header for the message. This should be called prior to display. Newlines are removed from the parameter. After the view has been presented to the user, this method will no longer change the value.

See also

- 105.13 MailComposer.GetSubject 5622
- 105.24 MailComposer.SetSubject 5635
- 114.5 MessageComposer.CanSendSubject 6010
- 114.13 MessageComposer.GetSubject 6018
- 114.15 MessageComposer.New 6020
- 114.16 MessageComposer.Present 6021
- 114.18 MessageComposer.SetEvaluate 6024
- 114.21 MessageComposer.SetScript 6027

Example Databases

- [iOS/iOS Message Sending](#)

Created 10th June 2017, last changed 10th June 2017.

114.23 MessageComposer.disableUserAttachments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
114 MessageComposer	7.3	No	No	No	No	Yes

MBS("MessageComposer.disableUserAttachments")

Result Returns OK or error.

Description

Calling this method will disable the camera/attachment button in the view controller. After the controller has been presented, this call will have no effect. The camera / attachment button is visible by default.

See also

- 114.4 MessageComposer.CanSendAttachments

6009

Created 10th June 2017, last changed 10th June 2017.

Chapter 115

MetaDataQuery

Spotlight search for macOS and iOS.

Find files & folders on the computer based on metadata properties, content or file names.

115.1 MetaDataQuery.AttributesForFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	No

MBS("MetaDataQuery.AttributesForFile"; Path)

Parameters

Path

The native file path to the file to check.

"/Users/cs/Desktop/sample.pdf"

Result Returns JSON or error.

Description

Returns JSON block with attributes.

This provides information Spotlight knows about the file.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Query download URL of file:

```
Set Variable [ $path ; Value: "/Users/cs/Downloads/test.html" ]
```

```
Set Variable [ $json ; Value: MBS( "MetaDataQuery.AttributesForFile"; $path) ]  
Set Variable [ $link ; Value: MBS("JSON.GetPathItem"; $json; "kMDItemWhereFroms$0") ]  
Show Custom Dialog [ "Link" ; $link ]
```

Query song details:

```
MBS( "MetaDataQuery.AttributesForFile"; "/Users/cs/Music/iTunes/iTunes Music/ABBA/ABBA_ Gold  
- Greatest Hits/16 One of Us.m4p" )
```

See also

- 100.52 JSON.GetPathItem 5314
- 121.2 Path.FileMakerPathToNativePath 6139

115.1.1 Blog Entries

- [Query URL from downloaded file](#)

Created 21st December 2017, last changed 11st August 2018.

115.2 MetaDataQuery.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.Close"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns OK or error.

Description

Examples

Close search:

Set Variable [\$r ; Value: MBS("MetaDataQuery.Close"; \$Query)]

See also

- [115.3 MetaDataQuery.Create](#) 6034
- [115.11 MetaDataQuery.Paths](#) 6043

Example Databases

- [Mac only/MetaDataQuery/Find FileMaker Databases](#)
- [Mac only/MetaDataQuery/Search Applications](#)

115.2.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

115.3 MetadataQuery.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetadataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetadataQuery.Create")

Result Returns reference number or error.

Description

Please call later MetadataQuery.Close to free the object.

See also

- [115.2 MetadataQuery.Close](#) 6033
- [115.11 MetadataQuery.Paths](#) 6043
- [115.18 MetadataQuery.SetQueryString](#) 6050
- [115.21 MetadataQuery.StartQuery](#) 6055

Example Databases

- [Mac only/MetadataQuery/Find FileMaker Databases](#)
- [Mac only/MetadataQuery/Search Applications](#)

115.3.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

115.4 MetaDataQuery.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.GetEvaluate"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns text or error.

Description

See also

- 115.17 MetaDataQuery.SetEvaluate

6049

Created 16th December 2017, last changed 16th December 2017.

115.5 MetaDataQuery.GetScriptFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.GetScriptFileName"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns file name or error.

Description

See also

- 115.6 MetaDataQuery.GetScriptName

6037

Created 16th December 2017, last changed 16th December 2017.

115.6 MetaDataQuery.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.GetScriptName"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns script name or error.

Description

See also

- 115.5 MetaDataQuery.GetScriptFileName 6036
- 115.19 MetaDataQuery.SetScript 6052

Created 16th December 2017, last changed 16th December 2017.

115.7 MetaDataQuery.IsGathering

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.IsGathering"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns 1, 0 or error.

Description

A Boolean value that indicates whether the receiver is in the initial gathering phase of the query.

Examples

Wait for the search to finish:

Loop

Pause/Resume Script [Duration (seconds): ,2]

Exit Loop If [MBS("MetaDataQuery.IsGathering"; \$Query) = 0]

End Loop

See also

- [115.12 MetaDataQuery.QueryString](#)

6044

Example Databases

- [Mac only/MetaDataQuery/Find FileMaker Databases](#)
- [Mac only/MetaDataQuery/Search Applications](#)

115.7.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

115.8 MetaDataQuery.IsStarted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.IsStarted"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns 1, 0 or error.

Description

A Boolean value that indicates whether the query has started.

See also

- 115.9 MetaDataQuery.IsStopped 6040
- 115.21 MetaDataQuery.StartQuery 6055

Created 16th December 2017, last changed 16th December 2017.

115.9 MetaDataQuery.IsStopped

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.IsStopped"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns 1, 0 or error.

Description

A Boolean value that indicates whether the query has stopped.

See also

- 115.8 MetaDataQuery.IsStarted 6039
- 115.22 MetaDataQuery.StopQuery 6056

Created 16th December 2017, last changed 16th December 2017.

115.10 MetaDataQuery.PathAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.PathAtIndex"; Query; Index)

Parameters

Query

The reference number of the query.

\$query

Index

The index of the item. Range from 0 to MetaDataQuery.ResultCount-1.

0

Result Returns OK or error.

Description

Examples

Put paths in records:

```
Set Variable [ $index ; Value: 0 ]
```

```
Loop
```

```
New Record/Request
```

```
Set Variable [ $path ; Value: MBS( "MetaDataQuery.PathAtIndex"; $Query; $Index ) ]
```

```
Set Field [ Search Applications::FilePath ; $path ]
```

```
Commit Records/Requests [ With dialog: Off ]
```

```
# next
```

```
Set Variable [ $index ; Value: $index + 1 ]
```

```
Exit Loop If [ $index = $count ]
```

```
End Loop
```

See also

- [115.13 MetaDataQuery.ResultAtIndex](#) 6045
- [115.14 MetaDataQuery.ResultCount](#) 6046

Example Databases

- [Mac only/MetaDataQuery/Find FileMaker Databases](#)
- [Mac only/MetaDataQuery/Search Applications](#)

115.10.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

115.11 MetaDataQuery.Paths

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.Paths"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns list or error.

Description

The plugin will check results and return a list of all file paths.

See also

- 115.2 MetaDataQuery.Close 6033
- 115.3 MetaDataQuery.Create 6034

Created 16th December 2017, last changed 16th December 2017.

115.12 MetaDataQuery.QueryString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.QueryString"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns text or error.

Description

See also

- 115.7 MetaDataQuery.IsGathering 6038
- 115.18 MetaDataQuery.SetQueryString 6050

Created 16th December 2017, last changed 16th December 2017.

115.13 MetaDataQuery.ResultAtIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.ResultAtIndex"; Query; Index)

Parameters

Query

The reference number of the query.

\$query

Index

The index of the item. Range from 0 to MetaDataQuery.ResultCount-1.

0

Result Returns OK or error.

Description

See also

- [115.10 MetaDataQuery.PathAtIndex](#) 6041
- [115.14 MetaDataQuery.ResultCount](#) 6046

Example Databases

- [Mac only/MetaDataQuery/Search Applications](#)

115.13.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

115.14 MetaDataQuery.ResultCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.ResultCount"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns number or error.

Description

Examples

Store result count:

```
Set Variable [ $Count ; Value: MBS( "MetaDataQuery.ResultCount"; $Query ) ]
```

```
Set Field [ Search Applications::ResultCount ; $Count ]
```

See also

- [115.10 MetaDataQuery.PathAtIndex](#) 6041
- [115.13 MetaDataQuery.ResultAtIndex](#) 6045
- [115.15 MetaDataQuery.Results](#) 6047

Example Databases

- [Mac only/MetaDataQuery/Find FileMaker Databases](#)
- [Mac only/MetaDataQuery/Search Applications](#)

115.14.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

115.15 MetaDataQuery.Results

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.Results"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns JSON Text or error.

Description

Returns all items with all attributes as one big JSON block.

Examples

Save all results as JSON in field:

Set Field [Search Applications::All Results JSON ; MBS("MetaDataQuery.Results"; \$Query)]

See also

- [115.14 MetaDataQuery.ResultCount](#)

6046

Example Databases

- [Mac only/MetaDataQuery/Search Applications](#)

115.15.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

115.16 MetaDataQuery.SearchScopes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.SearchScopes"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns OK or error.

Description

Returns a list with file paths and special keywords used to specify specific locations:

Key	Description
UserHomeScope	Search the user's home directory.
LocalComputerScope	Search all local mounted volumes, including the user home directory. The user's home directory is searched even if it is a remote volume.
NetworkScope	Search all user-mounted remote volumes.
UbiquitousDocumentsScope	Search all files in the Documents directories of the app's iCloud container directories.
UbiquitousDataScope	Search all files not in the Documents directories of the app's iCloud container directories.
AccessibleUbiquitousExternalDocumentsScope	Search for documents outside the app's container. This search can locate iCloud documents that the user previously opened using a document picker view controller. This lets your app access the documents again without requiring direct user interaction.
IndexedLocalComputerScope	Search all indexed local mounted volumes including the current user's home directory (even if the home directory is remote).
IndexedNetworkScope	Search all indexed user-mounted remote volumes.

See also

- 115.20 MetaDataQuery.SetSearchScopes

6053

Created 16th December 2017, last changed 16th December 2017.

115.17 MetaDataQuery.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.SetEvaluate"; ShellRef; Expression)

Parameters**ShellRef**

The reference number from the shell.

\$shell

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description**See also**

- 115.4 MetaDataQuery.GetEvaluate

6035

Created 16th December 2017, last changed 4th April 2018.

115.18 MetadataQuery.SetQueryString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetadataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetadataQuery.SetQueryString"; Query; QueryString)

Parameters

Query

The reference number of the query.

\$query

QueryString

The query string.

"kMDItemContentType=\"com.apple.application-bundle\""

Result Returns OK or error.

Description

The plugin will build the predicate with the given query string.

Setting this property while a query is running stops the query and discards the current results. The receiver immediately starts a new query.

See list of metadata keys here:

https://developer.apple.com/documentation/coreservices/file_metadata/mditem/common_metadata_attribute_keys

Examples

Search for applications

MBS("MetadataQuery.SetQueryString"; \$Query; "kMDItemContentType=\"com.apple.application-bundle\"")

Start a query:

Set Variable [\$query ; Value: MBS("MetadataQuery.Create")]

Set Variable [\$r ; Value: MBS("MetadataQuery.SetQueryString"; \$Query; "kMDItemContentType=\"com.apple.application-bundle\"")]

Set Variable [\$r ; Value: MBS("MetadataQuery.StartQuery"; \$Query)]

See also

- 115.3 MetadataQuery.Create 6034
- 115.12 MetadataQuery.QueryString 6044
- 115.21 MetadataQuery.StartQuery 6055

Example Databases

- [Mac only/MetaDataQuery/Find FileMaker Databases](#)
- [Mac only/MetaDataQuery/Search Applications](#)

115.18.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 4th March 2019.

115.19 MetaDataQuery.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.SetScript"; ShellRef; Filename; ScriptName)

Parameters

ShellRef

The reference number from the shell.

\$shell

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

See also

- [115.6 MetaDataQuery.GetScriptName](#)

6037

Example Databases

- [Mac only/MetaDataQuery/Find FileMaker Databases](#)
- [Mac only/MetaDataQuery/Search Applications](#)

Created 16th December 2017, last changed 16th December 2017.

115.20 MetadataQuery.SetSearchScopes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetadataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetadataQuery.SetSearchScopes"; Query; SearchScopes)

Parameters

Query

The reference number of the query.

\$query

SearchScopes

The list of search scopes.

"LocalComputerScope"

Result Returns OK or error.

Description

Please pass a list with file paths and special keywords used to specify specific locations:

Key	Description
UserHomeScope	Search the user's home directory.
LocalComputerScope	Search all local mounted volumes, including the user home directory. The user's home directory is searched even if it is a remote volume.
NetworkScope	Search all user-mounted remote volumes.
UbiquitousDocumentsScope	Search all files in the Documents directories of the app's iCloud container directories.
UbiquitousDataScope	Search all files not in the Documents directories of the app's iCloud container directories.
AccessibleUbiquitousExternalDocumentsScope	Search for documents outside the app's container. This search can locate iCloud documents that the user previously opened using a document picker view controller. This lets your app access the documents again without requiring direct user interaction.
IndexedLocalComputerScope	Search all indexed local mounted volumes including the current user's home directory (even if the home directory is remote).
IndexedNetworkScope	Search all indexed user-mounted remote volumes.

Examples

Search home folder:

MBS("MetadataQuery.SetSearchScopes"; \$Query; "UserHomeScope")

Search application folder:

MBS("MetadataQuery.SetSearchScopes"; \$Query; "/"Applications")

See also

- 115.16 MetaDataQuery.SearchScopes

Created 16th December 2017, last changed 16th December 2017.

115.21 MetadataQuery.StartQuery

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetadataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetadataQuery.StartQuery"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns OK or error.

Description

Returns OK when successful; otherwise, Failed.

A query may fail to start if it does not specify a predicate, or if the query has already been started.

Examples

Start a query:

```
Set Variable [ $query ; Value: MBS( "MetadataQuery.Create" ) ]
```

```
Set Variable [ $r ; Value: MBS( "MetadataQuery.SetQueryString"; $Query; "kMDItemContentType=\"com.apple.application-bundle\"" ) ]
```

```
Set Variable [ $r ; Value: MBS( "MetadataQuery.StartQuery"; $Query ) ]
```

See also

- [115.3 MetadataQuery.Create](#) 6034
- [115.8 MetadataQuery.IsStarted](#) 6039
- [115.18 MetadataQuery.SetQueryString](#) 6050
- [115.22 MetadataQuery.StopQuery](#) 6056

Example Databases

- [Mac only/MetadataQuery/Find FileMaker Databases](#)
- [Mac only/MetadataQuery/Search Applications](#)

115.21.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

115.22 MetaDataQuery.StopQuery

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
115 MetaDataQuery	8.0	Yes	No	Yes, macOS only	No	Yes

MBS("MetaDataQuery.StopQuery"; Query)

Parameters

Query

The reference number of the query.

\$query

Result Returns OK or error.

Description

The receiver first completes gathering any unprocessed results.

You call this function to stop a query that is generating too many results to be useful but you still want to access the available results. If the receiver is sent a startQuery message after performing this method, the existing results are discarded.

See also

- [115.9 MetaDataQuery.IsStopped](#) 6040
- [115.21 MetaDataQuery.StartQuery](#) 6055

Example Databases

- [Mac only/MetaDataQuery/Find FileMaker Databases](#)
- [Mac only/MetaDataQuery/Search Applications](#)

115.22.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)

Created 16th December 2017, last changed 16th December 2017.

Chapter 116

MovieView

Control the movieplayer for playing video in a container on Mac. (FileMaker 11 to 13 only)

See AVPlayer for newer FileMaker versions.

116.1 MovieView.AreStepButtonsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.AreStepButtonsVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 if visible and 0 if not.

Description

See also

- 116.2 MovieView.AreZoomButtonsVisible 6059
- 116.9 MovieView.IsBackButtonVisible 6066
- 116.11 MovieView.IsCustomButtonVisible 6068
- 116.12 MovieView.IsHotSpotButtonVisible 6069

- 116.14 `MovieView.IsVolumeButtonVisible` 6071
- 116.19 `MovieView.SetBackButtonVisible` 6076
- 116.22 `MovieView.SetCustomButtonVisible` 6079
- 116.23 `MovieView.SetHotSpotButtonVisible` 6080
- 116.24 `MovieView.SetStepButtonsVisible` 6081
- 116.27 `MovieView.SetZoomButtonsVisible` 6084

Created 18th August 2014, last changed 18th August 2014.

116.2 MovieView.AreZoomButtonsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.AreZoomButtonsVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 if visible and 0 if not.

Description

See also

- 116.1 MovieView.AreStepButtonsVisible 6057
- 116.11 MovieView.IsCustomButtonVisible 6068
- 116.12 MovieView.IsHotSpotButtonVisible 6069
- 116.14 MovieView.IsVolumeButtonVisible 6071
- 116.19 MovieView.SetBackButtonVisible 6076
- 116.22 MovieView.SetCustomButtonVisible 6079
- 116.23 MovieView.SetHotSpotButtonVisible 6080
- 116.24 MovieView.SetStepButtonsVisible 6081
- 116.26 MovieView.SetVolumeButtonVisible 6083
- 116.27 MovieView.SetZoomButtonsVisible 6084

Created 18th August 2014, last changed 18th August 2014.

116.3 `MovieView.CurrentFrameImage`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 <code>MovieView</code>	3.0	Yes	No	No	No	No

MBS("MovieView.CurrentFrameImage"; `MovieViewReference` { ; `ImageType`; `Filename` })

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.

"movie"

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns container value with image or error.

Description

See also

- 133.2 `QTMovie.CurrentFrameImage`

6579

Example Databases

- [Containers/MovieContainer](#)

Created 18th August 2014, last changed 18th August 2014.

116.4 MovieView.CurrentTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	4.0	Yes	No	No	No	No

MBS("MovieView.CurrentTime"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns value or error.

Description

Value is in seconds.

See also

- 116.21 MovieView.SetCurrentTime 6078
- 133.5 QTMovie.GetCurrentTime 6582
- 133.26 QTMovie.SetCurrentTime 6607

Created 18th August 2014, last changed 18th August 2014.

116.5 MovieView.Duration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	4.0	Yes	No	No	No	No

MBS("MovieView.Duration"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns value or error.

Description

Value is in seconds.

Created 18th August 2014, last changed 18th August 2014.

116.6 MovieView.GotoBeginning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.GotoBeginning"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

This action method sets the current movie time to the beginning of the movie. If the movie is playing, the movie continues playing from the new position.

See also

- 133.13 QTMovie.GotoBeginning

6590

Created 18th August 2014, last changed 18th August 2014.

116.7 `MovieView.GotoEnd`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.GotoEnd"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

This action method sets the current movie time to the end of the movie. If the movie is playing in one of the looping modes, the movie continues playing accordingly; otherwise, play stops.

Created 18th August 2014, last changed 18th August 2014.

116.8 MovieView.GotoPosterFrame

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.GotoPosterFrame"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Created 18th August 2014, last changed 18th August 2014.

116.9 `MovieView.IsBackButtonVisible`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.IsBackButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 if visible and 0 if not.

Description

See also

- 116.1 `MovieView.AreStepButtonsVisible` 6057
- 116.2 `MovieView.AreZoomButtonsVisible` 6059
- 116.11 `MovieView.IsCustomButtonVisible` 6068
- 116.12 `MovieView.IsHotSpotButtonVisible` 6069
- 116.13 `MovieView.IsTranslateButtonVisible` 6070
- 116.14 `MovieView.IsVolumeButtonVisible` 6071
- 116.19 `MovieView.SetBackButtonVisible` 6076
- 116.24 `MovieView.SetStepButtonsVisible` 6081
- 116.27 `MovieView.SetZoomButtonsVisible` 6084

Created 18th August 2014, last changed 18th August 2014.

116.10 MovieView.IsControllerVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.IsControllerVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 if visible and 0 if not.

Description

Using the MovieView.setControllerVisible method, the client tells QTMovieView whether or not to display a user interface for controlling the movie within its bounds. Using the isControllerVisible method, the client can determine whether a QTMovieView has been configured to display such an interface. By using the controllerBarHeight method, you can determine the height of the portion of the QTMovieView that is required to display that interface. Note that some types of QuickTime content are authored to display their own user interface; for those types of content it is possible for the ControllerBarHeight method to return 0 even when the MovieView.IsControllerVisible method returns 1.

See also

- 116.20 MovieView.SetControllerVisible

6077

Created 18th August 2014, last changed 18th August 2014.

116.11 `MovieView.IsCustomButtonVisible`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.IsCustomButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 if visible and 0 if not.

Description

See also

- 116.9 `MovieView.IsBackButtonVisible` 6066
- 116.12 `MovieView.IsHotSpotButtonVisible` 6069
- 116.13 `MovieView.IsTranslateButtonVisible` 6070
- 116.14 `MovieView.IsVolumeButtonVisible` 6071
- 116.19 `MovieView.SetBackButtonVisible` 6076
- 116.22 `MovieView.SetCustomButtonVisible` 6079
- 116.23 `MovieView.SetHotSpotButtonVisible` 6080
- 116.24 `MovieView.SetStepButtonsVisible` 6081
- 116.26 `MovieView.SetVolumeButtonVisible` 6083
- 116.27 `MovieView.SetZoomButtonsVisible` 6084

Created 18th August 2014, last changed 18th August 2014.

116.12 MovieView.IsHotSpotButtonVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.IsHotSpotButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 if visible and 0 if not.

Description

See also

- 116.9 MovieView.IsBackButtonVisible 6066
- 116.11 MovieView.IsCustomButtonVisible 6068
- 116.13 MovieView.IsTranslateButtonVisible 6070
- 116.14 MovieView.IsVolumeButtonVisible 6071
- 116.19 MovieView.SetBackButtonVisible 6076
- 116.22 MovieView.SetCustomButtonVisible 6079
- 116.23 MovieView.SetHotSpotButtonVisible 6080
- 116.24 MovieView.SetStepButtonsVisible 6081
- 116.26 MovieView.SetVolumeButtonVisible 6083
- 116.27 MovieView.SetZoomButtonsVisible 6084

Created 18th August 2014, last changed 18th August 2014.

116.13 `MovieView.IsTranslateButtonVisible`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.IsTranslateButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 if visible and 0 if not.

Description

See also

- 116.9 `MovieView.IsBackButtonVisible` 6066
- 116.11 `MovieView.IsCustomButtonVisible` 6068
- 116.12 `MovieView.IsHotSpotButtonVisible` 6069
- 116.14 `MovieView.IsVolumeButtonVisible` 6071
- 116.25 `MovieView.SetTranslateButtonVisible` 6082
- 116.26 `MovieView.SetVolumeButtonVisible` 6083

Created 18th August 2014, last changed 18th August 2014.

116.14 MovieView.IsVolumeButtonVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.IsVolumeButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 if visible and 0 if not.

Description

See also

- 116.9 MovieView.IsBackButtonVisible 6066
- 116.11 MovieView.IsCustomButtonVisible 6068
- 116.12 MovieView.IsHotSpotButtonVisible 6069
- 116.13 MovieView.IsTranslateButtonVisible 6070
- 116.19 MovieView.SetBackButtonVisible 6076
- 116.22 MovieView.SetCustomButtonVisible 6079
- 116.23 MovieView.SetHotSpotButtonVisible 6080
- 116.24 MovieView.SetStepButtonsVisible 6081
- 116.26 MovieView.SetVolumeButtonVisible 6083
- 116.27 MovieView.SetZoomButtonsVisible 6084

Created 18th August 2014, last changed 18th August 2014.

116.15 MovieView.Movie

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	4.0	Yes	No	No	No	No

MBS("MovieView.Movie"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns movie reference or error.

Description

The movie reference must be released with QTMovie.Release function later.

See also

- 116.16 MovieView.Pause 6073
- 116.30 MovieView.Valid 6087
- 133.18 QTMovie.OpenContainer 6595
- 133.24 QTMovie.Release 6605

Example Databases

- [Mac only/Movies/QTMovie](#)

Created 18th August 2014, last changed 18th August 2014.

116.16 MovieView.Pause

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.Pause"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

This action method pauses the movie playback. This method does nothing if the movie is already paused.

See also

- 116.15 MovieView.Movie 6072
- 116.18 MovieView.Play 6075
- 116.30 MovieView.Valid 6087

Example Databases

- [Containers/MovieContainer](#)

Created 18th August 2014, last changed 18th August 2014.

116.17 MovieView.PauseDelayed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	5.0	Yes	No	No	No	No

MBS("MovieView.PauseDelayed"; MovieViewReference; Delay)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Delay

The time in seconds to wait for performing pause operation.
5

Result Returns OK or error.

Description

You can start a video in a script and in next step run the pause command with a delay to play only a portion of the video.

116.17.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 15th December 2014, last changed 15th December 2014.

116.18 MovieView.Play

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.Play"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

This action method starts the movie playing at its current location. This method does nothing if the movie is already playing.

See also

- 116.16 MovieView.Pause 6073
- 116.30 MovieView.Valid 6087

Example Databases

- [Containers/MovieContainer](#)

Created 18th August 2014, last changed 18th August 2014.

116.19 `MovieView.SetBackButtonVisible`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.SetBackButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Be aware that it is possible that FileMaker can reset this setting.

See also

- 116.9 `MovieView.IsBackButtonVisible` 6066
- 116.11 `MovieView.IsCustomButtonVisible` 6068
- 116.12 `MovieView.IsHotSpotButtonVisible` 6069
- 116.14 `MovieView.IsVolumeButtonVisible` 6071
- 116.22 `MovieView.SetCustomButtonVisible` 6079
- 116.23 `MovieView.SetHotSpotButtonVisible` 6080
- 116.24 `MovieView.SetStepButtonsVisible` 6081
- 116.25 `MovieView.SetTranslateButtonVisible` 6082
- 116.26 `MovieView.SetVolumeButtonVisible` 6083
- 116.27 `MovieView.SetZoomButtonsVisible` 6084

Created 18th August 2014, last changed 31st July 2015.

116.20 MovieView.SetControllerVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.SetControllerVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**MovieViewReference**

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Be aware that it is possible that FileMaker can reset this setting.

See also

- 116.10 MovieView.IsControllerVisible

6067

Created 18th August 2014, last changed 31st July 2015.

116.21 `MovieView.SetCurrentTime`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	5.0	Yes	No	No	No	No

MBS("MovieView.SetCurrentTime"; MovieViewReference; Time)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Time

The new time value in seconds.
1.5

Result Returns OK or error.

Description

Value is in seconds.

See also

- [116.4 MovieView.CurrentTime](#) 6061
- [133.26 QTMovie.SetCurrentTime](#) 6607

116.21.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 10th December 2014, last changed 10th December 2014.

116.22 MovieView.SetCustomButtonVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.SetCustomButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Be aware that it is possible that FileMaker can reset this setting.

See also

- 116.2 MovieView.AreZoomButtonsVisible 6059
- 116.11 MovieView.IsCustomButtonVisible 6068
- 116.12 MovieView.IsHotSpotButtonVisible 6069
- 116.14 MovieView.IsVolumeButtonVisible 6071
- 116.19 MovieView.SetBackButtonVisible 6076
- 116.23 MovieView.SetHotSpotButtonVisible 6080
- 116.24 MovieView.SetStepButtonsVisible 6081
- 116.25 MovieView.SetTranslateButtonVisible 6082
- 116.26 MovieView.SetVolumeButtonVisible 6083
- 116.27 MovieView.SetZoomButtonsVisible 6084

Created 18th August 2014, last changed 31st July 2015.

116.23 `MovieView.SetHotSpotButtonVisible`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.SetHotSpotButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Be aware that it is possible that FileMaker can reset this setting.

See also

- 116.2 `MovieView.AreZoomButtonsVisible` 6059
- 116.11 `MovieView.IsCustomButtonVisible` 6068
- 116.12 `MovieView.IsHotSpotButtonVisible` 6069
- 116.14 `MovieView.IsVolumeButtonVisible` 6071
- 116.19 `MovieView.SetBackButtonVisible` 6076
- 116.22 `MovieView.SetCustomButtonVisible` 6079
- 116.24 `MovieView.SetStepButtonsVisible` 6081
- 116.25 `MovieView.SetTranslateButtonVisible` 6082
- 116.26 `MovieView.SetVolumeButtonVisible` 6083
- 116.27 `MovieView.SetZoomButtonsVisible` 6084

Created 18th August 2014, last changed 31st July 2015.

116.24 MovieView.SetStepButtonsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.SetStepButtonsVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Be aware that it is possible that FileMaker can reset this setting.

See also

- 116.1 MovieView.AreStepButtonsVisible 6057
- 116.11 MovieView.IsCustomButtonVisible 6068
- 116.12 MovieView.IsHotSpotButtonVisible 6069
- 116.14 MovieView.IsVolumeButtonVisible 6071
- 116.19 MovieView.SetBackButtonVisible 6076
- 116.22 MovieView.SetCustomButtonVisible 6079
- 116.23 MovieView.SetHotSpotButtonVisible 6080
- 116.25 MovieView.SetTranslateButtonVisible 6082
- 116.26 MovieView.SetVolumeButtonVisible 6083
- 116.27 MovieView.SetZoomButtonsVisible 6084

Created 18th August 2014, last changed 31st July 2015.

116.25 `MovieView.SetTranslateButtonVisible`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.SetTranslateButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Be aware that it is possible that FileMaker can reset this setting.

See also

- 116.13 `MovieView.IsTranslateButtonVisible` 6070
- 116.19 `MovieView.SetBackButtonVisible` 6076
- 116.22 `MovieView.SetCustomButtonVisible` 6079
- 116.23 `MovieView.SetHotSpotButtonVisible` 6080
- 116.24 `MovieView.SetStepButtonsVisible` 6081
- 116.26 `MovieView.SetVolumeButtonVisible` 6083

Created 18th August 2014, last changed 31st July 2015.

116.26 MovieView.SetVolumeButtonVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.SetVolumeButtonVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Be aware that it is possible that FileMaker can reset this setting.

See also

- 116.11 MovieView.IsCustomButtonVisible 6068
- 116.12 MovieView.IsHotSpotButtonVisible 6069
- 116.13 MovieView.IsTranslateButtonVisible 6070
- 116.14 MovieView.IsVolumeButtonVisible 6071
- 116.19 MovieView.SetBackButtonVisible 6076
- 116.22 MovieView.SetCustomButtonVisible 6079
- 116.23 MovieView.SetHotSpotButtonVisible 6080
- 116.24 MovieView.SetStepButtonsVisible 6081
- 116.25 MovieView.SetTranslateButtonVisible 6082
- 116.27 MovieView.SetZoomButtonsVisible 6084

Created 18th August 2014, last changed 31st July 2015.

116.27 `MovieView.SetZoomButtonsVisible`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.SetZoomButtonsVisible"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

Be aware that it is possible that FileMaker can reset this setting.

See also

- 116.2 `MovieView.AreZoomButtonsVisible` 6059
- 116.9 `MovieView.IsBackButtonVisible` 6066
- 116.11 `MovieView.IsCustomButtonVisible` 6068
- 116.12 `MovieView.IsHotSpotButtonVisible` 6069
- 116.14 `MovieView.IsVolumeButtonVisible` 6071
- 116.19 `MovieView.SetBackButtonVisible` 6076
- 116.22 `MovieView.SetCustomButtonVisible` 6079
- 116.23 `MovieView.SetHotSpotButtonVisible` 6080
- 116.24 `MovieView.SetStepButtonsVisible` 6081
- 116.26 `MovieView.SetVolumeButtonVisible` 6083

Created 18th August 2014, last changed 31st July 2015.

116.28 MovieView.StepBackward

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.StepBackward"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

See also

- 116.29 MovieView.StepForward

6086

Created 18th August 2014, last changed 18th August 2014.

116.29 `MovieView.StepForward`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.StepForward"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns OK on success.

Description

See also

- 116.28 `MovieView.StepBackward`

6085

Created 18th August 2014, last changed 18th August 2014.

116.30 MovieView.Valid

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
116 MovieView	3.0	Yes	No	No	No	No

MBS("MovieView.Valid"; MovieViewReference)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

MovieViewReference

The name of the container where to look for a movie view.
"movie"

Result Returns 1 on success and 0 or error on failure.

Description

With FileMaker 11, 12 and 13, you need to click on a container first to have it load a movie view with the movie. And only if container is set to picture (not the newer interactive mode). FileMaker 14 uses different control (a webviewer), so this function doesn't work.

See also

- 116.15 MovieView.Movie 6072
- 116.16 MovieView.Pause 6073
- 116.18 MovieView.Play 6075

Example Databases

- [Containers/MovieContainer](#)

Created 18th August 2014, last changed 28th April 2016.

Chapter 117

NetworkInterfaces

Query Network interfaces on Mac.

117.1 NetworkInterfaces.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
117 NetworkInterfaces	4.3	Yes	No	Yes	Yes	Yes

MBS("NetworkInterfaces.Count")

Result Returns number or error.

Description

If called first without a call to NetworkInterfaces.Update, the plugin will internally call NetworkInterfaces.Update.

See also

- 117.2 NetworkInterfaces.Default 6090
- 117.3 NetworkInterfaces.JSON 6091
- 117.4 NetworkInterfaces.Update 6092
- 117.5 NetworkInterfaces.Value 6093

Example Databases

- [Mac only/Network Interfaces](#)

Created 18th August 2014, last changed 19th March 2017.

117.2 NetworkInterfaces.Default

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
117 NetworkInterfaces	5.2	Yes	No	Yes	Yes	Yes

MBS("NetworkInterfaces.Default"; Selector)

Parameters

Selector

What value to return. Default is name. Mode can be IP, IPv4, IPv6, Index, InterfaceIndex, Name or MAC. "IP"

Result Returns value or error.

Description

Can be used to find IP, name or MAC of the default interface. Default is the first connected interface.

Examples

Queries name of default network interface:

```
MBS( "NetworkInterfaces.Default"; "Name" )
```

Queries IP of default connection:

```
MBS( "NetworkInterfaces.Default"; "IP" )
```

See also

- 117.1 NetworkInterfaces.Count 6089
- 117.4 NetworkInterfaces.Update 6092
- 117.5 NetworkInterfaces.Value 6093

117.2.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 8th July 2015, last changed 19th March 2017.

117.3 NetworkInterfaces.JSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
117 NetworkInterfaces	8.4	Yes	No	Yes	Yes	Yes

MBS("NetworkInterfaces.JSON")

Result Returns JSON or error.

Description

If called first without a call to NetworkInterfaces.Update, the plugin will internally call NetworkInterfaces.Update.

See also

- 117.1 NetworkInterfaces.Count 6089
- 117.4 NetworkInterfaces.Update 6092
- 117.5 NetworkInterfaces.Value 6093

117.3.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr1](#)

Created 27th July 2018, last changed 27th July 2018.

117.4 NetworkInterfaces.Update

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
117 NetworkInterfaces	4.3	Yes	No	Yes	Yes	Yes

MBS("NetworkInterfaces.Update")

Result Returns OK or error.

Description

Normally you call NetworkInterfaces.Update function. Than you call NetworkInterfaces.Count to query number of network interfaces and finally for each value the NetworkInterfaces.Value function.

See also

- 117.1 NetworkInterfaces.Count 6089
- 117.2 NetworkInterfaces.Default 6090
- 117.3 NetworkInterfaces.JSON 6091
- 117.5 NetworkInterfaces.Value 6093

Example Databases

- [Mac only/Network Interfaces](#)

Created 18th August 2014, last changed 19th March 2017.

117.5 NetworkInterfaces.Value

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
117 NetworkInterfaces	4.3	Yes	No	Yes	Yes	Yes

MBS("NetworkInterfaces.Value"; Index; Selector)

Parameters

Index

The index from 0 to NetworkInterfaces.Count-1.

0

Selector

Which value to query: Name, IPv4, IPv6, IP, MAC, Destination, Broadcast, Netmask, NetmaskIPv4, NetmaskIPv6, InterfaceIndex, Multicast, HasBroadcast, HasDestination, Up, Loopback, IPv4s, IPv6s, IPv4Count or IPv6Count.

"Name"

Result Returns value or error.

Description

See also

- 117.1 NetworkInterfaces.Count 6089
- 117.2 NetworkInterfaces.Default 6090
- 117.3 NetworkInterfaces.JSON 6091
- 117.4 NetworkInterfaces.Update 6092

Example Databases

- [Mac only/Network Interfaces](#)

Created 18th August 2014, last changed 19th March 2017.

Chapter 118

Notification

Send or receive notifications.

118.1 Notification.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
118 Notification	3.3	Yes	Yes	Yes	No	No

MBS("Notification.List")

Result Returns list of names.

Description

See also

- [118.2 Notification.Listen](#) 6096
- [118.3 Notification.Send](#) 6098
- [118.5 Notification.Unlisten](#) 6100

Example Databases

- [Utility functions/Notifications/Notifications](#)

118.1.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr1](#)

Created 18th August 2014, last changed 21st September 2015.

118.2 Notification.Listen

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
118 Notification	2.6	Yes	Yes	No	No	No

MBS("Notification.Listen"; NotificationName; FileName; ScriptName)

Parameters

NotificationName

The name of the notification.

"de.mbsplugins.MyTestNotification"

FileName

The name of the FileMaker File that contains the script

ScriptName

The name of the script to run

Result Returns "OK" or error message.

Description

Specify a filename and script name to have this script being called when a notification is received. The script parameter will be the notification name plus parameters.

Although the notification name can be any text, you probably want to use reverse dns notation to avoid conflicts.

This is implemented with Distributed Notifications on Mac and named messages on Windows. You can use our NSDistributedNotificationCenterMBS and WinNotificationMBS classes in the Real Studio plugins to send/receive this notifications.

Version 7.2 and newer pass parameters to the script call. On Windows you get both parameters (WParam and LParam).

For version 7.3 you can receive a payload in json as script parameter to the script call after the name of notification.

If you need to trigger scripts on other computers, please check UDPsocket or ServerSocket functions.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers script event:

```
MBS( "Notification.Listen"; "de.mbsplugins.MyTestNotification"; Get ( FileName ); "GotTestNotification")
```

Listen for device change event on Windows:

MBS("Notification.Listen"; 537; Get (FileName); "DeviceChanged")

See also

- [118.1 Notification.List](#) 6095
- [118.3 Notification.Send](#) 6098
- [118.5 Notification.Unlisten](#) 6100

Example Databases

- [CURL/WebServices/eID Auto/eID Auto v2](#)
- [Utility functions/Notifications/Notifications](#)
- [Win Only/Receive System Notifications](#)

118.2.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr7](#)

Created 18th August 2014, last changed 18th July 2018.

118.3 Notification.Send

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
118 Notification	2.6	Yes	Yes	Yes	No	No

MBS("Notification.Send"; NotificationName { ; Param1; Param2 })

Parameters

NotificationName

The name of the notification.

"de.mbsplugins.MyTestNotification"

Param1

Optional

Available in MBS FileMaker Plugin 7.2 or newer.

A number to pass on Windows. For Mac in 7.3 plugins you can pass JSON here.

Param2

Optional

A number to pass on Windows.

Result Returns "OK" or error message.

Description

This notification is delivered to all applications on the computer which register for receiving it.

Examples

Send notification on Mac with JSON payload:

```
MBS("Notification.Send"; "MyNotification"; " { \"recordID\":5 } ")
```

See also

- [118.1 Notification.List](#) 6095
- [118.2 Notification.Listen](#) 6096
- [170.15 UNNotification.New](#) 8080

Example Databases

- [Utility functions/Notifications/Notifications](#)

118.3.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr7](#)

Created 18th August 2014, last changed 14th May 2017.

118.4 Notification.SendDirect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
118 Notification	5.2	Yes	Yes	Yes	No	No

MBS("Notification.SendDirect"; NotificationName { ; Parameter })

Parameters

NotificationName

The name of the notification.

"de.mbsplugins.MyTestNotification"

Parameter

Optional

The script parameter. If you don't specify, we pass name of notification as usual. By passing your own parameter, you can include several values like a list of values including record IDs or reference numbers.

Result Returns number or error.

Description

This notification is delivered to all listening scripts within the FileMaker instance. For debugging.

118.4.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)

Created 4th July 2015, last changed 19th March 2017.

118.5 Notification.Unlisten

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
118 Notification	3.3	Yes	Yes	Yes	No	No

MBS("Notification.Unlisten"; NotificationName)

Parameters

NotificationName

The name of the notification.

"de.mbsplugins.MyTestNotification"

Result Returns OK or error message.

Description

See also

- 118.1 Notification.List 6095
- 118.2 Notification.Listen 6096
- 118.6 Notification.UnlistenAll 6101

118.5.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

118.6 Notification.UnlistenAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
118 Notification	7.2	Yes	Yes	Yes	No	No

MBS("Notification.UnlistenAll")

Result Returns OK or error.

Description

See also

- 118.5 Notification.Unlisten

6100

Example Databases

- [CURL/WebServices/eID Auto/eID Auto v2](#)
- [Win Only/Receive System Notifications](#)

118.6.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr5](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 19th March 2017, last changed 19th March 2017.

Chapter 119

NSEventFilter

Filter Cocoa events to block e.g. scrollwheel on Mac.

119.1 NSEventFilter.DisableEvents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
119 NSEventFilter	2.9	Yes	No	No	No	No

MBS("NSEventFilter.DisableEvents"; eventMask)

Parameters

eventMask

Which events to disable.

0

Result Returns OK on success.

Description

Event filtering requires Mac OS X 10.6 or newer.

Examples

Disable scroll wheel events:

MBS("NSEventFilter.DisableEvents"; 4194304)

Disable all right mouse events:

MBS("NSEventFilter.DisableEvents"; 8+16+128)

See also

- 119.2 NSEventFilter.EnableAllEvents 6105
- 119.3 NSEventFilter.EnableEvents 6106

119.1.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr9](#)

Created 18th August 2014, last changed 18th August 2014.

119.2 NSEventFilter.EnableAllEvents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
119 NSEventFilter	2.9	Yes	No	No	No	No

MBS("NSEventFilter.EnableAllEvents")

Result Returns OK on success.

Description

Event filtering requires Mac OS X 10.6 or newer.

Examples

Enable all events

MBS("NSEventFilter.EnableAllEvents")

See also

- [119.1 NSEventFilter.DisableEvents](#) 6103
- [119.3 NSEventFilter.EnableEvents](#) 6106

119.2.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr9](#)

Created 18th August 2014, last changed 18th August 2014.

119.3 NSEventFilter.EnableEvents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
119 NSEventFilter	2.9	Yes	No	No	No	No

MBS("NSEventFilter.EnableEvents"; eventMask)

Parameters

eventMask

Which events to enable.

0

Result Returns OK on success.

Description

Event filtering requires Mac OS X 10.6 or newer.

Possible values for the events:

NSLeftMouseDownMask	2
NSLeftMouseUpMask	4
NSRightMouseDownMask	8
NSRightMouseUpMask	16
NSMouseMovedMask	32
NSLeftMouseDraggedMask	64
NSRightMouseDraggedMask	128
NSKeyDownMask	1024
NSKeyUpMask	2048
NSFlagsChangedMask	4096
NSScrollWheelMask	4194304
NSTabletPointMask	8388608
NSTabletProximityMask	16777216
NSOtherMouseDownMask	33554432
NSOtherMouseUpMask	67108864
NSOtherMouseDraggedMask	134217728

You can add several mask values.

Examples

Enable scroll wheel events:

MBS("NSEventFilter.DisableEvents"; 4194304)

Enable all right mouse events:

MBS("NSEventFilter.DisableEvents"; 8+16+128)

119.3. NSEVENTFILTER.ENABLEEVENTS

6107

See also

- 119.1 NSEventFilter.DisableEvents
- 119.2 NSEventFilter.EnableAllEvents

6103

6105

119.3.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr9](#)

Created 18th August 2014, last changed 18th August 2014.

Chapter 120

OCR

Recognize text on images.

120.1 OCR.Cleanup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.Cleanup")

Result Returns OK on success.

Description

This is optional. You can initialize the engine when your solution starts and keep it running all time.

Examples

Cleanup:

MBS("OCR.Cleanup")

See also

- 61.9 CURL.Cleanup 1772
- 120.6 OCR.GetText 6114
- 120.7 OCR.GetTextWithCoordinates 6116

Created 18th August 2014, last changed 18th August 2014.

120.2 OCR.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.Clear")

Result Returns OK on success.

Description

Afterwards, you must call SetImage or TesseractRect before doing any Recognize or Get* operation.

Examples

Clear:

MBS("OCR.Clear")

Created 18th August 2014, last changed 18th August 2014.

120.3 OCR.GetBoxText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

```
MBS( "OCR.GetBoxText" { ; page } )
```

Parameters**page**

Optional

The page index you want to use in html. Default value is 0.

0

Result Returns the text.**Description**

Constructs coordinates in the original image - not just the rectangle. Page is a 0-based page index that will appear in the box file.

Examples

Queries text of first page:

```
$text = MBS( "OCR.GetBoxText"; 0 )
```

See also

- 120.4 OCR.GetHOCText 6112
- 120.6 OCR.GetText 6114

Created 18th August 2014, last changed 2nd November 2017.

120.4 OCR.GetHOCText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

```
MBS( "OCR.GetHOCText" { ; page } )
```

Parameters

page

Optional

The page index you want to use in html. Default value is 0.

0

Result Returns the text.

Description

Page is 0-based but will appear in the output as 1-based.

Examples

Queries text of first page:

```
$text = MBS( "OCR.GetHOCText"; 0 )
```

See also

- 120.3 OCR.GetBoxText

6111

Created 18th August 2014, last changed 18th August 2014.

120.5 OCR.GetPageSegMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.GetPageSegMode")

Result Returns the page set mode.

Description

See also OCR.SetPageSegMode.

Examples

Set single block mode and query value:

```
$r = MBS( "OCR.SetPageSegMode"; "SingleBlock" )
$pageMode = MBS( "OCR.GetPageSegMode" )
```

See also

- 120.15 OCR.SetPageSegMode

6127

Created 18th August 2014, last changed 18th August 2014.

120.6 OCR.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.GetText")

Result Returns the text.

Description

Calls Recognize if needed internally.

Examples

Query text:

```
$text = MBS( "OCR.GetText" )
```

Custom function to read image and return text:

```
/*
MBS-OCR ( language; Image)
```

Requires tessdata resources [MIT ©]

language: deu ('deu.traineddata'), fra, eng, etc.

Image: Container Fieldname ('MyTable::MyField') in Quotes

path: FM/Extensions - put 'tessdata' Folder into FM Extensions Folder

Benjamin Fehr, EfficientBizz GmbH

<http://www.efficientbizz.com>

```
/
```

```
Let (
```

```
[
```

```
// init OCR
```

```
$path = MBS( "Path.FilemakerPathToNativePath"; Get(FileMakerPath)& "Extensions/" ) ;
```

```
initialize = MBS( "OCR.Initialize"; $path; language ) ; $Error = initialize ;
```

```
SegMode = MBS( "OCR.SetPageSegMode"; "Auto" );
```

```
// Process Image
```

```
$img = MBS( "GMImage.NewFromContainer"; Image );
```

```
set = MBS( "OCR.SetImage"; $img ) ;
```

```
$result = MBS( "OCR.GetText" ) ;
```

```
// Cleanup
```

```
$clean = MBS( "OCR.CleanUp" ) ;
```

```
$destroy = MBS( "GMImage.Release"; $img)
```

```
]
; ”” )
```

See also

- 85.191 *GImage.New* 4580
- 85.193 *GImage.NewFromContainer* 4584
- 85.214 *GImage.Release* 4612
- 120.1 *OCR.Cleanup* 6109
- 120.3 *OCR.GetBoxText* 6111
- 120.7 *OCR.GetTextWithCoordinates* 6116
- 120.9 *OCR.Initialize* 6119
- 120.14 *OCR.SetImage* 6125
- 120.15 *OCR.SetPageSegMode* 6127
- 121.2 *Path.FileMakerPathToNativePath* 6139

Example Databases

- [OCR/OCR with DynaPDF](#)

Created 18th August 2014, last changed 21st December 2018.

120.7 OCR.GetTextWithCoordinates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	6.5	Yes	Yes	Yes	Yes	Yes

MBS("OCR.GetTextWithCoordinates")

Result Returns list or error.

Description

Please call OCR.Recognize or OCR.GetText or another function first to trigger recognition.

Returns a list with tab separated values. First 4 values define the pixel coordinates. Than followed by style and font size. Finally the word.

Columns: left, top, right, bottom, isBold, isItalic, isUnderlined, isMonospace, isSerif, isSmallCaps, Pointsize, Text.

e.g.

left	top	right	bottom	isBold	isItalic	isUnderlined	isMonospace	isSerif	isSmallCaps	Pointsize	Text
36	194	91	218	0	0	0	0	0	0	7	The
102	194	177	224	0	0	0	0	0	0	7	quick
189	194	274	218	0	0	0	0	0	0	7	brown
287	194	339	225	0	0	0	0	0	0	7	dog
348	194	456	225	0	0	0	0	0	0	7	jumped
468	200	531	218	0	0	0	0	0	0	7	over
540	194	585	218	0	0	0	0	0	0	7	the
37	228	92	259	0	0	0	0	0	0	7	lazy
103	228	153	252	0	0	0	0	0	0	7	fox.

Examples

Recognize:

```
# Init OCR
Set Variable [ $r; Value:MBS( "OCR.Initialize"; "/Users/cs/Documents"; "eng" ) ]
Set Variable [ $rr; Value:MBS( "OCR.SetPageSegMode"; "Auto" ) ]
# Process Image
Set Variable [ $img; Value:MBS("GMImage.NewFromContainer"; OCR::Image) ]
Set Variable [ $r; Value:MBS( "OCR.SetImage"; $img ) ]
Set Variable [ $rr; Value:MBS( "OCR.Recognize" ) ]
Set Field [ OCR::Text; MBS("OCR.GetTextWithCoordinates" ) ]
# Cleanup
Set Variable [ $r; Value:MBS( "OCR.CleanUp" ) ]
Set Variable [ $r; Value:MBS( "GMImage.Release"; $img ) ]
```

See also

<i>120.7. OCR.GETTEXTWITHCOORDINATES</i>	6117
• 85.191 GImage.New	4580
• 85.193 GImage.NewFromContainer	4584
• 85.214 GImage.Release	4612
• 120.1 OCR.Cleanup	6109
• 120.6 OCR.GetText	6114
• 120.9 OCR.Initialize	6119
• 120.13 OCR.Recognize	6124
• 120.14 OCR.SetImage	6125
• 120.15 OCR.SetPageSegMode	6127

Created 30th September 2016, last changed 21st December 2018.

120.8 OCR.GetVariable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	7.5	Yes	Yes	Yes	Yes	Yes

MBS("OCR.GetVariable"; Name)

Parameters

Name

The name of the variable.

"test"

Result Returns value or error.

Description

See also

- [120.18 OCR.SetVariable](#) 6131
- [123.5 PHP.GetVariable](#) 6252
- [123.10 PHP.SetVariable](#) 6258

120.8.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr6](#)

Created 2nd November 2017, last changed 2nd November 2017.

120.9 OCR.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.Initialize"; Path; Lang)

Parameters

Path

The path to the folder where to find tessdata folder.

\$path

Lang

The language to use.

"eng"

Result Returns OK on success.

Description

Pass path to parent folder of tessdata folder and language you need.

The language is (usually) an ISO 639-3 string.

To use multiple languages, please concat them with plus sign: e.g. "eng+deu"

You find our language files archive here:

<http://www.monkeybreadsoftware.de/xojo/download/plugin/Libs/Tesseract/>

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Initialize with tessdata folder in same folder as database for english:

```
set variable $databasePath to Get(FilePath)
set variable $databasePath to MBS("Path.FilemakerPathToNativePath"; $databasePath)
set variable $databasePath to Substitute ( $databasePath ; ".fp7" ; ".fmp12")
set variable $databaseName to Get(FileName) & ".fmp12"
set variable $path to Substitute ( $databasePath ; $databaseName ; "" )
set variable $r to MBS( "OCR.Initialize"; $path; "eng")
```

Initialize on Server with tessdata in Server folder:

```
MBS( "OCR.Initialize"; "/Library/FileMaker Server/"; "eng")
```

Initialize on demand:

```
If [ MBS("OCR.IsInitialized") = 1 ]
```

```
Set Variable [ $r; Value:MBS( "OCR.Initialize"; "/Library/FileMaker Server/"; "eng") ]  
End If
```

See also

- 97.6 Java.Initialize 5166
- 120.6 OCR.GetText 6114
- 120.7 OCR.GetTextWithCoordinates 6116
- 120.10 OCR.IsInitialized 6121
- 121.2 Path.FileMakerPathToNativePath 6139
- 131.2 Proj.Initialize 6546
- 163.21 TAPI.Initialize 7748
- 181.12 WIA.Initialize 8511
- 190.115 XL.Initialize 9005

Example Databases

- [OCR/OCR with DynaPDF](#)
- [OCR/OCR](#)

Created 18th August 2014, last changed 10th May 2018.

120.10 OCR.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	4.2	Yes	Yes	Yes	Yes	Yes

MBS("OCR.IsInitialized")

Result Returns 1 or 0.

Description

If value is 1, everything is okay.

If value is zero, the library is not initialized and you need to call OCR.Initialize function.

On a hosted database this function is better than using a global variable, as the variable can't see if initialization was made on server or client side.

Examples

Initialize on demand:

```
If [ MBS("OCR.IsInitialized") 1 ]
Set Variable [ $r; Value:MBS( "OCR.Initialize"; "/Library/FileMaker Server/"; "eng") ]
End If
```

See also

- 120.9 OCR.Initialize 6119
- 123.7 PHP.IsInitialized 6255
- 131.3 Proj.IsInitialized 6547
- 163.22 TAPI.IsInitialized 7749
- 169.39 Twain.IsInitialized 8028
- 190.116 XL.IsInitialized 9008

120.10.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr6](#)

Created 18th August 2014, last changed 7th July 2016.

120.11 OCR.Language

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.Language")

Result Returns the language name. e.g. "eng"

Description

Examples

Queries language:

```
$lang = MBS( "OCR.Language" )
```

Created 18th August 2014, last changed 18th August 2014.

120.12 OCR.MeanTextConf

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.MeanTextConf")

Result Returns mean confidence.

Description

Examples

Query mean text confidence:

```
$r = MBS( "OCR.MeanTextConf" )
```

Created 18th August 2014, last changed 18th August 2014.

120.13 OCR.Recognize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.Recognize")

Result Returns OK on success.

Description

Optional. The Get*Text functions will call Recognize if needed. After Recognize, the output is kept internally until the next SetImage.

Examples

Start recognition process:

```
$r = MBS( "OCR.Recognize" )
```

See also

- 120.7 OCR.GetTextWithCoordinates

6116

Created 18th August 2014, last changed 18th August 2014.

120.14 OCR.SetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.SetImage"; imageRef)

Parameters

imageRef

The image reference. Use functions like `GUIImage.NewFromContainer` to get an image reference.
\$img

Result Returns OK on success.

Description

The plugin makes a copy of the image.

Please do not pass PDF files. For PDF you either need to extract image (for scans) or raster PDF pages as images. Our functions `PDFKit.GetPDFPageImage` or `DynaPDF.RenderPage` can help here. If the PDF file contains real text, please use `PDFKit.GetPDFText`, `PDFKit.GetPDFPageText`, `DynaPDF.ExtractText`, `DynaPDF.ExtractPageText` or `DynaPDF.ExtractPageRectText`. This will not do OCR, but extract the text directly.

Examples

Set image reference:

```
MBS( "OCR.SetImage"; $img )
```

See also

- 41.5 `AVRecorder.CaptureStillPhoto` 1095
- 41.31 `AVRecorder.StartQRCodeDetection` 1126
- 70.97 `DynaPDF.ExtractPageRectText` 2707
- 70.98 `DynaPDF.ExtractPageText` 2709
- 70.99 `DynaPDF.ExtractText` 2711
- 70.315 `DynaPDF.RenderPage` 3040
- 120.6 `OCR.GetText` 6114
- 120.7 `OCR.GetTextWithCoordinates` 6116
- 122.15 `PDFKit.GetPDFPageImage` 6177
- 122.23 `PDFKit.GetPDFText` 6191

Example Databases

- [OCR/OCR with DynaPDF](#)
- [OCR/OCR](#)

120.14.1 Blog Entries

- [Live barcode reading for FileMaker on MacOS and iOS](#)
- [MBS Filemaker Plugin, version 3.0pr5](#)

Created 18th August 2014, last changed 9th September 2016.

120.15 OCR.SetPageSegMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.SetPageSegMode"; mode)

Parameters

mode

The new page segmentation mode.

"auto"

Result Returns OK on success.

Description

Possible values:

OSDOnly	Orientation and script detection only.
AutoOSD	Automatic page segmentation with orientation and script detection. (OSD)
AutoOnly	Automatic page segmentation, but no OSD, or OCR.
Auto	Fully automatic page segmentation, but no OSD.
SingleColumn	Assume a single column of text of variable sizes.
SingleBlockVertText	Assume a single uniform block of vertically.
SingleBlock	Assume a single uniform block of text. (Default)
SingleLine	Treat the image as a single text line.
SingleWord	Treat the image as a single word.
CircleWord	Treat the image as a single word in a circle.
SingleChar	Treat the image as a single character.

Examples

Set auto detection mode:

```
MBS( "OCR.SetPageSegMode"; "AutoOSD" )
```

Set single block mode:

```
MBS( "OCR.SetPageSegMode"; "SingleBlock" )
```

See also

- 120.5 OCR.GetPageSegMode 6113
- 120.6 OCR.GetText 6114
- 120.7 OCR.GetTextWithCoordinates 6116

Example Databases

- [OCR/OCR with DynaPDF](#)
- [OCR/OCR](#)

Created 18th August 2014, last changed 18th August 2014.

120.16 OCR.SetRectangle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	2.9	Yes	Yes	Yes	Yes	Yes

MBS("OCR.SetRectangle"; x; y; width; height)

Parameters

x

The x coordinate.

0

y

The y coordinate.

0

width

The width of the rectangle.

100

height

The height of the rectangle.

100

Result Returns OK on success.

Description

Call after SetImage. Each SetRectangle clears the recognition results so multiple rectangles can be recognized with the same image.

Examples

Set Rectangle to 800x600:

MBS("OCR.SetRectangle"; 0; 0; 800; 600)

Created 18th August 2014, last changed 20th January 2020.

120.17 OCR.SetResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	5.1	Yes	Yes	Yes	Yes	Yes

MBS("OCR.SetResolution"; Resolution)

Parameters

Resolution

The new resolution value in pixel per inch.

72

Result Returns OK or error.

Description

This helps to calculate font size information in results.

Call this after OCR.SetImage.

See also

- 120.14 OCR.SetImage

6125

120.17.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 21st April 2015, last changed 22nd April 2015.

120.18 OCR.SetVariable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	7.5	Yes	Yes	Yes	Yes	Yes

MBS("OCR.SetVariable"; Name; Value)

Parameters

Name

The name of the variable.

"test"

Value

The text value for this variable.

"123"

Result Returns OK or error.

Description

Examples

Set variable for white list characters:

```
MBS( "OCR.SetVariable"; "tessedit_char_whitelist"; "0123456789" )
```

Set variable for black list characters:

```
MBS( "OCR.SetVariable"; "tessedit_char_blacklist"; "xyz" )
```

See also

- [120.8 OCR.GetVariable](#) 6118
- [123.5 PHP.GetVariable](#) 6252
- [123.10 PHP.SetVariable](#) 6258
- [191.33 XML.SetVariables](#) 9305

120.18.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr6](#)

Created 2nd November 2017, last changed 2nd November 2017.

120.19 OCR.WriteToPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
120 OCR	3.1	Yes	Yes	Yes	Yes	Yes

MBS("OCR.WriteToPDF"; PosX; PosY; Width; Height)

Parameters

PosX

X-Coordinate of image.

\$x

PosY

Y-Coordinate of image.

\$y

Width

Width of the image.

\$w

Height

Height of the image.

\$h

Result Returns OK or error message.

Description

This function is good to overlay an OCR'd image with text, so you can copy/search the text. Please set a default font before calling this function.

Be aware that if the font loaded in pdf page is wider than scanned font, the words can overlap. Plugin version 7.5 or newer will reduce font size if needed to fit word length to fix this.

Examples

Insert image and write text over it:

```
MBS("DynaPDF.InsertImage"; OCR::Image; $x; $y; $w; $h)
```

```
MBS( "OCR.WriteToPDF"; $x; $y; $w; $h)
```

See also

- 70.276 DynaPDF.InsertImage

2952

Example Databases

- [OCR/OCR with DynaPDF](#)

120.19.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr9](#)
- [MBS FileMaker Plugin, version 6.5pr1](#)
- [MBS Filemaker Plugin, version 3.1pr11](#)

Created 18th August 2014, last changed 21st November 2017.

Chapter 121

Path

Convert paths from native to FileMaker and back.

121.1 Path.AddPathComponent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	6.0	Yes	Yes	Yes	Yes	Yes

MBS("Path.AddPathComponent"; Path; Component { ; More Components })

Parameters

Path

The native file path.

"/Users/cs/Desktop"

Component

The new path component.

"Hello"

More Components

Optional

Pass more components, each in its own parameter.

Result Returns path or error.

Description

The path provided as parameter does not need to end with a slash or backslash.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Adds a path component to a path:

```
MBS( "Path.AddPathComponent"; "/Users/cs/Desktop"; "Hello" )
```

Adds a file name:

```
MBS( "Path.AddPathComponent"; "/Users/cs/Desktop/"; "test.txt" )
```

Adds a file path on Windows:

```
MBS( "Path.AddPathComponent"; "c:\\Test"; "test.txt" )
```

Get file name from container and add to folder path:

```
Set Variable [ $name; Value:GetAsText ( Container Batch Export::Test1 ) ]
Set Variable [ $name; Value:GetValue($name; 1) ]
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $name ) ]
Set Variable [ $dpath; Value:MBS( "Path.AddPathComponent"; $FolderPath; $name ) ]
```

Create folder on Desktop:

```
Set Variable [ $folder; Value:MBS( "Folders.UserDesktop" ) ]
If [ IsEmpty(Container Export::Name) ]
Set Field [ Container Export::Name; "Record " & Get(RecordID) ]
End If
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; Container Export::Name ) ]
Set Variable [ $r; Value:MBS("Files.CreateDirectory"; $path) ]
```

Write container to temp file and launch:

```
# get temp folder
Set Variable [ $TempFolder; Value:MBS( "Folders.SystemTemporary" ) ]
# and file name from container
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; test::myContainer ) ]
# add name to folder path
Set Variable [ $TempPath; Value:MBS( "Path.AddPathComponent"; $TempFolder; $name ) ]
# now write temp file
Set Variable [ $r; Value:MBS( "Files.WriteFile"; test::myContainer; $TempPath) ]
# and launch file
Set Variable [ $r; Value:MBS( "Files.LaunchFile"; $TempPath) ]
```

Add multiple path componennts:

```
MBS( "Path.AddPathComponent"; "/Users/cs/Desktop"; "Hello"; "World"; "test" )
```

Example result: /Users/cs/Desktop/Hello/World/test

Export a container to desktop:

```
# get path stored in the container field
Set Variable [ $ContainerPath ; Value: GetAsText ( Contacts::Photo Container ) ]
# get the file name portion
Set Variable [ $ContainerName ; Value: MBS( "Path.LastPathComponent"; $ContainerPath ) ]
# take a folder on the computer, e.g. desktop
Set Variable [ $DesktopFolder ; Value: MBS( "Folders.UserDesktop" ) ]
# build path with file name on that folder
Set Variable [ $FilePath ; Value: MBS( "Path.AddPathComponent"; $DesktopFolder; $ContainerName ) ]
# and export the content of container to that path
Set Variable [ $r ; Value: MBS( "Container.WriteFile"; Contacts::Photo Container; $FilePath ) ]
```

See also

- 138.27 RichText.WritePDF 6750
- 164.49 Text.ReadTextFile 7843
- 164.68 Text.WriteTextFile 7871
- 124.52 Trace 6326
- 180.102 WebView.PrintToFile 8413
- 181.10 WIA.ImageDialog 8508
- 189.3 WordFile.AppendTableRow 8816
- 189.18 WordFile.ReplaceTag 8835
- 190.9 XL.Book.DeleteSheet 8864
- 190.117 XL.LoadBook 9010

Example Databases

- [CURL/CURL Download Picture to file](#)
- [CURL/Email/Email Parser and Preview](#)
- [CURL/WebServices/WeatherBit.io test](#)
- [DynaPDF/Invoice/Invoice](#)
- [DynaPDF/Shrink PDF pages](#)
- [GraphicsMagick/Create GIF](#)
- [RunTask/Run Shell Script on Mac](#)

- [SQL in FileMaker/ImageGallery](#)
- [Win Only/WIA Scan](#)
- [XML/XML Import](#)

121.1.1 Blog Entries

- [Define hot keys for functions in the FileMaker development](#)
- [MBS FileMaker Plugin, version 9.4pr1](#)
- [Storing files for download on FileMaker Server with download URLs](#)
- [Parsing VCard file](#)

121.1.2 FileMaker Magazin

- [Ausgabe 6/2018, Seite 31](#)
- [Ausgabe 6/2018, Seite 30](#)

Created 30th November 2015, last changed 22nd November 2019.

121.2 Path.FileMakerPathToNativePath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Path.FileMakerPathToNativePath"; path)

Parameters

path

The FileMaker file path.

"/Macintosh HD/Users/test/Desktop/picture.jpg"

Result Returns the native path.

Description

The difference between a native path and a FileMaker path on Mac is, that FileMaker expects to have the Disk Name in front followed by the rest of the path. Mac OS X functions require paths from the root disk to start without volume name. Other disks have paths starting with "/Volumes/name".

This function does not work for relative paths.

Examples

Convert path to native path:

MBS("Path.FilemakerPathToNativePath"; "/Macintosh HD/Users/test/Desktop/picture.jpg")

See also

- 184.12 WindowsUserNotification.SetImagePath 8725
- 189.13 WordFile.OpenFile 8828
- 189.25 WordFile.WriteFile 8846
- 190.5 XL.Book.AddPictureFile 8859
- 190.117 XL.LoadBook 9010
- 191.28 XML.ReadFile 9297
- 191.37 XML.ValidateFile 9313
- 53.33 ZipFile.CRCFile 1509
- 53.37 ZipFile.Open 1515
- 53.41 ZipFile.WriteFile 1521

Example Databases

- [DynaPDF/Form/Form](#)

- [Files/FileMakerPath to NativePath](#)
- [Network/ServerSocket/ServerSocket from Webviewer/ServerSocket from Webviewer](#)
- [WebViewer/Calendar/Calendar](#)
- [WebViewer/Javascript calls Filemaker Script/ServerSocket from Webviewer/ServerSocket from Webviewer](#)
- [WebViewer/MethodDraw SVG Editor/MethodDraw](#)

121.2.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr1](#)
- [MBS FileMaker Plugin, version 7.5pr8](#)
- [Restart FileMaker with same database](#)
- [MBS Filemaker Plugin, version 4.4pr9](#)
- [MBS Filemaker Plugin, version 3.3pr5](#)
- [MBS Filemaker Plugin, version 3.0pr1](#)
- [MBS Filemaker Plugin, version 2.8pr8](#)
- [MBS Filemaker Plugin, version 2.8pr1](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr2](#)

121.2.2 FileMaker Magazin

- [Ausgabe 6/2016, Seite 25](#)
- [Ausgabe 5/2013, Seite 21](#)

Created 18th August 2014, last changed 28th April 2016.

121.3 Path.FilePathToFileURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Path.FilePathToFileURL"; Path)

Parameters

Path

The absolute file path to convert to URL.

"/Users/cs/Desktop/test.html"

Result Returns URL or error.

Description

Examples

Converts a path to a file URL

```
/* shows: file://localhost/Users/cs/Desktop/test.html */
MBS( "Path.FilePathToFileURL"; "/Users/cs/Desktop/test.html" )
```

Converts a Windows path to file URL:

```
MBS( "Path.FilePathToFileURL"; "C:\Users\Christian\Desktop\test.html" )
```

Write a HTML file and an image file to load in web viewer:

```
Set Variable [ $folder ; Value: MBS( "Folders.UserTemporary" ) ]
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $folder; "test.jpg" ) ]
Set Variable [ $r ; Value: MBS( "Container.WriteFile"; Images::Image; $path ) ]
#
Set Variable [ $html ; Value: "<html><body><p>Hello World</p><img src=test.jpg width=300></body></html>" ]
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $folder; "test.html" ) ]
Set Variable [ $r ; Value: MBS( "Text.WriteTextFile"; $html; $path ) ]
#
Set Variable [ $URL ; Value: MBS( "Path.FilePathToFileURL"; $Path ) ]
Set Web Viewer [ Object Name: "web" ; URL: $URL ]
```

See also

- 55.35 Container.WriteFile 1658
- 81.16 Folders.UserTemporary 4187
- 121.1 Path.AddPathComponent 6135

- 164.68 Text.WriteTextFile 7871
- 187.1 WMFP.Create 8767

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/IMAP Email](#)
- [Network/ServerSocket/ServerSocket from Webviewer/ServerSocket from Webviewer](#)
- [WebViewer/Calendar/Calendar](#)
- [WebViewer/Javascript calls Filemaker Script/ServerSocket from Webviewer/ServerSocket from Webviewer](#)
- [WebViewer/MethodDraw SVG Editor/MethodDraw](#)
- [WebViewer/WebViewer Markdown/WebViewer Markdown](#)
- [Win Only/Windows Player](#)

121.3.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)
- [FileMaker and WebViewer communication](#)
- [MBS FileMaker Plugin, version 5.0pr9](#)

Created 30th January 2015, last changed 23th February 2020.

121.4 Path.FileURLToFilePath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Path.FileURLToFilePath"; URL)

Parameters

URL

The file URL to convert.

"file://localhost/Users/cs/Desktop/test.html"

Result Returns path or error.

Description

Examples

Converts a path URL:

```
/* returns /Users/cs/Desktop/test.html */
MBS( "Path.FileURLToFilePath"; "file://localhost/Users/cs/Desktop/test.html" )
```

Example result: "/Users/cs/Desktop/test.html"

Converts file URL on Windows to path:

```
MBS( "Path.FileURLToFilePath"; "file://C:/Users/Christian/Desktop/test.html" )
```

Example result: "/Users/Christian/Desktop/test.html"

121.4.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr9](#)

Created 30th January 2015, last changed 11st December 2016.

121.5 Path.LastPathComponent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	6.0	Yes	Yes	Yes	Yes	Yes

MBS("Path.LastPathComponent"; Path)

Parameters

Path

The native file path.
"/Users/cs/Desktop"

Result Returns path or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Queries file name:

```
MBS( "Path.LastPathComponent"; "c:\\test.txt" )
```

Get file name from container and add to folder path:

```
Set Variable [ $name; Value:GetAsText ( Container Batch Export::Test1 ) ]
Set Variable [ $name; Value:GetValue($name; 1) ]
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; $name ) ]
Set Variable [ $dpath; Value:MBS( "Path.AddPathComponent"; $FolderPath; $name ) ]
```

Write container to temp file and launch:

```
# get temp folder
Set Variable [ $TempFolder; Value:MBS( "Folders.SystemTemporary" ) ]
# and file name from container
Set Variable [ $name; Value:MBS( "Path.LastPathComponent"; test::myContainer ) ]
# add name to folder path
Set Variable [ $TempPath; Value:MBS( "Path.AddPathComponent"; $TempFolder; $name ) ]
# now write temp file
Set Variable [ $r; Value:MBS( "Files.WriteFile"; test::myContainer; $TempPath) ]
# and launch file
Set Variable [ $r; Value:MBS( "Files.LaunchFile"; $TempPath) ]
```

See also

- 78.35 Files.Launch

<i>121.5. PATH.LASTPATHCOMPONENT</i>	6145
• 81.5 Folders.System	4173
• 81.7 Folders.SystemTemporary	4175
• 114.1 MessageComposer.AddAttachmentContainer	6005
• 121.1 Path.AddPathComponent	6135
• 121.2 Path.FileMakerPathToNativePath	6139
• 121.8 Path.RemoveLastPathComponent	6149
• 181.8 WIA.Image	8505
• 181.9 WIA.ImageCount	8507
• 181.10 WIA.ImageDialog	8508

Example Databases

- [Containers/Container Batch Export](#)
- [CURL/Amazon S3 Upload File](#)
- [Drag and Drop/DragTest Popover](#)
- [Drag and Drop/DragTest](#)
- [DynaPDF/Merge PDFs](#)
- [DynaPDF/Shrink PDF pages](#)
- [iOS/iOS Email Sending](#)
- [iOS/iOS Message Sending](#)
- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [Win Only/WIA Scan](#)

121.5.1 Blog Entries

- [Storing files for download on FileMaker Server with download URLs](#)

121.5.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 31
- Ausgabe 6/2018, Seite 30

Created 30th November 2015, last changed 18th March 2016.

121.6 Path.LongPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Path.LongPath"; Path)

Parameters

Path

The native file path.

"C:\Users\Christian Schmitz\Dokumente"

Result Returns OK or error.

Description

For your convenience this function returns same path on iOS, Mac and Linux.

If the specified path is already in its long form and conversion is not needed, the function simply returns the input path.

Examples

Convert to long path:

MBS("Path.LongPath"; "C:\PROGRA~1\FILEMA~1\FILEMA~1")

Example result: "C:\Program Files\FileMaker\FileMaker Pro 17 Advanced"

See also

- [121.9 Path.ShortPath](#)

6151

121.6.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr4](#)

Created 17th December 2018, last changed 17th December 2018.

121.7 Path.NativePathToFileMakerPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Path.NativePathToFileMakerPath"; path)

Parameters

path

The native file path.

"/Users/test/Desktop/picture.jpg"

Result Returns the FileMaker path.

Description

The difference between a native path and a FileMaker path on Mac is, that FileMaker expects to have the Disk Name in front followed by the rest of the path. Mac OS X functions require paths from the root disk to start without volume name. Other disks have paths starting with "/Volumes/name".

This function does not work for relative paths.

Examples

Convert path to FileMaker path:

```
MBS( "Path.NativePathToFilemakerPath"; "/Users/test/Desktop/picture.jpg")
```

Build temp path:

```
"imagemac:" & MBS( "Path.NativePathToFileMakerPath"; MBS("Path.AddPathComponent"; MBS("Folders.UserTemporary"; "test.jpg")) )
```

See also

- 81.4 Folders.SharedDocuments 4172
- 81.5 Folders.System 4173
- 81.6 Folders.SystemFonts 4174
- 81.7 Folders.SystemTemporary 4175
- 81.8 Folders.UserDesktop 4177
- 81.13 Folders.UserMusic 4184
- 81.14 Folders.UserPictures 4185
- 81.15 Folders.UserPreferences 4186
- 81.16 Folders.UserTemporary 4187

- 81.18 Folders.UserVideo

Example Databases

- [Files/FileMakerPath to NativePath](#)
- [Mac only/Services for Mac OS X/ServiceProvider test](#)

121.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)
- [MBS FileMaker Plugin, version 5.1pr9](#)
- [MBS Filemaker Plugin, version 3.0pr1](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr2](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr8](#)

121.7.2 FileMaker Magazin

- [Ausgabe 4/2018, Seite 16](#)
- [Ausgabe 1/2017, Seite 10](#)
- [Ausgabe 3/2012, Seite 31](#)

Created 18th August 2014, last changed 8th May 2017.

121.8 Path.RemoveLastPathComponent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	6.0	Yes	Yes	Yes	Yes	Yes

```
MBS( "Path.RemoveLastPathComponent"; Path )
```

Parameters

Path

The native file path.
 ”/Users/cs/Desktop”

Result Returns path or error.

Description

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Removes last path component on Windows:

```
MBS( "Path.RemoveLastPathComponent"; "c:\\test.txt" )
```

Get app folder path:

```
MBS( "Path.RemoveLastPathComponent"; MBS( "App.GetProcessPath" ) )
```

Query plugin folder:

```
MBS( "Path.RemoveLastPathComponent"; MBS( "Plugin.Path" ) )
```

Example result: ”/Applications/FileMaker Pro 18 Advanced/Extensions”

See also

- [34.8 App.GetProcessPath](#) 916
- [70.273 DynaPDF.Initialize](#) 2941
- [78.62 Files.WriteFile](#) 3871
- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [121.5 Path.LastPathComponent](#) 6144
- [124.35 Plugin.Path](#) 6302

Example Databases

- [WebView/Calendar/Calendar](#)

121.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 30th November 2015, last changed 28th August 2019.

121.9 Path.ShortPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
121 Path	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Path.ShortPath"; Path)

Parameters

Path

The native file path.

"C:\Users\Christian Schmitz\Dokumente"

Result Returns OK or error.

Description

For your convenience this function returns same path on iOS, Mac and Linux.

If the specified path is already in its short form and conversion is not needed, the function simply returns the input path.

Use Path.LongPath function to reverse to long path.

Examples

Convert FileMaker path:

MBS("Path.ShortPath"; "C:\Program Files\FileMaker\FileMaker Pro 17 Advanced")

Example result: "C:\PROGRA~1\FILEMA~1\FILEMA~1"

See also

- 121.6 Path.LongPath

6146

121.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr4](#)

Created 17th December 2018, last changed 17th December 2018.

Chapter 122

PDFKit

PDF functions for Mac.

122.1 PDFKit.AddEmptyPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	5.0	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.AddEmptyPage"; PDF { ; Width; Height })

Parameters

PDF

A PDF reference number from PDFKit.Open.

\$ref

Width

Optional

The width for the new PDF page.

600

Height

Optional

The height of the new PDF page.

800

Result Returns OK or error.

Description

Your changes are only done in memory, so please remember to write modified pdf back to disk, e.g. by using PDFKit.WriteToPath. Or use PDFKit.GetPDFDocument to get a PDF for storing in a container.

Examples

Create PDF from images:

```
# Start new document
Set Variable [ $doc; Value:MBS("PDFKit.NewPDFDocument") ]
# Add image in full size as new page
Set Variable [ $r; Value:MBS("PDFKit.AddImagePage"; $doc; test::image) ]
# Add empty page in default size
Set Variable [ $r; Value:MBS("PDFKit.AddEmptyPage"; $doc) ]
# Add image in given size as new page:
Set Variable [ $r; Value:MBS("PDFKit.AddImagePage"; $doc; test::image; 400; 300) ]
# get PDF document and store in container:
Set Field [ test::test; MBS("PDFKit.GetPDFDocument"; $doc) ]
# release memory
Set Variable [ $r; Value:MBS("PDFKit.Release"; $doc) ]
```

See also

- 122.3 PDFKit.AddImagePage 6157
- 122.11 PDFKit.GetPDFDocument 6171
- 122.27 PDFKit.NewPDFDocument 6196
- 122.28 PDFKit.Open 6198
- 122.34 PDFKit.Release 6209
- 122.46 PDFKit.WriteToPath 6233

122.1.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr12](#)

Created 16th February 2015, last changed 25th April 2016.

122.2 PDFKit.AddImageFilePage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	7.2	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.AddImageFilePage"; PDF; FilePath { ; Width; Height })

Parameters

PDF

A PDF reference number from PDFKit.Open.

\$ref

FilePath

The file path to the image file to use.

"/Users/cs/Desktop/test.png"

Width

Optional

The width for the new PDF page.

600

Height

Optional

The height of the new PDF page.

800

Result Returns OK or error.

Description

If you need more control about details, you may want to check DynaPDF functions.

Your changes are only done in memory, so please remember to write modified pdf back to disk, e.g. by using PDFKit.WriteToPath. Or use PDFKit.GetPDFDocument to get a PDF for storing in a container.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Create PDF from image file:

```
Set Variable [ $ref; Value:MBS("PDFKit.NewPDFDocument") ]
```

```
Set Variable [ $r; Value:MBS("PDFKit.AddImageFilePage"; $ref; "/Users/cs/Desktop/test.jpg"; 640; 480) ]
```

```
Set Variable [ $r; Value:MBS("PDFKit.WriteToPath"; $ref; "/Users/cs/Desktop/test.pdf") ]
```

```
Set Variable [ $result; Value:MBS("PDFKit.Release"; $ref) ]
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 122.3 PDFKit.AddImagePage 6157
- 122.11 PDFKit.GetPDFDocument 6171
- 122.27 PDFKit.NewPDFDocument 6196
- 122.28 PDFKit.Open 6198
- 122.34 PDFKit.Release 6209
- 122.46 PDFKit.WriteToPath 6233

122.2.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr6](#)

Created 9th May 2017, last changed 9th May 2017.

122.3 PDFKit.AddImagePage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	5.0	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.AddImagePage"; PDF; Image { ; Width; Height })

Parameters

PDF

A PDF reference number from PDFKit.Open.

\$ref

Image

The image to use. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Width

Optional

The width for the new PDF page.

600

Height

Optional

The height of the new PDF page.

800

Result Returns OK or error.

Description

If you need more control about details, you may want to check DynaPDF functions.

Please use PDFKit.AddImageFilePage to add image file on disk.

Your changes are only done in memory, so please remember to write modified pdf back to disk, e.g. by using PDFKit.WriteToPath. Or use PDFKit.GetPDFDocument to get a PDF for storing in a container.

Examples

Create PDF from images:

```
# Start new document
Set Variable [ $doc; Value:MBS("PDFKit.NewPDFDocument") ]
# Add image in full size as new page
Set Variable [ $r; Value:MBS("PDFKit.AddImagePage"; $doc; test::image) ]
# Add empty page in default size
Set Variable [ $r; Value:MBS("PDFKit.AddEmptyPage"; $doc) ]
# Add image in given size as new page:
Set Variable [ $r; Value:MBS("PDFKit.AddImagePage"; $doc; test::image; 400; 300) ]
# get PDF document and store in container:
Set Field [ test::test; MBS("PDFKit.GetPDFDocument"; $doc) ]
# release memory
```

Set Variable [\$r; Value:MBS("PDFKit.Release"; \$doc)]

See also

- [122.1 PDFKit.AddEmptyPage](#) 6153
- [122.2 PDFKit.AddImageFilePage](#) 6155
- [122.11 PDFKit.GetPDFDocument](#) 6171
- [122.27 PDFKit.NewPDFDocument](#) 6196
- [122.28 PDFKit.Open](#) 6198
- [122.34 PDFKit.Release](#) 6209
- [122.46 PDFKit.WriteToPath](#) 6233

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)

122.3.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr6](#)
- [MBS FileMaker Plugin, version 5.0pr12](#)

Created 16th February 2015, last changed 9th May 2017.

122.4 PDFKit.AppendPages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	3.1	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.AppendPages"; PDFRef; OtherPDFs)

Parameters

PDFRef

The PDF Reference where pages are added.

\$ref

OtherPDFs

Several PDF references. A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

\$PDF

Result Returns OK on success or error on failure.

Description

Your changes are only done in memory, so please remember to write modified pdf back to disk, e.g. by using PDFKit.WriteToPath. Or use PDFKit.GetPDFDocument to get a PDF for storing in a container.

Examples

Merge two PDFs:

```
Set Variable [ $pdf ; Value: MBS("PDFKit.OpenContainer"; MyTable::InputPDF) ]
Set Variable [ $r ; Value: MBS( "PDFKit.AppendPages"; $pdf; MyTable::OtherPDF ) ]
Set Field [ MyTable::OutputPDF ; MBS( "PDFKit.GetPDFDocument"; $PDF) ]
Set Variable [ $r ; Value: MBS( "PDFKit.Release"; $pdf) ]
```

See also

- 122.11 PDFKit.GetPDFDocument 6171
- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200
- 122.34 PDFKit.Release 6209
- 122.46 PDFKit.WriteToPath 6233

122.4.1 Blog Entries

- [PDFKit on iOS for MBS FileMaker Plugin](#)
- [MBS Filemaker Plugin, version 3.1pr8](#)

Created 18th August 2014, last changed 30th November 2017.

122.5 PDFKit.Combine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.Combine"; Name; PDFs)

Parameters

Name

A text with the file name to include with the PDF.

"test.pdf"

PDFs

Several PDF references. A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open. The function will fail if one of those is an image file.

Result Returns the PDF container value.

Description

You can pass container values, URLs or PDF references. You can pass one PDF reference to save to a new PDF.

Please note the difference between PDFKit.Combine and PDFKit.CombineRef. Combine returns a new container value with the new PDF. CombineRef returns the new PDF reference for further processing.

If on combining one of the PDF parameters is not a valid PDF, the function returns an error. You can use PDFKit.SetIgnoreCombineErrors to disable that and ignore all PDFs which fail to open. For example if you write code which takes 4 container values and not all of them contain PDF files.

Starting with version 6.0, the PDFs parameters can also be lists of paths or reference numbers.

Examples

Combine two PDF files form two media fields into a new PDF

```
MBS("PDFKit.Combine"; "test.pdf"; mytable::test1; mytable::test2)
```

Merge PDFs:

```
# Start with blank list
Set Variable [ $list; Value:"" ]
# Load PDF from container
Go to Record/Request/Page [ First ]
Set Variable [ $destPage; Value:1 ]
Loop
Set Variable [ $r; Value:MBS("PDFKit.OpenContainer"; Merge PDFs::InputPDF) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $list; Value:$list & $r & $]
End If
Go to Record/Request/Page [ Next; Exit after last ]
End Loop
```

122.5. PDFKIT.COMBINE

6161

Set Field [Merge PDFs::FinalPDF; MBS("PDFKit.Combine"; "merge.pdf"; \$list)]

Set Variable [\$r; Value:MBS("PDFKit.Release"; \$list)]

See also

- [124.6 IsError](#) 6266
- [122.6 PDFKit.CombineRef](#) 6162
- [122.28 PDFKit.Open](#) 6198
- [122.29 PDFKit.OpenContainer](#) 6200
- [122.34 PDFKit.Release](#) 6209
- [122.38 PDFKit.SetCurrentFilter](#) 6214
- [122.39 PDFKit.SetIgnoreCombineErrors](#) 6216

Example Databases

- [Mac and iOS/PDFKit/Combine PDFs](#)
- [Mac and iOS/PDFKit/Compress PDF](#)
- [Mac and iOS/PDFKit/Merge PDF](#)

122.5.1 Blog Entries

- [FileMaker and PDF Containers](#)
- [MBS FileMaker Plugin, version 5.5pr1](#)
- [Compressing PDFs with PDFKit in FileMaker](#)

122.5.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 24](#)

Created 18th August 2014, last changed 7th March 2016.

122.6 PDFKit.CombineRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.CombineRef"; Name; PDFs)

Parameters

Name

A text with the file name to include with the PDF.
"test.pdf"

PDFs

Several PDF references. A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Result Returns the PDF reference.

Description

You can pass container values, URLs or PDF references. You can pass one PDF reference to save to a new PDF.

Please note the difference between PDFKit.Combine and PDFKit.CombineRef. Combine returns a new container value with the new PDF. CombineRef returns the new PDF reference for further processing.

If on combining one of the PDF parameters is not a valid PDF, the function returns an error. You can use PDFKit.SetIgnoreCombineErrors to disable that and ignore all PDFs which fail to open. For example if you write code which takes 4 container values and not all of them contain PDF files.

Starting with version 6.0, the PDFs parameters can also be lists of paths or reference numbers.

Examples

Combine the PDF files in the three PDF references into a new PDF reference:

```
MBS("PDFKit.CombineRef"; "" ; $ref1; $ref2; $ref3)
```

See also

- 122.5 PDFKit.Combine 6160
- 122.28 PDFKit.Open 6198
- 122.39 PDFKit.SetIgnoreCombineErrors 6216

122.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.5pr1](#)

122.6.2 FileMaker Magazin

- Ausgabe 6/2017, Seite 26

Created 18th August 2014, last changed 1st January 2016.

122.7 PDFKit.GeneratePreview

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	7.5	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GeneratePreview"; Container)

Parameters

Container

A media value containing PDF data.

Result Returns OK or error.

Description

For Windows or Linux, please use DynaPDF.GeneratePreview.

Examples

Generate preview:

```
Set Field [ Merge PDFs::FinalPDF ; MBS("PDFKit.GeneratePreview"; Merge PDFs::InputPDF) ]
```

Add a preview to PDF container if needed:

```
# get a PDF somewhere
Set Variable [ $PDF ; Value: MBS( "Files.ReadFile"; "C:\Users\Christian\Desktop\test.pdf"; "auto") ]
# Does have PDF and no image?
Set Variable [ $types ; Value: MBS( "Container.GetTypes"; $PDF) ]
# PDF included?
If [ Position ( $types ; "PDF " ; 1 ; 1 ) >0 ]
# Image preview missing?
If [ Position ( $types ; "JPEG" ; 1 ; 1 ) <1 and Position ( $types ; "PNGf" ; 1 ; 1 ) <1 ]
# Use DynaPDF if initialized, we can use it
If [ MBS( "DynaPDF.IsInitialized" ) ]
Set Variable [ $PDF2 ; Value: MBS( "DynaPDF.GeneratePreview"; $PDF) ]
If [ MBS("IsError") = 0 ]
# Success, so use the new PDF
Set Variable [ $PDF ; Value: $PDF2 ]
End If
Else If [ MBS( "IsMacOSX" ) = 1 ]
# On Mac use PDFKit
Set Variable [ $PDF2 ; Value: MBS( "PDFKit.GeneratePreview"; $PDF) ]
If [ MBS("IsError") = 0 ]
# Success, so use the new PDF
Set Variable [ $PDF ; Value: $PDF2 ]
End If
End If
End If
End If
```


122.7. PDFKIT.GENERATEPREVIEW

6165

```
# Store PDF with preview  
Set Field [ test::Image ; $PDF ]
```

See also

- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 70.116 DynaPDF.GeneratePreview 2740
- 70.282 DynaPDF.IsInitialized 2966
- 78.45 Files.ReadFile 3844
- 124.6 IsError 6266

122.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 17th October 2017, last changed 11st February 2018.

122.8 PDFKit.GetCurrentFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.3	Yes	No	Yes, macOS only	No	No

MBS("PDFKit.GetCurrentFilter")

Result Returns name or error.

Description

See also

- [122.38 PDFKit.SetCurrentFilter](#)

6214

122.8.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr6](#)

Created 18th August 2014, last changed 18th August 2014.

122.9 PDFKit.GetIgnoreCombineErrors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.4	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetIgnoreCombineErrors")

Result Returns the current value of the ignore combine error status.

Description

Returns true if errors should be ignored or false if not.

See also

- 122.39 PDFKit.SetIgnoreCombineErrors

6216

122.9.1 Blog Entries

- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr5](#)

Created 18th August 2014, last changed 18th August 2014.

122.10 PDFKit.GetPDFAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFAttribute"; PDF; Key)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Key

Which information to query. This can be one of the following: Title, Subject, Author, Creator, Producer, Keywords, CreationDate or ModificationDate.

"Title"

Result Returns the text or date value requested.

Description

New keys in v5.4: OwnerPassword, UserPassword, EncryptionKeyLength, AllowsPrinting and AllowsCopying.

If you need more control about encryption, restrictions or metadata, you may want to checkout our DynaPDF functions in the plugin.

Examples

Get all the information values for a PDF in a container:

```
"Title: " & MBS("PDFKit.GetPDFAttribute"; combine pdf::test1; "Title") & "§" &
"Subject: " & MBS("PDFKit.GetPDFAttribute"; combine pdf::test1; "Subject") & "§" &
"Author: " & MBS("PDFKit.GetPDFAttribute"; combine pdf::test1; "Author") & "§" &
"Creator: " & MBS("PDFKit.GetPDFAttribute"; combine pdf::test1; "Creator") & "§" &
"Producer: " & MBS("PDFKit.GetPDFAttribute"; combine pdf::test1; "Producer") & "§" &
"Keywords: " & MBS("PDFKit.GetPDFAttribute"; combine pdf::test1; "Keywords") & "§" &
"CreationDate: " & MBS("PDFKit.GetPDFAttribute"; combine pdf::test1; "CreationDate") & "§" &
"ModificationDate: " & MBS("PDFKit.GetPDFAttribute"; combine pdf::test1; "ModificationDate")
```

See also

- 122.28 PDFKit.Open 6198
- 122.40 PDFKit.SetPDFAttribute 6217

Example Databases

- [Mac and iOS/PDFKit/Combine PDFs](#)

122.10.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.4pr2](#)
- [MBS Filemaker Plugin, version 3.2pr8](#)

Created 18th August 2014, last changed 17th December 2018.

Key	Description
Title	The document's title. Optional; if present, the value of this key must be a text.
Author	The name of the person who created this document. Optional; if present, the value of this key must be a text.
Subject	The subject of a document. Optional; if present, the value of this key must be a text.
Keywords	The keywords for this document. This key is optional. Must be the keywords with comma separated.
Creator	The name of the application that created the original data used to create this document. Optional; if present, the value of this key must be a text.
OwnerPassword	The "owner password" of the PDF document. If this key is specified, the document will be encrypted using the value as the owner password; otherwise, the document will not be encrypted. The value of this key must be a text which can be represented in ASCII encoding; only the first 32 bytes will be used for the password. There is no default value for this key. If the value of this key cannot be represented in ASCII, the document will not be created and the creation function will fail.
UserPassword	The "user password" of the PDF document. If the document is encrypted, then the value of this key will be the user password for the document; if unspecified, the user password will be the empty string. The value of this key must be a text which can be represented in ASCII encoding; only the first 32 bytes will be used for the password. If the value of this key cannot be represented in ASCII, the document will not be created and the creation function will fail.
EncryptionKeyLength	Specifies the encryption key length in bits; see Table 3.18 "Entries common to all encryption dictionaries", PDF Reference: Adobe PDF version 1.5 (4th ed.) for more info. Optional; if present, the value of this key must be a number with value which is a multiple of 8 between 40 and 128, inclusive. If this key is absent or invalid, the encryption key length defaults to 40 bits.
AllowsPrinting	Used to specify whether the document allows printing when unlocked with the user password. The value of this key must be a boolean. The default value of this key is 1 (true).
AllowsCopying	Used to specify whether the document allows copying when unlocked with the user password. The value of this key must be a boolean. The default value of this key is 1 (true).
CreationDate	The creation date of PDF.
ModificationDate	The modification date of PDF.

122.11 PDFKit.GetPDFDocument

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.2	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFDocument"; PDF { ; Filename })

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Filename

Optional

Optionally, the file name to use for the container value.

"output.pdf"

Result Returns a container with a PDF document. The plugin adds a JPEG picture for preview as well as a file name. You can store it in a media field.

Description

Filename is optional. When you use an URL for the PDF, you can basicly load a new PDF from a server.

Examples

Save a PDF in a PDF reference into a container value:

```
MBS( "PDFKit.GetPDFDocument"; $ref; "test.pdf" )
```

Create PDF from images:

```
# Start new document
Set Variable [ $doc; Value:MBS("PDFKit.NewPDFDocument") ]
# Add image in full size as new page
Set Variable [ $r; Value:MBS("PDFKit.AddImagePage"; $doc; test::image) ]
# Add empty page in default size
Set Variable [ $r; Value:MBS("PDFKit.AddEmptyPage"; $doc) ]
# Add image in given size as new page:
Set Variable [ $r; Value:MBS("PDFKit.AddImagePage"; $doc; test::image; 400; 300) ]
# get PDF document and store in container:
Set Field [ test::test; MBS("PDFKit.GetPDFDocument"; $doc) ]
# release memory
Set Variable [ $r; Value:MBS("PDFKit.Release"; $doc) ]
```

See also

- 122.1 PDFKit.AddEmptyPage 6153
- 122.3 PDFKit.AddImagePage 6157

- 122.4 PDFKit.AppendPages 6159
- 122.19 PDFKit.GetPDFPageText 6184
- 122.27 PDFKit.NewPDFDocument 6196
- 122.29 PDFKit.OpenContainer 6200
- 122.34 PDFKit.Release 6209
- 122.41 PDFKit.SetPDFPageDisplayAnnotation 6220
- 122.42 PDFKit.SetPDFPageRotation 6222
- 122.45 PDFKit.Watermark 6230

Example Databases

- [Mac and iOS/PDFKit/Combine PDFs](#)
- [Mac and iOS/PDFKit/Encrypt PDF](#)
- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [Mac and iOS/PDFKit/Watermark PDF Page](#)

122.11.1 Blog Entries

- [PDFKit on iOS for MBS FileMaker Plugin](#)
- [MBS Filemaker Plugin, version 2.2pr4](#)

Created 18th August 2014, last changed 16th February 2015.

122.12 PDFKit.GetPDFPageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.1	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPageCount"; PDF)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Result The number of the page count.

Description

Examples

Query the page count from this PDF file:

MBS("PDFKit.GetPDFPageCount"; mytable::pdfField)

See also

- 122.13 PDFKit.GetPDFPageDisplayAnnotation 6175
- 122.14 PDFKit.GetPDFPageFormattedText 6176
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180
- 122.17 PDFKit.GetPDFPagePDFRef 6182
- 122.18 PDFKit.GetPDFPageRotation 6183
- 122.21 PDFKit.GetPDFPagesPDF 6188
- 122.22 PDFKit.GetPDFPagesPDFRef 6190
- 122.32 PDFKit.PageBounds 6205
- 122.41 PDFKit.SetPDFPageDisplayAnnotation 6220

Example Databases

- [Mac and iOS/PDFKit/Combine PDFs](#)
- [Mac and iOS/PDFKit/Extract PDF Pages](#)
- [Mac and iOS/PDFKit/Split](#)

122.12.1 Blog Entries

- [MBS Filemaker Plugin, version 2.1pr5](#)

Created 18th August 2014, last changed 18th August 2014.

122.13 PDFKit.GetPDFPageDisplayAnnotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	6.0	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPageDisplayAnnotation"; PDF; index)

Parameters**PDF**

The PDF reference number.

\$pdf

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

Result Returns OK or error.

Description**See also**

- 122.12 PDFKit.GetPDFPageCount 6173
- 122.41 PDFKit.SetPDFPageDisplayAnnotation 6220

Created 30th November 2015, last changed 30th November 2015.

122.14 PDFKit.GetPDFPageFormattedText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPageFormattedText"; PDF; index)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

5

Result The styled text of the PDF page as far as PDFKit knows it and the plugin can translate it.

Description

Our plugin translates the styled text from PDFKit to FileMaker. It should work with font size and styles like bold, underline and italic.

Examples

Extract styled text of page 6 in this PDF

MBS("PDFKit.GetPDFPageFormattedText"; \$ref; 5)

See also

- [122.12 PDFKit.GetPDFPageCount](#) 6173
- [122.28 PDFKit.Open](#) 6198

Example Databases

- [Mac and iOS/PDFKit/Extract PDF Pages](#)

122.14.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr1](#)

Created 18th August 2014, last changed 16th February 2015.

122.15 PDFKit.GetPDFPageImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.1	Yes	No	Yes, macOS only	No	Yes

```
MBS( "PDFKit.GetPDFPageImage"; PDF; index { ; ImageType; Filename; DPI; box; ClearBackground }
)
```

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

DPI

Optional

The DPI to use for the resolution of the image. Default is 72.

72

box

Optional

The PDF box to use. Can be Media Box = 0, Crop Box = 1, Bleed Box = 2, TrimBox = 3 or ArtBox = 4. If the box is not defined, we fall back to the media box. Default is 0.

1

ClearBackground

Optional

Optionally, whether to have a transparent background (1) vs. a white background (0). Default is 0 for white. For JPEG, you can't pass 1.

0

Result Returns a container with a JPEG picture of the PDF page. You can store it in a media field.

Description

With plugin version 2.4 you can specify format with ImageType parameter.

Due to bugs in Apple's PDFKit you may see memory leaks with JPEG data from PDF pages (seen in macOS 10.12).

For Windows, Linux or iOS, please check `DynaPDF.RenderPage` or `DynaPDF.GeneratePreview` function.

Examples

Render page 2 of a PDF into a picture

```
MBS( "PDFKit.GetPDFPageImage"; $ref; 1; "jpeg"; "test.jpg"; 300; 1 )
```

Render first page of a PDF in a container:

```
MBS( "PDFKit.GetPDFPageImage"; TableName::ContainerFieldName; 0; "jpeg"; "image.jpg" )
```

See also

- 55.2 `Container.DecodeFromBase64` 1607
- 55.8 `Container.GetBase64` 1617
- 70.116 `DynaPDF.GeneratePreview` 2740
- 120.14 `OCR.SetImage` 6125
- 122.16 `PDFKit.GetPDFPagePDF` 6180
- 122.21 `PDFKit.GetPDFPagesPDF` 6188
- 122.22 `PDFKit.GetPDFPagesPDFRef` 6190
- 122.19 `PDFKit.GetPDFPageText` 6184
- 122.28 `PDFKit.Open` 6198
- 122.41 `PDFKit.SetPDFPageDisplayAnnotation` 6220

Example Databases

- [Mac and iOS/PDFKit/Extract PDF Pages](#)

122.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr2](#)
- [JPEG rendering in MacOS Mojave](#)
- [MBS Filemaker Plugin, version 4.0pr1](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr2](#)
- [MBS Filemaker Plugin, version 2.4pr1](#)

- [MBS Filemaker Plugin, version 2.1pr5](#)

Created 18th August 2014, last changed 18th November 2018.

122.16 PDFKit.GetPDFPagePDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.2	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPagePDF"; PDF; index { ; Filename; DontRenderPreview })

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

Filename

Optional

Optionally, the file name to use for the container value.

"output.pdf"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result Returns a container with a PDF document. The plugin adds a JPEG picture for preview as well as a file name. You can store it in a media field.

Description

Filename is optional.

Examples

Extract page 6 into a new PDF:

MBS("PDFKit.GetPDFPagePDF"; \$ref; 5; "newpdf.pdf")

See also

- 122.12 PDFKit.GetPDFPageCount 6173
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.17 PDFKit.GetPDFPagePDFRef 6182
- 122.21 PDFKit.GetPDFPagesPDF 6188
- 122.22 PDFKit.GetPDFPagesPDFRef 6190
- 122.19 PDFKit.GetPDFPageText 6184

<i>122.16. PDFKIT.GETPDFPAGEPDF</i>	6181
• 122.20 PDFKit.GetPDFPageValue	6186
• 122.28 PDFKit.Open	6198
• 122.38 PDFKit.SetCurrentFilter	6214

Example Databases

- [Mac and iOS/PDFKit/Combine PDFs](#)

122.16.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [Compressing PDFs with PDFKit in FileMaker](#)
- [MBS Filemaker Plugin, version 2.2pr4](#)

Created 18th August 2014, last changed 9th March 2015.

122.17 PDFKit.GetPDFPagePDFRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPagePDFRef"; PDF; index)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

myTable::myMedia

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

Result Returns a PDF reference for the new PDF document.

Description

Examples

Extract the PDF page with the given number:

MBS("PDFKit.GetPDFPagePDFRef"; \$ref; 5)

See also

- 122.12 PDFKit.GetPDFPageCount 6173
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180
- 122.21 PDFKit.GetPDFPagesPDF 6188
- 122.22 PDFKit.GetPDFPagesPDFRef 6190
- 122.19 PDFKit.GetPDFPageText 6184
- 122.20 PDFKit.GetPDFPageValue 6186
- 122.28 PDFKit.Open 6198

Example Databases

- [Mac and iOS/PDFKit/Split](#)

Created 18th August 2014, last changed 16th February 2015.

122.18 PDFKit.GetPDFPageRotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.9	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPageRotation"; PDF; index)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

Result Returns rotation in degrees.

Description

The rotation is a positive multiple of 90: 0, 90, 180, or 270. The rotation of pages with negative rotation is converted to a corresponding positive rotation.

See also

- 122.12 PDFKit.GetPDFPageCount 6173
- 122.28 PDFKit.Open 6198
- 122.42 PDFKit.SetPDFPageRotation 6222

Created 18th August 2014, last changed 16th February 2015.

122.19 PDFKit.GetPDFPageText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.1	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPageText"; PDF; index)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

5

Result The text of the PDF page as far as PDFKit knows it.

Description

If you need text from all pages, please use PDFKit.GetPDFText.

For solutions on Windows, Linux or iOS, please use DynaPDF.ExtractPageText.

You may need to use Text.ConvertUnicodeToCharacterComposition if text is coming back in decomposed unicode characters.

Examples

Extract text of page 6 in this PDF

MBS("PDFKit.GetPDFPageText"; \$ref; 5)

See also

- 70.98 DynaPDF.ExtractPageText 2709
- 120.14 OCR.SetImage 6125
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180
- 122.17 PDFKit.GetPDFPagePDFRef 6182
- 122.21 PDFKit.GetPDFPagesPDF 6188
- 122.20 PDFKit.GetPDFPageValue 6186
- 122.23 PDFKit.GetPDFText 6191
- 122.28 PDFKit.Open 6198

122.19. *PDFKIT.GETPDFPAGE*TEXT

6185

- 164.9 Text.ConvertUnicodeToCharacterComposition

7790

Example Databases

- [Mac and iOS/PDFKit/Extract PDF Pages](#)

122.19.1 Blog Entries

- [MBS Filemaker Plugin, version 2.1pr5](#)

Created 18th August 2014, last changed 16th January 2017.

122.20 PDFKit.GetPDFPageValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	5.0	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPageValue"; PDF; index; Selector; Parameter { ; DontRenderPreview })

Parameters

PDF

A PDF reference number from PDFKit.Open.

\$ref

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

Selector

Which value to pick.

"label"

Parameter

For dataRepresentation the filename. For width/height/x/y the index of the box: 0 = media box, 1 = crop box, 2 = bleed box, 3 = trim box, 4 = art box.

DontRenderPreview

Optional

Optional for dataRepresentation. Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result Returns OK or error.

Description

label	The page label. Usually "1" for the first page, "2" for the second, etc.
rotation	Rotation on a page.
numberOfCharacters	Number of characters on the page (including linefeeds and spaces inserted).
string	String (with linefeeds and in some cases spaces inserted) representing the text on the page.
attributedString	Same as string, but with formatting.
displaysAnnotations	Whether to display annotations if page is drawn.
dataRepresentation	The page as a PDF document. Pass as parameter the file name to use for the container value.
width	The width of page.
height	The height of page.
X	The x offset of page bounds.
Y	The y offset of page bounds.

For X/Y/Width/Height you can specify which box to use in the parameter.

122.20. *PDFKIT.GETPDFPAGEVALUE* 6187

See also

- 122.12 PDFKit.GetPDFPageCount 6173
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180
- 122.17 PDFKit.GetPDFPagePDFRef 6182
- 122.21 PDFKit.GetPDFPagesPDF 6188
- 122.22 PDFKit.GetPDFPagesPDFRef 6190
- 122.19 PDFKit.GetPDFPageText 6184
- 122.28 PDFKit.Open 6198

122.20.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 16th February 2015, last changed 9th March 2015.

122.21 PDFKit.GetPDFPagesPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.2	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPagesPDF"; PDF; Indexes { ; Filename; DontRenderPreview })

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Indexes

The index of the page. From zero to PDFKit.GetPDFPageCount-1. You can use several numbers separated with comma and ranges with minus.

"0-2,4,6-9,19"

Filename

Optional

Optionally, the file name to use for the container value.

"output.pdf"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result Returns a container with a PDF document. The plugin adds a JPEG picture of the first page for preview as well as a file name. You can store it in a media field.

Description

Filename is optional.

Examples

Extract a few pages into a new PDF

MBS("PDFKit.GetPDFPagesPDF"; \$ref; "1,2,5,6"; "newpdf.pdf")

See also

- 122.12 PDFKit.GetPDFPageCount 6173
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180
- 122.17 PDFKit.GetPDFPagePDFRef 6182
- 122.22 PDFKit.GetPDFPagesPDFRef 6190
- 122.19 PDFKit.GetPDFPageText 6184

<i>122.21. PDFKIT.GETPDFPAGESPDF</i>	6189
• 122.20 PDFKit.GetPDFPageValue	6186
• 122.28 PDFKit.Open	6198
• 122.38 PDFKit.SetCurrentFilter	6214

122.21.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [Compressing PDFs with PDFKit in FileMaker](#)
- [MBS Filemaker Plugin, version 2.2pr4](#)

Created 18th August 2014, last changed 27th October 2015.

122.22 PDFKit.GetPDFPagesPDFRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFPagesPDFRef"; PDF; Indexes)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

\$ref

Indexes

The index of the page. From zero to PDFKit.GetPDFPageCount-1. You can use several numbers separated with comma and ranges with minus.

"1,2,6-9,19"

Result Returns a PDF reference for the new PDF document.

Description

Examples

Get the PDF pages with the given page numbers into a new PDF

MBS("PDFKit.GetPDFPagesPDFRef"; \$ref; "1,2,5,6")

See also

- 122.12 PDFKit.GetPDFPageCount 6173
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.16 PDFKit.GetPDFPagePDF 6180
- 122.17 PDFKit.GetPDFPagePDFRef 6182
- 122.21 PDFKit.GetPDFPagesPDF 6188
- 122.20 PDFKit.GetPDFPageValue 6186
- 122.28 PDFKit.Open 6198

122.22.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 18th August 2014, last changed 16th February 2015.

122.23 PDFKit.GetPDFText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.1	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.GetPDFText"; PDF)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Result The text of the PDF Document as far as PDFKit knows it.

Description

If you need only text for a given page, please use PDFKit.GetPDFPageText.

For solutions on Windows, Linux or iOS, please use DynaPDF.ExtractText.

Examples

Extract all the text from the given PDF reference:

```
MBS( "PDFKit.GetPDFText"; $ref )
```

See also

- [70.95 DynaPDF.ExtractDocumentText](#) 2703
- [70.99 DynaPDF.ExtractText](#) 2711
- [120.14 OCR.SetImage](#) 6125
- [122.19 PDFKit.GetPDFPageText](#) 6184
- [122.28 PDFKit.Open](#) 6198

Example Databases

- [Mac and iOS/PDFKit/Extract PDF Pages](#)

122.23.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr1](#)
- [MBS Filemaker Plugin, version 2.1pr5](#)

Created 18th August 2014, last changed 9th September 2016.

122.24 PDFKit.GetPrintLastSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	9.2	Yes	No	No	No	No

MBS("PDFKit.GetPrintLastSettings")

Result Returns text or error.

Description

For user to read. To save settings, you can use PDFKit.SetPrintSetting and PDFKit.GetPrintLastSettings.

Since version 10.1 we return settings as JSON instead of XML and includes print parameter.

Examples

Queries last print settings:

```
Set Variable [ $v ; Value: MBS( "PDFKit.GetPrintLastSettings" ) ]
If [ MBS("IsError") ]
Set Field [ PDFKit Print::Result ; $v ]
Else
Set Field [ PDFKit Print::Settings ; $v ]
Set Field [ PDFKit Print::Result ; "OK" ]
End If
```

See also

- [124.6 IsError](#) 6266
- [122.26 PDFKit.GetPrintSetting](#) 6194
- [122.35 PDFKit.ResetPrintSettings](#) 6211
- [122.44 PDFKit.SetPrintSetting](#) 6226

Example Databases

- [Mac and iOS/PDFKit/Print PDF](#)

122.24.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 13th March 2019, last changed 21st February 2020.

122.25 PDFKit.GetPrintOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	9.2	Yes	No	No	No	No

MBS("PDFKit.GetPrintOption"; Key)

Parameters

Key

The key to use.

"com_apple_print_PrintSettings_PMCopies"

Result Returns value or error.

Description

You can use PDFKit.SetOption to set options. Use PDFKit.GetPrintSetting for regular options.

See also

- [122.26 PDFKit.GetPrintSetting](#) 6194
- [122.43 PDFKit.SetPrintOption](#) 6224
- [122.44 PDFKit.SetPrintSetting](#) 6226

122.25.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 12nd March 2019, last changed 12nd March 2019.

122.26 PDFKit.GetPrintSetting

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.0	Yes	No	Yes, macOS only	No	No

MBS("PDFKit.GetPrintSetting"; Selector)

Parameters

Selector

Which value to query.
"FaxNumber"

Result Returns value or error.

Description

See also PDFKit.Print function.
See also PDFKit.SetPrintSetting where options are described.

You can query default printer name using "DefaultPrinter" as selector.
New in 8.1 you can use selector LastSettings to query last settings as XML and discover what options are set by using the dialog, e.g. the tray names.

Examples

Query printer:

```
MBS( "PDFKit.GetPrintSetting"; "printer" )
```

Query default printer:

```
MBS( "PDFKit.GetPrintSetting"; "DefaultPrinter" )
```

Query last settings as xml:

```
MBS( "PDFKit.GetPrintSetting"; "LastSettings" )
```

See also

- 122.24 PDFKit.GetPrintLastSettings 6192
- 122.25 PDFKit.GetPrintOption 6193
- 122.33 PDFKit.Print 6207
- 122.35 PDFKit.ResetPrintSettings 6211
- 122.36 PDFKit.RestorePrintSettings 6212
- 122.37 PDFKit.SavePrintSettings 6213

122.26. PDFKIT.GETPRINTSETTING	6195
• 122.43 PDFKit.SetPrintOption	6224
• 122.44 PDFKit.SetPrintSetting	6226

Example Databases

- [Mac and iOS/PDFKit/PDFKit Print](#)

122.26.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr1](#)
- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 2nd February 2018.

122.27 PDFKit.NewPDFDocument

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	5.0	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.NewPDFDocument")

Result Returns a number for the PDF. Use PDFKit.Release later to free the memory.

Description

This value can be used in other PDFKit calls to work on the same PDF.

See also PDFKit.Open.

PDF Document reference numbers are starting at 30000 and counting up for each new document.

Examples

Create PDF from images:

```
# Start new document
Set Variable [ $doc; Value:MBS("PDFKit.NewPDFDocument") ]
# Add image in full size as new page
Set Variable [ $r; Value:MBS("PDFKit.AddImagePage"; $doc; test::image) ]
# Add empty page in default size
Set Variable [ $r; Value:MBS("PDFKit.AddEmptyPage"; $doc) ]
# Add image in given size as new page:
Set Variable [ $r; Value:MBS("PDFKit.AddImagePage"; $doc; test::image; 400; 300) ]
# get PDF document and store in container:
Set Field [ test::test; MBS("PDFKit.GetPDFDocument"; $doc) ]
# release memory
Set Variable [ $r; Value:MBS("PDFKit.Release"; $doc) ]
```

See also

- 122.1 PDFKit.AddEmptyPage 6153
- 122.2 PDFKit.AddImageFilePage 6155
- 122.3 PDFKit.AddImagePage 6157
- 122.11 PDFKit.GetPDFDocument 6171
- 122.28 PDFKit.Open 6198
- 122.34 PDFKit.Release 6209

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)

122.27.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.0pr12](#)

Created 16th February 2015, last changed 16th February 2015.

122.28 PDFKit.Open

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.2	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.Open"; PDF)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL.

Result Returns a number for the PDF. Use PDFKit.Release later to free the memory.

Description

This value can be used in other PDFKit calls to work on the same PDF.

See also PDFKit.OpenContainer, PDFKit.OpenPath and PDFKit.OpenURL.

PDF Document reference numbers are starting at 30000 and counting up for each new document.

If you need to open a PDF file in the PDF Viewer, please use Files.LaunchFile with the path to the PDF file instead.

Examples

Open the PDF from the container value:

```
MBS("PDFKit.Open"; myTable::myMediaField)
```

See also

- 122.21 PDFKit.GetPDFPagesPDF 6188
- 122.23 PDFKit.GetPDFText 6191
- 122.30 PDFKit.OpenPath 6202
- 122.31 PDFKit.OpenURL 6204
- 122.33 PDFKit.Print 6207
- 122.40 PDFKit.SetPDFAttribute 6217
- 122.41 PDFKit.SetPDFPageDisplayAnnotation 6220
- 122.45 PDFKit.Watermark 6230
- 122.46 PDFKit.WriteToPath 6233
- 134.8 QLPreviewPanel.AddPDF 6626

122.28.1 **Blog Entries**

- [MBS Filemaker Plugin, version 2.2pr4](#)

Created 18th August 2014, last changed 13th May 2019.

122.29 PDFKit.OpenContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.OpenContainer"; Container)

Parameters

Container

A media value containing PDF data.

Result Returns a number for the PDF.

Description

This value can be used in other PDFKit calls to work on the same PDF.

See also PDFKit.OpenPath and PDFKit.OpenURL.

PDF Document reference numbers are starting at 30000 and counting up for each new document.

Use PDFKit.Release later to free the memory.

Examples

Open the PDF in the container:

```
MBS("PDFKit.OpenContainer"; myTable::myMediaField)
```

Rotate page and set title:

```
# open PDF from container
Set Variable [ $ref; Value:MBS("PDFKit.OpenContainer"; combine pdf::result) ]
# Set title for PDF
Set Variable [ $result; Value:MBS("PDFKit.SetPDFAttribute"; $ref; "Title"; combine pdf::title) ]
# Rotate first page by 90°
Set Variable [ $result; Value:MBS("PDFKit.SetPDFPageRotation"; $ref; 0; 90) ]
# save document to container
Set Field [ combine pdf::result; MBS("PDFKit.GetPDFDocument"; $ref; "result.pdf") ]
# free memory
Set Variable [ $result; Value:MBS("PDFKit.Release"; $ref) ]
```

See also

- 122.48 PDFKit.allowsPrinting 6237
- 122.5 PDFKit.Combine 6160
- 122.49 PDFKit.isEncrypted 6239
- 122.50 PDFKit.isLocked 6241

122.29. PDFKIT.OPENCONTAINER	6201
• 122.28 PDFKit.Open	6198
• 122.30 PDFKit.OpenPath	6202
• 122.34 PDFKit.Release	6209
• 122.40 PDFKit.SetPDFAttribute	6217
• 122.42 PDFKit.SetPDFPageRotation	6222
• 122.45 PDFKit.Watermark	6230

Example Databases

- [Mac and iOS/PDFKit/Combine PDFs](#)
- [Mac and iOS/PDFKit/Encrypt PDF](#)
- [Mac and iOS/PDFKit/Merge PDF](#)
- [Mac and iOS/PDFKit/PDFKit Print](#)
- [Mac and iOS/PDFKit/Watermark PDF Page](#)

122.29.1 Blog Entries

- [PDFKit on iOS for MBS FileMaker Plugin](#)

Created 18th August 2014, last changed 29th September 2017.

122.30 PDFKit.OpenPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.OpenPath"; Path)

Parameters

Path

A text with a file path.

Result Returns a number for the PDF.

Description

This value can be used in other PDFKit calls to work on the same PDF.

See also PDFKit.OpenContainer and PDFKit.OpenURL.

PDF Document reference numbers are starting at 30000 and counting up for each new document.

Use PDFKit.Release later to free the memory.

Examples

Open the PDF with the given path:

```
MBS("PDFKit.OpenPath"; "/data/test.pdf")
```

See also

- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200
- 122.31 PDFKit.OpenURL 6204
- 122.34 PDFKit.Release 6209
- 122.45 PDFKit.Watermark 6230
- 122.46 PDFKit.WriteToPath 6233

Example Databases

- [Mac and iOS/PDFKit/PDFKit Print](#)
- [Mac and iOS/PDFKit/Split](#)

122.30.1 FileMaker Magazin

- Ausgabe 6/2017, Seite 26

122.31 PDFKit.OpenURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.OpenURL"; URL)

Parameters

URL

A text with an URL.

Result Returns a number for the PDF.

Description

This value can be used in other PDFKit calls to work on the same PDF.

See also PDFKit.OpenPath and PDFKit.OpenContainer.

PDF Document reference numbers are starting at 30000 and counting up for each new document.

Use PDFKit.Release later to free the memory.

Seems to work for HTTP protocol, too. The Apple frameworks transparently handle this out of the control of the plugin. With HTTPS after redirect from HTTP is also possible. For more control, please use CURL functions.

Examples

Open the PDF with the given URL:

```
MBS("PDFKit.OpenURL"; "http://www.somedomain.invalid/somepath/test.pdf")
```

See also

- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200
- 122.30 PDFKit.OpenPath 6202
- 122.34 PDFKit.Release 6209
- 122.45 PDFKit.Watermark 6230

Created 18th August 2014, last changed 9th February 2018.

122.32 PDFKit.PageBounds

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.9	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.PageBounds"; PDF; index { ; box; mm })

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

box

Optional

Optionally, the PDF box to use. Can be Media Box = 0, Crop Box = 1, Bleed Box = 2, TrimBox = 3 or ArtBox = 4. If the box is not defined, we fall back to the media box. Default is 0.

1

mm

Optional

Optionally. If you pass 1, we convert the rectangle to millimeters. Else we return points where 72 points are one inch. Default is 0.

0

Result Returns four values separated with new line containing x, y, width and height.

Description

Note that only the media box is required for a PDF. If you request the bounds for the crop box, but the PDF does not include a crop box, the bounds for the media box are returned instead. If you request the bounds for other box types, and the PDF does not includes these types, the bounds for the crop box are returned instead.

The coordinates for the box are in page space, so you might need to transform the points if the page has a rotation on it. Also, note that the bounds boundsForBox returns are intersected with the page's media box.

Examples

Get media box of third page in a PDF in a container field:

```
MBS("PDFKit.PageBounds"; test::data; 2; 0)
```

Get crop box of sixth page in millimeters in a PDF with reference:

```
MBS("PDFKit.PageBounds"; $ref; 5; 1; 1)
```

See also

- 122.12 PDFKit.GetPDFPageCount 6173
- 122.28 PDFKit.Open 6198

Created 18th August 2014, last changed 16th February 2015.

122.33 PDFKit.Print

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.0	Yes	No	Yes, macOS only	No	No

```
MBS( "PDFKit.Print"; PDF )
```

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Result Returns OK or error.

Description

Optionally if you have a fax printer, you can also pass fax number to send a fax.

Please use PDFKit.ResetPrintSettings and then call PDFKit.SetPrintSetting for all the settings you need.

Please use DynaPDF.Print for Windows.

Printing may fail on Server if no printer selected or printer is not turned on.

Examples

Print a PDF container:

```
MBS( "PDFKit.Print"; MyTable::MyDocumentContainer )
```

Fax a PDF container:

```
MBS( "PDFKit.ResetPrintSettings" )
MBS( "PDFKit.SetPrintSetting"; "FaxNumber"; "+123456" )
MBS( "PDFKit.Print"; MyTable::MyDocumentContainer )
```

Print page 2 to 10 and make 3 copies:

```
MBS( "PDFKit.ResetPrintSettings" )
MBS( "PDFKit.SetPrintSetting"; "FirstPage"; 2 )
MBS( "PDFKit.SetPrintSetting"; "LastPage"; 10 )
MBS( "PDFKit.SetPrintSetting"; "Copies"; 3 )
MBS( "PDFKit.Print" )
```

Print with options:

```
# print pdf
Set Variable [ $print3; Value:MBS( "PDFKit.ResetPrintSettings" ) ]
Set Variable [ $print4; Value:MBS( "PDFKit.SetPrintSetting"; "Printer"; "Cliques Xerox" ) ]
Set Variable [ $print5; Value:MBS( "PDFKit.SetPrintSetting"; "FirstPage"; PDF::PrintPageFrom ) ]
Set Variable [ $print6; Value:MBS( "PDFKit.SetPrintSetting"; "LastPage"; PDF::PrintPageTo ) ]
```

```
Set Variable [ $print7; Value:MBS( "PDFKit.SetPrintSetting"; "Copies"; 1 ) ]  
Set Variable [ $print8; Value:MBS( "PDFKit.SetPrintSetting"; "scalingMode"; "DownToFit" ) ]  
Set Variable [ $print8; Value:MBS( "PDFKit.SetPrintSetting"; "DuplexMode"; "DuplexNoTumble" ) ]  
Set Variable [ $print9; Value:MBS( "PDFKit.Print"; PDF::Annotated PDF ) ]
```

See also

- [70.302 DynaPDF.Print](#) 3017
- [122.26 PDFKit.GetPrintSetting](#) 6194
- [122.28 PDFKit.Open](#) 6198
- [122.35 PDFKit.ResetPrintSettings](#) 6211
- [122.44 PDFKit.SetPrintSetting](#) 6226

Example Databases

- [Mac and iOS/PDFKit/Extract PDF Pages](#)
- [Mac and iOS/PDFKit/PDFKit Print](#)
- [Mac and iOS/PDFKit/Print PDF](#)

122.33.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr5](#)
- [PDF Printing in FileMaker on Windows without PDF Reader](#)
- [MBS Filemaker Plugin, version 4.2pr1](#)
- [MBS FileMaker Plugin 4.0 for OS X/Windows - More than 2200 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 17th December 2019.

122.34 PDFKit.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.1	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.Release"; PDFReference)

Parameters

PDFReference

A number referencing a PDF you opened before.

Result Returns OK on success. Do no longer use the reference number after this call as the object has been freed and accessing it again can crash your application.

Description

Examples

Release the PDF reference in variable ref

```
MBS("PDFKit.Release"; $ref)
```

See also

- 122.48 PDFKit.allowsPrinting 6237
- 122.11 PDFKit.GetPDFDocument 6171
- 122.49 PDFKit.isEncrypted 6239
- 122.50 PDFKit.isLocked 6241
- 122.30 PDFKit.OpenPath 6202
- 122.31 PDFKit.OpenURL 6204
- 122.40 PDFKit.SetPDFAttribute 6217
- 122.42 PDFKit.SetPDFPageRotation 6222
- 122.45 PDFKit.Watermark 6230
- 122.46 PDFKit.WriteToPath 6233

Example Databases

- [Mac and iOS/PDFKit/Combine PDFs](#)
- [Mac and iOS/PDFKit/Encrypt PDF](#)
- [Mac and iOS/PDFKit/Merge PDF](#)

- [Mac and iOS/PDFKit/PDFKit Print](#)
- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [Mac and iOS/PDFKit/Split](#)
- [Mac and iOS/PDFKit/Watermark PDF Page](#)

122.34.1 Blog Entries

- [PDFKit on iOS for MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 5.5pr1](#)
- [MBS Filemaker Plugin, version 2.2pr4](#)

122.34.2 FileMaker Magazin

- [Ausgabe 6/2017, Seite 26](#)

Created 18th August 2014, last changed 18th August 2014.

122.35 PDFKit.ResetPrintSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.0	Yes	No	Yes, macOS only	No	No

MBS("PDFKit.ResetPrintSettings")

Result Returns OK or error.

Description

Default is what is setup in the shared print settings for the application.

See also

- 122.24 PDFKit.GetPrintLastSettings 6192
- 122.26 PDFKit.GetPrintSetting 6194
- 122.33 PDFKit.Print 6207
- 122.36 PDFKit.RestorePrintSettings 6212
- 122.37 PDFKit.SavePrintSettings 6213
- 122.44 PDFKit.SetPrintSetting 6226

Example Databases

- [Mac and iOS/PDFKit/PDFKit Print](#)
- [Mac and iOS/PDFKit/Print PDF](#)

122.35.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr1](#)
- [MBS Filemaker Plugin, version 4.0pr5](#)

Created 18th August 2014, last changed 11st February 2020.

122.36 PDFKit.RestorePrintSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.0	Yes	No	Yes, macOS only	No	No

MBS("PDFKit.RestorePrintSettings"; Container)

Parameters

Container

The container value with printer settings.
MyTable::PrinterSettingsContainer

Result Returns OK or error.

Description

See also

- 122.26 PDFKit.GetPrintSetting 6194
- 122.35 PDFKit.ResetPrintSettings 6211
- 122.37 PDFKit.SavePrintSettings 6213
- 122.44 PDFKit.SetPrintSetting 6226

Example Databases

- [Mac and iOS/PDFKit/PDFKit Print](#)

Created 18th August 2014, last changed 18th August 2014.

122.37 PDFKit.SavePrintSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.0	Yes	No	Yes, macOS only	No	No

MBS("PDFKit.SavePrintSettings" { ; FileName })

Parameters

FileName

Optional

The filename to use in the container value.

"Printer Settings.dat"

Result Returns container value with print settings or error.

Description

Print settings are wrapped in a container value.

You can store them in a container and later restore them with PDFKit.RestorePrintSettings or PrintDialog.SetConfiguration function.

See also

- 122.26 PDFKit.GetPrintSetting 6194
- 122.35 PDFKit.ResetPrintSettings 6211
- 122.36 PDFKit.RestorePrintSettings 6212
- 122.44 PDFKit.SetPrintSetting 6226
- 127.24 PrintDialog.GetConfiguration 6409
- 127.42 PrintDialog.SetConfiguration 6429

Example Databases

- [Mac and iOS/PDFKit/PDFKit Print](#)

Created 18th August 2014, last changed 16th March 2019.

122.38 PDFKit.SetCurrentFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.3	Yes	No	Yes, macOS only	No	No

MBS("PDFKit.SetCurrentFilter"; name)

Parameters

name

The name of the filter. Use QuartzFilterManager.Filters to get list of filters. If Filter name is empty or missing, the filter is removed.

"Compress Pictures"

Result Returns OK or error.

Description

You can use the Quartz Filter Manager panel to create a panel.

This is for all PDF saving in MBS Plugin with PDFKit functions.

Applied to PDF in PDFKit.GetPDFPagesPDF, PDFKit.GetPDFPagePDF, PDFKit.Combine, PDFKit.WriteToPath and other functions writing PDFs.

Examples

Set a filter:

```
MBS("PDFKit.SetCurrentFilter"; "Compress Pictures")
```

See also

- [122.5 PDFKit.Combine](#) 6160
- [122.8 PDFKit.GetCurrentFilter](#) 6166
- [122.16 PDFKit.GetPDFPagePDF](#) 6180
- [122.21 PDFKit.GetPDFPagesPDF](#) 6188
- [122.46 PDFKit.WriteToPath](#) 6233
- [122.51 QuartzFilterManager.Filters](#) 6243

Example Databases

- [Mac and iOS/PDFKit/Compress PDF](#)

122.38.1 Blog Entries

- [Compressing PDFs with PDFKit in FileMaker](#)
- [MBS Filemaker Plugin, version 4.3pr6](#)

122.38.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 24
- Ausgabe 5/2014, Seite 23

Created 18th August 2014, last changed 3th June 2019.

122.39 PDFKit.SetIgnoreCombineErrors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.4	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.SetIgnoreCombineErrors")

Result Returns "OK" or error message.

Description

If you call PDFKit.Combine or PDFKit.CombineRef and you pass several container values, those functions normally stop if one of the parameters is not a PDF reference of any kind. If you set errors to be ignored, you can still combine other PDFs.

Examples

Ignore errors on Combine

```
MBS( "PDFKit.SetIgnoreCombineErrors"; 1 )
```

See also

- [122.5 PDFKit.Combine](#) 6160
- [122.6 PDFKit.CombineRef](#) 6162
- [122.9 PDFKit.GetIgnoreCombineErrors](#) 6167

122.39.1 Blog Entries

- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr5](#)

Created 18th August 2014, last changed 18th August 2014.

122.40 PDFKit.SetPDFAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.3	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.SetPDFAttribute"; PDF; Key; Value)

Parameters

PDF

A PDF reference from PDFKit.Open or other functions.

\$ref

Key

Which information to set. This can be one of the following: Title, Subject, Author, Creator, Producer, Keywords, CreationDate or ModificationDate.

"Title"

Value

The new value for this key. Either a text for text value or a timestamp for a date.

"new value"

Result Returns "OK" on success or an error message.

Description

While you can pass here a container value or an URL to a PDF file, you should really pass a reference value. Because once you changed the PDF attribute, you want to save the PDF with a call to PDFKit.GetDocument.

New keys in v5.4: OwnerPassword, UserPassword, EncryptionKeyLength, AllowsPrinting and AllowsCopying.

If you need more control about encryption, restrictions or metadata, you may want to checkout our DynaPDF functions in the plugin.

Your changes are only done in memory, so please remember to write modified pdf back to disk, e.g. by using PDFKit.WriteToPath. Or use PDFKit.GetPDFDocument to get a PDF for storing in a container.

Examples

Set title to a PDF:

```
MBS("PDFKit.SetPDFAttribute"; $ref; "title"; "The new title for this PDF file." )
```

Rotate page and set title:

```
# open PDF from container
Set Variable [ $ref; Value:MBS("PDFKit.OpenContainer"; combine pdf::result) ]
# Set title for PDF
Set Variable [ $result; Value:MBS("PDFKit.SetPDFAttribute"; $ref; "Title"; combine pdf::title) ]
# Rotate first page by 90°
```

```

Set Variable [ $result; Value:MBS("PDFKit.SetPDFPageRotation"; $ref; 0; 90) ]
# save document to container
Set Field [ combine pdf::result; MBS("PDFKit.GetPDFDocument"; $ref; "result.pdf") ]
# free memory
Set Variable [ $result; Value:MBS("PDFKit.Release"; $ref) ]

```

Create PDF with passwords:

```

Set Variable [ $ref; Value:MBS("PDFKit.OpenContainer"; combine pdf::test1) ]
Set Variable [ $r; Value:MBS("PDFKit.SetPDFAttribute"; $ref; "OwnerPassword"; "owner") ]
Set Variable [ $r; Value:MBS("PDFKit.SetPDFAttribute"; $ref; "UserPassword"; "test") ]
Set Variable [ $r; Value:MBS("PDFKit.SetPDFAttribute"; $ref; "EncryptionKeyLength"; 128) ]
Set Variable [ $r; Value:MBS("PDFKit.SetPDFAttribute"; $ref; "AllowsPrinting"; 0) ]
Set Variable [ $r; Value:MBS("PDFKit.SetPDFAttribute"; $ref; "AllowsCopying"; 0) ]
Set Field [ combine pdf::result; MBS("PDFKit.GetPDFDocument"; $ref; "result.pdf") ]
Set Variable [ $result; Value:MBS("PDFKit.Release"; $ref) ]

```

See also

- [122.10 PDFKit.GetPDFAttribute](#) 6168
- [122.11 PDFKit.GetPDFDocument](#) 6171
- [122.28 PDFKit.Open](#) 6198
- [122.29 PDFKit.OpenContainer](#) 6200
- [122.34 PDFKit.Release](#) 6209
- [122.42 PDFKit.SetPDFPageRotation](#) 6222
- [122.46 PDFKit.WriteToPath](#) 6233

Example Databases

- [Mac and iOS/PDFKit/Combine PDFs](#)
- [Mac and iOS/PDFKit/Encrypt PDF](#)

122.40.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr2](#)

Created 18th August 2014, last changed 17th December 2018.

Key	Description
Title	The document's title. Optional; if present, the value of this key must be a text.
Author	The name of the person who created this document. Optional; if present, the value of this key must be a text.
Subject	The subject of a document. Optional; if present, the value of this key must be a text.
Keywords	The keywords for this document. This key is optional. Must be the keywords with comma separated.
Creator	The name of the application that created the original data used to create this document. Optional; if present, the value of this key must be a text.
OwnerPassword	The "owner password" of the PDF document. If this key is specified, the document will be encrypted using the value as the owner password; otherwise, the document will not be encrypted. The value of this key must be a text which can be represented in ASCII encoding; only the first 32 bytes will be used for the password. There is no default value for this key. If the value of this key cannot be represented in ASCII, the document will not be created and the creation function will fail.
UserPassword	The "user password" of the PDF document. If the document is encrypted, then the value of this key will be the user password for the document; if unspecified, the user password will be the empty string. The value of this key must be a text which can be represented in ASCII encoding; only the first 32 bytes will be used for the password. If the value of this key cannot be represented in ASCII, the document will not be created and the creation function will fail.
EncryptionKeyLength	Specifies the encryption key length in bits; see Table 3.18 "Entries common to all encryption dictionaries", PDF Reference: Adobe PDF version 1.5 (4th ed.) for more info. Optional; if present, the value of this key must be a number with value which is a multiple of 8 between 40 and 128, inclusive. If this key is absent or invalid, the encryption key length defaults to 40 bits.
AllowsPrinting	Used to specify whether the document allows printing when unlocked with the user password. The value of this key must be a boolean. The default value of this key is 1 (true).
AllowsCopying	Used to specify whether the document allows copying when unlocked with the user password. The value of this key must be a boolean. The default value of this key is 1 (true).
CreationDate	The creation date of PDF.
ModificationDate	The modification date of PDF.

122.41 PDFKit.SetPDFPageDisplayAnnotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	6.0	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.SetPDFPageDisplayAnnotation"; PDF; index; Value)

Parameters

PDF

The PDF reference number.

\$pdf

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

Value

The new value for whether to display annotations. Can be 0 or 1.

1

Result Returns OK or error.

Description

Function to turn on or off the display of annotations when the page is drawn.

Your changes are only done in memory, so please remember to write modified pdf back to disk, e.g. by using PDFKit.WriteToPath. Or use PDFKit.GetPDFDocument to get a PDF for storing in a container.

Examples

Render with or without image:

```
Set Variable [ $pdf; Value:MBS( "PDFKit.OpenContainer"; PDFKit Rendering::PDF ) ]
Set Variable [ $r; Value:MBS( "PDFKit.SetPDFPageDisplayAnnotation"; $pdf; 0; 0 ) ]
Set Field [ PDFKit Rendering::Image1; MBS( "PDFKit.GetPDFPageImage"; $pdf; 0 ) ]
Set Variable [ $r; Value:MBS( "PDFKit.SetPDFPageDisplayAnnotation"; $pdf; 0; 1 ) ]
Set Field [ PDFKit Rendering::Image2; MBS( "PDFKit.GetPDFPageImage"; $pdf; 0 ) ]
Set Variable [ $r; Value:MBS("PDFKit.release"; $pdf) ]
```

See also

- 122.11 PDFKit.GetPDFDocument 6171
- 122.12 PDFKit.GetPDFPageCount 6173
- 122.13 PDFKit.GetPDFPageDisplayAnnotation 6175
- 122.15 PDFKit.GetPDFPageImage 6177
- 122.28 PDFKit.Open 6198

<i>122.41. PDFKIT.SETPDFPAGEDISPLAYANNOTATION</i>	6221
• 122.29 PDFKit.OpenContainer	6200
• 122.34 PDFKit.Release	6209
• 122.46 PDFKit.WriteToPath	6233

Created 30th November 2015, last changed 25th April 2016.

122.42 PDFKit.SetPDFPageRotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.9	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.SetPDFPageRotation"; PDF; index; rotation)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

index

The index of the page. From zero to PDFKit.GetPDFPageCount-1.

1

rotation

The new rotation value.

90

Result Returns OK on success.

Description

The rotation must be a positive or negative multiple of 90 (negative angles are converted to their positive equivalents; for example, -90 is changed to 270).

Your changes are only done in memory, so please remember to write modified pdf back to disk, e.g. by using PDFKit.WriteToPath. Or use PDFKit.GetPDFDocument to get a PDF for storing in a container.

Examples

Rotate page and set title:

```
# open PDF from container
Set Variable [ $ref; Value:MBS("PDFKit.OpenContainer"; combine pdf::result) ]
# Set title for PDF
Set Variable [ $result; Value:MBS("PDFKit.SetPDFAttribute"; $ref; "Title"; combine pdf::title) ]
# Rotate first page by 90°
Set Variable [ $result; Value:MBS("PDFKit.SetPDFPageRotation"; $ref; 0; 90) ]
# save document to container
Set Field [ combine pdf::result; MBS("PDFKit.GetPDFDocument"; $ref; "result.pdf") ]
# free memory
Set Variable [ $result; Value:MBS("PDFKit.Release"; $ref) ]
```

See also

- 122.11 PDFKit.GetPDFDocument 6171
- 122.12 PDFKit.GetPDFPageCount 6173

<i>122.42. PDFKIT.SETPDFPAGEROTATION</i>	6223
• 122.18 PDFKit.GetPDFPageRotation	6183
• 122.28 PDFKit.Open	6198
• 122.29 PDFKit.OpenContainer	6200
• 122.34 PDFKit.Release	6209
• 122.40 PDFKit.SetPDFAttribute	6217
• 122.46 PDFKit.WriteToPath	6233

Created 18th August 2014, last changed 25th April 2016.

122.43 PDFKit.SetPrintOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	9.2	Yes	No	No	No	No

MBS("PDFKit.SetPrintOption"; Key; Value { ; Type })

Parameters

Key

The key to use.

"com_apple_print_PrintSettings_PMCopies"

Value

The value to use. Depending on data type, the plugin will pass a number or a text.

3

Type

Optional

Available in MBS FileMaker Plugin 9.2 or newer.

The type of data to add. Default is empty to use type of value passed. So text or number type would be picked automatically. Valid values for type are boolean, text, number, integer and text. Integer is for integer numbers while number is for floating numbers.

Result Returns OK or error.

Description

For regular options, please use PDFKit.SetPrintSetting.

Examples

Sets a custom option:

```
MBS( "PDFKit.SetPrintOption"; "xxx"; 123 )
```

Sets a custom boolean option:

```
MBS( "PDFKit.SetPrintOption"; "xxx"; 1; "boolean" )
```

Asks for 4 pages per page:

```
Set Variable [ $r ; Value: MBS( "PDFKit.SetPrintOption"; "NSPagesAcross"; 2; "Integer" ) ]
```

```
Set Variable [ $r ; Value: MBS( "PDFKit.SetPrintOption"; "NSPagesDown"; 2; "Integer" ) ]
```

See also

- 122.25 PDFKit.GetPrintOption 6193
- 122.26 PDFKit.GetPrintSetting 6194
- 122.44 PDFKit.SetPrintSetting 6226

Example Databases

- [Mac and iOS/PDFKit/Print PDF](#)

122.43.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 12nd March 2019, last changed 14th December 2019.

122.44 PDFKit.SetPrintSetting

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.0	Yes	No	Yes, macOS only	No	No

MBS("PDFKit.SetPrintSetting"; Selector; Value)

Parameters

Selector

Which value to set.

"FaxNumber"

Value

The value for the setting.

"+123456"

Result Returns OK or error.

Description

See also PDFKit.Print function.

All settings are optional and if not set will use default setting.

Possible settings:

You can use PDFKit.SetPrintOption to set custom print options like with PrintDialog.SetOption function.

Examples

Set a fax number:

```
MBS( "PDFKit.SetPrintSetting"; "FaxNumber"; "+123456" )
```

Print page 2 to 10 and make 3 copies:

```
MBS( "PDFKit.ResetPrintSettings" )
MBS( "PDFKit.SetPrintSetting"; "FirstPage"; 2 )
MBS( "PDFKit.SetPrintSetting"; "LastPage"; 10 )
MBS( "PDFKit.SetPrintSetting"; "Copies"; 3 )
MBS( "PDFKit.Print" )
```

Set a duplex:

```
MBS( "PDFKit.SetPrintSetting"; "DuplexMode"; "DuplexNoTumble" )
```

Horizontal and vertical fit:

```
$r = MBS( "PDFKit.SetPrintSetting"; "HorizontalPagination"; "fit" )
$r = MBS( "PDFKit.SetPrintSetting"; "VerticalPagination"; "fit" )
```

Set paper tray:

```
MBS("PDFKit.SetPrintSetting"; "Tray"; "Tray-2")
```

Enable print dialog:

```
MBS( "PDFKit.SetPrintSetting"; "ShowsPrintPanel"; 1 )
```

Enable progress dialog:

```
MBS( "PDFKit.SetPrintSetting"; "ShowsProgressPanel"; 1 )
```

See also

- [122.24 PDFKit.GetPrintLastSettings](#) 6192
- [122.25 PDFKit.GetPrintOption](#) 6193
- [122.26 PDFKit.GetPrintSetting](#) 6194
- [122.33 PDFKit.Print](#) 6207
- [122.35 PDFKit.ResetPrintSettings](#) 6211
- [122.36 PDFKit.RestorePrintSettings](#) 6212
- [122.37 PDFKit.SavePrintSettings](#) 6213
- [122.43 PDFKit.SetPrintOption](#) 6224
- [127.39 PrintDialog.GetTray](#) 6425
- [127.49 PrintDialog.SetOption](#) 6438

Example Databases

- [Mac and iOS/PDFKit/PDFKit Print](#)
- [Mac and iOS/PDFKit/Print PDF](#)

122.44.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin, version 8.0pr8](#)
- [MBS Filemaker Plugin, version 4.0pr5](#)

122.44.2 FileMaker Magazin

- Ausgabe 6/2017, Seite 26

Created 18th August 2014, last changed 28th November 2019.

jobTitle	The title of the printing job.
faxNumber	A fax number for fax printers. This text is passed through and must match the format your driver expects.
PaperName	The name of the paper to use.
Printer	The name of the printer to use.
FirstPage	The number of the first page to print.
LastPage	The number of the last page to print.
Copies	The number of copies to print. Default is 1.
ReversePageOrder	Whether to reverse the page order. Pass 1 to reverse or 0 to not reverse. Default is not reverse.
MustCollate	Whether to collate or not. Pass 1 to collate or 0 to not collate. Default is 0.
AutoRotate	Whether to automatically rotate to match the PDF page format. Default is 1 (on).
ShowsPrintPanel	Whether to show the print panel. Default is 0 to not show it. Pass 1 for value to show dialog.
ShowsProgressPanel	Whether to show the progress panel. Default is 0 to not show it. Pass 1 for value to show progress.
DuplexMode	Whether to use duplex mode. Can be None (Print only on one side of sheet of paper), DuplexNoTumble (Print on both sides of the paper, with no tumbling), DuplexTumble (Print on both sides of the paper, tumbling on) or SimplexTumble (Print on only one side of the paper, but tumble the images while printing).
DetailedErrorReporting	Whether to enable detailed error reporting. If 1, produce detailed reports when an error occurs.
PagesAcross	Number of logical pages to be placed across a physical sheet.
PagesDown	Number of logical pages to be placed down a physical sheet.
TopMargin	The top margin. Default 0.
BottomMargin	The bottom margin. Default 0.
LeftMargin	The left margin. Default 0.
RightMargin	The right margin. Default 0.
HorizontalPagination	The horizontal pagination. Can be auto, clip or fit. Default is fit.
VerticalPagination	The vertical pagination. Can be auto, clip or fit. Default is fit.
scalingMode	The scaling mode to use. Default is None, but can also be DownToFit or ToFit.
Tray	The name of the paper tray. See <code>PrintDialog.GetTray</code> to find the name of the tray. (New in 8.0)

122.45 PDFKit.Watermark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.7	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.Watermark"; PDF; PageNumber; Image; Transparency; X; Y { ; W; H; Background; DeltaX; DeltaY })

Parameters

PDF

A PDF reference from PDFKit.Open.

\$pdf

PageNumber

The page number of the page to modify.

0

Image

The image to be used for watermark. Should be a PNG with mask for best results. Pass a container value.

\$image

Transparency

The transparency level. From 0.0 (opaque) to 1.0 (full transparency).

0.5

X

X coordinate. If zero, the plugin will center the image. If negative, this value is the distance from right side.

0

Y

Y coordinate. As with all PDF coordinates, the 0 coordinate is on the bottom of the page. If zero, the plugin will center the image. If negative, this value is the distance from top side.

0

W

Optional

Desired width. If value is zero or not provided, the plugin will use the image width.

0

H

Optional

Desired height. If value is zero or not provided, the plugin will use the image height.

0

Background

Optional

Whether to put image in foreground or background. Default is foreground. Can be 1 for background or 0 for foreground. Does not work if existing page clears background with background color!

0

DeltaX

Optional

Additional positioning offset to be added after the calculations for above are done.

0

DeltaY

Optional

Additional positioning offset to be added after the calculations for above are done.

0

Result Returns OK or error message.

Description

This modifies an in memory PDF Document which you can create by opening one using PDFKit.Open, PDFKit.OpenContainer, PDFKit.OpenPath or PDFKit.OpenURL.

You can watermark several pages by calling this function in a loop.

Don't forget to use PDFKit.Release to later release memory.

You can do similar with DynaPDF with insert image command (DynaPDF.InsertImage) and alpha set (DynaPDF.SetAlpha).

Your changes are only done in memory, so please remember to write modified pdf back to disk, e.g. by using PDFKit.WriteToPath. Or use PDFKit.GetPDFDocument to get a PDF for storing in a container.

Examples

Watermark with an image over full page:

```
MBS("PDFKit.Watermark"; $pdf; 0; Watermark PDF Page::WatermarkImage; 0; 0; 0; 0; 0)
```

See also

- 70.276 DynaPDF.InsertImage 2952
- 70.330 DynaPDF.SetAlpha 3074
- 122.11 PDFKit.GetPDFDocument 6171
- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200
- 122.30 PDFKit.OpenPath 6202
- 122.31 PDFKit.OpenURL 6204
- 122.34 PDFKit.Release 6209
- 122.46 PDFKit.WriteToPath 6233

Example Databases

- [Mac and iOS/PDFKit/Watermark PDF Page](#)

122.45.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr5](#)
- [MBS FileMaker Plugin, version 7.6pr4](#)
- [MBS Filemaker Plugin, version 4.2pr10](#)
- [MBS Filemaker Plugin, version 4.2pr7](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr2](#)

Created 18th August 2014, last changed 28th November 2019.

122.46 PDFKit.WriteToPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	3.1	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.WriteToPath"; PDF; Path)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Path

A valid native file path.

"/Users/test/Desktop/test.pdf"

Result Returns OK or error message.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Load PDF, Write PDF and release it.

```
$h = MBS("PDFKit.OpenPath"; "/Users/cs/Desktop/test.pdf")
$r = MBS("PDFKit.WriteToPath"; $h; "/Users/cs/Desktop/output.pdf")
$r = MBS("PDFKit.Release"; $h)
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 122.1 PDFKit.AddEmptyPage 6153
- 122.2 PDFKit.AddImageFilePage 6155
- 122.3 PDFKit.AddImagePage 6157
- 122.28 PDFKit.Open 6198
- 122.34 PDFKit.Release 6209
- 122.38 PDFKit.SetCurrentFilter 6214
- 122.40 PDFKit.SetPDFAttribute 6217
- 122.41 PDFKit.SetPDFPageDisplayAnnotation 6220
- 122.42 PDFKit.SetPDFPageRotation 6222

Example Databases

- [Mac and iOS/PDFKit/Split](#)

122.46.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)
- [MBS FileMaker Plugin, version 7.4pr3](#)
- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 5th September 2014.

122.47 PDFKit.allowsCopying

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.9	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.allowsCopying"; PDF)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Result Returns 1 if copying is allowed and 0 else.

Description

The ability to copy content from a PDF document is an attribute unrelated to whether the document is locked or unlocked. It depends on the PDF permissions set by the document's author.

This method only determines the desired permissions setting in the PDF document; it is up to the application to enforce (or ignore) the permissions.

This method always returns 1 if the document is not encrypted. Note that in many cases an encrypted document may still be readable by all users due to the standard empty string password. For more details about user and owner passwords, see the Adobe PDF specification.

Examples

Check directly if a PDF in a container allows copying:

```
MBS( "PDFKit.allowsCopying"; Test::Document )
```

Shows some properties:

```
# Load PDF from container
Set Variable [ $pdf ; Value: MBS( "PDFKit.OpenContainer"; Popup Menu::logo ) ]
# Check some properties
Set Variable [ $allowsCopying ; Value: MBS( "PDFKit.allowsCopying"; $PDF ) ]
Set Variable [ $allowsPrinting ; Value: MBS( "PDFKit.allowsPrinting"; $PDF ) ]
Set Variable [ $isEncrypted ; Value: MBS( "PDFKit.isEncrypted"; $PDF ) ]
Set Variable [ $isLocked ; Value: MBS( "PDFKit.isLocked"; $PDF ) ]
# show in dialog
Show Custom Dialog [ "PDF Details" ; "allows copying: " & If($allowsCopying; "yes"; "no") & $&
"allows printing: " & If($allowsPrinting; "yes"; "no") & $&
"is encrypted: " & If($isEncrypted; "yes"; "no") & $&
"is locked: " & If($isLocked; "yes"; "no") ]
# release PDF
Set Variable [ $r ; Value: MBS("PDFKit.Release"; $pdf) ]
```

See also

- 122.48 PDFKit.allowsPrinting 6237
- 122.49 PDFKit.isEncrypted 6239
- 122.50 PDFKit.isLocked 6241
- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200
- 122.34 PDFKit.Release 6209

Created 18th August 2014, last changed 25th November 2019.

122.48 PDFKit.allowsPrinting

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.9	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.allowsPrinting"; PDF)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Result Returns 1 if printing is allowed and 0 else.

Description

The ability to print a PDF document is an attribute unrelated to whether the document is locked or unlocked. It depends on the PDF permissions set by the document's author.

This method only determines the desired permissions setting in the PDF document; it is up to the application to enforce (or ignore) the permissions.

This method always returns 1 if the document is not encrypted. Note that in many cases an encrypted document may still be readable by all users due to the standard empty string password. For more details about user and owner passwords, see the Adobe PDF specification.

Examples

Shows some properties:

```
# Load PDF from container
Set Variable [ $pdf ; Value: MBS( "PDFKit.OpenContainer"; Popup Menu::logo ) ]
# Check some properties
Set Variable [ $allowsCopying ; Value: MBS( "PDFKit.allowsCopying"; $PDF ) ]
Set Variable [ $allowsPrinting ; Value: MBS( "PDFKit.allowsPrinting"; $PDF ) ]
Set Variable [ $isEncrypted ; Value: MBS( "PDFKit.isEncrypted"; $PDF ) ]
Set Variable [ $isLocked ; Value: MBS( "PDFKit.isLocked"; $PDF ) ]
# show in dialog
Show Custom Dialog [ "PDF Details" ; "allows copying: " & If($allowsCopying; "yes"; "no") & §&
"allows printing: " & If($allowsPrinting; "yes"; "no") & §&
"is encrypted: " & If($isEncrypted; "yes"; "no") & §&
"is locked: " & If($isLocked; "yes"; "no") ]
# release PDF
Set Variable [ $r ; Value: MBS("PDFKit.Release"; $pdf) ]
```

See also

- 122.47 PDFKit.allowsCopying 6235
- 122.49 PDFKit.isEncrypted 6239
- 122.50 PDFKit.isLocked 6241

- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200
- 122.34 PDFKit.Release 6209

Created 18th August 2014, last changed 25th November 2019.

122.49 PDFKit.isEncrypted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.9	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.isEncrypted"; PDF)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Result Returns 1 if encrypted.

Description

If encrypted, reading the document requires a password.

Encrypted documents whose password is the empty string are unlocked automatically upon opening, because PDF Kit tries the empty string as a password if none is supplied.

Examples

Shows some properties:

```
# Load PDF from container
Set Variable [ $pdf ; Value: MBS( "PDFKit.OpenContainer"; Popup Menu::logo ) ]
# Check some properties
Set Variable [ $allowsCopying ; Value: MBS( "PDFKit.allowsCopying"; $PDF ) ]
Set Variable [ $allowsPrinting ; Value: MBS( "PDFKit.allowsPrinting"; $PDF ) ]
Set Variable [ $isEncrypted ; Value: MBS( "PDFKit.isEncrypted"; $PDF ) ]
Set Variable [ $isLocked ; Value: MBS( "PDFKit.isLocked"; $PDF ) ]
# show in dialog
Show Custom Dialog [ "PDF Details" ; "allows copying: " & If($allowsCopying; "yes"; "no") & $&
"allows printing: " & If($allowsPrinting; "yes"; "no") & $&
"is encrypted: " & If($isEncrypted; "yes"; "no") & $&
"is locked: " & If($isLocked; "yes"; "no") ]
# release PDF
Set Variable [ $r ; Value: MBS("PDFKit.Release"; $pdf) ]
```

See also

- 122.47 PDFKit.allowsCopying 6235
- 122.48 PDFKit.allowsPrinting 6237
- 122.50 PDFKit.isLocked 6241
- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200

- 122.34 PDFKit.Release

Created 18th August 2014, last changed 25th November 2019.

122.50 PDFKit.isLocked

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	2.9	Yes	No	Yes, macOS only	No	Yes

MBS("PDFKit.isLocked"; PDF)

Parameters

PDF

A container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Result Returns 1 if PDF is locked.

Description

Only encrypted documents can be locked. Encrypted documents whose password is the empty string are unlocked automatically upon opening, because PDF Kit tries the empty string as a password if none is supplied.

Examples

Shows some properties:

```
# Load PDF from container
Set Variable [ $pdf ; Value: MBS( "PDFKit.OpenContainer"; Popup Menu::logo ) ]
# Check some properties
Set Variable [ $allowsCopying ; Value: MBS( "PDFKit.allowsCopying"; $PDF ) ]
Set Variable [ $allowsPrinting ; Value: MBS( "PDFKit.allowsPrinting"; $PDF ) ]
Set Variable [ $isEncrypted ; Value: MBS( "PDFKit.isEncrypted"; $PDF ) ]
Set Variable [ $isLocked ; Value: MBS( "PDFKit.isLocked"; $PDF ) ]
# show in dialog
Show Custom Dialog [ "PDF Details" ; "allows copying: " & If($allowsCopying; "yes"; "no") & $&
"allows printing: " & If($allowsPrinting; "yes"; "no") & $&
"is encrypted: " & If($isEncrypted; "yes"; "no") & $&
"is locked: " & If($isLocked; "yes"; "no") ]
# release PDF
Set Variable [ $r ; Value: MBS("PDFKit.Release"; $pdf) ]
```

See also

- 122.47 PDFKit.allowsCopying 6235
- 122.48 PDFKit.allowsPrinting 6237
- 122.49 PDFKit.isEncrypted 6239
- 122.28 PDFKit.Open 6198
- 122.29 PDFKit.OpenContainer 6200

- 122.34 PDFKit.Release

Created 18th August 2014, last changed 25th November 2019.

122.51 QuartzFilterManager.Filters

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.3	Yes	No	No	No	No

MBS("QuartzFilterManager.Filters")

Result Returns list or error.

Description

This gives list of filters as localized names.

This includes by default: Black & White, Blue Tone, Create Generic PDFX-3 Document, Gray Tone, Lightness Decrease, Lightness Increase, Reduce File Size and Sepia Tone.

Examples

Queries list of filters:

MBS("QuartzFilterManager.Filters")

See also

- [122.38 PDFKit.SetCurrentFilter](#) 6214
- [122.52 QuartzFilterManager.HidePanel](#) 6244

Example Databases

- [Mac and iOS/PDFKit/Compress PDF](#)

122.51.1 Blog Entries

- [Compressing PDFs with PDFKit in FileMaker](#)
- [MBS Filemaker Plugin, version 4.3pr6](#)

122.51.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 23](#)

Created 18th August 2014, last changed 25th August 2014.

122.52 QuartzFilterManager.HidePanel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.3	Yes	No	No	No	No

MBS("QuartzFilterManager.HidePanel")

Result Returns OK or error.

Description

Examples

Show the panel:

```
MBS( "QuartzFilterManager.ShowPanel" )
```

Hide the panel:

```
MBS( "QuartzFilterManager.HidePanel" )
```

See also

- [122.51 QuartzFilterManager.Filters](#) 6243
- [122.53 QuartzFilterManager.ShowPanel](#) 6245

122.52.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr6](#)

Created 18th August 2014, last changed 25th August 2014.

122.53 QuartzFilterManager.ShowPanel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
122 PDFKit	4.3	Yes	No	No	No	No

MBS("QuartzFilterManager.ShowPanel")

Result Returns OK or error.

Description

This gives your users the possibility to create a filter and later use it with PDFKit functions. e.g. if you create a filter to compress images as JPEG, you can get smaller PDFs.

Examples

Show the panel:

MBS("QuartzFilterManager.ShowPanel")

Hide the panel:

MBS("QuartzFilterManager.HidePanel")

See also

- [122.52 QuartzFilterManager.HidePanel](#)

6244

Example Databases

- [Mac and iOS/PDFKit/Compress PDF](#)

122.53.1 Blog Entries

- [Compressing PDFs with PDFKit in FileMaker](#)
- [MBS Filemaker Plugin, version 4.3pr6](#)

122.53.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 23](#)

Created 18th August 2014, last changed 25th August 2014.

Chapter 123

PHP

Run PHP scripts and get/set variables.

123.1 PHP.Execute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

MBS("PHP.Execute"; phpCode)

Parameters

phpCode

the source code of the script you are executing

\$code

Result The string returned from the PHP function or error message.

Description

Same as calling PHP.Run and PHP.GetResultString, but returns the result directly.

Examples

Run test code and get result:

```
$r = MBS( "PHP.Execute"; "echo 'ok';" )
```

See also

- 123.3 PHP.GetResultContainer 6250
- 123.4 PHP.GetResultString 6251

- 123.9 PHP.Run 6257
- 156.10 SQL.Execute 7309
- 157.5 SSH.Execute 7487

123.1.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr2](#)

Created 18th August 2014, last changed 18th August 2014.

123.2 PHP.ExistsVariable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

```
MBS( "PHP.ExistsVariable"; VariableName )
```

Parameters

VariableName

the name of the variable.

\$name

Result Returns true if the variable exists, false if it does not.

Description

Examples

Check if variable FilePath exists:

```
$r = MBS( "PHP.ExistsVariable"; "FilePath" )
```

Check if the PHP variable with the name in the FileMaker variable FilePath exists:

```
$r = MBS( "PHP.ExistsVariable"; $FilePath )
```

Created 18th August 2014, last changed 18th August 2014.

123.3 PHP.GetResultContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	6.4	Yes	Yes	Yes	Yes	No

MBS("PHP.GetResultContainer"; FileName)

Parameters

FileName

The file name for the container.

"test.jpg"

Result Returns container or error.

Description

Used to retrieve the results back into to FileMaker after script is run with PHP.Run or PHP.Execute. Please provide a file name to auto detect the content type.

See also

- 61.112 CURL.GetResultAsContainer 1907
- 123.1 PHP.Execute 6247
- 123.9 PHP.Run 6257

123.3.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr2](#)

Created 25th July 2016, last changed 25th July 2016.

123.4 PHP.GetResultString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

MBS("PHP.GetResultString")

Result Returns the result text.

Description

Used to retrieve the results back into to FileMaker after script is run with PHP.Run or PHP.Execute.

Examples

Run test code and get result:

```
$r = MBS( "PHP.Run"; "echo 'ok';" )
$t = MBS( "PHP.GetResultString" )
```

See also

- [123.1 PHP.Execute](#) 6247
- [123.5 PHP.GetVariable](#) 6252
- [123.9 PHP.Run](#) 6257
- [123.10 PHP.SetVariable](#) 6258

Example Databases

- [PHP/Simple_php](#)

Created 18th August 2014, last changed 18th August 2014.

123.5 PHP.GetVariable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

MBS("PHP.GetVariable"; VariableName)

Parameters

VariableName

the name of the variable to return

\$name

Description

Examples

Set and query variable:

```
Set Variable [ $result ; Value: MBS( "PHP.SetVariable"; "c"; 5 ) ]
```

```
Set Variable [ $result ; Value: MBS("PHP.Run"; "$c = $c + 1; echo $c;") ]
```

```
Show Custom Dialog [ "c: " & MBS( "PHP.GetVariable";... ; "Result: " & MBS("PHP.GetResultString") ]
```

See also

- 120.8 OCR.GetVariable 6118
- 120.18 OCR.SetVariable 6131
- 123.4 PHP.GetResultString 6251
- 123.9 PHP.Run 6257
- 123.10 PHP.SetVariable 6258

Created 18th August 2014, last changed 1st April 2019.

123.6 PHP.Init

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

MBS("PHP.Init")

Result Returns Ok on success.

Description

This must be called at least once before you execute any PHP code. You must call this after PHP.Load.

May work on server. Be sure to use right bit number to match server, not client!

Windows error 193 means that 64-bit FileMaker tried to load 32-bit library or 32-bit FileMaker tried to load 64-bit library. The bit level must match between app and library. For Mac OS X the error message will tell you about wrong architecture.

You can set PHP runtime configuration path via shell variable on Windows, e.g. like this:

```
MBS( "EnvironmentVariables.SetValue"; "PHPRC"; "C:\Users\Christian\Desktop\php-5.6.12-Win32-VC11-x64\" )
```

Examples

Init PHP on Windows:

```
Set Variable [ $r; Value:MBS( "EnvironmentVariables.SetValue"; "PHPRC"; "C:\Users\Christian\Desktop\php-5.6.12-Win32-VC11-x64\" ) ]
Set Variable [ $result; Value:MBS("PHP.Load"; "C:\Users\Christian\Desktop\php-5.6.12-Win32-VC11-x64\php5ts.dll") ]
If [ $result <>"OK" ]
Show Custom Dialog [ "php DLL was not found!"; "Please enter the path the php DLL in the field provided and try again." ]
Exit Script [ ]
End If
Set Variable [ $result; Value:MBS("PHP.Init") ]
If [ $result = "OK" ]
Show Custom Dialog [ "Success!"; "php is ready to go." ]
Else
Show Custom Dialog [ "Error!"; "php couldn't be started" ]
End If
```

See also

- 74.5 EnvironmentVariables.SetValue 3490
- 123.8 PHP.Load 6256

- 123.11 PHP.ShutDown

Example Databases

- [PHP/Simple_php](#)

Created 18th August 2014, last changed 31st July 2016.

123.7 PHP.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	7.3	Yes	Yes	Yes	Yes	No

MBS("PHP.IsInitialized")

Result Returns 0, 1 or error.

Description

Returns 1 if initialized.

See also

- 120.10 OCR.IsInitialized 6121
- 131.3 Proj.IsInitialized 6547
- 163.22 TAPI.IsInitialized 7749
- 169.39 Twain.IsInitialized 8028
- 190.116 XL.IsInitialized 9008

123.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 15th May 2017, last changed 15th May 2017.

123.8 PHP.Load

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

MBS("PHP.Load"; Path)

Parameters

Path

The path to the dll (Windows) or dynamic library (Mac OS X)
\$path

Result Returns OK on success.

Description

Pass the path to the php5ts.dll file on windows or the libphp5.dylib file on Mac OS X.

If you get a crash here on MacOS, please check if crash report says Code Signature Invalid. Then you may need to code sign the dylib yourself to match the code signature of your runtime application.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Load PHP:

```
MBS( "PHP.Load"; "/Library/FileMaker Server/PHP/libphp5.dylib" )
```

See also

- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [123.6 PHP.Init](#) 6253

Example Databases

- [PHP/Simple_php](#)

Created 18th August 2014, last changed 14th November 2019.

123.9 PHP.Run

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

MBS("PHP.Run"; PHPCode)

Parameters

PHPCode

The source code of the script you are executing
\$code

Result Returns OK on success.

Description

The result can be obtained with "PHP.GetResultString"

Examples

Run test code:

```
MBS( "PHP.Run"; "echo 'ok';" )
```

See also

- [123.1 PHP.Execute](#) 6247
- [123.3 PHP.GetResultContainer](#) 6250
- [123.4 PHP.GetResultString](#) 6251
- [123.5 PHP.GetVariable](#) 6252
- [123.10 PHP.SetVariable](#) 6258

Example Databases

- [PHP/Simple_php](#)

123.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr2](#)

Created 18th August 2014, last changed 18th August 2014.

123.10 PHP.SetVariable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

MBS("PHP.SetVariable"; VariableName; TextValue)

Parameters

VariableName

the name of the variable

Text Value

the value of the variable

Result Returns OK on success.

Description

This is one way to get data into php from FileMaker.

Examples

Set varibale and output it:

```
Set Variable [ $result ; Value: MBS( "PHP.SetVariable"; "c"; 5 ) ]
Set Variable [ $result ; Value: MBS("PHP.Run"; "echo $c;") ]
Set Field [ Simple_php::result ; MBS("PHP.GetResultString") ]
```

See also

- 120.8 OCR.GetVariable 6118
- 120.18 OCR.SetVariable 6131
- 123.4 PHP.GetResultString 6251
- 123.5 PHP.GetVariable 6252
- 123.9 PHP.Run 6257
- 191.33 XML.SetVariables 9305

Created 18th August 2014, last changed 1st April 2019.

123.11 PHP.ShutDown

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
123 PHP	2.9	Yes	Yes	Yes	Yes	No

MBS("PHP.ShutDown")

Description

You can't execute any PHP script once this function has been called. If you want to start php again use PHP.Init.

See also

- 123.6 PHP.Init

6253

Example Databases

- [PHP/Simple_php](#)

Created 18th August 2014, last changed 18th August 2014.

Chapter 124

Plugin

Central plugin management functions.

124.1 ClearRegistration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	3.0	Yes	Yes	Yes	Yes	Yes

MBS("ClearRegistration")

Result Returns OK on success.

Description

Added Windows support in plugin version 4.4.

Examples

Clears registration:

```
$r = MBS( "ClearRegistration" )
```

See also

- 124.51 StoreRegistration

6324

124.1.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr9](#)

Created 18th August 2014, last changed 21st October 2017.

124.2 CompileDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	1.0	Yes	Yes	Yes	Yes	Yes

MBS("CompileDate")

Result The date as text.

Description

Useful for determining if when the currently installed plug-in was released.
See Plugin.CompileDate to get a FileMaker date instead of a text.

Format of this text is "mmm DD YYYY" with month as three letter text in English.

Examples

Get the Compile Date

```
$r = MBS("CompileDate")
```

See also

- [124.3 CompileTime](#) 6263
- [124.21 Plugin.CompileDate](#) 6286

124.2.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)
- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 18th August 2014, last changed 24th December 2019.

124.3 CompileTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	1.0	Yes	Yes	Yes	Yes	Yes

MBS("CompileTime")

Description

Examples

Get the time of day that the plug-in was compiled

```
$r = MBS("CompileTime")
```

See also

- 124.2 CompileDate

6262

Created 18th August 2014, last changed 21st October 2017.

124.4 Is64bit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Is64bit")

Result Returns 1 or 0.

Description

Returns 1 for 64bit (e.g. FileMaker Server 13) or 0 for 32 bit (FileMaker Pro 13)

Returns 1 on FileMaker Cloud as this uses a 64-bit Linux.

See SystemInfo.Is64bitWindows to check if you are 32-bit Windows app on a 64-bit Windows OS.

See also

- 161.11 SystemInfo.Is64bitWindows

7662

124.4.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 30th November 2014, last changed 21st October 2017.

124.5 IsClient

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	4.3	Yes	Yes	Yes	Yes	Yes

MBS("IsClient")

Result Returns 1 on client or 0 elsewhere.

Description

Returns 0 if running on a server.

See also IsRegistered, IsRuntime and IsServer.

Examples

Run on client:

```
If [ MBS( "IsClient" ) ]
# runs on client
Else
# runs on server or where no plugin is installed
End If
```

See also

- [70.273 DynaPDF.Initialize](#) 2941
- [124.13 IsRegistered](#) 6274
- [124.49 Register](#) 6320

124.5.1 Blog Entries

- [Properly register MBS FileMaker Plugin](#)
- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 21st October 2017.

124.6 IsError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	3.4	Yes	Yes	Yes	Yes	Yes

MBS("IsError")

Result Returns 1 or 0.

Description

Returns 1 if last function returned an error.

Or returns 0 if no error happened.

This makes it easier to detect if the result text is an error message vs. a real result.

Examples

Cause an error and handle it:

```
Set Variable [ $r; Value:MBS( "ZipFile.Open"; "" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ Title: "Error"; Message: $r; Buttons: "OK", "Abbrechen" ]
Exit Script [ ]
End If
```

See also

- 48.32 X509.SubjectName 1379
- 190.4 XL.Book.AddPictureContainer 8857
- 190.29 XL.Book.SaveToFile 8888
- 190.117 XL.LoadBook 9010
- 190.118 XL.LoadBookPartially 9013
- 190.244 XL.Sheet.RemoveRow 9184
- 190.270 XL.Sheet.SetPictureWithSize 9222
- 191.12 XML.Import 9273
- 191.21 XML.Import.Work 9285
- 53.37 ZipFile.Open 1515

124.6.1 Blog Entries

- [Merge PDF with table of contents](#)
- [Core Location Geocoder with JSON](#)

- [Create Barcodes on Server from FileMaker Go](#)
- [Our JavaScript engine for FileMaker](#)
- [Read HEIC or HEIF image files in FileMaker](#)
- [Run fmsadmin from script](#)
- [Read patient name from Swiss Health Card](#)
- [Login in FileMaker web viewer if needed](#)
- [Correct Image Orientation in FileMaker](#)
- [Storing files for download on FileMaker Server with download URLs](#)

124.6.2 FileMaker Magazin

- [Ausgabe 6/2019, Seite 37](#)
- [Ausgabe 6/2019, Seite 36](#)
- [Ausgabe 6/2018, Seite 31](#)
- [Ausgabe 6/2018, Seite 30](#)
- [Ausgabe 5/2018, Seite 29](#)
- [Ausgabe 5/2018, Seite 26](#)
- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 6/2016, Seite 38](#)
- [Ausgabe 6/2016, Seite 24](#)
- [Ausgabe 6/2016, Seite 23](#)

Created 18th August 2014, last changed 21st October 2017.

124.7 IsIOS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	6.1	Yes	Yes	Yes	Yes	Yes

MBS("IsIOS")

Result Returns 1, 0 or error.

Description

Returns 1 if running on iOS and 0 if not.
For FileMaker 14 and older this is definitive always 0.

If someday we get a plugin SDK for iOS, we can already have the function to return this.

See also

- 61.179 [CURL.SetOptionCAINFO](#) 2022

124.7.1 Blog Entries

- [Use root certificates included with FileMaker](#)
- [MBS FileMaker Plugin, version 7.6pr2](#)
- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 2nd March 2016, last changed 21st October 2017.

124.8 IsIOSDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	8.0	Yes	Yes	Yes	Yes	Yes

MBS("IsIOSDevice")

Result Returns 1 or 0.

Description

Returns 0 in simulator or on macOS, Windows and Linux.

Examples

Distinguish between device and simulator:

```
If [ MBS( "IsIOSDevice" ) = 1 ]
# iOS specific things for device
Else If [ MBS("IsIOSSimulator") = 1 ]
# iOS specific things for simulator
Else
# other cases
End If
```

See also

- [124.9 IsIOSSimulator](#)

6270

124.8.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)

Created 9th December 2017, last changed 11st December 2017.

124.9 IsIOSSimulator

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	8.0	Yes	Yes	Yes	Yes	Yes

MBS("IsIOSSimulator")

Result Returns 1 or 0.

Description

Returns 0 on iOS Device or on macOS, Windows and Linux.

Examples

Distinguish between device and simulator:

```
If [ MBS( "IsIOSDevice" ) = 1 ]
# iOS specific things for device
Else If [ MBS("IsIOSSimulator") = 1 ]
# iOS specific things for simulator
Else
# other cases
End If
```

See also

- 124.8 IsIOSDevice

6269

124.9.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)

Created 9th December 2017, last changed 11st December 2017.

124.10 IsLinux

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	6.1	Yes	Yes	Yes	Yes	Yes

MBS("IsLinux")

Result Returns 1, 0 or error.

Description

Returns 1 if running on Linux and 0 if not.
For FileMaker 14 and older this is definitive always 0.

Returns 1 on FileMaker Cloud as this uses a 64-bit Linux.

See also

- 61.179 [CURL.SetOptionCAINFO](#)

2022

124.10.1 Blog Entries

- [Use root certificates included with FileMaker](#)
- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 2nd March 2016, last changed 21st October 2017.

124.11 IsMacOS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	6.1	Yes	Yes	Yes	Yes	Yes

MBS("IsMacOS")

(old name: IsMacOSX)

Result Returns 1, 0 or error.

Description

Returns 1 if running on Mac OS X and 0 if not.

See also IsWindows, IsLinux and IsIOS.

124.11.1 Blog Entries

- [Formatting and error checking expressions in FileMaker](#)

Created 2nd March 2016, last changed 5th November 2018.

124.12 IsMobile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	7.2	Yes	Yes	Yes	Yes	Yes

MBS("IsMobile")

Result Returns 0 or 1.

Description

Value is 1 if running in iOS SDK app.

See also

- 124.13 IsRegistered 6274
- 124.49 Register 6320

Created 18th March 2017, last changed 21st October 2017.

124.13 IsRegistered

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	3.0	Yes	Yes	Yes	Yes	Yes

MBS("IsRegistered" { ; Component })

Parameters

Component

Optional

Which part you want to check.

"webview"

Result Returns 1 if the plugin is registered or 0 if not.

Description

See also Register, IsRuntime, IsServer and isClient.

Examples

Check if plugin is registered:

```
$v = MBS("IsRegistered")
```

Register only when needed:

```
If [ MBS("IsRegistered") = 1 ]
If [ MBS("IsRuntime") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Runtime"; 123; 123) ]
Else If [ MBS("IsMobile") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "iOS"; 123; 123) ]
Else If [ MBS("IsServer") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Server"; 123; 123) ]
Else
Set Variable [ $r; Value:MBS("Register"; "test"; "5 seats"; 123; 123) ]
End If
End If
```

Register with Startup script for server and client:

Startup Script:

```
# Register for client
Perform Script [ "InitMBS" ]
# Register for server. Will be ignored if no server or no plugin installed on server
Perform Script on Server [ "InitMBS" ]
```

InitMBS script:

```

# Enable debug logging. Shows messages in DebugView/Console.app
Set Variable [ $r; Value:MBS("Trace") ]
# Register if needed for right platform
If [ MBS("IsRegistered") = 0 ]
If [ MBS("IsRuntime") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "Runtime"; 123; 123) ]
Else If [ MBS("IsServer") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "Server"; 123; 123) ]
Else If [ MBS("IsClient") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "5 Seats"; 123; 123) ]
Else
Set Variable [ $r; Value:"Unknown platform: " & MBS("Platform") ]
End If
# Show errors, so developer can fix them
If [ $r "OK" ]
Show Custom Dialog [ "InitMBS failed."; $r ]
End If
End If
# May initialize other stuff
# like dynapdf with library in extensions folder
If [ MBS("DynaPDF.IsInitialized") = 0 ]
Set Variable [ $DynaPDFLicense; Value:"1003637-16022016-3-8-12-685C57F..." ]
If [ MBS("IsWindows") ]
Set Variable [ $r; Value:MBS( "DynaPDF.Initialize"; "dynapdf.dll"; $DynaPDFLicense) ]
Else If [ MBS("IsMacOSX") ]
Set Variable [ $r; Value:MBS( "DynaPDF.Initialize"; "dynapdf.dylib"; $DynaPDFLicense) ]
Else
Set Variable [ $r; Value:"Unknown platform: " & MBS("Platform") ]
End If
# Show errors, so developer can fix them
If [ $r "OK" ]
Show Custom Dialog [ "InitMBS failed."; $r ]
End If
End If

```

Script to report back status of MBS Plugin:

```

# Script to trigger somewhere to report back details about MBS Plugin
Set Variable [ $version ; Value: GetAsText(MBS("Version")) ]
Set Variable [ $platform ; Value: MBS( "Platform" ) ]
Set Variable [ $buildNumber ; Value: MBS( "Plugin.BuildNumber" ) ]
Set Variable [ $path ; Value: MBS( "Plugin.Path" ) ]
Set Variable [ $IsRegistered ; Value: MBS( "IsRegistered" ) ]
Set Variable [ $Name ; Value: MBS( "Plugin.LicenseeName" ) ]
Set Variable [ $Debug ; Value: MBS( "Plugin.isDebug" ) ]
If [ $version = "?" ]
Set Variable [ $text ; Value: "MBS Plugin not installed. " & Get ( ApplicationVersion ) ]

```

```

Else
Set Variable [ $l1 ; Value: "MBS Plugin " & $version & ", build " & $buildNumber & " installed in " & Get
( ApplicationVersion ) ]
Set Variable [ $l2 ; Value: "$Platform: " & $Platform & "$Path: " & $path ]
Set Variable [ $l3 ; Value: If($IsRegistered; "$Licensed for: " & $Name ; "$No license set.") ]
Set Variable [ $l4 ; Value: "$Debug: " & If($debug; "yes"; "no") ]
Set Variable [ $text ; Value: $l1 & $l2 & $l3 ]
End If
Exit Script [ Text Result: $text ]

```

See also

- [70.282 DynaPDF.IsInitialized](#) 2966
- [124.12 IsMobile](#) 6273
- [124.15 IsServer](#) 6278
- [124.17 Platform](#) 6281
- [124.18 Plugin.BuildNumber](#) 6283
- [124.48 Plugin.isDebug](#) 6318
- [124.30 Plugin.LicenseeName](#) 6295
- [124.35 Plugin.Path](#) 6302
- [124.40 Plugin.SetFunctions](#) 6309
- [124.52 Trace](#) 6326

124.13.1 Blog Entries

- [MBS FileMaker Plugin registration dialogs](#)
- [Print WebViewer on macOS in FileMaker](#)
- [Properly register MBS FileMaker Plugin](#)
- [4000 functions in 10 years](#)
- [MBS FileMaker Plugin debugging help](#)
- [MBS Filemaker Plugin, version 3.0pr9](#)

Created 18th August 2014, last changed 26th June 2018.

124.14 IsRuntime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	4.3	Yes	Yes	Yes	Yes	Yes

MBS("IsRuntime")

Result Returns 1 on runtime or 0 elsewhere.

Description

Returns 0 if running on FileMaker Pro or Server.

See also IsRegistered, IsServer and isClient functions.

Examples

Run something only in runtime:

```
If [ MBS( "IsRuntime" ) ]
# runs on runtime
Else
# runs on non runtime or where no plugin is installed
End If
```

See also

- 70.273 DynaPDF.Initialize 2941
- 124.13 IsRegistered 6274
- 124.49 Register 6320
- 172.3 URLScheme.SetDefaultHandler 8144

124.14.1 Blog Entries

- [Properly register MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin debugging help](#)
- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 23th January 2020.

124.15 IsServer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	4.3	Yes	Yes	Yes	Yes	Yes

MBS("IsServer")

Result Returns 1 on server or 0 elsewhere.

Description

So if you see 0 returned, your script or calculation is not performed on a server, but on a client. Should return 1 always for scheduled server scripts or web direct scripts.

See also IsRegistered, IsClient and IsRuntime.

Examples

Run a script on server:

```

If [ MBS("IsServer") ]
# We run on server already
Else
# Call this script on server
Perform Script on Server [ Wait for completion; "Your Script"; Parameter: Get(ScriptParameter) ]
If [ Get(LastError) = 0 ]
# Can't run on server, e.g. too many connections.
End If
End If

```

Perform Script on Server:

```

# are we on Server?
If [ MBS("IsServer") = 0 ]
# perform same script on server and pass parameter
Perform Script on Server [ Wait for completion; "Do Something on Server"; Parameter: Get ( ScriptParameter ) ]
# check error and result
Set Variable [ $LastError; Value:Get ( LastError ) ]
# Maybe handle here error code if server is too busy and decide what to do, e.g. run script locally?
If [ $LastError = 0 ]
# run locally by fall through
# alternative: Exit script here and return error to caller
Else
Set Variable [ $ScriptResult; Value:Get ( ScriptResult ) ]
# Return result back to caller
Exit Script [ Result: $ScriptResult ]
End If
End If
# This now performs on Server or on Client if Server is too busy

```

124.15. *ISSERVER*

6279

```
Go to Layout [ "Test" ]  
New Record/Request  
Set Field [ perform::First; 1 ]  
Set Field [ perform::Last; 2 ]  
Commit Records/Requests [ No dialog ]  
# end of script
```

See also

- [70.273 DynaPDF.Initialize](#) 2941
- [124.13 IsRegistered](#) 6274
- [124.40 Plugin.SetFunctions](#) 6309
- [124.49 Register](#) 6320

124.15.1 **Blog Entries**

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Properly register MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 5.1pr5](#)
- [MBS FileMaker Plugin debugging help](#)
- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 21st October 2017.

124.16 IsWindows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	6.1	Yes	Yes	Yes	Yes	Yes

MBS("IsWindows")

Result Returns 1, 0 or error.

Description

Returns 1 if running on Windows and 0 if not.

See also IsMacOSX, IsLinux and IsIOS.

See also

- [61.179 CURL.SetOptionCAINFO](#) 2022
- [70.273 DynaPDF.Initialize](#) 2941
- [124.13 IsRegistered](#) 6274
- [124.49 Register](#) 6320

124.16.1 Blog Entries

- [Use root certificates included with FileMaker](#)
- [Properly register MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 2nd March 2016, last changed 21st October 2017.

124.17 Platform

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Platform")

(old name: Plattform)

Result Returns platform name.

Description

Value can be FileMaker Pro Advanced, FileMaker Pro, Runtime, Server, Web Direct, Mobile, XDBC, Server-Scripting or InstantWebPublishing.

Older versions may return "Developer" or "Pro" for FileMaker Pro.

For FileMaker 17 or newer, MBS Plugin detects the status of whether Advanced Tools are enabled. Returns Developer if enabled and Pro if not enabled.

Examples

Query the current platform:

```
$r = MBS( "Platform" )
```

Script to report back status of MBS Plugin:

```
# Script to trigger somewhere to report back details about MBS Plugin
Set Variable [ $version ; Value: GetAsText(MBS("Version")) ]
Set Variable [ $platform ; Value: MBS( "Platform" ) ]
Set Variable [ $buildNumber ; Value: MBS( "Plugin.BuildNumber" ) ]
Set Variable [ $path ; Value: MBS( "Plugin.Path" ) ]
Set Variable [ $IsRegistered ; Value: MBS( "IsRegistered" ) ]
Set Variable [ $Name ; Value: MBS( "Plugin.LicenseeName" ) ]
Set Variable [ $Debug ; Value: MBS( "Plugin.isDebug" ) ]
If [ $version = "?" ]
Set Variable [ $text ; Value: "MBS Plugin not installed. " & Get ( ApplicationVersion ) ]
Else
Set Variable [ $l1 ; Value: "MBS Plugin " & $version & ", build " & $buildNumber & " installed in " & Get ( ApplicationVersion ) ]
Set Variable [ $l2 ; Value: "$Platform: " & $Platform & "$Path: " & $path ]
Set Variable [ $l3 ; Value: If($IsRegistered; "$Licensed for: " & $Name ; "$No license set.") ]
Set Variable [ $l4 ; Value: "$Debug: " & If($debug; "yes"; "no") ]
Set Variable [ $text ; Value: $l1 & $l2 & $l3 ]
End If
Exit Script [ Text Result: $text ]
```

Check for WebDirect:

```
$r = (MBS("Platform") = "Web")
```

See also

- 70.273 DynaPDF.Initialize 2941
- 124.13 IsRegistered 6274
- 124.18 Plugin.BuildNumber 6283
- 124.48 Plugin.isDebug 6318
- 124.30 Plugin.LicenseName 6295
- 124.35 Plugin.Path 6302
- 124.49 Register 6320
- 124.62 Version 6338

124.17.1 Blog Entries

- [My FileMaker 17 Release Notes](#)

Created 18th August 2014, last changed 31st January 2019.

124.18 Plugin.BuildNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.0	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.BuildNumber")

(old name: BuildNumber)

Result Returns build number or error.

Description

Sometimes you may have two plugins with same version number, but one is newer as it has a higher build number.

Version 5.0 returns 1139.

Examples

Show build number:

Show Custom Dialog [MBS("BuildNumber")]

See also

- [124.13 IsRegistered](#) 6274
- [124.17 Platform](#) 6281
- [124.48 Plugin.isDebug](#) 6318
- [124.30 Plugin.LicenseeName](#) 6295
- [124.35 Plugin.Path](#) 6302

Created 27th November 2014, last changed 21st October 2017.

124.19 Plugin.CallCounter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.3	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.CallCounter")

Result Returns number.

Description

The MBS Plugin counts how often it is called and this function returns the current value. Calling this function increments the value.

124.19.1 Blog Entries

- [Heavy thread testing on FileMaker Server](#)
- [Neues vom MBS Plugin 9.3](#)
- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr7](#)

Created 20th July 2019, last changed 20th July 2019.

124.20 Plugin.CallErrorScriptTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	8.5	Yes	Yes	No	No	Yes

MBS("Plugin.CallErrorScriptTrigger")

Result Returns OK or error.

Description

To test your script trigger for error, you can call this method to test.

See also

- [124.39 Plugin.SetErrorScriptTrigger](#)

6307

Example Databases

- [Utility functions/Trigger Script on Plugin Error](#)

124.20.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)

Created 24th October 2018, last changed 24th October 2018.

124.21 Plugin.CompileDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	10.0	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.CompileDate")

Result Returns date or error.

Description

Allows you to compare current time to compile date to check how old the plugin is.

Examples

Check age of plugin:

```
get(CurrentDate) - MBS( "Plugin.CompileDate" )
```

Check and ask user to install newer version than the prerelease they have:

```
If [ MBS("Plugin.IsPrerelease") ]
If [ Get(CurrentDate) - MBS( "Plugin.CompileDate" ) >= 14 ]
Show Custom Dialog [ "Update" ; "Please install newer version of MBS Plugin." & §& MBS("Version") ]
End If
End If
```

See also

- [124.2 CompileDate](#) 6262
- [124.27 Plugin.IsPrerelease](#) 6292
- [124.62 Version](#) 6338

124.21.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 24th December 2019, last changed 24th December 2019.

124.22 Plugin.DisableFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	2.8	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.DisableFunction"; name)

(old name: DisableFunction)

Parameters

name

A function name like RemoteControl.ClickMouse.
"RemoteControl.ClickMouse"

Result Returns OK on success.

Description

This can be useful with security when you want to be sure your script does not use certain methods. The plugin removes the function from the global function list so it can't be called until you restart FileMaker.

Examples

Disable a function:

```
$r = MBS( "Plugin.DisableFunction"; "RemoteControl.ClickMouse" )
```

See also

- 137.1 RemoteControl.ClickMouse

6693

Created 18th August 2014, last changed 21st October 2017.

124.23 Plugin.FunctionCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	7.2	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.FunctionCount")

Result Returns number or error.

Description

As some functions are not available, this number is usually lower than our total number.
e.g. Windows only functions are not included on Mac count.

124.23.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 20th March 2017, last changed 21st October 2017.

124.24 Plugin.Functions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	1.0	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.Functions")

(old name: Functions)

Result Returns function names.

Description

Examples

Query the functions in the plugins:

```
$r = MBS("Plugin.Functions")
```

See also

- 124.40 Plugin.SetFunctions 6309
- 124.46 Plugin.UsedFunctions 6316

Created 18th August 2014, last changed 21st October 2017.

124.25 Plugin.GetSuccessReturn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.GetSuccessReturn")

Result Returns OK or error.

Description

See also

- 124.42 Plugin.SetSuccessReturn

6312

124.25.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr4](#)

Created 7th April 2015, last changed 21st October 2017.

124.26 Plugin.InstallSignalHandlers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.3	Yes	No	Yes	Yes	Yes

MBS("Plugin.InstallSignalHandlers")

Result Returns OK or error.

Description

When something happens like a segmentation fault (a crash in C code), the plugin can print the backtrace (list of functions called) to help to debug the problem.

Usually you call this function only if we ask you to help on debugging a crash on Linux or MacOS.

Example Databases

- [CURL/SFTP/CURL sFTP Upload File](#)

124.26.1 Blog Entries

- [Neues vom MBS Plugin 9.3](#)
- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr5](#)

Created 29th June 2019, last changed 29th June 2019.

124.27 Plugin.IsPrerelease

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	10.0	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.IsPrerelease")

Result Returns 1 or 0.

Description

We set to 1 for prerelease versions and 0 for final version.

Examples

Check and ask user to install newer version than the prerelease they have:

```

If [ MBS("Plugin.IsPrerelease") ]
If [ Get(CurrentDate) - MBS( "Plugin.CompileDate" ) >= 14 ]
Show Custom Dialog [ "Update" ; "Please install newer version of MBS Plugin." & §& MBS("Version") ]
End If
End If

```

See also

- [124.21 Plugin.CompileDate](#) 6286
- [124.62 Version](#) 6338

124.27.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)

Created 24th December 2019, last changed 24th December 2019.

124.28 Plugin.JasperVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.JasperVersion")

Result Returns text or error.

Description

We use Jasper library for JPEG 2000 support.

e.g. "1.900.29"

124.28.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr6](#)

Created 28th December 2018, last changed 28th December 2018.

124.29 Plugin.LibSSHVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	6.2	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.LibSSHVersion")

Result Returns text or error.

Description

Examples

Query version:

MBS("Plugin.LibSSHVersion")

Shows LibSSH version used:

Show Custom Dialog ["SSH Version"; MBS("Plugin.LibSSHVersion")]

See also

- [124.33 Plugin.OpenSSLVersion](#) 6300
- [124.44 Plugin.TiffVersion](#) 6314
- [124.47 Plugin.ZLibVersion](#) 6317

124.29.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr3](#)

Created 22nd March 2016, last changed 14th April 2018.

124.30 Plugin.LicenseeName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	8.3	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.LicenseeName")

Result Returns name or error.

Description

Returns the name used in Register function.

Examples

Script to report back status of MBS Plugin:

```
# Script to trigger somewhere to report back details about MBS Plugin
Set Variable [ $version ; Value: GetAsText(MBS("Version")) ]
Set Variable [ $platform ; Value: MBS( "Platform" ) ]
Set Variable [ $buildNumber ; Value: MBS( "Plugin.BuildNumber" ) ]
Set Variable [ $path ; Value: MBS( "Plugin.Path" ) ]
Set Variable [ $IsRegistered ; Value: MBS( "IsRegistered" ) ]
Set Variable [ $Name ; Value: MBS( "Plugin.LicenseeName" ) ]
Set Variable [ $Debug ; Value: MBS( "Plugin.isDebug" ) ]
If [ $version = "?" ]
Set Variable [ $text ; Value: "MBS Plugin not installed. " & Get ( ApplicationVersion ) ]
Else
Set Variable [ $l1 ; Value: "MBS Plugin " & $version & ", build " & $buildNumber & " installed in " & Get
( ApplicationVersion ) ]
Set Variable [ $l2 ; Value: "$Platform: " & $Platform & "$Path: " & $path ]
Set Variable [ $l3 ; Value: If($IsRegistered; "$Licensed for: " & $Name ; "$No license set.") ]
Set Variable [ $l4 ; Value: "$Debug: " & If($debug; "yes"; "no") ]
Set Variable [ $text ; Value: $l1 & $l2 & $l3 ]
End If
Exit Script [ Text Result: $text ]
```

See also

- 124.13 IsRegistered 6274
- 124.17 Platform 6281
- 124.18 Plugin.BuildNumber 6283
- 124.48 Plugin.isDebug 6318
- 124.35 Plugin.Path 6302
- 124.62 Version 6338

124.30.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)

Created 19th June 2018, last changed 26th June 2018.

124.31 Plugin.LimitFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.LimitFunction"; name { ; privilegeSets; AccountNames; ScriptNames })

Parameters

name

A function name like RemoteControl.ClickMouse.

"RemoteControl.ClickMouse"

privilegeSets

Optional

List of privilege set names.

AccountNames

Optional

List of account names.

"admin"

ScriptNames

Optional

List of script names. Each entry contains the name fo the file followed with ":" and the script name.

"MyFile.fmp12:TestScript"

Result Returns OK or error.

Description

Once limited, the function can only be called if current privilege set, account name and script name match those in the list. Lists can be empty if not needed.

For FileMaker hosting of several clients with one server, we highly recommend to limit the available plugin functions via Plugin.SetFunctions function. You also should limit some functions like Files.Delete or System.Shutdown to be only called by certain user accounts and/or script.

Examples

Limit a function to be called only from a certain script:

```
MBS("Plugin.LimitFunction"; "Version"; ""; ""; "test.fmp12:test")
```

Limit a function to be called only from a certain account name:

```
MBS("Plugin.LimitFunction"; "Text.WriteTextFile"; "Backup"; ""; "")
```

See also

- 78.14 Files.Delete

- 124.32 Plugin.LockFunction 6299
- 124.40 Plugin.SetFunctions 6309
- 137.1 RemoteControl.ClickMouse 6693
- 160.3 System.Shutdown 7649
- 164.68 Text.WriteTextFile 7871
- 124.62 Version 6338

124.31.1 Blog Entries

- [FileMaker Server Security and plugins](#)
- [Shared FileMaker Server Hosting and Plugin Security](#)

Created 20th October 2015, last changed 21st October 2017.

124.32 Plugin.LockFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.LockFunction"; name; password)

Parameters

name

A function name like RemoteControl.ClickMouse.
"RemoteControl.ClickMouse"

password

The password to use.
"secure"

Result Returns OK or error.

Description

The function can no longer be called until unlocked.

Examples

Locks version function:

```
MBS("Plugin.LockFunction"; "Version"; "test")
```

See also

- [124.31 Plugin.LimitFunction](#) 6297
- [124.40 Plugin.SetFunctions](#) 6309
- [124.45 Plugin.UnlockFunction](#) 6315
- [124.46 Plugin.UsedFunctions](#) 6316
- [137.1 RemoteControl.ClickMouse](#) 6693
- [124.62 Version](#) 6338

124.32.1 Blog Entries

- [Shared FileMaker Server Hosting and Plugin Security](#)

Created 20th October 2015, last changed 21st October 2017.

124.33 Plugin.OpenSSLVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	6.2	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.OpenSSLVersion")

(old name: CURL.OpenSSLVersion)

Result Returns text or error.

Description

Here you can check which OpenSSL version was used to built the plugin.

Examples

Shows open SSL version used:

```
Show Custom Dialog [ "SSL Version"; MBS( "Plugin.OpenSSLVersion" ) ]
```

See also

- [124.29 Plugin.LibSSHVersion](#)

6294

124.33.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr3](#)

Created 24th March 2016, last changed 14th April 2018.

124.34 Plugin.PNGVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	7.3	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.PNGVersion")

Result Returns text or error.

Description

This function is to allow you an automatic check of the PNG library version. For 7.2 it is 1.6.14 and for 7.3 1.6.30.

See also

- 124.44 Plugin.TiffVersion 6314
- 124.47 Plugin.ZLibVersion 6317

124.34.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr6](#)

Created 12nd July 2017, last changed 21st October 2017.

124.35 Plugin.Path

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	3.3	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.Path")

Result Returns path or error.

Description

On FileMaker Cloud this returns a path like `"/opt/FileMaker/FileMaker Server/Database Server/Extensions/MBS.fmx"`.

On Mac OS X this points usually to the application folder, e.g. `"/Applications/FileMaker Pro 16 Advanced/Extensions/MBS.fmplugin"`

Examples

Write DynaPDF library to same folder as plugin:

```
Goto Layout [ "MBS Update" (MBS Update) ; Animation: None ]
Go to Record/Query/Page [ First ]
Set Variable [ $folder ; Value: MBS( "Plugin.Path" ) ]
Set Variable [ $folder ; Value: MBS( "Path.RemoveLastPathComponent"; $folder ) ]
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $folder; "dynapdf.dylib" ) ]
Set Variable [ $Plat ; Value: MBS("Files.MoveToTrash"; $path) ]
Set Variable [ $Plat ; Value: MBS("Files.WriteFile"; MBS Update::dynaPdfMac; $path) ]
```

Script to report back status of MBS Plugin:

```
# Script to trigger somewhere to report back details about MBS Plugin
Set Variable [ $version ; Value: GetAsText(MBS("Version")) ]
Set Variable [ $platform ; Value: MBS( "Platform" ) ]
Set Variable [ $buildNumber ; Value: MBS( "Plugin.BuildNumber" ) ]
Set Variable [ $path ; Value: MBS( "Plugin.Path" ) ]
Set Variable [ $IsRegistered ; Value: MBS( "IsRegistered" ) ]
Set Variable [ $Name ; Value: MBS( "Plugin.LicenseName" ) ]
Set Variable [ $Debug ; Value: MBS( "Plugin.isDebug" ) ]
If [ $version = "?" ]
Set Variable [ $text ; Value: "MBS Plugin not installed. " & Get ( ApplicationVersion ) ]
Else
Set Variable [ $l1 ; Value: "MBS Plugin " & $version & ", build " & $buildNumber & " installed in " & Get ( ApplicationVersion ) ]
Set Variable [ $l2 ; Value: "$Platform: " & $Platform & "$Path: " & $path ]
Set Variable [ $l3 ; Value: If($IsRegistered; "$Licensed for: " & $Name ; "$No license set.") ]
Set Variable [ $l4 ; Value: "$Debug: " & If($debug; "yes"; "no") ]
Set Variable [ $text ; Value: $l1 & $l2 & $l3 ]
End If
Exit Script [ Text Result: $text ]
```

124.35. *PLUGIN.PATH* 6303

Query plugin folder:

```
MBS( "Path.RemoveLastPathComponent"; MBS( "Plugin.Path" ) )
```

See also

- 70.273 *DynaPDF.Initialize* 2941
- 78.44 *Files.MoveToTrash* 3842
- 78.62 *Files.WriteFile* 3871
- 121.1 *Path.AddPathComponent* 6135
- 121.8 *Path.RemoveLastPathComponent* 6149
- 124.17 *Platform* 6281
- 124.18 *Plugin.BuildNumber* 6283
- 124.48 *Plugin.isDebug* 6318
- 124.30 *Plugin.LicenseeName* 6295
- 124.38 *Plugin.Seats* 6306

124.35.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr6](#)
- [FileMaker Server 13 with Web Direct](#)
- [MBS Filemaker Plugin, version 3.3pr1](#)

Created 18th August 2014, last changed 28th August 2019.

124.36 Plugin.ScriptStepParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	7.2	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.ScriptStepParameter"; Index)

Parameters

Index

The zero based index of the parameter to query. Range from 0 to Plugin.ScriptStepParameterCount-1.
0

Result Returns value.

Description

If index is out of range, we return empty result.

See also

- 124.37 Plugin.ScriptStepParameterCount

6305

Created 23th April 2017, last changed 21st October 2017.

124.37 Plugin.ScriptStepParameterCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	7.2	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.ScriptStepParameterCount")

Result Returns number or error.

Description

See also

- 124.36 Plugin.ScriptStepParameter

6304

Created 23th April 2017, last changed 21st October 2017.

124.38 Plugin.Seats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	1.6	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.Seats")

(old name: Seats)

Result The number of seats licensed.

Description

Examples

Display seat count:

```
$r = MBS("Plugin.Seats")
```

See also

- 124.35 Plugin.Path

6302

Created 18th August 2014, last changed 21st October 2017.

124.39 Plugin.SetErrorScriptTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	8.5	Yes	Yes	No	No	Yes

MBS("Plugin.SetErrorScriptTrigger"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK or error.

Description

You can call Plugin.CallErrorScriptTrigger to test this.

The script is called with JSON block as parameter and this JSON includes entries for Function, Parameters, Result, UserName, FileName, ScriptName, AccountName, HostName, RecordID, CurrentTimeStamp, LayoutTableName, LayoutName, WindowName and TraceID.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- [124.20 Plugin.CallErrorScriptTrigger](#) 6285

Example Databases

- [Utility functions/Trigger Script on Plugin Error](#)

124.39.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.5 - Über 5500 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.5 - More than 5500 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.5pr4](#)

124.39.2 FileMaker Magazin

- [Ausgabe 6/2018, Seite 33](#)

124.40 Plugin.SetFunctions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.SetFunctions"; FunctionList)

(old name: SetFunctions)

Parameters

FunctionList

The new function list.

"Version\$Functions"

Result Returns OK or error.

Description

By default plugin allows use of 3000 and more functions.

You can use this command to limit what functions are available to your solution. This avoids some calling a function you don't want to have, e.g. not allow Files.Delete call.

For FileMaker hosting of several clients with one server, we highly recommend to limit the available plugin functions via Plugin.SetFunctions function. You also should limit some functions like Files.Delete or System.Shutdown to be only called by certain user accounts and/or script. See Plugin.LimitFunction for this.

Examples

Allow only two functions:

```
MBS( "Plugin.SetFunctions"; "Version$Functions" )
```

A typical MBS Init script for server usage:

```
If [ MBS("IsRegistered") 1 ]
If [ MBS("IsServer") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Server"; 123; 123) ]
# limit to the commands you need
Set Variable [ $r; MBS( "Plugin.SetFunctions"; "IsRegistered$CURL.New$CURL.Perform..." ) ]
# enable trace for errors
Set Variable [ $r; MBS( "Trace.ErrorsOnly"; 1 ) ]
Set Variable [ $r; MBS( "Trace"; "/Library/FileMaker Server/Logs/MBS.txt" ) ]
Else
# register on client
Set Variable [ $r; Value:MBS("Register"; "test"; "5 seats"; 123; 123) ]
End If
End If
```

See also

• 61.139 CURL.New	1947
• 61.142 CURL.Perform	1954
• 78.14 Files.Delete	3792
• 124.13 IsRegistered	6274
• 124.15 IsServer	6278
• 124.24 Plugin.Functions	6289
• 124.31 Plugin.LimitFunction	6297
• 124.32 Plugin.LockFunction	6299
• 124.49 Register	6320
• 124.52 Trace	6326

124.40.1 Blog Entries

- [FileMaker Server Security and plugins](#)
- [Shared FileMaker Server Hosting and Plugin Security](#)

Created 16th May 2015, last changed 21st October 2017.

124.41 Plugin.SetPreviewSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.SetPreviewSize"; Size)

Parameters

Size

The size for width and height to use for generating previews. Default is 600.
600

Result Returns OK or error.

Description

When plugin returns PDF or Image, we add JPEG preview.
e.g. in DynaPDF, PDFKit and Graphicsmagick functions.

Examples

Set size for previews:

MBS("Plugin.SetPreviewSize"; 1234)

Example Databases

- [DynaPDF/PDF Library](#)
- [DynaPDF/Report](#)

124.41.1 Blog Entries

- [FileMaker and PDF Containers](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 9th March 2015, last changed 21st October 2017.

124.42 Plugin.SetSuccessReturn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.SetSuccessReturn")

Result Returns OK or error.

Description

Default is "OK", but this can be changed here to some other text or number.
Some users prefer 1 or "success" as result.

See also

- [124.25 Plugin.GetSuccessReturn](#)

6290

124.42.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr4](#)

Created 7th April 2015, last changed 21st October 2017.

124.43 Plugin.StartTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.5	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.StartTimeStamp")

Result Returns timestamp.

Description

124.43.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr3](#)

Created 11st October 2019, last changed 11st October 2019.

124.44 Plugin.TiffVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.TiffVersion")

Result Returns text or error.

Description

e.g.

LIBTIFF, Version 4.0.9

Copyright (c) 1988-1996 Sam Leffler

Copyright (c) 1991-1996 Silicon Graphics, Inc.

See also

- 124.29 Plugin.LibSSHVersion 6294
- 124.34 Plugin.PNGVersion 6301
- 124.47 Plugin.ZLibVersion 6317

124.44.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr6](#)

Created 28th December 2018, last changed 28th December 2018.

124.45 Plugin.UnlockFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.UnlockFunction"; name; password)

Parameters

name

A function name like RemoteControl.ClickMouse.
"RemoteControl.ClickMouse"

password

The password to use.
"secure"

Result Returns OK or error.

Description

After unlocking you can use this function.

Examples

Unlocks version function:

```
MBS("Plugin.UnlockFunction"; "Version"; "test")
```

See also

- 124.32 Plugin.LockFunction 6299
- 137.1 RemoteControl.ClickMouse 6693
- 124.62 Version 6338

Created 20th October 2015, last changed 21st October 2017.

124.46 Plugin.UsedFunctions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	8.3	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.UsedFunctions")

Result Returns list or error.

Description

Can be useful to check what's needed and use with Plugin.SetFunctions.

See also

- [124.24 Plugin.Functions](#) 6289
- [124.32 Plugin.LockFunction](#) 6299
- [124.40 Plugin.SetFunctions](#) 6309

124.46.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr4](#)

Created 24th June 2018, last changed 25th June 2018.

124.47 Plugin.ZLibVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	8.1	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.ZLibVersion")

Result Returns version or error.

Description

Currently reports 1.2.8.

See also

- 124.29 Plugin.LibSSHVersion 6294
- 124.34 Plugin.PNGVersion 6301
- 124.44 Plugin.TiffVersion 6314

Created 2nd March 2018, last changed 19th June 2018.

124.48 Plugin.isDebug

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	7.1	Yes	Yes	Yes	Yes	Yes

MBS("Plugin.isDebug")

Result Returns 1, 0 or error.

Description

The debug version is available on request and given to users to find the roots of a bug.

Examples

Query debug status

```
MBS("Plugin.IsDebug")
```

Example result: 0

Script to report back status of MBS Plugin:

```
# Script to trigger somewhere to report back details about MBS Plugin
Set Variable [ $version ; Value: GetAsText(MBS("Version")) ]
Set Variable [ $platform ; Value: MBS( "Platform" ) ]
Set Variable [ $buildNumber ; Value: MBS( "Plugin.BuildNumber" ) ]
Set Variable [ $path ; Value: MBS( "Plugin.Path" ) ]
Set Variable [ $IsRegistered ; Value: MBS( "IsRegistered" ) ]
Set Variable [ $Name ; Value: MBS( "Plugin.LicenseeName" ) ]
Set Variable [ $Debug ; Value: MBS( "Plugin.isDebug" ) ]
If [ $version = "?" ]
Set Variable [ $text ; Value: "MBS Plugin not installed. " & Get ( ApplicationVersion ) ]
Else
Set Variable [ $I1 ; Value: "MBS Plugin " & $version & ", build " & $buildNumber & " installed in " & Get
( ApplicationVersion ) ]
Set Variable [ $I2 ; Value: "$Platform: " & $Platform & "$Path: " & $path ]
Set Variable [ $I3 ; Value: If($IsRegistered; "$Licensed for: " & $Name ; "$No license set.") ]
Set Variable [ $I4 ; Value: "$Debug: " & If($debug; "yes"; "no") ]
Set Variable [ $text ; Value: $I1 & $I2 & $I3 ]
End If
Exit Script [ Text Result: $text ]
```

See also

- 124.13 IsRegistered 6274
- 124.17 Platform 6281
- 124.18 Plugin.BuildNumber 6283
- 124.30 Plugin.LicenseeName 6295

124.48. *PLUGIN.ISDEBUG*

6319

- 124.35 Plugin.Path

6302

- 124.62 Version

6338

Created 23th February 2017, last changed 26th June 2018.

124.49 Register

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	1.0	Yes	Yes	Yes	Yes	Yes

MBS("Register"; Licensee Name; component; License Type; Expire Month; Serial number)

Parameters

Licensee Name

This is the name of the person or organization that holds the license for the plug-in
Your Name

component

The component that was licensed. For example "Complete"

License Type

Seats purchased. For example, "1 seat", "10 seats", "Developer"
1 Seat

Expire Month

This is the month in which the serial will expire for new versions of the plug-in in YYYYMM format. Plug-in released before the end of that month will continue to work forever. New Releases after that date will require a renewal
200708

Serial number

The license number
your serial number

Result Returns OK on success.

Description

If you use Server and Client licenses, be sure to register the right license for the right type.
e.g. in your script detect if you are on the server or not.
Before you register, you may want to check if already is registered.

See also StoreRegistration, IsRegistration, IsRuntime, IsServer and IsClient functions.

Newer plugins since 8.4 call StoreRegistration for iOS and Server automatically, so plugin registers automatically on loading and avoid problems with process is relaunched.

Examples

Register only when needed:

```
If [ MBS("IsRegistered") 1 ]
If [ MBS("IsRuntime") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Runtime"; 123; 123) ]
Else If [ MBS("IsMobile") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "iOS"; 123; 123) ]
```

```

Else If [ MBS("IsServer") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Server"; 123; 123) ]
Else
Set Variable [ $r; Value:MBS("Register"; "test"; "5 seats"; 123; 123) ]
End If
End If

```

Register with license values in a text field:

```

Set Variable [ $result ; Valeu: Evaluation("MBS(\\"Register\\"; " & Register::License & ")") ]

```

Register with Startup script for server and client:

Startup Script:

```

# Register for client
Perform Script [ "InitMBS" ]
# Register for server. Will be ignored if no server or no plugin installed on server
Perform Script on Server [ "InitMBS" ]

```

InitMBS script:

```

# Enable debug logging. Shows messages in DebugView/Console.app
Set Variable [ $r; Value:MBS("Trace") ]
# Register if needed for right platform
If [ MBS("IsRegistered") = 0 ]
If [ MBS("IsRuntime") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "Runtime"; 123; 123) ]
Else If [ MBS("IsServer") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "Server"; 123; 123) ]
Else If [ MBS("IsClient") ]
Set Variable [ $r; Value:MBS("Register"; "test"; "Complete"; "5 Seats"; 123; 123) ]
Else
Set Variable [ $r; Value:"Unknown platform: " & MBS("Platform") ]
End If
# Show errors, so developer can fix them
If [ $r "OK" ]
Show Custom Dialog [ "InitMBS failed."; $r ]
End If
End If
# May initialize other stuff
# like dynapdf with library in extensions folder
If [ MBS("DynaPDF.IsInitialized") = 0 ]
Set Variable [ $DynaPDFLicense; Value:"1003637-16022016-3-8-12-685C57F..." ]
If [ MBS("IsWindows") ]
Set Variable [ $r; Value:MBS( "DynaPDF.Initialize"; "dynapdf.dll"; $DynaPDFLicense) ]

```

```

Else If [ MBS("IsMacOSX") ]
Set Variable [ $r; Value:MBS( "DynaPDF.Initialize"; "dynapdf.dylib"; $DynaPDFLicense) ]
Else
Set Variable [ $r; Value:"Unknown platform: " & MBS("Platform") ]
End If
# Show errors, so developer can fix them
If [ $r "OK" ]
Show Custom Dialog [ "InitMBS failed."; $r ]
End If
End If

```

See also

- 70.273 DynaPDF.Initialize 2941
- 70.282 DynaPDF.IsInitialized 2966
- 124.5 IsClient 6265
- 124.12 IsMobile 6273
- 124.14 IsRuntime 6277
- 124.15 IsServer 6278
- 124.16 IsWindows 6280
- 124.17 Platform 6281
- 124.40 Plugin.SetFunctions 6309
- 124.52 Trace 6326

124.49.1 Blog Entries

- [MBS FileMaker Plugin registration dialogs](#)

124.49.2 FileMaker Magazin

- Ausgabe 2/2017, Seite 37

Created 18th August 2014, last changed 3th June 2019.

124.50 Registration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	1.0	Yes	Yes	Yes	Yes	Yes

MBS("Registration")

Result Returns "Registered." or "Not registered."

Description

Examples

Check Registration:

```
$r = MBS("Registration")
```

Created 18th August 2014, last changed 31st January 2016.

124.51 StoreRegistration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	3.0	Yes	Yes	Yes	Yes	Yes

MBS("StoreRegistration"; Licensee Name; component; License Type; Expire Month; Serial number)

Parameters

Licensee Name

This is the name of the person or organization that holds the license for the plug-in

Your Name

component

The component that was licensed. For example "Complete"

License Type

Seats purchased. For example, "1 seat", "10 seats", "Developer"

1 Seat

Expire Month

This is the month in which the serial will expire for new versions of the plug-in in YYYYMM format. Plug-in released before the end of that month will continue to work forever. New Releases after that date will require a renewal

200708

Serial number

The license number

your serial number

Result Returns OK on success.

Description

This is very useful for trainings where you want to preinstall license on FileMaker installations.

Added Windows support in plugin version 4.4.

You can clear the license with ClearRegistration function.

Added Linux support for 7.5.

Saves in preferences file on Mac and Linux, saves to registry on Windows.

Examples

Stores registration:

```
$r = MBS( "StoreRegistration"; $name; "Complete"; "5 seat"; $date; $code)
```

See also

- 124.1 ClearRegistration

124.51.1 **Blog Entries**

- [Preferences dialog for Windows](#)
- [MBS FileMaker Plugin, version 7.5pr3](#)
- [MBS FileMaker Plugin, version 7.3pr5](#)
- [MBS FileMaker Plugin, version 6.3pr3](#)
- [MBS FileMaker Plugin debugging help](#)
- [MBS Filemaker Plugin, version 4.4pr7](#)
- [Storing Registration for MBS Filemaker Plugin](#)
- [MBS Filemaker Plugin, version 3.0pr9](#)

Created 18th August 2014, last changed 15th October 2018.

124.52 Trace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	2.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "Trace" { ; path; Append } )
```

Parameters

path

Optional

The native file path to the log file.

"/Users/name/Desktop/debug.txt"

Append

Optional

Whether to append or create new file. Pass 1 to append or 0 (default) for new file.

1

Result Returns "OK" on success.

Description

If you pass a path, debug messages are written to the file. Else the plugin writes to debug console. See Console.app on Mac or DebugView on Windows.

See also Trace.Off and Trace.ErrorsOnly.

On Windows with a FileMaker Server, you can see debug messages in DebugView if you run DebugView application as admin and enable global Win32 listening.

For FileMaker Server on Mac OS X you can see messages in /Library/FileMaker Server/Logs/stderr file.

On Windows the log file is UTF-16 with BOM and CRLF as line endings. On Mac, Linux and iOS, you get an UTF-8 file with BOM and LF line endings.

See Trace.GetErrorsOnly, Trace.GetWithTimes, Trace.SetErrorsOnly and Trace.SetWithTimes to set options.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Log plugin calls to console:

```
MBS( "Trace" )
```

Log plugin calls to desktop on Windows:

```
MBS( "Trace"; "C:\Documents\Christian\Desktop\plugin.txt")
```

Log plugin calls to temp folder on MAC:

```
MBS( "Trace"; "/tmp/MBS Plugin Log.txt")
```

Log to log file on desktop:

```
Set Variable [ $TracePath; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ); "trace.txt" ) ]  
Set Variable [ $r; Value:MBS("Trace"; $TracePath) ]
```

See also

- [70.273 DynaPDF.Initialize](#) 2941
- [81.8 Folders.UserDesktop](#) 4177
- [124.13 IsRegistered](#) 6274
- [121.1 Path.AddPathComponent](#) 6135
- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [124.49 Register](#) 6320
- [154.34 Socket.Read](#) 7227
- [124.56 Trace.GetErrorsOnly](#) 6332
- [124.58 Trace.Off](#) 6334
- [124.59 Trace.SetErrorsOnly](#) 6335

124.52.1 Blog Entries

- [Debugging problems on FileMaker Cloud for AWS](#)
- [DbgView for watching trace messages live on FileMaker Server](#)
- [MBS FileMaker Plugin, version 8.1pr6](#)
- [Using MBS Plugin with FileMaker iOS SDK](#)
- [MBS FileMaker Plugin for iOS Update](#)
- [Properly register MBS FileMaker Plugin](#)
- [Tracing MBS Filemaker Plugin](#)

124.52.2 FileMaker Magazin

- Ausgabe 2/2017, Seite 39

Created 18th August 2014, last changed 21st July 2019.

124.53 Trace.AreErrorNotificationsEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.0	Yes	No	No	No	No

MBS("Trace.AreErrorNotificationsEnabled")

Result Returns 0 or 1.

Description

See also [Trace.DisableErrorNotifications](#) or [Trace.EnableErrorNotifications](#).

See also

- [124.54 Trace.DisableErrorNotifications](#) 6330
- [124.55 Trace.EnableErrorNotifications](#) 6331

124.53.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr4](#)
- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 11st December 2014, last changed 21st October 2017.

124.54 Trace.DisableErrorNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.0	Yes	No	No	No	No

MBS("Trace.DisableErrorNotifications")

Result Returns OK or error.

Description

See also `Trace.AreErrorNotificationsEnabled` or `Trace.EnableErrorNotifications`.

See also

- [124.53 Trace.AreErrorNotificationsEnabled](#) 6329
- [124.55 Trace.EnableErrorNotifications](#) 6331

Example Databases

- [Registration/Debugging and Registration](#)

124.54.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 11st December 2014, last changed 21st October 2017.

124.55 Trace.EnableErrorNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	5.0	Yes	No	No	No	No

MBS("Trace.EnableErrorNotifications")

Result Returns OK or error.

Description

The plugin presents errors returned by plugin calls as notifications, so you more easier notice them. Notifications are only presented at most one per 30 seconds. They are not shown if last error is same as new error or if you run plugin on server or runtime. The plugin will close error notifications after 5 seconds. See also Trace.DisableErrorNotifications or Trace.AreErrorNotificationsEnabled.

See also

- [124.53 Trace.AreErrorNotificationsEnabled](#) 6329
- [124.54 Trace.DisableErrorNotifications](#) 6330

Example Databases

- [Registration/Debugging and Registration](#)

124.55.1 Blog Entries

- [MBS FileMaker Plugin debugging help](#)
- [MBS FileMaker Plugin 5.0 for OS X/Windows - More than 3000 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 11st December 2014, last changed 21st October 2017.

124.56 Trace.GetErrorsOnly

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.3	Yes	Yes	Yes	Yes	Yes

MBS("Trace.GetErrorsOnly")

Result Returns 1, 0 or error.

Description

See also

- [124.52 Trace](#) 6326
- [124.59 Trace.SetErrorsOnly](#) 6335

124.56.1 Blog Entries

- [Neues vom MBS Plugin 9.3](#)
- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 16th July 2019, last changed 16th July 2019.

124.57 Trace.GetWithTimes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.3	Yes	Yes	Yes	Yes	Yes

MBS("Trace.GetWithTimes")

Result Returns 1, 0 or error.

Description

See also

- [124.52 Trace](#) 6326
- [124.60 Trace.SetWithTimes](#) 6336

124.57.1 Blog Entries

- [Neues vom MBS Plugin 9.3](#)
- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 16th July 2019, last changed 16th July 2019.

124.58 Trace.Off

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	3.3	Yes	Yes	Yes	Yes	Yes

MBS("Trace.Off")

Result Returns OK.

Description

See also

- [79.41 FM.Loop](#) 3968
- [124.52 Trace](#) 6326

Example Databases

- [List/QuickList Test](#)
- [List/Sort Benchmark](#)

124.58.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr6](#)

Created 18th August 2014, last changed 21st October 2017.

124.59 Trace.SetErrorsOnly

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.3	Yes	Yes	Yes	Yes	Yes

MBS("Trace.SetErrorsOnly"; Value)

(old name: Trace.ErrorsOnly)

Parameters

Value

The new setting.

1

Result Returns OK or error.

Description

See also

- [124.52 Trace](#) 6326
- [124.56 Trace.GetErrorsOnly](#) 6332

124.59.1 Blog Entries

- [Neues vom MBS Plugin 9.3](#)
- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 16th July 2019, last changed 16th July 2019.

124.60 Trace.SetWithTimes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.3	Yes	Yes	Yes	Yes	Yes

MBS("Trace.SetWithTimes"; Value)

Parameters

Value

The new setting.

1

Result Returns OK or error.

Description

See also

- [124.52 Trace](#) 6326
- [124.57 Trace.GetWithTimes](#) 6333

124.60.1 Blog Entries

- [Neues vom MBS Plugin 9.3](#)
- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 16th July 2019, last changed 16th July 2019.

124.61 Trace.WriteLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	9.1	Yes	Yes	Yes	Yes	Yes

MBS("Trace.WriteLine" { ; Parameters })

Parameters

Parameters

Optional

The parameters to print to the trace line. Can be several parameters in various data types.

"Hello"

Result Returns OK or error.

Description

Examples

Add trace log entry:

```
MBS("Trace.WriteLine"; "Hello: "; 123)
```

124.61.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr3](#)

Created 14th February 2019, last changed 14th February 2019.

124.62 Version

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	1.0	Yes	Yes	Yes	Yes	Yes

MBS("Version")

Description

Examples

Get the Plugin Version

```
$r = MBS("Version")
```

Query Plugin version on Server from Client with two scripts:

First a script called "Query MBS Version on Server" which you can run:

```
Perform Script on Server [ Wait for completion; "Query MBS Version Helper" ]
Set Variable [ $e; Value:Get(LastError) ]
Set Variable [ $r; Value:Get(ScriptResult) ]
If [ $e = 0 ]
Show Custom Dialog [ "MBS Version on Server"; "Failed to run script on server: " & $e ]
Else
Show Custom Dialog [ "MBS Version on Server"; $r ]
End If
```

Second, the helper script called "Query MBS Version Helper" which will run on the server:

```
Set Variable [ $r; Value:MBS("Version") & " " & MBS("Platform") ]
Exit Script [ Result: $r ]
```

Check and ask user to install newer version than the prerelease they have:

```
If [ MBS("Plugin.IsPrerelease") ]
If [ Get(CurrentDate) - MBS( "Plugin.CompileDate" ) >= 14 ]
Show Custom Dialog [ "Update" ; "Please install newer version of MBS Plugin." & $r & MBS("Version") ]
End If
End If
```

See also

- 95.13 iOSDevice.SystemVersion 5145
- 124.17 Platform 6281
- 124.48 Plugin.isDebug 6318

124.62. <i>VERSION</i>	6339
• 124.30 Plugin.LicenseeName	6295
• 124.31 Plugin.LimitFunction	6297
• 124.32 Plugin.LockFunction	6299
• 124.35 Plugin.Path	6302
• 124.45 Plugin.UnlockFunction	6315
• 139.11 RunTask.ReadErrorText	6769
• 48.33 X509.Version	1380

124.62.1 Blog Entries

- [Create Barcodes on Server from FileMaker Go](#)
- [Run scripts via Data API with FileMaker Plugins](#)
- [FileMaker iOS SDK and MBS Plugin Video](#)
- [Print WebViewer on macOS in FileMaker](#)
- [FileMaker Server 13 with Web Direct](#)

124.62.2 FileMaker Magazin

- Ausgabe 1/2017, Seite 8
- Ausgabe 1/2017, Seite 7

Created 18th August 2014, last changed 24th December 2019.

124.63 VersionAutoUpdate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
124 Plugin	2.4	Yes	Yes	Yes	Yes	Yes

MBS("VersionAutoUpdate")

Result the version as an 8 digit number.

Description

Examples

Queries version for auto update:

```
MBS("VersionAutoUpdate")
```

Convert from display format to auto update format:

```
Let ( [
v = Substitute ( MBS Update::VersionDisplayText ; "" ; §);
v1 = GetAsNumber ( GetValue ( v ; 1 ) );
v2 = GetAsNumber ( GetValue ( v ; 2 ) );
v3 = GetAsNumber ( GetValue ( v ; 3 ) );
v4 = GetAsNumber ( GetValue ( v ; 4 ) )
]; v4+v3*100+v2*10000+v1*1000000)
```

124.63.1 Blog Entries

- [MBS FileMaker Plugin Update Check Script](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr2](#)

124.63.2 FileMaker Magazin

- Ausgabe 1/2017, Seite 8
- Ausgabe 1/2017, Seite 7

Created 18th August 2014, last changed 21st October 2017.

Chapter 125

PortMidi

Access Midi devices and send/receive midi notes.

125.1 PortMidi.Abort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.Abort"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns OK or error.

Description

The caller should immediately close the output port; this call may result in transmission of a partial midi message.

There is no abort for Midi input because the user can simply ignore messages in the buffer and close an input device at any time.

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356

Created 18th August 2014, last changed 18th August 2014.

125.2 PortMidi.CheckHostError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.CheckHostError"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns any pending host error text or nothing.

Description

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356

Created 18th August 2014, last changed 18th August 2014.

125.3 PortMidi.ClearDataAvailableHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	8.5	Yes	Yes	No	No	No

MBS("PortMidi.ClearDataAvailableHandler"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns OK or error.

Description

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.24 PortMidi.SetDataAvailableHandler 6368
- 144.3 SerialPort.ClearDataAvailableHandler 6934
- 154.6 Socket.ClearDataAvailableHandler 7191

125.3.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr9](#)

Created 24th November 2018, last changed 24th November 2018.

125.4 PortMidi.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.Close"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns OK or error.

Description

Don't use the StreamRef after this call as stream is gone.

See also

- 125.1 PortMidi.Abort 6341
- 125.2 PortMidi.CheckHostError 6342
- 125.3 PortMidi.ClearDataAvailableHandler 6343
- 125.12 PortMidi.GetDeviceName 6353
- 125.13 PortMidi.GetFilter 6354
- 125.15 PortMidi.OpenOutput 6356
- 125.19 PortMidi.SendMessage 6361
- 125.21 PortMidi.SendSysExHex 6364
- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 125.24 PortMidi.SetDataAvailableHandler 6368

Example Databases

- [Midi/Midi Receive](#)
- [Midi/Midi Send](#)

Created 18th August 2014, last changed 18th August 2014.

125.5 PortMidi.CurrentEvent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	7.1	Yes	Yes	No	No	No

MBS("PortMidi.CurrentEvent")

Result Returns list of values or error.

Description

Returns several values: status, data1, data2 and timestamp.

You can use this to show current note playing.

Examples

Queries current event:

MBS("PortMidi.CurrentEvent")

Example result: 128

56

95

0

125.5.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 10th February 2017, last changed 11st February 2017.

125.6 PortMidi.DeviceCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.DeviceCount")

Result Returns number.

Description

Examples

Check before and after a scan:

```
$CountBefore = MBS( "PortMidi.DeviceCount" )
```

```
$r = MBS("PortMidi.Rescan")
```

```
$CountAfter = MBS( "PortMidi.DeviceCount" )
```

See also

- 125.11 PortMidi.GetDeviceInfo 6351
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.18 PortMidi.Rescan 6360

Example Databases

- [Midi/Midi List Devices](#)

Created 18th August 2014, last changed 18th August 2014.

125.7 PortMidi.GetChannelMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.GetChannelMask"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns value or error.

Description

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.22 PortMidi.SetChannelMask 6365

Created 18th August 2014, last changed 18th August 2014.

125.8 PortMidi.GetDefaultInputDeviceID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.GetDefaultInputDeviceID")

Result Returns Device ID.

Description

Returns -1 if no device is found. You can pass the index to PortMidi.OpenInput function.

See also

- [125.9 PortMidi.GetDefaultOutputDeviceID](#) 6349
- [125.14 PortMidi.OpenInput](#) 6355

Example Databases

- [Midi/Midi Receive](#)

Created 18th August 2014, last changed 18th August 2014.

125.9 PortMidi.GetDefaultOutputDeviceID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.GetDefaultOutputDeviceID")

Result Returns Device ID.

Description

Returns -1 if no device is found. You can pass the index to PortMidi.OpenOutput function.

See also

- [125.8 PortMidi.GetDefaultInputDeviceID](#) 6348
- [125.15 PortMidi.OpenOutput](#) 6356

Example Databases

- [Midi/Midi Send](#)

Created 18th August 2014, last changed 18th August 2014.

125.10 PortMidi.GetDeviceID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	7.0	Yes	Yes	No	No	No

MBS("PortMidi.GetDeviceID"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns number or error.

Description

See also

- 125.4 PortMidi.Close 6344
- 125.11 PortMidi.GetDeviceInfo 6351
- 125.12 PortMidi.GetDeviceName 6353
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356

125.10.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 29th December 2016, last changed 2nd January 2017.

125.11 PortMidi.GetDeviceInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.GetDeviceInfo"; index; selector)

Parameters

index

The device ID to query. From 0 to PortMidi.DeviceCount-1.

0

selector

Which detail to query. Can be Name, Interface, Input, Output or Opened.

"name"

Result Returns value or error.

Description

Information to query are the name of the device, the name of the interface, whether it's an input or output device and the open status.

Examples

Query if first device is open:

```
MBS( "PortMidi.GetDeviceInfo"; 0; "opened" )
```

Query name of third device

```
MBS( "PortMidi.GetDeviceInfo"; 2; "Name" )
```

See also

- [125.6 PortMidi.DeviceCount](#) 6346
- [125.10 PortMidi.GetDeviceID](#) 6350
- [125.12 PortMidi.GetDeviceName](#) 6353

Example Databases

- [Midi/Midi List Devices](#)
- [Midi/Midi Receive](#)
- [Midi/Midi Send](#)

125.11.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr5](#)

Created 18th August 2014, last changed 18th August 2014.

125.12 PortMidi.GetDeviceName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	7.0	Yes	Yes	No	No	No

MBS("PortMidi.GetDeviceName"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns text or error.

Description

See also

- 125.4 PortMidi.Close 6344
- 125.10 PortMidi.GetDeviceID 6350
- 125.11 PortMidi.GetDeviceInfo 6351
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356

125.12.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 29th December 2016, last changed 29th December 2016.

125.13 PortMidi.GetFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.GetFilter"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns value or error.

Description

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.25 PortMidi.SetFilter 6370

Created 18th August 2014, last changed 18th August 2014.

125.14 PortMidi.OpenInput

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.OpenInput"; DeviceID { ; BufferSize; Latency })

Parameters

DeviceID

The device ID, a number from 0 to PortMidi.DeviceCount-1.

0

BufferSize

Optional

Optional, number of events to buffer. Default is 100 if you don't pass this parameter.

0

Latency

Optional

The desired latency. By default 0 is used which means no latency.

0

Result Returns StreamRef or error.

Description

Midi reference numbers are starting at 17000 and counting up for each new midi stream.

See also

- 125.1 PortMidi.Abort 6341
- 125.2 PortMidi.CheckHostError 6342
- 125.3 PortMidi.ClearDataAvailableHandler 6343
- 125.4 PortMidi.Close 6344
- 125.7 PortMidi.GetChannelMask 6347
- 125.10 PortMidi.GetDeviceID 6350
- 125.16 PortMidi.Poll 6358
- 125.20 PortMidi.SendMessageRaw 6363
- 125.24 PortMidi.SetDataAvailableHandler 6368
- 125.25 PortMidi.SetFilter 6370

Example Databases

- [Midi/Midi Receive](#)

Created 18th August 2014, last changed 9th January 2015.

125.15 PortMidi.OpenOutput

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.OpenOutput"; DeviceID { ; BufferSize; Latency })

Parameters

DeviceID

The device ID, a number from 0 to PortMidi.DeviceCount-1.

0

BufferSize

Optional

Optional, Specifies the number of output events to be buffered waiting for output. Default is 100 if you don't pass this parameter.

0

Latency

Optional

The latency you want. Default is zero. Latency is the delay in milliseconds applied to timestamps to determine when the output should actually occur. (If latency is <0, 0 is assumed.) If latency is zero, timestamps are ignored and all output is delivered immediately. If latency is greater than zero, output is delayed until the message timestamp plus the latency. In some cases, PortMidi can obtain better timing than your application by passing timestamps along to the device driver or hardware. Latency may also help you to synchronize midi data to audio data by matching midi latency to the audio buffer latency.

10

Result Returns StreamRef or error.

Description

Midi reference numbers are starting at 17000 and counting up for each new midi stream.

See also

- 125.4 PortMidi.Close 6344
- 125.6 PortMidi.DeviceCount 6346
- 125.7 PortMidi.GetChannelMask 6347
- 125.9 PortMidi.GetDefaultOutputDeviceID 6349
- 125.13 PortMidi.GetFilter 6354
- 125.16 PortMidi.Poll 6358
- 125.21 PortMidi.SendSysExHex 6364
- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 125.24 PortMidi.SetDataAvailableHandler 6368

125.15. *PORTMIDI.OPENOUTPUT*

6357

- 125.25 PortMidi.SetFilter

6370

Example Databases

- [Midi/Midi Send](#)

125.15.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr4](#)

Created 18th August 2014, last changed 25th January 2017.

125.16 PortMidi.Poll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.Poll"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns 1, 0 or error.

Description

Returns 1 if data is available and zero if not.

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356

Example Databases

- [Midi/Midi Receive](#)

Created 18th August 2014, last changed 18th August 2014.

125.17 PortMidi.ReadMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.ReadMessage"; StreamRef)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Result Returns message, empty or error.

Description

Format of result is a list containing: Status, Data1, Data2, Timestamp and raw message first as decimal number and than also as hex number. Hex notation makes reading easier for debugging.

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.19 PortMidi.SendMessage 6361
- 125.20 PortMidi.SendMessageRaw 6363
- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 125.24 PortMidi.SetDataAvailableHandler 6368

Example Databases

- [Midi/Midi Receive](#)

Created 18th August 2014, last changed 18th August 2014.

125.18 PortMidi.Rescan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.Rescan")

Result Returns OK or error.

Description

Than on next call midi devices are searched.

Examples

Check before and after a scan:

```
$CountBefore = MBS( "PortMidi.DeviceCount" )
```

```
$r = MBS("PortMidi.Rescan")
```

```
$CountAfter = MBS( "PortMidi.DeviceCount" )
```

See also

- 125.6 PortMidi.DeviceCount

6346

Example Databases

- [Midi/Midi Receive](#)

Created 18th August 2014, last changed 18th August 2014.

125.19 PortMidi.SendMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.SendMessage"; StreamRef; Status; Data1; Data2 { ; Timestamp })

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Status

The Midi status code.

144

Data1

The first data byte.

4*12+0

Data2

The second data bytes.

127

Timestamp

Optional

The timestamp. If zero or not provided, note is sent immediately.

0

Result Returns OK or error.

Description

The Status is the command code. 144 is note on and 128 is note off. For those note commands Data1 is the number of the note. 48 (4*12) is C2 and then you can count over all notes till you get to next octave with C3 (5*12).

Examples

Press down a C note:

```
MBS( "PortMidi.SendMessage"; $StreamRef; 144; 4*12+0; 127 )
```

Release a C note:

```
MBS( "PortMidi.SendMessage"; $StreamRef; 128; 4*12+0; 127 )
```

See also

- 125.4 PortMidi.Close

6362

CHAPTER 125. PORTMIDI

- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.17 PortMidi.ReadMessage 6359
- 125.20 PortMidi.SendMessageRaw 6363
- 154.51 Socket.SendMessage 7248

Example Databases

- [Midi/Midi Send](#)

Created 18th August 2014, last changed 18th August 2014.

125.20 PortMidi.SendMessageRaw

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.SendMessageRaw"; StreamRef; Message { ; timestamp })

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Message

The message encoded as a 32bit integer number.

\$msg

timestamp

Optional

The timestamp.

Result Returns OK or error.

Description

This allows you to encode your own message data like this: status + data1 * 256 + data2 * 65536 + data3 * 16777216.

You can send this way also 4 byte messages by including a third data item.

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.17 PortMidi.ReadMessage 6359
- 125.19 PortMidi.SendMessage 6361

Created 18th August 2014, last changed 18th August 2014.

125.21 PortMidi.SendSysExHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

```
MBS( "PortMidi.SendSysExHex"; StreamRef; Message { ; TimeStamp } )
```

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Message

The message to send.

TimeStamp

Optional

The timestamp.

0

Result Returns OK or error.

Description

The input text must be hex encoded and is decoded before sending.

Examples

Send SysEx:

```
MBS( "PortMidi.SendSysExHex"; $out; "F000200D681020002BF7" )
```

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356

Created 18th August 2014, last changed 11st December 2017.

125.22 PortMidi.SetChannelMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.SetChannelMask"; StreamRef; Mask)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Mask

The new mask.

1

Result Returns OK or error.

Description

The mask is a 16-bit bitfield corresponding to appropriate channels.

Pass sum of the channel mask values you need:

Channel	Mask Value
0	1
1	2
2	4
3	8
4	16
5	32
6	64
7	128
8	256
9	512
10	1024
11	2048
12	4096
13	8192
14	16384
15	32767

See also

- 125.4 PortMidi.Close 6344
- 125.7 PortMidi.GetChannelMask 6347
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356

Created 18th August 2014, last changed 18th August 2014.

125.23 PortMidi.SetDataAvailableEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	8.5	Yes	Yes	No	No	No

MBS("PortMidi.SetDataAvailableEvaluate"; StreamRef; Expression)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

When new data arrives, this expression is evaluated, so you can call PortMidi.ReadMessage function.

Be aware that expression may be evaluated when just a few notes are in the read buffer. So the data message you wait for may only be available partly.

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the port midi reference, so you can pass it to other functions if needed.

See also

- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.17 PortMidi.ReadMessage 6359
- 125.24 PortMidi.SetDataAvailableHandler 6368
- 144.29 SerialPort.SetDataAvailableEvaluate 6967
- 148.40 Shell.SetDataAvailableEvaluate 7050
- 154.54 Socket.SetDataAvailableEvaluate 7252

125.23.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr9](#)

Created 24th November 2018, last changed 24th November 2018.

125.24 PortMidi.SetDataAvailableHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	8.5	Yes	Yes	No	No	No

MBS("PortMidi.SetDataAvailableHandler"; StreamRef; FileName; ScriptName)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

FileName

The name of the FileMaker File that contains the script
"MyDatabase.fp7"

ScriptName

The name of the script to run
"DataAvailable"

Result Returns OK or error.

Description

When new data arrives, this script is called, so you can call PortMidi.ReadMessage function. Be aware that script may be called when just a few notes are in the read buffer.

Examples

Set script to be triggered if data is available:

```
Set Variable [ $r; Value:MBS("PortMidi.SetDataAvailableHandler"; $$port; Get(FileName); "ReadMessage") ]
```

See also

- 125.3 PortMidi.ClearDataAvailableHandler 6343
- 125.4 PortMidi.Close 6344
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356
- 125.17 PortMidi.ReadMessage 6359
- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 144.30 SerialPort.SetDataAvailableHandler 6968
- 154.55 Socket.SetDataAvailableHandler 7253

125.24.1 **Blog Entries**

- [MBS FileMaker Plugin, version 8.5pr9](#)

Created 24th November 2018, last changed 26th November 2018.

125.25 PortMidi.SetFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	4.2	Yes	Yes	No	No	No

MBS("PortMidi.SetFilter"; StreamRef; Filter)

Parameters

StreamRef

The reference to the midi stream. You create those with PortMidi.OpenInput or PortMidi.OpenOutput and finally close them with PortMidi.Close.

\$stream

Filter

The new filter value.

0

Result Returns OK or error.

Description

By default, only active sensing messages are filtered.

Filtering is useful when midi routing or midi thru functionality is being provided by the user application. For example, you may want to exclude timing messages (clock, MTC, start/stop/continue), while allowing note-related messages to pass. Or you may be using a sequencer or drum-machine for MIDI clock information but want to exclude any notes it may play.

Filter values (can be ORed):

Filter active sensing messages (0xFE)	PM_FILT_ACTIVE	16384
Filter system exclusive messages (0xF0)	PM_FILT_SYSEX	1
Filter clock messages (CLOCK 0xF8, START 0xFA, STOP 0xFC, and CONTINUE 0xFB)	PM_FILT_CLOCK	7424
Filter play messages (start 0xFA, stop 0xFC, continue 0xFB)	PM_FILT_PLAY	1024
Filter tick messages (0xF9)	PM_FILT_TICK	512
Filter undefined FD messages	PM_FILT_FD	8192
Filter undefined real-time messages	PM_FILT_UNDEFINED	8192
Filter reset messages (0xFF)	PM_FILT_RESET	32768
Filter all real-time messages	PM_FILT_REALTIME	65281
Filter note-on and note-off (0x90-0x9F and 0x80-0x8F)	PM_FILT_NOTE	50331648
Filter channel aftertouch (most midi controllers use this) (0xD0-0xDF)	PM_FILT_CHANNEL_AFTERTOUCH	536870912
Per-note aftertouch (0xA0-0xAF)	PM_FILT_POLY_AFTERTOUCH	67108864
Filter both channel and poly aftertouch	PM_FILT_AFTERTOUCH	603979776
Program changes (0xC0-0xCF)	PM_FILT_PROGRAM	268435456
Control Changes (CC's) (0xB0-0xBF)	PM_FILT_CONTROL	134217728
Pitch Bender (0xE0-0xEF)	PM_FILT_PITCHBEND	1073741824
MIDI Time Code (0xF1)	PM_FILT_MTC	2
Song Position (0xF2)	PM_FILT_SONG_POSITION	4
Song Select (0xF3)	PM_FILT_SONG_SELECT	8
Tuning request (0xF6)	PM_FILT_TUNE	64
All System Common messages (mtc, song position, song select, tune request)	PM_FILT_SYSTEMCOMMON	78

Examples

To prohibit, say, active sensing and sysex messages, call:

MBS("PortMidi.SetFilter"; \$StreamRef; 16384 + 1)

125.25. *PORTMIDI.SETFILTER*

6371

See also

- 125.4 PortMidi.Close 6344
- 125.13 PortMidi.GetFilter 6354
- 125.14 PortMidi.OpenInput 6355
- 125.15 PortMidi.OpenOutput 6356

Created 18th August 2014, last changed 18th August 2014.

125.26 PortMidi.TimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
125 PortMidi	7.0	Yes	Yes	No	No	No

MBS("PortMidi.TimeStamp")

Result Returns number or error.

Description

On Mac this is the time since booting in milliseconds.

See also

- 154.51 Socket.SendMessage

7248

125.26.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr4](#)

Created 15th January 2017, last changed 15th January 2017.

Chapter 126

Preferences

Get or set preferences.

126.1 Preferences.ClearRecentFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
126 Preferences	6.5	Yes	No	No	No	No

MBS("Preferences.ClearRecentFiles")

Result Returns OK or error.

Description

After calling this, you should restart FileMaker to see effect.

126.1.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 23th November 2016, last changed 17th June 2018.

126.2 Preferences.DeleteValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
126 Preferences	6.0	Yes	Yes	Yes	No	Yes

MBS("Preferences.DeleteValue"; Domain; Key)

Parameters

Domain

The domain name for your preferences. Leave empty for default one.
"de.mbsplugins.MyApp"

Key

The key for the value lookup.
"Username"

Result Returns OK or error.

Description

Examples

Delete username value

MBS("Preferences.DeleteValue"; "de.mbsplugins.MyApp"; "Username")

See also

- [126.4 Preferences.GetValue](#) 6376
- [126.8 Preferences.SetValue](#) 6381

Example Databases

- [Preferences/Preferences](#)

126.2.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 4th January 2016, last changed 4th July 2019.

126.3 Preferences.GetTextSelectionWithDragAndDrop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
126 Preferences	2.8	Yes	No	Yes, macOS only	No	No

MBS("Preferences.GetTextSelectionWithDragAndDrop")

Result Returns current value 0 or 1 or an error.

Description

This function queries the preference setting from FileMaker (or Runtime) about allowing text selection by drag and drop.

Due to the way the preferences work, we can read the value which the setting has, but we can only set the value for the next launch of the application.

See also

- [126.7 Preferences.SetTextSelectionWithDragAndDrop](#) 6380

Example Databases

- [Preferences/TextSelectionWithDragAndDrop Preference](#)

126.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS Filemaker Plugin, version 2.8pr5](#)

Created 18th August 2014, last changed 24th September 2019.

126.4 Preferences.GetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
126 Preferences	2.7	Yes	Yes	Yes	No	Yes

MBS("Preferences.GetValue"; Domain; Key)

Parameters

Domain

The domain name for your preferences. Leave empty for default one.

"de.mbsplugins.MyApp"

Key

The key for the value lookup.

"Username"

Result Returns the text for the preference value.

Description

Domain should be an unique name for your app, like with reverse domain name notation. An example: "de.monkeybreadsoftware.filemaker.runtimes.MyApp". If you use no domain, the default one is used.

If no value exists for the value, an empty text is returned.

Values are read from registry on Windows and preference files on Mac.

Key must not be an empty string.

Examples

Gets preferences:

```
$username = MBS( "Preferences.GetValue"; "de.mbsplugins.MyApp"; "Username" )
```

Query file cache size:

```
MBS( "Preferences.GetValue"; "com.filemaker.client.advanced12"; "Preferences:FileCacheSize")
# Mac only!
```

Query file name of user:

```
MBS( "Preferences.GetValue"; "com.filemaker.client.advanced12"; "Preferences:UserName")
# Mac only!
```

Query whether quick start window shows:

```
MBS( "Preferences.GetValue"; "com.filemaker.client.advanced12"; "Preferences:ShowQuickStart")
# Mac only!
```

Query network name:

```
MBS( "Preferences.GetValue"; "com.filemaker.client.advanced12"; "Preferences:NetworkName")
```

Mac only!

Query memory cache size:

```
MBS( "Preferences.GetValue"; "com.filemaker.client.advanced12"; "Preferences:CacheSize")  
# Mac only!
```

Query user name for FileMaker preferences:

```
MBS( "Preferences.GetValue"; "com.filemaker.client.advanced12"; "Preferences:UserName" )
```

Query advanced tools flag for FileMaker Pro Advanced 17 (mac):

```
MBS( "Preferences.GetValue"; ""; "Preferences:UseAdvancedTools" )
```

Check flag for whether system or custom user name is used:

e.g. for FileMaker Pro 17 on MacOS:

```
MBS("Math.BitWiseAnd"; MBS( "Preferences.GetValue"; "com.filemaker.client.pro12"; "Preferences:AppGenOptions"); 8)
```

Value is 8 for custom name.

Value is 0 for system name.

See also

- 108.1 Math.BitwiseAND 5753
- 126.2 Preferences.DeleteValue 6374
- 126.5 Preferences.GetValueType 6378
- 126.6 Preferences.HasValue 6379
- 126.8 Preferences.SetValue 6381

Example Databases

- [Preferences/Preferences](#)

Created 18th August 2014, last changed 4th July 2019.

126.5 Preferences.GetValueType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
126 Preferences	9.3	Yes	Yes	Yes	No	Yes

MBS("Preferences.GetValueType"; Domain; Key)

Parameters

Domain

The domain name for your preferences. Leave empty for default one.
"de.mbsplugins.MyApp"

Key

The key for the value lookup.
"Username"

Result Returns text or error.

Description

Types may be Text, Data, Integer, Double, Boolean, Array or Dictionary.

Examples

Query type of an entry on Mac:

```
MBS( "Preferences.GetValueType"; "com.filemaker.client.advanced12"; "Preferences:FileCacheSize")
```

See also

- [126.4 Preferences.GetValue](#) 6376
- [126.8 Preferences.SetValue](#) 6381

126.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr5](#)

Created 4th July 2019, last changed 4th July 2019.

126.6 Preferences.HasValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
126 Preferences	6.0	Yes	Yes	Yes	No	Yes

MBS("Preferences.HasValue"; Domain; Key)

Parameters

Domain

The domain name for your preferences. Leave empty for default one.
"de.mbsplugins.MyApp"

Key

The key for the value lookup.
"Username"

Result Returns 0, 1 or error.

Description

See also

- [126.4 Preferences.GetValue](#) 6376
- [126.8 Preferences.SetValue](#) 6381

Example Databases

- [Preferences/Preferences](#)

126.6.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 4th January 2016, last changed 4th July 2019.

126.7 Preferences.SetTextSelectionWithDragAndDrop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
126 Preferences	2.8	Yes	No	Yes, macOS only	No	No

MBS("Preferences.SetTextSelectionWithDragAndDrop"; value)

Parameters

value

The new value: 0 for off and 1 for on.

1

Result Returns OK or error.

Description

Due to the way the preferences work, we can read the value which the setting has, but we can only set the value for the next launch of the application.

See also

- [126.3 Preferences.GetTextSelectionWithDragAndDrop](#) 6375

Example Databases

- [Preferences/TextSelectionWithDragAndDrop Preference](#)

126.7.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS Filemaker Plugin, version 2.8pr5](#)

Created 18th August 2014, last changed 17th June 2018.

126.8 Preferences.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
126 Preferences	2.7	Yes	Yes	Yes	No	Yes

MBS("Preferences.SetValue"; Domain; Key { ; Value; Type })

Parameters

Domain

The domain name for your preferences. Leave empty for default one.

"de.mbsplugins.MyApp"

Key

The key for the value lookup.

"Username"

Value

Optional

The new value text.

"Christian"

Type

Optional

The data type to use. (Mac only) Can be integer, double, boolean or text.

"text"

Result Returns OK or error message.

Description

Domain should be an unique name for your app, like with reverse domain name notation. An example: "de.monkeybreadsoftware.filemaker.runtimes.MyApp". If you use no domain, the default one is used.

Values are stored in registry on Windows and preference files on Mac.

Key must not be an empty string.

This is the location where you can store global settings like the last used username for login.

Changing preferences of FileMaker only works, if you restart FileMaker for changes take effect. Going to the preferences dialog (even with cancel on exit), can cause FileMaker to write it's settings over what you just changed.

To change windows preferences for Windows, you may better go with Registry functions.

Examples

Sets preferences:

```
MBS( "Preferences.SetValue"; "de.mbsplugins.MyApp"; "Username"; $username )
```

Set flag to not allow plugins to update:

```
MBS( "Preferences.SetValue"; "com.filemaker.client.advanced12"; "Preferences:AllowToUpdatePlugins"; 0; "integer")
```

Set file cache to 1 GB:

```
MBS( "Preferences.SetValue"; "com.filemaker.client.advanced12"; "Preferences:FileCacheSize"; 1048576; "integer")
```

Set user name in FileMaker preferences:

```
MBS( "Preferences.SetValue"; "com.filemaker.client.advanced12"; "Preferences:UserName"; "Chris" )
```

See also

- [126.2 Preferences.DeleteValue](#) 6374
- [126.4 Preferences.GetValue](#) 6376
- [126.5 Preferences.GetValueType](#) 6378
- [126.6 Preferences.HasValue](#) 6379

Example Databases

- [Preferences/Preferences](#)

126.8.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr2](#)

Created 18th August 2014, last changed 4th July 2019.

Chapter 127

PrintDialog

Control the Mac printer dialog. Select printer on Mac.

See `Printer.Print` and `Printer.SetPrinter` for similar features on Windows.

127.1 PageSetupDialog.ClearOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.ClearOption"; Key)

Parameters

Key

The key to use.

Result Returns OK or error.

Description

See also

- 127.2 PageSetupDialog.ClearOptions 6384
- 127.7 PageSetupDialog.GetOption 6390
- 127.14 PageSetupDialog.SetOption 6398

Created 20th April 2019, last changed 20th April 2019.

127.2 PageSetupDialog.ClearOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.ClearOptions")

Result Returns OK or error.

Description

See also

- 127.1 PageSetupDialog.ClearOption 6383
- 127.7 PageSetupDialog.GetOption 6390
- 127.14 PageSetupDialog.SetOption 6398
- 127.20 PrintDialog.ClearOptions 6404

Created 20th April 2019, last changed 20th April 2019.

127.3 PageSetupDialog.Disable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.Disable")

Result Returns OK or error.

Description

Examples

Disable it:

Set Variable [\$r ; Value: MBS("PageSetupDialog.Disable")]

See also

- [127.4 PageSetupDialog.Enable](#) 6386
- [127.12 PageSetupDialog.Install](#) 6395

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)
- [Mac only/Print/Page Setup Dialog](#)

127.3.1 Blog Entries

- [Page Setup Dialog example](#)

Created 20th April 2019, last changed 20th April 2019.

127.4 PageSetupDialog.Enable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.Enable")

Result Returns OK or error.

Description

Your page setup commands in FileMaker should show a dialog, so the plugin can intercept it.

Use Printer.SetPrinter for similar features on Windows.

Examples

Enable:

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.Disable") ]
```

Run dialog with plugin:

```
Allow User Abort [ Off ]
```

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.Install") ]
```

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.Enable") ]
```

```
# set options here
```

```
Set Variable [ $r ; Value: MBS( "Schedule.EvaluateAfterDelay"; ,1; "MBS( \"MenuBar.RunMenuCommand\"; 57606 )" ) // run Page Setup Dialog in 0.1 seconds ]
```

```
Pause/Resume Script [ Duration (seconds): 1 ]
```

See also

- [113.5 Menubar.RunMenuCommand](#) 5999
- [127.3 PageSetupDialog.Disable](#) 6385
- [127.12 PageSetupDialog.Install](#) 6395
- [128.15 Printer.SetPrinter](#) 6474
- [140.4 Schedule.EvaluateAfterDelay](#) 6788

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)
- [Mac only/Print/Page Setup Dialog](#)

127.4.1 Blog Entries

- [Page Setup Dialog example](#)

Created 20th April 2019, last changed 21st November 2019.

127.5 PageSetupDialog.GetLastSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.GetLastSettings")

Result Returns text or error.

Description

Please print once with enabled page setup dialog functions. After printing with dialog, you can query last settings and see what OS X or your driver uses.

Since version 10.1 we return settings as JSON instead of XML and includes print parameter.

See also

- [127.30 PrintDialog.GetLastSettings](#) 6415

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)

127.5.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 20th April 2019, last changed 21st February 2020.

127.6 PageSetupDialog.GetNoDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.GetNoDialog")

Result Returns value or error.

Description

Use PageSetupDialog.SetNoDialog to set this setting.

See also

- 127.7 PageSetupDialog.GetOption 6390
- 127.13 PageSetupDialog.SetNoDialog 6397
- 127.14 PageSetupDialog.SetOption 6398

Created 20th April 2019, last changed 20th April 2019.

127.7 PageSetupDialog.GetOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.GetOption"; Key)

Parameters

Key

The key to use.

Result Returns value or error.

Description

You can use PrintDialog.SetOption to set options or PrintDialog.ClearOption to clear one.

See also

- 127.1 PageSetupDialog.ClearOption 6383
- 127.2 PageSetupDialog.ClearOptions 6384
- 127.6 PageSetupDialog.GetNoDialog 6389
- 127.13 PageSetupDialog.SetNoDialog 6397
- 127.14 PageSetupDialog.SetOption 6398
- 127.19 PrintDialog.ClearOption 6403
- 127.49 PrintDialog.SetOption 6438

Created 20th April 2019, last changed 20th April 2019.

127.8 PageSetupDialog.GetPaperName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.GetPaperName")

Result Returns paper name or error.

Description

You can set this with PageSetupDialog.SetPaperName.

See also

- 127.10 PageSetupDialog.GetPrinterName 6393
- 127.15 PageSetupDialog.SetPaperName 6399
- 127.17 PageSetupDialog.SetPrinterName 6401
- 127.34 PrintDialog.GetPaperName 6420

Created 20th April 2019, last changed 20th April 2019.

127.9 PageSetupDialog.GetPaperOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.GetPaperOrientation")

Result Returns value or error.

Description

Result should be landscape, portrait or default.

See also

- 127.16 PageSetupDialog.SetPaperOrientation

6400

Created 20th April 2019, last changed 20th April 2019.

127.10 PageSetupDialog.GetPrinterName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.GetPrinterName")

Result Returns OK or error.

Description

You can set this with PageSetupDialog.SetPrinterName.

See also

- 127.8 PageSetupDialog.GetPaperName 6391
- 127.15 PageSetupDialog.SetPaperName 6399
- 127.17 PageSetupDialog.SetPrinterName 6401
- 127.36 PrintDialog.GetPrinterName 6422

Created 20th April 2019, last changed 20th April 2019.

127.11 PageSetupDialog.GetScalingFactor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.GetScalingFactor")

Result Returns value or error.

Description

See also

- 127.18 PageSetupDialog.SetScalingFactor

6402

Created 20th April 2019, last changed 20th April 2019.

127.12 PageSetupDialog.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.Install")

Result Returns OK or error.

Description

Only after PageSetupDialog.Install was called, you can use PageSetupDialog.Enable. You only call this function once.

This is Mac only. For Windows, please check Printer.SetPrinter and Printer.Print.

Examples

Initialize paper setup dialog:

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.Install") ]
```

Run dialog with plugin:

```
Allow User Abort [ Off ]
Set Variable [ $r ; Value: MBS("PageSetupDialog.Install") ]
Set Variable [ $r ; Value: MBS("PageSetupDialog.Enable") ]
# set options here
Set Variable [ $r ; Value: MBS( "Schedule.EvaluateAfterDelay"; ,1; "MBS( \ "Menubar.RunMenuCommand\"; 57606 )" ) // run Page Setup Dialog in 0.1 seconds ]
Pause/Resume Script [ Duration (seconds): 1 ]
```

See also

- 113.5 Menubar.RunMenuCommand 5999
- 127.3 PageSetupDialog.Disable 6385
- 127.4 PageSetupDialog.Enable 6386
- 128.10 Printer.Print 6464
- 128.15 Printer.SetPrinter 6474
- 140.4 Schedule.EvaluateAfterDelay 6788

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)
- [Mac only/Print/Page Setup Dialog](#)

127.12.1 Blog Entries

- [Page Setup Dialog example](#)

Created 20th April 2019, last changed 20th April 2019.

127.13 PageSetupDialog.SetNoDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.SetNoDialog"; Flag)

Parameters

Flag

Whether to show page setup dialog.

1

Result Returns OK or error.

Description

In FileMaker script step you need to use page setup with dialog. Than the plugin can control the dialog and either close it right away (with setting 1) or let it open (setting 0).

Examples

Set to show dialog:

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.SetNoDialog"; 0) ]
```

No dialog, please:

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.SetNoDialog"; 1) ]
```

See also

- [127.6 PageSetupDialog.GetNoDialog](#) 6389
- [127.7 PageSetupDialog.GetOption](#) 6390
- [127.14 PageSetupDialog.SetOption](#) 6398

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)
- [Mac only/Print/Page Setup Dialog](#)

127.13.1 Blog Entries

- [Page Setup Dialog example](#)

Created 20th April 2019, last changed 20th April 2019.

127.14 PageSetupDialog.SetOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.SetOption"; Key; Value; Type)

Parameters

Key

The key to use.

Value

The value to use. Depending on data type, the plugin will pass a number or a text.

3

Type

The type of data to add. Default is empty to use type of value passed. So text or number type would be picked automatically. Valid values for type are text, number, integer and text. Integer is for integer numbers while number is for floating numbers.

Result Returns OK or error.

Description

You can use PrintDialog.GetLastSettings after printing to query XML with all settings and pick keys and values.

See also

- 127.1 PageSetupDialog.ClearOption 6383
- 127.2 PageSetupDialog.ClearOptions 6384
- 127.6 PageSetupDialog.GetNoDialog 6389
- 127.7 PageSetupDialog.GetOption 6390
- 127.13 PageSetupDialog.SetNoDialog 6397
- 127.30 PrintDialog.GetLastSettings 6415

Created 20th April 2019, last changed 20th April 2019.

127.15 PageSetupDialog.SetPaperName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.SetPaperName"; name)

Parameters

name

The paper name.

"A4"

Result Returns OK or error.

Description

You need to run paper setup dialog to let the plugin change values.

We found paper sizes for our printer in PPD files in /private/etc/cups/ppd folder. e.g. "Env10" for Envelope # 10.

Examples

Set paper to be A5:

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.SetPaperName"; "A5") ]
```

See also

- [127.8 PageSetupDialog.GetPaperName](#) 6391
- [127.10 PageSetupDialog.GetPrinterName](#) 6393
- [127.17 PageSetupDialog.SetPrinterName](#) 6401
- [127.51 PrintDialog.SetPaperName](#) 6441

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)
- [Mac only/Print/Page Setup Dialog](#)

127.15.1 Blog Entries

- [Page Setup Dialog example](#)

Created 20th April 2019, last changed 26th August 2019.

127.16 PageSetupDialog.SetPaperOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.SetPaperOrientation"; PaperFormat)

Parameters

PaperFormat

The new paper orientation. Value should be landscape, portrait or default.
"landscape"

Result Returns OK or error.

Description

You need to run paper setup dialog to let the plugin change values.

Examples

Set paper orientation to portrait:

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.SetPaperOrientation"; "portrait") ]
```

Set paper orientation to landscape:

```
Set Variable [ $r ; Value: MBS("PageSetupDialog.SetPaperOrientation"; "landscape") ]
```

See also

- [127.9 PageSetupDialog.GetPaperOrientation](#) 6392

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)
- [Mac only/Print/Page Setup Dialog](#)

127.16.1 Blog Entries

- [Page Setup Dialog example](#)

Created 20th April 2019, last changed 20th April 2019.

127.17 PageSetupDialog.SetPrinterName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.SetPrinterName")

Result Returns OK or error.

Description

The plugin will try to find a printer with the given name and assigns it for the printing. You need to run paper setup dialog to let the plugin change values.

See also

- 127.8 PageSetupDialog.GetPaperName 6391
- 127.10 PageSetupDialog.GetPrinterName 6393
- 127.15 PageSetupDialog.SetPaperName 6399
- 127.54 PrintDialog.SetPrinterName 6445

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)

Created 20th April 2019, last changed 20th April 2019.

127.18 PageSetupDialog.SetScalingFactor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	9.2	Yes	No	No	No	No

MBS("PageSetupDialog.SetScalingFactor"; Value)

Parameters

Value

The new scale factor.

1.0

Result Returns OK or error.

Description

If zero, we don't change it.

Value is 1.0 for 100% .

You need to run paper setup dialog to let the plugin change values.

Examples

Set scaling to 150% :

Set Variable [\$r ; Value: MBS("PageSetupDialog.SetScalingFactor"; 1,5)]

See also

- 127.11 PageSetupDialog.GetScalingFactor

6394

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)

Created 20th April 2019, last changed 20th April 2019.

127.19 PrintDialog.ClearOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.ClearOption"; Key)

Parameters

Key

The key to use.

"com_apple_print_PrintSettings_PMCopies"

Result Returns OK or error.

Description

See also

- [127.7 PageSetupDialog.GetOption](#) 6390
- [127.20 PrintDialog.ClearOptions](#) 6404
- [127.32 PrintDialog.GetOption](#) 6418
- [127.49 PrintDialog.SetOption](#) 6438

127.19.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr7](#)

Created 30th April 2016, last changed 30th April 2016.

127.20 PrintDialog.ClearOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.ClearOptions")

Result Returns OK or error.

Description

Examples

Clear all options:

MBS("PrintDialog.ClearOptions")

See also

- [127.2 PageSetupDialog.ClearOptions](#) 6384
- [127.19 PrintDialog.ClearOption](#) 6403
- [127.32 PrintDialog.GetOption](#) 6418
- [127.49 PrintDialog.SetOption](#) 6438

127.20.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr7](#)

Created 30th April 2016, last changed 30th April 2016.

127.21 PrintDialog.Disable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.Disable")

Result Returns OK or error.

Description

Examples

Disable plugin's printer extension:

```
Set Variable [ $r; MBS( "PrintDialog.Disable" ) ]
```

See also

- [127.22 PrintDialog.Enable](#) 6406
- [127.30 PrintDialog.GetLastSettings](#) 6415
- [127.40 PrintDialog.Install](#) 6426
- [127.43 PrintDialog.SetCopies](#) 6430
- [127.46 PrintDialog.SetFirstPage](#) 6434
- [127.47 PrintDialog.SetLastPage](#) 6435
- [127.53 PrintDialog.SetPrintType](#) 6443

Example Databases

- [Mac only/Print/Printer Dialog on Mac](#)

127.21.1 FileMaker Magazin

- Ausgabe 5/2017, Seite 22

Created 18th August 2014, last changed 18th August 2014.

127.22 PrintDialog.Enable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.Enable")

Result Returns OK or error.

Description

Your print commands in FileMaker should show a dialog, so the plugin can intercept it.

Examples

Install and print to PDF:

```
Set Variable [ $r; MBS( "PrintDialog.Install" ) ]
Set Variable [ $r; MBS( "PrintDialog.Enable" ) ]
Set Variable [ $r; MBS( "PrintDialog.SetPrintToPDF"; 1 ) ]
Set Variable [ $r; MBS( "PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test.pdf" ) ]
Set Variable [ $r; MBS( "PrintDialog.SetNoDialog"; 1 ) ]
Print [ ]
```

See also

- 127.24 PrintDialog.GetConfiguration 6409
- 127.30 PrintDialog.GetLastSettings 6415
- 127.40 PrintDialog.Install 6426
- 127.42 PrintDialog.SetConfiguration 6429
- 127.43 PrintDialog.SetCopies 6430
- 127.44 PrintDialog.SetDestinationPath 6432
- 127.46 PrintDialog.SetFirstPage 6434
- 127.47 PrintDialog.SetLastPage 6435
- 127.48 PrintDialog.SetNoDialog 6436
- 127.53 PrintDialog.SetPrintType 6443

Example Databases

- [Mac only/Print/Printer Dialog on Mac](#)

127.22.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr1](#)
- [How to fix the Sierra printing bug in FileMaker](#)
- [Printing with FileMaker on Mac with a specific Paper Tray](#)

127.22.2 FileMaker Magazin

- [Ausgabe 5/2017, Seite 22](#)

Created 18th August 2014, last changed 16th September 2016.

127.23 PrintDialog.GetAllPages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.GetAllPages")

Result Returns OK or error.

Description

Value is -1 if not defined.

See also

- 127.25 PrintDialog.GetCopies 6410
- 127.28 PrintDialog.GetFirstPage 6413
- 127.29 PrintDialog.GetLastPage 6414
- 127.41 PrintDialog.SetAllPages 6428
- 127.47 PrintDialog.SetLastPage 6435

Created 17th March 2016, last changed 17th March 2016.

127.24 PrintDialog.GetConfiguration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	8.0	Yes	No	No	No	No

MBS("PrintDialog.GetConfiguration")

Result Returns OK or error.

Description

You can run with dialog, select all settings you like and than store the configuration.

Configuration is the serialized and base64 encoded setup data.

Just store as it is in a text field for later restoration with PrintDialog.SetConfiguration or PDFKit.SavePrintSettings.

Returns empty result if no print configuration was yet created.

See PrintDialog.GetLastSettings for a xml you can read.

Examples

Query configuration after printing:

```
Set Variable [ $r ; Value: MBS("PrintDialog.Enable") ]
```

```
Print [ With dialog: On ]
```

```
Set Field [ Printer Dialog on Mac::Data ; MBS("PrintDialog.GetConfiguration") ]
```

See also

- [122.37 PDFKit.SavePrintSettings](#) 6213
- [127.22 PrintDialog.Enable](#) 6406
- [127.30 PrintDialog.GetLastSettings](#) 6415
- [127.42 PrintDialog.SetConfiguration](#) 6429

127.24.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr5](#)

Created 21st December 2017, last changed 16th March 2019.

127.25 PrintDialog.GetCopies

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.GetCopies")

Result Returns OK or error.

Description

This property is the number of copies of the print job to be printed.

Value is -1 if not defined.

See also

- 127.23 PrintDialog.GetAllPages 6408
- 127.27 PrintDialog.GetDuplex 6412
- 127.31 PrintDialog.GetNoDialog 6417
- 127.32 PrintDialog.GetOption 6418
- 127.37 PrintDialog.GetReset 6423
- 127.43 PrintDialog.SetCopies 6430
- 127.45 PrintDialog.SetDuplex 6433
- 127.49 PrintDialog.SetOption 6438

Created 17th March 2016, last changed 17th March 2016.

127.26 PrintDialog.GetDestinationPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.GetDestinationPath")

Result Returns path text or error.

Description

See also

- 127.44 PrintDialog.SetDestinationPath

6432

Created 18th August 2014, last changed 18th August 2014.

127.27 PrintDialog.GetDuplex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	4.1	Yes	No	No	No	No

MBS("PrintDialog.GetDuplex")

Result Returns current setting.

Description

Use PrintDialog.SetDuplex to set this value.

Setting is 1 (on), 0 (off) or -1 (not set).

See also

- 127.25 PrintDialog.GetCopies 6410
- 127.31 PrintDialog.GetNoDialog 6417
- 127.32 PrintDialog.GetOption 6418
- 127.37 PrintDialog.GetReset 6423
- 127.43 PrintDialog.SetCopies 6430
- 127.45 PrintDialog.SetDuplex 6433

Created 18th August 2014, last changed 18th August 2014.

127.28 PrintDialog.GetFirstPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.GetFirstPage")

Result Returns OK or error.

Description

This property containing the one-based index of the first page in the job to print.

Value is -1 if not defined.

See also

- 127.23 PrintDialog.GetAllPages 6408
- 127.29 PrintDialog.GetLastPage 6414
- 127.34 PrintDialog.GetPaperName 6420
- 127.36 PrintDialog.GetPrinterName 6422
- 127.46 PrintDialog.SetFirstPage 6434
- 127.47 PrintDialog.SetLastPage 6435
- 127.53 PrintDialog.SetPrintType 6443

Created 17th March 2016, last changed 17th March 2016.

127.29 PrintDialog.GetLastPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.GetLastPage")

Result Returns OK or error.

Description

This property containing the one-based index of the last page in the job to print.

Value is -1 if not defined.

See also

- 127.23 PrintDialog.GetAllPages 6408
- 127.28 PrintDialog.GetFirstPage 6413
- 127.34 PrintDialog.GetPaperName 6420
- 127.41 PrintDialog.SetAllPages 6428
- 127.46 PrintDialog.SetFirstPage 6434
- 127.47 PrintDialog.SetLastPage 6435

Created 17th March 2016, last changed 17th March 2016.

127.30 PrintDialog.GetLastSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.GetLastSettings")

Result Returns text or error.

Description

Please print once with enabled print dialog functions. After printing with dialog, you can query last settings and see what OS X or your driver uses.

Since version 10.1 we return settings as JSON instead of XML and includes print parameter.

Examples

Get last settings:

```
MBS("PrintDialog.GetLastSettings")
```

Query settings after using dialog:

```
Set Variable [ $r ; Value: MBS("PrintDialog.Install") ]
Set Variable [ $r ; Value: MBS("PrintDialog.Enable") ]
Print [ With dialog: On ]
Set Variable [ $r ; Value: MBS("PrintDialog.Disable") ]
Set Variable [ $r ; Value: MBS("PrintDialog.GetLastSettings") ]
Set Field [ Printer Dialog on Mac::Path ; $r ]
```

See also

- [127.5 PageSetupDialog.GetLastSettings](#) 6388
- [127.14 PageSetupDialog.SetOption](#) 6398
- [127.21 PrintDialog.Disable](#) 6405
- [127.22 PrintDialog.Enable](#) 6406
- [127.24 PrintDialog.GetConfiguration](#) 6409
- [127.40 PrintDialog.Install](#) 6426
- [127.49 PrintDialog.SetOption](#) 6438

Example Databases

- [Mac only/Print/Printer Dialog on Mac](#)

127.30.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [MBS FileMaker Plugin, version 6.2pr7](#)

Created 30th April 2016, last changed 21st February 2020.

127.31 PrintDialog.GetNoDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.GetNoDialog")

Result Returns value or error.

Description

Use PrintDialog.SetNoDialog to set this setting.

See also

- 127.25 PrintDialog.GetCopies 6410
- 127.27 PrintDialog.GetDuplex 6412
- 127.32 PrintDialog.GetOption 6418
- 127.48 PrintDialog.SetNoDialog 6436

Created 18th August 2014, last changed 18th August 2014.

127.32 PrintDialog.GetOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.GetOption"; Key)

Parameters

Key

The key to use.

"com_apple_print_PrintSettings_PMCopies"

Result Returns value or error.

Description

You can use PrintDialog.SetOption to set options or PrintDialog.ClearOption to clear one.

See also

- 127.19 PrintDialog.ClearOption 6403
- 127.20 PrintDialog.ClearOptions 6404
- 127.25 PrintDialog.GetCopies 6410
- 127.27 PrintDialog.GetDuplex 6412
- 127.31 PrintDialog.GetNoDialog 6417
- 127.43 PrintDialog.SetCopies 6430
- 127.49 PrintDialog.SetOption 6438

127.32.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr7](#)

Created 30th April 2016, last changed 30th April 2016.

127.33 PrintDialog.GetPageNumberingOffset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	7.0	Yes	No	No	No	No

MBS("PrintDialog.GetPageNumberingOffset")

Result Returns value or error.

Description

Use PrintDialog.SetPageNumberingOffset to set this value.

Value -1 means to not change it. Value 0 is for no offset. Other values to start page numbering at given number.

See also

- 127.50 PrintDialog.SetPageNumberingOffset

6440

127.33.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr2](#)

Created 6th January 2017, last changed 6th January 2017.

127.34 PrintDialog.GetPaperName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	5.0	Yes	No	No	No	No

MBS("PrintDialog.GetPaperName")

Result Returns paper name or error.

Description

You can set this with PrintDialog.SetPaperName.

See also

- 127.8 PageSetupDialog.GetPaperName 6391
- 127.28 PrintDialog.GetFirstPage 6413
- 127.29 PrintDialog.GetLastPage 6414
- 127.36 PrintDialog.GetPrinterName 6422
- 127.51 PrintDialog.SetPaperName 6441
- 127.54 PrintDialog.SetPrinterName 6445

127.34.1 Blog Entries

- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 27th December 2014, last changed 27th December 2014.

127.35 PrintDialog.GetPrintToPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.GetPrintToPDF")

Result Returns boolean or error.

Description

See also

- 127.36 PrintDialog.GetPrinterName 6422
- 127.54 PrintDialog.SetPrinterName 6445
- 127.52 PrintDialog.SetPrintToPDF 6442
- 127.53 PrintDialog.SetPrintType 6443

Created 18th August 2014, last changed 18th August 2014.

127.36 PrintDialog.GetPrinterName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.GetPrinterName")

Result Returns printer name or error.

Description

You can set this with PrintDialog.SetPrinterName.

See also

- 127.10 PageSetupDialog.GetPrinterName 6393
- 127.28 PrintDialog.GetFirstPage 6413
- 127.34 PrintDialog.GetPaperName 6420
- 127.35 PrintDialog.GetPrintToPDF 6421
- 127.51 PrintDialog.SetPaperName 6441
- 127.54 PrintDialog.SetPrinterName 6445
- 127.52 PrintDialog.SetPrintToPDF 6442
- 127.53 PrintDialog.SetPrintType 6443

Created 18th August 2014, last changed 18th August 2014.

127.37 PrintDialog.GetReset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	7.0	Yes	No	No	No	No

MBS("PrintDialog.GetReset")

Result Returns value or error.

Description

See also

- [127.25 PrintDialog.GetCopies](#) 6410
- [127.27 PrintDialog.GetDuplex](#) 6412
- [127.39 PrintDialog.GetTray](#) 6425
- [127.55 PrintDialog.SetReset](#) 6446

127.37.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr3](#)

Created 10th January 2017, last changed 10th January 2017.

127.38 PrintDialog.GetResetDestination

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.5	Yes	No	No	No	No

MBS("PrintDialog.GetResetDestination")

Result Returns 1, 0 or error.

Description

See also

- 127.56 PrintDialog.SetResetDestination

6447

127.38.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 17th October 2016, last changed 17th October 2016.

127.39 PrintDialog.GetTray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.1	Yes	No	No	No	No

MBS("PrintDialog.GetTray" { ; LastTray })

Parameters

LastTray

Optional

Pass 1 to return the last tray name used by print dialog. This allows you use the print dialog and than see what value is used internally for the tray you selected. Pass 0 to get the text you passed to PrintDialog.SetTray.

0

Result Returns text or error.

Description

Examples

Query last tray selection from dialog:

```
MBS( "PrintDialog.GetTray"; 1 )
```

See also

- [122.44 PDFKit.SetPrintSetting](#) 6226
- [127.37 PrintDialog.GetReset](#) 6423
- [127.57 PrintDialog.SetTray](#) 6448

127.39.1 Blog Entries

- [Printing with FileMaker on Mac with a specific Paper Tray](#)

Created 10th February 2016, last changed 11st February 2016.

127.40 PrintDialog.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.Install")

Result Returns OK or error.

Description

Only after PrintDialog.Install was called, you can use PrintDialog.Enable.
You only call this function once.

This is Mac only. For Windows, please check Printer.SetPrinter and Printer.Print.

Examples

Install and print to PDF:

```
Set Variable [ $r; MBS( "PrintDialog.Install" ) ]
Set Variable [ $r; MBS( "PrintDialog.Enable" ) ]
Set Variable [ $r; MBS( "PrintDialog.SetPrintToPDF"; 1 ) ]
Set Variable [ $r; MBS( "PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test.pdf" ) ]
Set Variable [ $r; MBS( "PrintDialog.SetNoDialog"; 1 ) ]
Print [ ]
```

See also

- 127.21 PrintDialog.Disable 6405
- 127.22 PrintDialog.Enable 6406
- 127.30 PrintDialog.GetLastSettings 6415
- 127.44 PrintDialog.SetDestinationPath 6432
- 127.48 PrintDialog.SetNoDialog 6436
- 127.52 PrintDialog.SetPrintToPDF 6442
- 127.56 PrintDialog.SetResetDestination 6447
- 128.10 Printer.Print 6464
- 128.15 Printer.SetPrinter 6474

Example Databases

- [Mac only/Print/Printer Dialog on Mac](#)

127.40.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr1](#)
- [How to fix the Sierra printing bug in FileMaker](#)
- [Printing with FileMaker on Mac with a specific Paper Tray](#)

127.40.2 FileMaker Magazin

- [Ausgabe 5/2017, Seite 22](#)

Created 18th August 2014, last changed 20th April 2019.

127.41 PrintDialog.SetAllPages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.SetAllPages"; Value)

Parameters

Value

The new value. 1 = on, 0 = off, -1 = undefined

1

Result Returns OK or error.

Description

Value is -1 if not defined.

See also

- 127.23 PrintDialog.GetAllPages 6408
- 127.29 PrintDialog.GetLastPage 6414
- 127.43 PrintDialog.SetCopies 6430
- 127.46 PrintDialog.SetFirstPage 6434
- 127.47 PrintDialog.SetLastPage 6435

Created 17th March 2016, last changed 17th March 2016.

127.42 PrintDialog.SetConfiguration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	8.0	Yes	No	No	No	No

MBS("PrintDialog.SetConfiguration"; Configuration)

Parameters

Configuration

The configuration data you got from PrintDialog.GetConfiguration.

Result Returns OK or error.

Description

The given configuration will be applied after reset of settings (if enabled) and before other settings are applied. This way you can still customize the saved configuration.

Examples

Restore configuration:

Allow User Abort [Off]

Set Variable [\$r ; Value: MBS("PrintDialog.Enable")]

Set Variable [\$r ; Value: MBS("PrintDialog.SetConfiguration"; Printer Dialog on Mac::Data)]

Print [With dialog: On]

See also

- 122.37 PDFKit.SavePrintSettings 6213
- 127.22 PrintDialog.Enable 6406
- 127.24 PrintDialog.GetConfiguration 6409

127.42.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr5](#)

Created 21st December 2017, last changed 21st December 2017.

127.43 PrintDialog.SetCopies

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.SetCopies"; Value)

Parameters

Value

The new copies value. Use -1 for undefined.

2

Result Returns OK or error.

Description

This property is the number of copies of the print job to be printed.

Value is -1 if not defined.

Examples

Print with 5 copies:

```
Set Variable [ $r; Value:MBS("PrintDialog.Enable") ]
Set Variable [ $r; Value:MBS("PrintDialog.SetCopies"; 5) ]
Print [ ]
Set Variable [ $r; Value:MBS("PrintDialog.Disable") ]
```

See also

- 127.21 PrintDialog.Disable 6405
- 127.22 PrintDialog.Enable 6406
- 127.25 PrintDialog.GetCopies 6410
- 127.27 PrintDialog.GetDuplex 6412
- 127.32 PrintDialog.GetOption 6418
- 127.41 PrintDialog.SetAllPages 6428
- 127.45 PrintDialog.SetDuplex 6433
- 127.48 PrintDialog.SetNoDialog 6436
- 127.49 PrintDialog.SetOption 6438
- 127.55 PrintDialog.SetReset 6446

127.43.1 **Blog Entries**

- [MBS FileMaker Plugin, version 8.4pr8](#)

Created 17th March 2016, last changed 17th March 2016.

127.44 PrintDialog.SetDestinationPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.SetDestinationPath"; Path)

Parameters

Path

Native file path for PDF file.

\$path

Result Returns error or OK.

Description

If you want the user to select a path, please use FileDialog functions.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Set print to PDF:

```
Set Variable [ $r ; Value: MBS( "PrintDialog.SetPrintToPDF"; 1 ) ]
```

```
Set Variable [ $r ; Value: MBS( "PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test.pdf" ) ]
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 127.22 PrintDialog.Enable 6406
- 127.26 PrintDialog.GetDestinationPath 6411
- 127.40 PrintDialog.Install 6426
- 127.52 PrintDialog.SetPrintToPDF 6442
- 127.53 PrintDialog.SetPrintType 6443

Example Databases

- [Mac only/Print/Printer Dialog on Mac](#)

Created 18th August 2014, last changed 25th November 2017.

127.45 PrintDialog.SetDuplex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	4.1	Yes	No	No	No	No

MBS("PrintDialog.SetDuplex"; value)

Parameters

value

The new duplex setting.

1

Result Returns OK or error.

Description

Pass 0 for no duplex, 1 to enable duplex and -1 to not change it.

Version 6.5 adds 2 for duplex with tumble.

Version 7.5 changes value: 0 = off, 1 = long edge, 2 = short edge

Examples

Enable duplex:

```
Set Variable [ $r ; Value: MBS( "PrintDialog.SetDuplex"; 1 ) ]
```

See also

- 127.25 PrintDialog.GetCopies 6410
- 127.27 PrintDialog.GetDuplex 6412
- 127.43 PrintDialog.SetCopies 6430
- 127.48 PrintDialog.SetNoDialog 6436
- 127.49 PrintDialog.SetOption 6438
- 127.55 PrintDialog.SetReset 6446

127.45.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr2](#)

Created 18th August 2014, last changed 25th November 2017.

127.46 PrintDialog.SetFirstPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.SetFirstPage"; Page)

Parameters

Page

The first page to print.

2

Result Returns OK or error.

Description

This property containing the one-based index of the first page in the job to print.

Value is -1 if not defined.

Examples

Print page 2 to 3 copies:

```
Set Variable [ $r; Value:MBS("PrintDialog.Enable") ]
Set Variable [ $r; Value:MBS("PrintDialog.SetFirstPage"; 2) ]
Set Variable [ $r; Value:MBS("PrintDialog.SetLastPage"; 3) ]
Print [ ]
Set Variable [ $r; Value:MBS("PrintDialog.Disable") ]
```

See also

- 127.21 PrintDialog.Disable 6405
- 127.22 PrintDialog.Enable 6406
- 127.28 PrintDialog.GetFirstPage 6413
- 127.29 PrintDialog.GetLastPage 6414
- 127.41 PrintDialog.SetAllPages 6428
- 127.47 PrintDialog.SetLastPage 6435
- 127.51 PrintDialog.SetPaperName 6441
- 127.54 PrintDialog.SetPrinterName 6445
- 127.53 PrintDialog.SetPrintType 6443

Created 17th March 2016, last changed 17th March 2016.

127.47 PrintDialog.SetLastPage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.SetLastPage"; Page)

Parameters

Page

The last page to print.

2

Result Returns OK or error.

Description

This property containing the one-based index of the last page in the job to print.

Value is -1 if not defined.

Examples

Print page 2 to 3 copies:

```
Set Variable [ $r; Value:MBS("PrintDialog.Enable") ]
Set Variable [ $r; Value:MBS("PrintDialog.SetFirstPage"; 2) ]
Set Variable [ $r; Value:MBS("PrintDialog.SetLastPage"; 3) ]
Print [ ]
Set Variable [ $r; Value:MBS("PrintDialog.Disable") ]
```

See also

- 127.21 PrintDialog.Disable 6405
- 127.22 PrintDialog.Enable 6406
- 127.23 PrintDialog.GetAllPages 6408
- 127.28 PrintDialog.GetFirstPage 6413
- 127.29 PrintDialog.GetLastPage 6414
- 127.41 PrintDialog.SetAllPages 6428
- 127.46 PrintDialog.SetFirstPage 6434
- 127.51 PrintDialog.SetPaperName 6441

Created 17th March 2016, last changed 17th March 2016.

127.48 PrintDialog.SetNoDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.SetNoDialog"; Flag)

Parameters

Flag

Whether to show print dialog.

1

Result Returns OK or error.

Description

In FileMaker script step you need to use print with dialog. Than the plugin can control the dialog and either close it right away (with setting 1) or let it open (setting 0).

Examples

Disable dialog:

```
Set Variable [ $r ; Value: MBS( "PrintDialog.SetNoDialog"; 1 ) ]
```

Enable dialog:

```
Set Variable [ $r ; Value: MBS( "PrintDialog.SetNoDialog"; 0 ) ]
```

See also

- [127.22 PrintDialog.Enable](#) 6406
- [127.31 PrintDialog.GetNoDialog](#) 6417
- [127.40 PrintDialog.Install](#) 6426
- [127.43 PrintDialog.SetCopies](#) 6430
- [127.45 PrintDialog.SetDuplex](#) 6433
- [127.49 PrintDialog.SetOption](#) 6438
- [127.53 PrintDialog.SetPrintType](#) 6443

Example Databases

- [Mac only/Print/Printer Dialog on Mac](#)

127.48.1 FileMaker Magazin

- Ausgabe 5/2017, Seite 22

Created 18th August 2014, last changed 25th November 2017.

127.49 PrintDialog.SetOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.2	Yes	No	No	No	No

MBS("PrintDialog.SetOption"; Key; Value { ; Type })

Parameters

Key

The key to use.

"com_apple_print_PrintSettings_PMCopies"

Value

The value to use. Depending on data type, the plugin will pass a number or a text.

3

Type

Optional

Available in MBS FileMaker Plugin 9.2 or newer.

The type of data to add. Default is empty to use type of value passed. So text or number type would be picked automatically. Valid values for type are text, number, integer and text. Integer is for integer numbers while number is for floating numbers.

Result Returns OK or error.

Description

You can use PrintDialog.GetLastSettings after printing to query XML with all settings and pick keys and values.

Examples

Set copies to 3 via options:

```
MBS("PrintDialog.SetOption"; "com_apple_print_PrintSettings_PMCopies"; 3)
```

Set border to double hairline:

```
MBS("PrintDialog.SetOption"; "com_apple_print_PrintSettings_PMBorderType"; 2)
```

Set border to single hairline:

```
MBS("PrintDialog.SetOption"; "com_apple_print_PrintSettings_PMBorderType"; 1)
```

Set duplex binding:

```
MBS("PrintDialog.SetOption"; "com_apple_print_PrintSettings_PMDuplexing"; 2) &
```

```
MBS("PrintDialog.SetOption"; "DuplexBindingEdge"; 2)
```

Set input slot and output bin:

127.49. *PRINTDIALOG.SETOPTION* 6439

MBS("PrintDialog.SetOption"; "InputSlot"; "4Tray") &
MBS("PrintDialog.SetOption"; "OutputBin"; "MailBoxBin7")
those keys and values are print driver dependent and hand picked from configuration XML.

See also

- 127.7 PageSetupDialog.GetOption 6390
- 122.44 PDFKit.SetPrintSetting 6226
- 127.19 PrintDialog.ClearOption 6403
- 127.20 PrintDialog.ClearOptions 6404
- 127.25 PrintDialog.GetCopies 6410
- 127.32 PrintDialog.GetOption 6418
- 127.43 PrintDialog.SetCopies 6430
- 127.45 PrintDialog.SetDuplex 6433
- 127.48 PrintDialog.SetNoDialog 6436
- 127.57 PrintDialog.SetTray 6448

127.49.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)
- [MBS FileMaker Plugin, version 6.2pr7](#)

127.49.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 21

Created 30th April 2016, last changed 14th March 2019.

127.50 PrintDialog.SetPageNumberingOffset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	7.0	Yes	No	No	No	No

MBS("PrintDialog.SetPageNumberingOffset"; Value)

Parameters

Value

The new offset to use.

1

Result Returns OK or error.

Description

Value -1 means to not change it. Value 0 is for no offset. Other values to start page numbering at given number.

Showing print dialog may reset this!

Examples

Set offset to 5:

MBS("PrintDialog.SetPageNumberingOffset"; 5)

See also

- 127.33 PrintDialog.GetPageNumberingOffset

6419

127.50.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr2](#)

Created 6th January 2017, last changed 6th January 2017.

127.51 PrintDialog.SetPaperName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	5.0	Yes	No	No	No	No

MBS("PrintDialog.SetPaperName"; name)

Parameters

name

The paper name.

"A4"

Result Returns OK or error.

Description

Examples

Set paper to A4:

Set Variable [\$r ; Value: MBS("PrintDialog.SetPaperName"; "A4")]

See also

- 127.15 PageSetupDialog.SetPaperName 6399
- 127.34 PrintDialog.GetPaperName 6420
- 127.36 PrintDialog.GetPrinterName 6422
- 127.46 PrintDialog.SetFirstPage 6434
- 127.47 PrintDialog.SetLastPage 6435
- 127.54 PrintDialog.SetPrinterName 6445
- 127.53 PrintDialog.SetPrintType 6443

127.51.1 Blog Entries

- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 27th December 2014, last changed 25th November 2017.

127.52 PrintDialog.SetPrintToPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.SetPrintToPDF"; flag)

Parameters

flag

The new setting. Can be 0 to disable PDF creation or 1 to enable it.

1

Result Returns OK or error.

Description

Please also use PrintDialog.SetDestinationPath to print to PDF.

Examples

Set print to PDF:

```
Set Variable [ $r ; Value: MBS( "PrintDialog.SetPrintToPDF"; 1 ) ]
```

```
Set Variable [ $r ; Value: MBS( "PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test.pdf" ) ]
```

See also

- 127.22 PrintDialog.Enable 6406
- 127.36 PrintDialog.GetPrinterName 6422
- 127.35 PrintDialog.GetPrintToPDF 6421
- 127.40 PrintDialog.Install 6426
- 127.44 PrintDialog.SetDestinationPath 6432
- 127.54 PrintDialog.SetPrinterName 6445
- 127.53 PrintDialog.SetPrintType 6443

Example Databases

- [Mac only/Print/Printer Dialog on Mac](#)

Created 18th August 2014, last changed 25th November 2017.

127.53 PrintDialog.SetPrintType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	5.0	Yes	No	No	No	No

MBS("PrintDialog.SetPrintType"; Type { ; BlankOption })

Parameters

Type

What to print. Can be 0 for records being browsed, 1 for current record or 2 for blank record.

1

BlankOption

Optional

Optional, which option to select for blank. Can be 0 for "as formatted", 1 for "with boxes" or 2 for "with underline".

0

Result Returns OK or error.

Description

Works only if dialog is not shown currently.

Examples

Test all variants:

```
Allow User Abort [ Off ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.Enable") ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetPrinterName"; "" ) ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetNoDialog"; 1) ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test-0.pdf") ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetPrintType"; 0; 0) ]
```

```
Print [ ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test-1.pdf") ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetPrintType"; 1; 0) ]
```

```
Print [ ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test-2-0.pdf") ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetPrintType"; 2; 0) ]
```

```
Print [ ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test-2-1.pdf") ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetPrintType"; 2; 1) ]
```

```
Print [ ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetDestinationPath"; "/Users/cs/Desktop/test-2-2.pdf") ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.SetPrintType"; 2; 2) ]
```

```
Print [ ]
```

```
Set Variable [ $r; Value:MBS("PrintDialog.Disable") ]
```

See also

- 127.21 PrintDialog.Disable 6405
- 127.22 PrintDialog.Enable 6406
- 127.28 PrintDialog.GetFirstPage 6413
- 127.36 PrintDialog.GetPrinterName 6422
- 127.35 PrintDialog.GetPrintToPDF 6421
- 127.44 PrintDialog.SetDestinationPath 6432
- 127.48 PrintDialog.SetNoDialog 6436
- 127.51 PrintDialog.SetPaperName 6441
- 127.54 PrintDialog.SetPrinterName 6445
- 127.52 PrintDialog.SetPrintToPDF 6442

127.53.1 Blog Entries

- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 27th December 2014, last changed 27th December 2014.

127.54 PrintDialog.SetPrinterName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	3.5	Yes	No	No	No	No

MBS("PrintDialog.SetPrinterName"; name)

Parameters

name

The printer name.

"My Printer"

Result Returns OK or error.

Description

The plugin will try to find a printer with the given name and assigns it for the printing.

Examples

Sets printer name:

MBS("PrintDialog.SetPrinterName"; "Test Printer")

See also

- 127.17 PageSetupDialog.SetPrinterName 6401
- 127.34 PrintDialog.GetPaperName 6420
- 127.36 PrintDialog.GetPrinterName 6422
- 127.35 PrintDialog.GetPrintToPDF 6421
- 127.46 PrintDialog.SetFirstPage 6434
- 127.51 PrintDialog.SetPaperName 6441
- 127.52 PrintDialog.SetPrintToPDF 6442
- 127.53 PrintDialog.SetPrintType 6443

Example Databases

- [Mac only/Print/Printer Dialog on Mac](#)

127.54.1 FileMaker Magazin

- Ausgabe 5/2017, Seite 22

Created 18th August 2014, last changed 18th August 2014.

127.55 PrintDialog.SetReset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	7.0	Yes	No	No	No	No

MBS("PrintDialog.SetReset"; value)

Parameters

value

The new value. Pass 1 or 0.

1

Result Returns OK or error.

Description

When this is set to 1, we reset print settings to the default ones.

This removes any settings including presets.

See also

- [127.37 PrintDialog.GetReset](#) 6423
- [127.43 PrintDialog.SetCopies](#) 6430
- [127.45 PrintDialog.SetDuplex](#) 6433
- [127.56 PrintDialog.SetResetDestination](#) 6447
- [127.57 PrintDialog.SetTray](#) 6448

127.55.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr3](#)

Created 10th January 2017, last changed 10th January 2017.

127.56 PrintDialog.SetResetDestination

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.5	Yes	No	No	No	No

MBS("PrintDialog.SetResetDestination"; Value)

Parameters

Value

The new setting. Pass 1 to enable reset of destination. Pass 0 to disable.

1

Result Returns OK or error.

Description

FileMaker 15 and older on macOS Sierra show a problem with printing.

If you once print to PDF, the print dialog in FileMaker will remember the PDF printing and even print to PDF if no PDF printing is selected.

If you set this option to 1, the plugin will reset the print destination to the printer before the dialog is shown or other options are applied.

Examples

Initialize to fix printing issues with FileMaker and macOS Sierra:

```
Set Variable [ $r; Value: MBS( "PrintDialog.Install" ) ]
Set Variable [ $r; Value: MBS( "PrintDialog.Enable" ) ]
Set Variable [ $r; Value: MBS( "PrintDialog.SetResetDestination"; 1 ) ]
```

See also

- [127.22 PrintDialog.Enable](#) 6406
- [127.38 PrintDialog.GetResetDestination](#) 6424
- [127.40 PrintDialog.Install](#) 6426
- [127.55 PrintDialog.SetReset](#) 6446

127.56.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)
- [How to fix the Sierra printing bug in FileMaker](#)

Created 17th October 2016, last changed 17th October 2016.

127.57 PrintDialog.SetTray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
127 PrintDialog	6.1	Yes	No	No	No	No

MBS("PrintDialog.SetTray"; Value)

Parameters

Value

The name of the tray to use.

"Tray1"

Result Returns OK or error.

Description

Value may be Tray1, Tray2, tray-1, tray-2, auto, Left, Right, Lower, Middle, Upper and depends on the printer driver. This is not the name displayed in dialog, but the internal value which is the same for all localization.

Same as using PrintDialog.SetOption with "InputSlot" as key and tray name as value.

Examples

Set Tray-2 as the tray for paper:

```
MBS("PrintDialog.SetTray"; "Tray-2")
```

See also

- [127.39 PrintDialog.GetTray](#) 6425
- [127.49 PrintDialog.SetOption](#) 6438
- [127.55 PrintDialog.SetReset](#) 6446

127.57.1 Blog Entries

- [Printing with FileMaker on Mac with a specific Paper Tray](#)

127.57.2 FileMaker Magazin

- [Ausgabe 5/2017, Seite 22](#)

Created 10th February 2016, last changed 15th May 2017.

Chapter 128

Printer

List printers and set/get default printer. Select printer on Windows.

See `PrintDialog` functions for Mac, too.

128.1 `Printer.CurrentNumberOfCopies`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	9.2	No	Yes	No	No	No

MBS("Printer.CurrentNumberOfCopies")

Result Returns number or error.

Description

This is queried when dialog opens after setting number of copies.

So it may be useful to use `Printer.Print` with mode 2 to just read current values.

Value is -1 if unknown.

See also

- 128.10 `Printer.Print`

6464

128.1.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.2pr3](#)

Created 9th April 2019, last changed 9th April 2019.

128.2 Printer.CurrentPaperFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.CurrentPaperFormat" { ; ReturnIndex })

Parameters

ReturnIndex

Optional

Pass 1 to return index or 0 to return name. Default is zero to return name.

0

Result Returns value or error.

Description

This value is only available after Printer.Print or Printer.SetPrinter run.

Examples

Show current settings:

```
Show Custom Dialog [ "Current Settings" ; "PrinterName: " & MBS( "Printer.CurrentPrinterName" ) &
&&
"PaperSource: " & MBS( "Printer.CurrentPaperSource" ) & &&
"PaperFormat: " & MBS( "Printer.CurrentPaperFormat" ) & &&
"PrintWhat: " & MBS( "Printer.CurrentPrintWhat" ) ]
```

See also

- [128.3 Printer.CurrentPaperSource](#) 6452
- [128.5 Printer.CurrentPrinterName](#) 6456
- [128.4 Printer.CurrentPrintWhat](#) 6454
- [128.10 Printer.Print](#) 6464
- [128.15 Printer.SetPrinter](#) 6474

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.2.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

128.2.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 23

Created 18th November 2016, last changed 21st November 2019.

128.3 Printer.CurrentPaperSource

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.CurrentPaperSource" { ; ReturnIndex })

Parameters

ReturnIndex

Optional

Pass 1 to return index or 0 to return name. Default is zero to return name.

0

Result Returns value or error.

Description

This value is only available after Printer.Print or Printer.SetPrinter run.

Examples

Show current settings:

```
Show Custom Dialog [ "Current Settings" ; "PrinterName: " & MBS( "Printer.CurrentPrinterName" ) &
&&
"PaperSource: " & MBS( "Printer.CurrentPaperSource" ) & &&
"PaperFormat: " & MBS( "Printer.CurrentPaperFormat" ) & &&
"PrintWhat: " & MBS( "Printer.CurrentPrintWhat" ) ]
```

See also

- 128.2 Printer.CurrentPaperFormat 6450
- 128.5 Printer.CurrentPrinterName 6456
- 128.4 Printer.CurrentPrintWhat 6454
- 128.10 Printer.Print 6464
- 128.15 Printer.SetPrinter 6474

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.3.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

128.3.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 23

Created 18th November 2016, last changed 21st November 2019.

128.4 Printer.CurrentPrintWhat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.CurrentPrintWhat" { ; ReturnIndex })

Parameters

ReturnIndex

Optional

Pass 1 to return index or 0 to return name. Default is zero to return name.

0

Result Returns value or error.

Description

This value is only available after Printer.Print run.

Examples

Show current settings:

```
Show Custom Dialog [ "Current Settings" ; "PrinterName: " & MBS( "Printer.CurrentPrinterName" ) &
§&
"PaperSource: " & MBS( "Printer.CurrentPaperSource" ) & §&
"PaperFormat: " & MBS( "Printer.CurrentPaperFormat" ) & §&
"PrintWhat: " & MBS( "Printer.CurrentPrintWhat" ) ]
```

See also

- [128.2 Printer.CurrentPaperFormat](#) 6450
- [128.3 Printer.CurrentPaperSource](#) 6452
- [128.5 Printer.CurrentPrinterName](#) 6456
- [128.10 Printer.Print](#) 6464

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.4.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr8](#)

128.4.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 23

Created 18th November 2016, last changed 25th November 2017.

128.5 Printer.CurrentPrinterName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.CurrentPrinterName" { ; ReturnIndex })

Parameters

ReturnIndex

Optional

Pass 1 to return index or 0 to return name. Default is zero to return name.

0

Result Returns value or error.

Description

This value is only available after Printer.Print or Printer.SetPrinter run.

Examples

Show current settings:

```
Show Custom Dialog [ "Current Settings" ; "PrinterName: " & MBS( "Printer.CurrentPrinterName" ) &
§&
"PaperSource: " & MBS( "Printer.CurrentPaperSource" ) & §&
"PaperFormat: " & MBS( "Printer.CurrentPaperFormat" ) & §&
"PrintWhat: " & MBS( "Printer.CurrentPrintWhat" ) ]
```

See also

- 128.2 Printer.CurrentPaperFormat 6450
- 128.3 Printer.CurrentPaperSource 6452
- 128.4 Printer.CurrentPrintWhat 6454
- 128.10 Printer.Print 6464
- 128.15 Printer.SetPrinter 6474

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)
- [MBS FileMaker Plugin, version 6.5pr8](#)

128.5.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 23
- Ausgabe 5/2017, Seite 21

Created 18th November 2016, last changed 21st November 2019.

128.6 Printer.ErrorLog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.ErrorLog")

Result Returns list of error messages.

Description

On success, the result is simply "OK".

See also

- 128.10 Printer.Print 6464
- 128.15 Printer.SetPrinter 6474

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.6.1 FileMaker Magazin

- Ausgabe 5/2017, Seite 23

Created 14th November 2016, last changed 14th November 2016.

128.7 Printer.GetDefaultPrinter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	3.0	Yes	Yes	Yes	No	No

MBS("Printer.GetDefaultPrinter")

Result Returns printer name or error.

Description

Example Databases

- [Printers/Printers](#)

128.7.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr8](#)

Created 29th August 2017, last changed 29th August 2017.

128.8 Printer.PaperFormats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.PaperFormats")

Result Returns list or error.

Description

The plugin will store the paper formats it sees in the dialog, so you can later query them. This value is only available after Printer.Print or Printer.SetPrinter run.

Examples

Query formats:

```
# we run Print dialog
# as there is no printer or paper format with ?, this will not change it
# and 2 means cancel
#
Set Variable [ $r; Value:MBS("Printer.Print"; "?"; 2; ""; "?") ]
#
Pause/Resume Script [ Duration (seconds): 2 ]
#
Set Field [ Printer Dialog::PaperFormats; MBS( "Printer.PaperFormats" ) ]
Set Field [ Printer Dialog::Printers; MBS( "Printer.PrinterNames" ) ]
Set Field [ Printer Dialog::PaperSources; MBS( "Printer.PaperSources" ) ]
```

See also

- [128.9 Printer.PaperSources](#) 6462
- [128.10 Printer.Print](#) 6464
- [128.13 Printer.PrinterName](#) 6470
- [128.14 Printer.PrinterNames](#) 6472
- [128.15 Printer.SetPrinter](#) 6474

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.8.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

128.8.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 23

Created 16th November 2016, last changed 21st November 2019.

128.9 Printer.PaperSources

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.PaperSources")

Result Returns list or error.

Description

The plugin will store the paper sources it sees in the dialog, so you can later query them. This value is only available after Printer.Print or Printer.SetPrinter run.

Examples

Query formats:

```
# we run Print dialog
# as there is no printer or paper format with ?, this will not change it
# and 2 means cancel
#
Set Variable [ $r; Value:MBS("Printer.Print"; "?"; 2; ""; "?") ]
#
Pause/Resume Script [ Duration (seconds): 2 ]
#
Set Field [ Printer Dialog::PaperFormats; MBS( "Printer.PaperFormats" ) ]
Set Field [ Printer Dialog::Printers; MBS( "Printer.PrinterNames" ) ]
Set Field [ Printer Dialog::PaperSources; MBS( "Printer.PaperSources" ) ]
```

See also

- 128.8 Printer.PaperFormats 6460
- 128.10 Printer.Print 6464
- 128.13 Printer.PrinterName 6470
- 128.14 Printer.PrinterNames 6472
- 128.15 Printer.SetPrinter 6474

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.9.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

128.9.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 23
- Ausgabe 5/2017, Seite 21

Created 16th November 2016, last changed 21st November 2019.

128.10 Printer.Print

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.Print"; Printer { ; CloseDialog; Number of Copies; Paper Format; Paper Orientation; Paper Source; Pages From; Pages To; Collate Pages; What })

Parameters

Printer

The printer name to set. Must not match exactly, just the first letters. If empty, we use current. "Brother"

CloseDialog

Optional

Whether to close print dialog. Pass 1 to close or 0 to not close. Pass 2 to press cancel button in case you just want to learn the options. Pass 3 to leave dialog open.

1

Number of Copies

Optional

The number of copies. Leave empty to not change.

1

Paper Format

Optional

The name of the paper format. Leave empty to not change.

"A4"

Paper Orientation

Optional

The paper orientation. Pass portrait or landscape. Empty value leaves setting as is.

"landscape"

Paper Source

Optional

The paper source. Pass name of setting. Name doesn't need to match exactly, just first letters. So you can pass "Man" für Manual (English) and Manuell (German).

"Man"

Pages From

Optional

The start number of page range. Pass empty text for Pages From and To to select all pages.

1

Pages To

Optional

The end number of page range. Pass empty text for Pages From and To to select all pages.

1

Collate Pages

Optional

Whether to collate pages. Pass 1 to enable or 0 to disable. Other values are ignored, so pass -1 to leave existing value.

1

What

Optional

What to print: Pass 0 for records being browsed. Pass 1 for current record. Pass 2 for Blank Record showing fields. Default is empty (or -1) to keep current setting.

0

Result Returns OK or error.

Description

The plugin will show the print dialog from FileMaker, automatically set options and close dialog if requested. Sub dialog for paper is opened if paper format, paper orientation or source is passed. The function returns before the dialog shows, so please do a script pause after calling this.

You can later call `Print.ErrorLog` to detect errors. If Windows ever change dialogs, features may no longer work. FileMaker may not show the print dialog if there is no record available or when debugger is open.

For Mac, please check `PrintDialog.Install` function.

After calling this method, you can call `Printer.PaperFormats`, `Printer.PaperSources` or `Printer.PrinterNames` to learn what was available.

Version 9.1 or newer allows you to pass 3 for `CloseDialog` parameter to leave dialog open while sub dialog is closed.

Source code sponsored by [schubec.com](http://www.schubec.com)

<http://www.schubec.com>

Examples

Print:

```
Set Variable [ $r; Value:MBS("Printer.Print"; Printer Dialog::Printer Name; Printer Dialog::Close Dialog;
Printer Dialog::Number of Copies; Printer Dialog::Paper Format; Printer Dialog::Paper Orientation; Printer
Dialog::Paper Source; Printer Dialog:... ]
```

```
Pause/Resume Script [ Duration (seconds): 2 ]
```

```
Show Custom Dialog [ "Result"; MBS("Printer.ErrorLog") ]
```

See also

- 127.12 `PageSetupDialog.Install`

- 127.40 PrintDialog.Install 6426
- 128.1 Printer.CurrentNumberOfCopies 6449
- 128.2 Printer.CurrentPaperFormat 6450
- 128.5 Printer.CurrentPrinterName 6456
- 128.6 Printer.ErrorLog 6458
- 128.8 Printer.PaperFormats 6460
- 128.11 Printer.PrinterCount 6467
- 128.12 Printer.PrinterInfo 6468
- 128.14 Printer.PrinterNames 6472

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.10.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)
- [MBS FileMaker Plugin, version 9.1pr5](#)
- [MBS FileMaker Plugin, version 9.1pr1](#)
- [MBS FileMaker Plugin, version 9.0pr8](#)
- [MBS FileMaker Plugin, version 7.1pr2](#)
- [MBS FileMaker Plugin, version 6.5pr7](#)
- [Printer Switch for Windows with MBS FileMaker Plugin](#)

128.10.2 FileMaker Magazin

- [Ausgabe 5/2017, Seite 23](#)
- [Ausgabe 5/2017, Seite 22](#)
- [Ausgabe 5/2017, Seite 21](#)

128.11 Printer.PrinterCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	3.0	Yes	Yes	Yes	No	No

MBS("Printer.PrinterCount")

Result Returns the number of printers.

Description

Examples

Queries number of printers:

```
$r = MBS( "Printer.PrinterCount" )
```

See also

- 128.10 Printer.Print 6464
- 128.12 Printer.PrinterInfo 6468
- 128.13 Printer.PrinterName 6470
- 128.14 Printer.PrinterNames 6472

Example Databases

- [Printers/Printers](#)

128.11.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr8](#)

128.11.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 21

Created 18th August 2014, last changed 18th August 2014.

128.12 Printer.PrinterInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	Yes	Yes	Yes	No	No

MBS("Printer.PrinterInfo"; Name; Selector)

Parameters

Name

The name of the printer.

"LaserPrinter"

Selector

The selector for the value to query.

"Name"

Result Returns value or error.

Description

Selectors on Mac: Name, Type, languageLevel (PostScript language level or zero). If you ask for deviceDescriptionKeys, you get a list of other keys available.

Selectors on Windows: ServerName, PrinterName, ShareName, PortName, DriverName, Comment, Location, SepFile, PrintProcessor, Datatype, Parameters, SepFile, Priority, DefaultPriority, StartTime, UntilTime, Status, Jobs, AveragePPM, Status, Attributes.

Attributes and Status are returned as numbers.

If you pass "Keys" for selector, we return list of all available keys.

Examples

Queries type of Mac printer:

```
MBS("Printer.PrinterInfo"; "Brother DCP-8085DN"; "type")
```

See also

- 128.10 Printer.Print 6464
- 128.11 Printer.PrinterCount 6467
- 128.13 Printer.PrinterName 6470
- 128.14 Printer.PrinterNames 6472

Example Databases

- [Printers/Printer Info](#)
- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)

128.12.1 FileMaker Magazin

- Ausgabe 5/2017, Seite 21

Created 27th November 2016, last changed 27th November 2016.

128.13 Printer.PrinterName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	3.0	Yes	Yes	Yes	No	No

MBS("Printer.PrinterName"; index)

Parameters

index

The index of the printer. From 0 to PrinterCount-1.
0

Result Returns name of printer or error.

Description

Examples

Queries name of first printer:

```
$name = MBS( "Printer.PrinterName"; 0 )
```

See also

- [70.302 DynaPDF.Print](#) 3017
- [128.8 Printer.PaperFormats](#) 6460
- [128.9 Printer.PaperSources](#) 6462
- [128.10 Printer.Print](#) 6464
- [128.11 Printer.PrinterCount](#) 6467
- [128.12 Printer.PrinterInfo](#) 6468
- [128.14 Printer.PrinterNames](#) 6472

Example Databases

- [Printers/Printer Info](#)
- [Printers/Printers](#)

128.13.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr2](#)
- [MBS Filemaker Plugin, version 3.0pr8](#)

128.13. *PRINTER.PRINTERNAME*

6471

128.13.2 FileMaker Magazin

- Ausgabe 5/2017, Seite 21

Created 18th August 2014, last changed 18th August 2014.

128.14 Printer.PrinterNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.PrinterNames")

Result Returns list or error.

Description

The plugin will store the printer names it sees in the dialog, so you can later query them. This value is only available after Printer.Print run or Printer.SetPrinter.

Examples

Query formats:

```
# we run Print dialog
# as there is no printer or paper format with ?, this will not change it
# and 2 means cancel
#
Set Variable [ $r; Value:MBS("Printer.Print"; "?" ; 2; "" ; "?") ]
#
Pause/Resume Script [ Duration (seconds): 2 ]
#
Set Field [ Printer Dialog::PaperFormats; MBS( "Printer.PaperFormats" ) ]
Set Field [ Printer Dialog::Printers; MBS( "Printer.PrinterNames" ) ]
Set Field [ Printer Dialog::PaperSources; MBS( "Printer.PaperSources" ) ]
```

See also

- 70.302 DynaPDF.Print 3017
- 128.8 Printer.PaperFormats 6460
- 128.9 Printer.PaperSources 6462
- 128.10 Printer.Print 6464
- 128.11 Printer.PrinterCount 6467
- 128.12 Printer.PrinterInfo 6468
- 128.13 Printer.PrinterName 6470
- 128.15 Printer.SetPrinter 6474

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)

- [Win Only/Printer Switch/PrinterToolWin/printerTool_FM15](#)
- [Win Only/Printer Switch/Query Paper Formats and Sources](#)

128.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr7](#)

128.14.2 FileMaker Magazin

- [Ausgabe 5/2017, Seite 23](#)
- [Ausgabe 5/2017, Seite 21](#)

Created 16th November 2016, last changed 6th March 2017.

128.15 Printer.SetPrinter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
128 Printer	6.5	No	Yes	No	No	No

MBS("Printer.SetPrinter"; Printer { ; CloseDialog; Paper Format; Paper Orientation; Paper Source })

Parameters

Printer

The printer name to set. Must not match exactly, just the first letters. Leave empty to not change printer. "Brother"

CloseDialog

Optional

Whether to close print dialog. Pass 1 to close or 0 to not close. Pass 2 to press cancel button in case you just want to learn the options.

1

Paper Format

Optional

Available in MBS FileMaker Plugin 10.0 or newer.

The name of the paper format. Leave empty to not change.

"A4"

Paper Orientation

Optional

Available in MBS FileMaker Plugin 10.0 or newer.

The paper orientation. Pass portrait or landscape. Empty value leaves setting as is.

"landscape"

Paper Source

Optional

Available in MBS FileMaker Plugin 10.0 or newer.

The paper source. Pass name of setting. Name doesn't need to match exactly, just first letters. So you can pass "Man" für Manual (English) and Manuell (German).

"Man"

Result Returns OK or error.

Description

Shows the printer setup dialog and switches target printer or paper settings.

Please use a script pause of at least a second after calling this function to let Windows show the dialogs.

You can later call Print.ErrorLog to detect errors. If Windows ever change dialogs, features may no longer work.

For Mac, please check PrintDialog.Install function.

Version 10.0 of MBS Plugin adds three new parameters paper format, orientation and source. And the plugin fills the internal lists for paper sources, formats and printers.

Source code sponsored by [schubec.com](http://www.schubec.com)
<http://www.schubec.com>

Examples

Switch printer:

```
Set Variable [ $r; Value:MBS("Printer.SetPrinter"; Printer Dialog::Printer Name) ]
Pause/Resume Script [ Duration (seconds): 2 ]
Show Custom Dialog [ "Result"; MBS("Printer.ErrorLog") ]
```

Change paper to Letter in landscape:

```
MBS( "Printer.SetPrinter"; "" ; 0; "Letter"; "landscape")
```

See also

- [127.4 PageSetupDialog.Enable](#) 6386
- [127.12 PageSetupDialog.Install](#) 6395
- [127.40 PrintDialog.Install](#) 6426
- [128.2 Printer.CurrentPaperFormat](#) 6450
- [128.3 Printer.CurrentPaperSource](#) 6452
- [128.5 Printer.CurrentPrinterName](#) 6456
- [128.6 Printer.ErrorLog](#) 6458
- [128.8 Printer.PaperFormats](#) 6460
- [128.9 Printer.PaperSources](#) 6462
- [128.14 Printer.PrinterNames](#) 6472

Example Databases

- [Win Only/Printer Switch/Printer Dialog](#)

128.15.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.6pr1](#)

- [MBS FileMaker Plugin, version 6.5pr7](#)
- [Printer Switch for Windows with MBS FileMaker Plugin](#)

Created 14th November 2016, last changed 21st November 2019.

Chapter 129

Process

Query process details.

129.1 Process.FrontProcessBundleID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	4.2	Yes	No	No	No	No

MBS("Process.FrontProcessBundleID")

Result Returns error or app bundle ID.

Description

Examples

Show bundle ID of front process:

Show Custom Dialog ["Front Process" ; MBS("Process.FrontProcessBundleID")]

See also

- 129.2 Process.FrontProcessName

6478

129.1.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 25th November 2017.

129.2 Process.FrontProcessName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	4.2	Yes	Yes	No	No	No

MBS("Process.FrontProcessName")

Result Returns app name.

Description

On Windows the app name is just the name of the exe file.

Returns empty string or error in case of errors.

Examples

Show name of current process in front:

Show Custom Dialog ["Front Process" ; MBS("Process.FrontProcessName")]

See also

- [129.1 Process.FrontProcessBundleID](#)

6477

Example Databases

- [Utility functions/Process Info](#)

129.2.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr4](#)

Created 18th August 2014, last changed 25th November 2017.

129.3 Process.FrontWindowTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	4.2	Yes	Yes	No	No	No

MBS("Process.FrontWindowTitle" { ; index })

Parameters

index

Optional

Optional for Mac. Pass -1 to return number of windows. Else pass index from 0 to count-1 to query title of nth window.

””

Result Returns window title.

Description

On Mac OS X requires you to allow FileMaker accessibility functions. In System Preferences check privacy control panel and add FileMaker there to the list allowed for assistive input.

Examples

Query title of focused window:

```
MBS( "Process.FrontWindowTitle"
```

Query on Mac number of Windows.

```
MBS( "Process.FrontWindowTitle"; -1 )
```

Query on Mac the second window:

```
MBS( "Process.FrontWindowTitle"; 1 )
```

Example Databases

- [Utility functions/Process Info](#)

129.3.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

129.4 Process.GetCurrentDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	6.5	Yes	Yes	Yes	Yes	Yes

MBS("Process.GetCurrentDirectory")

Result Returns path or error.

Description

Some OS functions look for files relative to this folder.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Query current directory:

MBS("Process.GetCurrentDirectory")

See also

- 121.2 `Path.FileMakerPathToNativePath` 6139
- 129.9 `Process.SetCurrentDirectory` 6485
- 148.18 `Shell.GetCurrentDirectory` 7027
- 148.39 `Shell.SetCurrentDirectory` 7049

129.4.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr6](#)

Created 8th November 2016, last changed 8th November 2016.

129.5 Process.IsFrontMost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	2.9	Yes	Yes	No	No	No

MBS("Process.IsFrontMost")

Result Returns 1 if FileMaker is frontmost and 0 if not.

Description

If the function returns zero, you can call Process.SetFrontMost to move FileMaker to the front. Added support for Windows in plugin version 4.2.

Examples

Check if we are in background and move us to front:

```
If [ MBS( "Process.IsFrontMost" ) = 0 ]
Set Variable [ $r ; Value: MBS( "Process.SetFrontMost" ) ]
End If
```

See also

- [129.7 Process.KeepFrontMost](#) 6483
- [129.10 Process.SetFrontMost](#) 6486

Example Databases

- [Mac only/Process FrontMost](#)
- [Utility functions/Process Info](#)

129.5.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr4](#)
- [MBS Filemaker Plugin, version 2.9pr9](#)

Created 18th August 2014, last changed 25th November 2019.

129.6 Process.IsRunning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	4.0	Yes	No	Yes, macOS only	No	No

MBS("Process.IsRunning"; Process)

Parameters

Process

Either a number with process ID or a process name or a bundle ID.

123

Result Returns 0, 1 or error.

Description

Returns 1 if process is found in process list or 0 if not.

Examples

Check if Safari is running by name:

```
MBS( "Process.IsRunning"; "Safari" )
```

Check if Safari is running by bundle ID:

```
MBS( "Process.IsRunning"; "com.apple.safari" )
```

129.6.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr1](#)
- [MBS FileMaker Plugin 4.0 for OS X/Windows - More than 2200 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 4.0pr4](#)

Created 18th August 2014, last changed 18th August 2014.

129.7 Process.KeepFrontMost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	7.1	Yes	No	No	No	No

MBS("Process.KeepFrontMost"; Enabled)

Parameters

Enabled

Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Can be enabled/disabled at any time.

If enabled, the plugin will bring FileMaker to front whenever it goes to background.

Examples

Enable in script:

```
Variable setzen [ $$ref ; Wert: MBS( "Process.KeepFrontMost"; 1 ) ]
```

Disable in script:

```
Variable setzen [ $$ref ; Wert: MBS( "Process.KeepFrontMost"; 0 ) ]
```

See also

- 129.5 Process.IsFrontMost 6481
- 129.10 Process.SetFrontMost 6486

129.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr4](#)

Created 28th February 2017, last changed 28th February 2017.

129.8 Process.LoadLibrary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	6.5	Yes	Yes	Yes	Yes	Yes

MBS("Process.LoadLibrary"; Path)

Parameters

Path

The native path to the library.

"C:\Users\Christian\Desktop\dynapdf64.dll"

Result Returns OK or error.

Description

This can be used to resolve dependencies with libraries in various places.

This should work with .dll files on Windows, .dylib files on macOS and .so files on Linux.

Windows error 193 means that 64-bit FileMaker tried to load 32-bit library or 32-bit FileMaker tried to load 64-bit library. The bit level must match between app and library. For Mac OS X the error message will tell you about wrong architecture.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- 121.2 Path.FileMakerPathToNativePath 6139

129.8.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr6](#)

Created 8th November 2016, last changed 14th August 2017.

129.9 Process.SetCurrentDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	6.5	Yes	Yes	Yes	Yes	Yes

MBS("Process.SetCurrentDirectory"; Path)

Parameters

Path

The new native path.

"C:\Test"

Result Returns OK or error.

Description

Some OS functions look for files relative to this folder.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Set current directory:

MBS("Process.SetCurrentDirectory"; "/Users/cs/Desktop")

Set current path on Windows:

MBS("Process.SetCurrentDirectory"; "C:\Test")

See also

- 78.19 Files.FileExists 3801
- 121.2 Path.FileMakerPathToNativePath 6139
- 129.4 Process.GetCurrentDirectory 6480
- 148.18 Shell.GetCurrentDirectory 7027
- 148.39 Shell.SetCurrentDirectory 7049
- 191.37 XML.ValidateFile 9313

129.9.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr6](#)

Created 8th November 2016, last changed 8th November 2016.

129.10 Process.SetFrontMost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	2.9	Yes	Yes	Yes	No	No

MBS("Process.SetFrontMost")

Result Returns OK or error.

Description

You can use Process.IsFrontMost to check the status.

You can use Window.Activate for Windows.

Implemented Process.SetFrontMost for Windows in version 9.2. The plugin builds a list of all FileMaker windows. Then we activate the top most of them and move all other windows in z order behind.

Examples

Bring FileMaker to front:

```
Set Variable [ $r; Value:MBS("Process.SetFrontMost") ]
```

See also

- [129.5 Process.IsFrontMost](#) 6481
- [129.7 Process.KeepFrontMost](#) 6483
- [182.5 Window.Activate](#) 8537

Example Databases

- [Mac only/Process FrontMost](#)

129.10.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)
- [SetFrontMost for Windows](#)
- [MBS Filemaker Plugin, version 2.9pr9](#)

Created 18th August 2014, last changed 27th March 2019.

129.11 ProcessActivity.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("ProcessActivity.List")

Result Returns list of IDs or error.

Description

This helps debugging, especially finding scripts which do not release their objects properly.

Examples

List all activities:

MBS("ProcessActivity.List")

See also

- 129.13 ProcessActivity.Reason

6489

Created 2nd June 2015, last changed 21st September 2015.

129.12 ProcessActivity.Options

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("ProcessActivity.Options"; ProcessActivityID)

Parameters

ProcessActivityID

The process activity reference number as returned by ProcessActivity.beginActivity function.

\$ref

Result Returns number or error.

Description

Examples

Query options of first activity:

MBS("ProcessActivity.Options"; "39001")

See also

- 129.14 ProcessActivity.beginActivity 6490
- 129.13 ProcessActivity.Reason 6489

Created 2nd June 2015, last changed 2nd June 2015.

129.13 ProcessActivity.Reason

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("ProcessActivity.Reason"; ProcessActivityID)

Parameters**ProcessActivityID**

The process activity reference number as returned by ProcessActivity.beginActivity function.

\$ref

Result Returns text or error.

Description**Examples**

Query reason of first activity:

MBS("ProcessActivity.Reason"; "39001")

See also

- 129.14 ProcessActivity.beginActivity 6490
- 129.11 ProcessActivity.List 6487
- 129.12 ProcessActivity.Options 6488

Created 2nd June 2015, last changed 2nd June 2015.

129.14 ProcessActivity.beginActivity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("ProcessActivity.beginActivity"; activity; Reason)

Parameters

activity

The activity as a number or a text. The plugin allows you to pass texts like IdleDisplaySleepDisabled, IdleSystemSleepDisabled, UserInitiated, UserInitiatedAllowingIdleSystemSleep, Background and Latency-Critical. Those texts can be combined.

"IdleDisplaySleepDisabled"

Reason

The reason text.

"Doing backup"

Result Returns reference number or error.

Description

Pass in an activity to this function, and a non-empty reason string. Indicate completion of the activity by calling the corresponding ProcessActivity.endActivity function with the result of this function. The reason string is used for debugging.

Requires Mac OS X 10.9 and newer.

This function allows to deactivate App Nap for FileMaker. So when a script has to do some work, you can disable system/display sleep here which also disables app nap.

Examples

Start an activity:

```
MBS( "ProcessActivity.beginActivity"; "IdleSystemSleepDisabled UserInitiated"; "Doing Backup in File-Maker" )
```

Avoid display sleep:

```
MBS( "ProcessActivity.beginActivity"; "IdleDisplaySleepDisabled UserInitiated"; "Showing animation" )
```

See also

- 129.15 ProcessActivity.endActivity 6492
- 129.12 ProcessActivity.Options 6488
- 129.13 ProcessActivity.Reason 6489

Example Databases

- [Utility functions/Process Activity](#)

129.14.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.2pr2](#)
- [Disable App Nap, System and Screen Sleep in FileMaker](#)

Created 2nd June 2015, last changed 17th May 2019.

129.15 ProcessActivity.endActivity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
129 Process	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("ProcessActivity.endActivity"; ProcessActivityID)

Parameters

ProcessActivityID

The process activity reference number as returned by ProcessActivity.beginActivity function.
\$ref

Result Returns OK or error.

Description

See also

- [129.14 ProcessActivity.beginActivity](#) 6490

Example Databases

- [Utility functions/Process Activity](#)

129.15.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr2](#)
- [Disable App Nap, System and Screen Sleep in FileMaker](#)

Created 2nd June 2015, last changed 2nd June 2015.

Chapter 130

ProgressDialog

Show progress dialog.

130.1 ProgressDialog.ClearImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.ClearImage")

Result Returns "OK" on success.

Description

If there is no image, there is more room for your text in the dialog.

Examples

Clear Image

MBS("ProgressDialog.ClearImage")

See also

- [130.20 ProgressDialog.SetImage](#)

6519

Example Databases

- [Progress Dialog](#)
- [Utility functions/MouseCursors](#)

130.1.1 Blog Entries

- [MBS Filemaker Plugin, version 2.4pr7](#)

130.1.2 FileMaker Magazin

- Ausgabe 2/2017, Seite 40

Created 18th August 2014, last changed 18th August 2014.

130.2 ProgressDialog.GetBottomText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.GetBottomText")

Result The bottom text.

Description

See also

- [130.3 ProgressDialog.GetButtonCaption](#) 6496
- [130.12 ProgressDialog.GetTopMost](#) 6506
- [130.13 ProgressDialog.GetTopText](#) 6507
- [130.16 ProgressDialog.SetBottomText](#) 6511
- [130.29 ProgressDialog.SetTopText](#) 6533

130.2.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr4](#)

Created 18th August 2014, last changed 18th August 2014.

130.3 ProgressDialog.GetButtonCaption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.GetButtonCaption")

Result The button text.

Description

See also

- 130.2 ProgressDialog.GetBottomText 6495
- 130.17 ProgressDialog.SetButtonCaption 6513

Created 18th August 2014, last changed 18th August 2014.

130.4 ProgressDialog.GetCancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.GetCancel")

Result The current state. 1 = cancel pressed, 0 = cancel not pressed.

Description

Cancel property is set when the user clicks the cancel button. It is reset when you call ProgressDialog.Show. You can also set it with ProgressDialog.SetCancel.

Examples

Query cancel state

MBS("ProgressDialog.GetCancel")

See also

- [100.56 JSON.Import](#) 5322
- [130.11 ProgressDialog.GetTitle](#) 6505
- [130.13 ProgressDialog.GetTopText](#) 6507
- [130.18 ProgressDialog.SetCancel](#) 6515
- [130.19 ProgressDialog.SetFont](#) 6517
- [130.20 ProgressDialog.SetImage](#) 6519
- [130.27 ProgressDialog.SetTitle](#) 6529
- [130.29 ProgressDialog.SetTopText](#) 6533
- [130.30 ProgressDialog.Show](#) 6535
- [191.12 XML.Import](#) 9273

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/CURL Download in Background](#)
- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)

- [JSON/JSON Import](#)
- [Utility functions/MouseCursors](#)
- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)
- [XML/XML Import](#)

130.4.1 FileMaker Magazin

- Ausgabe 5/2018, Seite 25
- Ausgabe 2/2017, Seite 40

Created 18th August 2014, last changed 18th August 2014.

130.5 ProgressDialog.GetImageHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	9.2	Yes	Yes	No	No	No

MBS("ProgressDialog.GetImageHeight")

Result Returns number or error.

Description

See also

- [130.6 ProgressDialog.GetImageWidth](#) 6500
- [130.21 ProgressDialog.SetImageHeight](#) 6521
- [130.22 ProgressDialog.SetImageWidth](#) 6522

130.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 28th March 2019, last changed 28th March 2019.

130.6 ProgressDialog.GetImageWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	9.2	Yes	Yes	No	No	No

MBS("ProgressDialog.GetImageWidth")

Result Returns number or error.

Description

See also

- [130.5 ProgressDialog.GetImageHeight](#) 6499
- [130.20 ProgressDialog.SetImage](#) 6519
- [130.21 ProgressDialog.SetImageHeight](#) 6521
- [130.22 ProgressDialog.SetImageWidth](#) 6522

130.6.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 28th March 2019, last changed 28th March 2019.

130.7 ProgressDialog.GetPositionX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.6	Yes	Yes	No	No	No

MBS("ProgressDialog.GetPositionX")

Result The X position value or an error message.

Description

You can store the position in your database so the user can enjoy a movable dialog which remembers position. Please use ProgressDialog.SetPosition to restore position.

See also

- [130.8 ProgressDialog.GetPositionY](#) 6502
- [130.10 ProgressDialog.GetShowButton](#) 6504
- [130.12 ProgressDialog.GetTopMost](#) 6506
- [130.23 ProgressDialog.SetPosition](#) 6523
- [130.26 ProgressDialog.SetShowButton](#) 6527

130.7.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr3](#)

Created 18th August 2014, last changed 18th August 2014.

130.8 ProgressDialog.GetPositionY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.6	Yes	Yes	No	No	No

MBS("ProgressDialog.GetPositionY")

Result The Y position value or an error message.

Description

You can store the position in your database so the user can enjoy a movable dialog which remembers position. Please use ProgressDialog.SetPosition to restore position.

See also

- 130.7 ProgressDialog.GetPositionX 6501
- 130.10 ProgressDialog.GetShowButton 6504
- 130.12 ProgressDialog.GetTopMost 6506
- 130.23 ProgressDialog.SetPosition 6523
- 130.26 ProgressDialog.SetShowButton 6527

130.8.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr3](#)

Created 18th August 2014, last changed 18th August 2014.

130.9 ProgressDialog.GetProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.GetProgress")

Result The current progress value.

Description

This is a number from 0 to 100 for progress or a negative number for indeterminate progress bar.

See also

- 130.4 ProgressDialog.GetCancel 6497
- 130.12 ProgressDialog.GetTopMost 6506
- 130.13 ProgressDialog.GetTopText 6507
- 130.25 ProgressDialog.SetProgress 6525
- 130.28 ProgressDialog.SetTopMost 6531
- 130.29 ProgressDialog.SetTopText 6533

Created 18th August 2014, last changed 18th August 2014.

130.10 ProgressDialog.GetShowButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.GetShowButton")

Result The current status. 1 if visible and 0 if the show button is hidden.

Description

See also

- 130.7 ProgressDialog.GetPositionX 6501
- 130.8 ProgressDialog.GetPositionY 6502
- 130.23 ProgressDialog.SetPosition 6523
- 130.26 ProgressDialog.SetShowButton 6527

Created 18th August 2014, last changed 18th August 2014.

130.11 ProgressDialog.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.GetTitle")

Result The title of the dialog.

Description**Examples**

Queries the title text:

MBS("ProgressDialog.GetTitle")

See also

- 130.4 ProgressDialog.GetCancel 6497
- 130.12 ProgressDialog.GetTopMost 6506
- 130.13 ProgressDialog.GetTopText 6507
- 130.18 ProgressDialog.SetCancel 6515
- 130.19 ProgressDialog.SetFont 6517
- 130.20 ProgressDialog.SetImage 6519
- 130.27 ProgressDialog.SetTitle 6529
- 130.29 ProgressDialog.SetTopText 6533
- 130.31 ProgressDialog.Update 6537

Created 18th August 2014, last changed 18th August 2014.

130.12 ProgressDialog.GetTopMost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.6	Yes	Yes	No	No	No

MBS("ProgressDialog.GetTopMost")

Result Returns 1 if dialog is topmost or 0 if not.

Description

Top most means that dialog floats over other windows.

See also

- 130.4 ProgressDialog.GetCancel 6497
- 130.7 ProgressDialog.GetPositionX 6501
- 130.8 ProgressDialog.GetPositionY 6502
- 130.9 ProgressDialog.GetProgress 6503
- 130.11 ProgressDialog.GetTitle 6505
- 130.13 ProgressDialog.GetTopText 6507
- 130.19 ProgressDialog.SetFont 6517
- 130.25 ProgressDialog.SetProgress 6525
- 130.28 ProgressDialog.SetTopMost 6531
- 130.29 ProgressDialog.SetTopText 6533

130.12.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr5](#)

Created 18th August 2014, last changed 18th August 2014.

130.13 ProgressDialog.GetTopText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.GetTopText")

Result The top text.

Description**See also**

- [130.9 ProgressDialog.GetProgress](#) 6503
- [130.11 ProgressDialog.GetTitle](#) 6505
- [130.12 ProgressDialog.GetTopMost](#) 6506
- [130.16 ProgressDialog.SetBottomText](#) 6511
- [130.18 ProgressDialog.SetCancel](#) 6515
- [130.19 ProgressDialog.SetFont](#) 6517
- [130.25 ProgressDialog.SetProgress](#) 6525
- [130.27 ProgressDialog.SetTitle](#) 6529
- [130.28 ProgressDialog.SetTopMost](#) 6531
- [130.29 ProgressDialog.SetTopText](#) 6533

Created 18th August 2014, last changed 18th August 2014.

130.14 ProgressDialog.Hide

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.Hide")

Result Returns "OK" on success.

Description

You may want to call ProgressDialog.Reset before reusing the progress dialog. Or later call ProgressDialog.Show again to show progress dialog with same settings.

Resets parent and enables parent window to make sure it is not disabled.

Examples

Show the progress dialog:

MBS("ProgressDialog.Show")

Hide the progress dialog:

MBS("ProgressDialog.Hide")

See also

- 61.385 CURL.SetUpdateProgressDialog 2318
- 80.3 FM.CompareTables 4069
- 80.23 FM.InsertSetUpdateProgressDialog 4132
- 91.86 ImageCapture.RequestScan 5018
- 91.91 ImageCapture.SetParameter 5026
- 130.15 ProgressDialog.Reset 6510
- 130.35 Progressdialog.SetEvaluate 6542
- 130.30 ProgressDialog.Show 6535
- 130.31 ProgressDialog.Update 6537
- 191.12 XML.Import 9273

Example Databases

- [CURL/Amazon S3 Upload File](#)

- [CURL/CURL Download in Background](#)
- [CURL/CURL Download with Progress](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [CURL/FTP/CURL FTP Upload from file with Progress](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [Mac and iOS/Addressbook/Addressbook](#)
- [Mac only/MetaDataQuery/Search Applications](#)
- [Win Only/WIA Scan](#)

130.14.1 Blog Entries

- [ImageCapture functions for Mac OS X](#)

130.14.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 2/2017, Seite 40](#)

Created 18th August 2014, last changed 21st December 2017.

130.15 ProgressDialog.Reset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	6.4	Yes	Yes	Yes	No	No

MBS("ProgressDialog.Reset")

Result Returns OK or error.

Description

See also

- [80.37 FM.SetSQLBatchMode](#) 4162
- [91.86 ImageCapture.RequestScan](#) 5018
- [91.91 ImageCapture.SetParameter](#) 5026
- [130.14 ProgressDialog.Hide](#) 6508
- [130.19 ProgressDialog.SetFont](#) 6517
- [130.30 ProgressDialog.Show](#) 6535
- [130.31 ProgressDialog.Update](#) 6537

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/Email/Batch Emailer](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [Mac only/ImageCapture/ImageCapture](#)
- [Mac only/MetaDataQuery/Search Applications](#)
- [Win Only/WIA Scan](#)

130.15.1 Blog Entries

- [Debugging problems on FileMaker Cloud for AWS](#)
- [MBS FileMaker Plugin, version 6.4pr7](#)
- [ImageCapture functions for Mac OS X](#)

Created 11st September 2016, last changed 11st September 2016.

130.16 ProgressDialog.SetBottomText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetBottomText"; text)

Parameters

text

The new bottom text.

"Hello"

Result Returns "OK" on success.

Description

Below the progress bar most applications shows some data like "x of y files processed" or "123 KB of 456 KB copied."

Please do not call this function more than one time per second to avoid the progress window redraw to slow down your process.

Examples

Report progress:

MBS("ProgressDialog.SetBottomText"; \$index & " of " & \$total & " files")

See also

- 80.3 FM.CompareTables 4069
- 91.86 ImageCapture.RequestScan 5018
- 91.91 ImageCapture.SetParameter 5026
- 100.56 JSON.Import 5322
- 130.2 ProgressDialog.GetBottomText 6495
- 130.13 ProgressDialog.GetTopText 6507
- 130.17 ProgressDialog.SetButtonCaption 6513
- 130.28 ProgressDialog.SetTopMost 6531
- 130.29 ProgressDialog.SetTopText 6533
- 191.12 XML.Import 9273

Example Databases

- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [Mac only/ImageCapture/ImageCapture](#)
- [Mac only/MetaDataQuery/Search Applications](#)
- [Utility functions/MouseCursors](#)
- [WebView/WebView Download Delegate for Mac](#)
- [XML/XML Import](#)

130.16.1 Blog Entries

- [ImageCapture functions for Mac OS X](#)

130.16.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 2/2017, Seite 40](#)

Created 18th August 2014, last changed 9th February 2015.

130.17 ProgressDialog.SetButtonCaption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetButtonCaption"; text)

Parameters

text

The new button text.

"Annuler"

Result Returns "OK" on success.

Description

Default is "Cancel" if you don't call this method. If your solution supports multiple languages, it may be worth putting those texts into an extra table and picking the right text at runtime.

Examples

Set button text for Germany:

MBS("ProgressDialog.SetButtonCaption"; "Abbrechen")

See also

- [63.31 Dialog.SetButton](#) 2371
- [80.3 FM.CompareTables](#) 4069
- [91.86 ImageCapture.RequestScan](#) 5018
- [91.91 ImageCapture.SetParameter](#) 5026
- [100.56 JSON.Import](#) 5322
- [130.3 ProgressDialog.GetButtonCaption](#) 6496
- [130.16 ProgressDialog.SetBottomText](#) 6511
- [130.31 ProgressDialog.Update](#) 6537
- [191.12 XML.Import](#) 9273

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Email Client IMAP Optimized](#)

- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [Mac and iOS/Addressbook/Addressbook](#)
- [Mac and iOS/AVExport](#)
- [Mac only/ImageCapture/ImageCapture](#)
- [WebViewer/WebViewer Download Delegate for Mac](#)

130.17.1 Blog Entries

- [ImageCapture functions for Mac OS X](#)

130.17.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 2/2017, Seite 40](#)

Created 18th August 2014, last changed 18th August 2014.

130.18 ProgressDialog.SetCancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetCancel"; Flag)

Parameters

Flag

the new cancel state.

1

Result Returns "OK" on success.

Description

You can query in your loop whether user clicked cancel so you can exit your loop.

If your script does not make a pause or a long running plugin functions runs, there may be no reaction on the cancel button.

Examples

Set cancel state

MBS("ProgressDialog.SetCancel"; 1)

Reset Cancel state:

MBS("ProgressDialog.SetCancel"; 0)

See also

- 61.385 CURL.SetUpdateProgressDialog 2318
- 130.4 ProgressDialog.GetCancel 6497
- 130.11 ProgressDialog.GetTitle 6505
- 130.13 ProgressDialog.GetTopText 6507
- 130.19 ProgressDialog.SetFont 6517
- 130.20 ProgressDialog.SetImage 6519
- 130.25 ProgressDialog.SetProgress 6525
- 130.28 ProgressDialog.SetTopMost 6531
- 130.29 ProgressDialog.SetTopText 6533
- 130.30 ProgressDialog.Show 6535

Example Databases

- [CURL/CURL Download in Background](#)
- [CURL/CURL Download with Progress](#)
- [CURL/FTP/CURL FTP Upload from file with Progress](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [Mac only/MetaDataQuery/Search Applications](#)

Created 18th August 2014, last changed 3th April 2016.

130.19 ProgressDialog.SetFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.9	Yes	Yes	No	No	No

MBS("ProgressDialog.SetFont" { ; fontname; fontsize })

Parameters

fontname

Optional

The font name. If this is empty, the system font is used.

"Arial"

fontsize

Optional

The font size. If this value is 0, the system font size is used.

12

Result Returns OK on success.

Description

Examples

Set font:

MBS("ProgressDialog.SetFont"; "Comic Sans MS"; 12)

See also

- 130.13 ProgressDialog.GetTopText 6507
- 130.15 ProgressDialog.Reset 6510
- 130.18 ProgressDialog.SetCancel 6515
- 130.20 ProgressDialog.SetImage 6519
- 130.23 ProgressDialog.SetPosition 6523
- 130.36 Progressdialog.SetScript 6543
- 130.27 ProgressDialog.SetTitle 6529
- 130.28 ProgressDialog.SetTopMost 6531
- 130.29 ProgressDialog.SetTopText 6533
- 130.30 ProgressDialog.Show 6535

130.19.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr2](#)
- [MBS Filemaker Plugin, version 2.9pr9](#)

Created 18th August 2014, last changed 25th November 2017.

130.20 ProgressDialog.SetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetImage"; image)

Parameters

image

A container value with some picture. Can be JPEG, GIF, BMP, PNG or TIFF.

preftable::ProgressIcon

Result Returns "OK" on success.

Description

For best results use a PNG with alpha channel, so you don't see a border. Size should be 64 x 64 Pixels (72 dpi). If the picture does not fit, the plugin tries to scale it.

Alpha Channel is not supported on Windows 2000, but works on Windows XP and newer.

Internally we use GraphicsMagick, so all the image formats supported by GraphicsMagick should work.

If there is no image, there is more room for your text in the dialog.

Examples

Set Image:

MBS("ProgressDialog.SetImage"; Globals::ProgressLogo)

See also

- 130.1 ProgressDialog.ClearImage 6493
- 130.11 ProgressDialog.GetTitle 6505
- 130.18 ProgressDialog.SetCancel 6515
- 130.19 ProgressDialog.SetFont 6517
- 130.21 ProgressDialog.SetImageHeight 6521
- 130.22 ProgressDialog.SetImageWidth 6522
- 130.25 ProgressDialog.SetProgress 6525
- 130.27 ProgressDialog.SetTitle 6529
- 130.29 ProgressDialog.SetTopText 6533
- 130.31 ProgressDialog.Update 6537

Example Databases

- [Progress Dialog](#)

130.20.1 FileMaker Magazin

- Ausgabe 2/2017, Seite 40

Created 18th August 2014, last changed 25th November 2017.

130.21 ProgressDialog.SetImageHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	9.2	Yes	Yes	No	No	No

MBS("ProgressDialog.SetImageHeight"; Height)

Parameters

Height

The new height.

64

Result Returns OK or error.

Description

Sets the height for the image view showing the image.

Default is 64 points.

Image is stretched to this size on MacOS.

See also

- [130.5 ProgressDialog.GetImageHeight](#) 6499
- [130.6 ProgressDialog.GetImageWidth](#) 6500
- [130.20 ProgressDialog.SetImage](#) 6519
- [130.22 ProgressDialog.SetImageWidth](#) 6522

130.21.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 28th March 2019, last changed 28th March 2019.

130.22 ProgressDialog.SetImageWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	9.2	Yes	Yes	No	No	No

MBS("ProgressDialog.SetImageWidth"; Width)

Parameters

Width

The new width.

64

Result Returns OK or error.

Description

Sets the width for the image view showing the image.

Default is 64 points.

Image is stretched to this size on MacOS.

See also

- 130.5 ProgressDialog.GetImageHeight 6499
- 130.6 ProgressDialog.GetImageWidth 6500
- 130.20 ProgressDialog.SetImage 6519
- 130.21 ProgressDialog.SetImageHeight 6521

130.22.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 28th March 2019, last changed 28th March 2019.

130.23 ProgressDialog.SetPosition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetPosition"; X; Y)

Parameters

X

Relative x coordinate.

100

Y

Relative y coordinate.

100

Result Returns "OK" on success.

Description

With X and Y you can move the dialog relative to the top left corner of the main screen. Use functions like Screen.Height to learn about screen height.

See also

- 130.8 ProgressDialog.GetPositionY 6502
- 130.10 ProgressDialog.GetShowButton 6504
- 130.19 ProgressDialog.SetFont 6517
- 130.24 ProgressDialog.SetPositionCentered 6524
- 130.25 ProgressDialog.SetProgress 6525
- 130.26 ProgressDialog.SetShowButton 6527
- 130.27 ProgressDialog.SetTitle 6529
- 130.28 ProgressDialog.SetTopMost 6531
- 130.29 ProgressDialog.SetTopText 6533
- 141.4 Screen.Height 6840

130.23.1 Blog Entries

- [MBS Filemaker Plugin, version 2.4pr9](#)

Created 18th August 2014, last changed 31st May 2018.

130.24 ProgressDialog.SetPositionCentered

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

```
MBS( "ProgressDialog.SetPositionCentered" { ; X; Y } )
```

Parameters

X

Optional

Optional, Relative x coordinate.

0

Y

Optional

Optional, Relative y coordinate.

0

Result Returns "OK" on success.

Description

With X and Y you can move the dialog relative to the center of the main screen. Use functions like Screen.Height to learn about screen height.

Examples

Center dialog:

```
MBS( "ProgressDialog.SetPositionCentered" )
```

Center dialog a little bit lower on screen:

```
MBS( "ProgressDialog.SetPositionCentered"; 0; 200 )
```

See also

- [130.23 ProgressDialog.SetPosition](#) 6523
- [141.4 Screen.Height](#) 6840

130.24.1 Blog Entries

- [MBS Filemaker Plugin, version 2.4pr9](#)

Created 18th August 2014, last changed 18th August 2014.

130.25 ProgressDialog.SetProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetProgress"; value)

Parameters

value

New value. Range from 0 to 100 for a normal progress bar or negative value for indeterminated progress bar.

50

Result Returns "OK" on success.

Description

Depending on your range, you need to multiply/divide to get into range from 0 to 100. Typically you can simply do math like this: $\$index * 100 / \$total$. That calculates the percentage of files processed if you have $\$total$ files and current file index is $\$index$.

If you process more than 100 items, please consider only updating progress if you actually moved forward 1% . You can do this by keeping variable with last progress you set and update only if new progress value is bigger.

Please do not call this function more than one time per second to avoid the progress window redraw to slow down your process.

Examples

Set progress bar to indeterminate while preparing operations:

```
MBS( "ProgressDialog.SetProgress"; -1 )
```

Set later progress bar to current value:

```
MBS( "ProgressDialog.SetProgress"; $index * 100 / $total )
```

Update only when changed by one percent:

```
Set Variable [ $percent; Value:Round(100 * $current / $total; 0) ]
If [ $percent > $lastpercent ]
Set Variable [ $lastpercent; Value:$percent ]
Set Variable [ $r; Value:MBS( "ProgressDialog.SetProgress"; $percent ) ]
End If
```

See also

- 91.86 ImageCapture.RequestScan

- 91.91 ImageCapture.SetParameter 5026
- 130.9 ProgressDialog.GetProgress 6503
- 130.12 ProgressDialog.GetTopMost 6506
- 130.13 ProgressDialog.GetTopText 6507
- 130.18 ProgressDialog.SetCancel 6515
- 130.20 ProgressDialog.SetImage 6519
- 130.23 ProgressDialog.SetPosition 6523
- 130.28 ProgressDialog.SetTopMost 6531
- 130.30 ProgressDialog.Show 6535

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [Mac and iOS/AVExport](#)
- [Mac only/ImageCapture/ImageCapture](#)
- [Progress Dialog](#)

130.25.1 Blog Entries

- [ImageCapture functions for Mac OS X](#)

130.25.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 25
- Ausgabe 2/2017, Seite 40

130.26 ProgressDialog.SetShowButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetShowButton"; Flag)

Parameters

Flag

Whether to show or hide the show button.

1

Result Returns "OK" on success.

Description

Examples

Hide button:

MBS("ProgressDialog.SetShowButton"; 0)

Show button:

MBS("ProgressDialog.SetShowButton"; 1)

See also

- 61.385 [CURL.SetUpdateProgressDialog](#) 2318
- 80.23 [FM.InsertSetUpdateProgressDialog](#) 4132
- 130.7 [ProgressDialog.GetPositionX](#) 6501
- 130.8 [ProgressDialog.GetPositionY](#) 6502
- 130.10 [ProgressDialog.GetShowButton](#) 6504
- 130.23 [ProgressDialog.SetPosition](#) 6523
- 130.30 [ProgressDialog.Show](#) 6535

Example Databases

- [CURL/CURL Download in Background](#)
- [CURL/CURL Download with Progress](#)
- [CURL/FTP/CURL FTP Upload from file with Progress](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)

- [CURL/SFTP/CURL sFTP Upload File](#)
- [Mac and iOS/AVExport](#)
- [Mac only/MetaDataQuery/Search Applications](#)

Created 18th August 2014, last changed 26th May 2016.

130.27 ProgressDialog.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetTitle"; title)

Parameters**title**

The new text for the title.

"Please wait."

Result Returns "OK" on success.

Description**Examples**

Sets new title text:

MBS("ProgressDialog.SetTitle"; "Please wait.")

See also

- 80.37 FM.SetSQLBatchMode 4162
- 91.91 ImageCapture.SetParameter 5026
- 100.56 JSON.Import 5322
- 130.4 ProgressDialog.GetCancel 6497
- 130.11 ProgressDialog.GetTitle 6505
- 130.13 ProgressDialog.GetTopText 6507
- 130.20 ProgressDialog.SetImage 6519
- 130.23 ProgressDialog.SetPosition 6523
- 130.31 ProgressDialog.Update 6537
- 191.12 XML.Import 9273

Example Databases

- [CURL/Amazon S3 Upload File](#)
- [CURL/Email/Batch Emailer](#)
- [CURL/SFTP/CURL sFTP Upload File](#)

- [DynaPDF/Scan with WIA to PDF](#)
- [JSON/JSON Import](#)
- [Progress Dialog](#)
- [Utility functions/MouseCursors](#)
- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)
- [XML/XML Import](#)

130.27.1 Blog Entries

- [ImageCapture functions for Mac OS X](#)

130.27.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 2/2017, Seite 40](#)

Created 18th August 2014, last changed 18th August 2014.

130.28 ProgressDialog.SetTopMost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.6	Yes	Yes	No	No	No

MBS("ProgressDialog.SetTopMost"; value)

Parameters**value**

The new topmost state.

1

Result Returns "OK" or error message.

Description

Default is to have topmost enabled.

Top most means that dialog floats over other windows.

Examples

Enable top most:

```
MBS( "ProgressDialog.SetTopMost"; 1 )
```

Disable top most:

```
MBS( "ProgressDialog.SetTopMost"; 0 )
```

See also

- 63.47 Dialog.SetTop 2389
- 130.12 ProgressDialog.GetTopMost 6506
- 130.13 ProgressDialog.GetTopText 6507
- 130.16 ProgressDialog.SetBottomText 6511
- 130.19 ProgressDialog.SetFont 6517
- 130.23 ProgressDialog.SetPosition 6523
- 130.25 ProgressDialog.SetProgress 6525
- 130.36 Progressdialog.SetScript 6543
- 130.27 ProgressDialog.SetTitle 6529
- 130.29 ProgressDialog.SetTopText 6533

130.28.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr5](#)

Created 18th August 2014, last changed 25th November 2017.

130.29 ProgressDialog.SetTopText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.SetTopText"; text)

Parameters

text

The new top text.

"Generating thumbnails..."

Result Returns "OK" on success.

Description

Here you can show what your solution is doing.

Please do not call this function more than one time per second to avoid the progress window redraw to slow down your process.

Examples

Report activity in dialog:

MBS("ProgressDialog.SetTopText"; "Downloading images...")

See also

- 91.91 ImageCapture.SetParameter 5026
- 100.56 JSON.Import 5322
- 130.13 ProgressDialog.GetTopText 6507
- 130.19 ProgressDialog.SetFont 6517
- 130.25 ProgressDialog.SetProgress 6525
- 130.36 Progressdialog.SetScript 6543
- 130.27 ProgressDialog.SetTitle 6529
- 130.28 ProgressDialog.SetTopMost 6531
- 130.30 ProgressDialog.Show 6535
- 191.12 XML.Import 9273

Example Databases

- [CURL/Amazon S3 Upload File](#)

- [CURL/CURL Download in Background](#)
- [CURL/CURL Download with Progress](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [Mac and iOS/Addressbook/Addressbook](#)
- [Mac only/ImageCapture/ImageCapture](#)
- [Mac only/MetaDataQuery/Search Applications](#)
- [Utility functions/MouseCursors](#)
- [WebView/WebView Download Delegate for Mac](#)

130.29.1 Blog Entries

- [ImageCapture functions for Mac OS X](#)

130.29.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 2/2017, Seite 40](#)

Created 18th August 2014, last changed 9th February 2015.

130.30 ProgressDialog.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.4	Yes	Yes	No	No	No

MBS("ProgressDialog.Show" { ; NoActivate })

Parameters

NoActivate

Optional

Available in MBS FileMaker Plugin 8.0 or newer.

Whether to activate the window (0) or not to activate (1). By default we move window to front to show user. But if you prefer being in background, you can simply show without activation.

0

Result Returns "OK" on success.

Description

Examples

Show the progress dialog:

```
MBS( "ProgressDialog.Show" )
```

Hide the progress dialog:

```
MBS( "ProgressDialog.Hide" )
```

Setup a progress window before an upload:

```
Set Variable [ $result; Value:MBS("ProgressDialog.Reset") ]
Set Variable [ $result; Value:MBS("ProgressDialog.SetCancel"; 0) ]
Set Variable [ $result; Value:MBS("ProgressDialog.SetProgress"; 0) ]
Set Variable [ $result; Value:MBS("ProgressDialog.SetTopText"; "Uploading text...") ]
Set Variable [ $result; Value:MBS("ProgressDialog.SetShowButton"; 0) ]
Set Variable [ $result; Value:MBS("ProgressDialog.Show") ]
```

See also

- 80.37 FM.SetSQLBatchMode 4162
- 91.86 ImageCapture.RequestScan 5018
- 91.91 ImageCapture.SetParameter 5026
- 130.14 ProgressDialog.Hide 6508
- 130.15 ProgressDialog.Reset 6510

- 130.18 ProgressDialog.SetCancel 6515
- 130.19 ProgressDialog.SetFont 6517
- 130.25 ProgressDialog.SetProgress 6525
- 130.29 ProgressDialog.SetTopText 6533
- 191.12 XML.Import 9273

Example Databases

- [CURL/CURL Download in Background](#)
- [CURL/Email/Batch Emailer](#)
- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/FTP/CURL FTP Upload with Progress](#)
- [CURL/SFTP/CURL sFTP Upload File](#)
- [DynaPDF/Scan with WIA to PDF](#)
- [Mac only/ImageCapture/ImageCapture](#)
- [Mac only/MetaDataQuery/Search Applications](#)
- [Utility functions/MouseCursors](#)
- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)

130.30.1 Blog Entries

- [Introducing FM.CompareTables function](#)
- [MBS FileMaker Plugin, version 7.6pr1](#)
- [ImageCapture functions for Mac OS X](#)
- [MBS FileMaker Plugin, version 5.2pr4](#)

130.30.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 2/2017, Seite 40](#)

130.31 ProgressDialog.Update

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
130 ProgressDialog	2.6	Yes	Yes	No	No	No

MBS("ProgressDialog.Update")

Result Returns "OK" on success.

Description

When you change something on the dialog, it's marked for needing a redraw and this redraw is normally performed when there is some free CPU time like in a script pause. You can call this function to redraw now.

Please do not call this function more than 10 times a second in your script. Else you may see a slowdown in script performance as redrawing the dialog takes time.

Examples

Updates dialog with new button caption:

```
MBS( "ProgressDialog.SetButtonCaption"; "Abbrechen" )
MBS( "ProgressDialog.Update" )
```

See also

- [63.31 Dialog.SetButton](#) 2371
- [80.37 FM.SetSQLBatchMode](#) 4162
- [130.11 ProgressDialog.GetTitle](#) 6505
- [130.14 ProgressDialog.Hide](#) 6508
- [130.15 ProgressDialog.Reset](#) 6510
- [130.17 ProgressDialog.SetButtonCaption](#) 6513
- [130.20 ProgressDialog.SetImage](#) 6519
- [130.27 ProgressDialog.SetTitle](#) 6529

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Email Client IMAP Optimized](#)
- [CURL/Email/Email Client IMAP](#)
- [CURL/Email/Email Client](#)

- [CURL/Email/old examples/Email Client IMAP Optimized](#)
- [CURL/Email/old examples/Email Client IMAP](#)
- [Mac and iOS/Addressbook/Addressbook](#)
- [Utility functions/MouseCursors](#)

130.31.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr3](#)

Created 18th August 2014, last changed 17th January 2016.

130.32 Progressdialog.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Progressdialog	7.1	Yes	Yes	No	No	No

MBS("Progressdialog.GetEvaluate")

Result Returns text or error.

Description

See also

- [130.33 Progressdialog.GetFileName](#) 6540
- [130.35 Progressdialog.SetEvaluate](#) 6542

130.32.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 14th February 2017, last changed 14th February 2017.

130.33 Progressdialog.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Progressdialog	7.1	Yes	Yes	No	No	No

MBS("Progressdialog.GetFileName")

Result Returns text or error.

Description

See also

- [130.32 Progressdialog.GetEvaluate](#) 6539
- [130.34 Progressdialog.GetScriptName](#) 6541
- [130.35 Progressdialog.SetEvaluate](#) 6542

130.33.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 14th February 2017, last changed 14th February 2017.

130.34 Progressdialog.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Progressdialog	7.1	Yes	Yes	No	No	No

MBS("Progressdialog.GetScriptName")

Result Returns text or error.

Description

See also

- [130.33 Progressdialog.GetFileName](#) 6540
- [130.36 Progressdialog.SetScript](#) 6543

130.34.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 14th February 2017, last changed 16th February 2017.

130.35 Progressdialog.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Progressdialog	7.1	Yes	Yes	No	No	No

MBS("Progressdialog.SetEvaluate"; Expression)

Parameters

Expression

The expression to run. Can be in local language of FileMaker Pro or english. For Server must always be in english.

”\$\$cancel = 1”

Result Returns OK or error.

Description

You can set global variable to stop something or call MBS functions here.

Examples

Sets expression to hide dialog:

```
MBS("ProgressDialog.SetEvaluate"; "MBS(\"ProgressDialog.Hide\)")")
```

See also

- 130.32 Progressdialog.GetEvaluate 6539
- 130.33 Progressdialog.GetFileName 6540
- 130.14 ProgressDialog.Hide 6508
- 130.36 Progressdialog.SetScript 6543

130.35.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 14th February 2017, last changed 4th April 2018.

130.36 Progressdialog.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Progressdialog	7.1	Yes	Yes	No	No	No

MBS("Progressdialog.SetScript"; FileName; ScriptName { ; Parameter })

Parameters

FileName

The file name for the script.

Get(FileName)

ScriptName

The script name to run. An empty name will disable the script calling.

"CancelScript"

Parameter

Optional

The script parameter to pass.

Result Returns OK or error.

Description

Examples

Set script to run

```
MBS("ProgressDialog.SetScript"; Get(FileName); "CancelScript"; "optional parameter")
```

See also

- [130.34 Progressdialog.GetScriptName](#) 6541
- [130.18 ProgressDialog.SetCancel](#) 6515
- [130.35 Progressdialog.SetEvaluate](#) 6542
- [130.19 ProgressDialog.SetFont](#) 6517
- [130.28 ProgressDialog.SetTopMost](#) 6531
- [130.29 ProgressDialog.SetTopText](#) 6533

130.36.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr3](#)

Created 14th February 2017, last changed 14th February 2017.

Chapter 131

Proj

Transform geo coordinate between projections with PROJ library.

Learn more about this open source library here: <https://proj.org>

131.1 Proj.BatchTransform

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
131 Proj	10.1	Yes	Yes	Yes	Yes	Yes

MBS("Proj.BatchTransform"; Source Projection; Output Projection)

Parameters

Source Projection

The definition string for the source projection.

"+proj=longlat +datum=WGS84"

Output Projection

The definition for the output projection.

"+proj=utm +zone=31 +datum=WGS84"

Result Returns JSON or error.

Description

Reads x/y/z from JSON array and returns new JSON array with results.

Example Databases

- [Proj/PROJ Library](#)

Created 22nd January 2020, last changed 22nd January 2020.

131.2 Proj.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
131 Proj	10.1	Yes	Yes	Yes	Yes	Yes

MBS("Proj.Initialize"; Path)

Parameters

Path

The file path to the framework or library.
 ”/Library/Frameworks/PROJ.framework”

Result Returns OK or error.

Description

Please pass file path to DLL for Windows, framework for iOS/macOS and path to shared object for Linux. The plugin does not care where you install it or whether you just copy the library with your solution.

Examples

Load framework on Mac from default location:

MBS("Proj.Initialize"; ”/Library/Frameworks/PROJ.framework”)

See also

- 97.6 Java.Initialize 5166
- 120.9 OCR.Initialize 6119
- 131.3 Proj.IsInitialized 6547
- 163.21 TAPI.Initialize 7748
- 181.12 WIA.Initialize 8511

Example Databases

- [Proj/PROJ Library](#)

Created 22nd January 2020, last changed 22nd January 2020.

131.3 Proj.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
131 Proj	10.1	Yes	Yes	Yes	Yes	Yes

MBS("Proj.IsInitialized")

Result Returns 1, 0 or error.

Description

Returns 1 if initialized or 0 if not.

See also

- 120.10 OCR.IsInitialized 6121
- 123.7 PHP.IsInitialized 6255
- 131.2 Proj.Initialize 6546
- 163.22 TAPI.IsInitialized 7749
- 169.39 Twain.IsInitialized 8028
- 190.116 XL.IsInitialized 9008

Created 22nd January 2020, last changed 22nd January 2020.

131.4 Proj.Transform

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
131 Proj	10.1	Yes	Yes	Yes	Yes	Yes

MBS("Proj.Transform"; Source Projection; Output Projection { ; X; Y; Z })

Parameters

Source Projection

The definition string for the source projection.

"+proj=longlat +datum=WGS84"

Output Projection

The definition for the output projection.

"+proj=utm +zone=31 +datum=WGS84"

X

Optional

The x coordinate to transform.

Y

Optional

The y coordinate to transform.

Z

Optional

The z coordinate to transform. Not used by all transformations.

Result Returns JSON or error.

Description

Example Databases

- [Proj/PROJ Library](#)

Created 22nd January 2020, last changed 22nd January 2020.

Chapter 132

QTExport

Older QuickTime based functions on OS X and Windows to transcode videos.

Can be used to compress videos as MPEG 4 video file. Or with LAME encoder component to create MP3 files.

Deprecated and only for 32-bit available. Will be removed someday.

132.1 QTExport.CloseMovie

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTExport	6.1	Yes	Yes	No	No	No

MBS("QTExport.CloseMovie"; QTExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTExporter

The exporter reference number.

\$\$QTExporter

Result Returns OK or error.

Description

Please close movie before you load a new one.

Examples

Close Exporter:

```
If [ not IsEmpty($$QT) ]
```

6550

CHAPTER 132. QTEXTPORT

```
Set Variable [ $r; Value:MBS("QTEExport.Release"; $$QT) ]  
Set Variable [ $$QT; Value:"" ]  
End If
```

See also

- 132.14 QTEExport.OpenMovie 6565
- 132.15 QTEExport.Release 6566

Created 1st March 2016, last changed 1st March 2016.

132.2 QTEExport.Duration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.Duration"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns number or error.

Description

Returns duration in seconds.

Examples

Query duration:

```
Set Field [ QTMovieExporter::Duration; MBS("QTEExport.Duration"; $$QT) ]
```

See also

- 39.3 AVEExport.Duration

1030

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.3 QTExport.Export

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTExport	6.1	Yes	Yes	No	No	No

MBS("QTExport.Export"; QTExporter; Path; FileType; Creator Code { ; Flags })

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTExporter

The exporter reference number.

\$\$QTExporter

Path

The native path for the destination file.

"/Users/cs/Desktop/test.mp3"

FileType

The file type code.

"MP3 "

Creator Code

The creator code. We normally use TVOD for the QuickTime Player.

"TVOD"

Flags

Optional

The flags.

0

Result Returns OK or error.

Description

The export is running modal and may show a progress dialog.

Deprecated. Please move to use AVExport functions for new projects.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Run exporter:

```
Set Variable [ $r; Value:MBS("QTExport.Export"; $$QT; QTMovieExporter::Output File Path; "MP3 "; "TVOD") ]
```

132.3. *QTEXTORT.EXPORT*

6553

See also

- 121.2 [Path.FileMakerPathToNativePath](#)

6139

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 16th November 2017.

132.4 QTEExport.GetHighResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.GetHighResolution"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns setting or error.

Description

Returns 1 if enabled or 0 if disabled.

See also

- 132.16 QTEExport.SetHighResolution

6567

Created 1st March 2016, last changed 1st March 2016.

132.5 QTEExport.GetMovieHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.GetMovieHeight"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns value or error.

Description

See also

- 132.6 QTEExport.GetMovieWidth 6556
- 132.17 QTEExport.SetMovieHeight 6568
- 132.18 QTEExport.SetMovieWidth 6569

Created 1st March 2016, last changed 1st March 2016.

132.6 QTEExport.GetMovieWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.GetMovieWidth"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns value or error.

Description

See also

- 132.5 QTEExport.GetMovieHeight 6555
- 132.17 QTEExport.SetMovieHeight 6568
- 132.18 QTEExport.SetMovieWidth 6569

Created 1st March 2016, last changed 1st March 2016.

132.7 QTEExport.GetSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.GetSettings"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns text or error.

Description

The plugin encoded settings as base64 text, so you can store it in a global preferences field. Please use QTEExport.SetSettings to restore those settings for another export.

Examples

Query settings:

```
MBS("QTEExport.GetSettings"; $$QT)
```

See also

- 132.19 QTEExport.SetSettings

6570

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.8 QTEExport.GetShowProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.GetShowProgress"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns value or error.

Description

Default is to 1 (on).

See also

- 132.20 QTEExport.SetShowProgress

6571

Created 1st March 2016, last changed 1st March 2016.

132.9 QTExport.GetSoundChannelCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTExport	6.1	Yes	Yes	No	No	No

MBS("QTExport.GetSoundChannelCount"; QTExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTExporter

The exporter reference number.

\$\$QTExporter

Result Returns value or error.

Description

Examples

Query channel count:

MBS("QTExport.GetSoundChannelCount"; \$\$QT)

See also

- 132.21 QTExport.SetSoundChannelCount

6572

Created 1st March 2016, last changed 1st March 2016.

132.10 QTextExport.GetSoundSampleRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTextExport	6.1	Yes	Yes	No	No	No

MBS("QTextExport.GetSoundSampleRate"; QTextExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTextExporter

The exporter reference number.

\$\$QTextExporter

Result Returns value or error.

Description

Examples

Query sample rate:

MBS("QTextExport.GetSoundSampleRate"; \$\$QT)

See also

- 132.11 QTextExport.GetSoundSampleSize 6561
- 132.22 QTextExport.SetSoundSampleRate 6573
- 132.23 QTextExport.SetSoundSampleSize 6574

Created 1st March 2016, last changed 1st March 2016.

132.11 QTEExport.GetSoundSampleSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.GetSoundSampleSize"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns value or error.

Description

Examples

Query sample size:

MBS("QTEExport.GetSoundSampleSize"; \$\$QT)

See also

- 132.10 QTEExport.GetSoundSampleRate 6560
- 132.22 QTEExport.SetSoundSampleRate 6573
- 132.23 QTEExport.SetSoundSampleSize 6574

Created 1st March 2016, last changed 1st March 2016.

132.12 QTEExport.ListExporters

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.ListExporters" { ; Type })

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Type

Optional

The component type. Default is "spit" for movie exporters.

Result Returns list or error.

Description

The list returned is tab separated: Type, SubType, Manufacturer, Name and Info texts. If no entry is found for the given type, an empty list is returned.

Examples

List exporters:

```
MBS("QTEExport.ListExporters")
```

See also

- [132.13 QTEExport.OpenExporter](#)

6563

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.13 QTEExport.OpenExporter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.OpenExporter"; SubType; Manufacturer)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

SubType

The exporter component subtype to identify the exporter to open.

"mp3 "

Manufacturer

The manufacturer of the exporter component.

"PYEh"

Result Returns reference number or error.

Description

This function is only available for 32-bit. It may work on FileMaker Mac and Windows. For Windows please install QuickTime Player 7 for Windows.

Please use QTEExport.ListExporters to get a list of installed exporter components.

Please call AVExport.Release later to free the exporter.

Examples

Open Exporter:

```
Set Variable [ $$QT; Value:MBS("QTEExport.OpenExporter"; QTMovieExporter::ExporterSubType; QT-
MovieExporter::ExporterManufacturer) ]
```

```
If [ MBS("IsError") ]
```

```
Show Custom Dialog [ "Failed to create export sessio..."; MBS("Text.RemovePrefix"; $$AVExport; " [ MBS
] ") ]
```

```
Exit Script [ ]
```

```
Else
```

```
Set Variable [ $r; Value:MBS("QTEExport.SetShowProgress"; $$QT; 1) ]
```

```
Set Variable [ $r; Value:MBS("QTEExport.SetHighResolution"; $$QT; 1) ]
```

```
End If
```

See also

- 39.17 AVExport.Release 1048
- 124.6 IsError 6266
- 132.12 QTEExport.ListExporters 6562
- 132.16 QTEExport.SetHighResolution 6567

- 132.20 QTextExport.SetShowProgress 6571
- 164.57 Text.RemovePrefix 7854

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.14 QTextort.OpenMovie

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTextort	6.1	Yes	Yes	No	No	No

MBS("QTextort.OpenMovie"; QTextorter; Path)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTextorter

The exporter reference number.

\$\$QTextorter

Path

The native file path to the movie file.

"/Users/cs/Desktop/test.mov"

Result Returns OK or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Open Movie:

```
Set Variable [ $r; Value:MBS("QTextort.OpenMovie"; $$QT; QTMovieExporter::Input File Path) ]
```

See also

- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [132.1 QTextort.CloseMovie](#) 6549

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.15 QTEExport.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.Release"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns OK or error.

Description

All memory is released.

Please call this when you are done with the export.

See also

- [39.17 AVExport.Release](#) 1048
- [132.1 QTEExport.CloseMovie](#) 6549

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.16 QTExport.SetHighResolution

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTExport	6.1	Yes	Yes	No	No	No

MBS("QTExport.SetHighResolution"; QTExporter; Value)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTExporter

The exporter reference number.

\$\$QTExporter

Value

The new setting. 1 to enable, 0 to disable.

1

Result Returns OK or error.

Description

If you set it to 1 and you have QuickTime 7 on your Mac OS X copy, you can e.g. export a movie with 96000 HZ audio.

See also

- [132.4 QTExport.GetHighResolution](#) 6554
- [132.13 QTExport.OpenExporter](#) 6563

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.17 QTEExport.SetMovieHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.SetMovieHeight"; QTEExporter; Height)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Height

The movie height to export.

480

Result Returns OK or error.

Description

If you don't set this, the default is used.

See also

- 132.5 QTEExport.GetMovieHeight 6555
- 132.6 QTEExport.GetMovieWidth 6556
- 132.18 QTEExport.SetMovieWidth 6569

Created 1st March 2016, last changed 1st March 2016.

132.18 QTEExport.SetMovieWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.SetMovieWidth"; QTEExporter; Width)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**QTEExporter**

The exporter reference number.

\$\$QTEExporter

Width

The movie width to export.

640

Result Returns OK or error.

Description

If you don't set this, the default is used.

See also

- 132.5 QTEExport.GetMovieHeight 6555
- 132.6 QTEExport.GetMovieWidth 6556
- 132.17 QTEExport.SetMovieHeight 6568

Created 1st March 2016, last changed 1st March 2016.

132.19 QTextExport.SetSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTextExport	6.1	Yes	Yes	No	No	No

MBS("QTextExport.SetSettings"; QTextExporter; Settings)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTextExporter

The exporter reference number.

\$\$QTextExporter

Settings

The settings as base64 encoded text as returned by QTextExport.GetSettings.

MyPreferences::ExportSettings

Result Returns OK or error.

Description

You can save the settings text you got from QTextExport.GetSettings and restore it with this function. Please make sure you use the same settings for the same exporter component.

Examples

Load Settings from field:

```
MBS("QTextExport.SetSettings"; $$QT; QTMovieExporter::Settings)
```

See also

- 132.7 QTextExport.GetSettings

6557

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.20 QTEExport.SetShowProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.SetShowProgress"; QTEExporter; Value)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Value

The new setting. Can be 1 to show progress dialog or 0 to hide it.

1

Result Returns OK or error.

Description

Pass 1 to show progress dialog automatically or 0 to hide it.

Examples

Enable progress dialog:

MBS("QTEExport.SetShowProgress"; \$QTEExport; 1)

See also

- 132.8 QTEExport.GetShowProgress 6558
- 132.13 QTEExport.OpenExporter 6563

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.21 QTextExport.SetSoundChannelCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTextExport	6.1	Yes	Yes	No	No	No

MBS("QTextExport.SetSoundChannelCount"; QTextExporter; Value)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTextExporter

The exporter reference number.

\$\$QTextExporter

Value

The new channel count.

2

Result Returns OK or error.

Description

Examples

Sets sound settings:

```
Set Variable [ $r; Value:MBS("QTextExport.SetSoundChannelCount"; $$QT; 1) ]
```

```
Set Variable [ $r; Value:MBS("QTextExport.SetSoundSampleSize"; $$QT; 8) ]
```

```
Set Variable [ $r; Value:MBS("QTextExport.SetSoundSampleRate"; $$QT; 22050) ]
```

See also

- 132.9 QTextExport.GetSoundChannelCount 6559
- 132.22 QTextExport.SetSoundSampleRate 6573
- 132.23 QTextExport.SetSoundSampleSize 6574

Created 1st March 2016, last changed 1st March 2016.

132.22 QTExport.SetSoundSampleRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTExport	6.1	Yes	Yes	No	No	No

MBS("QTExport.SetSoundSampleRate"; QTExporter; Value)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTExporter

The exporter reference number.

\$\$QTExporter

Value

The new sample rate.

44100

Result Returns OK or error.

Description

Examples

Sets sound settings:

```
Set Variable [ $r; Value:MBS("QTExport.SetSoundChannelCount"; $$QT; 1) ]
```

```
Set Variable [ $r; Value:MBS("QTExport.SetSoundSampleSize"; $$QT; 8) ]
```

```
Set Variable [ $r; Value:MBS("QTExport.SetSoundSampleRate"; $$QT; 22050) ]
```

See also

- 132.10 QTExport.GetSoundSampleRate 6560
- 132.11 QTExport.GetSoundSampleSize 6561
- 132.21 QTExport.SetSoundChannelCount 6572
- 132.23 QTExport.SetSoundSampleSize 6574

Created 1st March 2016, last changed 1st March 2016.

132.23 QTextport.SetSoundSampleSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTextport	6.1	Yes	Yes	No	No	No

MBS("QTextport.SetSoundSampleSize"; QTextporter; Value)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTextporter

The exporter reference number.

\$\$QTextporter

Value

The new sample size in bits.

16

Result Returns OK or error.

Description

Examples

Sets sound settings:

```
Set Variable [ $r; Value:MBS("QTextport.SetSoundChannelCount"; $$QT; 1) ]
Set Variable [ $r; Value:MBS("QTextport.SetSoundSampleSize"; $$QT; 8) ]
Set Variable [ $r; Value:MBS("QTextport.SetSoundSampleRate"; $$QT; 22050) ]
```

See also

- 132.10 QTextport.GetSoundSampleRate 6560
- 132.11 QTextport.GetSoundSampleSize 6561
- 132.21 QTextport.SetSoundChannelCount 6572
- 132.22 QTextport.SetSoundSampleRate 6573

Created 1st March 2016, last changed 1st March 2016.

132.24 QTEExport.SetupDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.SetupDialog"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns OK or error.

Description

The user can define the settings and you can store those in your preferences.

This way the user doesn't need to select settings each time.

If the user presses cancel button the text "Cancel" is returned.

Examples

Show setup dialog:

```
MBS("QTEExport.SetupDialog"; $$QT)
```

Example Databases

- [Mac only/Movies/QTMovieExporter](#)

Created 1st March 2016, last changed 1st March 2016.

132.25 QTEExport.Validate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
132 QTEExport	6.1	Yes	Yes	No	No	No

MBS("QTEExport.Validate"; QTEExporter)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

QTEExporter

The exporter reference number.

\$\$QTEExporter

Result Returns OK or error.

Description

Returns "Valid" in case of success.

Examples

Validate settings:

```
MBS("QTEExport.Validate"; $$QT)
```

Created 1st March 2016, last changed 1st March 2016.

Chapter 133

QTMovie

QuickTime Movie access.

Deprecated. Please move to AVPlayer functions for playing sound.

133.1 QTMovie.Autoplay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.Autoplay"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description

The autoplay method configures a QTMovie object to begin playing as soon as enough data is available that the playback can continue uninterrupted to the end of the movie. This is most useful for movies being loaded from a remote URL or from an extremely slow local device. For movies stored on most local devices, this method has the same effect as the QTMovie.play method.

Examples

Play now

MBS("QTMovie.Autoplay"; \$Movie)

Play when enough data is loaded:

MBS("QTMovie.Autoplay"; \$Movie)

See also

- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.22 QTMovie.Play 6602

Created 18th August 2014, last changed 18th August 2014.

133.2 QTMovie.CurrentFrameImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.CurrentFrameImage"; Movie { ; ImageType; Filename })

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns an image as container value or error.

Description**See also**

- 116.3 *MovieView.CurrentFrameImage* 6060
- 133.18 *QTMovie.OpenContainer* 6595
- 133.19 *QTMovie.OpenFile* 6597
- 133.20 *QTMovie.OpenURL* 6599

Created 18th August 2014, last changed 18th August 2014.

133.3 QTMovie.FormatTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	5.0	Yes	No	No	No	No

MBS("QTMovie.FormatTime"; Seconds)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Seconds

The number of seconds to format.

123

Result Returns text or error.

Description

Examples

Format one second:

```
MBS("QTMovie.FormatTime"; 1)
```

Format 3 hours, 2 minutes, 1 second and one millisecond

```
MBS("QTMovie.FormatTime"; 3600*3 + 60*2 + 1 + 1/1000)
```

See also

- [133.21 QTMovie.ParseTime](#)

6601

133.3.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 15th December 2014, last changed 15th December 2014.

133.4 **QTMovie.FrameImageAtTime**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.FrameImageAtTime"; Movie; Time { ; ImageType; Filename })

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use `QTMovie.OpenContainer`, `QTMovie.OpenFile` or `QTMovie.OpenURL` function to get movie reference.

\$mov

Time

The time of the movie to use in seconds.

5.0

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns an image as container value or error.

Description

Please use `AVAsset.Image` for new projects.

See also

- 38.5 `AVAsset.Image` 992
- 133.18 `QTMovie.OpenContainer` 6595
- 133.19 `QTMovie.OpenFile` 6597
- 133.20 `QTMovie.OpenURL` 6599

Example Databases

- [Mac only/Movies/QTMovie](#)

Created 18th August 2014, last changed 31st August 2017.

133.5 QTMovie.GetCurrentTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GetCurrentTime"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns value or error.

Description

See also

- 116.4 [MovieView.CurrentTime](#) 6061
- 133.18 [QTMovie.OpenContainer](#) 6595
- 133.19 [QTMovie.OpenFile](#) 6597
- 133.20 [QTMovie.OpenURL](#) 6599
- 133.26 [QTMovie.SetCurrentTime](#) 6607

Created 18th August 2014, last changed 18th August 2014.

133.6 QTMovie.GetDuration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GetDuration"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns value or error.

Description

See also

- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

Example Databases

- [Mac only/Movies/QTMovie](#)

Created 18th August 2014, last changed 18th August 2014.

133.7 QTMovie.GetMuted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GetMuted"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns value or error.

Description

Value is 1 if muted and 0 if not.

See also

- 133.8 QTMovie.GetRate 6585
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.27 QTMovie.SetMuted 6608
- 133.28 QTMovie.SetRate 6609

Created 18th August 2014, last changed 18th August 2014.

133.8 QTMovie.GetRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GetRate"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use `QTMovie.OpenContainer`, `QTMovie.OpenFile` or `QTMovie.OpenURL` function to get movie reference.

\$mov

Result Returns value or error.

Description

For instance, 0.0 is stop, 1.0 is playback at normal speed, 2.0 is twice normal speed, and so on.

See also

- 133.7 `QTMovie.GetMuted` 6584
- 133.18 `QTMovie.OpenContainer` 6595
- 133.19 `QTMovie.OpenFile` 6597
- 133.20 `QTMovie.OpenURL` 6599
- 133.24 `QTMovie.Release` 6605
- 133.27 `QTMovie.SetMuted` 6608
- 133.28 `QTMovie.SetRate` 6609

Created 18th August 2014, last changed 18th August 2014.

133.9 QTMovie.GetSelectionDuration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GetSelectionDuration"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns value or error.

Description

See also

- 133.11 QTMovie.GetSelectionStart 6588
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

Created 18th August 2014, last changed 18th August 2014.

133.10 QTMovie.GetSelectionEnd

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GetSelectionEnd"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns value or error.

Description**See also**

- 133.11 QTMovie.GetSelectionStart 6588
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

Created 18th August 2014, last changed 18th August 2014.

133.11 QTMovie.GetSelectionStart

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GetSelectionStart"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns value or error.

Description

See also

- 133.9 QTMovie.GetSelectionDuration 6586
- 133.10 QTMovie.GetSelectionEnd 6587
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

Created 18th August 2014, last changed 18th August 2014.

133.12 QTMovie.GetVolume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GetVolume"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use `QTMovie.OpenContainer`, `QTMovie.OpenFile` or `QTMovie.OpenURL` function to get movie reference.

\$mov

Result Returns value or error.

Description

The valid range is 0.0 to 1.0.

See also

- 133.18 `QTMovie.OpenContainer` 6595
- 133.19 `QTMovie.OpenFile` 6597
- 133.20 `QTMovie.OpenURL` 6599
- 133.29 `QTMovie.SetVolume` 6610

Created 18th August 2014, last changed 18th August 2014.

133.13 QTMovie.GotoBeginning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GotoBeginning"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description

If the movie is playing, the movie continues playing from the new position.

Examples

Go to poster time:

```
MBS( "QTMovie.GotoPosterTime"; $Movie )
```

Go to beginning of movie:

```
MBS( "QTMovie.GotoBeginning"; $Movie )
```

Go to end of movie:

```
MBS( "QTMovie.GotoEnd"; $Movie )
```

See also

- 116.6 [MovieView.GotoBeginning](#) 6063
- 133.14 [QTMovie.GotoEnd](#) 6591
- 133.16 [QTMovie.GotoPosterTime](#) 6593
- 133.18 [QTMovie.OpenContainer](#) 6595
- 133.19 [QTMovie.OpenFile](#) 6597
- 133.20 [QTMovie.OpenURL](#) 6599

Created 18th August 2014, last changed 18th August 2014.

133.14 QTMovie.GotoEnd

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GotoEnd"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use `QTMovie.OpenContainer`, `QTMovie.OpenFile` or `QTMovie.OpenURL` function to get movie reference.

\$mov

Result Returns OK or error.

Description

If the movie is playing in one of the looping modes, the movie continues playing accordingly; otherwise, play stops.

Examples

Go to poster time:

MBS("QTMovie.GotoPosterTime"; \$Movie)

Go to beginning of movie:

MBS("QTMovie.GotoBeginning"; \$Movie)

Go to end of movie:

MBS("QTMovie.GotoEnd"; \$Movie)

See also

- 133.13 `QTMovie.GotoBeginning` 6590
- 133.16 `QTMovie.GotoPosterTime` 6593
- 133.18 `QTMovie.OpenContainer` 6595
- 133.19 `QTMovie.OpenFile` 6597
- 133.20 `QTMovie.OpenURL` 6599

Created 18th August 2014, last changed 18th August 2014.

133.15 QTMovie.GotoNextSelectionPoint

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GotoNextSelectionPoint"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description

See also

- 133.17 QTMovie.GotoPreviousSelectionPoint 6594
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

Created 18th August 2014, last changed 18th August 2014.

133.16 QTMovie.GotoPosterTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GotoPosterTime"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use `QTMovie.OpenContainer`, `QTMovie.OpenFile` or `QTMovie.OpenURL` function to get movie reference.

\$mov

Result Returns OK or error.

Description

If no poster time is defined, the movie jumps to the beginning. If the movie is playing, the movie continues playing from the new position.

Examples

Go to poster time:

MBS("QTMovie.GotoPosterTime"; \$Movie)

Go to beginning of movie:

MBS("QTMovie.GotoBeginning"; \$Movie)

Go to end of movie:

MBS("QTMovie.GotoEnd"; \$Movie)

See also

- 133.13 `QTMovie.GotoBeginning` 6590
- 133.14 `QTMovie.GotoEnd` 6591
- 133.18 `QTMovie.OpenContainer` 6595
- 133.19 `QTMovie.OpenFile` 6597
- 133.20 `QTMovie.OpenURL` 6599

Created 18th August 2014, last changed 18th August 2014.

133.17 QTMovie.GotoPreviousSelectionPoint

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.GotoPreviousSelectionPoint"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description

See also

- 133.15 QTMovie.GotoNextSelectionPoint 6592
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

Created 18th August 2014, last changed 18th August 2014.

133.18 QTMovie.OpenContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.OpenContainer"; Container)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Container

The container with the movie file.

MyTable::MovieContainer

Result Returns Movie Reference or error.

Description

This loads the movie in RAM.

Returns the movie reference which must be released with QTMovie.Release function.

See also QTMovie.OpenFile or QTMovie.OpenURL.

Works with normal container, compressed container and referenced container file.

For interactive containers it may be better to use MovieView.Movie as FileMaker already loaded the video and we can reference it instead of loading it again.

Examples

Open Movie

```
$Movie = MBS( "QTMovie.OpenContainer"; MyTable::MovieContainer )
```

Close it later

```
MBS( "QTMovie.Release"; $Movie )
```

Load and play:

```
# Open Container
```

```
Set Variable [ $$Movie; Value:MBS("QTMovie.OpenContainer"; QTMovie::MovieContainer) ]
```

```
# Play it
```

```
Set Variable [ $r; Value:MBS("QTMovie.Play"; $$Movie) ]
```

```
# later you should release movie to free memory
```

See also

- 116.15 MovieView.Movie 6072
- 133.13 QTMovie.GotoBeginning 6590

- 133.14 QTMovie.GotoEnd 6591
- 133.16 QTMovie.GotoPosterTime 6593
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.22 QTMovie.Play 6602
- 133.28 QTMovie.SetRate 6609
- 133.29 QTMovie.SetVolume 6610
- 133.32 QTMovie.Stop 6613

Example Databases

- [Mac only/Movies/QTMovie](#)

133.18.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr8](#)
- [MBS Filemaker Plugin, version 4.3pr6](#)

Created 18th August 2014, last changed 20th January 2016.

133.19 QTMovie.OpenFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.OpenFile"; Path)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Path

The native file path to the movie file.

"/Test.mov"

Result Returns Movie Reference or error.

Description

Returns the movie reference which must be released with QTMovie.Release function.

See also QTMovie.OpenContainer or QTMovie.OpenURL.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Open Movie

```
$Movie = MBS( "QTMovie.OpenFile"; "/Test.mov" )
```

Close it later

```
MBS( "QTMovie.Release"; $Movie )
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 133.12 QTMovie.GetVolume 6589
- 133.13 QTMovie.GotoBeginning 6590
- 133.14 QTMovie.GotoEnd 6591
- 133.16 QTMovie.GotoPosterTime 6593
- 133.18 QTMovie.OpenContainer 6595
- 133.22 QTMovie.Play 6602

6598

CHAPTER 133. QTMOVIE

- 133.24 QTMovie.Release 6605
- 133.28 QTMovie.SetRate 6609
- 133.31 QTMovie.StepForward 6612

Created 18th August 2014, last changed 5th September 2014.

133.20 QTMovie.OpenURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.OpenURL"; URL)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**URL**

The URL of the movie to open.

"http://example.test/mysound.mp3"

Result Returns Movie Reference or error.

Description

Returns the movie reference which must be released with QTMovie.Release function.

See also QTMovie.OpenFile or QTMovie.OpenContainer.

Examples

Open Movie

```
$Movie = MBS( "QTMovie.OpenURL"; "http://example.test/mysound.mp3" )
```

Close it later

```
MBS( "QTMovie.Release"; $Movie )
```

See also

- 133.11 QTMovie.GetSelectionStart 6588
- 133.16 QTMovie.GotoPosterTime 6593
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.22 QTMovie.Play 6602
- 133.23 QTMovie.PosterImage 6604
- 133.26 QTMovie.SetCurrentTime 6607
- 133.28 QTMovie.SetRate 6609
- 133.30 QTMovie.StepBackward 6611
- 133.33 QTMovie.StopDelayed 6614

133.21 QTMovie.ParseTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	5.0	Yes	No	No	No	No

MBS("QTMovie.ParseTime"; Time value)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Time value

The time text to parse.

"04:03:02:01.12/60"

Result Returns seconds or error.

Description

May return zero if wrong format.

Examples

Parses a time value:

MBS("QTMovie.ParseTime"; "04:03:02:01.12/60")

See also

- [133.3 QTMovie.FormatTime](#)

6580

133.21.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 15th December 2014, last changed 15th December 2014.

133.22 QTMovie.Play

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.Play"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description

Without an actual movie view, this will only play sound.

Examples

Play movie:

```
MBS( "QTMovie.Play"; $Movie )
```

Stop movie:

```
MBS( "QTMovie.Stop"; $Movie )
```

Load and play:

```
# Open Container
Set Variable [ $$Movie; Value:MBS("QTMovie.OpenContainer"; QTMovie::MovieContainer) ]
# Play it
Set Variable [ $r; Value:MBS("QTMovie.Play"; $$Movie) ]
# later you should release movie to free memory
```

See also

- 133.1 QTMovie.Autoplay 6577
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.32 QTMovie.Stop 6613

Example Databases

- [Mac only/Movies/QTMovie](#)

Created 18th August 2014, last changed 20th January 2016.

133.23 QTMovie.PosterImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.PosterImage"; Movie { ; ImageType; Filename })

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns an image as container value or error.

Description

See also

- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

Example Databases

- [Mac only/Movies/QTMovie](#)

Created 18th August 2014, last changed 18th August 2014.

133.24 QTMovie.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.Release"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description

If you forget to release a movie, the movie object stays in memory and if memory is low, FileMaker will crash.

To avoid this the plugin will only open up to 50 movies simultaneously.

See also

- 116.15 [MovieView.Movie](#) 6072
- 133.8 [QTMovie.GetRate](#) 6585
- 133.18 [QTMovie.OpenContainer](#) 6595
- 133.19 [QTMovie.OpenFile](#) 6597
- 133.20 [QTMovie.OpenURL](#) 6599
- 133.25 [QTMovie.ReleaseAll](#) 6606
- 133.28 [QTMovie.SetRate](#) 6609

Example Databases

- [Mac only/Movies/QTMovie](#)

133.24.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 18th August 2014, last changed 18th August 2014.

133.25 QTMovie.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	7.1	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.ReleaseAll")

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Result Returns OK or error.

Description

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

See also

- [133.24 QTMovie.Release](#)

6605

133.25.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

Created 2nd February 2017, last changed 9th January 2020.

133.26 QTMovie.SetCurrentTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	No	No	No

MBS("QTMovie.SetCurrentTime"; Movie; Time)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Time

Time in the movie in seconds.

5.0

Result Returns OK or error.

Description**Examples**

Go to 5th second:

MBS("QTMovie.SetCurrentTime"; \$Movie; 5.0)

See also

- 116.4 [MovieView.CurrentTime](#) 6061
- 116.21 [MovieView.SetCurrentTime](#) 6078
- 133.5 [QTMovie.GetCurrentTime](#) 6582
- 133.18 [QTMovie.OpenContainer](#) 6595
- 133.19 [QTMovie.OpenFile](#) 6597
- 133.20 [QTMovie.OpenURL](#) 6599

Created 18th August 2014, last changed 10th December 2014.

133.27 QTMovie.SetMuted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.SetMuted"; Movie; Flag)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Flag

The new mute status. Pass 0 to mute or 1 to unmute.

1

Result Returns OK or error.

Description

Note that this does not affect the volume.

See also

- 133.7 QTMovie.GetMuted 6584
- 133.8 QTMovie.GetRate 6585
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.28 QTMovie.SetRate 6609

Created 18th August 2014, last changed 18th August 2014.

133.28 QTMovie.SetRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.SetRate"; Movie; Rate)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Rate

The new playback rate.

1.0

Result Returns OK or error.

Description

For instance, 0.0 is stop, 1.0 is playback at normal speed, 2.0 is twice normal speed, and so on.

See also

- 133.7 QTMovie.GetMuted 6584
- 133.8 QTMovie.GetRate 6585
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.24 QTMovie.Release 6605
- 133.27 QTMovie.SetMuted 6608

Created 18th August 2014, last changed 18th August 2014.

133.29 QTMovie.SetVolume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.SetVolume"; Movie; Volume)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Volume

The new volume. 0.0 is no sound while 1.0 is maximum.

1.0

Result Returns OK or error.

Description

Note that this does not affect the movie's stored settings.

See also

- 133.12 QTMovie.GetVolume 6589
- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

Created 18th August 2014, last changed 18th August 2014.

133.30 QTMovie.StepBackward

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.StepBackward"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description**See also**

- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.31 QTMovie.StepForward 6612

Created 18th August 2014, last changed 18th August 2014.

133.31 QTMovie.StepForward

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.StepForward"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description

See also

- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.30 QTMovie.StepBackward 6611

Created 18th August 2014, last changed 18th August 2014.

133.32 QTMovie.Stop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	4.0	Yes	No	Yes, macOS only	No	No

MBS("QTMovie.Stop"; Movie)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters**Movie**

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Result Returns OK or error.

Description**Examples**

Play movie:

MBS("QTMovie.Play"; \$Movie)

Stop movie:

MBS("QTMovie.Stop"; \$Movie)

See also

- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599
- 133.22 QTMovie.Play 6602

Example Databases

- [Mac only/Movies/QTMovie](#)

Created 18th August 2014, last changed 18th August 2014.

133.33 QTMovie.StopDelayed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
133 QTMovie	5.0	Yes	No	No	No	No

MBS("QTMovie.StopDelayed"; Movie; Delay)

This function was ?? removed for MBS FileMaker Plugin 9.0. Please move to newer functions or keep using older plugins.

Parameters

Movie

The reference number of the movie. Please use QTMovie.OpenContainer, QTMovie.OpenFile or QTMovie.OpenURL function to get movie reference.

\$mov

Delay

The time in seconds to wait for performing pause operation.

5

Result Returns OK or error.

Description

You can start a video in a script and in next step run the stop command with a delay to play only a portion of the video.

See also

- 133.18 QTMovie.OpenContainer 6595
- 133.19 QTMovie.OpenFile 6597
- 133.20 QTMovie.OpenURL 6599

133.33.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 15th December 2014, last changed 15th December 2014.

Chapter 134

QuickLook

Query file icons and previews.

134.1 Icon.ClearIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook 78 Files	2.7	Yes	No	Yes, macOS only	No	No

MBS("Icon.ClearIcon"; Path)

Parameters

Path

The path to the file or folder.

"/Applications"

Result Returns OK on success.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Clears icon of a file on the desktop:

```
MBS("Icon.ClearIcon"; "/Users/Christian/Desktop/test.pdf")
```

See also

- 121.2 Path.FileMakerPathToNativePath

6139

Example Databases

- [Mac only/Icon and QuickLook/SetIcon](#)

134.1.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr8](#)

Created 18th August 2014, last changed 24th May 2017.

134.2 Icon.GetIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook 78 Files	2.3	Yes	Yes	Yes	No	No

MBS("Icon.GetIcon"; Path; Size)

Parameters

Path

The path to the file or folder.

"/Applications"

Size

The size of the icon picture you'd like to have. Suggested range is from 16 to 512 pixel.

512

Result Container value.

Description

Size specifies the icon size from 16 to 512 pixel. The container value returned includes PNG data with alpha, JPEG preview, filename and size.

Added Windows support in plugin version 4.2.

On Mac Server this may not work well as the Server user account has no icon database.

See also [Icon.GetIconWithQuickLook](#).

Examples

Queries icon of iPhoto app:

MBS("Icon.GetIcon"; "/Applications/iPhoto.app"; 512)

See also

- [134.3 Icon.GetIconWithQuickLook](#) 6619
- [134.4 Icon.SetIcon](#) 6621
- [134.22 QLPreviewPanel.Show](#) 6641

Example Databases

- [Files/File Listing With Icons](#)
- [Mac only/Icon and QuickLook/Icons](#)
- [Mac only/MetaDataQuery/Search Applications](#)

134.2.1 Blog Entries

- [Spotlight search in FileMaker with MBS Plugin](#)
- [MBS Filemaker Plugin, version 4.3pr5](#)
- [MBS Filemaker Plugin, version 4.2pr12](#)
- [MBS Filemaker Plugin, version 2.3pr3](#)
- [MBS Filemaker Plugin, version 2.3pr2](#)
- [Getting icons from Files](#)

Created 18th August 2014, last changed 29th October 2018.

134.3 Icon.GetIconWithQuickLook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook 78 Files	2.3	Yes	Yes	Yes	No	No

MBS("Icon.GetIconWithQuickLook"; Path; Size)

Parameters

Path

The path to the file or folder.
"/Applications"

Size

The size of the icon picture you'd like to have. Suggested range is from 16 to 512 pixel.
512

Result Container value.

Description

This method tries first to get QuickLook preview for the file, before it tries the icon. QuickLook requires Mac OS X 10.5. Size specifies the icon size from 16 to 512 pixel. The container value returned includes PNG data with alpha, JPEG preview, filename and size.

Version 4.3 adds support for Windows. We now query same thumbnail as explorer uses.
See also Icon.GetIcon.

Examples

Queries preview on iPhoto app:

MBS("Icon.GetIconWithQuickLook"; "/Applications/iPhoto.app"; 512)

See also

- [134.2 Icon.GetIcon](#) 6617
- [134.22 QLPreviewPanel.Show](#) 6641

Example Databases

- [Mac only/Icon and QuickLook/Icons](#)

134.3.1 Blog Entries

- [MBS Filemaker Plugin, version 2.3pr3](#)
- [MBS Filemaker Plugin, version 2.3pr2](#)

- [Getting icons from Files](#)

Created 18th August 2014, last changed 17th June 2018.

134.4 Icon.SetIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook 78 Files	2.7	Yes	No	Yes, macOS only	No	No

MBS("Icon.SetIcon"; Path; image)

Parameters

Path

The path to the file or folder.

"/Applications"

image

A container value with some picture. Can be JPEG, GIF, BMP, PNG or TIFF.

\$image

Result Returns OK on success.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Sets icon of a file on the desktop:

```
MBS("Icon.SetIcon"; "/Users/Christian/Desktop/test.pdf"; Data::image)
```

See also

- [134.2 Icon.GetIcon](#) 6617
- [121.2 Path.FileMakerPathToNativePath](#) 6139

Example Databases

- [Mac only/Icon and QuickLook/SetIcon](#)

134.4.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr8](#)

Created 18th August 2014, last changed 24th May 2017.

134.5 QLPreviewPanel.AddContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	8.4	Yes	No	No	No	Yes

MBS("QLPreviewPanel.AddContainer"; Container { ; Title })

Parameters

Container

the container to show.

MyTable::MyField

Title

Optional

The title for the container.

"My Holiday"

Result Returns OK or error.

Description

If you have an existing file, better use QLPreviewPanel.AddFile function.

The container can contain a file supported by QuickLook for previewing.

Either we use file path from FileMaker's external container storage directly or we write a temporary file, which is cleared later when app quits or panel is cleared.

Examples

Show containers:

```
# Prepare
If [ MBS("QLPreviewPanel.IsVisible") ]
Set Variable [ $r ; Value: MBS("QLPreviewPanel.Hide") ]
End If
Set Variable [ $r ; Value: MBS("QLPreviewPanel.Clear") ]
#
# Add all containers you have
Set Variable [ $r ; Value: MBS("QLPreviewPanel.AddContainer"; Placeholder::Container; "Stratocaster") ]
#
# Run it!
Set Variable [ $r ; Value: MBS("QLPreviewPanel.Show") ]
```

See also

- 134.6 QLPreviewPanel.AddFile 6624
- 134.9 QLPreviewPanel.Clear 6627
- 134.17 QLPreviewPanel.Hide 6635

<i>134.5. QLPREVIEWPANEL.ADDCONTAINER</i>	6623
• 134.18 QLPreviewPanel.IsVisible	6636
• 134.22 QLPreviewPanel.Show	6641

134.5.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr3](#)
- [QLPreviewPanel functions for iOS](#)

Created 14th August 2018, last changed 15th August 2018.

134.6 QLPreviewPanel.AddFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	Yes

MBS("QLPreviewPanel.AddFile"; Path)

Parameters

Path

The native file path to the image file.

"/Users/test/Images/test.jpg"

Result Returns Ok or error.

Description

If you want the user to select a path, please use OpenFileDialog functions.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use OpenFileDialog functions.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 134.5 QLPreviewPanel.AddContainer 6622
- 134.7 QLPreviewPanel.AddImage 6625
- 134.8 QLPreviewPanel.AddPDF 6626
- 134.17 QLPreviewPanel.Hide 6635
- 134.18 QLPreviewPanel.IsVisible 6636
- 134.20 QLPreviewPanel.Resize 6638

Example Databases

- [Mac only/Icon and QuickLook/QuickLook Preview Panel](#)

Created 18th August 2014, last changed 15th August 2018.

134.7 QLPreviewPanel.AddImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	Yes

MBS("QLPreviewPanel.AddImage"; Image { ; Title })

Parameters

Image

The image as container.

\$img

Title

Optional

The title for the image.

"My Holiday"

Result Returns OK or error.

Description

If you have an image file, better use QLPreviewPanel.AddFile function.

The container can contain an image (GIF, PNG, BMP, JPEG) or an image file (TIFF, BMP, PNG, JPEG and other formats supported by Mac OS X).

Either we use file path from FileMaker's external container storage directly or we write a temporary file, which is cleared later when app quits or panel is cleared.

See also

- [134.6 QLPreviewPanel.AddFile](#) 6624
- [134.8 QLPreviewPanel.AddPDF](#) 6626
- [134.9 QLPreviewPanel.Clear](#) 6627

Example Databases

- [Mac only/Icon and QuickLook/QuickLook Preview Panel](#)

Created 18th August 2014, last changed 15th August 2018.

134.8 QLPreviewPanel.AddPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	Yes

MBS("QLPreviewPanel.AddPDF"; PDF { ; Title })

Parameters

PDF

The PDF.

\$pdf

Title

Optional

The title to use.

"Hello World"

Result Returns OK or error.

Description

You can pass a container value with the PDF content from a media field. Or a text with an URL. Or a PDF reference from PDFKit.Open.

Either we use file path from FileMaker's external container storage directly or we write a temporary file, which is cleared later when app quits or panel is cleared.

See also

- 122.28 PDFKit.Open 6198
- 134.6 QLPreviewPanel.AddFile 6624
- 134.7 QLPreviewPanel.AddImage 6625
- 134.9 QLPreviewPanel.Clear 6627
- 134.15 QLPreviewPanel.GetTop 6633
- 134.17 QLPreviewPanel.Hide 6635
- 134.20 QLPreviewPanel.Resize 6638

Example Databases

- [Mac only/Icon and QuickLook/QuickLook Preview Panel](#)

Created 18th August 2014, last changed 15th August 2018.

134.9 QLPreviewPanel.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	Yes

MBS("QLPreviewPanel.Clear")

Result Returns OK or error.

Description

Please call this function always before you start to fill

This also deletes any temporary file created by QLPreviewPanel.AddPDF or QLPreviewPanel.AddImage.

See also

- [134.5 QLPreviewPanel.AddContainer](#) 6622
- [134.7 QLPreviewPanel.AddImage](#) 6625
- [134.8 QLPreviewPanel.AddPDF](#) 6626
- [134.17 QLPreviewPanel.Hide](#) 6635
- [134.19 QLPreviewPanel.Move](#) 6637
- [134.22 QLPreviewPanel.Show](#) 6641

Example Databases

- [Mac only/Icon and QuickLook/QuickLook Preview Panel](#)

134.9.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr7](#)
- [QLPreviewPanel functions for iOS](#)

Created 18th August 2014, last changed 14th August 2018.

134.10 QLPreviewPanel.CurrentPreviewItemIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	8.4	Yes	No	No	No	Yes

MBS("QLPreviewPanel.CurrentPreviewItemIndex")

Result Returns index or error.

Description

Can be empty if no index is set.

See also

- [134.11 QLPreviewPanel.CurrentPreviewItemPath](#) 6629
- [134.12 QLPreviewPanel.CurrentPreviewItemTitle](#) 6630
- [134.21 QLPreviewPanel.SetCurrentPreviewItemIndex](#) 6640

134.10.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr3](#)

Created 14th August 2018, last changed 15th August 2018.

134.11 QLPreviewPanel.CurrentPreviewItemPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	8.4	Yes	No	No	No	Yes

MBS("QLPreviewPanel.CurrentPreviewItemPath")

Result Returns OK or error.

Description

See also

- [134.10 QLPreviewPanel.CurrentPreviewItemIndex](#) 6628
- [134.12 QLPreviewPanel.CurrentPreviewItemTitle](#) 6630
- [134.21 QLPreviewPanel.SetCurrentPreviewItemIndex](#) 6640

134.11.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr3](#)

Created 14th August 2018, last changed 15th August 2018.

134.12 QLPreviewPanel.CurrentPreviewItemTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	8.4	Yes	No	No	No	Yes

MBS("QLPreviewPanel.CurrentPreviewItemTitle")

Result Returns OK or error.

Description

See also

- [134.10 QLPreviewPanel.CurrentPreviewItemIndex](#) 6628
- [134.11 QLPreviewPanel.CurrentPreviewItemPath](#) 6629
- [134.21 QLPreviewPanel.SetCurrentPreviewItemIndex](#) 6640

134.12.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr3](#)

Created 14th August 2018, last changed 15th August 2018.

134.13 QLPreviewPanel.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	No

MBS("QLPreviewPanel.GetHeight")

Result Returns height or error.

Description

See also

- 134.14 QLPreviewPanel.GetLeft 6632
- 134.15 QLPreviewPanel.GetTop 6633
- 134.16 QLPreviewPanel.GetWidth 6634

Created 18th August 2014, last changed 25th August 2014.

134.14 QLPreviewPanel.GetLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	No

MBS("QLPreviewPanel.GetLeft")

Result Returns position or error.

Description

See also

- 134.13 QLPreviewPanel.GetHeight 6631
- 134.15 QLPreviewPanel.GetTop 6633
- 134.16 QLPreviewPanel.GetWidth 6634
- 134.20 QLPreviewPanel.Resize 6638

Created 18th August 2014, last changed 25th August 2014.

134.15 QLPreviewPanel.GetTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	No

MBS("QLPreviewPanel.GetTop")

Result Returns top position or error.

Description

See also

- 134.8 QLPreviewPanel.AddPDF 6626
- 134.13 QLPreviewPanel.GetHeight 6631
- 134.14 QLPreviewPanel.GetLeft 6632
- 134.16 QLPreviewPanel.GetWidth 6634
- 134.20 QLPreviewPanel.Resize 6638
- 134.22 QLPreviewPanel.Show 6641

Created 18th August 2014, last changed 25th August 2014.

134.16 QLPreviewPanel.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	No

MBS("QLPreviewPanel.GetWidth")

Result Returns width or error.

Description

See also

- 134.13 QLPreviewPanel.GetHeight 6631
- 134.14 QLPreviewPanel.GetLeft 6632
- 134.15 QLPreviewPanel.GetTop 6633
- 134.20 QLPreviewPanel.Resize 6638

Created 18th August 2014, last changed 25th August 2014.

134.17 QLPreviewPanel.Hide

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	Yes

MBS("QLPreviewPanel.Hide")

Result Returns OK or error.

Description

Added iOS support for version 8.4.

See also

- [134.5 QLPreviewPanel.AddContainer](#) 6622
- [134.6 QLPreviewPanel.AddFile](#) 6624
- [134.8 QLPreviewPanel.AddPDF](#) 6626
- [134.9 QLPreviewPanel.Clear](#) 6627
- [134.19 QLPreviewPanel.Move](#) 6637
- [134.20 QLPreviewPanel.Resize](#) 6638
- [134.22 QLPreviewPanel.Show](#) 6641

Example Databases

- [Mac only/Icon and QuickLook/QuickLook Preview Panel](#)

134.17.1 Blog Entries

- [QLPreviewPanel functions for iOS](#)

Created 18th August 2014, last changed 14th August 2018.

134.18 QLPreviewPanel.IsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	Yes

MBS("QLPreviewPanel.IsVisible")

Result Returns 1 if visible or 0 if not.

Description

Added iOS support for version 8.4.

See also

- [134.5 QLPreviewPanel.AddContainer](#) 6622
- [134.6 QLPreviewPanel.AddFile](#) 6624
- [134.20 QLPreviewPanel.Resize](#) 6638

Example Databases

- [Mac only/Icon and QuickLook/QuickLook Preview Panel](#)

134.18.1 Blog Entries

- [QLPreviewPanel functions for iOS](#)

Created 18th August 2014, last changed 14th August 2018.

134.19 QLPreviewPanel.Move

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	No

MBS("QLPreviewPanel.Move"; X; Y { ; Duration })

Parameters

X

The new screen position. Distance from top/left edge of main screen in points.

10

Y

The new screen position. Distance from top/Left edge of main screen in points.

50

Duration

Optional

Optional the duration. Can be a value between 0.1 and 5.0. Use zero to disable.

0.5

Result Returns OK or error.

Description

You can use this method to have the panel side by side to your FileMaker layout window.

See also

- 134.9 QLPreviewPanel.Clear 6627
- 134.17 QLPreviewPanel.Hide 6635
- 134.20 QLPreviewPanel.Resize 6638
- 134.22 QLPreviewPanel.Show 6641

134.19.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr7](#)

Created 18th August 2014, last changed 26th October 2014.

134.20 QLPreviewPanel.Resize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	No

MBS("QLPreviewPanel.Resize"; Width; Height { ; NoAnimation; Duration })

Parameters

Width

The new width of the panel.

600

Height

The new height of the panel.

500

NoAnimation

Optional

Whether to avoid animation. Pass 1 to disable animation. Default is 0 to allow animation.

0

Duration

Optional

Only for Mac: the duration. Can be a value between 0.1 and 5.0.

0.5

Result Returns OK or error.

Description

See also

- 134.6 QLPreviewPanel.AddFile 6624
- 134.8 QLPreviewPanel.AddPDF 6626
- 134.14 QLPreviewPanel.GetLeft 6632
- 134.15 QLPreviewPanel.GetTop 6633
- 134.16 QLPreviewPanel.GetWidth 6634
- 134.17 QLPreviewPanel.Hide 6635
- 134.18 QLPreviewPanel.IsVisible 6636
- 134.19 QLPreviewPanel.Move 6637

134.20.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr7](#)

134.20. *QLPREVIEWPANEL.RESIZE*

6639

Created 18th August 2014, last changed 12nd July 2015.

134.21 QLPreviewPanel.SetCurrentPreviewItemIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	8.4	Yes	No	No	No	Yes

MBS("QLPreviewPanel.SetCurrentPreviewItemIndex"; Index)

Parameters

Index

The zero based index of the current item.

0

Result Returns OK or error.

Description

See also

- [134.10 QLPreviewPanel.CurrentPreviewItemIndex](#) 6628
- [134.11 QLPreviewPanel.CurrentPreviewItemPath](#) 6629
- [134.12 QLPreviewPanel.CurrentPreviewItemTitle](#) 6630

134.21.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr3](#)

Created 14th August 2018, last changed 15th August 2018.

134.22 QLPreviewPanel.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
134 QuickLook	4.3	Yes	No	No	No	Yes

MBS("QLPreviewPanel.Show")

Result Returns OK or error.

Description

Added iOS support for version 8.4.

See also [Icon.GetIconWithQuickLook](#) for just getting the preview as image.

See also

- [134.2 Icon.GetIcon](#) 6617
- [134.3 Icon.GetIconWithQuickLook](#) 6619
- [134.5 QLPreviewPanel.AddContainer](#) 6622
- [134.9 QLPreviewPanel.Clear](#) 6627
- [134.15 QLPreviewPanel.GetTop](#) 6633
- [134.17 QLPreviewPanel.Hide](#) 6635
- [134.19 QLPreviewPanel.Move](#) 6637

Example Databases

- [Mac only/Icon and QuickLook/QuickLook Preview Panel](#)

134.22.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr1](#)
- [QLPreviewPanel functions for iOS](#)

Created 18th August 2014, last changed 16th January 2019.

Chapter 135

RegEx

Regular expressions like in Perl.

135.1 RegEx.CaptureCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.CaptureCount"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.

\$regex

Result Returns number or error.

Description

Examples

Run query:

```
Set Variable [ $Pattern ; Value: "H(.*?)o (.)or(..)" ]
```

```
Set Variable [ $Text ; Value: "Hello World Test" ]
```

```
# Compile
```

```
Set Variable [ $Regex ; Value: MBS("RegEx.Compile"; $Pattern; "CaseLess") ]
```

```
If [ MBS("isError") ]
```

```
Show Custom Dialog [ $Regex ]
```

```
Exit Script [ Text Result: ]
```

```
End If
```

```
Set Variable [ $ExecuteResult ; Value: MBS("RegEx.Execute"; $Regex; $Text; "") ]
```

```
If [ MBS("IsError") = 0 ]  
Show Custom Dialog [ "Captures" ; MBS("Regex.CaptureCount"; $Regex) & " captures" ]  
End If  
# free last  
Set Variable [ $r ; Value: MBS("Regex.Free"; $Regex) ]
```

See also

- [124.6 IsError](#) 6266
- [135.2 Regex.Compile](#) 6645
- [135.3 Regex.Execute](#) 6648
- [135.5 Regex.Free](#) 6654
- [135.21 Regex.Substring](#) 6675

Example Databases

- [Regex/Regex](#)

Created 26th October 2014, last changed 25th November 2017.

135.2 RegEx.Compile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Compile"; Pattern; CompilerOptions)

Parameters

Pattern

The pattern to use.

"H(*)"

CompilerOptions

A number for the options to use. e.g. 1 for case insensitive or 512 for ungreedy. Add 2 for multiline. Can be given as text or number.

"multiline\$ungreedy"

Result Returns reference number or error.

Description

Returns the regular expression reference which you can then pass to other functions.

Remember to use RegEx.Free to free memory later.

You compile a pattern once. If you use RegEx.Execute several times on it, it may be worth using RegEx.Study for better performance.

Please use \r instead of \n for the pattern as FileMaker uses Mac line endings.

RegEx reference numbers are starting at 13000 and counting up for each new expression.

Compile option	Number	Description
Caseless	1	Do caseless matching
Multiline	2	^ and \$ match newlines within data
Dot All	4	. matches anything including NL
Extended	8	Ignore white space and # comments
Anchored	16	Force pattern anchoring
Dollar End Only	32	\$ not to match newline at end
Ungreedy	512	Invert greediness of quantifiers
No Auto Capture	4096	Disable numbered capturing parentheses (named ones available)
Auto Callout	16384	Compile automatic callouts
FirstLine	262144	Force matching to be before newline
Dup Names	524288	Allow duplicate names for subpatterns
Newline CR	1048576	Set CR as the newline sequence
Newline LF	2097152	Set LF as the newline sequence
Newline CRLF	3145728	Set CRLF as the newline sequence
Newline Any	4194304	Recognize any Unicode newline sequence
Newline Any CRLF	5242880	Recognize CR, LF, and CRLF as newline sequences
BSR Any CRLF	8388608	\R matches only CR, LF, or CRLF
BSR Unicode	16777216	\R matches all Unicode line endings
JavaScript Compatible	33554432	JavaScript compatibility
No start optimize	67108864	Disable match-time start optimizations

Please pass sum of the numbers to select options.

Examples

Compile with double escapement:

```
Set Variable [ $regex ; Value: MBS("RegEx.Compile"; "\\\""; 512+1) ]
```

Find matches in multiline text:

```
Let ( [
pattern = "^GR.";
text = "GR1§GR2 §GR3 ";
CompileOptions = 2 /* multiline */ + 1 /* caseless */ + 4194304 /* newline any */;
ExecuteOptions = 4194304 /* newline any */;
regex = MBS("RegEx.Compile"; pattern; CompileOptions );
result = MBS( "RegEx.FindMatches"; regex; text; ExecuteOptions ; 0 );
r = MBS("RegEx.Free"; regex)
] ; result )
```

Loop and find all matches for pattern:

```
Set Variable [ $pattern ; Value: "(USt\-ID:? | USt\-IDNR\.:? | Umsatzsteuer\-ID:? | VAT\-ID:?) [ \s ] ?(DE) [ \s ] ?( [ 0-9 ] { 9 } )" ]
Set Variable [ $ExecuteOptions ; Value: 0 ]
Set Variable [ $CompileOptions ; Value: "caseless" ]
Set Variable [ $regex ; Value: MBS("RegEx.Compile"; $Pattern; $CompileOptions) ]
Set Variable [ $offset ; Value: 0 ]
```

Loop

```
Set Variable [ $r ; Value: MBS("RegEx.Execute"; $regex; RegEx::Text; $ExecuteOptions; $offset) ]
Exit Loop If [ $r < 4 ]
Set Variable [ $s1 ; Value: MBS("RegEx.Substring"; $RegEx; 1) ]
Set Variable [ $s2 ; Value: MBS("RegEx.Substring"; $RegEx; 2) ]
Set Variable [ $s3 ; Value: MBS("RegEx.Substring"; $RegEx; 3) ]
Show Custom Dialog [ $s1 & $s2 & $s3 ]
Exit Loop If [ MBS("IsError") ]
Set Variable [ $offset ; $offset + Value: GetAsNumber(GetValue(MBS("RegEx.Results"; $regex); 2)) ]
End Loop
Set Variable [ $r ; Value: MBS("RegEx.Free"; $RegEx) ]
```

See also

- 135.1 RegEx.CaptureCount 6643
- 135.3 RegEx.Execute 6648
- 135.4 RegEx.FindMatches 6651
- 135.5 RegEx.Free 6654

<i>135.2. REGEX.COMPILE</i>	6647
• 135.9 RegEx.MinimumLength	6660
• 135.10 RegEx.NameCount	6661
• 135.11 RegEx.NamedSubstring	6662
• 135.17 RegEx.Results	6670
• 135.18 RegEx.Size	6672
• 135.20 RegEx.Study	6674

Example Databases

- [RegEx/RegEx Find all matches in text](#)
- [RegEx/RegEx](#)

Created 26th October 2014, last changed 29th June 2018.

135.3 RegEx.Execute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Execute"; RegExRef; Text; ExecuteOptions { ; Offset })

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.

\$regex

Text

The text to search.

"Hello"

ExecuteOptions

The options for executing. Can be given as text or number.

0

Offset

Optional

Optional the offset in the text to start. Can be in range from 0 to length(text).

0

Result Returns result or error.

Description

You need to compile pattern before with RegEx.Compile function.

Returns the number of results.

Use RegEx.Results function to get list of results.

Please pass sum of the numbers to select options.

Examples

Run query and show substrings:

```
Set Variable [ $Pattern ; Value: "H(.*?)o (.)or(.)" ]
```

```
Set Variable [ $Text ; Value: "Hello World Test" ]
```

```
# Compile
```

```
Set Variable [ $Regex ; Value: MBS("RegEx.Compile"; $Pattern; "CaseLess") ]
```

```
If [ MBS("isError") ]
```

```
Show Custom Dialog [ $Regex ]
```

```
Exit Script [ Text Result: ]
```

```
End If
```

```
Set Variable [ $ExecuteResult ; Value: MBS("RegEx.Execute"; $Regex; $Text; "" ) ]
```

```
If [ MBS("IsError") = 0 ]
```

```
Show Custom Dialog [ "Captures" ; MBS("RegEx.CaptureCount"; $Regex) ]
```

```
Show Custom Dialog [ "Substrings" ; MBS("RegEx.Substring"; $Regex) & $&
```

Execute option	Number	Description
Anchored	16	Force pattern anchoring
Not BOL	128	Subject string is not the beginning of a line
Not EOL	256	Subject string is not the end of a line
Not Empty	1024	An empty string is not a valid match
Partial	32768	Allow partial results.
Newline CR	1048576	Set CR as the newline sequence
Newline LF	2097152	Set LF as the newline sequence
Newline CRLF	3145728	Set CRLF as the newline sequence
Newline Any	4194304	Recognize any Unicode newline sequence
Newline Any CRLF	5242880	Recognize CR, LF, and CRLF as newline sequences
BSR Any CRLF	8388608	\R matches only CR, LF, or CRLF
BSR Unicode	16777216	\R matches all Unicode line endings
No start optimize	67108864	Disable match-time start optimizations
Partial Hard	134217728	Return partial result if found before .
Not Empty At Start	268435456	An empty string at the start of the subject is not a valid match
UCP	536870912	Use Unicode properties for \d, \w, etc.

```
MBS("RegEx.Substring"; $RegEx; 1) & $&
MBS("RegEx.Substring"; $RegEx; 2) & $&
MBS("RegEx.Substring"; $RegEx; 3) ]
End If
# free last
Set Variable [ $r ; Value: MBS("RegEx.Free"; $RegEx) ]
```

Loop and find all matches for pattern:

```
Set Variable [ $pattern ; Value: "(USt\-\?ID:? | USt\-\?IdNR\.\.? | Umsatzsteuer\-\?ID:? | VAT\-\?ID:?) [ \s ] ?(DE) [ \s ] ?( [ 0-9 ] { 9 } )" ]
Set Variable [ $ExecuteOptions ; Value: 0 ]
Set Variable [ $CompileOptions ; Value: "caseless" ]
Set Variable [ $regex ; Value: MBS("RegEx.Compile"; $Pattern; $CompileOptions) ]
Set Variable [ $offset ; Value: 0 ]
```

Loop

```
Set Variable [ $r ; Value: MBS("RegEx.Execute"; $regex; RegEx::Text; $ExecuteOptions; $offset) ]
Exit Loop If [ $r < 4 ]
Set Variable [ $s1 ; Value: MBS("RegEx.Substring"; $RegEx; 1) ]
Set Variable [ $s2 ; Value: MBS("RegEx.Substring"; $RegEx; 2) ]
Set Variable [ $s3 ; Value: MBS("RegEx.Substring"; $RegEx; 3) ]
Show Custom Dialog [ $s1 & $& $s2 & $& $s3 ]
Exit Loop If [ MBS("IsError") ]
Set Variable [ $offset ; $offset + Value: GetAsNumber(GetValue(MBS("RegEx.Results"; $regex); 2)) ]
End Loop
Set Variable [ $r ; Value: MBS("RegEx.Free"; $RegEx) ]
```

See also

- 124.6 IsError 6266
- 135.1 RegEx.CaptureCount 6643
- 135.2 RegEx.Compile 6645
- 135.5 RegEx.Free 6654
- 135.11 RegEx.NamedSubstring 6662
- 135.17 RegEx.Results 6670
- 135.20 RegEx.Study 6674
- 135.21 RegEx.Substring 6675

Example Databases

- [RegEx/RegEx](#)

135.3.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr4](#)

Created 26th October 2014, last changed 29th June 2018.

135.4 RegEx.FindMatches

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	5.1	Yes	Yes	Yes	Yes	Yes

```
MBS( "RegEx.FindMatches"; RegExRef; Text; ExecuteOptions { ; ReturnWholeMatch; NoReturnEnding } )
```

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.

\$regex

Text

The text to search.

"Hello"

ExecuteOptions

The options for executing. Can be given as text or number.

0

ReturnWholeMatch

Optional

Pass 1 to return whole match including text you have in the pattern. Else pass 0 to get only the text from your captures.

1

NoReturnEnding

Optional

Pass 1 to have no extra newline character on the end of the returned list. Default is 0 to include one to easily concat lists.

1

Result Returns list or error.

Description

Can be used for example to find tokens or placeholders in a text.

If your search pattern has no captures, please pass 1 for ReturnWholeMatch or you won't see anything in result.

Please pass sum of the numbers to select options.

Examples

Search for numbers in text:

```
Set Variable [ $regex; Value:MBS("RegEx.Compile"; "(\\d+)\\D"; 512+1) ]
```

```
Set Variable [ $result; MBS("RegEx.FindMatches"; $regex; "aa 123 abc"; 0; 0) ]
```

```
Set Variable [ $r; Value:MBS("RegEx.Free"; $regex) ]
```

Execute option	Number	Description
Anchored	16	Force pattern anchoring
Not BOL	128	Subject string is not the beginning of a line
Not EOL	256	Subject string is not the end of a line
Not Empty	1024	An empty string is not a valid match
Partial	32768	Allow partial results.
Newline CR	1048576	Set CR as the newline sequence
Newline LF	2097152	Set LF as the newline sequence
Newline CRLF	3145728	Set CRLF as the newline sequence
Newline Any	4194304	Recognize any Unicode newline sequence
Newline Any CRLF	5242880	Recognize CR, LF, and CRLF as newline sequences
BSR Any CRLF	8388608	\R matches only CR, LF, or CRLF
BSR Unicode	16777216	\R matches all Unicode line endings
No start optimize	67108864	Disable match-time start optimizations
Partial Hard	134217728	Return partial result if found before .
Not Empty At Start	268435456	An empty string at the start of the subject is not a valid match
UCP	536870912	Use Unicode properties for \d, \w, etc.

Find cd and 34 in the following text:

```
Set Variable [ $regex; Value:MBS("RegEx.Compile"; "<code>..(..)</code>"; 512+1) ]
Set Variable [ $result; Value:MBS("RegEx.FindMatches"; $regex; "<code>abcdef</code>§<code>123456</code>";
0; 0) ]
Set Variable [ $r; Value:MBS("RegEx.Free"; $regex) ]
```

Find matches in multiline text:

```
Let ( [
pattern = "^GR.";
text = "GR1$GR2 $GR3 ";
CompileOptions = 2 /* multiline */ + 1 /* caseless */ + 4194304 /* newline any */;
ExecuteOptions = 4194304 /* newline any */;
regex = MBS("RegEx.Compile"; pattern; CompileOptions );
result = MBS( "RegEx.FindMatches"; regex; text; ExecuteOptions ; 0 );
r = MBS("RegEx.Free"; regex)
]; result )
```

See also

- 135.2 RegEx.Compile 6645
- 135.5 RegEx.Free 6654

Example Databases

- [RegEx/RegEx Find all matches in text](#)

135.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)
- [MBS FileMaker Plugin, version 8.2pr2](#)
- [MBS FileMaker Plugin, version 7.5pr8](#)
- [MBS FileMaker Plugin, version 5.1pr4](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 15th March 2015, last changed 27th October 2019.

135.5 RegEx.Free

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Free"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.
\$regex

Result Returns OK or error.

Description

Examples

Free regex:

```
Set Variable [ $r ; Value: MBS("RegEx.Free"; $RegEx) ]
```

See also

- [135.1 RegEx.CaptureCount](#) 6643
- [135.2 RegEx.Compile](#) 6645
- [135.3 RegEx.Execute](#) 6648
- [135.4 RegEx.FindMatches](#) 6651
- [135.10 RegEx.NameCount](#) 6661
- [135.13 RegEx.Pattern](#) 6664
- [135.17 RegEx.Results](#) 6670
- [135.21 RegEx.Substring](#) 6675

Example Databases

- [RegEx/RegEx Find all matches in text](#)
- [RegEx/RegEx](#)

Created 26th October 2014, last changed 25th November 2017.

135.6 RegEx.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	5.3	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.List")

Result Returns list or error.

Description

This helps debugging, especially finding scripts which do not release their objects properly.

135.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr4](#)

Created 21st September 2015, last changed 21st September 2015.

135.7 RegEx.Match

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Match"; Pattern; Text; CompilerOptions; ExecuteOptions)

Parameters

Pattern

The pattern to use.

"H(.*)"

Text

The text to search.

"Hello"

CompilerOptions

A number for the options to use. e.g. 1 for case insensitive or 512 for ungreedy. Can be given as text or number.

512+1

ExecuteOptions

The options for executing. Can be given as text or number.

0

Result Returns 0, 1 or error.

Description

This compiles the pattern, executes it and looks if we have a match or not.

Returns 1 if matches and 0 if not.

Please pass sum of the numbers to select options.

Examples

Match Hello with pattern:

```
MBS( "RegEx.Match"; "H(.*)o"; "Hello")
```

Match case less:

```
MBS( "RegEx.Match"; "H(.*)o"; "hello"; 1)
```

See also

- 135.8 RegEx.MatchList

6658

Example Databases

Option	Number	Description
Caseless	1	Do caseless matching
CaseSensitive	0	Do case sensitive matching
Multiline	2	^and \$ match newlines within data
SingleLine	0	^and \$ do not match newlines within data
DotAll	4	. matches anything including NL
Extended	8	Ignore white space and # comments
Anchored	16	Force pattern anchoring
DollarEndOnly	32	\$ not to match newline at end
NotBOL	128	Subject string is not the beginning of a line
NotEOL	256	Subject string is not the end of a line
Ungreedy	512	Invert greediness of quantifiers
Greedy	0	Be greedy.
NotEmpty	1024	An empty string is not a valid match
Empty	0	An empty string is a valid match
AutoCapture	0	Enable numbered capturing parentheses
NoAutoCapture	4096	Disable numbered capturing parentheses (named ones available)
AutoCallout	16384	Compile automatic callouts
NoAutoCallout	0	Don't compile automatic callouts
Partial	32768	Allow partial results.
FirstLine	262144	Force matching to be before newline
DupNames	524288	Allow duplicate names for subpatterns
NewlineCR	1048576	Set CR as the newline sequence
NewlineLF	2097152	Set LF as the newline sequence
NewlineCRLF	3145728	Set CRLF as the newline sequence
NewlineAny	4194304	Recognize any Unicode newline sequence
NewlineAnyCRLF	5242880	Recognize CR, LF, and CRLF as newline sequences
BSRAnyCRLF	8388608	\R matches only CR, LF, or CRLF
BSRUnicode	16777216	\R matches all Unicode line endings
JavaScriptCompatible	33554432	JavaScript compatibility
NoStartOptimize	67108864	Disable match-time start optimizations
PartialHard	134217728	Return partial result if found before .
NotEmptyAtStart	268435456	An empty string at the start of the subject is not a valid match
UCP	536870912	Use Unicode properties for \d, \w, etc.

- [RegEx/RegEx Simple Match](#)

135.7.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr5](#)

Created 26th October 2014, last changed 17th October 2017.

135.8 RegEx.MatchList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.MatchList"; Pattern; List; CompilerOptions; ExecuteOptions)

Parameters

Pattern

The pattern to use.

"H(*)"

List

The list of texts to search.

"Hello"

CompilerOptions

A number for the options to use. e.g. 1 for case insensitive or 512 for ungreedy. Can be given as text or number.

512+1

ExecuteOptions

The options for executing. Can be given as text or number.

0

Result Returns list or error.

Description

This compiles the pattern, executes it and looks if we have a match or not for each list item. Returns the list items which match.

Please pass sum of the numbers to select options.

Examples

Match Hello with pattern:

MBS("RegEx.MatchList"; "H(*)o"; "Hello\$Test\$World\$House\$Test")

See also

- 135.7 RegEx.Match

6656

135.8.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr9](#)

Created 2nd November 2014, last changed 17th October 2017.

Compile option	Number	Description
Caseless	1	Do caseless matching
Multiline	2	^and \$ match newlines within data
Dot All	4	. matches anything including NL
Extended	8	Ignore white space and # comments
Anchored	16	Force pattern anchoring
Dollar End Only	32	\$ not to match newline at end
Ungreedy	512	Invert greediness of quantifiers
No Auto Capture	4096	Disable numbered capturing parentheses (named ones available)
Auto Callout	16384	Compile automatic callouts
FirstLine	262144	Force matching to be before newline
Dup Names	524288	Allow duplicate names for subpatterns
Newline CR	1048576	Set CR as the newline sequence
Newline LF	2097152	Set LF as the newline sequence
Newline CRLF	3145728	Set CRLF as the newline sequence
Newline Any	4194304	Recognize any Unicode newline sequence
Newline Any CRLF	5242880	Recognize CR, LF, and CRLF as newline sequences
BSR Any CRLF	8388608	\R matches only CR, LF, or CRLF
BSR Unicode	16777216	\R matches all Unicode line endings
JavaScript Compatible	33554432	JavaScript compatibility
No start optimize	67108864	Disable match-time start optimizations

Execute option	Number	Description
Anchored	16	Force pattern anchoring
Not BOL	128	Subject string is not the beginning of a line
Not EOL	256	Subject string is not the end of a line
Not Empty	1024	An empty string is not a valid match
Partial	32768	Allow partial results.
Newline CR	1048576	Set CR as the newline sequence
Newline LF	2097152	Set LF as the newline sequence
Newline CRLF	3145728	Set CRLF as the newline sequence
Newline Any	4194304	Recognize any Unicode newline sequence
Newline Any CRLF	5242880	Recognize CR, LF, and CRLF as newline sequences
BSR Any CRLF	8388608	\R matches only CR, LF, or CRLF
BSR Unicode	16777216	\R matches all Unicode line endings
No start optimize	67108864	Disable match-time start optimizations
Partial Hard	134217728	Return partial result if found before .
Not Empty At Start	268435456	An empty string at the start of the subject is not a valid match
UCP	536870912	Use Unicode properties for \d, \w, etc.

135.9 RegEx.MinimumLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.MinimumLength"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.
\$regex

Result Returns number or error.

Description

Returns -1 if not applicable.

See also

- 135.2 RegEx.Compile

6645

Example Databases

- [RegEx/RegEx](#)

Created 26th October 2014, last changed 26th October 2014.

135.10 RegEx.NameCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.NameCount"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.
\$regex

Result Returns number or error.

Description

Examples

Use a named group:

```
Set Variable [ $Pattern ; Value: "H(?P<MyName>.*o)" ]
Set Variable [ $Regex ; Value: MBS("RegEx.Compile"; $Pattern; "CaseLess") ]
Show Custom Dialog [ "Namecount" ; MBS( "RegEx.nameCount"; $Regex ) ]
Set Variable [ $r ; Value: MBS("RegEx.Free"; $Regex) ]
```

See also

- 135.2 RegEx.Compile 6645
- 135.5 RegEx.Free 6654

Example Databases

- [RegEx/RegEx](#)

Created 26th October 2014, last changed 25th November 2017.

135.11 RegEx.NamedSubstring

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.NamedSubstring"; RegExRef; Name)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.

\$regex

Name

The name of the substring to find.

"test"

Result Returns OK or error.

Description

Examples

Query text of named substring

```
$regex = MBS("RegEx.Compile"; "H(?P<name>.*); 0)
```

```
$r = MBS("RegEx.Execute"; "Hello")
```

```
$text = MBS("RegEx.NamedSubstring"; $regex; "name")
```

See also

- 135.2 RegEx.Compile 6645
- 135.3 RegEx.Execute 6648

Created 26th October 2014, last changed 26th October 2014.

135.12 RegEx.Options

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Options"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.
\$regex

Result Returns number or error.

Description

Always returns numeric options value.

See also

- 135.2 RegEx.Compile

6645

Created 26th October 2014, last changed 17th October 2017.

135.13 RegEx.Pattern

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Pattern"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.
\$regex

Result Returns OK or error.

Description

Examples

Query pattern:

```
Set Variable [ $Pattern ; Value: "H(.*?)o (.)or(.)" ]
```

```
Set Variable [ $Regex ; Value: MBS("RegEx.Compile"; $Pattern; "CaseLess") ]
```

```
Show Custom Dialog [ "Pattern used" ; MBS( "RegEx.Pattern"; $RegEx ) ]
```

```
Set Variable [ $r ; Value: MBS("RegEx.Free"; $RegEx) ]
```

See also

- 135.2 RegEx.Compile 6645
- 135.5 RegEx.Free 6654

Created 26th October 2014, last changed 25th November 2017.

135.14 RegEx.Quote

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	7.5	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Quote"; Text)

Parameters

Text

The text to quote.

"Hello."

Result Returns text or error.

Description

Escapes all potentially meaningful regexp characters in text. The returned string, used as a regular expression, will exactly match the original string. For example, "1.5-2.0?" may become: "1\.5\-2\.0\?".

Note QuoteMeta behaves the same as perl's QuoteMeta function, **except** that it escapes the NUL character (`\0`) as backslash + 0, rather than backslash + NUL.

Examples

Escape a test string:

Show Custom Dialog ["RegEx escaped" ; MBS("RegEx.Quote"; "Hello? *test* 123")]

Example result: "Hello\?*\test*\123"

135.14.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 17th October 2017, last changed 25th November 2017.

135.15 RegEx.Replace

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	7.5	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Replace"; Text; Pattern; Rewrite { ; Options; All })

Parameters

Text

The text to use.

"hello world"

Pattern

The pattern to use.

"1+"

Rewrite

The output pattern.

"\1\1"

Options

Optional

The PCRE options. Can be given as text or number.

0

All

Optional

Whether to replace all occurrences. Pass 1 to replace all or 0 to replace once. Default 0.

0

Result Returns new text or error.

Description

You can replace the first match of pattern in text with rewrite pattern. Within rewrite pattern, backslash-escaped digits (\1 to \9) can be used to insert text matching corresponding parenthesized group from the pattern. \0 in rewrite refers to the entire matching text.

Examples

Replace:

```
MBS( "RegEx.Replace"; "yabba dabba doo"; "b+"; "d" )
```

Example result: "yadba dabba doo"

See also

- 135.16 RegEx.ReplaceAll

Option	Number	Description
Caseless	1	Do caseless matching
CaseSensitive	0	Do case sensitive matching
Multiline	2	^and \$ match newlines within data
SingleLine	0	^and \$ do not match newlines within data
DotAll	4	. matches anything including NL
Extended	8	Ignore white space and # comments
Anchored	16	Force pattern anchoring
DollarEndOnly	32	\$ not to match newline at end
NotBOL	128	Subject string is not the beginning of a line
NotEOL	256	Subject string is not the end of a line
Ungreedy	512	Invert greediness of quantifiers
Greedy	0	Be greedy.
NotEmpty	1024	An empty string is not a valid match
Empty	0	An empty string is a valid match
AutoCapture	0	Enable numbered capturing parentheses
NoAutoCapture	4096	Disable numbered capturing parentheses (named ones available)
AutoCallout	16384	Compile automatic callouts
NoAutoCallout	0	Don't compile automatic callouts
Partial	32768	Allow partial results.
FirstLine	262144	Force matching to be before newline
DupNames	524288	Allow duplicate names for subpatterns
NewlineCR	1048576	Set CR as the newline sequence
NewlineLF	2097152	Set LF as the newline sequence
NewlineCRLF	3145728	Set CRLF as the newline sequence
NewlineAny	4194304	Recognize any Unicode newline sequence
NewlineAnyCRLF	5242880	Recognize CR, LF, and CRLF as newline sequences
BSRAnyCRLF	8388608	\R matches only CR, LF, or CRLF
BSRUnicode	16777216	\R matches all Unicode line endings
JavaScriptCompatible	33554432	JavaScript compatibility
NoStartOptimize	67108864	Disable match-time start optimizations
PartialHard	134217728	Return partial result if found before .
NotEmptyAtStart	268435456	An empty string at the start of the subject is not a valid match
UCP	536870912	Use Unicode properties for \d, \w, etc.

135.15.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 17th October 2017, last changed 17th October 2017.

135.16 RegEx.ReplaceAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	7.5	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.ReplaceAll"; Text; Pattern; Rewrite { ; Options })

Parameters

Text

The text to use.

"hello world"

Pattern

The pattern to use.

"1+"

Rewrite

The output pattern.

"\1\1"

Options

Optional

The PCRE options. Can be given as text or number.

0

Result Returns new text or error.

Description

You can replace the all occurrences of pattern in text with rewrite pattern. Within rewrite pattern, backslash-escaped digits (\1 to \9) can be used to insert text matching corresponding parenthesized group from the pattern. \0 in rewrite refers to the entire matching text.

Replacements are not subject to re-matching.

Examples

Replace all:

MBS("RegEx.ReplaceAll"; "yabba dabba doo"; "b+"; "d")

Example result: "yadda dadda doo"

Replace all greedy:

MBS("RegEx.ReplaceAll"; "yabba dabba doo"; "b+"; "d"; "greedy")

Example result: "yada dada doo"

Replace links with html:

MBS("RegEx.ReplaceAll"; "This is a link to the Monkeybread Software site: <http://www.mbsplugins.eu/>

where Filemaker solutions can be found.”; ”(https?:// [\w./] +)”; ”\1”; ”case-less\$greedy”)

Example result: This is a link to the Monkeybread Software site: http://www.mbsplugins.eu/where Filemaker solutions can be found.

Replace all with in greek texts:

MBS(”Regex.ReplaceAll”; ”I test test”; ”([\p { Greek } \p { Latin }] +)(\W*)”; ”\1\2”)

See also

- 135.15 RegEx.Replace 6666
- 164.58 Text.ReplaceAll 7856

Example Databases

- [CURL/Email/IMAP Email](#)
- [WebViewer/Text To WebViewer](#)

135.16.1 Blog Entries

- [Text to Webviewer Script for FileMaker](#)
- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 17th October 2017, last changed 23th July 2018.

135.17 RegEx.Results

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Results"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.

\$regex

Result Returns OK or error.

Description

The result are offsets into the text to search. Two for the whole match followed by 2 for each sub pattern.

Examples

Loop and find all matches for pattern:

```
Set Variable [ $pattern ; Value: "(USt\-ID:? | USt\-IdNR\.:? | Umsatzsteuer\-ID:? | VAT\-ID:?) [ \s ] ?(DE) [ \s ] ?( [ 0-9 ] { 9 } )" ]
Set Variable [ $ExecuteOptions ; Value: 0 ]
Set Variable [ $CompileOptions ; Value: "caseless" ]
Set Variable [ $regex ; Value: MBS("RegEx.Compile"; $Pattern; $CompileOptions) ]
Set Variable [ $offset ; Value: 0 ]
```

Loop

```
Set Variable [ $r ; Value: MBS("RegEx.Execute"; $regex; RegEx::Text; $ExecuteOptions; $offset) ]
Exit Loop If [ $r < 4 ]
Set Variable [ $s1 ; Value: MBS("RegEx.Substring"; $RegEx; 1) ]
Set Variable [ $s2 ; Value: MBS("RegEx.Substring"; $RegEx; 2) ]
Set Variable [ $s3 ; Value: MBS("RegEx.Substring"; $RegEx; 3) ]
Show Custom Dialog [ $s1 & $s2 & $s3 ]
Exit Loop If [ MBS("IsError") ]
Set Variable [ $offset ; $offset + Value: GetAsNumber(GetValue(MBS("RegEx.Results"; $regex); 2)) ]
End Loop
Set Variable [ $r ; Value: MBS("RegEx.Free"; $RegEx) ]
```

See also

- 124.6 IsError 6266
- 135.2 RegEx.Compile 6645
- 135.3 RegEx.Execute 6648
- 135.5 RegEx.Free 6654

135.17. *REGEX.RESULTS*

6671

- 135.21 RegEx.Substring

6675

Created 26th October 2014, last changed 29th June 2018.

135.18 RegEx.Size

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Size"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.
\$regex

Result Returns OK or error.

Description

See also

- 135.2 RegEx.Compile

6645

Example Databases

- [RegEx/RegEx](#)

Created 26th October 2014, last changed 26th October 2014.

135.19 RegEx.StringNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.StringNumber"; RegExRef; Name)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.

\$regex

Name

The name of the substring to find.

"test"

Result Returns number or error.

Description

Examples

Test with a named substring:

```
$regex = MBS("RegEx.Compile"; "H(?P<name>.*o)"; 0)
```

```
$index = MBS("RegEx.StringNumber"; $regex; "name")
```

```
# index is now 1 as this is first substring.
```

See also

- 135.2 RegEx.Compile

135.20 RegEx.Study

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Study"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.
\$regex

Result Returns OK or error.

Description

You can call this if you plan to call RegEx.Execute often.

Examples

Study regex:

Set Variable [\$r ; Value: MBS("RegEx.Study"; \$RegEx)]

See also

- [135.2 RegEx.Compile](#) 6645
- [135.3 RegEx.Execute](#) 6648

Example Databases

- [RegEx/RegEx](#)

Created 26th October 2014, last changed 25th November 2017.

135.21 RegEx.Substring

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Substring"; RegExRef; Index)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.

\$regex

Index

The index for the substring.

0

Result Returns text or error.

Description

Index 0 gives whole match and index from 1 to RegEx.CaptureCount gives substrings matched.

Examples

Find seller ID in an URL:

```
Let ( [
pattern = "^http.*\?.*& seller=(.*)$";
text = "https://www.example.com.com/gp/aag/main/ref=olp__merch__name__2?ie=UTF8& astn=B8J070KLDO&
isFulfilled=1& seller=A2XKMLD9HIY1T";

regex = MBS( "RegEx.Compile"; pattern; 512+1 );
r = MBS( "RegEx.Execute"; regex; text; 0 );
r = MBS( "RegEx.Substring"; regex; 1 );
f = MBS( "RegEx.Free"; regex )
]; r )
```

See also

- 135.1 RegEx.CaptureCount 6643
- 135.2 RegEx.Compile 6645
- 135.3 RegEx.Execute 6648
- 135.5 RegEx.Free 6654
- 135.17 RegEx.Results 6670
- 135.22 RegEx.SubstringList 6677

Example Databases

- [RegEx/RegEx](#)

Created 26th October 2014, last changed 9th June 2017.

135.22 RegEx.SubstringList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.SubstringList"; RegExRef)

Parameters

RegExRef

The reference number for the regular expression returned from RegEx.Compile.
\$regex

Result Returns list or error.

Description

First item in the list is the whole match, followed by other lines for each substring.

See also

- 135.2 RegEx.Compile 6645
- 135.21 RegEx.Substring 6675

Example Databases

- [RegEx/RegEx](#)

Created 26th October 2014, last changed 26th October 2014.

135.23 RegEx.Version

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
135 RegEx	4.4	Yes	Yes	Yes	Yes	Yes

MBS("RegEx.Version")

Result Returns version.

Description

e.g. "8.33 2013-05-28"

Examples

Query version:

MBS("RegEx.Version")

Created 26th October 2014, last changed 26th October 2014.

Chapter 136

Registry

Windows Registry functions.

136.1 Registry.CreateKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.CreateKey"; Path; Name)

Parameters

Path

The path to the parent registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.

"Users\test"

Name

The name of the new key.

"test"

Result Returns OK or error.

Description

Does not return an error, if such a key exists already, so you can

Examples

Creates a key:

MBS("Registry.CreateKey"; "CurrentUser"; "Test")

6680

Creates key and intermediate ones:

```
MBS( "Registry.CreateKey"; "CurrentUser"; "Test\MyApp\MyPref" )
```

See also

- 136.2 Registry.DeleteKey

6681

Created 20th March 2017, last changed 20th March 2017.

136.2 Registry.DeleteKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.DeleteKey"; Path; Name)

Parameters

Path

The path to the parent registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.

"Users\test"

Name

The name of the key to delete.

"test"

Result Returns OK or error.

Description

Examples

Delete test key:

```
MBS( "Registry.DeleteKey"; "CurrentUser"; "Test")
```

Delete a key in a path:

```
MBS( "Registry.DeleteKey"; "CurrentUser\Test\MyApp"; "MyPref")
```

See also

- 136.1 Registry.CreateKey 6679
- 136.3 Registry.DeleteTree 6682
- 136.4 Registry.DeleteValue 6683
- 136.5 Registry.FlushKey 6684

Created 20th March 2017, last changed 20th March 2017.

136.3 Registry.DeleteTree

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.DeleteTree"; Path)

Parameters

Path

The path to the registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.
"Users\test"

Result Returns OK or error.

Description

Not available on Windows XP. Works on Windows Vista or newer and Windows Server 2008 or newer.

Examples

Deletes a tree:

```
MBS( "Registry.DeleteTree"; "CurrentUser\Test")
```

See also

- 136.2 Registry.DeleteKey 6681
- 136.4 Registry.DeleteValue 6683

Created 20th March 2017, last changed 25th May 2017.

136.4 Registry.DeleteValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.DeleteValue"; Path; Name)

Parameters

Path

The path to the parent registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.

"Users\test"

Name

The name of the value to delete.

"Hello"

Result Returns OK or error.

Description

Examples

Delete a value:

MBS("Registry.DeleteValue"; "CurrentUser\Test"; "Hello")

See also

- 136.2 Registry.DeleteKey 6681
- 136.3 Registry.DeleteTree 6682
- 136.6 Registry.GetValue 6685
- 136.10 Registry.SetValue 6690

Created 20th March 2017, last changed 20th March 2017.

136.5 Registry.FlushKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.FlushKey"; Path)

Parameters

Path

The path to the registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.
"Users\test"

Result Returns OK or error.

Description

See also

- 136.2 Registry.DeleteKey 6681
- 136.8 Registry.ListKeys 6688

Created 20th March 2017, last changed 20th March 2017.

136.6 Registry.GetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.GetValue"; Path; Name)

Parameters

Path

The path to the parent registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.

"Users\test"

Name

The name of the value.

"Hello"

Result Returns value or error.

Description

We return Text, Link or ExpandText as text.

Binary is returned hex encoded.

DWORD or QWORD is returned as numbers.

Lists are converted to FileMaker list.

Examples

Query value:

```
MBS( "Registry.GetValue"; "CurrentUser\Test"; "Hello")
```

Query FileMaker's printer settings:

```
MBS( "Registry.GetValue"; "HKEY_CURRENT_USER\SOFTWARE\FileMaker\FileMaker Pro Advanced\16.0\Preferences"; "Printer")
```

Query Windows product name:

```
MBS( "Registry.GetValue"; "HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion"; "ProductName")
```

Query user name:

```
MBS( "Registry.GetValue"; "HKEY_CURRENT_USER\SOFTWARE\FileMaker\FileMaker Pro Advanced\16.0\Preferences"; "User Name")
```

Query FileMaker Cache Size:

```
MBS( "Registry.GetValue"; "HKEY_CURRENT_USER\SOFTWARE\FileMaker\FileMaker Pro Advanced\16.0\Preferences"; "Cache Size")
```

Query whether we have FileMaker Pro Advanced 17:

```
MBS( "Registry.GetValue"; "HKEY_CURRENT_USER\SOFTWARE\FileMaker\FileMaker Pro Advanced\17.0\Preferences"; "Use Advanced Tools")
```

See also

- 136.4 Registry.DeleteValue 6683
- 136.7 Registry.GetValueType 6687
- 136.9 Registry.ListValues 6689
- 136.10 Registry.SetValue 6690

Created 20th March 2017, last changed 28th November 2019.

136.7 Registry.GetValueType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.GetValueType"; Path; Name)

Parameters**Path**

The path to the parent registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.

"Users\test"

Name

The name of the value.

"Hello"

Result Returns value or error.

Description

Value can be none, text, ExpandText, Binary, DWORD, DWORD BigEndian, Link, List, ResourceList, FullResourceDescriptor, ResourceRequirementsList or QWORD.

DWORD is a 32-bit number and QWORD a 64-bit number.

Examples

Queries the value type:

MBS("Registry.GetValueType"; "CurrentUser\Test"; "Hello")

See also

- 136.6 Registry.GetValue 6685
- 136.10 Registry.SetValue 6690

Created 20th March 2017, last changed 20th March 2017.

136.8 Registry.ListKeys

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.ListKeys"; Path)

Parameters

Path

The path to the registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.
"Users\test"

Result Returns list or error.

Description

Examples

Lists all keys in CurrentUser:

MBS("Registry.ListKeys"; "CurrentUser")

See also

- 136.5 Registry.FlushKey 6684
- 136.9 Registry.ListValues 6689

Created 20th March 2017, last changed 20th March 2017.

136.9 Registry.ListValues

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.ListValues"; Path)

Parameters

Path

The path to the registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.
"Users\test"

Result Returns list or error.

Description

Examples

Query list of values:

```
MBS( "Registry.ListValues"; "CurrentUser\Test")
```

See also

- 136.6 Registry.GetValue 6685
- 136.8 Registry.ListKeys 6688
- 136.10 Registry.SetValue 6690

Created 20th March 2017, last changed 20th March 2017.

136.10 Registry.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
136 Registry	7.2	No	Yes	Yes, Windows only	No	No

MBS("Registry.SetValue"; Path; Name; Value; Type)

Parameters

Path

The path to the parent registry key. Separated by \you specify the path to the key you want. Root can be Classes, CurrentUser, LocalMachine, Users, PerformanceData, CurrentConfig, DynData or the HKEY names.

"Users\test"

Name

The name of the value.

"Hello"

Value

The value to set.

"World"

Type

The data type to store.

"text"

Result Returns OK or error.

Description

Type can be Text, ExpandText, DWORD, BinaryHex, None, QWORD or List.

Use DWORD to save 32-bit integer number or QWORD to save 64-bit number.

For list, please pass a normal \$separated list and we translate it.

For BinaryHex type, please pass hex encoded data and we decode it before saving.

Examples

Set user name for FileMaker:

MBS("Registry.SetValue"; "HKEY_CURRENT_USER\SOFTWARE\FileMaker\FileMaker Pro Advanced\16.0\Pref-erences"; "User Name"; "Mr. Miller"; "text")

See also

- 136.4 Registry.DeleteValue 6683
- 136.6 Registry.GetValue 6685
- 136.7 Registry.GetValueType 6687
- 136.9 Registry.ListValues 6689

Created 20th March 2017, last changed 17th November 2017.

Chapter 137

RemoteControl

Press keys or move/click mouse.

137.1 RemoteControl.ClickMouse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	Yes	No	No	No

MBS("RemoteControl.ClickMouse"; x; y { ; down; ButtonIndex })

Parameters

x

New x position of the mouse.

500

y

New y position of the mouse.

500

down

Optional

Pass 1 to press mouse button and 0 to release it. If this parameter is missing, the plugin will click and release in one step.

1

ButtonIndex

Optional

Optional, pass 2 for the right mouse instead of left mouse. Or 3 for the third button.

1

Result Returns OK on success.

Description

If x and y are both zero, the mouse is not moved.
May fail due to limited permissions.

You can use RemoteControl.MouseX and RemoteControl.MouseY to find current mouse position.

See also

- [124.22 Plugin.DisableFunction](#) 6287
- [124.31 Plugin.LimitFunction](#) 6297
- [124.32 Plugin.LockFunction](#) 6299
- [124.45 Plugin.UnlockFunction](#) 6315
- [137.5 RemoteControl.MouseX](#) 6698
- [137.6 RemoteControl.MouseY](#) 6699
- [137.7 RemoteControl.MoveMouse](#) 6700

Example Databases

- [Containers/MovieContainer](#)
- [RemoteControl/Move Mouse](#)

137.1.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr3](#)
- [MBS FileMaker Plugin, version 6.2pr4](#)

Created 18th August 2014, last changed 17th August 2016.

137.2 RemoteControl.FindWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	No	Yes	No	No	No

MBS("RemoteControl.FindWindow"; WindowClassName; WindowTitle)

Parameters

WindowClassName

The internal class name of a window.

CalcFrame

WindowTitle

The title of the window.

"Calculator"

Result Returns the window handle for use with other window functions.

Description

One of both parameters can be an empty string.

Example Databases

- [RemoteControl/Control Windows Calculator](#)

Created 18th August 2014, last changed 18th August 2014.

137.3 RemoteControl.GetWindowsList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	No	Yes	No	No	No

MBS("RemoteControl.GetWindowsList")

Result Returns list of window references separated by newline character.

Description

You can separate this list and pass the window reference values as number to our other Window functions.

See also

- [182.53 Window.List](#) 8595

Example Databases

- [RemoteControl/Windows List](#)

137.3.1 Blog Entries

- [MBS Filemaker Plugin, version 2.8pr5](#)

Created 18th August 2014, last changed 17th June 2018.

137.4 RemoteControl.HideCursor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	3.4	Yes	Yes	No	No	No

MBS("RemoteControl.HideCursor")

Result Returns OK.

Description

As FileMaker may reset the cursor to be visible when scripts end, you may not see the mouse actually hide.

Examples

Hide the mouse:

MBS("RemoteControl.HideCursor")

Show the mouse:

MBS("RemoteControl.ShowCursor")

See also

- 137.16 RemoteControl.ShowCursor

6711

137.4.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr4](#)

Created 18th August 2014, last changed 18th August 2014.

137.5 RemoteControl.MouseX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	Yes	No	No	No

MBS("RemoteControl.MouseX")

Result Returns x coordinate.

Description

See also

- 75.7 EventMonitor.LastMousePositionX 3499
- 137.1 RemoteControl.ClickMouse 6693
- 137.6 RemoteControl.MouseY 6699
- 137.7 RemoteControl.MoveMouse 6700

Example Databases

- [DynaPDF/Click Points](#)
- [RemoteControl/Move Mouse](#)

137.5.1 FileMaker Magazin

- Ausgabe 3/2015, Seite 37

Created 18th August 2014, last changed 18th August 2014.

137.6 RemoteControl.MouseY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	Yes	No	No	No

MBS("RemoteControl.MouseY")

Result Returns y coordinate.

Description

See also

- 75.8 EventMonitor.LastMousePositionY 3500
- 137.1 RemoteControl.ClickMouse 6693
- 137.5 RemoteControl.MouseX 6698
- 137.7 RemoteControl.MoveMouse 6700

Example Databases

- [DynaPDF/Click Points](#)
- [RemoteControl/Move Mouse](#)

137.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr1](#)

Created 18th August 2014, last changed 18th August 2014.

137.7 RemoteControl.MoveMouse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	Yes	No	No	No

MBS("RemoteControl.MoveMouse"; x; y)

Parameters

x

New x position of the mouse.

500

y

New y position of the mouse.

500

Result Returns OK on success.

Description

See also

- [137.1 RemoteControl.ClickMouse](#) 6693
- [137.5 RemoteControl.MouseX](#) 6698
- [137.6 RemoteControl.MouseY](#) 6699

Example Databases

- [RemoteControl/Move Mouse](#)

Created 18th August 2014, last changed 18th August 2014.

137.8 RemoteControl.PressCommandKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	No	No	No	No

MBS("RemoteControl.PressCommandKey"; down)

Parameters

down

Pass 1 to press key down or 0 to release it.

1

Result Returns OK on success.

Description

See also

- [137.9 RemoteControl.PressControlKey](#) 6702
- [137.13 RemoteControl.PressKeyLater](#) 6708
- [137.14 RemoteControl.PressOptionKey](#) 6709
- [137.15 RemoteControl.PressShiftKey](#) 6710

Created 18th August 2014, last changed 18th August 2014.

137.9 RemoteControl.PressControlKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	Yes	No	No	No

MBS("RemoteControl.PressControlKey"; down)

Parameters

down

Pass 1 to press key down or 0 to release it.

1

Result Returns OK on success.

Description

Examples

Press Control-V:

```
MBS( "RemoteControl.PressControlKey"; 1 )
```

```
MBS( "RemoteControl.PressKey"; "V" )
```

```
MBS( "RemoteControl.PressControlKey"; 0 )
```

See also

- 88.13 HotKey.Register 4843
- 137.8 RemoteControl.PressCommandKey 6701
- 137.12 RemoteControl.PressKey 6705
- 137.14 RemoteControl.PressOptionKey 6709
- 137.15 RemoteControl.PressShiftKey 6710

137.9.1 Blog Entries

- [Insert snippet for FileMaker on Windows](#)

Created 18th August 2014, last changed 18th August 2014.

137.10 RemoteControl.PressDialogButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	6.2	Yes	No	No	No	No

MBS("RemoteControl.PressDialogButton"; ButtonName)

Parameters

ButtonName

The name of the button.

"OK"

Result Returns OK or error.

Description

The plugin takes the button name and waits in background.

If a dialog shows up with the right button name, the plugin presses it.

Please call RemoteControl.PressDialogButton.clear to stop this after you needed it.

Examples

Press OK on the custom dialog:

```
Set Variable [ $r; Value:MBS( "RemoteControl.PressDialogButton"; "OK" ) ]
```

```
Show Custom Dialog [ "Hello" ]
```

```
Set Variable [ $r; Value:MBS( "RemoteControl.PressDialogButton.Clear" ) ]
```

See also

- [137.11 RemoteControl.PressDialogButton.Clear](#)

6704

137.10.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 18th March 2016, last changed 18th March 2016.

137.11 RemoteControl.PressDialogButton.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	6.2	Yes	No	No	No	No

MBS("RemoteControl.PressDialogButton.Clear")

Result Returns OK or error.

Description

Examples

GetWindowsList

See also

- 137.10 RemoteControl.PressDialogButton

6703

Created 18th March 2016, last changed 17th June 2018.

137.12 RemoteControl.PressKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	Yes	No	No	No

```
MBS( "RemoteControl.PressKey"; VirtualKey; ScanCode { ; down } )
```

Parameters

VirtualKey

The platform dependent virtual key code. Pass a number for a virtual key code or pass a string to let the plugin try to lookup the virtual key code.

"a"

ScanCode

The platform dependent scan code. Pass a number for a scan code or pass a string to let the plugin try to lookup the virtual key code. If this parameter is missing, the virtual key code is used to lookup the scan code.

"a"

down

Optional

Whether to press key down or release it. If parameter is missing the plugin will do both.

Result Returns OK on success.

Description

Codes are platform dependent. As a help we allow you to pass the character for the key as text and the plugin looks up virtual key code and scan code. But this lookup can fail. So please try all keys for your keyboard.

Common key codes for MacOS:

Examples

Press a key

```
MBS( "RemoteControl.PressKey"; "a")
```

Press return key on Mac:

```
MBS( "RemoteControl.PressKey"; 36; 13)
```

Press cursor right key on Mac:

```
MBS( "RemoteControl.PressKey"; 124; 0 )
```

Write Hello

```

Set Variable [ $r ; Value: MBS("RemoteControl.PressShiftKey"; 1) ]
Set Variable [ $r ; Value: MBS("RemoteControl.PressKey"; "H") ]
Set Variable [ $r ; Value: MBS("RemoteControl.PressShiftKey"; 0) ]
Set Variable [ $r ; Value: MBS("RemoteControl.PressKey"; "e") ]
Set Variable [ $r ; Value: MBS("RemoteControl.PressKey"; "l") ]
Set Variable [ $r ; Value: MBS("RemoteControl.PressKey"; "l") ]
Set Variable [ $r ; Value: MBS("RemoteControl.PressKey"; "o") ]

```

Press return with plugin looking up codes:

```
Set Variable [ $r ; Value: MBS("RemoteControl.PressKey"; §) ]
```

Press space key:

```
Set Variable [ $r ; Value: MBS("RemoteControl.PressKey"; " ") ]
```

See also

- 88.13 HotKey.Register 4843
- 137.9 RemoteControl.PressControlKey 6702
- 137.13 RemoteControl.PressKeyLater 6708
- 137.14 RemoteControl.PressOptionKey 6709
- 137.15 RemoteControl.PressShiftKey 6710

Example Databases

- [RemoteControl/Control Windows Calculator](#)
- [RemoteControl/Press keys](#)

137.12.1 Blog Entries

- [Insert snippet for FileMaker on Windows](#)

Created 18th August 2014, last changed 1st January 2019.

Key	Hex KeyCode	Decimal KeyCode
a	00	0
b	0B	11
c	08	8
d	02	2
e	0E	14
f	03	3
g	05	5
h	04	4
i	22	34
j	26	38
k	28	40
l	25	37
m	2E	46
n	2D	45
o	1F	31
p	23	35
q	0C	12
r	0F	15
s	01	1
t	11	17
u	20	32
v	09	9
w	0D	13
x	07	7
y	10	16
z	06	6
0	52	82
1	53	83
2	54	84
3	55	85
4	56	86
5	57	87
6	58	88
7	59	89
8	5B	91
9	5C	92
F1	7A	122
F2	78	120
F3	63	99
F4	76	118
F5	60	96
F6	61	97
F7	62	98
F8	64	100
F9	65	101
F10	6D	109
F11	67	103
F12	6F	111
F13	69	105
F14	6B	107
F15	71	113
Space	31	49
Tab	30	48
Home	73	115
Backspace	33	51
End	77	119
Page Up	74	116
Page Down	79	121
Delete	75	117
Help	72	114
Left	7B	123

137.13 RemoteControl.PressKeyLater

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	6.2	Yes	Yes	No	No	No

MBS("RemoteControl.PressKeyLater"; VirtualKey; ScanCode; Delay)

Parameters

VirtualKey

The platform dependent virtual key code. Pass a number for a virtual key code or pass a string to let the plugin try to lookup the virtual key code.

"a"

ScanCode

The platform dependent scan code. Pass a number for a scan code or pass a string to let the plugin try to lookup the virtual key code. If this parameter is missing, the virtual key code is used to lookup the scan code.

"a"

Delay

the delay in seconds.

2

Result Returns OK or error.

Description

Codes are platform dependent. As a help we allow you to pass the character for the key as text and the plugin looks up virtual key code and scan code. But this lookup can fail. So please try all keys for your keyboard.

Examples

Press enter in 2 seconds on Mac:

```
MBS( "RemoteControl.PressKeyLater"; 36; 13; 2)
```

See also

- 137.8 RemoteControl.PressCommandKey 6701
- 137.12 RemoteControl.PressKey 6705
- 137.14 RemoteControl.PressOptionKey 6709
- 137.15 RemoteControl.PressShiftKey 6710

Created 22nd March 2016, last changed 22nd March 2016.

137.14 RemoteControl.PressOptionKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	Yes	No	No	No

MBS("RemoteControl.PressOptionKey"; down)

Parameters**down**

Pass 1 to press key down or 0 to release it.

1

Result Returns OK on success.

Description**See also**

- 137.8 RemoteControl.PressCommandKey 6701
- 137.9 RemoteControl.PressControlKey 6702
- 137.12 RemoteControl.PressKey 6705
- 137.13 RemoteControl.PressKeyLater 6708
- 137.15 RemoteControl.PressShiftKey 6710

Created 18th August 2014, last changed 18th August 2014.

137.15 RemoteControl.PressShiftKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	2.8	Yes	Yes	No	No	No

MBS("RemoteControl.PressShiftKey"; down)

Parameters

down

Pass 1 to press key down or 0 to release it.

1

Result Returns OK on success.

Description

See also

- 137.8 RemoteControl.PressCommandKey 6701
- 137.9 RemoteControl.PressControlKey 6702
- 137.12 RemoteControl.PressKey 6705
- 137.13 RemoteControl.PressKeyLater 6708
- 137.14 RemoteControl.PressOptionKey 6709

Example Databases

- [RemoteControl/Press keys](#)

Created 18th August 2014, last changed 18th August 2014.

137.16 RemoteControl.ShowCursor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
137 RemoteControl	3.4	Yes	Yes	No	No	No

MBS("RemoteControl.ShowCursor")

Result Returns OK.

Description

Examples

Hide the mouse:

MBS("RemoteControl.HideCursor")

Show the mouse:

MBS("RemoteControl.ShowCursor")

See also

- [137.4 RemoteControl.HideCursor](#)

6697

137.16.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr4](#)

Created 18th August 2014, last changed 18th August 2014.

Chapter 138

RichText

Read and write Word/OpenOffice/RTF files on Mac.

138.1 RichText.AppendFormattedText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	10.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.AppendFormattedText"; text)

Parameters

text

The new text to use. Can have style information.
"Hello World"

Result Returns OK or error.

Description

You may need to append a line break first.

See also

- [138.5 RichText.FormattedText](#) 6717
- [138.20 RichText.SetFormattedText](#) 6738

138.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 16th November 2019, last changed 16th November 2019.

138.2 RichText.AppendText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	10.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.AppendText"; text)

Parameters

text

The new text to use.

"Hello World"

Result Returns OK or error.

Description

You may need to append a line break first.

Examples

Append some text in one expression:

```
Let( [
r = MBS( "RichText.SetText"; "Hello " );
r = MBS( "RichText.AppendText"; "World!" );
r = MBS( "RichText.Text" )
]; r)
```

Example result: Hello World!

See also

- 138.13 RichText.ReadText 6729
- 138.21 RichText.SetText 6740
- 138.22 RichText.Text 6741

138.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 16th November 2019, last changed 16th November 2019.

138.3 RichText.Attribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.Attribute"; AttributeSelector)

Parameters

AttributeSelector

The name of the attribute to query. Can be Title, Company, Copyright, Subject, Author, Keywords, Comment, Editor, ModificationTime, Manager, Category or Type.
"title"

Result Returns attribute value or error.

Description

Added selector PaperSize in v9.2 to return two values with width and height of paper size.

Examples

Get title:

```
$title = MBS( "RichText.Attribute"; "Title"
```

Get type of document:

```
$title = MBS( "RichText.Attribute"; "Type"
```

See also

- [138.19 RichText.SetAttribute](#)

6737

Example Databases

- [Mac only/RichText/RichText](#)

138.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr6](#)

Created 18th August 2014, last changed 3th May 2019.

138.4 RichText.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.5	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.Clear")

Result Returns OK.

Description

See also

- 138.16 RichText.Release 6733
- 138.18 RichText.ReplaceTexts 6736
- 138.8 RichText.RTF 6721
- 138.20 RichText.SetFormattedText 6738

Example Databases

- [Mac only/RichText/RichText](#)

Created 18th August 2014, last changed 18th August 2014.

138.5 RichText.FormattedText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.FormattedText")

Result Returns text or error.

Description

Examples

Read formatted text from container field:

```
$r = MBS( "RichText.ReadContainer"; Test::ContainerField )
$text = MBS( "RichText.FormattedText" )
```

Read container in one formula:

```
Let ( [
r = MBS( "RichText.ReadContainer"; MyContainer );
text = MBS( "RichText.FormattedText" )
]; text )
```

See also

- [138.1 RichText.AppendFormattedText](#) 6713
- [138.9 RichText.ReadContainer](#) 6722
- [138.10 RichText.ReadFile](#) 6724
- [138.11 RichText.ReadHTML](#) 6726
- [138.12 RichText.ReadRTF](#) 6728
- [138.14 RichText.ReadURL](#) 6731
- [138.16 RichText.Release](#) 6733
- [138.20 RichText.SetFormattedText](#) 6738

Example Databases

- [Mac only/RichText/RichText](#)
- [Mac only/RichText/RTF to formatted text](#)
- [Text functions/HTML to formatted text](#)

138.5.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)

Created 18th August 2014, last changed 18th December 2015.

138.6 RichText.GeneratePDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	5.1	Yes	No	Yes, macOS only	No	No

MBS("RichText.GeneratePDF" { ; Filename })

Parameters

Filename

Optional

The desired file name.

test.png

Result Returns PDF container or error.

Description

Examples

Convert HTML to PDF:

```
Set Variable [ $r ; Value: MBS( "RichText.ReadHTML"; "<html><body><p><b>Schokoladenplätzchen</b></p></body></html>" ) ]
```

```
Set Variable [ $r ; Value: MBS( "RichText.GeneratePDF"; "test.pdf" ) ]
```

```
Set Field [ RegEx::test ; $r ]
```

See also

- [138.11 RichText.ReadHTML](#) 6726
- [138.27 RichText.WritePDF](#) 6750

138.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 14th March 2015, last changed 25th November 2017.

138.7 RichText.HTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	6.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.HTMLText")

Result Returns html or error.

Description

This does not handle all, but most attributes.

Examples

Read in HTML and output it:

```
Set Variable [ $r ; Value: MBS( "RichText.ReadHTML"; "<html><body><p><b>Schokoladenplätzchen</b></p></body>" ) ]
```

```
Show Custom Dialog [ "HTML" ; MBS( "RichText.HTMLText" ) ]
```

See also

- [138.11 RichText.ReadHTML](#) 6726
- [138.13 RichText.ReadText](#) 6729
- [138.17 RichText.ReplaceText](#) 6734
- [138.21 RichText.SetText](#) 6740

Example Databases

- [Mac only/RichText/RTF to formatted text](#)

138.7.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr3](#)

Created 11st January 2016, last changed 25th November 2017.

138.8 RichText.RTF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	6.5	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.RTF")

Result Returns text or error.

Description

Examples

From Styled text to RTF:

```
// Custom function with pFormattedText as parameter
Let ( [
  r = MBS( "RichText.Clear" );
  vOK = MBS( "RichText.SetFormattedText"; pFormattedText );
  vResult = MBS( "RichText.RTF" );
  vOK = MBS( "RichText.Release" )
];
vResult
)
```

See also

- [138.4 RichText.Clear](#) 6716
- [138.16 RichText.Release](#) 6733
- [138.20 RichText.SetFormattedText](#) 6738

138.8.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr1](#)

Created 27th September 2016, last changed 4th January 2017.

138.9 RichText.ReadContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.ReadContainer"; Container)

Parameters

Container

The container value to read from.

\$data

Result Returns OK or error message.

Description

The plugin uses Mac system functions to read text files including plain text files, RTF files, Word files in doc or xml format, webkit archives or OpenOffice documents.

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

Examples

Read container field:

```
MBS( "RichText.ReadContainer"; Test::ContainerField )
```

Read container in one formula:

```
Let ( [
r = MBS( "RichText.ReadContainer"; MyContainer );
text = MBS( "RichText.FormattedText" )
]; text )
```

Convert doc/docx/rtf file in container to PDF:

```
Set Variable [ $temppath; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.UserTemporary" );
"temp.pdf" ) ]
Set Variable [ $r; Value:MBS( "RichText.ReadContainer"; test::MyContainerDoc ) ]
Set Variable [ $r; Value:MBS( "RichText.WritePDF"; $temppath ) ]
Set Variable [ $r; Value:MBS( "RichText.Release" ) ]
Set Field [ test::MyContainerPDF; MBS("Files.ReadFile"; $temppath; "PDF"; "test.pdf" ) ]
```

See also

- 78.45 Files.ReadFile 3844
- 81.16 Folders.UserTemporary 4187

<i>138.9. RICHTEXT.READCONTAINER</i>	6723
• 121.1 Path.AddPathComponent	6135
• 138.5 RichText.FormattedText	6717
• 138.16 RichText.Release	6733
• 138.22 RichText.Text	6741
• 138.23 RichText.TextLength	6742
• 138.24 RichText.WriteContainer	6743
• 138.26 RichText.WriteFile	6747
• 138.27 RichText.WritePDF	6750

Example Databases

- [Mac only/RichText/Replace Text in Word File](#)
- [Mac only/RichText/RichText](#)

Created 18th August 2014, last changed 14th August 2017.

138.10 RichText.ReadFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.ReadFile"; Path)

Parameters

Path

The native file path to the file.

\$path

Result Returns OK or error message.

Description

The plugin uses Mac system functions to read text files including plain text files, RTF files, Word files in doc or xml format, webkit archives or OpenOffice documents.

If you want the user to select a path, please use FileDialog functions.

See also Files.ReadJPEG, Files.ReadPDF, Files.ReadPNG, Text.ReadTextFile and Files.ReadFile.

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read formatted text from container field:

```
$r = MBS( "RichText.ReadFile"; "/Users/Desktop/test.txt" )
```

```
$text = MBS( "RichText.FormattedText" )
```

See also

- 55.28 Container.ReadFile 1645
- 78.45 Files.ReadFile 3844
- 78.47 Files.ReadPDF 3849
- 78.48 Files.ReadPNG 3851
- 121.2 Path.FileMakerPathToNativePath 6139
- 138.11 RichText.ReadHTML 6726
- 138.12 RichText.ReadRTF 6728

<i>138.10. RICHTEXT.READFILE</i>	6725
• 138.13 RichText.ReadText	6729
• 138.26 RichText.WriteFile	6747
• 164.49 Text.ReadTextFile	7843

Example Databases

- [Mac only/RichText/RichText](#)

Created 18th August 2014, last changed 14th August 2017.

138.11 RichText.ReadHTML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	5.2	Yes	No	No	No	Yes

MBS("RichText.ReadHTML"; HTML { ; Encoding; BaseURL })

Parameters

HTML

The html text to load.

"<p>Hello</p>"

Encoding

Optional

The text encoding for text parameter. Default is native.

UTF8

BaseURL

Optional

The base URL for relative links.

"http://www.mbsplugins.de"

Result Returns OK or error.

Description

Does not work on server due to missing main thread support for Cocoa.

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

Looks like font OpenSans will be converted to Times. You can avoid it by replacing 'OpenSans' with e.g. 'Helvetica' before reading HTML.

Examples

Read HTML:

```
MBS( "RichText.ReadHTML"; "<p>Schokoladenplätzchen</P>" )
```

Convert HTML to formatted text:

```
Let ( [
r = MBS( "RichText.ReadHTML"; "<p>Schokoladenplätzchen</P>"; "UTF-8" );
o = MBS("RichText.FormattedText");
r = MBS( "RichText.Release" )
]; o )
```

See also

<i>138.11. RICHTEXT.READHTML</i>	6727
• 138.5 RichText.FormattedText	6717
• 138.6 RichText.GeneratePDF	6719
• 138.7 RichText.HTMLText	6720
• 138.10 RichText.ReadFile	6724
• 138.12 RichText.ReadRTF	6728
• 138.13 RichText.ReadText	6729
• 138.14 RichText.ReadURL	6731
• 138.17 RichText.ReplaceText	6734
• 138.25 RichText.WriteDOC	6745
• 138.28 RichText.WriteRTF	6752

Example Databases

- [Mac only/RichText/Write Document](#)
- [Text functions/HTML to formatted text](#)

138.11.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr8](#)

Created 23th July 2015, last changed 29th June 2018.

138.12 RichText.ReadRTF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	5.2	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.ReadRTF"; RTF { ; Encoding })

Parameters

RTF

The rtf text to load.

Encoding

Optional

The text encoding for text parameter. Default is native.

UTF8

Result Returns OK or error.

Description

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

Examples

Convert RTF to formatted text:

```
Let ( [
r = MBS( "RichText.ReadRTF"; $rtf );
o = MBS("RichText.FormattedText");
r = MBS( "RichText.Release" )
]; o )
```

See also

- 138.5 RichText.FormattedText 6717
- 138.10 RichText.ReadFile 6724
- 138.11 RichText.ReadHTML 6726
- 138.13 RichText.ReadText 6729
- 138.14 RichText.ReadURL 6731
- 138.16 RichText.Release 6733

138.12.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr8](#)

Created 23th July 2015, last changed 14th August 2017.

138.13 RichText.ReadText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	4.4	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.ReadText"; text { ; Encoding })

Parameters

text

The text for the text file.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

UTF8

Result Returns OK or error.

Description

This is for reading RTF text. Be sure to have right text encoding to preserve special characters.

To read styled text into RichText functions, please use RichText.SetFormattedText.

See also

- 138.2 RichText.AppendText 6714
- 138.7 RichText.HTMLText 6720
- 138.10 RichText.ReadFile 6724
- 138.11 RichText.ReadHTML 6726
- 138.12 RichText.ReadRTF 6728
- 138.14 RichText.ReadURL 6731
- 138.17 RichText.ReplaceText 6734
- 138.18 RichText.ReplaceTexts 6736
- 138.20 RichText.SetFormattedText 6738
- 138.21 RichText.SetText 6740

Example Databases

- [Mac only/RichText/RTF to formatted text](#)

138.13.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr7](#)

Created 24th October 2014, last changed 4th January 2017.

138.14 RichText.ReadURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.ReadURL"; URL)

Parameters**URL**

The URL to the text file.

\$URL

Result Returns OK or error message.

Description

The plugin uses Mac system functions to read text files including plain text files, RTF files, Word files in doc or xml format, webkit archives or OpenOffice documents.

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

Examples

Read formatted text from container field:

```
$r = MBS( "RichText.ReadURL"; "file:///Users/Desktop/test.txt" )
```

```
$text = MBS( "RichText.FormattedText" )
```

See also

- 138.5 RichText.FormattedText 6717
- 138.10 RichText.ReadFile 6724
- 138.11 RichText.ReadHTML 6726
- 138.12 RichText.ReadRTF 6728
- 138.13 RichText.ReadText 6729

Example Databases

- [Mac only/RichText/RichText](#)

Created 18th August 2014, last changed 14th August 2017.

138.15 RichText.ReadWebviewer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	5.4	Yes	No	No	No	Yes

MBS("RichText.ReadWebviewer"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework. Added iOS and FileMaker 16 support for version 8.2.

See also

- 180.46 [WebView.FindByName](#) 8339

Example Databases

- [Mac only/RichText/Write Document](#)

138.15.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr7](#)
- [MBS FileMaker Plugin, version 5.4pr6](#)

Created 17th November 2015, last changed 10th May 2018.

138.16 RichText.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.Release")

Result Returns OK on success.

Description

When loading a new file, the old file is automatically released.

Examples

Read formatted text from container field and release memory:

```
$r = MBS( "RichText.ReadContainer"; Test::ContainerField )
$text = MBS( "RichText.FormattedText" )
$r = MBS( "RichText.Release" )
```

See also

- 138.4 RichText.Clear 6716
- 138.5 RichText.FormattedText 6717
- 138.9 RichText.ReadContainer 6722
- 138.11 RichText.ReadHTML 6726
- 138.12 RichText.ReadRTF 6728
- 138.8 RichText.RTF 6721
- 138.20 RichText.SetFormattedText 6738
- 138.24 RichText.WriteContainer 6743
- 138.26 RichText.WriteFile 6747
- 138.27 RichText.WritePDF 6750

Example Databases

- [Mac only/RichText/Replace Text in Word File](#)
- [Mac only/RichText/RTF to formatted text](#)
- [Mac only/RichText/Write Document](#)
- [Text functions/HTML to formatted text](#)

Created 18th August 2014, last changed 18th August 2014.

138.17 RichText.ReplaceText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	4.4	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.ReplaceText"; SearchText; NewText { ; Multiple })

Parameters

SearchText

The text to search. Search is case insensitive.

"\$FirstName"

NewText

The new text to use as replacement. Can be empty.

"Christian"

Multiple

Optional

Optional, Pass 1 to replace all occurrences. Default is 0 to replace the first one found.

0

Result Returns Count or error.

Description

This can be used to load Word file (DOC, RTF, DOCX), replace place holders with values for client and save a personalized copy.

Version 6.0 and newer returns number of replaces. Older versions just returned OK on success.

Examples

Replace chocolate with vanilla:

```
Set Variable [ $r ; Value: MBS( "RichText.ReadHTML"; "<html><body><p><b>Schokoladenplätzchen</b></p></body>" ) ]
```

```
Set Variable [ $r ; Value: MBS("RichText.ReplaceText"; "Schokoladen"; "Vanille") ]
```

```
Show Custom Dialog [ "HTML" ; MBS( "RichText.HTMLText" ) ]
```

See also

- 138.7 RichText.HTMLText 6720
- 138.11 RichText.ReadHTML 6726
- 138.13 RichText.ReadText 6729
- 138.18 RichText.ReplaceTexts 6736
- 138.24 RichText.WriteContainer 6743
- 138.26 RichText.WriteFile 6747

Example Databases

- [Mac only/RichText/Replace Text in Word File](#)

138.17.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr8](#)
- [MBS FileMaker Plugin, version 5.3pr5](#)
- [MBS FileMaker Plugin, version 5.1pr7](#)
- [MBS Filemaker Plugin, version 4.4pr6](#)

Created 16th October 2014, last changed 25th November 2017.

138.18 RichText.ReplaceTexts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	6.4	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.ReplaceTexts"; SearchTextList; NewTextList { ; Multiple })

Parameters

SearchTextList

The list of texts to search. Search is case insensitive.

"\$FirstName"

NewTextList

The list of new text to use as replacement. Can be empty.

"Christian"

Multiple

Optional

Optional, Pass 1 to replace all occurrences. Default is 0 to replace the first one found.

0

Result Returns OK or error.

Description

While RichText.ReplaceText replaces just one value, this function can replace a list of value.

This can be used to load Word file (DOC, RTF, DOCX), replace place holders with values for client and save a personalized copy.

Examples

Replaces text to test function:

```
Let ( [
r1 = MBS( "RichText.ReadText"; "Hello World. Greetings from FileMaker."; "UTF-8" );
r2 = MBS( "RichText.ReplaceTexts"; "Hello$World$from$FileMaker$Greetings"; "Hallo$Leute$aus$File-
Maker!$Grüße"; 0 );
r = MBS( "RichText.Text" );
r3 = MBS( "RichText.Clear" )
];r)
```

See also

- 138.4 RichText.Clear 6716
- 138.13 RichText.ReadText 6729
- 138.17 RichText.ReplaceText 6734
- 138.22 RichText.Text 6741

Created 25th September 2016, last changed 25th September 2016.

138.19 RichText.SetAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.5	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.SetAttribute"; Key; Value)

Parameters

Key

The new attribute key. Can be Title, Company, Copyright, Subject, Author, Keywords, Comment, Editor, ModificationTime, Manager or Category.

"Title"

Value

The value of the attribute. Most are text parameters except for the timestamp of ModificationTime.

"My title"

Result Returns OK or error.

Description

See RichText.Attribute for details.

Examples

Set title:

```
MBS( "RichText.SetAttribute"; "Title"; "Hello World")
```

Set paper size:

```
MBS( "RichText.SetAttribute"; "PaperSize"; 595; 842) // A4
```

See also

- [138.3 RichText.Attribute](#) 6715
- [138.25 RichText.WriteDOC](#) 6745
- [138.28 RichText.WriteRTF](#) 6752

Example Databases

- [Mac only/RichText/RichText](#)

138.19.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr6](#)

Created 18th August 2014, last changed 3th May 2019.

138.20 RichText.SetFormattedText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.5	Yes	No	Yes, macOS only	No	Yes

```
MBS( "RichText.SetFormattedText"; text )
```

Parameters

text

The new text to use. Can have style information.

```
"Hello World"
```

Result Returns OK or error.

Description

Examples

From Styled text to RTF:

```
// Custom function with pFormattedText as parameter
Let ( [
r = MBS( "RichText.Clear" );
vOK = MBS( "RichText.SetFormattedText"; pFormattedText );
vResult = MBS("RichText.RTF" );
vOK = MBS( "RichText.Release" )
];
vResult
)
```

See also

- 138.1 RichText.AppendFormattedText 6713
- 138.4 RichText.Clear 6716
- 138.5 RichText.FormattedText 6717
- 138.13 RichText.ReadText 6729
- 138.16 RichText.Release 6733
- 138.8 RichText.RTF 6721
- 138.25 RichText.WriteDOC 6745
- 138.28 RichText.WriteRTF 6752

Example Databases

- [Mac only/RichText/RichText](#)

138.20.1 Blog Entries

- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 18th August 2014, last changed 27th September 2016.

138.21 RichText.SetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.5	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.SetText"; text)

Parameters**text**

The new text to use.

"Hello World"

Result Returns OK or error.

Description**See also**

- 138.2 RichText.AppendText 6714
- 138.7 RichText.HTMLText 6720
- 138.13 RichText.ReadText 6729
- 138.22 RichText.Text 6741
- 138.25 RichText.WriteDOC 6745
- 138.28 RichText.WriteRTF 6752

Created 18th August 2014, last changed 16th November 2019.

138.22 RichText.Text

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.Text")

Result Returns text or error.

Description

See also WordFile.Texts for extracting text from word files.

Examples

Read plain text from container field:

```
$r = MBS( "RichText.ReadContainer"; Test::ContainerField )
$text = MBS( "RichText.Text" )
```

See also

- [138.2 RichText.AppendText](#) 6714
- [138.9 RichText.ReadContainer](#) 6722
- [138.18 RichText.ReplaceTexts](#) 6736
- [138.21 RichText.SetText](#) 6740
- [138.23 RichText.TextLength](#) 6742
- [189.24 WordFile.Texts](#) 8844

Example Databases

- [Mac only/RichText/RichText](#)

Created 18th August 2014, last changed 11st April 2017.

138.23 RichText.TextLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.0	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.TextLength")

Result Returns the length of the text in characters.

Description

Examples

Read plain text from container field:

```
$r = MBS( "RichText.ReadContainer"; Test::ContainerField )
$length = MBS( "RichText.TextLength" )
```

See also

- [138.9 RichText.ReadContainer](#) 6722
- [138.22 RichText.Text](#) 6741

Example Databases

- [Mac only/RichText/RichText](#)

Created 18th August 2014, last changed 18th August 2014.

138.24 RichText.WriteContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	4.4	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.WriteContainer"; Format { ; FileName })

Parameters

Format

The file format to use. Can be DOC, DOCX or RTF.

"DOC"

FileName

Optional

The file name to use for the container.

"test.doc"

Result Returns OK or error.

Description

Please pass format type:

- doc: creates old style Word document
- rtf: created rich text file.
- docx: creates newer Word document.
- html: creates html file.
- webarchive: creates html and renders web archive.
- opendocument: creates open office document.

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

Examples

Read a file, apply replaces and save it:

```
# load from container
Set Variable [ $r; Value:MBS("RichText.ReadContainer"; Replace Text in Word File::InputContainer) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; "Failed to read file." ]
Exit Script [ ]
End If
# now loop through records to do replaces
Go to Record/Request/Page [ First ]
Loop
Set Variable [ $r; Value:MBS("RichText.ReplaceText"; Replace Text in Word File::Old Text; Replace Text
```

```
in Word File::New Text) ]
Go to Record/Request/Page [ Next; Exit after last ]
End Loop
# write file
Set Field [ Replace Text in Word File::OutputContainer; MBS("RichText.WriteContainer"; Replace Text in
Word File::format) ]
# cleanup
Set Variable [ $r; Value:MBS("RichText.Release") ]
```

See also

- [124.6 IsError](#) 6266
- [138.9 RichText.ReadContainer](#) 6722
- [138.16 RichText.Release](#) 6733
- [138.17 RichText.ReplaceText](#) 6734
- [164.69 Text.WriteToContainer](#) 7875

Example Databases

- [Mac only/RichText/Replace Text in Word File](#)

138.24.1 Blog Entries

- [MBS FileMaker Plugin, version 5.5pr3](#)
- [MBS Filemaker Plugin, version 4.4pr6](#)

Created 16th October 2014, last changed 14th August 2017.

138.25 RichText.WriteDOC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.5	Yes	No	Yes, macOS only	No	No

MBS("RichText.WriteDOC"; Path)

Parameters

Path

The native file path to the file.

\$path

Result Returns OK or error.

Description

Please set text with RichText.SetFormattedText or RichText.SetText.

And use RichText.SetAttribute to set properties for document.

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Convert html to Word file:

```
Set Variable [ $r ; Value: MBS( "RichText.ReadHTML"; "<html><body><p><b>Schokoladenplätzchen</b></p></body></html>" ) ]
```

```
Set Variable [ $r ; Value: MBS( "RichText.WriteDOC"; "/Users/cs/Desktop/test.doc" ) ]
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 138.11 RichText.ReadHTML 6726
- 138.19 RichText.SetAttribute 6737
- 138.20 RichText.SetFormattedText 6738
- 138.21 RichText.SetText 6740
- 138.26 RichText.WriteFile 6747
- 138.27 RichText.WritePDF 6750
- 138.28 RichText.WriteRTF 6752

Example Databases

- [Mac only/RichText/RichText](#)

Created 18th August 2014, last changed 25th November 2017.

138.26 RichText.WriteFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	4.4	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.WriteFile"; Path; Format)

Parameters

Path

The native file path.

"/Users/cs/Desktop/test.doc"

Format

The file format to use. Can be DOC, DOCX or RTF.

"DOC"

Result Returns OK or error.

Description

Please pass format type:

- doc: creates old style Word document
- rtf: created rich text file.
- docx: creates newer Word document.
- html: creates html file.
- webarchive: creates html and renders web archive.
- opendocument: creates open office document.

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework. If the styles don't come through to Word formats, maybe try RTF instead and let Word open that?

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read a file, apply replaces and save it:

```
# load from container
Set Variable [ $r; Value:MBS("RichText.ReadContainer"; Replace Text in Word File::InputContainer) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; "Failed to read file." ]
Exit Script [ ]
```

```

End If
# now loop through records to do replaces
Go to Record/Request/Page [ First ]
Loop
Set Variable [ $r; Value:MBS("RichText.ReplaceText"; Replace Text in Word File::Old Text; Replace Text
in Word File::New Text) ]
Go to Record/Request/Page [ Next; Exit after last ]
End Loop
# write file
Set Variable [ $r; MBS("RichText.WriteFile"; Replace Text in Word File::path; Replace Text in Word
File::format) ]
# cleanup
Set Variable [ $r; Value:MBS("RichText.Release") ]

```

Save as docx, the newer XML based Word file format:

```

# Word, new format
Set Variable [ $path ; Value: $folder & "/test.docx" ]
Set Variable [ $r ; Value: MBS( "RichText.WriteFile"; $path; "docx" ) ]

```

Save an old doc:

```

# Word, old format
Set Variable [ $path ; Value: $folder & "/test.doc" ]
Set Variable [ $r ; Value: MBS( "RichText.WriteFile"; $path; "doc" ) ]

```

Save as RTF:

```

# RTF
Set Variable [ $path ; Value: $folder & "/test.rtf" ]
Set Variable [ $r ; Value: MBS( "RichText.WriteFile"; $path; "rtf" ) ]

```

See also

- 124.6 IsError 6266
- 121.2 Path.FileMakerPathToNativePath 6139
- 138.9 RichText.ReadContainer 6722
- 138.10 RichText.ReadFile 6724
- 138.16 RichText.Release 6733
- 138.17 RichText.ReplaceText 6734
- 138.25 RichText.WriteDOC 6745
- 138.27 RichText.WritePDF 6750

138.26. *RICHTEXT.WRITEFILE*

6749

- 138.28 RichText.WriteRTF

6752

Example Databases

- [Mac only/RichText/Write Document](#)

Created 16th October 2014, last changed 3th May 2019.

138.27 RichText.WritePDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	5.1	Yes	No	Yes, macOS only	No	No

MBS("RichText.WritePDF"; Path)

Parameters

Path

A valid native file path.

"/Users/test/Desktop/test.pdf"

Result Returns OK or error.

Description

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

Examples

Convert doc/docx/rtf file in container to PDF:

```
Set Variable [ $tempPath; Value:MBS( "Path.AddPathComponent"; MBS( "Folders.UserTemporary" );
"temp.pdf" ) ]
```

```
Set Variable [ $r; Value:MBS( "RichText.ReadContainer"; test::MyContainerDoc ) ]
```

```
Set Variable [ $r; Value:MBS( "RichText.WritePDF"; $tempPath ) ]
```

```
Set Variable [ $r; Value:MBS( "RichText.Release" ) ]
```

```
Set Field [ test::MyContainerPDF; MBS("Files.ReadFile"; $tempPath; "PDF"; "test.pdf" ) ]
```

See also

- 78.45 Files.ReadFile 3844
- 81.16 Folders.UserTemporary 4187
- 121.1 Path.AddPathComponent 6135
- 138.6 RichText.GeneratePDF 6719
- 138.9 RichText.ReadContainer 6722
- 138.16 RichText.Release 6733
- 138.25 RichText.WriteDOC 6745
- 138.26 RichText.WriteFile 6747
- 138.28 RichText.WriteRTF 6752

138.27.1 **Blog Entries**

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 14th March 2015, last changed 14th August 2017.

138.28 RichText.WriteRTF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
138 RichText	3.5	Yes	No	Yes, macOS only	No	Yes

MBS("RichText.WriteRTF"; Path)

Parameters

Path

The native file path to the file.

\$path

Result Returns OK or error.

Description

Please set text with RichText.SetFormattedText or RichText.SetText.

And use RichText.SetAttribute to set properties for document.

Warning: The plugin can only read/write the styles/formats which Apple supports for their cocoa framework.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Convert HTML to RTF:

```
Set Variable [ $r ; Value: MBS( "RichText.ReadHTML"; "<html><body><p><b>Schokoladenplätzchen</b></p></body></html>" ) ]
```

```
Set Variable [ $r ; Value: MBS( "RichText.WriteRTF"; "/Users/cs/Desktop/test.rtf" ) ]
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 138.11 RichText.ReadHTML 6726
- 138.19 RichText.SetAttribute 6737
- 138.20 RichText.SetFormattedText 6738
- 138.21 RichText.SetText 6740
- 138.25 RichText.WriteDOC 6745
- 138.26 RichText.WriteFile 6747
- 138.27 RichText.WritePDF 6750

Example Databases

- [Mac only/RichText/RichText](#)

Created 18th August 2014, last changed 25th November 2017.

Chapter 139

RunTask

Launch applications and command line tools with parameters and query their status.

Deprecated. Please use newer Shell functions.

139.1 RunTask.AddArgument

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	4.1	Yes	Yes	Yes	No	No

```
MBS( "RunTask.AddArgument"; argument )
```

Parameters

argument

Pass one argument here.

"-v"

Result Returns OK or error.

Description

Be aware that shell expansion does not happen and shell variables are not expanded.

Examples

Set three arguments

```
MBS( "RunTask.AddArgument"; "-v" )
```

```
MBS( "RunTask.AddArgument"; "-s" )
```

```
MBS( "RunTask.AddArgument"; "test.txt" )
```

See also

- 139.2 RunTask.GetArgument 6757
- 139.13 RunTask.SetArguments 6771

Example Databases

- [RunTask/Run Shell Script on Mac](#)

Created 18th August 2014, last changed 18th August 2014.

139.2 RunTask.GetArgument

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.GetArgument"; Index)

Parameters

Index

The index of the argument to query. Range from 0 to RunTask.GetArgumentCount-1.

\$index

Result Returns argument text or error message.

Description

On Windows we have only one argument string, so index is ignored and you receive all arguments.

See also

- 139.1 RunTask.AddArgument 6755
- 139.3 RunTask.GetArgumentCount 6758
- 139.13 RunTask.SetArguments 6771

Created 18th August 2014, last changed 18th August 2014.

139.3 RunTask.GetArgumentCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.GetArgumentCount")

Result Returns the number of arguments or error message.

Description

One Windows all arguments are stored in one string with spaces separated, so this function returns 0 or 1 depending on whether an argument is set.

See also

- 139.2 RunTask.GetArgument

6757

Created 18th August 2014, last changed 18th August 2014.

139.4 RunTask.GetCurrentDirectoryPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.GetCurrentDirectoryPath")

Result Returns the task's current directory.

Description

See also

- 139.14 RunTask.SetCurrentDirectoryPath

6774

Created 18th August 2014, last changed 18th August 2014.

139.5 RunTask.GetLaunchPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.GetLaunchPath")

Result Returns the path of the executable.

Description

See also

- 139.15 RunTask.SetLaunchPath

6775

Created 18th August 2014, last changed 18th August 2014.

139.6 RunTask.GetVerb

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.2	No	Yes	Yes, Windows only	No	No

MBS("RunTask.GetVerb")

Result Returns the verb string.

Description

See also

- 139.16 RunTask.SetVerb

6777

Created 18th August 2014, last changed 18th August 2014.

139.7 RunTask.IsRunning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.IsRunning")

Result Returns whether the receiver is still running.

Description

1 if the receiver is still running, otherwise 0. 0 means either the receiver could not run or it has terminated.

Examples

Wait for app ending:

```
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS( "RunTask.IsRunning" ) = 1 ]
End Loop
```

See also

- [139.8 RunTask.Launch](#) 6763
- [139.9 RunTask.NewTask](#) 6766
- [139.13 RunTask.SetArguments](#) 6771
- [172.3 URLScheme.SetDefaultHandler](#) 8144

Example Databases

- [RunTask/RunTask Windows](#)
- [RunTask/RunTask with read and write on Mac](#)
- [RunTask/RunTask](#)

139.7.1 Blog Entries

- [Tip of the day: Query connected clients on FileMaker Server by script](#)

Created 18th August 2014, last changed 29th January 2016.

139.8 RunTask.Launch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.Launch")

Result Returns OK or error.

Description

If you get back an error with `posix_spawn` and error 13, that's a permission denied.

Please use `Shell.Execute` if you need more features.

For PowerShell scripts on Windows, you may need to check with the execution policy for the user account FileMaker is using or use an admin account. e.g. on FileMaker Server, may need to be installed as Admin user (not `fmserver` user).

Examples

Run ls on Mac:

```
# new task
Set Variable [ $r; Value:MBS( "RunTask.NewTask" ) ]
# set launch path and arguments
Set Variable [ $r; Value:MBS( "RunTask.SetLaunchPath"; "/bin/ls" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetArguments"; "/bin" ) ]
# run
Set Variable [ $r; Value:MBS( "RunTask.Launch" ) ]
# wait
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS( "RunTask.IsRunning" ) = 1 ]
End Loop
# read result
Set Variable [ $data; Value:MBS( "RunTask.ReadOutputText"; "UTF-8" ) ]
Show Custom Dialog [ "Result"; $data ]
```

List connected clients on FileMaker Server:

```
# © 30.07.2016 Patrick Weh | Team Nifty GmbH (17:40 Uhr)
# List connected Clients
# -----
# Script checks for connected clients at the FileMaker Server.
# Copy this File to your Server and run this Script on your FileMaker Server.
# -----
#
Set Error Capture [ On ]
```

```

Allow User Abort [ Off ]
#
Set Variable [ $r; Value:MBS( "RunTask.NewTask" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetLaunchPath"; "/Library/FileMaker Server/Database Server/bin/fm-
sadmin" ) ]
# please put your admin password here
Set Variable [ $r; Value:MBS( "RunTask.SetArguments"; "-u" ; "fmserveradmin" ; "-p" ; "fmserveradmin-
password" ; "list" ; "clients" ; "-s" ) ]
Set Variable [ $r; Value:MBS( "RunTask.Launch" ) ]
# now wait for task to finish:
Set Variable [ $result; Value:"" ]
Loop
Pause/Resume Script [ Duration (seconds): 2 ]
Set Variable [ $result; Value:$result & MBS("RunTask.ReadOutputText") ]
Exit Loop If [ MBS("RunTask.IsRunning") 1 ]
End Loop
#
# write into a field:
Set Field [ Check clients::Clients; $result ]
Commit Records/Requests [ No dialog ]
#

```

Run shell script in bash:

```

Set Variable [ $r; Value:MBS( "RunTask.NewTask" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetLaunchPath"; "/bin/bash" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetArguments"; "/Users/cs/Desktop/test.sh"; "First Param" ) ]
Set Variable [ $r; Value:MBS( "RunTask.Launch" ) ]

```

Run something with shell to do redirect:

```

Set Variable [ $r ; Value: MBS( "RunTask.NewTask" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.SetLaunchPath"; "/bin/bash" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.SetArguments"; "-c"; "date >/tmp/date.txt" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.Launch" ) ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS( "RunTask.IsRunning" ) 1 ]
End Loop
Set Field [ RunTask::Text ; MBS( "Text.ReadTextFile"; "/tmp/date.txt"; "UTF-8" ) ]

```

Show quicklook preview window for PDF file:

```

Set Variable [ $r ; Value: MBS( "RunTask.NewTask" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.SetLaunchPath"; "/usr/bin/qlmanage" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.SetArguments"; "-p"; "/Users/cs/Desktop/Hello World.pdf" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.Launch" ) ]

```


See also

- 139.7 `RunTask.IsRunning` 6762
- 139.9 `RunTask.NewTask` 6766
- 139.11 `RunTask.ReadErrorText` 6769
- 139.12 `RunTask.ReadOutputText` 6770
- 139.13 `RunTask.SetArguments` 6771
- 139.15 `RunTask.SetLaunchPath` 6775
- 139.16 `RunTask.SetVerb` 6777
- 148.9 `Shell.Execute` 7011
- 164.49 `Text.ReadTextFile` 7843
- 172.3 `URLScheme.SetDefaultHandler` 8144

Example Databases

- [RunTask/Run Shell Script on Mac](#)
- [RunTask/RunTask Windows](#)
- [RunTask/RunTask with read and write on Mac](#)
- [RunTask/RunTask](#)

139.8.1 Blog Entries

- [Tip of the day: Query connected clients on FileMaker Server by script](#)

Created 18th August 2014, last changed 28th June 2019.

139.9 RunTask.NewTask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.NewTask")

Result Returns OK or error.

Description

Clears all properties, so you can start fresh.

Please use Shell.New if you need more features.

Examples

Run ls on Mac:

```
# new task
Set Variable [ $r; Value:MBS( "RunTask.NewTask" ) ]
# set launch path and arguments
Set Variable [ $r; Value:MBS( "RunTask.SetLaunchPath"; "/bin/ls" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetArguments"; "/bin" ) ]
# run
Set Variable [ $r; Value:MBS( "RunTask.Launch" ) ]
# wait
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS( "RunTask.IsRunning" ) = 1 ]
End Loop
# read result
Set Variable [ $data; Value:MBS( "RunTask.ReadOutputText"; "UTF-8" ) ]
Show Custom Dialog [ "Result"; $data ]
```

Run shell script in bash:

```
Set Variable [ $r; Value:MBS( "RunTask.NewTask" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetLaunchPath"; "/bin/bash" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetArguments"; "/Users/cs/Desktop/test.sh"; "First Param" ) ]
Set Variable [ $r; Value:MBS( "RunTask.Launch" ) ]
```

See also

- 139.7 RunTask.IsRunning 6762
- 139.8 RunTask.Launch 6763
- 139.11 RunTask.ReadErrorText 6769

<i>139.9. RUNTASK.NEWTASK</i>	6767
• 139.12 RunTask.ReadOutputText	6770
• 139.13 RunTask.SetArguments	6771
• 139.15 RunTask.SetLaunchPath	6775
• 139.20 RunTask.Wait	6781
• 148.27 Shell.New	7036
• 172.3 URLScheme.SetDefaultHandler	8144

Example Databases

- [RunTask/Run Shell Script on Mac](#)
- [RunTask/RunTask Windows](#)
- [RunTask/RunTask with read and write on Mac](#)
- [RunTask/RunTask](#)

139.9.1 Blog Entries

- [Tip of the day: Query connected clients on FileMaker Server by script](#)

Created 18th August 2014, last changed 14th November 2017.

139.10 RunTask.ProcessIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.ProcessIdentifier")

Result Returns the receiver's process identifier.

Description

Example Databases

- [RunTask/RunTask Windows](#)

Created 18th August 2014, last changed 18th August 2014.

139.11 RunTask.ReadErrorText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	4.1	Yes	No	Yes, macOS only	No	No

MBS("RunTask.ReadErrorText" { ; Encoding })

Parameters

Encoding

Optional

The text encoding for result. Default is native.

"UTF-8"

Result Returns text or error.

Description

Examples

Read version of python:

```
Set Variable [ $r; Value:MBS( "RunTask.NewTask" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetLaunchPath"; "/usr/bin/python" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetArguments"; "-V" ) ]
Set Variable [ $r; Value:MBS( "RunTask.Launch" ) ]
Pause/Resume Script [ Duration (seconds): ,1 ]
Show Custom Dialog [ "Version"; MBS("RunTask.ReadErrorText"; "UTF8") ]
```

See also

- [139.8 RunTask.Launch](#) 6763
- [139.9 RunTask.NewTask](#) 6766
- [139.12 RunTask.ReadOutputText](#) 6770
- [139.13 RunTask.SetArguments](#) 6771
- [139.15 RunTask.SetLaunchPath](#) 6775
- [124.62 Version](#) 6338

Example Databases

- [RunTask/Run Shell Script on Mac](#)

Created 18th August 2014, last changed 18th April 2017.

139.12 RunTask.ReadOutputText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	4.1	Yes	No	Yes, macOS only	No	No

MBS("RunTask.ReadOutputText" { ; Encoding })

Parameters

Encoding

Optional

The text encoding for result. Default is native.

"UTF-8"

Result Returns text or error.

Description

For Windows this is not available, but you can start a .bat file and redirect output to a text file.

Version 7.5 introduces shell functions which offer this feature for macOS, Windows and Linux.

See also

- [139.8 RunTask.Launch](#) 6763
- [139.9 RunTask.NewTask](#) 6766
- [139.11 RunTask.ReadErrorText](#) 6769
- [139.13 RunTask.SetArguments](#) 6771
- [139.20 RunTask.Wait](#) 6781

Example Databases

- [RunTask/Run Shell Script on Mac](#)
- [RunTask/RunTask with read and write on Mac](#)

139.12.1 Blog Entries

- [Tip of the day: Query connected clients on FileMaker Server by script](#)

Created 18th August 2014, last changed 25th November 2017.

139.13 RunTask.SetArguments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.SetArguments"; arguments)

Parameters

arguments

Pass one argument for each argument.

"-v"

Result Returns OK or error.

Description

Be aware that shell expansion does not happen and shell variables are not expanded.

Examples

Set three arguments

```
MBS( "RunTask.SetArguments"; "-v"; "-s"; "test.txt" )
```

Set a lot of arguments:

```
MBS("RunTask.SetArguments"; "-i"; "/test/tmp/filetmp% d.jpg"; "-b:v"; "320k"; "-vcodec"; "prores"; "-profile"; "2"; "-qscale"; "5"; "/test/tmp/IM_0001.mov")
```

List connected clients on FileMaker Server:

```
# © 30.07.2016 Patrick Weh | Team Nifty GmbH (17:40 Uhr)
# List connected Clients
# -----
# Script checks for connected clients at the FileMaker Server.
# Copy this File to your Server and run this Script on your FileMaker Server.
# -----
#
Set Error Capture [ On ]
Allow User Abort [ Off ]
#
Set Variable [ $r; Value:MBS( "RunTask.NewTask" ) ]
Set Variable [ $r; Value:MBS( "RunTask.SetLaunchPath"; "/Library/FileMaker Server/Database Server/bin/fm-
sadmin" ) ]
# please put your admin password here
Set Variable [ $r; Value:MBS( "RunTask.SetArguments"; "-u" ; "fmsserveradmin" ; "-p" ; "fmsserveradmin-
password" ; "list" ; "clients" ; "-s" ) ]
Set Variable [ $r; Value:MBS( "RunTask.Launch" ) ]
# now wait for task to finish:
Set Variable [ $result; Value:"" ]
```

Loop

```
Pause/Resume Script [ Duration (seconds): 2 ]
Set Variable [ $result; Value:$result & MBS("RunTask.ReadOutputText") ]
Exit Loop If [ MBS("RunTask.IsRunning") 1 ]
End Loop
#
# write into a field:
Set Field [ Check clients::Clients; $result ]
Commit Records/Requests [ No dialog ]
#
```

Set parameters for -p "Hello World":

```
MBS( "RunTask.SetArguments"; "-p"; "Hello World" )
```

please notice that we just have quotes around Hello World

Show quicklook preview window for PDF file:

```
Set Variable [ $r ; Value: MBS( "RunTask.NewTask" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.SetLaunchPath"; "/usr/bin/qlmanage" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.SetArguments"; "-p"; "/Users/cs/Desktop/Hello World.pdf" ) ]
Set Variable [ $r ; Value: MBS( "RunTask.Launch" ) ]
```

See also

- 139.1 RunTask.AddArgument 6755
- 139.2 RunTask.GetArgument 6757
- 139.7 RunTask.IsRunning 6762
- 139.8 RunTask.Launch 6763
- 139.9 RunTask.NewTask 6766
- 139.11 RunTask.ReadErrorText 6769
- 139.12 RunTask.ReadOutputText 6770
- 139.15 RunTask.SetLaunchPath 6775
- 139.20 RunTask.Wait 6781
- 172.3 URLScheme.SetDefaultHandler 8144

Example Databases

- [RunTask/RunTask Windows](#)
- [RunTask/RunTask](#)

139.13.1 **Blog Entries**

- [Tip of the day: Query connected clients on FileMaker Server by script](#)

Created 18th August 2014, last changed 22nd August 2017.

139.14 RunTask.SetCurrentDirectoryPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.SetCurrentDirectoryPath"; Path)

Parameters

Path

The new path for current working directory.

"/Users/cs/Desktop"

Result Returns OK or error.

Description

If this method isn't used, the current directory is inherited from the process that created the receiver.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 139.4 RunTask.GetCurrentDirectoryPath 6759

Example Databases

- [RunTask/Run Shell Script on Mac](#)
- [RunTask/RunTask Windows](#)

Created 18th August 2014, last changed 5th September 2014.

139.15 RunTask.SetLaunchPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.SetLaunchPath"; Path)

Parameters

Path

The new path for current working directory.
"notepad.exe"

Result Returns OK or error.

Description

Examples

Launch a Java application on Mac:

```
MBS( "RunTask.NewTask" )
# you launch java
MBS( "RunTask.SetLaunchPath"; "/usr/bin/java" )
# and pass jar file as arguments followed by other arguments
MBS( "RunTask.SetArguments"; "-jar" ; "/Applications/test/java.jar"; "Hello" )
MBS( "RunTask.Launch"
```

See also

- [139.5 RunTask.GetLaunchPath](#) 6760
- [139.8 RunTask.Launch](#) 6763
- [139.9 RunTask.NewTask](#) 6766
- [139.11 RunTask.ReadErrorText](#) 6769
- [139.13 RunTask.SetArguments](#) 6771
- [139.20 RunTask.Wait](#) 6781
- [172.3 URLScheme.SetDefaultHandler](#) 8144

Example Databases

- [RunTask/Run Shell Script on Mac](#)
- [RunTask/RunTask Windows](#)
- [RunTask/RunTask with read and write on Mac](#)
- [RunTask/RunTask](#)

139.15.1 Blog Entries

- [Tip of the day: Query connected clients on FileMaker Server by script](#)

Created 18th August 2014, last changed 19th May 2017.

139.16 RunTask.SetVerb

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.2	No	Yes	Yes, Windows only	No	No

MBS("RunTask.SetVerb"; Verb)

Parameters

Verb

The new verb.

"open"

Result Returns OK or error.

Description

The set of available verbs depends on the particular file or folder. Generally, the actions available from an object's shortcut menu are available verbs. This parameter can be "", in which case the default verb is used if available. If not, the "open" verb is used. If neither verb is available, the system uses the first verb listed in the registry. The following verbs are commonly used:

edit	Launches an editor and opens the document for editing. If lpFile is not a document file, the RunTask.Launch function will fail.
explore	Explores the folder specified by lpFile.
find	Initiates a search starting from the specified directory.
open	Opens the file specified by the lpFile parameter. The file can be an executable file, a document file, or a folder.
print	Prints the document file specified by lpFile. If File is not a document file, the RunTask.Launch function will fail.
properties	Displays the file or folder's properties.

See also

- 139.6 RunTask.GetVerb 6761
- 139.8 RunTask.Launch 6763

Example Databases

- [RunTask/RunTask Windows](#)

Created 18th August 2014, last changed 18th August 2014.

139.17 RunTask.Terminate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	Yes	Yes	No	No

MBS("RunTask.Terminate"; ExitCode)

Parameters

ExitCode

Only for Windows the exit code for the application.

1

Result Returns OK or error.

Description

This method has no effect if the receiver was already launched and has already finished executing. If the receiver has not been launched yet, this method raises an `NSInvalidArgumentException`.

It is not always possible to terminate the receiver because it might be ignoring the terminate signal. `terminate` sends `SIGTERM`.

Example Databases

- [RunTask/Run Shell Script on Mac](#)
- [RunTask/RunTask Windows](#)

Created 18th August 2014, last changed 18th August 2014.

139.18 RunTask.TerminationReason

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	No	Yes, macOS only	No	No

MBS("RunTask.TerminationReason")

Result Returns the reason the task was terminated.

Description

Available in OS X v10.6 and later.

Returns 1 for exit and 2 for an uncaught signal.

See also

- 139.19 RunTask.TerminationStatus

6780

Created 18th August 2014, last changed 13th April 2016.

139.19 RunTask.TerminationStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	3.1	Yes	No	Yes, macOS only	No	No

MBS("RunTask.TerminationStatus")

Result Returns the exit status returned by the receiver's executable.

Description

Each task defines and documents how its return value should be interpreted. For example, many commands return 0 if they complete successfully or an error code if they don't. You'll need to look at the documentation for that task to learn what values it returns under what circumstances.

See also

- 139.18 RunTask.TerminationReason

6779

Created 18th August 2014, last changed 18th August 2014.

139.20 RunTask.Wait

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	6.4	Yes	No	Yes, macOS only	No	No

MBS("RunTask.Wait"; Timeout)

Parameters

Timeout

The maximum time to wait.

30

Result Returns 1, 0 or error.

Description

Returns 0 if task terminated or 1 if task is still running.

Examples

Run a shell tool and wait for ending:

```
Let ( [
r = MBS( "RunTask.NewTask" );
r = MBS( "RunTask.SetLaunchPath"; "/bin/sh" );
r = MBS( "RunTask.SetArguments"; "-c"; "date;sleep 5;date" );
r = MBS( "RunTask.Launch");
r = MBS( "RunTask.Wait"; "30");
output = MBS( "RunTask.ReadOutputText"; "utf8")
]
; output )
```

See also

- [139.8 RunTask.Launch](#) 6763
- [139.9 RunTask.NewTask](#) 6766
- [139.12 RunTask.ReadOutputText](#) 6770
- [139.13 RunTask.SetArguments](#) 6771
- [139.15 RunTask.SetLaunchPath](#) 6775

Example Databases

- [RunTask/Run Shell Script on Mac](#)

139.20.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr9](#)

6782

CHAPTER 139. RUNTASK

Created 22nd September 2016, last changed 22nd September 2016.

139.21 RunTask.WriteInputText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
139 RunTask	4.1	Yes	No	Yes, macOS only	No	No

MBS("RunTask.WriteInputText"; text { ; Encoding })

Parameters**text**

The text to put in the buffer.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns OK.

Description**Example Databases**

- [RunTask/RunTask with read and write on Mac](#)

Created 18th August 2014, last changed 12nd November 2015.

Chapter 140

Schedule

Scheduled script calls and sql queries.

140.1 Schedule.Check

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.Check")

Result Returns OK or error.

Description

This is intended for server where you need to call this regularly (e.g. in scheduled script every minute) to process scheduled script calls or sql executes.

See also

- 140.8 Schedule.ExecuteSQLAfterDelay 6795
- 140.9 Schedule.ExecuteSQLAtTime 6797
- 140.10 Schedule.ExecuteSQLAtTimeStamp 6799
- 140.11 Schedule.ExecuteSQLOnIdle 6801

Created 20th May 2015, last changed 21st May 2015.

140.2 Schedule.ClearEvaluateResult

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.ClearEvaluateResult"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns OK or error.

Description

See also

- 140.14 Schedule.GetEvaluateResult

6805

Created 21st May 2015, last changed 21st May 2015.

140.3 Schedule.ClearSQLResult

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.ClearSQLResult"; ScheduleRef)

Parameters**ScheduleRef**

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns OK or error.

Description**See also**

- 140.20 Schedule.GetSQLResult

6811

Created 21st May 2015, last changed 21st May 2015.

140.4 Schedule.EvaluateAfterDelay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.EvaluateAfterDelay"; DelaySeconds; Expression { ; ScriptFileName; ScriptName; RepeatDelay })

Parameters

DelaySeconds

The Number of Seconds to wait before running the script.

10

Expression

The expression to evaluate.

"Get(CurrentTimeStamp)"

ScriptFileName

Optional

The name of the file that contains the script to be run.

Get(Filename)

ScriptName

Optional

The exact name of the script to run.

"TestScript"

RepeatDelay

Optional

The number of seconds after which to repeat the script call.

30

Result Returns reference number or error.

Description

Optional, we can start a script with the result of the query.

Please use Schedule.Release later to remove schedule from list. Non repeating scheduled items are free automatically for you.

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

Examples

Try it:

```
Set Variable [ $expression; Value:"MBS(\Log\; \Evaluate works\)" ]
```

```
Set Variable [ $ref; Value:MBS( "Schedule.EvaluateAfterDelay"; 5; $expression ) ]
```

Show/Hide format bar in German:

```
Variable setzen [ $r ; Wert: MBS( "Schedule.EvaluateAfterDelay"; ,1; "MBS( \MenuBar.RunMenuCom-
```



```
mand\"; Liste(\ "Ansicht\"; \ "Formatierungsleiste\" )") ]
```

Set scrollbar elasticity after delay of 0.1 seconds:

```
Set Variable [ $r ; Value: MBS( "Schedule.EvaluateAfterDelay"; 0.1; "MBS(\ "Window.Scrollbar.SetScrollElasticity\"; 0; \ "none\"")" ) ]
```

Open Scriptworkspace:

```
# won't work directly in script as we need to delay, let the script end and then the menu command can run:
Set Variable [ $r ; Value: MBS( "Schedule.EvaluateAfterDelay"; 0.1; "MBS( \ "Menubar.RunMenuCommand\"; 51319 )" ) ]
```

See also

- 113.5 Menubar.RunMenuCommand 5999
- 127.4 PageSetupDialog.Enable 6386
- 127.12 PageSetupDialog.Install 6395
- 140.6 Schedule.EvaluateAtTimeStamp 6792
- 140.8 Schedule.ExecuteSQLAfterDelay 6795
- 140.13 Schedule.GetEvaluate 6804
- 140.14 Schedule.GetEvaluateResult 6805
- 140.26 Schedule.Release 6817
- 142.9 ScriptWorkspace.OpenScript 6857
- 182.68 Window.Scrollbar.SetScrollElasticity 8616

Example Databases

- [Mac only/Print/Page Setup Dialog on Mac](#)
- [Mac only/Print/Page Setup Dialog](#)
- [Utility functions/Schedules](#)

140.4.1 Blog Entries

- [Page Setup Dialog example](#)

Created 21st May 2015, last changed 31st December 2019.

140.5 Schedule.EvaluateAtTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.EvaluateAtTime"; Hours; Minutes; Seconds; Expression { ; ScriptFileName; ScriptName; RepeatHour; RepeatMinute; RepeatSecond })

Parameters

Hours

The hour of the day at which to call the script.

12

Minutes

The minute of the day at which to call the script.

10

Seconds

The seconds of the day at which to call the script.

0

Expression

The expression to evaluate.

"Get(CurrentTimeStamp)"

ScriptFileName

Optional

The name of the file that contains the script to be run.

Get(Filename)

ScriptName

Optional

The exact name of the script to run.

"TestScript"

RepeatHour

Optional

The number of hours to wait between script calls.

1

RepeatMinute

Optional

The number of minutes to wait between script calls.

0

RepeatSecond

Optional

The number of seconds to wait between script calls.

0

Result Returns reference number or error.

Description

Optional, we can start a script with the result of the query.

Please use Schedule.Release later to remove schedule from list. Non repeating scheduled items are free automatically for you.

You define the timestamp with hours, minutes and seconds parameter at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker is busy!

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

See also

- 140.6 Schedule.EvaluateAtTimeStamp 6792
- 140.7 Schedule.EvaluateOnIdle 6794
- 140.26 Schedule.Release 6817

Created 21st May 2015, last changed 21st May 2015.

140.6 Schedule.EvaluateAtTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.EvaluateAtTimeStamp"; TimeStamp; Expression { ; ScriptFileName; ScriptName; Repeat-Delay })

Parameters

TimeStamp

The timestamp at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker is busy!

Get(CurrentTimeStamp)+60

Expression

The expression to evaluate.

"Get(CurrentTimeStamp)"

ScriptFileName

Optional

The name of the file that contains the script to be run.

Get(Filename)

ScriptName

Optional

The exact name of the script to run

"TestScript"

RepeatDelay

Optional

The number of seconds after which to repeat the script call.

30

Result Returns reference number or error.

Description

Optional, we can start a script with the result of the query.

Please use Schedule.Release later to remove schedule from list. Non repeating scheduled items are free automatically for you.

You define the timestamp at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker is busy!

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

See also

- 140.4 Schedule.EvaluateAfterDelay 6788
- 140.5 Schedule.EvaluateAtTime 6790

<i>140.6. SCHEDULE.EVALUATEATTIMESTAMP</i>	6793
• 140.10 Schedule.ExecuteSQLAtTimeStamp	6799
• 140.26 Schedule.Release	6817

Created 21st May 2015, last changed 12nd July 2015.

140.7 Schedule.EvaluateOnIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	No

MBS("Schedule.EvaluateOnIdle"; DelaySeconds; Expression { ; ScriptFileName; ScriptName })

Parameters

DelaySeconds

The Number of Seconds to wait before running the script. Moving the mouse or using keyboard will reset the counter.

10

Expression

The expression to evaluate.

"Get(CurrentTimeStamp)"

ScriptFileName

Optional

The name of the file that contains the script to be run.

Get(Filename)

ScriptName

Optional

The exact name of the script to run.

"TestScript"

Result Returns reference number or error.

Description

This SQL query is performed in FileMaker whenever no user activity has been for the given amount of time. If script is called, the user is idle the given time period. Than once user starts working again, the count is reset and next time the user is idle again, the script can be called. So our idle schedules repeat automatically. Please use Schedule.Release later to remove schedule from list.

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 140.5 Schedule.EvaluateAtTime 6790
- 140.26 Schedule.Release 6817

Created 21st May 2015, last changed 9th January 2020.

140.8 Schedule.ExecuteSQLAfterDelay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.ExecuteSQLAfterDelay"; DelaySeconds; FileName; SQL Statement { ; ScriptFileName; ScriptName; Column Delimiter; Record Delimiter; Params })

Parameters

DelaySeconds

The Number of Seconds to wait before running the script.

10

FileName

The target database name. Can be empty to not limit query to one database.

""

SQL Statement

SQL Statement as a Text string

ScriptFileName

Optional

The name of the file that contains the script to be run.

Get(Filename)

ScriptName

Optional

The exact name of the script to run.

"TestScript"

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is TAB.

9

Record Delimiter

Optional

Record Separator, only used with SELECT statement, Default is Return

13

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns reference number or error.

Description

Optional, we can start a script with the result of the query.

Please use `Schedule.Release` later to remove schedule from list. Non repeating scheduled items are free automatically for you.

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

Unless you call `Schedule.Check` to perform due schedules now, the schedules are performed at idle time, so all the SQL commands are available including `INSERT`, `DELETE`, `UPDATE` and even `ALTER TABLE`.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 140.1 `Schedule.Check` 6785
- 140.4 `Schedule.EvaluateAfterDelay` 6788
- 140.9 `Schedule.ExecuteSQLAtTime` 6797
- 140.10 `Schedule.ExecuteSQLAtTimeStamp` 6799
- 140.26 `Schedule.Release` 6817

Example Databases

- [Utility functions/Schedules](#)

Created 20th May 2015, last changed 27th January 2016.

140.9 Schedule.ExecuteSQLAtTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.ExecuteSQLAtTime"; Hours; Minutes; Seconds; FileName; SQL Statement { ; Script-FileName; ScriptName; Column Delimiter; Record Delimiter; RepeatHour; RepeatMinute; RepeatSecond; Params })

Parameters

Hours

The hour of the day at which to call the script.

12

Minutes

The minute of the day at which to call the script.

10

Seconds

The seconds of the day at which to call the script.

0

FileName

The target database name. Can be empty to not limit query to one database.

""

SQL Statement

SQL Statement as a Text string

ScriptFileName

Optional

The name of the file that contains the script to be run.

Get(Filename)

ScriptName

Optional

The exact name of the script to run.

"TestScript"

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is TAB.

9

Record Delimiter

Optional

Record Separator, only used with SELECT statement, Default is Return

13

RepeatHour

Optional

The number of hours to wait between script calls.

1

RepeatMinute

Optional

The number of minutes to wait between script calls.

0

RepeatSecond

Optional

The number of seconds to wait between script calls.

0

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns reference number or error.

Description

Optional, we can start a script with the result of the query.

Please use `Schedule.Release` later to remove schedule from list. Non repeating scheduled items are free automatically for you.

You define the timestamp with hours, minutes and seconds parameter at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker is busy!

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

Unless you call `Schedule.Check` to perform due schedules now, the schedules are performed at idle time, so all the SQL commands are available including `INSERT`, `DELETE`, `UPDATE` and even `ALTER TABLE`.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 140.1 `Schedule.Check` 6785
- 140.8 `Schedule.ExecuteSQLAfterDelay` 6795
- 140.10 `Schedule.ExecuteSQLAtTimeStamp` 6799
- 140.11 `Schedule.ExecuteSQLOnIdle` 6801
- 140.26 `Schedule.Release` 6817

Created 21st May 2015, last changed 27th January 2016.

140.10 Schedule.ExecuteSQLAtTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.ExecuteSQLAtTimeStamp"; TimeStamp; FileName; SQL Statement { ; ScriptFileName; ScriptName; RepeatDelay; Params })

Parameters

TimeStamp

The timestamp at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker is busy!

Get(CurrentTimeStamp)+60

FileName

The target database name. Can be empty to not limit query to one database.

""

SQL Statement

SQL Statement as a Text string

ScriptFileName

Optional

The name of the file that contains the script to be run.

Get(Filename)

ScriptName

Optional

The exact name of the script to run

"TestScript"

RepeatDelay

Optional

The number of seconds after which to repeat the script call.

30

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns reference number or error.

Description

Optional, we can start a script with the result of the query.

Please use Schedule.Release later to remove schedule from list. Non repeating scheduled items are free automatically for you.

You define the timestamp at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker

is busy!

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

Unless you call `Schedule.Check` to perform due schedules now, the schedules are performed at idle time, so all the SQL commands are available including `INSERT`, `DELETE`, `UPDATE` and even `ALTER TABLE`.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 140.1 `Schedule.Check` 6785
- 140.6 `Schedule.EvaluateTimeStamp` 6792
- 140.8 `Schedule.ExecuteSQLAfterDelay` 6795
- 140.9 `Schedule.ExecuteSQLAtTime` 6797
- 140.26 `Schedule.Release` 6817

Created 21st May 2015, last changed 27th January 2016.

140.11 Schedule.ExecuteSQLOnIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	No

MBS("Schedule.ExecuteSQLOnIdle"; DelaySeconds; FileName; SQL Statement { ; ScriptFileName; ScriptName; Column Delimiter; Record Delimiter; RepeatDelay; Params })

Parameters

DelaySeconds

The Number of Seconds to wait before running the script. Moving the mouse or using keyboard will reset the counter.

10

FileName

The target database name. Can be empty to not limit query to one database.
""

SQL Statement

SQL Statement as a Text string

ScriptFileName

Optional

The name of the file that contains the script to be run.

Get(Filename)

ScriptName

Optional

The exact name of the script to run.

"TestScript"

Column Delimiter

Optional

Columns Separator, only used with SELECT statement. Default is TAB.

9

Record Delimiter

Optional

Record Separator, only used with SELECT statement, Default is Return

13

RepeatDelay

Optional

The number of seconds after which to repeat the script call.

30

Params

Optional

Optional, pass here parameters. One parameter to this function for each parameter you want to pass to the SQL statement.

123

Result Returns reference number or error.

Description

This SQL query is performed in FileMaker whenever no user activity has been for the given amount of time. If script is called, the user is idle the given time period. Than once user starts working again, the count is reset and next time the user is idle again, the script can be called. So our idle schedules repeat automatically. Please use Schedule.Release later to remove schedule from list.

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

Unless you call Schedule.Check to perform due schedules now, the schedules are performed at idle time, so all the SQL commands are available including INSERT, DELETE, UPDATE and even ALTER TABLE.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 140.1 Schedule.Check 6785
- 140.9 Schedule.ExecuteSQLAtTime 6797
- 140.26 Schedule.Release 6817

Created 21st May 2015, last changed 9th January 2020.

140.12 Schedule.GetAutoRelease

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetAutoRelease"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns value or error.

Description

Value is 1 to auto remove from list of schedules or 0 if not.

See also

- 140.28 Schedule.SetAutoRelease

6820

Created 21st May 2015, last changed 21st May 2015.

140.13 Schedule.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetEvaluate"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns text or error.

Description

Examples

Try it:

```
Set Variable [ $ref; Value:MBS( "Schedule.EvaluateAfterDelay"; 5; "1+2" ) ]
```

```
Set Variable [ $r; Value:MBS( "Schedule.GetEvaluate"; $ref ) ]
```

See also

- 140.4 Schedule.EvaluateAfterDelay 6788
- 140.14 Schedule.GetEvaluateResult 6805
- 140.29 Schedule.SetEvaluate 6821

Created 21st May 2015, last changed 5th March 2017.

140.14 Schedule.GetEvaluateResult

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetEvaluateResult"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns OK or error.

Description

Please use Schedule.SetAutoRelease with parameter 0 to avoid the target schedule to be released before you can query result.

Examples

Try it:

```
# evaluate that in a second
Set Variable [ $ref; Value:MBS( "Schedule.EvaluateAfterDelay"; 1; "1+2" ) ]
# stop plugin from removing schedule after it was evaluated
Set Variable [ $r; Value:MBS( "Schedule.SetFreeAfterRun"; $ref; 0 ) ]
# check what is inside?
Set Variable [ $r; Value:MBS( "Schedule.GetEvaluate"; $ref ) ]
# make a pause
Pause/Resume Script [ Duration (seconds): 2 ]
# now check result. Shows 3
Show Custom Dialog [ "Result"; MBS( "Schedule.GetEvaluateResult"; $ref ) ]
# and free memory
Set Variable [ $r; Value:MBS( "Schedule.Release"; $ref ) ]
```

See also

- 140.2 Schedule.ClearEvaluateResult 6786
- 140.4 Schedule.EvaluateAfterDelay 6788
- 140.13 Schedule.GetEvaluate 6804
- 140.26 Schedule.Release 6817
- 140.28 Schedule.SetAutoRelease 6820

Created 21st May 2015, last changed 21st May 2015.

140.15 Schedule.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetFileName"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns text or error.

Description

See also

- 140.21 Schedule.GetScriptName 6812
- 140.23 Schedule.GetTimeStamp 6814
- 140.30 Schedule.SetFileName 6822

Created 20th May 2015, last changed 20th May 2015.

140.16 Schedule.GetLastTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	6.2	Yes	Yes	Yes	No	Yes

MBS("Schedule.GetLastTimeStamp"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns timestamp, empty or error.

Description

May be empty if not yet run.

See also

- 140.23 Schedule.GetTimeStamp 6814
- 140.35 Schedule.SetTimeStamp 6827

140.16.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 12nd March 2016, last changed 12nd March 2016.

140.17 Schedule.GetRepeatDelay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetRepeatDelay"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns value or error.

Description

See also

- 140.31 Schedule.SetRepeatDelay

6823

Created 20th May 2015, last changed 20th May 2015.

140.18 Schedule.GetRunCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetRunCount"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns value or error.

Description

Created 20th May 2015, last changed 20th May 2015.

140.19 Schedule.GetSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetSQL"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns text or error.

Description

See also

- 140.24 Schedule.GetURL 6815
- 140.32 Schedule.SetSQL 6824
- 140.36 Schedule.SetURL 6828

Created 20th May 2015, last changed 20th May 2015.

140.20 Schedule.GetSQLResult

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetSQLResult"; ScheduleRef)

Parameters**ScheduleRef**

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns value or error.

Description

Please use Schedule.SetAutoRelease with parameter 0 to avoid the target schedule to be released before you can query result.

See also

- 140.3 Schedule.ClearSQLResult 6787
- 140.28 Schedule.SetAutoRelease 6820

Created 21st May 2015, last changed 21st May 2015.

140.21 Schedule.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetScriptName"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns text or error.

Description

See also

- 140.15 Schedule.GetFileName 6806
- 140.22 Schedule.GetScriptParameter 6813
- 140.33 Schedule.SetScriptName 6825

Created 20th May 2015, last changed 20th May 2015.

140.22 Schedule.GetScriptParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetScriptParameter"; ScheduleRef)

Parameters**ScheduleRef**

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns text or error.

Description**See also**

- 140.21 Schedule.GetScriptName 6812
- 140.34 Schedule.SetScriptParameter 6826

Created 20th May 2015, last changed 26th May 2015.

140.23 Schedule.GetTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.GetTimeStamp"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns value or error.

Description

See also

- 140.15 Schedule.GetFileName 6806
- 140.16 Schedule.GetLastTimeStamp 6807
- 140.35 Schedule.SetTimeStamp 6827

Created 20th May 2015, last changed 20th May 2015.

140.24 Schedule.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	6.5	Yes	Yes	Yes	No	Yes

MBS("Schedule.GetURL"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns text or error.

Description

See also

- 140.19 Schedule.GetSQL 6810
- 140.32 Schedule.SetSQL 6824
- 140.36 Schedule.SetURL 6828

140.24.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

140.25 Schedule.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.List" { ; OnlyIDs })

Parameters

OnlyIDs

Optional

Pass 1 to only get IDs. Pass 0 or no parameter to get IDs and details.

1

Result Returns list or error.

Description

The list contains for each schedule the ID, type, file name, script name, script parameter, sql, repeat delay and idle delay.

Examples

List items

```
Set Variables [ $List; MBS( "Schedule.List" ) ]
```

Example Databases

- [Utility functions/Schedules](#)

Created 20th May 2015, last changed 27th May 2015.

140.26 Schedule.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.Release"; ScheduleRef)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Result Returns OK or error.

Description

This will free all memory used and stops the schedule.

Examples

Release now:

```
MBS( "Schedule.Release"; $ScheduleRef )
```

Start a script once in 10 seconds and release:

```
Set Variable [ $ref; MBS( "Schedule.StartScriptAfterDelay"; 10; Get(FileName); "testScript"; "Hello World" ) ]
Set Variable [ $r; MBS("Schedule.Release"; $ref) ]
# script will never be called as schedule was destroyed!
```

See also

- 140.5 Schedule.EvaluateAtTime 6790
- 140.7 Schedule.EvaluateOnIdle 6794
- 140.8 Schedule.ExecuteSQLAfterDelay 6795
- 140.9 Schedule.ExecuteSQLAtTime 6797
- 140.10 Schedule.ExecuteSQLAtTimeStamp 6799
- 140.11 Schedule.ExecuteSQLOnIdle 6801
- 140.14 Schedule.GetEvaluateResult 6805
- 140.37 Schedule.StartScriptAfterDelay 6829
- 140.39 Schedule.StartScriptAtTimeStamp 6833

- 140.40 Schedule.StartScriptOnIdle

Created 20th May 2015, last changed 27th May 2015.

140.27 Schedule.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	6.4	Yes	Yes	Yes	No	Yes

MBS("Schedule.ReleaseAll")

Result Returns OK or error.

Description

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

See also

- 140.26 Schedule.Release

6817

140.27.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr9](#)

Created 20th September 2016, last changed 9th January 2020.

140.28 Schedule.SetAutoRelease

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.SetAutoRelease"; ScheduleRef; Value)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Value

The new setting. 1 to free schedule item after it run (and has no repeating), 0 to not free it.

1

Result Returns OK or error.

Description

Examples

Set schedule to be destroyed after last execution:

```
MBS( "Schedule.SetAutoRelease"; $ScheduleRef; 1 )
```

Set schedule to be not destroyed after last execution:

```
MBS( "Schedule.SetAutoRelease"; $ScheduleRef; 0 )
```

See also

- 140.12 Schedule.GetAutoRelease 6803
- 140.14 Schedule.GetEvaluateResult 6805
- 140.20 Schedule.GetSQLResult 6811

Created 21st May 2015, last changed 27th May 2015.

140.29 Schedule.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.SetEvaluate"; ScheduleRef; Expression)

Parameters**ScheduleRef**

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

Result Returns OK or error.

Description**See also**

- 140.13 Schedule.GetEvaluate

6804

Created 21st May 2015, last changed 4th April 2018.

140.30 Schedule.SetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.SetFileName"; ScheduleRef; Filename)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Filename

The database file name where the script is located.

"test.fmp12"

Result Returns OK or error.

Description

See also

- 140.15 Schedule.GetFileName 6806
- 140.33 Schedule.SetScriptName 6825
- 140.35 Schedule.SetTimeStamp 6827

Created 20th May 2015, last changed 20th May 2015.

140.31 Schedule.SetRepeatDelay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.SetRepeatDelay"; ScheduleRef; Value)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Value

The delay in seconds.

60

Result Returns OK or error.

Description

For idle timer, the delay to wait for the user to be idle, else the delay for second or further calls.

See also

- 140.17 Schedule.GetRepeatDelay

6808

Created 20th May 2015, last changed 20th May 2015.

140.32 Schedule.SetSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.SetSQL"; ScheduleRef; SQL)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

SQL

The SQL to execute.

"INSERT INTO Contacts (FirstName, LastName) Values('Bob', 'Miller')"

Result Returns OK or error.

Description

See also

- 140.19 Schedule.GetSQL 6810
- 140.24 Schedule.GetURL 6815
- 140.36 Schedule.SetURL 6828

Created 20th May 2015, last changed 20th May 2015.

140.33 Schedule.SetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.SetScriptName"; ScheduleRef; ScriptName)

Parameters**ScheduleRef**

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 140.21 Schedule.GetScriptName 6812
- 140.30 Schedule.SetFileName 6822
- 140.34 Schedule.SetScriptParameter 6826

Created 20th May 2015, last changed 27th January 2016.

140.34 Schedule.SetScriptParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.SetScriptParameter"; ScheduleRef; Parameter)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

Parameter

The new parameter value. If empty or not provided, the plugin passes the schedule reference number.
””

Result Returns OK or error.

Description

If the script parameter is empty, the plugin passes the timer reference number as parameter.

Examples

Change Script Parameter:

```
MBS( "Schedule.SetScriptParameter"; $ScheduleRef; "Hello World" )
```

See also

- 140.22 Schedule.GetScriptParameter 6813
- 140.33 Schedule.SetScriptName 6825

Created 20th May 2015, last changed 27th May 2015.

140.35 Schedule.SetTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.SetTimeStamp"; ScheduleRef; TimeStamp)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

TimeStamp

The new time stamp. This moves the schedule to run on a different time.

Get(CurrentTimeStamp) + 60

Result Returns OK or error.

Description

Examples

Move next execution to now plus 10 seconds:

MBS("Schedule.SetTimeStamp"; \$ScheduleRef; Get(CurrentTimeStamp) + 10)

See also

- 140.16 Schedule.GetLastTimeStamp 6807
- 140.23 Schedule.GetTimeStamp 6814
- 140.30 Schedule.SetFileName 6822

Created 20th May 2015, last changed 27th May 2015.

140.36 Schedule.SetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	6.5	Yes	Yes	Yes	No	Yes

MBS("Schedule.SetURL"; ScheduleRef; URL)

Parameters

ScheduleRef

The reference for a scheduled script call or sql query as returned by Schedule.StartScript* functions or Schedule.ExecuteSQL* functions.

\$ref

URL

The URL to trigger.

Result Returns OK or error.

Description

\$\$ID\$\$ in the URL is replaced with schedule ID.

Queries http/ftp/sftp URLs with CURL, other URLs passed to OS to open.

See also

- 140.19 Schedule.GetSQL 6810
- 140.24 Schedule.GetURL 6815
- 140.32 Schedule.SetSQL 6824

140.36.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

140.37 Schedule.StartScriptAfterDelay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.StartScriptAfterDelay"; DelaySeconds; FileName; ScriptName { ; ScriptParameter; RepeatDelay })

Parameters

DelaySeconds

The Number of Seconds to wait before running the script.

10

FileName

The name of the file that contains the script to be run

Get(FileName)

ScriptName

The exact name of the script to run

"TestScript"

ScriptParameter

Optional

Optional, the Script Parameter to pass to the script

RepeatDelay

Optional

The number of seconds after which to repeat the script call.

30

Result Returns reference number or error.

Description

You can also pass a text string to the Script as a Parameter. The parameter can be retrieved by using Get(ScriptParameter) in the script that plug-in is calling.

Please use Schedule.Release later to remove schedule from list. Non repeating scheduled items are free automatically for you.

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Start a script once in 10 seconds:

```
MBS( "Schedule.StartScriptAfterDelay"; 10; Get(FileName); "testScript"; "Hello World" )
```

Start a script once in 10 seconds and repeat every 20 seconds:

```
MBS( "Schedule.StartScriptAfterDelay"; 10; Get(FileName); "testScript"; "Hello World"; 20 )
```

See also

- 79.54 FM.RunScriptLater 3990
- 140.26 Schedule.Release 6817
- 140.38 Schedule.StartScriptAtTime 6831
- 140.39 Schedule.StartScriptAtTimeStamp 6833

Example Databases

- [Utility functions/Schedules](#)
- [Window/Flash Window and Jump Dock](#)

Created 20th May 2015, last changed 27th January 2016.

140.38 Schedule.StartScriptAtTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.StartScriptAtTime"; Hours; Minutes; Seconds; FileName; ScriptName { ; ScriptParameter; RepeatHour; RepeatMinute; RepeatSecond })

Parameters

Hours

The hour of the day at which to call the script.

12

Minutes

The minute of the day at which to call the script.

10

Seconds

The seconds of the day at which to call the script.

0

FileName

The name of the file that contains the script to be run

Get(FileName)

ScriptName

The exact name of the script to run

"TestScript"

ScriptParameter

Optional

Optional, the Script Parameter to pass to the script

RepeatHour

Optional

The number of hours to wait between script calls.

1

RepeatMinute

Optional

The number of minutes to wait between script calls.

0

RepeatSecond

Optional

The number of seconds to wait between script calls.

0

Result Returns reference number or error.

Description

You can also pass a text string to the Script as a Parameter. The parameter can be retrieved by using `Get(ScriptParameter)` in the script that plug-in is calling.

Please use `Schedule.Release` later to remove schedule from list. Non repeating scheduled items are free automatically for you.

You define the timestamp with hours, minutes and seconds parameter at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker is busy!

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Run at 10:30 and repeat every 2 hour:

```
MBS( "Schedule.StartScriptAtTime"; 10; 30; 0; Get(FileName); "testScript"; ""; 2; 0; 0 )
```

Run daily at 6:10 in morning

```
MBS( "Schedule.StartScriptAtTime"; 6;10; 0; Get(FileName); "Send Jobs"; ""; 24; 0; 0 )
```

See also

- 140.26 `Schedule.Release` 6817
- 140.37 `Schedule.StartScriptAfterDelay` 6829
- 140.39 `Schedule.StartScriptAtTimeStamp` 6833
- 140.40 `Schedule.StartScriptOnIdle` 6835

Created 20th May 2015, last changed 20th April 2017.

140.39 Schedule.StartScriptAtTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	Yes

MBS("Schedule.StartScriptAtTimeStamp"; TimeStamp; FileName; ScriptName { ; ScriptParameter; RepeatDelay })

Parameters

TimeStamp

The timestamp at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker is busy!

Get(CurrentTimeStamp)+60

FileName

The name of the file that contains the script to be run

Get(FileName)

ScriptName

The exact name of the script to run

"TestScript"

ScriptParameter

Optional

Optional, the Script Parameter to pass to the script

RepeatDelay

Optional

The number of seconds after which to repeat the script call.

30

Result Returns reference number or error.

Description

You can also pass a text string to the Script as a Parameter. The parameter can be retrieved by using Get(ScriptParameter) in the script that plug-in is calling.

Please use Schedule.Release later to remove schedule from list. Non repeating scheduled items are free automatically for you.

You define the timestamp at which to call the script. Plugin checks regularly if time stamp is reaches and calls as soon as current time is greater or equal the given timestamp. So calls can be delayed if FileMaker is busy!

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Run script in 10 seconds and then repeat every 10 seconds:

```
MBS( "Schedule.StartScriptAtTimeStamp"; Get(CurrentTimeStamp)+10; Get(FileName); "testScript"; "time passed"; 10 )
```

See also

- 140.26 Schedule.Release 6817
- 140.37 Schedule.StartScriptAfterDelay 6829
- 140.38 Schedule.StartScriptAtTime 6831

Created 20th May 2015, last changed 27th January 2016.

140.40 Schedule.StartScriptOnIdle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
140 Schedule	5.2	Yes	Yes	No	No	No

MBS("Schedule.StartScriptOnIdle"; DelaySeconds; FileName; ScriptName { ; ScriptParameter })

Parameters

DelaySeconds

The Number of Seconds to wait before running the script. Moving the mouse or using keyboard will reset the counter.

10

FileName

The name of the file that contains the script to be run

Get(FileName)

ScriptName

The exact name of the script to run

"TestScript"

ScriptParameter

Optional

The Script Parameter to pass to the script

Result Returns reference number or error.

Description

This script is called in FileMaker whenever no user activity has been for the given amount of time.

You can also pass a text string to the Script as a Parameter. The parameter can be retrieved by using Get(ScriptParameter) in the script that plug-in is calling.

If script is called, the user is idle the given time period. Than once user starts working again, the count is reset and next time the user is idle again, the script can be called. So our idle schedules repeat automatically. Please use Schedule.Release later to remove schedule from list.

Our plugin does not provide persistence. You need to schedule things in your scripts if you need them. When FileMaker quits, the plugin forgets the list of schedules.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Run a script 10 seconds after idle is detected:

```
MBS("Schedule.StartScriptOnIdle"; 10; Get(FileName); "testScript"; "don't work?")
```

See also

6836

CHAPTER 140. SCHEDULE

- 79.53 FM.RunScriptIdle 3988
- 79.77 FM.StopScriptIdle 4034
- 140.26 Schedule.Release 6817
- 140.38 Schedule.StartScriptAtTime 6831

Created 20th May 2015, last changed 9th January 2020.

Chapter 141

Screenshot

Create screenshots.

141.1 Screen.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	1.0	Yes	Yes	Yes	No	No

MBS("Screen.Count")

Description

Unlimited monitors are supported on Macs. Only one monitor is supported on PCs. Therefore on the PC this function will always return 1.

For version 7.1 we added support for multiple monitors for Windows.

Examples

Count Screens

MBS("Screen.Count")

See also

- 90.13 IKSlideShow.GetScreen 4904
- 90.24 IKSlideShow.SetScreen 4916

Created 18th August 2014, last changed 26th January 2017.

141.2 Screen.DockHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	8.3	Yes	No	No	No	No

MBS("Screen.DockHeight")

Result Returns number or error.

Description

The plugin checks screen height compared to usable screen height, which gives the dock height on the main screen.

Examples

Query dock size:

```
Show Custom Dialog [ "Dock Size" ; MBS( "Screen.DockWidth" ) & " x " & MBS( "Screen.DockHeight" ) ]
```

See also

- [141.3 Screen.DockWidth](#) 6839

141.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 12nd July 2018, last changed 12nd July 2018.

141.3 Screen.DockWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	8.3	Yes	No	Yes, macOS only	No	No

MBS("Screen.DockWidth")

Result Returns number or error.

Description

The plugin checks screen width compared to usable screen width, which gives the dock width on the main screen.

Examples

Query dock size:

```
Show Custom Dialog [ "Dock Size" ; MBS( "Screen.DockWidth" ) & " x " & MBS( "Screen.DockHeight" ) ]
```

See also

- 141.2 Screen.DockHeight

6838

141.3.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 12nd July 2018, last changed 13th July 2018.

141.4 Screen.Height

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	1.0	Yes	Yes	Yes	No	Yes

MBS("Screen.Height"; ScreenID)

Parameters

ScreenID

The zero based index of the screen to target.

0

Description

FileMaker's built in functions for returning related information only works for the "desktop" and may include more than one screen in a Multiple monitor situation. Also Get(WindowDesktopHeight) returns the height of the desktop not the height of the monitor. The desktop height does not include the height of the menu. Unlimited monitors are supported on Macs. Only one monitor is supported on PCs.

For version 7.1 we added support for multiple monitors for Windows.

Examples

Get the first screen's co-ordinates

```
MBS( "Screen.Left" ; 0 ) & " " &
MBS( "Screen.Top" ; 0 ) & " " &
MBS( "Screen.Width" ; 0 ) & " " &
MBS( "Screen.Height" ; 0 )
```

See also

- 130.23 ProgressDialog.SetPosition 6523
- 130.24 ProgressDialog.SetPositionCentered 6524
- 141.5 Screen.Left 6841
- 141.7 Screen.Top 6843
- 141.8 Screen.Width 6844

Created 18th August 2014, last changed 12nd July 2018.

141.5 Screen.Left

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	1.0	Yes	Yes	Yes	No	Yes

MBS("Screen.Left"; ScreenID)

Parameters

ScreenID

The zero based index of the screen to to target.

0

Description

FileMaker's built in functions for returning screen related information only works for the "desktop" and may include more than one screen in a Multiple monitor situation. Unlimited monitors are supported on Macs. Only one monitor is supported on PCs.

For version 7.1 we added support for multiple monitors for Windows.

Examples

Get the first screen's co-ordinates

```
MBS( "Screen.Left" ; 0 ) & " " &
```

```
MBS( "Screen.Top" ; 0 ) & " " &
```

```
MBS( "Screen.Width" ; 0 ) & " " &
```

```
MBS( "Screen.Height" ; 0 )
```

See also

- 141.4 Screen.Height 6840
- 141.7 Screen.Top 6843
- 141.8 Screen.Width 6844

Created 18th August 2014, last changed 12nd July 2018.

141.6 Screen.Scale

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	9.2	Yes	Yes	Yes	No	Yes

MBS("Screen.Scale" { ; Screen ID })

Parameters

Screen ID

Optional

The zero based index of the screen to to target. Default is main screen.

0

Result Returns number or error.

Description

Normal screens have 1, retina screens have 2 and on iPhone some have even 3. Windows has same scale factor for all screens, which can be fractions like 1.5.

141.6.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.2](#)
- [MBS FileMaker Plugin 9.2 - More than 5800 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 21st March 2019, last changed 15th July 2019.

141.7 Screen.Top

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	1.0	Yes	Yes	Yes	No	Yes

MBS("Screen.Top"; Screen ID)

Parameters

Screen ID

The zero based index of the screen to to target.

0

Description

Returns the Top coordinate of the screen indicated by the Screen ID parameter Also Get(WindowDesktopHeight) returns the height of the desktop not the height of the monitor. The desktop height does not include the height of the menu. Unlimited monitors are supported on Macs. Only one monitor is supported on PCs.

For version 7.1 we added support for multiple monitors for Windows.

Examples

Get the first screen's co-ordinates

```
MBS( "Screen.Left" ; 0 ) & " " &
MBS( "Screen.Top" ; 0 ) & " " &
MBS( "Screen.Width" ; 0 ) & " " &
MBS( "Screen.Height" ; 0 )
```

See also

- 141.4 Screen.Height 6840
- 141.5 Screen.Left 6841
- 141.8 Screen.Width 6844

Created 18th August 2014, last changed 12nd July 2018.

141.8 Screen.Width

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	1.0	Yes	Yes	Yes	No	Yes

MBS("Screen.Width"; ScreenID)

Parameters

ScreenID

The zero based index of the screen to to target.

0

Description

FileMaker's built in functions for returning related information only works for the "desktop" and may include more than one screen in a Multiple monitor situation. Unlimited monitors are supported on Macs. Only one monitor is supported on PCs.

For version 7.1 we added support for multiple monitors for Windows.

Examples

Get the first screen's co-ordinates

```
MBS( "Screen.Left" ; 0 ) & " " &
```

```
MBS( "Screen.Top" ; 0 ) & " " &
```

```
MBS( "Screen.Width" ; 0 ) & " " &
```

```
MBS( "Screen.Height" ; 0 )
```

See also

- 141.4 Screen.Height 6840
- 141.5 Screen.Left 6841
- 141.7 Screen.Top 6843

Created 18th August 2014, last changed 12nd July 2018.

141.9 Screenshot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	1.0	Yes	Yes	Yes	No	No

MBS("Screenshot"; ScreenID; Format; Quality; Filename)

Parameters

ScreenID

Zero Based index of the screens. If blank "0" is assumed

0

Format

The format of the file (currently only JPEG is supported)

JPEG

Quality

The quality of the image. From 0 to 100.

80

Filename

The desired file name. The image is not written to disk. This file name is just added to the container for later export.

MyCoolFile

Result Returns the image as a container value so you can assign it to a container.

Description

Use "Set Field" to set the result of this function into any container field. On PCs only the main monitor is supported, screen id 0.

Updated for Mac OS X 10.7 in plugin version 2.5.

Returns the image as container value, so you can assign it to a container field or save to disk with Container.WriteFile function.

Examples

Capture screen as JPEG:

```
Let(
[
/*-----PARAMETERS-----*/
ScreenID = 0;
Format = "JPEG";
Quality = 512;
Filename = "MyCoolFile"
];
/*-----FUNCTION-----*/
MBS(
"Screenshot";
```

6846

CHAPTER 141. SCREENSHOT

```
ScreenID ;  
Format ;  
Quality ;  
Filename  
)  
)
```

Put screenshot in field:

```
Set Variable [ $screenshot ; Value: MBS("Screenshot"; 0; "jpeg"; 90) ]  
Set Field [ Contacts::Photo Container ; $screenshot ]
```

See also

- 55.35 Container.WriteFile

1658

Created 18th August 2014, last changed 26th April 2019.

141.10 ScreenshotRect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
141 Screenshot	1.0	Yes	Yes	Yes	No	No

MBS("ScreenshotRect"; Left; Top; Width; Height; Format; Quality; File Name)

Parameters**Left**

Left
100

Top

Top
100

Width

Width of the rectangle
200

Height

Height of Rectangle
200

Format

File Format
JPEG

Quality

The quality of the image
100

File Name

The desired file name. The image is not written to disk. This file name is just added to the container for later export.
Test File.jpg

Result Returns the image as a container value so you can assign it to a container.

Description

Updated for Mac OS X 10.7 in plugin version 2.5.

Returns the image as container value, so you can assign it to a container field or save to disk with Container.WriteFile function.

Examples

Capture a portion of the screen to a JPEG

```
Let(
[
```

```

/*-----PARAMETERS-----*/
Left = 100;
Top = 100;
Width = 200;
Height = 200;
Format = "JPEG";
Quality = 1024;
File Name = "Test File.jpg"
];
/*-----FUNCTION-----*/
MBS(
"ScreenshotRect";
Left ;
Top ;
Width ;
Height ;
Format ;
Quality ;
File Name
)
)

```

Capture an area of screen as picture:

```
Set Field [ test::test ; MBS( "ScreenshotRect"; 100; 100; 400; 300; "JPEG"; 1024; "screenshot.jpg" ) ]
```

See also

- 55.35 Container.WriteFile

1658

141.10.1 Blog Entries

- [MBS Filemaker Plugin Overview](#)

Created 18th August 2014, last changed 26th April 2019.

Chapter 142

ScriptWorkspace

Control FileMaker's Script Workspace on macOS.

142.1 ScriptWorkspace.BringToFront

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.BringToFront")

Result Returns OK or error.

Description

See also

- 142.8 ScriptWorkspace.LineCount

6856

Created 13th August 2017, last changed 13th August 2017.

142.2 ScriptWorkspace.CopyScriptText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	10.1	Yes	No	No	No	No

MBS("ScriptWorkspace.CopyScriptText")

Result Returns OK or error.

Description

Includes colors for script steps.

Maybe useful for automation workflows where you like to evaluate an expression by hotkey which puts current script on clipboard and then pastes it in your CMS for the website.

See also

- [142.11 ScriptWorkspace.ScriptText](#) 6859
- [142.21 ScriptWorkspace.StyledScriptText](#) 6869

142.2.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 21st February 2020, last changed 21st February 2020.

142.3 ScriptWorkspace.CurrentTab

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.CurrentTab")

Result Returns text or error.

Description

See also

- [88.13 HotKey.Register](#) 4843
- [88.15 HotKey.SetEvaluate](#) 4848
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

142.3.1 Blog Entries

- [Define hot keys for functions in the FileMaker development](#)

Created 13th August 2017, last changed 13th August 2017.

142.4 ScriptWorkspace.ExpandScriptFolders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.ExpandScriptFolders")

Result Returns number or error.

Description

Returns number of folders.

Created 14th August 2017, last changed 10th November 2017.

142.5 ScriptWorkspace.GetScriptListSearch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	10.0	Yes	No	No	No	No

MBS("ScriptWorkspace.GetScriptListSearch")

Result Returns text or error.

Description

See also

- 142.19 ScriptWorkspace.SetScriptListSearch

6867

142.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 4th December 2019, last changed 4th December 2019.

142.6 ScriptWorkspace.IsActive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	10.0	Yes	No	No	No	No

MBS("ScriptWorkspace.IsActive")

Result Returns 1, 0 or error.

Description

Returns 1 if script workspace has focus.

e.g. if you trigger an evaluation via hotkey functions, you can use this function to check if you are in script workspace.

See also

- [142.7 ScriptWorkspace.IsVisible](#) 6855
- [142.15 ScriptWorkspace.SelectLine](#) 6863
- [142.16 ScriptWorkspace.SelectLines](#) 6864
- [142.23 ScriptWorkspace.Title](#) 6871

142.6.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 2nd December 2019, last changed 2nd December 2019.

142.7 ScriptWorkspace.IsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.IsVisible")

Result Returns 0, 1 or error.

Description

Returns 1 if visible or 0 if not.

See also

- 142.6 ScriptWorkspace.IsActive 6854
- 142.12 ScriptWorkspace.ScriptsVisible 6860
- 142.20 ScriptWorkspace.StepsVisible 6868
- 142.23 ScriptWorkspace.Title 6871

Created 14th August 2017, last changed 14th August 2017.

142.8 ScriptWorkspace.LineCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.LineCount")

Result Returns number or error.

Description

See also

- 142.1 ScriptWorkspace.BringToFront 6849
- 142.26 ScriptWorkspace.Window 6874

Created 14th August 2017, last changed 14th August 2017.

142.9 ScriptWorkspace.OpenScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.OpenScript"; ScriptName)

Parameters

ScriptName

The name of the script to select. Must be visible in the left list of scripts in script workspace.

"Test"

Result Returns OK or error.

Description

The script list does not need to be visible.

Examples

Open a script in a second:

```
Set Variable [ $r ; Value: MBS( "Schedule.EvaluateAfterDelay"; 1; "MBS( \"ScriptWorkspace.OpenScript\"; \"Test Script\" )" ) ]
```

See also

- 140.4 Schedule.EvaluateAfterDelay 6788
- 142.24 ScriptWorkspace.TriggerScripts 6872

Created 13th August 2017, last changed 8th October 2019.

142.10 ScriptWorkspace.ScriptNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.ScriptNames")

Result Returns list or error.

Description

See also

- 142.12 ScriptWorkspace.ScriptsVisible 6860
- 142.11 ScriptWorkspace.ScriptText 6859
- 142.16 ScriptWorkspace.SelectLines 6864

142.10.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr8](#)

Created 13th August 2017, last changed 13th August 2017.

142.11 ScriptWorkspace.ScriptText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	9.0	Yes	No	No	No	No

MBS("ScriptWorkspace.ScriptText" { ; SelectedOnly })

Parameters

SelectedOnly

Optional

Available in MBS FileMaker Plugin 9.5 or newer.

Return only selected text lines. Default is 0.

1

Result Returns text or error.

Description

Same as copy button in script workspace.

See also

- [88.13 HotKey.Register](#) 4843
- [88.15 HotKey.SetEvaluate](#) 4848
- [142.2 ScriptWorkspace.CopyScriptText](#) 6850
- [142.10 ScriptWorkspace.ScriptNames](#) 6858
- [142.21 ScriptWorkspace.StyledScriptText](#) 6869
- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553

142.11.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)
- [Define hot keys for functions in the FileMaker development](#)
- [MBS FileMaker Plugin, version 9.5pr7](#)
- [MBS FileMaker Plugin, version 8.6pr5](#)

Created 20th December 2018, last changed 7th November 2019.

142.12 ScriptWorkspace.ScriptsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.5	Yes	No	No	No	No

MBS("ScriptWorkspace.ScriptsVisible")

Result Returns 1, 0 or error.

Description

Examples

Queries state:

Show Custom Dialog ["Scripts: " & MBS("ScriptWorkspace.ScriptsVisible") & ", Steps: "& MBS("ScriptWorkspace.StepsVisible")]

See also

- [142.7 ScriptWorkspace.IsVisible](#) 6855
- [142.10 ScriptWorkspace.ScriptNames](#) 6858
- [142.20 ScriptWorkspace.StepsVisible](#) 6868

142.12.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)

Created 12nd November 2017, last changed 12nd November 2017.

142.13 ScriptWorkspace.ScrollToLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	9.0	Yes	No	No	No	No

MBS("ScriptWorkspace.ScrollToLine"; Line)

Parameters

Line

The new line number. If negative, will be relative to end.

10

Result Returns OK or error.

Description

Line number can be be negative to select a line relative to end of script.

Examples

Scrolls to last line:

MBS("ScriptWorkspace.ScrollToLine"; -1)

See also

- [142.14 ScriptWorkspace.ScrollToSelection](#) 6862
- [142.17 ScriptWorkspace.SelectedLine](#) 6865
- [142.18 ScriptWorkspace.SelectedLines](#) 6866
- [142.15 ScriptWorkspace.SelectLine](#) 6863
- [142.16 ScriptWorkspace.SelectLines](#) 6864

142.13.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr5](#)

Created 20th December 2018, last changed 20th December 2018.

142.14 ScriptWorkspace.ScrollToSelection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	9.0	Yes	No	No	No	No

MBS("ScriptWorkspace.ScrollToSelection")

Result Returns OK or error.

Description

See also

- 142.13 ScriptWorkspace.ScrollToLine

6861

142.14.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr5](#)

Created 20th December 2018, last changed 20th December 2018.

142.15 ScriptWorkspace.SelectLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.SelectLine"; Line { ; Scroll })

Parameters

Line

The new line number. If negative, will be relative to end.

10

Scroll

Optional

Whether to scroll to move row visible.

1

Result Returns OK or error.

Description

Line number can be be negative to select a line relative to end of script.

See also

- 142.6 ScriptWorkspace.IsActive 6854
- 142.13 ScriptWorkspace.ScrollToLine 6861
- 142.17 ScriptWorkspace.SelectedLine 6865
- 142.18 ScriptWorkspace.SelectedLines 6866
- 142.16 ScriptWorkspace.SelectLines 6864

142.15.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr5](#)

Created 14th August 2017, last changed 20th December 2018.

142.16 ScriptWorkspace.SelectLines

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	9.0	Yes	No	No	No	No

MBS("ScriptWorkspace.SelectLines"; Line1; Line2)

Parameters

Line1

The first line number. If negative, will be relative to end.
10

Line2

The last line number. If negative, will be relative to end.
15

Result Returns OK or error.

Description

Line number can be be negative to select a line relative to end of script.

Examples

Select rows 5 to 10:

MBS("ScriptWorkspace.SelectLines"; 5; 10)

Select last two lines:

MBS("ScriptWorkspace.SelectLines"; -2; -1)

See also

- [142.6 ScriptWorkspace.IsActive](#) 6854
- [142.10 ScriptWorkspace.ScriptNames](#) 6858
- [142.13 ScriptWorkspace.ScrollToLine](#) 6861
- [142.17 ScriptWorkspace.SelectedLine](#) 6865
- [142.18 ScriptWorkspace.SelectedLines](#) 6866
- [142.15 ScriptWorkspace.SelectLine](#) 6863

142.16.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 20th December 2018, last changed 4th December 2019.

142.17 ScriptWorkspace.SelectedLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.SelectedLine")

Result Returns line number or error.

Description

See also

- 142.13 ScriptWorkspace.ScrollToLine 6861
- 142.18 ScriptWorkspace.SelectedLines 6866
- 142.15 ScriptWorkspace.SelectLine 6863
- 142.16 ScriptWorkspace.SelectLines 6864

Created 14th August 2017, last changed 14th August 2017.

142.18 ScriptWorkspace.SelectedLines

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	10.0	Yes	No	No	No	No

MBS("ScriptWorkspace.SelectedLines" { ; Ranges })

Parameters

Ranges

Optional

Whether to return list with ranges. Pass 1 for ranges or 0 for just line numbers.

1

Result Returns list or error.

Description

If ranges is 1, we return ranges like "3-5§7§10-12", otherwise we return "3§4§5§7§10§11§12".

See also

- 142.13 ScriptWorkspace.ScrollToLine 6861
- 142.17 ScriptWorkspace.SelectedLine 6865
- 142.15 ScriptWorkspace.SelectLine 6863
- 142.16 ScriptWorkspace.SelectLines 6864

142.18.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 4th December 2019, last changed 4th December 2019.

142.19 ScriptWorkspace.SetScriptListSearch

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	10.0	Yes	No	No	No	No

MBS("ScriptWorkspace.SetScriptListSearch" { ; SearchText })

Parameters

SearchText

Optional

The text to put in the search field.

"Import"

Result Returns OK or error.

Description

Performs also search after changing text.

See also

- 142.5 ScriptWorkspace.GetScriptListSearch

6853

142.19.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 4th December 2019, last changed 4th December 2019.

142.20 ScriptWorkspace.StepsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.5	Yes	No	No	No	No

MBS("ScriptWorkspace.StepsVisible")

Result Returns 1, 0 or error.

Description

Examples

Queries state:

Show Custom Dialog ["Scripts: " & MBS("ScriptWorkspace.ScriptsVisible") & ", Steps: "& MBS("ScriptWorkspace.StepsVisible")]

See also

- [142.7 ScriptWorkspace.IsVisible](#) 6855
- [142.12 ScriptWorkspace.ScriptsVisible](#) 6860

142.20.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)

Created 12nd November 2017, last changed 12nd November 2017.

142.21 ScriptWorkspace.StyledScriptText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	10.1	Yes	No	No	No	No

MBS("ScriptWorkspace.StyledScriptText" { ; Mode })

Parameters

Mode

Optional

The mode to use. Can be HTML, RTF, StyledText or Text. Default is StyledText.

"StyledText"

Result Returns text or error.

Description

Can return text as styled text, plain text, html or rtf.

Maybe useful for automation workflows where you like to evaluate an expression by hotkey which puts current scripttext into a CMS for your website or writes to it to a text file to compare differences later.

Examples

Query text as styled text:

```
MBS( "ScriptWorkspace.StyledScriptText"; "StyledText")
```

See also

- [142.2 ScriptWorkspace.CopyScriptText](#) 6850
- [142.11 ScriptWorkspace.ScriptText](#) 6859

142.21.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 21st February 2020, last changed 21st February 2020.

142.22 ScriptWorkspace.Tabs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.Tabs")

Result Returns list or error.

Description

See also

- 142.23 ScriptWorkspace.Title

6871

Created 13th August 2017, last changed 13th August 2017.

142.23 ScriptWorkspace.Title

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.Title")

Result Returns OK or error.

Description

See also

- 142.6 ScriptWorkspace.IsActive 6854
- 142.7 ScriptWorkspace.IsVisible 6855
- 142.22 ScriptWorkspace.Tabs 6870
- 142.26 ScriptWorkspace.Window 6874

Created 13th August 2017, last changed 13th August 2017.

142.24 ScriptWorkspace.TriggerScripts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.5	Yes	No	No	No	No

MBS("ScriptWorkspace.TriggerScripts")

Result Returns OK or error.

Description

Examples

Trigger scripts:

Set Variable [\$r ; Value: MBS("ScriptWorkspace.TriggerScripts")]

See also

- [142.9 ScriptWorkspace.OpenScript](#) 6857
- [142.25 ScriptWorkspace.TriggerSteps](#) 6873

142.24.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)

Created 12nd November 2017, last changed 12nd November 2017.

142.25 ScriptWorkspace.TriggerSteps

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.5	Yes	No	No	No	No

MBS("ScriptWorkspace.TriggerSteps")

Result Returns OK or error.

Description

Examples

Trigger steps:

Set Variable [\$r ; Value: MBS("ScriptWorkspace.TriggerSteps")]

See also

- [142.24 ScriptWorkspace.TriggerScripts](#)

6872

142.25.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)

Created 12nd November 2017, last changed 12nd November 2017.

142.26 ScriptWorkspace.Window

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
142 ScriptWorkspace	7.4	Yes	No	No	No	No

MBS("ScriptWorkspace.Window")

Result Returns window reference number or error.

Description

Allows to use other commands like Window.Hide.

See also

- 142.8 ScriptWorkspace.LineCount 6856
- 142.23 ScriptWorkspace.Title 6871
- 182.41 Window.Hide 8581

Created 13th August 2017, last changed 13th August 2017.

Chapter 143

SendMail

Create emails and send them.

You can send or receive emails with our CURL functions. For sending the SendMail functions help to build an email and send it, while EmailParser functions help to parse an email.

143.1 SendMail.AddAttachmentContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

```
MBS( "SendMail.AddAttachmentContainer"; EmailID; Container { ; Name; MimeType; InlineID } )
```

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Container

The container to attach to email.

Attachment::Container

Name

Optional

The name for the attachment. If empty, version 6.2 or newer uses file name from container.

"sample.pdf"

MimeType

Optional

The mime type to use. e.g. "application/pdf" for PDF files. If missing, we use "application/octet-stream". Version 6.2 or newer detects mime type from file extension if needed.

"application/octet-stream"

InlineID

Optional

The content ID for inline images (CID). Empty text or no parameter gives regular attachment.

```
"test.png@3C111B0E.81ED.478A.912C.4B64F538003C"
```

Result Returns OK or error.

Description

Version 5 of MBS Plugin can encode file name for preserving non ASCII characters. Still for compatibility it is recommended to use simply ASCII names.

You can use `Text.FileExtensionToMimeType` to find the mime type for a file extension.

You can use `AddAttachment` functions several times to add several attachments.

If your Container is already Base64 encoded text, you can use the `SendMail.AddAttachmentText` function with 1 for `IsBase64` parameter.

For `InlineID`:

If you like to use inline images, please check your html for references to image files. Please add all the image files as attachments with an `InlineID`, e.g. pass the file name as `InlineID`.

e.g. in you html you may reference `background-3.jpg` in the body tag:

```
<body background="background-3.jpg">
```

Add an attachment named `background-3.jpg` (name doesn't matter) with `InlineID background-3.jpg` and replace the `background-3.jpg` in the html with `cid:background-3.jpg` so the email viewer will lookup the attachment with that id to display it there.

Examples

Add attachment:

```
Set Variable [ $r; Value:MBS("SendMail.AddAttachmentContainer"; $EmailID; Attachment::Container; Attachment::Name; Attachment::Type) ]
```

See also

- 143.2 `SendMail.AddAttachmentFile` 6878
- 143.3 `SendMail.AddAttachmentText` 6881
- 143.14 `SendMail.CreateEmail` 6898
- 143.25 `SendMail.PrepareCURL` 6910
- 143.28 `SendMail.SetHTMLText` 6915
- 164.37 `Text.FileExtensionToMimeType` 7828

143.1. *SENDMAIL.ADDATTACHMENTCONTAINER*

6877

- 186.1 WinSendMail.AddAttachmentContainer

8739

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.1.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)
- [Sending emails in FileMaker with MBS Plugin](#)
- [MBS FileMaker Plugin, version 6.2pr1](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)

143.1.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 26](#)

Created 3th September 2014, last changed 10th May 2018.

143.2 SendMail.AddAttachmentFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.AddAttachmentFile"; EmailID; Path { ; Name; MimeType; InlineID })

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Path

The native file path to the file to include as attachment.

"/Users/cs/Desktop/sample.pdf"

Name

Optional

The name for the attachment. If empty, version 6.2 or newer uses file name from file path.

"sample.pdf"

MimeType

Optional

The mime type to use. e.g. "application/pdf" for PDF files. If missing, we use "application/octet-stream".

Version 6.2 or newer detects mime type from file extension if needed.

"application/octet-stream"

InlineID

Optional

The content ID for inline images (CID). Empty text or no parameter gives regular attachment.

"test.png@3C111B0E.81ED.478A.912C.4B64F538003C"

Result Returns OK or error.

Description

Attachments over 100 MB are not supported.

Version 5 of MBS Plugin can encode file name for preserving non ASCII characters. Still for compatibility it is recommended to use simply ASCII names.

You can use Text.FileExtensionToMimeType to find the mime type for a file extension.

You can use AddAttachment several times to add several attachments.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Add attachment:

```
Set Variable [ $r; Value:MBS("SendMail.AddAttachmentFile"; $EmailID; Attachment::Path; Attachment::Name;
```

```
Attachment::Type) ]
```

Recursive custom function to add a list of files:

```
MBSAttachment(EmailID, FilePathList, Flag_inline)

// e.g. $r=MBSattachment ( $EmailID ; MyTable::FilePathList; 1 ) ;

Case(
ValueCount (FilePathList ) >0;
Let(
[
$element =
ValueCount (FilePathList ) ;
$Line =
GetValue( FilePathList; $element );
$InlineID=
MBS( "Path.LastPathComponent"; $line ) ;
$r=
MBS(
"SendMail.AddAttachmentFile";
EmailID;
$Line;
""; /* file name from path automatically */
""; /* mime name from file name automatically */
Case(
Flag_inline = 1;
$InlineID ;
""
)
)
];

// call recursive for next file:
MBSAttachment(
EmailID;
Trim(
Substitute(
"$" & FilePathList;
"$" & $Line ;
""
));
Flag_inline
)
);
""
)
```

See also

- [121.2 Path.FileMakerPathToNativePath](#) 6139
- [121.5 Path.LastPathComponent](#) 6144
- [143.1 SendMail.AddAttachmentContainer](#) 6875
- [143.3 SendMail.AddAttachmentText](#) 6881
- [143.14 SendMail.CreateEmail](#) 6898
- [143.25 SendMail.PrepareCURL](#) 6910
- [164.37 Text.FileExtensionToMimeType](#) 7828
- [186.1 WinSendMail.AddAttachmentContainer](#) 8739
- [186.2 WinSendMail.AddAttachmentFile](#) 8741
- [186.3 WinSendMail.AddAttachmentText](#) 8743

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.2.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)
- [MBS FileMaker Plugin, version 6.2pr1](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)

143.2.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 26](#)

143.3 SendMail.AddAttachmentText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	6.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "SendMail.AddAttachmentText"; EmailID; Text; Encoding { ; Name; MimeType; InlineID; IsBase64 } )
```

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Text

The text to use for the attachment.

"Hello World"

Encoding

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Name

Optional

The name for the attachment. If empty, version 6.2 or newer uses file name from file path.

"sample.txt"

MimeType

Optional

The mime type to use. e.g. "application/pdf" for PDF files. If missing, we use "application/octet-stream". Version 6.2 or newer detects mime type from file extension if needed.

"application/octet-stream"

InlineID

Optional

Available in MBS FileMaker Plugin 7.3 or newer.

The content ID for inline images (CID). Empty text or no parameter gives regular attachment.

IsBase64

Optional

Available in MBS FileMaker Plugin 8.2 or newer.

Whether text is already base64 encoded. Default is 0, so we encode it. Pass 1 if you already encoded the text yourself.

0

Result Returns OK or error.

Description

Attachments over 100 MB are not supported.

You can use Text.FileExtensionToMimeType to find the mime type for a file extension.

You can use AddAttachment several times to add several attachments.

Broken in 8.1 or older where you need to do Base64 encoding and fixed in 8.2 to work correctly.

Examples

Adds a text attachment:

```
MBS( "SendMail.AddAttachmentText"; $email; "Hello World"; "UTF-8"; "test.txt"; "text/plain" )
```

See also

- [143.1 SendMail.AddAttachmentContainer](#) 6875
- [143.2 SendMail.AddAttachmentFile](#) 6878
- [143.10 SendMail.AttachmentCount](#) 6894
- [143.14 SendMail.CreateEmail](#) 6898
- [164.37 Text.FileExtensionToMimeType](#) 7828
- [186.2 WinSendMail.AddAttachmentFile](#) 8741
- [186.3 WinSendMail.AddAttachmentText](#) 8743

143.3.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr3](#)
- [MBS FileMaker Plugin, version 6.5pr1](#)
- [Sending emails in FileMaker with MBS Plugin](#)

Created 1st October 2016, last changed 5th May 2018.

143.4 SendMail.AddBCC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.AddBCC"; EmailID; Email { ; Name })

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Email

The email address of the recipient.

"test@mbsplugins.de"

Name

Optional

Optional the name of the recipient. If this name contains special characters, it will be automatically encoded with UTF-8.

"John Miller"

Result Returns OK or error.

Description

See also SendMail.AddRecipient.

You can call this in a loop several times to add as many recipients as needed.

Please make sure the email addresses are syntactically correct.

Examples

Start new email and add recipients:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
Set Variable [ $r; Value:MBS("SendMail.AddTO"; $EmailID; "Jens@mbsplugins.test"; "Jens Müller") ]
Set Variable [ $r; Value:MBS("SendMail.AddCC"; $EmailID; "John@mbsplugins.test"; "John Miller") ]
Set Variable [ $r; Value:MBS("SendMail.AddBCC"; $EmailID; "Bob@mbsplugins.test"; "Bob Jones") ]
```

See also

- 143.5 SendMail.AddCC 6885
- 143.7 SendMail.AddRecipient 6889
- 143.9 SendMail.AddTo 6892
- 143.14 SendMail.CreateEmail 6898
- 143.25 SendMail.PrepareCURL 6910

- 186.4 WinSendMail.AddBCC 8744
- 186.5 WinSendMail.AddCC 8746
- 186.6 WinSendMail.AddRecipient 8748

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.4.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.4.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 3th September 2014, last changed 9th September 2019.

143.5 SendMail.AddCC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.AddCC"; EmailID; Email { ; Name })

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Email

The email address of the recipient.

"test@mbsplugins.de"

Name

Optional

Optional the name of the recipient. If this name contains special characters, it will be automatically encoded with UTF-8.

"John Miller"

Result Returns OK or error.

Description

See also SendMail.AddRecipient.

You can call this in a loop several times to add as many recipients as needed.

Please make sure the email addresses are syntactically correct.

Examples

Start new email and add recipients:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
Set Variable [ $r; Value:MBS("SendMail.AddTO"; $EmailID; "Jens@mbsplugins.test"; "Jens Müller") ]
Set Variable [ $r; Value:MBS("SendMail.AddCC"; $EmailID; "John@mbsplugins.test"; "John Miller") ]
Set Variable [ $r; Value:MBS("SendMail.AddBCC"; $EmailID; "Bob@mbsplugins.test"; "Bob Jones") ]
```

See also

- 143.4 SendMail.AddBCC 6883
- 143.7 SendMail.AddRecipient 6889
- 143.9 SendMail.AddTo 6892
- 143.14 SendMail.CreateEmail 6898
- 143.25 SendMail.PrepareCURL 6910

- 186.4 WinSendMail.AddBCC 8744
- 186.5 WinSendMail.AddCC 8746
- 186.6 WinSendMail.AddRecipient 8748
- 186.11 WinSendMail.CreateEmail 8755

Example Databases

- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.5.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.5.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 3th September 2014, last changed 9th September 2019.

143.6 SendMail.AddHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.AddHeader"; EmailID; Header)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Header

The new header entry. Passed to CURL later without modification. Since version 6.4 this can be a list of headers.

"X-Company: Test Inc"

Result Returns OK or error.

Description

This header is passed as is and not preprocessed.

You can use this function to pass custom headers for "X-Universally-Unique-Identifier:", "Date:", "X-Mailer:", "Message-Id:" and "Mime-Version:".

If you pass header without text following ":", the header is not included.

Examples

Add company name:

```
MBS("SendMail.AddHeader"; $EmailID; "X-Company: Your Company Name")
```

Add X-URL header:

```
MBS("SendMail.AddHeader"; $EmailID; "X-URL: http://www.myurl.com")
```

Add high priority:

```
MBS("SendMail.AddHeader"; $EmailID; "X-Priority: 1")
```

Add low priority:

```
MBS("SendMail.AddHeader"; $EmailID; "X-Priority: 5")
```

Add language

```
MBS("SendMail.AddHeader"; $EmailID; "Content-Language: de")
```

Request read receipt:

```
MBS("SendMail.AddHeader"; $EMailID; "Disposition-Notification-To: email@server.de")
```

Set email app:

```
MBS("SendMail.AddHeader"; $EMailID; "X-Mailer: FMCompanyManagerX")
```

Request return receipt:

```
MBS("SendMail.AddHeader"; $EMailID; "Return-Receipt-To: \"Test Software\" <admin@testsoft.com>")
```

See also

- 143.14 SendMail.CreateEmail 6898

143.6.1 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 3th September 2014, last changed 26th February 2020.

143.7 SendMail.AddRecipient

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.AddRecipient"; EmailID; Type; Email { ; Name })

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.
\$EmailID

Type

The type of recipient. Can be TO, BCC, CC or ReplyTo.
"CC"

Email

The email address of the recipient.
"test@mbsplugins.de"

Name

Optional
Optional the name of the recipient. If this name contains special characters, it will be automatically encoded with UTF-8.
"John Miller"

Result Returns OK or error.

Description

This function can be used easily if the type is also a field in your database.
As an alternative you can of course also use SendMail.AddTo, SendMail.AddReplyTo, SendMail.AddCC or SendMail.AddBCC.

You can call this in a loop several times to add as many recipients as needed.
Please make sure the email addresses are syntactically correct.

Examples

Add email address for a carbon copy:

```
MBS( "SendMail.AddRecipient"; $email; "CC"; "test@mbsplugins.de"; "Bob Miller")
```

See also

- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.8 SendMail.AddReplyTo 6891

- 143.9 SendMail.AddTo 6892
- 143.13 SendMail.ClearRecipients 6897
- 143.14 SendMail.CreateEmail 6898
- 186.4 WinSendMail.AddBCC 8744
- 186.5 WinSendMail.AddCC 8746
- 186.6 WinSendMail.AddRecipient 8748
- 186.7 WinSendMail.AddTo 8750

143.7.1 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 5th September 2014, last changed 9th September 2019.

143.8 SendMail.AddReplyTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.AddReplyTo"; EmailID; Email { ; Name })

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Email

The email address of the recipient.

"test@mbsplugins.de"

Name

Optional

Optional the name of the recipient. If this name contains special characters, it will be automatically encoded with UTF-8.

"John Miller"

Result Returns OK or error.

Description

See also SendMail.AddRecipient.

Examples

Adds a reply to:

MBS("SendMail.AddReplyTo"; \$EmailID; "test@test.test"; "Bob Miller")

See also

- 143.7 SendMail.AddRecipient 6889
- 143.14 SendMail.CreateEmail 6898
- 143.16 SendMail.GetInReplyTo 6901
- 143.29 SendMail.SetInReplyTo 6917
- 186.6 WinSendMail.AddRecipient 8748

Created 5th September 2014, last changed 5th September 2014.

143.9 SendMail.AddTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.AddTo"; EmailID; Email { ; Name })

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Email

The email address of the recipient.

"test@mbsplugins.de"

Name

Optional

Optional the name of the recipient. If this name contains special characters, it will be automatically encoded with UTF-8.

"John Miller"

Result Returns OK or error.

Description

See also SendMail.AddRecipient.

You can call this in a loop several times to add as many recipients as needed.

Please make sure the email addresses are syntactically correct.

Examples

Start new email and add recipients:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
Set Variable [ $r; Value:MBS("SendMail.AddTO"; $EmailID; "Jens@mbsplugins.test"; "Jens Müller") ]
Set Variable [ $r; Value:MBS("SendMail.AddCC"; $EmailID; "John@mbsplugins.test"; "John Miller") ]
Set Variable [ $r; Value:MBS("SendMail.AddBCC"; $EmailID; "Bob@mbsplugins.test"; "Bob Jones") ]
```

See also

- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.7 SendMail.AddRecipient 6889
- 143.14 SendMail.CreateEmail 6898
- 143.25 SendMail.PrepareCURL 6910

<i>143.9. SENDMAIL.ADDTO</i>	6893
• 186.6 WinSendMail.AddRecipient	8748
• 186.7 WinSendMail.AddTo	8750
• 186.11 WinSendMail.CreateEmail	8755

143.9.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.9.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 3th September 2014, last changed 9th September 2019.

143.10 SendMail.AttachmentCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	6.5	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.AttachmentCount"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns number or error.

Description

See also

- 143.3 SendMail.AddAttachmentText 6881
- 143.14 SendMail.CreateEmail 6898
- 186.8 WinSendMail.AttachmentCount 8752

143.10.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr1](#)

Created 1st October 2016, last changed 1st October 2016.

143.11 SendMail.ClearAttachments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.ClearAttachments"; EmailID)

Parameters**EmailID**

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns OK or error.

Description**Examples**

Clear attachments from email:

MBS("SendMail.ClearAttachments"; \$EmailID)

See also

- [143.13 SendMail.ClearRecipients](#) 6897
- [143.14 SendMail.CreateEmail](#) 6898
- [186.9 WinSendMail.ClearAttachments](#) 8753

Created 5th September 2014, last changed 19th February 2016.

143.12 SendMail.ClearHeaders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	6.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.ClearHeaders"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.
\$EmailID

Result Returns OK or error.

Description

Examples

Clear headers from email:

MBS("SendMail.ClearHeaders"; \$EmailID)

See also

- 143.14 SendMail.CreateEmail

6898

143.12.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 19th February 2016, last changed 19th February 2016.

143.13 SendMail.ClearRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.ClearRecipients"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.
\$EmailID

Result Returns OK or error.

Description

Removes all TO, CC, BCC and ReplyTO entries.

Examples

Clear recipients from email:

MBS("SendMail.ClearRecipients"; \$EmailID)

See also

- [143.7 SendMail.AddRecipient](#) 6889
- [143.11 SendMail.ClearAttachments](#) 6895
- [143.14 SendMail.CreateEmail](#) 6898
- [186.10 WinSendMail.ClearRecipients](#) 8754

Example Databases

- [CURL/Email/Batch Mailer](#)

Created 5th September 2014, last changed 19th February 2016.

143.14 SendMail.CreateEmail

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.CreateEmail" { ; Encoding })

Parameters

Encoding

Optional

The text encoding to use for the email. If unspecified we use "UTF-8". Can be UTF-8, macintosh, windows-1250, windows-1251, windows-1252, windows-1253, windows-1254, windows-1255, windows-1256, windows-1257, ISO-8859-1, ISO-8859-2, ISO-8859-3, ISO-8859-5, ISO-8859-6, ISO-8859-7, ISO-8859-8, ISO-8859-9 or ISO-8859-15.

"UTF-8"

Result Returns Email ID or error.

Description

The reference number returned by this function can be passed to other plugin functions for setting up the email.

Later use SendMail.Release to free memory.

SendMail reference numbers are starting at 14000 and counting up for each new email.

See also

- 143.9 SendMail.AddTo 6892
- 143.22 SendMail.GetSMTPUserName 6907
- 143.24 SendMail.GetSubject 6909
- 143.25 SendMail.PrepareCURL 6910
- 143.29 SendMail.SetInReplyTo 6917
- 143.30 SendMail.SetMessageID 6918
- 143.31 SendMail.SetPlainText 6919
- 143.33 SendMail.SetSMTPPassword 6923
- 143.34 SendMail.SetSMTPServer 6925
- 143.35 SendMail.SetSMTPUserName 6927

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.14.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)
- [MBS Filemaker Plugin, version 4.4pr10](#)
- [MBS Filemaker Plugin, version 4.4pr9](#)

143.14.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 25](#)

Created 3th September 2014, last changed 12nd November 2015.

143.15 SendMail.GetHTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetHTMLText"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns text or error.

Description

See also

- 143.14 SendMail.CreateEmail 6898
- 143.18 SendMail.GetPlainText 6903
- 143.19 SendMail.GetRichText 6904
- 143.28 SendMail.SetHTMLText 6915
- 143.32 SendMail.SetRichText 6921

Created 28th February 2017, last changed 28th February 2017.

143.16 SendMail.GetInReplyTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetInReplyTo"; EmailID)

Parameters**EmailID**

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns text or error.

Description**See also**

- 143.8 SendMail.AddReplyTo 6891
- 143.14 SendMail.CreateEmail 6898
- 143.29 SendMail.SetInReplyTo 6917

Created 28th February 2017, last changed 28th February 2017.

143.17 SendMail.GetMessageID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetMessageID"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns text or error.

Description

See also

- 143.14 SendMail.CreateEmail 6898
- 143.30 SendMail.SetMessageID 6918

Created 28th February 2017, last changed 28th February 2017.

143.18 SendMail.GetPlainText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetPlainText"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns text or error.

Description

See also

- 143.14 SendMail.CreateEmail 6898
- 143.15 SendMail.GetHTMLText 6900
- 143.19 SendMail.GetRichText 6904
- 143.31 SendMail.SetPlainText 6919

Created 28th February 2017, last changed 28th February 2017.

143.19 SendMail.GetRichText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetRichText"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns text or error.

Description

See also

- 143.14 SendMail.CreateEmail 6898
- 143.15 SendMail.GetHTMLText 6900
- 143.18 SendMail.GetPlainText 6903
- 143.28 SendMail.SetHTMLText 6915
- 143.32 SendMail.SetRichText 6921

Created 28th February 2017, last changed 28th February 2017.

143.20 SendMail.GetSMTPPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetSMTPPassword"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.
\$EmailID

Result Returns text or error.

Description

See also

- 143.14 SendMail.CreateEmail 6898
- 143.33 SendMail.SetSMTPPassword 6923

Created 28th February 2017, last changed 28th February 2017.

143.21 SendMail.GetSMTPServer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetSMTPServer"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns text or error.

Description

See also

- 143.14 SendMail.CreateEmail 6898
- 143.22 SendMail.GetSMTPUserName 6907
- 143.34 SendMail.SetSMTPServer 6925

Created 28th February 2017, last changed 28th February 2017.

143.22 SendMail.GetSMTPUserName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetSMTPUserName"; EmailID)

Parameters**EmailID**

The email reference number obtained using SendMail.CreateEmail function.
\$EmailID

Result Returns text or error.

Description**See also**

- 143.14 SendMail.CreateEmail 6898
- 143.21 SendMail.GetSMTPServer 6906
- 143.35 SendMail.SetSMTPUserName 6927

Created 28th February 2017, last changed 28th February 2017.

143.23 SendMail.GetSource

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetSource"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns text or error.

Description

This is more for debugging, then for real use.

See also

- [143.14 SendMail.CreateEmail](#) 6898
- [143.24 SendMail.GetSubject](#) 6909
- [143.25 SendMail.PrepareCURL](#) 6910

Example Databases

- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.23.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

Created 3th September 2014, last changed 24th June 2019.

143.24 SendMail.GetSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	7.1	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.GetSubject"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns text or error.

Description

See also

- 143.14 SendMail.CreateEmail 6898
- 143.23 SendMail.GetSource 6908
- 143.36 SendMail.SetSubject 6929
- 186.12 WinSendMail.GetSubject 8757
- 186.19 WinSendMail.SetSubject 8764

Created 28th February 2017, last changed 28th February 2017.

143.25 SendMail.PrepareCURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.PrepareCURL"; EmailID; CURLID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

CURLID

The CURL session handle.

\$curl

Result Returns OK or error.

Description

You can set your own settings like proxy after this function call.

If you like you can reuse the email and curl objects after you sent an email, change values and send another email.

Examples

Setup and send email with all options:

```

Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
Set Variable [ $r; Value:MBS("SendMail.SetFrom"; $EmailID; EMail::FromEmail; EMail::FromName) ]
Set Variable [ $r; Value:MBS("SendMail.SetHTMLText"; $EmailID; EMail::HTMLText) ]
Set Variable [ $r; Value:MBS("SendMail.SetPlainText"; $EmailID; EMail::PlainText) ]
Set Variable [ $r; Value:MBS("SendMail.SetSubject"; $EmailID; EMail::Subject) ]
Set Variable [ $r; Value:MBS("SendMail.SetSMTPServer"; $EmailID; EMail::SMTP Server; EMail::SMTP
SSL) ]
Set Variable [ $r; Value:MBS("SendMail.SetSMTPUsername"; $EmailID; EMail::SMTP Username) ]
Set Variable [ $r; Value:MBS("SendMail.SetSMTPPassword"; $EmailID; EMail::SMTP Password) ]
Set Variable [ $r; Value:MBS("SendMail.AddTO"; $EmailID; Recipient::Email; Recipient::Name) ]
Set Variable [ $r; Value:MBS("SendMail.AddCC"; $EmailID; Recipient::Email; Recipient::Name) ]
Set Variable [ $r; Value:MBS("SendMail.AddBCC"; $EmailID; Recipient::Email; Recipient::Name) ]
Set Variable [ $r; Value:MBS("SendMail.AddAttachmentContainer"; $EmailID; Attachment::Container; At-
tachment::Name; Attachment::Type) ]
Set Variable [ $r; Value:MBS("SendMail.AddAttachmentFile"; $EmailID; Attachment::Path; Attachment::Name;
Attachment::Type) ]
Set Field [ EMail::EmailSource; MBS( "Text.ReplaceNewline"; MBS("SendMail.GetSource"; $EmailID); 1)
]
Set Variable [ $curl; Value:MBS("CURL.New") ]
Set Variable [ $r; Value:MBS("SendMail.PrepareCURL"; $EmailID; $curl) ]
Set Variable [ $r; Value:MBS("CURL.Perform"; $curl) ]
Set Field [ EMail::DebugInput; MBS("Text.ReplaceNewline"; MBS("CURL.GetHeaderAsText"; $curl);1) ]
Set Field [ EMail::DebugMessages; MBS("Text.ReplaceNewline"; MBS("CURL.GetDebugAsText"; $curl);1)

```

143.25. *SENDMAIL.PREPARECURL* 6911

```
]
Set Variable [ $r; Value:MBS("CURL.Cleanup"; $curl) ]
Set Variable [ $r; Value:MBS("SendMail.Release"; $EmailID) ]
```

See also

- 143.2 SendMail.AddAttachmentFile 6878
- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.14 SendMail.CreateEmail 6898
- 143.23 SendMail.GetSource 6908
- 143.27 SendMail.SetFrom 6913
- 143.28 SendMail.SetHTMLText 6915
- 143.31 SendMail.SetPlainText 6919
- 143.35 SendMail.SetSMTPUserName 6927
- 164.59 Text.ReplaceNewline 7857

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.25.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.25.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 3th September 2014, last changed 18th October 2014.

143.26 SendMail.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.Release"; EmailID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Result Returns OK or error.

Description

See also

- [143.14 SendMail.CreateEmail](#) 6898
- [143.25 SendMail.PrepareCURL](#) 6910
- [186.11 WinSendMail.CreateEmail](#) 8755
- [186.14 WinSendMail.Release](#) 8759

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.26.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

Created 3th September 2014, last changed 3th September 2014.

143.27 SendMail.SetFrom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetFrom"; EmailID; Email { ; Name })

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.
\$EmailID

Email

The email address of the sender.
"test@mbsplugins.de"

Name

Optional
Optional the name of the sender. If this name contains special characters, it will be automatically encoded with UTF-8. Do not put an email address here!
"John Miller"

Result Returns OK or error.

Description

Examples

Create email and set sender:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
Set Variable [ $r; Value:MBS("SendMail.SetFrom"; $EmailID; "Jens@mbsplugins.test"; "Jens Müller") ]
```

See also

- 143.14 SendMail.CreateEmail 6898
- 143.25 SendMail.PrepareCURL 6910
- 143.30 SendMail.SetMessageID 6918
- 186.11 WinSendMail.CreateEmail 8755
- 186.18 WinSendMail.SetFrom 8763

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.27.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.27.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 25

Created 3th September 2014, last changed 4th October 2017.

143.28 SendMail.SetHTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetHTMLText"; EmailID; Text)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.
\$EmailID

Text

The HTML text for the email. Will be encoded by the plugin to quoted printable UTF-8.
Email::HTMLText

Result Returns OK or error.

Description

See also SendMail.SetPlainText and SendMail.SetRichText.

If you need to encode text yourself to html, you can use the Text.EncodeToHTML function.
You can read html content from file using the Text.ReplaceNewline function.

You can use Text.MergeFields to replace placeholders with values from variables, fields and expressions.

Examples

Create email and set content:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
Set Variable [ $r; Value:MBS("SendMail.SetHTMLText"; $EmailID; $html) ]
```

Sets the text as plain text and as html:

```
Set Variable [ $r; Value: MBS("SendMail.SetHTMLText"; $EmailID; "<html><body>" & GetAsCSS(EMail::Plain-
Text) & "</body></html>") ]
Set Variable [ $r; Value: MBS("SendMail.SetPlainText"; $EmailID; EMail::PlainText) ]
```

Add inline graphics with placeholder in HTML:

```
Set Variable [ $EmailID ; Value: MBS("SendMail.CreateEmail") ]
# prepare HTML from field in FileMaker
Set Variable [ $html ; Value: "<html><body>" & GetAsCSS(EMail::PlainText) & "</body></html>" ]
# Replace $$img$$ in text with image.
Set Variable [ $html ; Value: Substitute($html; "$$img$$"; "<img src=\"cid:image1.png\">") ]
Set Variable [ $r ; Value: MBS("SendMail.SetHTMLText"; $EmailID; $html) ]
# now add a container
Set Variable [ $r ; Value: MBS("SendMail.AddAttachmentContainer"; $EmailID; EMail::ImageContainer;
EMail::ImageName; "image/png"; "image1.png") ]
```

See also

- [143.1 SendMail.AddAttachmentContainer](#) 6875
- [143.14 SendMail.CreateEmail](#) 6898
- [143.15 SendMail.GetHTMLText](#) 6900
- [143.19 SendMail.GetRichText](#) 6904
- [143.25 SendMail.PrepareCURL](#) 6910
- [143.31 SendMail.SetPlainText](#) 6919
- [143.32 SendMail.SetRichText](#) 6921
- [164.31 Text.EncodeToHTML](#) 7817
- [164.46 Text.MergeFields](#) 7839
- [164.59 Text.ReplaceNewline](#) 7857

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.28.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

Created 3th September 2014, last changed 15th October 2018.

143.29 SendMail.SetInReplyTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetInReplyTo"; EmailID; MessageID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

MessageID

The message ID of the email you reply to.

\$MessageID

Result Returns OK or error.

Description

See also

- 143.8 SendMail.AddReplyTo 6891
- 143.14 SendMail.CreateEmail 6898
- 143.16 SendMail.GetInReplyTo 6901

143.29.1 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 5th September 2014, last changed 5th September 2014.

143.30 SendMail.SetMessageID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.4	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetMessageID"; EmailID; MessageID)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

MessageID

The new id for the email message.

"6345767890@monkeybreadsoftware.de"

Result Returns OK or error.

Description

This is normally set via SendMail.SetFrom.

See also

- 143.14 SendMail.CreateEmail 6898
- 143.17 SendMail.GetMessageID 6902
- 143.27 SendMail.SetFrom 6913

143.30.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr3](#)

143.30.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 29th September 2014, last changed 1st October 2014.

143.31 SendMail.SetPlainText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetPlainText"; EmailID; Text)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Text

The plain text for the email. Will be encoded by the plugin to quoted printable UTF-8.

Email::PlainText

Result Returns OK or error.

Description

See also SendMail.SetHTMLText and SendMail.SetRichText.

You can read text content from file using the Text.ReadTextFile function.

You can use Text.MergeFields to replace placeholders with values from variables, fields and expressions.

Examples

Create email and set content:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
```

```
Set Variable [ $r; Value:MBS("SendMail.SetPlainText"; $EmailID; "Hello World") ]
```

Sets the text as plain text and as html:

```
Set Variable [ $r ; Value: MBS("SendMail.SetHTMLText"; $EmailID; "<html><body>" & GetAsCSS(EMail::Plain-Text) & "</body></html>") ]
```

```
Set Variable [ $r ; Value: MBS("SendMail.SetPlainText"; $EmailID; EMail::PlainText) ]
```

See also

- 143.14 SendMail.CreateEmail 6898
- 143.18 SendMail.GetPlainText 6903
- 143.25 SendMail.PrepareCURL 6910
- 143.28 SendMail.SetHTMLText 6915
- 143.32 SendMail.SetRichText 6921
- 164.46 Text.MergeFields 7839

- [164.49 Text.ReadFile](#)

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.31.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.31.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 25](#)

Created 3th September 2014, last changed 15th October 2018.

143.32 SendMail.SetRichText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetRichText"; EmailID; Text)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Text

The rich text for the email. Will be encoded by the plugin to quoted printable UTF-8.

Email::RichText

Result Returns OK or error.

Description

See also SendMail.SetPlainText and SendMail.SetHTMLText.

You can read text content from file using the Text.ReadTextFile function.

This is not to be confused with RTF file format. Enriched text is described here:

http://en.wikipedia.org/wiki/Enriched_text

Please note that most email clients do not support this nowadays.

Examples

Sets rich text:

```
MBS("SendMail.SetRichText"; $EmailID; "<bold><italic>Hello, world!</italic></bold>")
```

See also

- 143.14 SendMail.CreateEmail 6898
- 143.15 SendMail.GetHTMLText 6900
- 143.19 SendMail.GetRichText 6904
- 143.28 SendMail.SetHTMLText 6915
- 143.31 SendMail.SetPlainText 6919
- 164.49 Text.ReadTextFile 7843

143.32.1 FileMaker Magazin

- Ausgabe 5/2014, Seite 25

143.33 SendMail.SetSMTPPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetSMTPPassword"; EmailID; password)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.
\$EmailID

password

Sets the password for SMTP server.
"This is a password"

Result Returns OK or error.

Description

Alternative to this method you can set CURL.SetOptionPassword yourself later.

Examples

Start new email and setup SMTP login:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
Set Variable [ $r; Value:MBS("SendMail.SetSMTPServer"; $EmailID; EMail::SMTP Server; EMail::SMTP
SSL) ]
Set Variable [ $r; Value:MBS("SendMail.SetSMTPUsername"; $EmailID; EMail::SMTP Username) ]
Set Variable [ $r; Value:MBS("SendMail.SetSMTPPassword"; $EmailID; EMail::SMTP Password) ]
```

See also

- 61.265 CURL.SetOptionPassword 2145
- 61.381 CURL.SetOptionXOAuth2Bearer 2312
- 143.14 SendMail.CreateEmail 6898
- 143.20 SendMail.GetSMTPPassword 6905
- 143.25 SendMail.PrepareCURL 6910
- 143.34 SendMail.SetSMTPServer 6925
- 143.35 SendMail.SetSMTPUserName 6927

Example Databases

- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.33.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.33.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 3th September 2014, last changed 9th January 2017.

143.34 SendMail.SetSMTPServer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetSMTPServer"; EmailID; Server { ; SSL })

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Server

The new SMTP Server address.

"smtp.mac.com"

SSL

Optional

Optional, pass 1 to use SSL, else 0. Pass 0 for TLS and later configure CURL for TLS.

Pass 1 if you use port 465 to enable SSL.

1

Result Returns OK or error.

Description

There are a few combinations possible.

First you can use SendMail.SetSMTPServer with SSL and pass 1 there.

Or you pass 0 for no SSL. Still you can use CURL.SetOptionFTPSSL set to 3 to allow TLS for an upgrade of the unencrypted connection to SSL later.

Some servers don't support unencrypted, SSL or TLS, so only one may work.

And ports can be difficult, too. You can use CURL.SetOptionPort to set a port explicit or include it in the server with double colon on the end. Common ports are 25, 587 or 465.

Alternative to this method you can set CURL.SetOptionURL directly.

Examples

Start new email and setup SMTP login:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
```

```
Set Variable [ $r; Value:MBS("SendMail.SetSMTPServer"; $EmailID; EMail::SMTP Server; EMail::SMTP SSL) ]
```

```
Set Variable [ $r; Value:MBS("SendMail.SetSMTPUsername"; $EmailID; EMail::SMTP Username) ]
```

```
Set Variable [ $r; Value:MBS("SendMail.SetSMTPPassword"; $EmailID; EMail::SMTP Password) ]
```

See also

- 61.269 CURL.SetOptionPort

- 61.370 CURL.SetOptionURL 2288
- 143.14 SendMail.CreateEmail 6898
- 143.21 SendMail.GetSMTPServer 6906
- 143.25 SendMail.PrepareCURL 6910
- 143.33 SendMail.SetSMTPPassword 6923
- 143.35 SendMail.SetSMTPUserName 6927

Example Databases

- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.34.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.34.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 3th September 2014, last changed 28th February 2020.

143.35 SendMail.SetSMTPUserName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetSMTPUserName"; EmailID; Username)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Username

Sets the username for SMTP server.

"user@mbsplugins.de"

Result Returns OK or error.

Description

Alternative to this method you can set CURL.SetOptionUsername yourself later.

Examples

Start new email and setup SMTP login:

```
Set Variable [ $EmailID; Value:MBS("SendMail.CreateEmail") ]
```

```
Set Variable [ $r; Value:MBS("SendMail.SetSMTPServer"; $EmailID; EMail::SMTP Server; EMail::SMTP SSL) ]
```

```
Set Variable [ $r; Value:MBS("SendMail.SetSMTPUsername"; $EmailID; EMail::SMTP Username) ]
```

```
Set Variable [ $r; Value:MBS("SendMail.SetSMTPPassword"; $EmailID; EMail::SMTP Password) ]
```

See also

- 61.378 CURL.SetOptionUsername 2305
- 61.381 CURL.SetOptionXOAuth2Bearer 2312
- 143.14 SendMail.CreateEmail 6898
- 143.22 SendMail.GetSMTPUserName 6907
- 143.25 SendMail.PrepareCURL 6910
- 143.33 SendMail.SetSMTPPassword 6923
- 143.34 SendMail.SetSMTPServer 6925

143.35.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

143.35.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 26

Created 3th September 2014, last changed 9th January 2017.

143.36 SendMail.SetSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
143 SendMail	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SendMail.SetSubject"; EmailID; Text)

Parameters

EmailID

The email reference number obtained using SendMail.CreateEmail function.

\$EmailID

Text

The new subject line.

"Hello World"

Result Returns OK or error.

Description

If subject lines contains special characters, it is automatically encoded as UTF-8.

Examples

Set subject line:

MBS("SendMail.SetSubject"; \$Email; "Hello World")

See also

- [143.14 SendMail.CreateEmail](#) 6898
- [143.24 SendMail.GetSubject](#) 6909
- [143.25 SendMail.PrepareCURL](#) 6910
- [186.11 WinSendMail.CreateEmail](#) 8755
- [186.12 WinSendMail.GetSubject](#) 8757
- [186.19 WinSendMail.SetSubject](#) 8764

Example Databases

- [CURL/Email/Batch Mailer](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)

143.36.1 Blog Entries

- [Sending emails in FileMaker with MBS Plugin](#)

Created 3th September 2014, last changed 24th February 2018.

Chapter 144

SerialPort

Enumerate serial ports and send/receive data.

144.1 SerialPort.AvailableBytes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	4.4	Yes	Yes	Yes	No	No

MBS("SerialPort.AvailableBytes"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns number or error.

Description

Examples

Queries bytes and reads them:

```
$count = MBS( "SerialPort.AvailableBytes"; $PortReference )  
$text = MBS( "SerialPort.Read"; $PortReference; $count; "windows" )
```

Read in loop as long as data comes in:

```
# read data until end  
Set Variable [ $data; Value:"" ]  
Loop  
Pause/Resume Script [ Duration (seconds): ,1 ]
```

```
# exit when no more data
Exit Loop If [ not (MBS( "SerialPort.AvailableBytes"; $port ) >0) ]
# read some data
Set Variable [ $newdata; Value:MBS( "SerialPort.Read"; $port; 10000; "windows" ) ]
Set Variable [ $data; Value:$data & $newdata ]
# next
Pause/Resume Script [ Duration (seconds): ,1 ]
End Loop
```

See also

- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.21 SerialPort.ReadByte 6959
- 144.22 SerialPort.ReadHex 6960

144.1.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr7](#)

Created 21st October 2014, last changed 30th November 2016.

144.2 SerialPort.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	7.4	Yes	Yes	No	No	No

MBS("SerialPort.Clear"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns OK or error.

Description

Reads all data from serial port.

See also

- [144.4 SerialPort.Close](#) 6935
- [144.19 SerialPort.Open](#) 6950
- [144.20 SerialPort.Read](#) 6956

144.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr9](#)
- [MBS FileMaker Plugin, version 7.4pr6](#)

Created 12nd September 2017, last changed 25th September 2018.

144.3 SerialPort.ClearDataAvailableHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	5.1	Yes	Yes	No	No	No

MBS("SerialPort.ClearDataAvailableHandler"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns OK or error.

Description

See also

- [125.3 PortMidi.ClearDataAvailableHandler](#) 6343
- [144.19 SerialPort.Open](#) 6950
- [144.30 SerialPort.SetDataAvailableHandler](#) 6968
- [154.6 Socket.ClearDataAvailableHandler](#) 7191

144.3.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 16th April 2015, last changed 16th April 2015.

144.4 SerialPort.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.Close"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns OK on success.

Description

Examples

Open port and close it:

```
$port = MBS( "SerialPort.Open"; "COM1" )
$r = MBS( "SerialPort.Write"; $port; "Hello" )
$r = MBS( "SerialPort.Close"; $port )
```

See also

- [144.2 SerialPort.Clear](#) 6933
- [144.5 SerialPort.CloseAll](#) 6936
- [144.18 SerialPort.List](#) 6949
- [144.19 SerialPort.Open](#) 6950
- [144.20 SerialPort.Read](#) 6956
- [144.37 SerialPort.Write](#) 6977

Example Databases

- [Serial Port](#)

144.4.1 Blog Entries

- [Serial Port functions for MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 18th August 2014.

144.5 SerialPort.CloseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	5.4	Yes	Yes	Yes	No	No

MBS("SerialPort.CloseAll")

Result Returns OK or error.

Description

See also

- 144.4 SerialPort.Close

6935

144.5.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 6th November 2015, last changed 6th November 2015.

144.6 SerialPort.GetBaudRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.1	Yes	Yes	Yes	No	No

MBS("SerialPort.GetBaudRate"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns baud rate as number or error message.

Description

See also

- 144.10 SerialPort.GetDataBits 6941
- 144.19 SerialPort.Open 6950
- 144.25 SerialPort.SetBaudRate 6963

144.6.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr1](#)

Created 18th August 2014, last changed 18th August 2014.

144.7 SerialPort.GetCTS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.GetCTS"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns current value (0 or 1) or error message.

Description

If enabled, the CTS (clear-to-send) signal is monitored for output flow control. Than if CTS is turned off, output is suspended until CTS is sent again.

See also

- 144.8 SerialPort.GetDSR 6939
- 144.9 SerialPort.GetDTR 6940
- 144.12 SerialPort.GetRTS 6943
- 144.19 SerialPort.Open 6950
- 144.24 SerialPort.Resume 6962
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974

Created 18th August 2014, last changed 18th August 2014.

144.8 SerialPort.GetDSR

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.GetDSR"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns current value (0 or 1) or error message.

Description

If enabled DSR (data-set-ready) signal is monitored for output flow control.

See also

- 144.7 SerialPort.GetCTS 6938
- 144.9 SerialPort.GetDTR 6940
- 144.12 SerialPort.GetRTS 6943
- 144.14 SerialPort.GetXON 6945
- 144.19 SerialPort.Open 6950
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974

Created 18th August 2014, last changed 18th August 2014.

144.9 SerialPort.GetDTR

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.GetDTR"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns current value (0 or 1) or error message.

Description

See also

- 144.7 SerialPort.GetCTS 6938
- 144.8 SerialPort.GetDSR 6939
- 144.12 SerialPort.GetRTS 6943
- 144.14 SerialPort.GetXON 6945
- 144.19 SerialPort.Open 6950
- 144.24 SerialPort.Resume 6962
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974

Created 18th August 2014, last changed 18th August 2014.

144.10 SerialPort.GetDataBits

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.1	Yes	Yes	Yes	No	No

MBS("SerialPort.GetDataBits"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns data size as number or error message.

Description

Value is 5, 6, 7 or 8.

See also

- 144.6 SerialPort.GetBaudRate 6937
- 144.11 SerialPort.GetParity 6942
- 144.13 SerialPort.GetStopBits 6944
- 144.19 SerialPort.Open 6950
- 144.31 SerialPort.SetDataBits 6970
- 144.34 SerialPort.SetStopBits 6973

144.10.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr1](#)

Created 18th August 2014, last changed 18th August 2014.

144.11 SerialPort.GetParity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	5.0	Yes	Yes	Yes	No	No

MBS("SerialPort.GetParity"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns value or error.

Description

Can be 0 (off), 1 (odd) or 2 (even)

Examples

Queries parity:

MBS("SerialPort.GetParity"; \$SerialPort)

See also

- 144.10 SerialPort.GetDataBits 6941
- 144.19 SerialPort.Open 6950
- 144.32 SerialPort.SetParity 6971

Created 6th February 2015, last changed 6th February 2015.

144.12 SerialPort.GetRTS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.GetRTS"; PortReference)

Parameters**PortReference**

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns current value (0 or 1) or error message.

Description**See also**

- 144.7 SerialPort.GetCTS 6938
- 144.9 SerialPort.GetDTR 6940
- 144.14 SerialPort.GetXON 6945
- 144.19 SerialPort.Open 6950
- 144.24 SerialPort.Resume 6962
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974

Created 18th August 2014, last changed 18th August 2014.

144.13 SerialPort.GetStopBits

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	5.0	Yes	Yes	Yes	No	No

MBS("SerialPort.GetStopBits"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns OK or error.

Description

Can be 1 or 2 on Mac and 1, 1.5 or 2 on Windows.

Examples

Queries setting:

MBS("SerialPort.GetStopBits"; \$SerialPort)

See also

- 144.10 SerialPort.GetDataBits 6941
- 144.19 SerialPort.Open 6950
- 144.31 SerialPort.SetDataBits 6970
- 144.34 SerialPort.SetStopBits 6973

Created 6th February 2015, last changed 6th February 2015.

144.14 SerialPort.GetXON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.GetXON"; PortReference)

Parameters**PortReference**

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns current value (0 or 1) or error message.

Description**See also**

- 144.7 SerialPort.GetCTS 6938
- 144.8 SerialPort.GetDSR 6939
- 144.9 SerialPort.GetDTR 6940
- 144.12 SerialPort.GetRTS 6943
- 144.19 SerialPort.Open 6950
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974

Created 18th August 2014, last changed 18th August 2014.

144.15 SerialPort.HasLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	7.0	Yes	Yes	Yes	No	No

MBS("SerialPort.HasLine"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns 1, 0 or error.

Description

The plugin checks the input buffer for a newline character.

See also

- 144.19 SerialPort.Open 6950
- 144.23 SerialPort.ReadLine 6961
- 144.24 SerialPort.Resume 6962
- 144.36 SerialPort.Suspend 6976

144.15.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 21st December 2016, last changed 21st December 2016.

144.16 SerialPort.IsSuspended

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	7.4	Yes	Yes	No	No	No

MBS("SerialPort.IsSuspended"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns 1, 0 or error.

Description

While suspended, we do not trigger event and clear incoming buffer regularly.

See also

- [144.19 SerialPort.Open](#) 6950
- [144.36 SerialPort.Suspend](#) 6976

144.16.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr6](#)

Created 12nd September 2017, last changed 17th October 2018.

144.17 SerialPort.LastError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.3	Yes	Yes	Yes	No	No

MBS("SerialPort.LastError"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns error code.

Description

The error code is zero for no error.

On Windows you get the windows system error codes and on Mac OS X the unix system error codes.

See also

- 144.19 SerialPort.Open

6950

144.17.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr5](#)

Created 18th August 2014, last changed 18th August 2014.

144.18 SerialPort.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.List")

Result Returns the list of names.

Description

On Windows can list ports with textual name.

Examples

Get device list and pick first one:

```
$list = MBS( "SerialPort.List" )
$firstDevice = LeftValues($list; 1)
```

See also

- [144.4 SerialPort.Close](#) 6935
- [144.19 SerialPort.Open](#) 6950
- [144.20 SerialPort.Read](#) 6956
- [144.37 SerialPort.Write](#) 6977

Example Databases

- [Serial Port](#)

144.18.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr6](#)
- [MBS FileMaker Plugin, version 6.2pr10](#)
- [Serial Port functions for MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 16th May 2017.

144.19 SerialPort.Open

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.Open"; PortName { ; Index })

Parameters

PortName

The name of the serial port to open.

"COM1"

Index

Optional

In case you have several ports with same name, you can specify an index here. Zero for first port with given name, 1 for the second port with given name.

0

Result Returns the port reference value which you pass to other SerialPort functions.

Description

You get the names from SerialPort.List function.

The port is opened with default settings.

Serial Port reference numbers are starting at 28000 and counting up for each new port.

Even if port is not showing in list, it may still open here, e.g. virtual COM ports on Windows.

You can open several ports with different connections, e.g. by calling SerialPort.Open once for each connection.

Version 9.2 introduced a workaround to make this work for port numbers >COM9 on Windows.

Examples

Open port and close it:

```
$port = MBS( "SerialPort.Open"; "COM1" )
$r = MBS( "SerialPort.Write"; $port; "Hello" )
$r = MBS( "SerialPort.Close"; $port )
```

A script to measure at a specific scale:

```
# Open port
Set Variable [ $serialPort ; Value: MBS("SerialPort.Open"; Scale::Port) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to open serial port" ; $serialPort ]
Exit Script [ Text Result: ]
End If
# Send reset command
```

```

Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "@" ) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]
# Disable keyboard
Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "K 3" ) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]
# Set scale to zero
Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "Z" ) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]
# Set to measure in gramms
Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "M21 1 0" ) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]
Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "M21 0 0" ) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]
# Send expected weight and tolerance
Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "PMW REL "& Scale::WeightExpected & "
" & Scale::Tolerance & " " & Scale::Tolerance & " g" ) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]
Set Variable [ $Counter ; Value: 1 ]
Set Variable [ $finished ; Value: 0 ]
Loop
Loop
# Wait for Answer
Set Variable [ $data ; Value: "" ]
Loop
Pause/Resume Script [ Duration (seconds): .01 ]
Set Variable [ $newdata ; Value: MBS("SerialPort.Read"; $serialPort; 1000) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $data ; Value: $data & $newData ]
End If
Exit Loop If [ Position($Data; "$"; 1; 1)>0 ]
End Loop
Set Variable [ $data ; Value: MBS("String.ReplaceNewline"; $data; 1) ]
If [ ValueCount ( $data ) = 1 ]
Set Variable [ $data ; Value: GetValue($data; 1) ]
End If
# Process Answer
If [ $data = "K A" ]
# Answer from keyboard turn off
# okay
Else If [ $data = "PMW A" ]
# Answer PMW
# okay

```

```

Else If [ $data = "K C 4" ]
# Return pressed on scale
Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "S") ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]
# Wait for Answer
Set Variable [ $data ; Value: "" ]
Loop
Pause/Resume Script [ Duration (seconds): ,01 ]
Set Variable [ $newdata ; Value: MBS("SerialPort.Read"; $serialPort; 1000) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $data ; Value: $data & $newData ]
End If
Exit Loop If [ Position($Data; "$"; 1; 1)>0 ]
End Loop
Set Variable [ $data ; Value: MBS("String.ReplaceNewline"; $data; 1) ]
If [ ValueCount ( $data ) = 1 ]
Set Variable [ $data ; Value: GetValue($data; 1) ]
End If
# Process Answer
If [ Left($Data; 3) = "S S" ]
Set Variable [ $Data ; Value: Substitute($Data; ", "; "" ) ]
Set Variable [ $Data ; Value: Substitute($Data; " "; ", " ) ]
Set Variable [ $Weight ; Value: GetAsNumber( Middle($Data; 4; 20)) ]
If [ Position ( $data; "kg"; 1;1) >0 ]
Set Variable [ $Weight ; Value: $Weight * 1000 ]
End If
Set Field [ Scale::Status ; "Weight read: " & $Weight ]
Set Field [ Scale::WeightGemessen ; $Weight ]
If [ ($Weight >= Scale::WeightExpected - Scale::Tolerance) and ($Weight <= Scale::WeightExpected +
Scale::Tolerance) ]
Set Variable [ $finished ; Value: 1 ]
Show Custom Dialog [ "Thanks" ]
Exit Loop If [ 1 ]
Else
Show Custom Dialog [ "Please measure again" ]
End If
End If
Exit Loop If [ $finished ]
End If
Exit Loop If [ $finished ]
End Loop
Exit Loop If [ $finished ]
End Loop
# Enable keyboard
Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "K 2") ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]

```

```

# Reset scale
Set Variable [ $r ; Value: MBS("SerialPort.Write"; $serialPort; "@" ) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 13) ]
Set Variable [ $r ; Value: MBS("SerialPort.WriteByte"; $serialPort; 10) ]
# short wait to let commands run to device
Pause/Resume Script [ Duration (seconds): ,01 ]
# close port
Set Variable [ $r ; Value: MBS("SerialPort.Close"; $serialPort) ]

Record weight in predefined field:

# Change to reflect actual Layout
Go to Layout [ "MPO201 Input Weight" (MPORawMaterialColourInputs_MPO RM inputs) ]
Set Variable [ $portList; Value:MBS("SerialPort.List") ]
Show Custom Dialog [ Title: "Serial Ports"; Message: $portList; Default Button: "OK", Commit: "Yes";
Button 2: "Cancel", Commit: "No" ]

If [ Get ( LastMessageChoice ) = 2 ]
Exit Script [ ]
End If

# Change to reflect actual COM port
Set Variable [ $port; Value:"COM4" ]
Set Variable [ $serialPort; Value:MBS("SerialPort.Open"; $port) ]

If [ MBS("IsError") ]
Show Custom Dialog [ Title: "Error"; Message: "Serial port error " & $serialPort; Default Button: "OK",
Commit: "Yes" ]
Exit Script [ ]
End If

Set Variable [ $baudSet; Value:MBS("SerialPort.SetBaudRate"; $serialPort; 9600) ]
Set Variable [ $count; Value:0 ]

// New Record/Request

Loop
Set Variable [ $newScaleData; Value:MBS("SerialPort.Read"; $serialPort; 1000) ]
Exit Loop If [ $newScaleData "" ]
Exit Loop If [ $count >100 ]
Pause/Resume Script [ Duration (seconds): .01 ]
Set Variable [ $count; Value:$count + 1 ]
End Loop

# Change to reflect fields
Set Field [ MPORawMaterialColourInputs_MPO RM inputs::mpoiw Input Weight Grams; $newScaleData
]
Set Field [ MPORawMaterialColourInputs_MPO RM inputs::mpoiw Input Weight Grams; Trim ( Left (

```

```
$newScaleData ; 9) ) ]
```

Commit Records/Requests

```
Set Variable [ $result; Value:MBS("SerialPort.Close"; $serialPort) ]
```

```
If [ MBS("IsError") ]
```

```
Show Custom Dialog [ Title: "Error"; Message: "Serial port error " & $result; Default Button: "OK",  
Commit: "Yes" ]
```

```
Else
```

```
Show Custom Dialog [ Title: "Info"; Message: "Serial port closed " & $result; Default Button: "OK", Com-  
mit: "Yes" ]
```

```
End If
```

See also

- [124.6 IsError](#) 6266
- [144.4 SerialPort.Close](#) 6935
- [144.18 SerialPort.List](#) 6949
- [144.31 SerialPort.SetDataBits](#) 6970
- [144.27 SerialPort.SetDSR](#) 6965
- [144.28 SerialPort.SetDTR](#) 6966
- [144.35 SerialPort.SetXON](#) 6974
- [144.36 SerialPort.Suspend](#) 6976
- [144.38 SerialPort.WriteByte](#) 6979
- [144.39 SerialPort.WriteHex](#) 6980

Example Databases

- [Serial Port](#)

144.19.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [MBS FileMaker Plugin, version 9.2pr7](#)
- [MBS FileMaker Plugin, version 9.2pr6](#)
- [MBS FileMaker Plugin, version 8.3pr5](#)
- [MBS FileMaker Plugin, version 6.2pr10](#)

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 18th August 2014, last changed 6th May 2019.

144.20 SerialPort.Read

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.Read"; PortReference; length { ; Encoding })

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

length

Maximum number of bytes to read.

10

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns text or error message.

Description

The text returned may be shorter than length bytes.

See also SerialPort.AvailableBytes function.

Examples

Read up to 8 bytes and decode them from Windows text encoding into FileMaker:

```
$value = MBS( "SerialPort.Read"; $port; 8; "windows" )
```

Read in loop as long as data comes in:

```
# read data until end
Set Variable [ $data; Value:"" ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
# exit when no more data
Exit Loop If [ not (MBS( "SerialPort.AvailableBytes"; $port ) >0) ]
# read some data
Set Variable [ $newdata; Value:MBS( "SerialPort.Read"; $port; 10000; "windows" ) ]
Set Variable [ $data; Value:$data & $newdata ]
# next
Pause/Resume Script [ Duration (seconds): ,1 ]
End Loop
```


Record weight in predefined field:

```
# Change to reflect actual Layout
Go to Layout [ "MPO201 Input Weight" (MPORawMaterialColourInputs_MPO RM inputs) ]
Set Variable [ $portList; Value:MBS("SerialPort.List") ]
Show Custom Dialog [ Title: "Serial Ports"; Message: $portList; Default Button: "OK", Commit: "Yes";
Button 2: "Cancel", Commit: "No" ]

If [ Get ( LastMessageChoice ) = 2 ]
Exit Script [ ]
End If

# Change to reflect actual COM port
Set Variable [ $port; Value:"COM4" ]
Set Variable [ $serialPort; Value:MBS("SerialPort.Open"; $port) ]

If [ MBS("IsError") ]
Show Custom Dialog [ Title: "Error"; Message: "Serial port error " & $serialPort; Default Button: "OK",
Commit: "Yes" ]
Exit Script [ ]
End If

Set Variable [ $baudSet; Value:MBS("SerialPort.SetBaudRate"; $serialPort; 9600) ]
Set Variable [ $count; Value:0 ]

// New Record/Request

Loop
Set Variable [ $newScaleData; Value:MBS("SerialPort.Read"; $serialPort; 1000) ]
Exit Loop If [ $newScaleData "" ]
Exit Loop If [ $count >100 ]
Pause/Resume Script [ Duration (seconds): .01 ]
Set Variable [ $count; Value:$count + 1 ]
End Loop

# Change to reflect fields
Set Field [ MPORawMaterialColourInputs_MPO RM inputs::mpoiw Input Weight Grams; $newScaleData
]
Set Field [ MPORawMaterialColourInputs_MPO RM inputs::mpoiw Input Weight Grams; Trim ( Left (
$newScaleData ; 9) ) ]

Commit Records/Requests

Set Variable [ $result; Value:MBS("SerialPort.Close"; $serialPort) ]

If [ MBS("IsError") ]
Show Custom Dialog [ Title: "Error"; Message: "Serial port error " & $result; Default Button: "OK",
Commit: "Yes" ]
```

Else

Show Custom Dialog [Title: "Info"; Message: "Serial port closed " & \$result; Default Button: "OK", Commit: "Yes"]

End If

See also

- [144.4 SerialPort.Close](#) 6935
- [144.18 SerialPort.List](#) 6949
- [144.19 SerialPort.Open](#) 6950
- [144.21 SerialPort.ReadByte](#) 6959
- [144.22 SerialPort.ReadHex](#) 6960
- [144.23 SerialPort.ReadLine](#) 6961
- [144.24 SerialPort.Resume](#) 6962
- [144.25 SerialPort.SetBaudRate](#) 6963
- [144.29 SerialPort.SetDataAvailableEvaluate](#) 6967
- [144.30 SerialPort.SetDataAvailableHandler](#) 6968

144.20.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)
- [MBS Filemaker Plugin, version 3.2pr6](#)
- [MBS Filemaker Plugin, version 3.2pr3](#)
- [Serial Port functions for MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 11st May 2018.

144.21 SerialPort.ReadByte

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.ReadByte"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns the byte value or an error message.

Description

This is very useful for reading control characters which you can't easily put in a text in FileMaker. Like 13 for a LF (line feed) or 10 for CR (carriage return). See also SerialPort.AvailableBytes function.

Examples

Read one byte:

```
$value = MBS( "SerialPort.ReadByte"; $port )
```

See also

- 144.1 SerialPort.AvailableBytes 6931
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.22 SerialPort.ReadHex 6960
- 144.23 SerialPort.ReadLine 6961
- 144.24 SerialPort.Resume 6962
- 144.38 SerialPort.WriteByte 6979

144.21.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr1](#)
- [Serial Port functions for MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 6th February 2015.

144.22 SerialPort.ReadHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.ReadHex"; PortReference; length)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

length

Maximum number of bytes to read.

10

Result Returns text encoded as hex or error message.

Description

The text returned may be shorter than length bytes.

See also SerialPort.AvailableBytes function.

Examples

Read up to 8 bytes and return them as:

```
$value = MBS( "SerialPort.ReadHex"; $port; 8 )
```

See also

- 144.1 SerialPort.AvailableBytes 6931
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.21 SerialPort.ReadByte 6959
- 144.23 SerialPort.ReadLine 6961
- 144.24 SerialPort.Resume 6962
- 144.39 SerialPort.WriteHex 6980

144.22.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)
- [Serial Port functions for MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 6th February 2015.

144.23 SerialPort.ReadLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	7.0	Yes	Yes	Yes	No	No

MBS("SerialPort.ReadLine"; PortReference { ; Encoding })

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order. Pass hex or base64 to get text back encoded.
UTF8

Result Returns text or error.

Description

The plugin buffers input and reads text until first newline character. Returns text without that newline character.

See also

- 144.15 SerialPort.HasLine 6946
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.21 SerialPort.ReadByte 6959
- 144.22 SerialPort.ReadHex 6960
- 144.24 SerialPort.Resume 6962

144.23.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr4](#)
- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 21st December 2016, last changed 21st December 2016.

144.24 SerialPort.Resume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	7.4	Yes	Yes	No	No	No

MBS("SerialPort.Resume"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns OK or error.

Description

While suspended, we do not trigger event and clear incoming buffer regularly.

See also

- 144.15 SerialPort.HasLine 6946
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.21 SerialPort.ReadByte 6959
- 144.23 SerialPort.ReadLine 6961
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974
- 144.36 SerialPort.Suspend 6976

144.24.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr6](#)

Created 12nd September 2017, last changed 17th October 2018.

144.25 SerialPort.SetBaudRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.1	Yes	Yes	Yes	No	No

MBS("SerialPort.SetBaudRate"; PortReference; BaudRate)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

BaudRate

The new baud rate as number.
9600

Result Returns OK or error message.

Description

Examples

Set the baud rate to 9600:

```
$r = MBS( "SerialPort.SetBaudRate"; $DeviceRef; 9600 )
```

See also

- 144.6 SerialPort.GetBaudRate 6937
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.31 SerialPort.SetDataBits 6970

144.25.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr1](#)

Created 18th August 2014, last changed 18th August 2014.

144.26 SerialPort.SetCTS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.SetCTS"; PortReference; Value)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Value

0 to turn off, 1 to turn on.

1

Result Returns OK or error message.

Description

If enabled, the CTS (clear-to-send) signal is monitored for output flow control. Than if CTS is turned off, output is suspended until CTS is sent again.

Examples

Turn CTS mode on:

```
MBS( "SerialPort.SetCTS"; $SerialPort; 1 )
```

See also

- 144.7 SerialPort.GetCTS 6938
- 144.8 SerialPort.GetDSR 6939
- 144.9 SerialPort.GetDTR 6940
- 144.12 SerialPort.GetRTS 6943
- 144.14 SerialPort.GetXON 6945
- 144.24 SerialPort.Resume 6962
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974

Created 18th August 2014, last changed 24th February 2018.

144.27 SerialPort.SetDSR

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.SetDSR"; PortReference; Value)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Value

0 to turn off, 1 to turn on.

1

Result Returns OK or error message.

Description

If enabled DSR (data-set-ready) signal is monitored for output flow control.

Examples

Turn DSR mode on:

```
MBS( "SerialPort.SetDSR"; $SerialPort; 1 )
```

See also

- 144.7 SerialPort.GetCTS 6938
- 144.8 SerialPort.GetDSR 6939
- 144.9 SerialPort.GetDTR 6940
- 144.12 SerialPort.GetRTS 6943
- 144.19 SerialPort.Open 6950
- 144.24 SerialPort.Resume 6962
- 144.26 SerialPort.SetCTS 6964
- 144.28 SerialPort.SetDTR 6966
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974

Created 18th August 2014, last changed 24th February 2018.

144.28 SerialPort.SetDTR

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.SetDTR"; PortReference; Value)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Value

0 to turn off, 1 to turn on.

1

Result Returns OK or error message.

Description

Examples

Turn DTR mode on:

```
MBS( "SerialPort.SetDTR"; $SerialPort; 1 )
```

See also

- 144.7 SerialPort.GetCTS 6938
- 144.8 SerialPort.GetDSR 6939
- 144.9 SerialPort.GetDTR 6940
- 144.12 SerialPort.GetRTS 6943
- 144.19 SerialPort.Open 6950
- 144.24 SerialPort.Resume 6962
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.33 SerialPort.SetRTS 6972
- 144.35 SerialPort.SetXON 6974

Created 18th August 2014, last changed 24th February 2018.

144.29 SerialPort.SetDataAvailableEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	6.2	Yes	Yes	No	No	No

MBS("SerialPort.SetDataAvailableEvaluate"; PortReference; Expression)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Expression

The expression to evaluate.
"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

When new data arrives, this expression is evaluated, so you can call SerialPort.Read functions. Be aware that script may be called when just a few bytes are in the read buffer. So the data message you wait for may only be available partly. In that case, please read available bytes, check if whole packet/message arrived and if not, store read data for later and wait for next evaluation.

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the serial port reference, so you can pass it to other functions if needed.

See also

- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.30 SerialPort.SetDataAvailableHandler 6968
- 148.40 Shell.SetDataAvailableEvaluate 7050
- 154.54 Socket.SetDataAvailableEvaluate 7252

144.29.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 29th March 2016.

144.30 SerialPort.SetDataAvailableHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	5.1	Yes	Yes	No	No	No

MBS("SerialPort.SetDataAvailableHandler"; PortReference; FileName; ScriptName)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

FileName

The name of the FileMaker File that contains the script
"MyDatabase.fmp12"

ScriptName

The name of the script to run
"DataAvailable"

Result Returns OK or error.

Description

When new data arrives, this script is called, so you can call SerialPort.Read functions.

Be aware that script may be called when just a few bytes are in the read buffer. So the data message you wait for may only be available partly. In that case, please read available bytes, check if whole packet/message arrived and if not, store read data for later and wait for next script call.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Set data available handler script:

MBS("SerialPort.SetDataAvailableHandler"; \$port; Get(FileName); "SerialPortDataAvailable")

See also

- 125.24 PortMidi.SetDataAvailableHandler 6368
- 144.3 SerialPort.ClearDataAvailableHandler 6934
- 144.19 SerialPort.Open 6950
- 144.20 SerialPort.Read 6956
- 144.29 SerialPort.SetDataAvailableEvaluate 6967
- 154.55 Socket.SetDataAvailableHandler 7253

144.30.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr7](#)
- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 16th April 2015, last changed 12nd December 2016.

144.31 SerialPort.SetDataBits

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.1	Yes	Yes	Yes	No	No

MBS("SerialPort.SetDataBits"; PortReference; size)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

size

The new setting.
8

Result Returns OK or error message.

Description

Value can only be 5, 6, 7 or 8.

Examples

Set the data bits to 8:

```
$r = MBS( "SerialPort.SetDataBits"; $DeviceRef; 8 )
```

See also

- 144.10 SerialPort.GetDataBits 6941
- 144.13 SerialPort.GetStopBits 6944
- 144.19 SerialPort.Open 6950
- 144.25 SerialPort.SetBaudRate 6963
- 144.32 SerialPort.SetParity 6971
- 144.34 SerialPort.SetStopBits 6973

144.31.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr10](#)
- [MBS Filemaker Plugin, version 3.1pr1](#)

Created 18th August 2014, last changed 18th August 2014.

144.32 SerialPort.SetParity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	5.0	Yes	Yes	Yes	No	No

MBS("SerialPort.SetParity"; PortReference; Value)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Value

The new parity setting.

1

Result Returns OK or error.

Description

Can be 0 (off), 1 (odd) or 2 (even)

Examples

Sets partity to odd:

```
MBS("SerialPort.SetParity"; 28001; 1)
```

Sets partity to even:

```
MBS("SerialPort.SetParity"; 28001; 2)
```

Sets partity to none:

```
MBS("SerialPort.SetParity"; 28001; 0)
```

See also

- 144.11 SerialPort.GetParity 6942
- 144.19 SerialPort.Open 6950
- 144.31 SerialPort.SetDataBits 6970

Created 6th February 2015, last changed 6th February 2015.

144.33 SerialPort.SetRTS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.SetRTS"; PortReference; Value)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Value

0 to turn off, 1 to turn on.

1

Result Returns OK or error message.

Description

If set to 0, we disable RTS. If set to 1, we use normal handshaking to make sure buffers don't overflow/underflow.

See also

- 144.7 SerialPort.GetCTS 6938
- 144.8 SerialPort.GetDSR 6939
- 144.9 SerialPort.GetDTR 6940
- 144.12 SerialPort.GetRTS 6943
- 144.14 SerialPort.GetXON 6945
- 144.19 SerialPort.Open 6950
- 144.24 SerialPort.Resume 6962
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966

Created 18th August 2014, last changed 18th August 2014.

144.34 SerialPort.SetStopBits

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	5.0	Yes	Yes	Yes	No	No

MBS("SerialPort.SetStopBits"; PortReference; Value)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Value

The new setting.

2

Result Returns OK or error.

Description

Can be 1 or 2 on Mac and 1, 1.5 or 2 on Windows.

Examples

Set stop bits to be 1:

```
MBS("SerialPort.SetStopBits"; $SerialPort; 1)
```

Set stop bits to be 2:

```
MBS("SerialPort.SetStopBits"; $SerialPort; 2)
```

See also

- 144.10 SerialPort.GetDataBits 6941
- 144.13 SerialPort.GetStopBits 6944
- 144.19 SerialPort.Open 6950
- 144.31 SerialPort.SetDataBits 6970

Created 6th February 2015, last changed 6th February 2015.

144.35 SerialPort.SetXON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.4	Yes	Yes	Yes	No	No

MBS("SerialPort.SetXON"; PortReference; Value)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Value

0 to turn off, 1 to turn on.

1

Result Returns OK or error message.

Description

If set to 1, we use XON/XOFF flow control is used during reception and transmission.

Examples

Turn XON/XOFF mode on:

```
MBS( "SerialPort.SetXON"; $SerialPort; 1 )
```

Turn XON/XOFF mode off:

```
MBS( "SerialPort.SetXON"; $SerialPort; 0 )
```

See also

- 144.7 SerialPort.GetCTS 6938
- 144.8 SerialPort.GetDSR 6939
- 144.9 SerialPort.GetDTR 6940
- 144.12 SerialPort.GetRTS 6943
- 144.14 SerialPort.GetXON 6945
- 144.19 SerialPort.Open 6950
- 144.24 SerialPort.Resume 6962
- 144.26 SerialPort.SetCTS 6964
- 144.27 SerialPort.SetDSR 6965
- 144.28 SerialPort.SetDTR 6966

144.35. SERIALPORT.SETXON

6975

Created 18th August 2014, last changed 24th February 2018.

144.36 SerialPort.Suspend

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	7.4	Yes	Yes	No	No	No

MBS("SerialPort.Suspend"; PortReference)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Result Returns OK or error.

Description

While suspended, we do not trigger event and clear incoming buffer regularly.
Please call SerialPort.Resume later.

See also

- 144.15 SerialPort.HasLine 6946
- 144.16 SerialPort.IsSuspended 6947
- 144.19 SerialPort.Open 6950
- 144.24 SerialPort.Resume 6962

144.36.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr6](#)

Created 12nd September 2017, last changed 17th October 2018.

144.37 SerialPort.Write

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.Write"; PortReference; Text { ; Encoding })

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Text

The text to send.
"Hello World"

Encoding

Optional
The text encoding for text parameter. Default is native.
"UTF8"

Result Returns the number of bytes written or an error message.

Description

Be aware that text encoding conversion may result in different bytes than expected, so please verify on other side the text encoding matches the expectations.

Examples

Write something:

```
MBS( "SerialPort.Write"; $port; "Hello World" )
```

Write something with DOS text encoding:

```
MBS( "SerialPort.Write"; $port; "Umlauts: äöü"; "DOS" )
```

Send set zero command to scale for MT-SICS (METTLER TOLEDO Standard Interface Command Set):

```
MBS( "SerialPort.Write"; $port; "Z" & Char(13) & Char(10) )
```

Send print weight command to scale for MT-SICS (METTLER TOLEDO Standard Interface Command Set):

```
MBS( "SerialPort.Write"; $port; "P" & Char(13) & Char(10) )
```

See also

- 144.4 SerialPort.Close

- 144.18 SerialPort.List 6949
- 144.19 SerialPort.Open 6950
- 144.38 SerialPort.WriteByte 6979
- 144.39 SerialPort.WriteHex 6980

Example Databases

- [Serial Port](#)

144.37.1 Blog Entries

- [Serial Port functions for MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 19th September 2019.

144.38 SerialPort.WriteByte

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.WriteByte"; PortReference; Value)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Value

The byte value to send. Range from 0 to 255.
13

Result Returns the number of bytes written.

Description

This is very useful for sending control characters which you can't easily put in a text in FileMaker. Like 13 for a LF (line feed) or 10 for CR (carriage return).

Examples

Write a character:

MBS("SerialPort.WriteByte"; \$port; 65)

See also

- [144.19 SerialPort.Open](#) 6950
- [144.21 SerialPort.ReadByte](#) 6959
- [144.37 SerialPort.Write](#) 6977
- [144.39 SerialPort.WriteHex](#) 6980

Example Databases

- [Serial Port](#)

144.38.1 Blog Entries

- [Serial Port functions for MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 18th August 2014.

144.39 SerialPort.WriteHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
144 SerialPort	3.0	Yes	Yes	Yes	No	No

MBS("SerialPort.WriteHex"; PortReference; Text)

Parameters

PortReference

The reference number of the port. You get this number from SerialPort.Open when you open the port.
\$port

Text

The text to send in hex encoding.
"48656C6C6F"

Result Returns the number of bytes written or an error message.

Description

You pass the text hex encoded. For example for "Hello" you pass "48656C6C6F".

Examples

Write some text:

```
MBS( "SerialPort.WriteHex"; $port; "48656C6C6F" )
```

Send CRLF:

```
MBS( "SerialPort.WriteHex"; $port; "0C0A" )
```

Write escape P:

```
MBS("SerialPort.WriteHex"; $port ; "1B50" )
```

See also

- 144.19 SerialPort.Open 6950
- 144.22 SerialPort.ReadHex 6960
- 144.37 SerialPort.Write 6977
- 144.38 SerialPort.WriteByte 6979

Example Databases

- [Serial Port](#)

144.39.1 Blog Entries

- [More Text Encoding conversion for FileMaker](#)
- [Serial Port functions for MBS Filemaker Plugin](#)

Created 18th August 2014, last changed 14th June 2017.

Chapter 145

ServerSocket

Allow one FileMaker instance to receive queries from other FileMaker instances.

145.1 ServerSocket.Check

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
145 ServerSocket	3.2	Yes	Yes	Yes	Yes	Yes

MBS("ServerSocket.Check")

Result Returns OK

Description

In a tight loop you can run this to keep sockets working.

For a FileMaker Server, it seems that you need to call this in a script so the plugin has a chance to do something.

See also

- 145.7 ServerSocket.Start 6990
- 145.8 ServerSocket.Stop 6992

Created 18th August 2014, last changed 18th August 2014.

145.2 ServerSocket.GetAllowedScripts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
145 ServerSocket	3.4	Yes	Yes	Yes	Yes	Yes

MBS("ServerSocket.GetAllowedScripts")

Result Returns list of script names.

Description

Examples

Set and query:

```
$r = MBS( "ServerSocket.SetAllowedScripts"; "ServerSocket_PrintReceipt$ServerSocket_Notify" )
```

```
$l = MBS( "ServerSocket.GetAllowedScripts" )
```

See also

- [145.3 ServerSocket.GetAllowedTypes](#) 6985
- [145.5 ServerSocket.SetAllowedScripts](#) 6988
- [145.6 ServerSocket.SetAllowedTypes](#) 6989

145.2.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr2](#)

Created 18th August 2014, last changed 18th August 2014.

145.3 ServerSocket.GetAllowedTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
145 ServerSocket	3.4	Yes	Yes	Yes	Yes	Yes

MBS("ServerSocket.GetAllowedTypes")

Result Returns list of type identifiers.

Description

Examples

Allow two types:

```
$r = MBS( "ServerSocket.SetAllowedTypes"; "SQL$Evaluate" )
```

```
$l = MBS( "ServerSocket.GetAllowedTypes" )
```

See also

- [145.2 ServerSocket.GetAllowedScripts](#) 6984
- [145.5 ServerSocket.SetAllowedScripts](#) 6988
- [145.6 ServerSocket.SetAllowedTypes](#) 6989

145.3.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr2](#)

Created 18th August 2014, last changed 18th August 2014.

145.4 ServerSocket.SendQuery

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
145 ServerSocket	3.2	Yes	Yes	Yes	Yes	Yes

MBS("ServerSocket.SendQuery"; Target; Port; Login; Type; Query)

Parameters

Target

The target IP or name of the server. Can be an IP or a name.
"localhost"

Port

The network port of the server to use.
9000

Login

The login secret. Server will only answer if the logins match.
"Hello"

Type

The type of the query. Can be MBSVersion, SQL, Evaluate or Script.
"Evaluate"

Query

The query to use. Must match the type of query above. For Script calls please use filename:scriptname:parameter to run a script and use full file name with extension.
"Get(AccountName)"

Result Returns result or error.

Description

This has nothing to do with a FileMaker Server. The plugin starts a socket which answers queries, so the current FileMaker instance becomes a kind of server.

See example database for sample queries.

Queries can be SQL queries, expression evaluation or running scripts.

While you can send queries across the internet, we recommend to use a VPN connection to do so.

Version 6.3 now supports passing IPv4, IPv6, or a host name.

Examples

Query a table with SQL:

```
MBS( "ServerSocket.SendQuery"; "FrontDeskMac.local"; 9000; "mysecret"; "SQL"; "SELECT JobID, Status FROM JobTable" )
```

Query the account name of the current user:

```
MBS( "ServerSocket.SendQuery"; "FrontDeskMac.local"; 9000; "mysecret"; "Evaluate"; "Get(AccountName)" )
```

)

Start a script:

```
MBS( "ServerSocket.SendQuery"; "FrontDeskMac.local"; 9000; "mysecret"; "Script"; "OrderDatabase:Print-LastOrder:5" )
```

Example Databases

- [Network/ServerSocket/Send Query](#)

145.4.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)
- [MBS FileMaker Plugin, version 6.3pr4](#)
- [MBS FileMaker Plugin, version 6.0pr5](#)
- [MBS FileMaker Plugin, version 5.2pr4](#)
- [MBS FileMaker Plugin, version 5.0pr6](#)

145.4.2 FileMaker Magazin

- Ausgabe 3/2013, Seite 25
- Ausgabe 3/2013, Seite 24

Created 18th August 2014, last changed 31st October 2016.

145.5 ServerSocket.SetAllowedScripts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
145 ServerSocket	3.4	Yes	Yes	Yes	Yes	Yes

MBS("ServerSocket.SetAllowedScripts"; Scripts)

Parameters

Scripts

Pass several texts here for the script names.

"ServerSocket_PrintReceipt"

Result Returns number of scripts.

Description

If this command is used, the plugin will only launch scripts with the names in this list.

We recommend to prefix the script names for use with ServerSockets, so you don't risk of having two scripts with same name.

Examples

Allow two scripts:

MBS("ServerSocket.SetAllowedScripts"; "ServerSocket_PrintReceipt\$ServerSocket_Notify")

See also

- 145.2 ServerSocket.GetAllowedScripts 6984
- 145.3 ServerSocket.GetAllowedTypes 6985
- 145.6 ServerSocket.SetAllowedTypes 6989

145.5.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr2](#)

Created 18th August 2014, last changed 18th August 2014.

145.6 ServerSocket.SetAllowedTypes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
145 ServerSocket	3.4	Yes	Yes	Yes	Yes	Yes

MBS("ServerSocket.SetAllowedTypes"; Types)

Parameters

Types

Pass several texts here for the type names.

"SQL"

Result Returns number of allowed types.

Description

Types include: MBSVersion, SQL, Evaluate or Script

If this command is used, the plugin will only perform the allowed query types.

We recommend to disable SQL if you don't need it.

Examples

Allow two types:

MBS("ServerSocket.SetAllowedTypes"; "SQL\$Evaluate")

See also

- 145.2 ServerSocket.GetAllowedScripts 6984
- 145.3 ServerSocket.GetAllowedTypes 6985
- 145.5 ServerSocket.SetAllowedScripts 6988

145.6.1 Blog Entries

- [MBS Filemaker Plugin, version 3.4pr2](#)

Created 18th August 2014, last changed 18th August 2014.

145.7 ServerSocket.Start

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
145 ServerSocket	3.2	Yes	Yes	Yes	Yes	Yes

MBS("ServerSocket.Start"; Port; Login; Flags)

Parameters

Port

The network port of the server to use.

9000

Login

The login secret. Server will only answer if the logins match.

"Hello"

Flags

Pass sum of flag values.

1+4

Result Returns OK or error.

Description

You can send queries from FileMaker or other development tools. See examples for details.

This has nothing to do with a FileMaker Server. The plugin starts a socket which answers queries, so the current FileMaker instance becomes a kind of server.

On FileMaker Server it looks like you must have a paused script to give time to the plugin for processing requests.

With plugin version 3.3, we added FileMaker Go support. Please use Insert From URL Script Step with an URL like this: "http://" & Server & ":"& Port & "/" & Login & "/" & Type & "/" & Query. Target a text field for the result, disable to show a dialog and use "Select entire contents" option. As browsers cache requests (e.g. Internet Explorer), you may want to add a random value to the request in order to avoid caching due to using same URL.

Possible flag values:

- 1 Listen only for local connections.
- 2 Block HTTP Access from e.g. FileMaker Go or Webviewer.
- 4 Block requests from plugin with ServerSocket.Query.

FileMaker 13 Server does currently not like to execute scripts with 4.0 plugin.

Examples

Listen for local connections on port 12345

145.7. *SERVERSOCKET.START* 6991
MBS("ServerSocket.Start"; 12345; "secret"; 1)

See also

- 145.1 ServerSocket.Check 6983
- 145.8 ServerSocket.Stop 6992

Example Databases

- [Network/ServerSocket/Server](#)
- [Network/ServerSocket/ServerSocket from Webviewer/ServerSocket from Webviewer](#)
- [WebViewer/Javascript calls Filemaker Script/ServerSocket from Webviewer/ServerSocket from Webviewer](#)

145.7.1 Blog Entries

- [FileMaker and WebViewer communication](#)
- [MBS Filemaker Plugin, version 3.3pr6](#)
- [MBS Filemaker Plugin, version 3.3pr1](#)

145.7.2 FileMaker Magazin

- [Ausgabe 3/2013, Seite 24](#)

Created 18th August 2014, last changed 28th April 2016.

145.8 ServerSocket.Stop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
145 ServerSocket	3.2	Yes	Yes	Yes	Yes	Yes

MBS("ServerSocket.Stop")

Result Returns OK or error.

Description

See also

- 145.1 ServerSocket.Check 6983
- 145.7 ServerSocket.Start 6990

Example Databases

- [Network/ServerSocket/Server](#)

Created 18th August 2014, last changed 18th August 2014.

Chapter 146

ServiceProvider

Add service menu entries for Mac which callback to FileMaker.

146.1 ServiceProvider.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
146 ServiceProvider	4.4	Yes	No	No	No	No

MBS("ServiceProvider.Install"; FileName; ScriptName { ; Force })

Parameters

FileName

The name of the FileMaker File that contains the script.

"test.fp7"

ScriptName

The name of the script to run.

"MyScript"

Force

Optional

Asks system to update service menu now.

0

Result Returns OK or error.

Description

If you add right info.plist entries to the info.plist inside the FileMaker app, you register services.

The plugin starts a script when a service request is received.

Best call this function in the script called when solutions opens.

This function has been verified to work well for file and text services. Other types are also implemented, but

not tested.

see also:

<https://developer.apple.com/library/mac/documentation/Cocoa/Conceptual/SysServices/introduction.html>

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 146.2 ServiceProvider.Uninstall 6995
- 146.3 ServiceProvider.Value 6996

Example Databases

- [Mac only/Services for Mac OS X/ServiceProvider test](#)
- [Mac only/Services for Mac OS X/ServiceProvider](#)

Created 3th October 2014, last changed 27th January 2016.

146.2 ServiceProvider.Uninstall

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
146 ServiceProvider	4.4	Yes	No	No	No	No

MBS("ServiceProvider.Uninstall")

Result Returns OK or error.

Description

This call is not required. Cleanup is done automatically when app exits.

See also

- 146.1 ServiceProvider.Install

6993

Created 3th October 2014, last changed 3th October 2014.

146.3 ServiceProvider.Value

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
146 ServiceProvider	4.4	Yes	No	No	No	No

MBS("ServiceProvider.Value"; Selector { ; Filename; DontRenderPreview })

Parameters

Selector

Which value to query. Can be URL, Text, RTF, HTML, Paths, PDF, Image, URL or Path.
"Text"

Filename

Optional

Optionally, the file name to use for the container value when returning image or PDF.
"output.pdf"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result Returns value or error.

Description

If you got a file, you can query file with Paths to get a list of all file paths as a list.
For URLs, you get a list of all URLs when you pass "URLs".

See also

- [146.1 ServiceProvider.Install](#)

6993

Example Databases

- [Mac only/Services for Mac OS X/ServiceProvider test](#)
- [Mac only/Services for Mac OS X/ServiceProvider](#)

146.3.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 3th October 2014, last changed 9th March 2015.

Chapter 147

SharedMemory

Shared memory between several processes.

147.1 SharedMemory.Exists

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
147 SharedMemory	10.1	Yes	Yes	Yes	Yes	No

MBS("SharedMemory.Exists"; Name)

Parameters

Name

The name of the shared memory object.
"test"

Result Returns 1, 0 or error.

Description

Examples

Check if shared memory object named test exists:

```
MBS( "SharedMemory.Exists"; "test" )
```

Example result: 0

Created 2nd February 2020, last changed 2nd February 2020.

147.2 SharedMemory.GetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
147 SharedMemory	10.1	Yes	Yes	Yes	Yes	No

MBS("SharedMemory.GetValue"; Name)

Parameters

Name

The name of the shared memory object.

"test"

Result Returns text value or error.

Description

MBS Plugin provides SharedMemory functions to store UTF-8 text in shared memory, so one process can set it and other can read it, e.g. two versions of FileMaker Pro or two server processes.

Examples

Query shared memory object:

```
MBS( "SharedMemory.GetValue"; "test")
```

See also

- 147.3 SharedMemory.SetValue

6999

Created 2nd February 2020, last changed 2nd February 2020.

147.3 SharedMemory.SetValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
147 SharedMemory	10.1	Yes	Yes	Yes	Yes	No

MBS("SharedMemory.SetValue"; Name; Value)

Parameters

Name

The name of the shared memory object.

"test"

Value

The text value to store.

"Hello World"

Result Returns OK or error.

Description

MBS Plugin provides SharedMemory functions to store UTF-8 text in shared memory, so one process can set it and other can read it, e.g. two versions of FileMaker Pro or two server processes.

The value is lost when computer restarts, but stays when application quits.

Examples

Store text in shared memory:

```
MBS( "SharedMemory.SetValue"; "test"; "Hello World" )
```

See also

- 147.2 SharedMemory.GetValue

Chapter 148

Shell

Functions to run command line tools.

Run tools in background, send input text and receive output.

148.1 Shell.AddArgument

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.AddArgument"; ShellRef; Argument { ; More Arguments })

Parameters

ShellRef

The reference number from the shell.

\$shell

Argument

The new argument.

"-l"

More Arguments

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

Add more parameters to add more arguments.

Result Returns OK or error.

Description

This argument is added to the list of arguments passed first on each call to Shell.Execute.

With version 8.3, you can add several arguments here.

Examples

Adds an argument:

```
MBS( "Shell.AddArgument"; $shell; "-v" )
```

Send email via Outlook.exe with options via command line:

```
Set Variable [ $app ; Value: "C:\Program Files (x86)\Microsoft Office\Office15\OUTLOOK.EXE" ]
Set Variable [ $attachment ; Value: "C:\Users\Administrator\Desktop\test.jpg" ]
Set Variable [ $to ; Value: "to@test.com" ]
Set Variable [ $subject ; Value: "Test Email" ]
Set Variable [ $cc ; Value: "copy@test.com" ]
Set Variable [ $body ; Value: "Hello World" ]
Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $s ; Value: MBS( "Shell.AddArgument"; $shell; "/c" ) ]
Set Variable [ $s ; Value: MBS( "Shell.AddArgument"; $shell; "ipm.note" ) ]
If [ not IsEmpty ( $attachment ) ]
Set Variable [ $s ; Value: MBS( "Shell.AddArgument"; $shell; "/a" ) ]
Set Variable [ $s ; Value: MBS( "Shell.AddArgument"; $shell; $attachment ) ]
End If
Set Variable [ $s ; Value: MBS( "Shell.AddArgument"; $shell; "/m" ) ]
Set Variable [ $a1 ; Value: MBS( "Text.EncodeURLComponent"; $to; "UTF-8" ) ]
Set Variable [ $a2 ; Value: "?subject=" & MBS( "Text.EncodeURLComponent"; $subject; "UTF-8" ) ]
Set Variable [ $a3 ; Value: If ( Length ( $cc ) > 0 ; "& cc=" & MBS( "Text.EncodeURLComponent"; $cc; "UTF-8" ); "" ) ]
Set Variable [ $a4 ; Value: If ( Length ( $body ) > 0 ; "& body=" & MBS( "Text.EncodeURLComponent"; $body; "UTF-8" ); "" ) ]
Set Variable [ $s ; Value: MBS( "Shell.AddArgument"; $shell; $a1 & $a2 & $a3 & $a4 ) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; $app ) ]
Set Variable [ $r ; Value: MBS( "Shell.Release"; $shell ) ]
```

Adds three arguments:

```
MBS( "Shell.AddArgument"; $shell; "-v"; "-r"; "-e" )
```

See also

- 148.9 Shell.Execute 7011
- 148.12 Shell.GetArgument 7021
- 148.14 Shell.GetArguments 7023
- 148.27 Shell.New 7036
- 148.33 Shell.Release 7043
- 148.35 Shell.SetArguments 7045
- 164.36 Text.EncodeURLComponent 7826

Example Databases

- [Shell/Shell Ping](#)

148.1.1 Blog Entries

- [Tips for FileMaker Data Migration Tool](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)

Created 11st November 2017, last changed 16th September 2018.

148.2 Shell.AddEnvironment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.AddEnvironment"; ShellRef; Name; Value)

Parameters

ShellRef

The reference number from the shell.

\$shell

Name

The name of the variable.

"PATH"

Value

The value of the environment variable.

"C:\test"

Result Returns OK or error.

Description

Examples

Try environment functions:

```
Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
```

```
# set
```

```
Set Variable [ $s ; Value: MBS( "Shell.AddEnvironment"; $shell; "test"; "Hello" ) ]
```

```
# and query
```

```
Show Custom Dialog [ "Environment" ; MBS( "Shell.GetEnvironment"; $shell ) ]
```

```
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]
```

See also

- 148.6 Shell.ClearEnvironment 7008
- 148.23 Shell.GetEnvironment 7032
- 148.27 Shell.New 7036
- 148.33 Shell.Release 7043

Created 11st November 2017, last changed 24th February 2018.

148.3 Shell.AvailableBytesError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.AvailableBytesError"; ShellRef)

Parameters**ShellRef**

The reference number from the shell.

\$shell

Result Returns number or error.

Description

This allows you to check whether the child process wrote data in the error stream.

See also

- 148.4 Shell.AvailableBytesOutput

7006

Created 11st November 2017, last changed 11st November 2017.

148.4 Shell.AvailableBytesOutput

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.AvailableBytesOutput"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns number or error.

Description

This allows you to check whether the child process wrote data in the output stream.

See also

- 148.3 Shell.AvailableBytesError

7005

Created 11st November 2017, last changed 11st November 2017.

148.5 Shell.ClearArguments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.ClearArguments"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns OK or error.

Description

See also

- 148.12 Shell.GetArgument 7021
- 148.14 Shell.GetArguments 7023
- 148.35 Shell.SetArguments 7045

Created 11st November 2017, last changed 11st November 2017.

148.6 Shell.ClearEnvironment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.ClearEnvironment"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns OK or error.

Description

If no environment values are set, the default environment is used.

See also

- 148.2 Shell.AddEnvironment 7004
- 148.23 Shell.GetEnvironment 7032

Created 11st November 2017, last changed 11st November 2017.

148.7 Shell.CloseInput

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	8.3	Yes	Yes	Yes	Yes	No

MBS("Shell.CloseInput"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns OK or error.

Description

If needed, you can close the input stream after writing to it to signal end of file to the application.

148.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)

Created 18th June 2018, last changed 18th June 2018.

148.8 Shell.CloseStreams

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	8.3	Yes	Yes	Yes	Yes	No

MBS("Shell.CloseStreams"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns OK or error.

Description

This closes input, error and output streams.

148.8.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)

Created 18th June 2018, last changed 18th June 2018.

148.9 Shell.Execute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.Execute"; ShellRef; Executable { ; Additional Arguments })

Parameters

ShellRef

The reference number from the shell.

\$shell

Executable

The path to the executable. Should be full path to executable. On Windows, the system also searches path if you just specify a file name.

"/bin/ls"

Additional Arguments

Optional

Pass additional arguments to send.

"-v"

Result Returns OK or error.

Description

Parameters set by SetArgument* functions are passed first followed by any parameters you pass here.

On macOS, we use NSTask.

<https://developer.apple.com/documentation/foundation/nstask>

On Linux we use execve function.

<https://www.unix.com/man-page/linux/3/execve/>

On Windows we use CreateProcess function and we pass in a command line with the Executable parameter followed by all the arguments. If needed, we put them in quotes.

[https://msdn.microsoft.com/en-us/library/windows/desktop/ms682425\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/ms682425(v=vs.85).aspx)

If username is given for Windows, we use CreateProcessWithLogon function instead to provide login as a local user.

[https://msdn.microsoft.com/en-us/library/windows/desktop/ms682431\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/ms682431(v=vs.85).aspx)

If you just need to launch a file, please use Files.LaunchFile or Files.Launch.

You can run "/usr/bin/whoami" on Mac/Linux or "whoami.exe" on Windows to print the user who executes the shell tool.

For PowerShell scripts on Windows, you may need to check with the execution policy for the user account FileMaker is using or use an admin account. e.g. on FileMaker Server, may need to be installed as Admin user (not fmserver user).

Examples

Run ffmpeg in shell to convert video to mp3 file:

```

Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Field [ Shell::Output ; "" ]
Set Field [ Shell::Error ; "" ]
Commit Records/Requests [ With dialog: Off ]
# Where the app is:
Set Variable [ $executable ; Value: "/Applications/ffmpegX.app/Contents/Resources/ffmpeg" ]
# option: overwrite file
Set Variable [ $s ; Value: MBS( "Shell.AddArgument"; $shell; "-y" ) ]
# option: input file
Set Variable [ $s ; Value: MBS( "Shell.AddArgument"; $shell; "-i" ) ]
# Path to input file
Set Variable [ $InputFile ; Value: "/Users/cs/Desktop/movie.m4v" ]
# and output file
Set Variable [ $OutputFile ; Value: "/Users/cs/Desktop/sound.mp3" ]
# Run it!
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; $executable; $InputFile; $OutputFile) ]
Set Variable [ $error ; Value: "" ]
Set Variable [ $result ; Value: "" ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to run" ; $s ]
Else
# Loop while app runs and collect messages
Loop
# Wait a second or till it quits
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 1) ]
# And read output
Set Variable [ $error ; Value: $error & MBS( "Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $result ; Value: $result & MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
Set Field [ Shell::Error ; MBS( "Text.ReplaceNewline"; $error; 1) ]
Set Field [ Shell::Output ; MBS( "Text.ReplaceNewline"; $result; 1) ]
# exit when done
Exit Loop If [ MBS( "Shell.IsRunning"; $shell) 1 ]
End Loop
# We are done
Commit Records/Requests [ With dialog: Off ]
End If
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]

```

Query python version:

```

Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]

```



```

Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/usr/bin/python"; "-E"; "-c"; "import sys;print(sys.version_info);") ]
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 1) ]
Set Variable [ $error ; Value: MBS( "Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $result ; Value: MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
Set Field [ Shell::Error ; MBS( "Text.ReplaceNewline"; $error; 1) ]
Set Field [ Shell::Output ; MBS( "Text.ReplaceNewline"; $result; 1) ]
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]

```

Expand tar archive:

```

Set Variable [ $DestFolder ; Value: "/Users/cs/Desktop" ]
Set Variable [ $TarFile ; Value: "/Users/cs/Desktop/FNFOTES.tar " ]
# run tar
Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/usr/bin/tar"; "-xv"; "-C"; $DestFolder; "-f"; $TarFile) ]
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 10) ]
Set Variable [ $error ; Value: MBS( "Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $result ; Value: MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
Set Field [ Shell::Error ; MBS( "Text.ReplaceNewline"; $error; 1) ]
Set Field [ Shell::Output ; MBS( "Text.ReplaceNewline"; $result; 1) ]
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]

```

Run a python script:

```

Set Variable [ $shell ; Value: MBS("Shell.new") ]
Set Variable [ $s ; Value: MBS("Shell.execute"; $shell; "/usr/local/bin/python3"; "/Users/morkus/MBSTest/MBS.py"; PythonMBSTest::Input) ]
Set Variable [ $s ; Value: MBS("Shell.wait"; $shell; 1) ]
Set Variable [ $error ; Value: MBS("Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $result ; Value: MBS("Shell.ReadOutputText"; $shell ; "UTF-8") ]
Set Field [ PythonMBSTest::output ; $result ]

```

Run defaults to change preferences for Dock application:

```

Set Variable [ $error ; Value: "" ]
Set Variable [ $result ; Value: "" ]
Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/usr/bin/defaults"; "write"; "com.apple.dock"; "persistent-apps"; "-array-add"; "<dict><key>tile-data</key><dict><key>file-data</key><dict><key>_CFURLStringBook.app</string><key>_CFURLStringType</key><integer>0</integer></dict></dict></dict>" ]
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 2) ]
Set Variable [ $error ; Value: $error & MBS( "Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $result ; Value: $result & MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/usr/bin/killall"; "Dock") ]
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 2) ]

```

```

Set Variable [ $error ; Value: $error & MBS( "Shell.ReadErrorText"; $shell; "UTF-8" ) ]
Set Variable [ $result ; Value: $result & MBS( "Shell.ReadOutputText"; $shell; "UTF-8" ) ]
Set Field [ Shell::Error ; MBS( "Text.ReplaceNewline"; $error; 1 ) ]
Set Field [ Shell::Output ; MBS( "Text.ReplaceNewline"; $result; 1 ) ]
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]

```

Start VPN on Mac:

```

Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/usr/sbin/scutil"; "-nc"; "start"; "VPN Name" ) ]
Set Variable [ $error ; Value: "" ]
Set Variable [ $result ; Value: "" ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to run" ; $s ]
Else
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 2 ) ]
Set Variable [ $error ; Value: MBS( "Shell.ReadErrorText"; $shell; "UTF-8" ) ]
Set Variable [ $result ; Value: MBS( "Shell.ReadOutputText"; $shell; "UTF-8" ) ]
End If
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]
If [ Length ( $error ) >0 ]
Show Custom Dialog [ "VPN Start" ; $error & $s & $result ]
End If

```

Register FileMaker with Launch Services:

```

Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/System/Library/Frameworks/CoreServices.framework/Versions/A/Frameworks/LaunchServices.framework/Versions/A/Support/lsregister"; "-r"; "-f"; "/Applications/FileMaker Pro 16 Advanced/FileMaker Pro Advanced.app" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to run" ; $s ]
Else
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 5 ) ]
Set Variable [ $error ; Value: MBS( "Shell.ReadErrorText"; $shell; "UTF-8" ) ]
Set Variable [ $result ; Value: MBS( "Shell.ReadOutputText"; $shell; "UTF-8" ) ]
If [ Length ( $error ) >0 ]
Show Custom Dialog [ "Failed" ; $error ]
End If
End If
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]

```

Zip files on FileMaker Cloud using Wait function waiting for 2 minutes maximum:

```

Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/usr/bin/zip"; "-r"; "/tmp/Logs.zip"; "/FileMakerData/Logs" ) ]

```

```

If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to run" ; $s ]
Else
Set Variable [ $running ; Value: MBS( "Shell.Wait"; $shell; 120) ]
Set Variable [ $error ; Value: MBS( "Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $output ; Value: MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
End If
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]
New Record/Request
Set Field [ MBS Test::Result ; $output ]
Set Field [ MBS Test::Error ; $error ]
Commit Records/Requests [ With dialog: On ]

```

Zip files on FileMaker Cloud using IsRunning in a loop waiting for 2 minutes maximum:

```

Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/usr/bin/zip"; "-r"; "/tmp/Logs.zip"; "/FileMakerData/Logs" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to run" ; $s ]
Else
Set Variable [ $error ; Value: "" ]
Set Variable [ $running ; Value: MBS( "Shell.IsRunning"; $shell) ]
Set Variable [ $output ; Value: "" ]
Set Variable [ $count ; Value: 0 ]
Loop
Set Variable [ $count ; Value: $count + 1 ]
Set Variable [ $error ; Value: $error & MBS( "Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $output ; Value: $output & MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
Exit Loop If [ MBS( "Shell.IsRunning"; $shell) = 1 ]
Exit Loop If [ $count > 1200 ]
Pause/Resume Script [ Duration (seconds): ,1 ]
End Loop
Set Variable [ $error ; Value: $error & MBS( "Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $output ; Value: $output & MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
End If
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]
New Record/Request
Set Field [ MBS Test::Result ; $output ]
Set Field [ MBS Test::Error ; $error ]
Commit Records/Requests [ With dialog: On ]

```

Convert Word file using LibreOffice to PDF:

```

Set Variable [ $shell ; Value: MBS( "Shell.New" ) ] Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell;
"/Applications/LibreOffice.app/Contents/MacOS/soffice"; "-convert-to"; "pdf"; "-outdir"; "/Users/cs/Desktop";
"/Users/cs/Documents/test.doc" ) ] If [ MBS("IsError") ]

```

```
Show Custom Dialog [ "Failed to run" ; $s ]
Else
  Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 10) ]      Set Variable [ $error ; Value: MBS(
"Shell.ReadErrorText"; $shell; "UTF-8") ]      Set Variable [ $result ; Value: MBS( "Shell.ReadOutput-
Text"; $shell; "UTF-8") ]      Show Custom Dialog [ "Converted" ; $result & $& $error ]
End If
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]
```

Zip Files on Mac with current directory to get relative paths in zip archive:

```
Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $Folder ; Value: MBS( "Folders.UserDesktop" ) ]
Set Variable [ $s ; Value: MBS( "Shell.SetCurrentDirectory"; $shell; $Folder) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "/usr/bin/zip"; "-r"; "-X"; "ziptest.zip"; "Test" ) ]
Set Variable [ $error ; Value: "" ]
Set Variable [ $result ; Value: "" ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to run" ; $s ]
Else
# Loop while app runs and collect messages
Loop
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 1) ]
Set Variable [ $error ; Value: $error & MBS( "Shell.ReadErrorText"; $shell; "UTF-8") ]
Set Variable [ $result ; Value: $result & MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
Set Field [ Shell::Error ; MBS( "Text.ReplaceNewline"; $error; 1) ]
Set Field [ Shell::Output ; MBS( "Text.ReplaceNewline"; $result; 1) ]
Exit Loop If [ MBS( "Shell.IsRunning"; $shell) = 1 ]
End Loop
Commit Records/Requests [ With dialog: Off ]
End If
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]
```

Translate ffmpeg command line:

```
# ffmpeg -i "D:\Test\fmp\1901070400.mp4" -ss 00:00:05.435 -vframes 1 "D:\Test\fmp\1901070400.jpg"
```

```
MBS( "Shell.Execute"; $shell; "C:\ffmpeg\bin\ffmpeg.exe"; "-i"; "D:\Test\fmp\1901070400.mp4"; "-ss";
"00:00:05.435"; "-vframes"; "1"; "D:\Test\fmp\1901070400.jpg")
```

Run fmsadmin via Shell:

```
Set Variable [ $shell ; Value: MBS( "Shell.New" ) ]
Set Variable [ $s ; Value: MBS( "Shell.Execute"; $shell; "C:\Program Files\FileMaker\FileMaker Server\Database
Server\fmsadmin.exe"; "-v"; "-u"; "admin"; "-p"; "xxx" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to run" ; $s ]
Else
```

```
# Loop while app runs and collect messages
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 5) ]
Set Variable [ $result ; Value: MBS( "Shell.ReadOutputText"; $shell; "UTF-8") ]
Show Custom Dialog [ "Result" ; $result ]
End If
```

```
Set Variable [ $r ; Value: MBS("Shell.Release"; $shell) ]
```

Run shell command with several tools concated:

```
MBS( "Shell.Execute"; $shell; "/bin/sh"; "-c"; "diskutil list | grep /dev | awk ' { print $1 } '")
```

Run command in one Let statement:

```
Let ( [
// new Shell
shell = MBS( "Shell.New" );
// run command with parameters
r = MBS( "Shell.Execute"; shell; "/bin/ls"; "/" );
// wait for a result up to 5 seconds
r = MBS( "Shell.Wait"; shell; 5);
// read output
error = MBS( "Shell.ReadErrorText"; shell; "UTF-8");
output = MBS( "Shell.ReadOutputText"; shell; "UTF-8");
// free shell
r = MBS("Shell.Release"; shell)
]
; output & error )
```

Run bat file with one parameter:

```
MBS( "Shell.Execute"; $shell; "C:\Users\Christian\Desktop\test.bat"; "123")
```

See also

- 81.8 Folders.UserDesktop 4177
- 139.8 RunTask.Launch 6763
- 148.26 Shell.IsRunning 7035
- 148.27 Shell.New 7036
- 148.32 Shell.ReadOutputText 7041
- 148.33 Shell.Release 7043
- 148.35 Shell.SetArguments 7045

- 148.39 Shell.SetCurrentDirectory 7049
- 148.47 Shell.Wait 7057
- 148.48 Shell.WriteInputText 7059

Example Databases

- [Shell/Shell Ping](#)
- [Shell/Shell](#)
- [Shell/Terminal](#)

148.9.1 Blog Entries

- [Tip of the day: Shell Execute as one Let statement](#)
- [Run fmsadmin from script](#)
- [Convert office documents to PDF with LibreOffice](#)
- [Tips for FileMaker Data Migration Tool](#)
- [MBS FileMaker Plugin, version 8.2pr8](#)
- [Execute defaults command with Shell functions](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)

Created 11st November 2017, last changed 24th January 2020.

148.10 Shell.ExitCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.ExitCode"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns number or error.

Description

Not defined while the child process is still running.

Created 11st November 2017, last changed 11st November 2017.

148.11 Shell.GetApplicationName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.GetApplicationName"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns text or error.

Description

See also

- 148.34 Shell.SetApplicationName

7044

Created 11st November 2017, last changed 11st November 2017.

148.12 Shell.GetArgument

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.GetArgument"; ShellRef; Index)

Parameters

ShellRef

The reference number from the shell.

\$shell

Index

The index of the argument to query. Range from 0 to Shell.GetArgumentCount-1.

0

Result Returns text or error.

Description

See also

- 148.1 Shell.AddArgument 7001
- 148.5 Shell.ClearArguments 7007
- 148.13 Shell.GetArgumentCount 7022
- 148.14 Shell.GetArguments 7023
- 148.35 Shell.SetArguments 7045

Created 11st November 2017, last changed 11st November 2017.

148.13 Shell.GetArgumentCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.GetArgumentCount"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns number or error.

Description

See also

- 148.12 Shell.GetArgument 7021
- 148.14 Shell.GetArguments 7023
- 148.36 Shell.SetArgumentsList 7046

Created 11st November 2017, last changed 11st November 2017.

148.14 Shell.GetArguments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	9.3	Yes	Yes	Yes	Yes	No

MBS("Shell.GetArguments"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns list or error.

Description

This is intended for debugging to check if you got all arguments.

See also

- [148.1 Shell.AddArgument](#) 7001
- [148.5 Shell.ClearArguments](#) 7007
- [148.12 Shell.GetArgument](#) 7021
- [148.13 Shell.GetArgumentCount](#) 7022
- [148.35 Shell.SetArguments](#) 7045
- [148.36 Shell.SetArgumentsList](#) 7046

148.14.1 Blog Entries

- [Neues vom MBS Plugin 9.3](#)
- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr7](#)

Created 18th July 2019, last changed 18th July 2019.

148.15 Shell.GetCompletedEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	No	No	No

MBS("Shell.GetCompletedEvaluate"; ShellRef)

(old name: Shell.GetEvaluate)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns text or error.

Description

See also

- [148.37 Shell.SetCompletedEvaluate](#)

7047

148.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 18th November 2017, last changed 17th November 2019.

148.16 Shell.GetCompletedScriptFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	No	No	No

MBS("Shell.GetCompletedScriptFileName"; ShellRef)

(old name: Shell.GetScriptFileName)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns file name or error.

Description

See also

- 148.17 Shell.GetCompletedScriptName

7026

Created 18th November 2017, last changed 17th November 2019.

148.17 Shell.GetCompletedScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	No	No	No

MBS("Shell.GetCompletedScriptName"; ShellRef)

(old name: Shell.GetScriptName)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns script name or error.

Description

See also

- 148.16 Shell.GetCompletedScriptFileName 7025
- 148.38 Shell.SetCompletedScript 7048

Created 18th November 2017, last changed 17th November 2019.

148.18 Shell.GetCurrentDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.GetCurrentDirectory"; ShellRef)

Parameters**ShellRef**

The reference number from the shell.

\$shell

Result Returns path or error.

Description

This is the native path to use as current directory for the child process.

See also

- 129.4 Process.GetCurrentDirectory 6480
- 129.9 Process.SetCurrentDirectory 6485
- 148.39 Shell.SetCurrentDirectory 7049

Created 11st November 2017, last changed 11st November 2017.

148.19 Shell.GetDataAvailableEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	10.0	Yes	Yes	No	No	No

MBS("Shell.GetDataAvailableEvaluate"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns text or error.

Description

See also

- 148.21 Shell.GetDataAvailableScriptName 7030
- 148.40 Shell.SetDataAvailableEvaluate 7050
- 148.41 Shell.SetDataAvailableScript 7051
- 154.54 Socket.SetDataAvailableEvaluate 7252

148.19.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 17th November 2019, last changed 17th November 2019.

148.20 Shell.GetDataAvailableScriptFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	10.0	Yes	Yes	No	No	No

MBS("Shell.GetDataAvailableScriptFileName"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns file name or error.

Description

See also

- 148.21 Shell.GetDataAvailableScriptName

7030

148.20.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 17th November 2019, last changed 17th November 2019.

148.21 Shell.GetDataAvailableScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	10.0	Yes	Yes	No	No	No

MBS("Shell.GetDataAvailableScriptName"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns script name or error.

Description

See also

- 148.19 Shell.GetDataAvailableEvaluate 7028
- 148.20 Shell.GetDataAvailableScriptFileName 7029
- 148.41 Shell.SetDataAvailableScript 7051

148.21.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 17th November 2019, last changed 17th November 2019.

148.22 Shell.GetDomain

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.GetDomain"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns text or error.

Description

See also

- 148.42 Shell.SetDomain

7052

Created 11st November 2017, last changed 11st November 2017.

148.23 Shell.GetEnvironment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.GetEnvironment"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns text or error.

Description

Returns list with = as separator.

See also

- 148.2 Shell.AddEnvironment 7004
- 148.6 Shell.ClearEnvironment 7008

Created 11st November 2017, last changed 11st November 2017.

148.24 Shell.GetPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.GetPassword"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns text or error.

Description

See also

- 148.43 Shell.SetPassword

7053

Created 11st November 2017, last changed 11st November 2017.

148.25 Shell.GetUsername

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.GetUsername"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns text or error.

Description

See also

- 148.44 Shell.SetUsername

7054

Created 11st November 2017, last changed 11st November 2017.

148.26 Shell.IsRunning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.IsRunning"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns 1 or 0 or error.

Description

Returns 1 if running or 0 if not.

Please use 8.2 or newer on FileMaker Cloud as Shell.Wait/Shell.IsRunning was broken there before.

See also

- [148.9 Shell.Execute](#) 7011
- [148.32 Shell.ReadOutputText](#) 7041
- [148.47 Shell.Wait](#) 7057

Example Databases

- [Shell/Shell Ping](#)
- [Shell/Shell](#)

148.26.1 Blog Entries

- [Tips for FileMaker Data Migration Tool](#)
- [MBS FileMaker Plugin, version 8.2pr8](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)

Created 11st November 2017, last changed 14th May 2018.

148.27 Shell.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.New")

Result Returns number or error.

Description

Please call Shell.Release later.

Technically the shell could run on iOS, but it does not due to sandboxing.

See also

- [139.9 RunTask.NewTask](#) 6766
- [148.1 Shell.AddArgument](#) 7001
- [148.2 Shell.AddEnvironment](#) 7004
- [148.9 Shell.Execute](#) 7011
- [148.33 Shell.Release](#) 7043

Example Databases

- [Shell/Shell Ping](#)
- [Shell/Shell](#)
- [Shell/Terminal](#)

148.27.1 Blog Entries

- [Tip of the day: Shell Execute as one Let statement](#)
- [Run fmsadmin from script](#)
- [Convert office documents to PDF with LibreOffice](#)
- [Tips for FileMaker Data Migration Tool](#)
- [Execute defaults command with Shell functions](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)

Created 11st November 2017, last changed 28th November 2017.

148.28 Shell.PeekErrorText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.PeekErrorText"; ShellRef { ; Encoding })

Parameters

ShellRef

The reference number from the shell.

\$shell

Encoding

Optional

The text encoding for result.

UTF8

Result Returns text or error.

Description

Returns data in buffer without removing it.

You need to call Shell.ReadErrorText later to actually read the data and remove it from the buffer.

See also

- 148.31 Shell.ReadErrorText

7040

148.28.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr2](#)
- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 11st November 2017, last changed 14th September 2018.

148.29 Shell.PeekOutputText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.PeekOutputText"; ShellRef { ; Encoding })

Parameters

ShellRef

The reference number from the shell.

\$shell

Encoding

Optional

The text encoding for result.

UTF8

Result Returns text or error.

Description

Returns data in buffer without removing it.

You need to call Shell.ReadOutputText later to actually read the data and remove it from the buffer.

See also

- 148.32 Shell.ReadOutputText

7041

Created 11st November 2017, last changed 14th September 2018.

148.30 Shell.ProcessIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.ProcessIdentifier"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns number or error.

Description

Created 11st November 2017, last changed 11st November 2017.

148.31 Shell.ReadErrorText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.ReadErrorText"; ShellRef { ; Encoding })

Parameters

ShellRef

The reference number from the shell.

\$shell

Encoding

Optional

The text encoding for result.

UTF8

Result Returns text or error.

Description

When child process writes something to error stream, you can read it here.

See also

- 148.9 Shell.Execute 7011
- 148.28 Shell.PeekErrorText 7037
- 148.32 Shell.ReadOutputText 7041

Example Databases

- [Shell/Shell Ping](#)
- [Shell/Shell](#)
- [Shell/Terminal](#)

148.31.1 Blog Entries

- [Tip of the day: Shell Execute as one Let statement](#)
- [Convert office documents to PDF with LibreOffice](#)
- [Tips for FileMaker Data Migration Tool](#)
- [Execute defaults command with Shell functions](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)

Created 11st November 2017, last changed 10th September 2018.

148.32 Shell.ReadOutputText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.ReadOutputText"; ShellRef { ; Encoding })

Parameters

ShellRef

The reference number from the shell.

\$shell

Encoding

Optional

The text encoding for result.

UTF8

Result Returns text or error.

Description

When child process writes something to output stream, you can read it here.

Examples

Loop and collect messages:

```
Set Variable [ $error ; Value: "" ]
Set Variable [ $result ; Value: "" ]
# Loop while app runs and collect messages
Loop
# Wait a second or till it quits
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 1 ) ]
# And read output
Set Variable [ $error ; Value: $error & MBS( "Shell.ReadErrorText"; $shell; "UTF-8" ) ]
Set Variable [ $result ; Value: $result & MBS( "Shell.ReadOutputText"; $shell; "UTF-8" ) ]
Set Field [ Shell::Error ; MBS( "Text.ReplaceNewline"; $error; 1 ) ]
Set Field [ Shell::Output ; MBS( "Text.ReplaceNewline"; $result; 1 ) ]
# exit when done
Exit Loop If [ MBS( "Shell.IsRunning"; $shell) = 1 ]
End Loop
```

See also

- 148.9 Shell.Execute 7011
- 148.26 Shell.IsRunning 7035
- 148.29 Shell.PeekOutputText 7038
- 148.31 Shell.ReadErrorText 7040

- 148.47 Shell.Wait 7057
- 164.59 Text.ReplaceNewline 7857

Example Databases

- [Shell/Shell Ping](#)
- [Shell/Shell](#)
- [Shell/Terminal](#)

148.32.1 Blog Entries

- [Tip of the day: Shell Execute as one Let statement](#)
- [Run fmsadmin from script](#)
- [Convert office documents to PDF with LibreOffice](#)
- [Tips for FileMaker Data Migration Tool](#)
- [Execute defaults command with Shell functions](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)

Created 11st November 2017, last changed 10th September 2018.

148.33 Shell.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.Release"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns OK or error.

Description

See also

- 148.1 Shell.AddArgument 7001
- 148.2 Shell.AddEnvironment 7004
- 148.9 Shell.Execute 7011
- 148.27 Shell.New 7036

Example Databases

- [Shell/Shell Ping](#)
- [Shell/Shell](#)
- [Shell/Terminal](#)

148.33.1 Blog Entries

- [Tip of the day: Shell Execute as one Let statement](#)
- [Run fmsadmin from script](#)
- [Convert office documents to PDF with LibreOffice](#)
- [Tips for FileMaker Data Migration Tool](#)
- [Execute defaults command with Shell functions](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)

Created 11st November 2017, last changed 11st November 2017.

148.34 Shell.SetApplicationName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.SetApplicationName"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns OK or error.

Description

Only for Windows.

See also

- 148.11 Shell.GetApplicationName

7020

Created 11st November 2017, last changed 11st November 2017.

148.35 Shell.SetArguments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.SetArguments"; ShellRef { ; Arguments })

Parameters

ShellRef

The reference number from the shell.

\$shell

Arguments

Optional

The first argument. Please pass one parameter per argument to set.

Result Returns OK or error.

Description

Pass as many arguments as needed.

This arguments define the list of arguments passed first on each call to Shell.Execute.

Examples

Pass three arguments

```
MBS( "Shell.SetArguments"; $shell; "-v"; "-l"; "/Users/cs")
```

See also

- 148.1 Shell.AddArgument 7001
- 148.5 Shell.ClearArguments 7007
- 148.9 Shell.Execute 7011
- 148.12 Shell.GetArgument 7021
- 148.14 Shell.GetArguments 7023
- 148.36 Shell.SetArgumentsList 7046

Created 11st November 2017, last changed 16th November 2017.

148.36 Shell.SetArgumentsList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.SetArgumentsList"; ShellRef; List)

Parameters

ShellRef

The reference number from the shell.

\$shell

List

The list of arguments.

"-v\$x\$a"

Result Returns OK or error.

Description

This arguments define the list of arguments passed first on each call to Shell.Execute.

See also

- 148.9 Shell.Execute 7011
- 148.13 Shell.GetArgumentCount 7022
- 148.14 Shell.GetArguments 7023
- 148.35 Shell.SetArguments 7045

Example Databases

- [Shell/Shell](#)

Created 11st November 2017, last changed 16th November 2017.

148.37 Shell.SetCompletedEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	No	No	No

MBS("Shell.SetCompletedEvaluate"; ShellRef; Expression)

(old name: Shell.SetEvaluate)

Parameters

ShellRef

The reference number from the shell.

\$shell

Expression

The expression to evaluate.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

See also

- 148.15 Shell.GetCompletedEvaluate 7024
- 148.38 Shell.SetCompletedScript 7048

148.37.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 18th November 2017, last changed 17th November 2019.

148.38 Shell.SetCompletedScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	No	No	No

MBS("Shell.SetCompletedScript"; ShellRef; Filename; ScriptName)

(old name: Shell.SetScript)

Parameters

ShellRef

The reference number from the shell.

\$shell

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- [148.17 Shell.GetCompletedScriptName](#) 7026
- [148.37 Shell.SetCompletedEvaluate](#) 7047

Example Databases

- [Shell/Terminal](#)

148.38.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 18th November 2017, last changed 17th November 2019.

148.39 Shell.SetCurrentDirectory

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.SetCurrentDirectory"; ShellRef; Path)

Parameters

ShellRef

The reference number from the shell.

\$shell

Path

The native path to the new directory.

"/Users/cs/Desktop"

Result Returns OK or error.

Description

Keep empty for default, which is current directory of FileMaker.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Sets current directory to tmp:

MBS("Shell.SetCurrentDirectory"; \$shell; "/tmp")

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 129.4 Process.GetCurrentDirectory 6480
- 129.9 Process.SetCurrentDirectory 6485
- 148.9 Shell.Execute 7011
- 148.18 Shell.GetCurrentDirectory 7027

Created 11st November 2017, last changed 16th November 2017.

148.40 Shell.SetDataAvailableEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	10.0	Yes	Yes	No	No	No

MBS("Shell.SetDataAvailableEvaluate"; ShellRef; Expression)

Parameters

ShellRef

The reference number from the shell.

\$shell

Expression

The expression to evaluate.

Result Returns OK or error.

Description

See also

- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 144.29 SerialPort.SetDataAvailableEvaluate 6967
- 148.19 Shell.GetDataAvailableEvaluate 7028
- 148.41 Shell.SetDataAvailableScript 7051
- 154.54 Socket.SetDataAvailableEvaluate 7252

148.40.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 17th November 2019, last changed 17th November 2019.

148.41 Shell.SetDataAvailableScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	10.0	Yes	Yes	No	No	No

MBS("Shell.SetDataAvailableScript"; ShellRef; Filename; ScriptName)

Parameters

ShellRef

The reference number from the shell.

\$shell

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- [148.19 Shell.GetDataAvailableEvaluate](#) 7028
- [148.21 Shell.GetDataAvailableScriptName](#) 7030
- [148.40 Shell.SetDataAvailableEvaluate](#) 7050

Example Databases

- [Shell/Terminal](#)

148.41.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 17th November 2019, last changed 17th November 2019.

148.42 Shell.SetDomain

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.SetDomain"; ShellRef; Domain)

Parameters

ShellRef

The reference number from the shell.

\$shell

Domain

The domain to use.

Result Returns OK or error.

Description

Only for Windows.

See also

- 148.22 Shell.GetDomain

7031

Created 11st November 2017, last changed 11st November 2017.

148.43 Shell.SetPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.SetPassword"; ShellRef; Password)

Parameters

ShellRef

The reference number from the shell.

\$shell

Password

The password text.

"xxx"

Result Returns OK or error.

Description

Only for Windows.

See also

- 148.24 Shell.GetPassword

148.44 Shell.SetUsername

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.SetUsername"; ShellRef; Username)

Parameters

ShellRef

The reference number from the shell.

\$shell

Username

The user name.

"cs"

Result Returns OK or error.

Description

Only for Windows to run application with different login.

See also

- 148.25 Shell.GetUsername

7034

Created 11st November 2017, last changed 11st November 2017.

148.45 Shell.Terminate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.Terminate"; ShellRef)

Parameters

ShellRef

The reference number from the shell.

\$shell

Result Returns OK or error.

Description

Force quits the process.

Created 11st November 2017, last changed 11st November 2017.

148.46 Shell.TerminationReason

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	No	Yes, macOS only	No	No

MBS("Shell.TerminationReason"; ShellRef)

Parameters**ShellRef**

The reference number from the shell.

\$shell

Result Returns the reason the task was terminated.

Description

Available in OS X v10.6 and later.

Returns 1 for exit and 2 for an uncaught signal.

Created 11st November 2017, last changed 11st November 2017.

148.47 Shell.Wait

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.Wait"; ShellRef; Timeout)

Parameters

ShellRef

The reference number from the shell.

\$shell

Timeout

The timeout in seconds on how long to wait.

3

Result Returns OK or error.

Description

This blocks FileMaker for doing anything till the app is done or timeout happens.

Please use 8.2 or newer on FileMaker Cloud as Shell.Wait/Shell.IsRunning was broken there before.

Examples

Wait 5 seconds or till the tool quit:

```
Set Variable [ $s ; Value: MBS( "Shell.Wait"; $shell; 5) ]
```

See also

- [148.9 Shell.Execute](#) 7011
- [148.26 Shell.IsRunning](#) 7035
- [148.32 Shell.ReadOutputText](#) 7041

Example Databases

- [Shell/Shell](#)

148.47.1 Blog Entries

- [Tip of the day: Shell Execute as one Let statement](#)
- [Run fmsadmin from script](#)
- [Convert office documents to PDF with LibreOffice](#)

- [Tips for FileMaker Data Migration Tool](#)
- [Execute defaults command with Shell functions](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)

Created 11st November 2017, last changed 27th August 2018.

148.48 Shell.WriteInputText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
148 Shell	7.5	Yes	Yes	Yes	Yes	No

MBS("Shell.WriteInputText"; ShellRef; Text { ; Encoding })

Parameters

ShellRef

The reference number from the shell.

\$shell

Text

The text to send.

"Hello World"

Encoding

Optional

The text encoding for text parameter.

"UTF-8"

Result Returns OK or error.

Description

The child process and read this from the input stream.

Please make sure you use right line endings and encoding.

You must call Shell.Execute first to start the child process, before you send data.

Examples

Sends text to shell:

MBS("Shell.WriteInputText"; \$shell; "Hello World"; "UTF-8")

See also

- 148.9 Shell.Execute

7011

Example Databases

- [Shell/Shell Ping](#)
- [Shell/Shell](#)
- [Shell/Terminal](#)

148.48.1 Blog Entries

- [Tips for FileMaker Data Migration Tool](#)

Created 11st November 2017, last changed 4th November 2019.

Chapter 149

Sign

Sign with Elliptic Curve or RSA.

Generate private and public keys, sign with private key and verify with public key. We can use Elliptic Curve Digital Signature Algorithm or RSA.

149.1 ECKey.BuiltInCurves

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.BuiltInCurves")

Result Returns list or error.

Description

Returns a list of curves with ID=Description format.

The list looks like this:

Created 9th October 2015, last changed 9th October 2015.

- 704 SECG/WTLS curve over a 112 bit prime field
- 705 SECG curve over a 112 bit prime field
- 706 SECG curve over a 128 bit prime field
- 707 SECG curve over a 128 bit prime field
- 708 SECG curve over a 160 bit prime field
- 709 SECG curve over a 160 bit prime field
- 710 SECG/WTLS curve over a 160 bit prime field
- 711 SECG curve over a 192 bit prime field
- 712 SECG curve over a 224 bit prime field
- 713 NIST/SECG curve over a 224 bit prime field
- 714 SECG curve over a 256 bit prime field
- 715 NIST/SECG curve over a 384 bit prime field
- 716 NIST/SECG curve over a 521 bit prime field
- 409 NIST/X9.62/SECG curve over a 192 bit prime field
- 410 X9.62 curve over a 192 bit prime field
- 411 X9.62 curve over a 192 bit prime field
- 412 X9.62 curve over a 239 bit prime field
- 413 X9.62 curve over a 239 bit prime field
- 414 X9.62 curve over a 239 bit prime field
- 415 X9.62/SECG curve over a 256 bit prime field
- 717 SECG curve over a 113 bit binary field
- 718 SECG curve over a 113 bit binary field
- 719 SECG/WTLS curve over a 131 bit binary field
- 720 SECG curve over a 131 bit binary field
- 721 NIST/SECG/WTLS curve over a 163 bit binary field
- 722 SECG curve over a 163 bit binary field
- 723 NIST/SECG curve over a 163 bit binary field
- 724 SECG curve over a 193 bit binary field
- 725 SECG curve over a 193 bit binary field
- 726 NIST/SECG/WTLS curve over a 233 bit binary field
- 727 NIST/SECG/WTLS curve over a 233 bit binary field
- 728 SECG curve over a 239 bit binary field
- 729 NIST/SECG curve over a 283 bit binary field
- 730 NIST/SECG curve over a 283 bit binary field
- 731 NIST/SECG curve over a 409 bit binary field
- 732 NIST/SECG curve over a 409 bit binary field
- 733 NIST/SECG curve over a 571 bit binary field
- 734 NIST/SECG curve over a 571 bit binary field
- 684 X9.62 curve over a 163 bit binary field
- 685 X9.62 curve over a 163 bit binary field
- 686 X9.62 curve over a 163 bit binary field
- 687 X9.62 curve over a 176 bit binary field
- 688 X9.62 curve over a 191 bit binary field
- 689 X9.62 curve over a 191 bit binary field
- 690 X9.62 curve over a 191 bit binary field
- 693 X9.62 curve over a 208 bit binary field
- 694 X9.62 curve over a 239 bit binary field
- 695 X9.62 curve over a 239 bit binary field
- 696 X9.62 curve over a 239 bit binary field

149.2 ECKey.Description

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.Description"; ECKey)

Parameters

ECKey

The reference number for the key.

\$Key

Result Returns text or error.

Description

For display to user.

See also

- 59.10 CoreML.Description 1721
- 149.4 ECKey.Generate 7065
- 149.5 ECKey.PrivateKey 7067
- 149.6 ECKey.PublicKey 7068

Example Databases

- [Encryption and Hash/ECKey Test](#)

149.2.1 FileMaker Magazin

- Ausgabe 6/2015, Seite 30
- Ausgabe 6/2015, Seite 29

Created 9th October 2015, last changed 9th October 2015.

149.3 ECKey.Duplicate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.Duplicate"; ECKey)

Parameters

ECKey

The reference number for the key.

\$Key

Result Returns key reference or error.

Description

Please use ECKey.Release later to free memory.

See also

- 149.9 ECKey.Release

7071

Created 9th October 2015, last changed 9th October 2015.

149.4 ECKEY.Generate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKEY.Generate"; CurveID)

Parameters

CurveID

The curve ID to use.

711

Result Returns reference number or error.

Description

You can use ECKEY.ReadPrivateKey and ECKEY.ReadPublicKey functions to get the keys. Please use ECKEY.Release later to free memory.

Examples

Generate keys and store in fields:

```
Set Variable [ $key; Value:MBS("ECKEY.Generate"; 711) ]
Set Field [ ECKEY Test::KeyInfo; MBS("ECKEY.Description"; $key) ]
Set Field [ ECKEY Test::PrivateKey; MBS("ECKEY.PrivateKey"; $key) ]
Set Field [ ECKEY Test::PublicKey; MBS("ECKEY.PublicKey"; $key) ]
Set Variable [ $r; Value:MBS("ECKEY.Release"; $key) ]
```

See also

- [149.2 ECKEY.Description](#) 7063
- [149.5 ECKEY.PrivateKey](#) 7067
- [149.6 ECKEY.PublicKey](#) 7068
- [149.7 ECKEY.ReadPrivateKey](#) 7069
- [149.8 ECKEY.ReadPublicKey](#) 7070
- [149.9 ECKEY.Release](#) 7071

Example Databases

- [Encryption and Hash/ECKEY Test](#)
- [Encryption and Hash/Solution Registration/Solution Registration Creator](#)

149.4.1 FileMaker Magazin

- Ausgabe 6/2015, Seite 29

Created 9th October 2015, last changed 14th October 2015.

149.5 ECKey.PrivateKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.PrivateKey"; ECKey)

Parameters

ECKey

The reference number for the key.

\$Key

Result Returns text or error.

Description

Returned as hex encoded text.

Examples

Generate keys and store in fields:

```
Set Variable [ $key; Value:MBS("ECKey.Generate"; 711) ]
Set Field [ ECKey Test::KeyInfo; MBS("ECKey.Description"; $key) ]
Set Field [ ECKey Test::PrivateKey; MBS("ECKey.PrivateKey"; $key) ]
Set Field [ ECKey Test::PublicKey; MBS("ECKey.PublicKey"; $key) ]
Set Variable [ $r; Value:MBS("ECKey.Release"; $key) ]
```

See also

- [149.2 ECKey.Description](#) 7063
- [149.4 ECKey.Generate](#) 7065
- [149.6 ECKey.PublicKey](#) 7068
- [149.7 ECKey.ReadPrivateKey](#) 7069
- [149.9 ECKey.Release](#) 7071

Example Databases

- [Encryption and Hash/ECKey Test](#)
- [Encryption and Hash/Solution Registration/Solution Registration Creator](#)

149.5.1 FileMaker Magazin

- Ausgabe 6/2015, Seite 29

Created 9th October 2015, last changed 14th October 2015.

149.6 ECKey.PublicKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.PublicKey"; ECKey)

Parameters

ECKey

The reference number for the key.

\$Key

Result Returns text or error.

Description

Returned as hex encoded text.

Examples

Generate keys and store in fields:

```
Set Variable [ $key; Value:MBS("ECKey.Generate"; 711) ]
Set Field [ ECKey Test::KeyInfo; MBS("ECKey.Description"; $key) ]
Set Field [ ECKey Test::PrivateKey; MBS("ECKey.PrivateKey"; $key) ]
Set Field [ ECKey Test::PublicKey; MBS("ECKey.PublicKey"; $key) ]
Set Variable [ $r; Value:MBS("ECKey.Release"; $key) ]
```

See also

- [149.2 ECKey.Description](#) 7063
- [149.4 ECKey.Generate](#) 7065
- [149.5 ECKey.PrivateKey](#) 7067
- [149.8 ECKey.ReadPublicKey](#) 7070
- [149.9 ECKey.Release](#) 7071

Example Databases

- [Encryption and Hash/ECKey Test](#)
- [Encryption and Hash/Solution Registration/Solution Registration Creator](#)

149.6.1 FileMaker Magazin

- Ausgabe 6/2015, Seite 29

Created 9th October 2015, last changed 14th October 2015.

149.7 ECKEY.ReadPrivateKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKEY.ReadPrivateKey"; KeyData)

Parameters**KeyData**

The hex encoded key data.

Result Returns reference number or error.

Description

Please use ECKEY.Release later to free memory.

See also

- 149.4 ECKEY.Generate 7065
- 149.5 ECKEY.PrivateKey 7067
- 149.9 ECKEY.Release 7071
- 48.18 PKey.GetPrivateKey 1365

Example Databases

- [Encryption and Hash/ECKEY Test](#)
- [Encryption and Hash/Solution Registration/Solution Registration Creator](#)

149.7.1 FileMaker Magazin

- Ausgabe 6/2015, Seite 30

Created 9th October 2015, last changed 12nd October 2015.

149.8 ECKey.ReadPublicKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.ReadPublicKey"; KeyData; CurveID)

Parameters

KeyData

The hex encoded key data.

CurveID

The curve ID to use.

711

Result Returns reference or error.

Description

Please use ECKey.Release later to free memory.

See also

- 149.4 ECKey.Generate 7065
- 149.6 ECKey.PublicKey 7068
- 149.9 ECKey.Release 7071
- 48.19 PKey.GetPublicKey 1366

Example Databases

- [Encryption and Hash/ECKey Test](#)
- [Encryption and Hash/Solution Registration/Solution Registration](#)

149.8.1 FileMaker Magazin

- Ausgabe 6/2015, Seite 30

Created 9th October 2015, last changed 12nd October 2015.

149.9 ECKey.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.Release"; ECKey)

Parameters

ECKey

The reference number for the key.
\$Key

Result Returns OK or error.

Description

See also

- 149.3 ECKey.Duplicate 7064
- 149.4 ECKey.Generate 7065
- 149.5 ECKey.PrivateKey 7067
- 149.6 ECKey.PublicKey 7068
- 149.7 ECKey.ReadPrivateKey 7069
- 149.8 ECKey.ReadPublicKey 7070
- 48.20 PKey.Release 1367

Example Databases

- [Encryption and Hash/ECKey Test](#)
- [Encryption and Hash/Solution Registration/Solution Registration Creator](#)
- [Encryption and Hash/Solution Registration/Solution Registration](#)

149.9.1 FileMaker Magazin

- Ausgabe 6/2015, Seite 31
- Ausgabe 6/2015, Seite 30
- Ausgabe 6/2015, Seite 29

Created 9th October 2015, last changed 9th October 2015.

149.10 ECKey.Sign

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.Sign"; ECKey; Data)

Parameters

ECKey

The reference number for the key.

\$Key

Data

The hex encoded data.

\$hash

Result Returns text or error.

Description

We highly recommend to use a hash like SHA-512 to preprocess the data.

Returns the signature as hex text on success.

See also

- 149.11 ECKey.Size

7073

Example Databases

- [Encryption and Hash/ECKey Test](#)
- [Encryption and Hash/Solution Registration/Solution Registration Creator](#)

149.10.1 FileMaker Magazin

- Ausgabe 6/2015, Seite 30

Created 9th October 2015, last changed 9th October 2015.

149.11 **ECKKey.Size**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKKey.Size"; ECKKey)

Parameters

ECKKey

The reference number for the key.

\$Key

Result Returns number or error.

Description

See also

- 149.10 ECKKey.Sign

7072

Created 9th October 2015, last changed 9th October 2015.

149.12 ECKey.Verify

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	5.4	Yes	Yes	Yes	Yes	Yes

MBS("ECKey.Verify"; ECKey; Data; SignatureData)

Parameters

ECKey

The reference number for the key.

\$Key

Data

The hex encoded data.

\$hash

SignatureData

The hex encoded signature.

\$sig

Result Returns OK or error.

Description

Returns OK on success. Returns error if data, signature and public key don't belong together.

We highly recommend to use a hashed value for the data parameter, e.g. use Hash.SHA512 function to get a 512bit hash for your data.

See also

- [86.13 Hash.SHA512](#) 4812

Example Databases

- [Encryption and Hash/ECKey Test](#)
- [Encryption and Hash/Solution Registration/Solution Registration](#)

149.12.1 Blog Entries

- [MBS FileMaker Plugin, version 5.5pr4](#)

149.12.2 FileMaker Magazin

- Ausgabe 6/2015, Seite 31
- Ausgabe 6/2015, Seite 30

Created 9th October 2015, last changed 9th October 2015.

149.13 RSA.GeneratePrivateKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	6.2	Yes	Yes	Yes	Yes	Yes

MBS("RSA.GeneratePrivateKey" { ; Bits; Exp; Algorithm; PasswordType; PasswordData; PasswordEncoding })

Parameters**Bits**

Optional

The bit size. e.g. 1024, 2048, 4096, etc. Default is 4096.
4096

Exp

Optional

The exponent to use. Default is 65537.
65537

Algorithm

Optional

Which algorithm to use. Can be for example RC2, blowfish, AES128, AES192, AES256. See Encryption.Cipher.
"AES-128-CFB"

PasswordType

Optional

The type of input for optional password. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

PasswordData

Optional

The actual input data for the password. Text, container or file path.
"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.
"UTF-8"

Result Returns key as text or error.

Description

Returns the PEM formatted key as text.

As the PEM format contains base64 encoded DER data, you can remove header and footer line and use the result as base64 encoded DER key.

If you specify an algorithm and a key, we encrypt the PEM file. (New in 7.5)

Examples

Generate keys:

```
Set Variable [ $privateKey; Value:MBS( "RSA.GeneratePrivateKey" ) ]
Set Variable [ $publickey; Value:MBS( "RSA.GetPublicKey"; "text"; $privateKey; "UTF-8" ) ]
Set Field [ Table::PrivateKey; $privateKey ]
Set Field [ Table::PublicKey; $publicKey ]
```

Generate key with text password:

```
MBS( "RSA.GeneratePrivateKey"; 4096; 65537; "AES-128-CBC"; "text"; "Hello" )
```

See also

- [73.1 Encryption.Cipher](#) 3445
- [73.12 RSA.DecryptPrivateKey](#) 3469
- [73.13 RSA.EncryptPrivateKey](#) 3471
- [149.14 RSA.GetPublicKey](#) 7077
- [73.14 RSA.PrivateDecrypt](#) 3473
- [73.15 RSA.PrivateEncrypt](#) 3476
- [73.16 RSA.PublicDecrypt](#) 3479
- [73.17 RSA.PublicEncrypt](#) 3482

Example Databases

- [Encryption and Hash/RSA Sign and Verify](#)

149.13.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)
- [MBS FileMaker Plugin, version 7.5pr2](#)
- [MBS FileMaker Plugin 6.2 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 12nd March 2016, last changed 15th October 2017.

149.14 RSA.GetPublicKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	6.2	Yes	Yes	Yes	Yes	Yes

MBS("RSA.GetPublicKey"; KeyType; KeyData { ; KeyEncoding; PasswordType; PasswordData; PasswordEncoding })

Parameters

KeyType

The type of input for private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Path"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"/Users/cs/desktop/test.pem"

KeyEncoding

Optional

The text encoding for text input for the key. Parameter is ignored for other cases.

PasswordType

Optional

The type of input for the password of the private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.
"Text"

PasswordData

Optional

The actual input data for the password of the private key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.
"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.
"UTF-8"

Result Returns text or error.

Description

You pass in private key and this function returns public key as PEM.
Returns public key in PEM format as text.

You can create a new private key using `RSA.GeneratePrivateKey` function.

See also

- 48.19 PKey.GetPublicKey

- 149.13 RSA.GeneratePrivateKey 7075
- 73.16 RSA.PublicDecrypt 3479
- 73.17 RSA.PublicEncrypt 3482

Example Databases

- [Encryption and Hash/RSA Sign and Verify](#)

149.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 12nd March 2016, last changed 30th May 2016.

149.15 RSA.Sign

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	6.2	Yes	Yes	Yes	Yes	Yes

MBS("RSA.Sign"; Algorithm; InputType; InputData; InputEncoding; KeyType; KeyData; KeyEncoding; PasswordType; PasswordData; PasswordEncoding; OutputType; OutputInfo)

Parameters

Algorithm

Which algorithm to use. Can be MD4, MD5, SHA, SHA1, MDC2, RIPEMD160, SHA224, SHA256, SHA384 or SHA512.

"SHA512"

InputType

The type of input data. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

InputData

The actual input data. Text, container or file path.

"Hello World"

InputEncoding

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

KeyType

The type of input for private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Path"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.

"/Users/cs/desktop/test.pem"

KeyEncoding

The text encoding for text input for the key. Parameter is ignored for other cases.

PasswordType

The type of input for the password of the private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

PasswordData

The actual input data for the password of the private key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.

"Hello World"

PasswordEncoding

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

OutputType

The output type. Can be Base64, Hex, Text, File, Path.
"Hex"

OutputInfo

The addition info for output. For text it is the text encoding, for file container the file name and for path the actual native file path.
""

Result Returns signature or error.

Description

Returns signature data in the format specified in OutputType.

Internally we make a hash of the data with given algorithm, open the private RSA key and do a RSA sign operation. We return the signature.

Optional you can pass a password to read password protected keys.

You pass data as triplet of type, data and encoding. For the types use:

Text: Pass text and encoding.

Data or File: Pass a container to read its content as data.

PDF: Pass a container containing a PDF document.

Container: Pass a container, which will be serialized.

Image: Pass a container containing an image, e.g. JPEG, TIFF, PNG, GIF, etc.

GIF: Pass a container containing a GIF document.

JPEG: Pass a container containing a JPEG document.

PNG: Pass a container containing a PNG document.

TIFF: Pass a container containing a TIFF document.

Path: Pass a file name as data. The file is read and it's content is used.

Hex: Pass a hex encoded value as text.

Hash: Pass the hex encoded hash to use instead of hashing data.

Examples

Sign data with private key file:

```
MBS( "RSA.Sign"; "SHA512";
"Text"; "Hello World. This is test data to sign."; "UTF8";
"Path";
"/Users/cs/Desktop/Sign and Verify/test.pem";
"UTF8";
"text"; "", "";
"hex"; "" )
```

How to create keys and test in command line on Mac OS X:

Create private key:

openssl genrsa -out test.pem 4096

Create public key:

openssl rsa -in test.pem -pubout -out test.pub

Sign datafile.txt:

openssl dgst -sha1 -sign test.pem -out signature.sha1 Create\Keys.rtf

Verify signature

openssl dgst -sha1 -verify test.pub -signature signature.sha1 Create\Keys.rtf

To encrypt the private key, use a command like this:

openssl genrsa -des3 -out test.pem 2048

Sign call with private key included as text:

```
MBS( "RSA.Sign"; "SHA512";
"Text"; "Hello World. This is test data to sign."; "UTF8";
"Text";
"—BEGIN RSA PRIVATE KEY—" & $$
"MIJJKQIBA AKCAgEAz71qzCQEpcV4BbB1+D0IKmjOy+gzxY8CqPAkZTzQhHw8UE9" & $$
"KrnAjWm8Ze+9TNMs0Ar3ttJzLwnY4+12I5L9H0HTsW4hrzZI8kv0GtS98KJxAJ+x" & $$
"7k6Om5N6ZQj/wgkBbR1PC+89k+IkVwvwQ9nLq9pLocEabvfeesIdEYqrpPc3K35O" & $$
"T1hcPY3B5ISUmLC51S9yGvJdnp8+7GWpthCL46SVtl0VUZkEQGDWNquvneCJD99L" & $$
"9TdWz0WV1S0ksjNNzEYCotKtco27AoL4wNoZkIAi0RbrfxPHZ8G2E9ZdDWmUkIKZ" & $$
"aE5YAAIu57ZIBW7E2UqczkhHi+qXnZ/wlH3mBh5R8+rC6Vvuw+ufxZbcIG2O/Lj" & $$
"L9UduSvFVw900JJeolmAWSchs4Ut/Gt15L3fHB8rB1UnkFOVpyZ/O712a/GmQbB" & $$
"sBYb/NLz0ATDF0yUW0cB/0+uyfhUiLHH3C47M7BJAKLZuHr4Sj+iNFgv3+tYypN" & $$
"nmEfeFwWUzRWmHqEAdagE5c22EJZ4a4jRcTWORD2CVzDFPCI5GuIe7BIUgEChUE" & $$
"sr7fi6eN5q2YKmJ+ck+tH3JloJyVLt4/xb08JwYPRIKsnjZUAc/dWCsc5R9sGVMf" & $$
"NYmMpn2nR8iejw6zfkUE564zU8xNTNK4Qb6R9dR3JfHQ4/162hjZOhr4kx8CAwEA" & $$
"AQKCAgEAyD8ZJECp7k9j+2/nK+oeySfRCAMDbKsG8FvTaXbutNaguPVF0tIrce/" & $$
"oC8xNU3WQ5Be6e8AstX2KPdsSxUrH2ilsTHWYKlXFIUsoxhrrwSWkvhc5o747kSB" & $$
"1cSP7LUL1+eJm8J4hAWX7ASJDI5zwmTBPmHKni72WTSmGpOmEvVuS9GLoPZWq8rq" & $$
"nOGj729jInmCrzDzR4TPfcYdim92uO+cINyZr52NOJVfyAFE3QRkWIvVfadjWZcE" & $$
"8BhUmKXV11PhFJyqLuMp4ijnqdZSkfQHK6/BP5SMQZq7bXHT7qrYV1hckev7Skae" & $$
"JGThfQkVdIOvILRwFQ3zVu05B9JFK6xUhtAthnyqwVbLSYK/F0yPUzayV6fWhtDB" & $$
"szBLUqEns/amvD1KztbbHkRWdETeT9DXwqpRUhyYcfs9GcdGZIDG/Js4hQkoaaf8" & $$
"Wag3B95H3EdQ9OfKqoc2coM1GyM3pKaUxOC03n59Qaiwc9MLvqimOAMyQrLiLaqQ" & $$
"nIv4eAMgHbJqKHPJ1AQSDLY4d56zYuHctPjv9dv0tk5dCgx4fBA9/0wQT0p1q/+f" & $$
"FZkTSCyfNjLLGOzr/fdFnw4vMQNtDfYEu9S+qnmJehJuFLuVdTCkO2V3K2ugAZjK" & $$
"01wkuw85Cuhxws9d1lRMeZlzyEzL6BB7a1QHvAFxaHCvc+aXcwkCggEBAPofx0Js" & $$
"8yWrpr0hJZcs/vxpVuuAd54fuY9eKkkQh/Ymwp7BeGUiarLQKBhusVrdXoNx2vYi" & $$
```

```

”d+8i0o2VQrltdpCdrbPTOF9icUwBpeO87SoFWCfuokA9xP8J8aCwSVVTtzFGoTcv” & §&
”HgfzUXXQNqquuUeCcC6irEDWviSZd07UVUut4HLtA29U8Sn4u9Po1RQTDfZrw7iz” & §&
”o3iqYs4fTa0YTp7lQgAQ+iHDPVKa/loKaeiZyXeo4l4YZfE0jCm3KKhYpQ2BPCZm” & §&
”J5KywDEQd2ZRZnkeQZiGFNp/9cfmB7HwErBSHyVlRfgEI+YY+h13h2EfV9k+H9fu” & §&
”JoO2qKhXkRBwK7UCggEBANSevovGNC0LRn0PFKvbNjUpjxccT/iX2AWylXSMyc5O” & §&
”40xpci/k+muqu6BWf940Fa4tcJBcAFlytYmQ4Fv1vIXn0fOqNqikJ8R24btFIKk” & §&
”K98KCsxgaFFn9GPa5WvGZCUCx8jisUy3/H50hqppvy8fb4REOI66FhuhhkvB7j4” & §&
”K/Rv173cdlJrFoJ1NsTctvGfXiL/xJ4u9bY3VTZ6hZAB6x9UhHwi+naBkvyr6JY6” & §&
”1XPEmfWcAfGBXHM9r0ECTIle/QRciztA2/if1+pph50L+MXqA2kMHCGAYSXdjJUW” & §&
”PHUuncx8BE5Ss+HEgg0bhHpwi2JQ/IDPiv5iwrPax0AMCggEBAL4SLA+UT2lO+ZQ7” & §&
”fh9VeCdDvWOU6lFk9lO2T9u5zjgF2Ftf1ie0cbSUbgOzCl9sXYgxmzzsIQuyCYD” & §&
”SQMz5aebwyYd+naxjjsd/XwEc409JnKh6vY6elr8qXtcuzl2Mn3lmFkhGwcbpcmL” & §&
”gh9OSonGG4203IUhKrRThK/VFoANdHfvn555BHrDIDKLDHnEPMzjTXsfMsTX6YX” & §&
”L6XcFNK2kOMQA6Rog08krSirRTQWuXyPAAZVMBKNxf1lTCYxxqtui9D6TBQ0dcxT” & §&
”IQjFzsM3dM19BpfMKW/QpARZ1TncDgMS5lRGSqluTZLa5Cuv78gMZ5JITStGQQA8” & §&
”GuaM9wkCggEAG+4Sd8f8mKIvi0QM4hp0v30LF+0XMD+6F92CtoUYugIw55u+bT42” & §&
”CytJ7JUQTP8oje3YKI59WUKxR169hDb+odR3BvwoG/UcaDl5o6EMDkirjTigEB1” & §&
”06PFpCzGcGbgRtZbqi7lPX+5w17KRc20quST3ADf6NvFY8B5Cxbdtfa5kw+2ej4” & §&
”/hCIL1P4ctnPimP1+MECcgkXK+2O2w4zN1yZJ09x6+CoaCLTTS/D6OAnpAKCevoY” & §&
”Y0IsA9Npjy+syhldQVJq08jMXJeaxGdCkXdUxpPgmAd3eTAXjoBOqBmJrmc7Mi2” & §&
”asRiCnJL7GasH7SQIME+GLLDmmoy/mETQwKCAQBkbiATEB+4XFaQTdDlhD8TkN2k” & §&
”cRvLdwHwMR/xDZhoDr35DBD+Mht/3eChSQoXkF13LFnaM24zWuJA5lP/4+yHsGIh” & §&
”psV5EEYpzJFg3APiMAixU9PaqIm6UPyIvD8XzIi/lBc2fpendKJ+BswaNMKM0gj” & §&
”hfZOXFo/XcirEeJB0b8i9e2OwpZx9JbxMhKSqL/D1hDGQ9S+dxMIu+ui55xLTR8Q” & §&
”Rxx/wyQffVZvQVH556A1Ubtln5MwmnQkXmRQnWk+HWPHUDF60Ghn5+RgZ3wjQbx8” & §&
”ilmfH0p2YN6/QTpH1EdPVCofcGDsxRmva9OYiUIPcNlt8Ro5g0akJh6IW5E1” & §&
”—END RSA PRIVATE KEY—” & §;
”UTF8”;
”text”; ””; ””;
”hex”; ”” )

```

Sign some text:

```

Set Field [ Table::Signature; MBS( "RSA.Sign"; Table::Algorithm; "Text"; Table::Text to Sign; "UTF8";
"text"; Table::PrivateKey; "UTF8"; "" ; "" ; "" ; "hex"; "" ) ]

```

See also

- 149.16 RSA.Verify

7084

Example Databases

- [Encryption and Hash/RSA Sign and Verify](#)

149.15.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)

- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 12nd March 2016, last changed 15th May 2018.

149.16 RSA.Verify

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
149 Sign	6.2	Yes	Yes	Yes	Yes	Yes

MBS("RSA.Verify"; Algorithm; InputType; InputData; InputEncoding; KeyType; KeyData; KeyEncoding; SigType; SigData; SigEncoding { ; PasswordType; PasswordData; PasswordEncoding })

Parameters

Algorithm

Which algorithm to use. Can be MD4, MD5, SHA, SHA1, MDC2, RIPEMD160, SHA224, SHA256, SHA384 or SHA512.

"SHA512"

InputType

The type of input data. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

InputData

The actual input data. Text, container or file path.

"Hello World"

InputEncoding

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

KeyType

The type of input for private or public key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

KeyData

The actual input data for the key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.

"Hello World"

KeyEncoding

The text encoding for text input for the key. Parameter is ignored for other cases.

"UTF-8"

SigType

The type of input data for signature. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

SigData

The actual input data for signature. Text, container or file path.

"Hello World"

SigEncoding

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

PasswordType

Optional

The type of input for the password of the private key. Can be Text, Container, Image, Path, PDF, Data, base64 or Hex.

"Text"

PasswordData

Optional

The actual input data for the password of the private key. Text, container or file path. Must not be longer than the maximum key length of the given algorithm. If key is too short, we pad it with zero bytes.

"Hello World"

PasswordEncoding

Optional

The text encoding for text input. Parameter is ignored for other cases.

"UTF-8"

Result Returns 1, 0 or error.

Description

Returns 1 if signature is valid or 0 if not or an error if parameters are wrong.

Key can be the public or private key, but of course normally you use the public key.

A hash is created with given algorithm and verified with the signature.

Signature must be the string returned like from RSA.Sign function.

Optional you can pass a password to read password protected keys.

Examples

Verify with all data in files:

```
MBS( "RSA.Verify";
"SHA1";
"Path"; "/Users/cs/Desktop/Sign and Verify/Create Keys.rtf"; "";
"Path"; "/Users/cs/Desktop/Sign and Verify/test.pub"; "";
"Path"; "/Users/cs/Desktop/Sign and Verify/signature.sha1"; "";
"Text"; ""; "" )
```

Verify with passing signature as hex text:

```
MBS( "RSA.Verify";
"SHA512";
"Text"; "Hello World. This is test data to sign."; "UTF8";
"Path"; "/Users/cs/Desktop/Sign and Verify/test.pub"; "";
"Hex"; "CD603612768BD33F2C0C0DE1E71658F91914DCE083D96F0CE69490AE53F8711853D1589E08E67956812AA47B41
BBBD4E4C454862F15B68F4DEDC2A58EC15CF1150405E5F92A679CDEC1266AE87B5E78F63C4F46FAFA56502BE6BB2
CCEE93882CECF43F427A7FC536ACD8E0D773D7BDD4BE9012B76FA628B27AA9EB521F8F42138858A6C8158FF9A46D
";
"Text"; ""; "" )
```

Verify some text:

```
Set Variable [ $r; Value:MBS( "RSA.Verify"; Table::Algorithm; "Text"; Table::Text to Sign; "UTF8"; "Text";  
Table::PublicKey; "UTF8"; "Hex"; Table::Signature ) ]  
If [ $r = 1 ]  
Show Custom Dialog [ "Signature valid" ]  
Else If [ $r = 0 ]  
Show Custom Dialog [ "Signature invalid" ]  
Else  
Show Custom Dialog [ "Error"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]  
End If
```

See also

- 149.15 RSA.Sign 7079
- 164.57 Text.RemovePrefix 7854

Example Databases

- [Encryption and Hash/RSA Sign and Verify](#)

149.16.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr5](#)
- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 12nd March 2016, last changed 12nd March 2016.

Chapter 150

SmartCard

PCSC interface to SmartCard readers.

150.1 SmartCard.Available

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Available")

Result Returns 1, 0 or error.

Description

Should always be available on Mac and Windows.

Returns 1 if available or 0 if not.

On a server it would read the smart card attached the to the server, not any client.

See also

- 150.12 SmartCard.Init 7100
- 150.23 SmartCard.Transmit 7117

150.1.1 Blog Entries

- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 19th June 2016.

150.2 SmartCard.BeginTransaction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.BeginTransaction"; SmartCardContext)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Result Returns OK or error.

Description

The function waits for the completion of all other transactions before it begins. After the transaction starts, all other applications are blocked from accessing the smart card while the transaction is in progress.

If a transaction is held on the card for more than five seconds with no operations happening on that card, then the card is reset. Calling any of the Smart Card and Reader Access Functions or Direct Card Access Functions on the card that is transacted results in the timer being reset to continue allowing the transaction to be used.

The BeginTransaction function is a smart card and reader access function. For more information about other access functions, see Smart Card and Reader Access Functions.

See also

- 150.4 SmartCard.CancelTransaction 7090
- 150.8 SmartCard.EndTransaction 7095

Created 13th June 2016, last changed 19th June 2016.

150.3 SmartCard.Cancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Cancel"; SmartCardContext)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Result Returns OK or error.

Description

The only requests that you can cancel are those that require waiting for external action by the smart card or user. Any such outstanding action requests will terminate with a status indication that the action was canceled. This is especially useful to force outstanding GetStatusChange calls to terminate.

See also

- 150.5 SmartCard.Connect 7091
- 150.6 SmartCard.Control 7093

Created 13th June 2016, last changed 18th June 2016.

150.4 SmartCard.CancelTransaction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.CancelTransaction"; SmartCardContext)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Result Returns OK or error.

Description

See also

- 150.2 SmartCard.BeginTransaction 7088
- 150.8 SmartCard.EndTransaction 7095

Created 13th June 2016, last changed 19th June 2016.

150.5 SmartCard.Connect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Connect"; SmartCardContext; Reader; ShareMode; PreferredProtocols)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Reader

The name of the reader that contains the target card.

\$reader

ShareMode

A flag that indicates whether other applications may form connections to the card. Can be integer or one of the following texts: Exclusive (1), Shared (2) or Direct (3).

"Exclusive"

PreferredProtocols

A number with bitmask of acceptable protocols for the connection or just the text name of the value for only one protocol. Pass T0 (1), T1 (2), T15 (8, not on Windows), Any (3), RAW (4).

1+2

Result Returns OK or error.

Description

Establishes a connection (using a specific resource manager context) between the calling application and a smart card contained by a specific reader. If no card exists in the specified reader, an error is returned.

On success we have a connection to a smart card.

You can query SmartCard.GetActiveProtocol

Examples

Connect

MBS("SmartCard.Connect"; \$Context; \$Reader; "Shared"; "any")

See also

- 150.3 SmartCard.Cancel 7089
- 150.6 SmartCard.Control 7093
- 150.7 SmartCard.Disconnect 7094
- 150.9 SmartCard.GetActiveProtocol 7096

- 150.12 SmartCard.Init 7100
- 150.17 SmartCard.ReadFile 7108
- 150.18 SmartCard.Reconnect 7111
- 150.22 SmartCard.Status 7116
- 150.23 SmartCard.Transmit 7117

Example Databases

- [CURL/WebServices/eID Auto/eID Auto v2](#)
- [SmartCard/SmartCard ReadFile](#)
- [SmartCard/SmartCard Signatures](#)

150.5.1 Blog Entries

- [Read patient name from Swiss Health Card](#)
- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 3th August 2016.

150.6 SmartCard.Control

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Control"; SmartCardContext; ControlCode; InputData; OutputSize)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

ControlCode

Control code for the operation. This value identifies the specific operation to be performed.

InputData

Hex encoded input data. Contains the data required to perform the operation.

OutputSize

The expected output size. This is the buffer size the plugin will use for receiving.

1024

Result Returns hex encoded data or error.

Description

You can call it any time after a successful call to SmartCard.Connect and before a successful call to SmartCard.Disconnect. The effect on the state of the reader depends on the control code.

See also

- 150.3 SmartCard.Cancel 7089
- 150.5 SmartCard.Connect 7091
- 150.7 SmartCard.Disconnect 7094

Created 13th June 2016, last changed 19th June 2016.

150.7 SmartCard.Disconnect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Disconnect"; SmartCardContext; Disposition)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Disposition

Action to take on the card in the connected reader on close. Can be Leave, Reset, Unpower or Eject. "Eject"

Result Returns OK or error.

Description

Terminates a connection previously opened between the calling application and a smart card in the target reader.

Examples

Close it:

MBS("SmartCard.Disconnect"; \$card; "leave")

See also

- 150.5 SmartCard.Connect 7091
- 150.6 SmartCard.Control 7093
- 150.12 SmartCard.Init 7100
- 150.17 SmartCard.ReadFile 7108
- 150.18 SmartCard.Reconnect 7111
- 150.22 SmartCard.Status 7116
- 150.23 SmartCard.Transmit 7117

150.7.1 Blog Entries

- [Read patient name from Swiss Health Card](#)
- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 3th August 2016.

150.8 SmartCard.EndTransaction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.EndTransaction"; SmartCardContext; Disposition)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Disposition

Action to take on the card in the connected reader on close. Can be Eject, Leave, Reset or Unpower. "Eject"

Result Returns OK or error.

Description

Completes a previously declared transaction, allowing other applications to resume interactions with the card.

See also

- 150.2 SmartCard.BeginTransaction 7088
- 150.4 SmartCard.CancelTransaction 7090

Created 13th June 2016, last changed 19th June 2016.

150.9 SmartCard.GetActiveProtocol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.GetActiveProtocol"; SmartCardContext)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Result Returns value or error.

Description

The result is undefined, Raw, T0, T1 or T15.

See also

- [150.5 SmartCard.Connect](#) 7091
- [150.12 SmartCard.Init](#) 7100
- [150.18 SmartCard.Reconnect](#) 7111
- [150.23 SmartCard.Transmit](#) 7117

Example Databases

- [SmartCard/SmartCard ReadFile](#)
- [SmartCard/SmartCard Signatures](#)

150.9.1 Blog Entries

- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 19th June 2016.

150.10 SmartCard.GetAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.GetAttribute"; SmartCardContext; AttributeID)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

AttributeID

The ID of the attribute.

Result Returns hex text or error.

Description

It does not affect the state of the reader, driver, or card.

The plugin first queries for size of attribute and on success queries again to get the data and return it as a hex encoded text.

See also

- 150.20 SmartCard.SetAttribute

7113

Created 13th June 2016, last changed 19th June 2016.

Name	ID	Description
AtrString	590595	Answer to reset (ATR) string.
ChannelId	131344	Number encoded as 0xDDDDCCCC, where DDDD = data channel type and CCCC = channel number.
Characteristics	393552	Integer indicating which mechanical characteristics are supported. If zero, no special characteristics are supported.
CurrentBwt	524809	Current block waiting time.
CurrentClk	524802	Current clock rate, in kHz.
CurrentCwt	524810	Current character waiting time.
CurrentD	524804	Bit rate conversion factor.
CurrentEbcEncoding	524811	Current error block control encoding: 0 = longitudinal redundancy check (LRC), 1 = cyclical redundancy check (CRC)
CurrentF	524803	Clock conversion factor.
CurrentIfsc	524807	Current byte size for information field size card.
CurrentIfsd	524808	Current byte size for information field size device.
CurrentIoState	590594	Current IO state
CurrentN	524805	Current guard time.
CurrentProtocolType	524801	Integer encoded as 0xrrrrpppp where rrr is RFU and should be 0x000. pppp encodes the current protocol type. Whichever bit has been set indicates which ISO protocol is currently in use. (For example, if bit zero is set, T=0 protocol is in effect.)
CurrentW	524806	Current work waiting time.
DefaultClk	196897	Default clock rate, in kHz.
DefaultDataRate	196899	Default data rate, in bps.
DeviceFriendlyNameA	2147418115	Reader's display name. Windows ANSI encoding.
DeviceFriendlyNameW	2147418117	Reader's display name. Unicode encoding.
DeviceInUse	2147418114	Reserved for future use.
DeviceSystemNameA	2147418116	Reader's system name. Windows ANSI encoding.
DeviceSystemNameW	2147418118	Reader's system name. Unicode encoding.
DeviceUnit	2147418113	Instance of this vendor's reader attached to the computer. The first instance will be device unit 0, the next will be unit 1 (if it is the same brand of reader) and so on. Two different brands of readers will both have zero for this value.
EscAuthrequest	499717	Esc authentication request
EscCancel	499715	Esc cancel
EscReset	499712	Esc reset
ExtendedBwt	524812	Extended block wait time.
IccInterfaceStatus	590593	Single byte. Zero if smart card electrical contact is not active; nonzero if contact is active.
IccPresence	590592	Single byte indicating smart card presence: 0 = not present, 1 = card present but not swallowed (applies only if reader supports smart card swallowing), 2 = card present (and swallowed if reader supports smart card swallowing), 4 = card confiscated.
IccTypePerAtr	590596	Single byte indicating smart card type: 0 = unknown type, 1 = 7816 Asynchronous, 2 = 7816 Synchronous. Other values RFU.
MaxClk	196898	Maximum clock rate, in kHz.
MaxDataRate	196900	Maximum data rate, in bps.
MaxIfsd	196901	Maximum bytes for information file size device.
Maxinput	499719	Maximum input
PowerMgmtSupport	262449	Zero if device does not support power down while smart card is inserted. Nonzero otherwise.
ProtocolTypes	196896	Integer encoded as 0xrrrrpppp where rrr is RFU and should be 0x000. pppp encodes the supported protocol types. A '1' in a given bit position indicates support for the associated ISO protocol, so if bits zero and one are set, both T=0 and T=1 protocols are supported.
SupressT1IfsRequest	2147418119	Supress T1 information file size request.
UserAuthInputDevice	328002	User authentication input device
UserToCardAuthDevice	328000	User to card authentication device
VendorIfdSerialNo	65795	Vendor-supplied interface device serial number.
VendorIfdType	65793	Vendor-supplied interface device type (model designation of reader).
VendorIfdVersion	65794	Vendor-supplied interface device version (DWORD in the form 0xMMmmbbbb where MM = major version, mm = minor version, and bbbb = build number).
VendorName	65792	Vendor name.

150.11 SmartCard.HeaderTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.4	Yes	Yes	No	No	No

MBS("SmartCard.HeaderTemplate"; Protocol)

Parameters

Protocol

Which protocol you need a header. Can be T0, T1 or RAW.

"T1"

Result Returns OK or error.

Description

Examples

Get T0 header:

MBS("SmartCard.HeaderTemplate"; "T0")

Get T1 header:

MBS("SmartCard.HeaderTemplate"; "T1")

See also

- [150.16 SmartCard.ReadCertificate](#)

7107

Example Databases

- [SmartCard/SmartCard ReadFile](#)
- [SmartCard/SmartCard Signatures](#)

150.11.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr3](#)

Created 3th August 2016, last changed 18th November 2016.

150.12 SmartCard.Init

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Init")

Result Returns SmartCard Context ID or error.

Description

Returns the ID for other SmartCard functions.

Please call SmartCard.Release later.

Examples

List readers:

```
Set Variable [ $c; Value:MBS( "SmartCard.Init" ) ]
Set Variable [ $readers; Value:MBS( "SmartCard.ListReaders"; $c ) ]
Set Variable [ $r; Value:MBS( "SmartCard.Release"; $c ) ]
Show Custom Dialog [ "Readers"; $readers ]
```

Connect and query value:

```
If [ MBS( "SmartCard.Available" ) = 1 ]
# Start a new session
Set Variable [ $SCContext; Value:MBS( "SmartCard.Init" ) ]
If [ MBS( "SmartCard.Valid"; $SCContext ) ]
# Query list of readers and pick first
Set Variable [ $SCReader; Value:GetValue ( MBS( "SmartCard.ListReaders"; $SCContext ) ; 1 ) ]
If [ MBS("IsError") = 0 ]
# Connect to card
Set Variable [ $SCConnect; Value:MBS( "SmartCard.Connect"; $SCContext ; $SCReader ; "Shared"; "any" ) ]
Set Variable [ $PProtocol; Value:MBS( "SmartCard.GetActiveProtocol"; $SCContext ) ]
If [ $SCConnect = "OK" ]
# Run a query
Set Variable [ $Result; Value:MBS( "SmartCard.Transmit"; $SCContext; "0200000008000000"; "00ca018202"; 512 ) ]
# Result is 4 bytes. Starts with C901 for Version 5.0 or C903 for Version 5.3
Show Custom Dialog [ "Version"; $result ]
# Disconnect
Set Variable [ $SCDisconnect; Value:MBS( "SmartCard.Disconnect"; $SCContext; "Leave" ) ]
Else
Show Custom Dialog [ "Error"; "No card available." ]
End If
End If
# End Card Session
Set Variable [ $SCRelease; Value:MBS( "SmartCard.Release" ; $SCContext ) ]
```



```

Else
Show Custom Dialog [ "Error"; "Failed to initialize" ]
End If
Else
Show Custom Dialog [ "Error"; "No SmartCard API on this OS." ]
End If

```

Query name from Swiss health card:

```

# Initialize smart card:
Set Variable [ $$SmartCard ; Value: MBS( "SmartCard.Init" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to initialize SmartCard" ; $$SmartCard ]
Exit Script [ Text Result: ]
End If
#
# Connect to a reader
Set Variable [ $reader ; Value: "Identiv SCR3310 uTrust 2700 R" ]
Set Variable [ $r ; Value: MBS( "SmartCard.Connect"; $$SmartCard; $Reader; "Shared"; "any" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect failed" ; $r ]
Exit Script [ Text Result: ]
End If
#
# Read file from smartcard with APDU protocol.
#
# Read record with name
Set Variable [ $result ; Value: MBS( "SmartCard.ReadFile"; $$SmartCard; "2F06" ) ]
If [ MBS("IsError") ]
Set Field [ Card::Status ; $result ]
Show Custom Dialog [ "Error" ; $result ]
Exit Script [ Text Result: ]
End If
# Pick result
Set Variable [ $filedata ; Value: Middle ( $result ; 5; Length($result) ) ]
#
# Split in values
Set Variable [ $json ; Value: MBS("SmartCard.SplitValues"; $FileData) ]
# Get item 128, which is full name
Set Variable [ $name ; Value: JSONGetElement ( $json ; "128" ) ]
Set Variable [ $nameList ; Value: Substitute($name; ", "; § ) ]
Set Variable [ $lastName ; Value: GetValue($nameList; 1) ]
Set Variable [ $firstName ; Value: GetValue($nameList; 2) ]
#
Show Custom Dialog [ "Name" ; $firstName & " " & $lastName ]
Set Variable [ $r ; Value: MBS( "SmartCard.DisConnect"; $$SmartCard; "Eject" ) ]

```

See also

- [124.6 IsError](#) 6266
- [150.1 SmartCard.Available](#) 7087
- [150.5 SmartCard.Connect](#) 7091
- [150.7 SmartCard.Disconnect](#) 7094
- [150.9 SmartCard.GetActiveProtocol](#) 7096
- [150.14 SmartCard.ListReaders](#) 7104
- [150.17 SmartCard.ReadFile](#) 7108
- [150.19 SmartCard.Release](#) 7112
- [150.21 SmartCard.SplitValues](#) 7114
- [124.62 Version](#) 6338

Example Databases

- [CURL/WebServices/eID Auto/eID Auto v2](#)
- [SmartCard/SmartCard ReadFile](#)
- [SmartCard/SmartCard Signatures](#)

150.12.1 Blog Entries

- [Read patient name from Swiss Health Card](#)
- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 8th March 2019.

150.13 SmartCard.ListReaderGroups

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.ListReaderGroups"; SmartCardContext)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Result Returns list or error.

Description

Provides the list of reader groups that have previously been introduced to the system.

The groups may be SCard\$AllReaders, SCard\$DefaultReaders, SCard\$LocalReaders and SCard\$System-Readers.

See also

- 150.14 SmartCard.ListReaders

7104

Created 13th June 2016, last changed 18th June 2016.

150.14 SmartCard.ListReaders

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.ListReaders"; SmartCardContext { ; Groups })

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Groups

Optional

Optional a list of groups to search.

"SCard\$LocalReaders"

Result Returns OK or error.

Description

Examples

List readers:

```
Set Variable [ $c; Value:MBS( "SmartCard.Init" ) ]
Set Variable [ $readers; Value:MBS( "SmartCard.ListReaders"; $c ) ]
Set Variable [ $r; Value:MBS( "SmartCard.Release"; $c ) ]
Show Custom Dialog [ "Readers"; $readers ]
```

See also

- [150.12 SmartCard.Init](#) 7100
- [150.13 SmartCard.ListReaderGroups](#) 7103
- [150.19 SmartCard.Release](#) 7112
- [150.23 SmartCard.Transmit](#) 7117

Example Databases

- [CURL/WebServices/eID Auto/eID Auto v2](#)
- [SmartCard/SmartCard ReadFile](#)
- [SmartCard/SmartCard Signatures](#)

150.14.1 Blog Entries

- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 18th June 2016.

150.15 SmartCard.PerformSignature

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	7.0	Yes	Yes	Yes	No	No

MBS("SmartCard.PerformSignature"; SmartCardContext; DeviceType; Hash { ; ReturnType })

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

DeviceType

Which device to handle, so the plugin talks the right dialect. Currently supported cardos and acos.
"cardos"

Hash

The input hash to sign. Length should be 40 hex characters, so it's decoded 20 bytes.

"0011223344556677889900112233445566778899"

ReturnType

Optional

What format to return the certificate. Can be Hex or Base64. Default is hex.

"Hex"

Result Returns result or error.

Description

Convenience function which wraps a few calls to Transmit function.

With plugin version 7.1 the length of hash is variable.

This is function for atos Smartcards CardOS v5.0/5.3, which we needed for point of sales software in Austria. It may not work with your cards unless they have same protocol.

Example Databases

- [SmartCard/SmartCard Signatures](#)

150.15.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr5](#)
- [MBS FileMaker Plugin, version 7.0pr4](#)

Created 18th January 2017, last changed 17th June 2018.

150.16 SmartCard.ReadCertificate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	7.0	Yes	Yes	Yes	No	No

MBS("SmartCard.ReadCertificate"; SmartCardContext; DeviceType { ; ReturnType })

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

DeviceType

Which device to handle, so the plugin talks the right dialect. Currently supported cardos and acos.
"cardos"

ReturnType

Optional

What format to return the certificate. Can be Hex or Base64. Default is hex.

"Hex"

Result Returns result or error.

Description

Convenience function which wraps a few calls to Transmit function.

This is function for atos Smartcards CardOS v5.0/5.3, which we needed for point of sales software in Austria. It may not work with your cards unless they have same protocol.

See also

- [150.11 SmartCard.HeaderTemplate](#)

7099

Example Databases

- [SmartCard/SmartCard Signatures](#)

150.16.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr4](#)

Created 18th January 2017, last changed 17th June 2018.

150.17 SmartCard.ReadFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	8.5	Yes	Yes	Yes	No	No

MBS("SmartCard.ReadFile"; SmartCardContext; FileID; ResultType)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

FileID

The fileID of the file to retrieve. Given as hex string.

"2F07"

ResultType

How to return data. Can be JPEG, Hex or Base64.

"Hex"

Result Returns data or error.

Description

Returns data in desired encoding or error message.

The first two bytes (4 Hex characters) are status code.

For JPEG we remove status code to return only image.

For Swiss health cards, the relevant IDs are 2F06 and 2F07.

For Belgian EID:

```

4031  ID RN
4032  SGN RN
4033  ID Address
4034  SGN Address
4035  ID Photo

```

You find the IDs for files usually in documentation or your card!

For some cards you may first need to move down a hierarchy of folders to get an item via SmartCard.Transmit.

Examples

Read file from smartcard with APDU protocol:

```

Set Variable [ $result ; Value: MBS( "SmartCard.ReadFile"; $$SmartCard; Card::FileID) ]
If [ MBS("IsError") ]
Set Field [ Card::Status ; $result ]

```



```
Show Custom Dialog [ "Error" ; $result ]
Else
Set Field [ Card::FileData ; $result ]
Set Field [ Card::Status ; "OK " & Left ( $result ; 4 ) ]
#
Perform Script [ Specified: From list ; "Split" ; Parameter: ]
End If
```

Query name from Swiss health card:

```
# Initialize smart card:
Set Variable [ $$SmartCard ; Value: MBS( "SmartCard.Init" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to initialize SmartCard" ; $$SmartCard ]
Exit Script [ Text Result: ]
End If
#
# Connect to a reader
Set Variable [ $reader ; Value: "Identiv SCR3310 uTrust 2700 R" ]
Set Variable [ $r ; Value: MBS( "SmartCard.Connect"; $$SmartCard; $reader; "Shared"; "any" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect failed" ; $r ]
Exit Script [ Text Result: ]
End If
#
# Read file from smartcard with APDU protocol.
#
# Read record with name
Set Variable [ $result ; Value: MBS( "SmartCard.ReadFile"; $$SmartCard; "2F06" ) ]
If [ MBS("IsError") ]
Set Field [ Card::Status ; $result ]
Show Custom Dialog [ "Error" ; $result ]
Exit Script [ Text Result: ]
End If
# Pick result
Set Variable [ $filedata ; Value: $result ]
#
# Split in values
Set Variable [ $json ; Value: MBS("SmartCard.SplitValues"; $filedata) ]
# Get item 128, which is full name
Set Variable [ $name ; Value: JSONGetElement ( $json ; "128" ) ]
Set Variable [ $nameList ; Value: Substitute($name; ", "; § ) ]
Set Variable [ $lastName ; Value: GetValue($nameList; 1) ]
Set Variable [ $firstName ; Value: GetValue($nameList; 2) ]
#
Show Custom Dialog [ "Name" ; $firstName & " " & $lastName ]
Set Variable [ $r ; Value: MBS( "SmartCard.DisConnect"; $$SmartCard; "Eject" ) ]
```

See also

- [124.6 IsError](#) 6266
- [150.5 SmartCard.Connect](#) 7091
- [150.7 SmartCard.Disconnect](#) 7094
- [150.12 SmartCard.Init](#) 7100
- [150.19 SmartCard.Release](#) 7112
- [150.21 SmartCard.SplitValues](#) 7114
- [150.23 SmartCard.Transmit](#) 7117

Example Databases

- [SmartCard/SmartCard ReadFile](#)

150.17.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.6pr1](#)
- [Neues MBS FileMaker Plugin 9.5](#)
- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.5pr6](#)
- [Read patient name from Swiss Health Card](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)
- [New functions for smart card reading](#)

Created 19th October 2018, last changed 6th December 2019.

150.18 SmartCard.Reconnect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Reconnect"; SmartCardContext; ShareMode; PreferredProtocols; Initialization)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

ShareMode

A flag that indicates whether other applications may form connections to the card. Can be integer or one of the following texts: Exclusive (1), Shared (2) or Direct (3).

"Exclusive"

PreferredProtocols

A number with bitmask of acceptable protocols for the connection or just the text name of the value for only one protocol. Pass T0 (1), T1 (2), T15 (8, not on Windows), Any (3), RAW (4).

1+2

Initialization

Type of initialization that should be performed on the card. Can be Leave, Reset, Unpower or Eject.

"Reset"

Result Returns OK or error.

Description

The Reconnect function reestablishes an existing connection between the calling application and a smart card. This function moves a card handle from direct access to general access, or acknowledges and clears an error condition that is preventing further access to the card.

On success we have a connection to a smart card.

You can query SmartCard.GetActiveProtocol

See also

- 150.5 SmartCard.Connect 7091
- 150.7 SmartCard.Disconnect 7094
- 150.9 SmartCard.GetActiveProtocol 7096

Created 13th June 2016, last changed 19th June 2016.

150.19 SmartCard.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Release"; SmartCardContext)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Result Returns OK or error.

Description

Also frees any smart card object.

See also

- 150.12 SmartCard.Init 7100
- 150.14 SmartCard.ListReaders 7104
- 150.17 SmartCard.ReadFile 7108
- 150.23 SmartCard.Transmit 7117

150.19.1 Blog Entries

- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 18th June 2016.

150.20 SmartCard.SetAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.SetAttribute"; SmartCardContext; AttributeID; Value)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

AttributeID

The ID of the attribute.

Value

The hex encoded data to be set.

Result Returns OK or error.

Description

It does not affect the state of the reader, reader driver, or smart card. Not all attributes are supported by all readers (nor can they be set at all times) as many of the attributes are under direct control of the transport protocol.

See also

- 150.10 SmartCard.GetAttribute

7097

Created 13th June 2016, last changed 19th June 2016.

150.21 SmartCard.SplitValues

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	8.5	Yes	Yes	Yes	No	No

MBS("SmartCard.SplitValues"; Input)

Parameters

Input

The hex encoded input string.

Result Returns JSON or error.

Description

Files on smartcard can contain key/value data.

Returns JSON with an object containing numbers as text (key) and values as text.

Sample for JSON result:

```
{
  "128": "MILLER, JOE",
  "130": "19651201",
  "131": "123456789012",
  "132": "\u0001"
}
```

Starting with version 10.0 we hex encode binary data instead of assuming it's UTF-8.

Examples

Split file data:

```
Set Variable [ $json ; Value: MBS("SmartCard.SplitValues"; Card::FileData) ]
If [ MBS("IsError") ]
Set Field [ Card::JSON ; "" ]
Else
Set Field [ Card::JSON ; MBS("JSON.Colorize"; $json) ]
End If
```

See also

- 124.6 IsError 6266
- 100.15 JSON.Colorize 5261

<i>150.21. SMARTCARD.SPLITVALUES</i>	7115
• 150.12 SmartCard.Init	7100
• 150.17 SmartCard.ReadFile	7108

Example Databases

- [SmartCard/SmartCard ReadFile](#)

150.21.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)
- [Read patient name from Swiss Health Card](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)
- [New functions for smart card reading](#)

Created 19th October 2018, last changed 6th December 2019.

150.22 SmartCard.Status

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Status"; SmartCardContext; Selector)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Selector

Which value to query. Can be ReaderName, State, Protocol or ATR.

"State"

Result Returns value or error.

Description

You can call it any time after a successful call to SmartCard.Connect and before a successful call to SmartCard.Disconnect. It does not affect the state of the reader or reader driver.

If you ask for State, the result is Absent, Present, Swallowed, Powered, Negotiable or Specific.

Examples

Query reader name:

MBS("SmartCard.Status"; \$SmartCardContext; "ReaderName")

See also

- [150.5 SmartCard.Connect](#) 7091
- [150.7 SmartCard.Disconnect](#) 7094

Example Databases

- [SmartCard/SmartCard ReadFile](#)
- [SmartCard/SmartCard Signatures](#)

Created 13th June 2016, last changed 18th June 2016.

150.23 SmartCard.Transmit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Transmit"; SmartCardContext; SendHeader; SendBuffer; RecvLength)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

SendHeader

The hex encoded protocol header structure for the instruction. This buffer is in the format of an SCARD_IO_REQUEST structure, followed by the specific protocol control information (PCI). For the T=0, T=1, and Raw protocols, the PCI structure is constant. The smart card subsystem supplies a global T=0, T=1, or Raw PCI structure, which you can reference by using the symbols T0, T1, and RAW respectively. With version 7.0 or newer this can be empty to use default header.

"T1"

SendBuffer

The hex encoded data to be sent to the card. For T=0, the data parameters are placed into the address pointed to by pbSendBuffer according to the following structure:

Type name	Description	Byte Cla	The instruction class	Byte Ins	The instruction code	Byte P1	Parameter to the instruction	Byte P2	Parameter to the instruction	Byte P3	Size of I/O transfer

The data sent to the card should immediately follow the send buffer. In the special case where no data is sent to the card and no data is expected in return, P3 is not sent.

RecvLength

The number of bytes for the receiving buffer.

1024

Result Returns Receive Buffer or error.

Description

Returns receive buffer hex encoded.

see also

[https://msdn.microsoft.com/en-us/library/windows/desktop/aa379804\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/aa379804(v=vs.85).aspx)

You can use SmartCard.TransmitReceiveHeader to return last Transmit's receive header.

Examples

Query serial number of card:

MBS("SmartCard.Transmit"; \$Context; "0200000008000000"; "00ca018108"; 8)

Query version:

```
MBS( "SmartCard.Transmit"; $Context; "0200000008000000"; "00ca018202"; 2 )
```

Connect and query value:

```
If [ MBS( "SmartCard.Available" ) = 1 ]
# Start a new session
Set Variable [ $$SCContext; Value:MBS( "SmartCard.Init" ) ]
If [ MBS( "SmartCard.Valid"; $$SCContext ) ]
# Query list of readers and pick first
Set Variable [ $$SCReader; Value:GetValue ( MBS( "SmartCard.ListReaders"; $$SCContext ) ; 1 ) ]
If [ MBS("IsError") = 0 ]
# Connect to card
Set Variable [ $$SCConnect; Value:MBS( "SmartCard.Connect"; $$SCContext ; $$SCReader ; "Shared"; "any" )
]
Set Variable [ $PProtocol; Value:MBS( "SmartCard.GetActiveProtocol"; $$SCContext ) ]
If [ $$SCConnect = "OK" ]
# Run a query
Set Variable [ $Result; Value:MBS( "SmartCard.Transmit"; $$SCContext; "0200000008000000"; "00ca018202";
512 ) ]
# Result is 4 bytes. Starts with C901 for Version 5.0 or C903 for Version 5.3
Show Custom Dialog [ "Version"; $result ]
# Disconnect
Set Variable [ $$SCDisconnect; Value:MBS( "SmartCard.Disconnect"; $$SCContext; "Leave" ) ]
Else
Show Custom Dialog [ "Error"; "No card available." ]
End If
End If
# End Card Session
Set Variable [ $$SCRelease; Value:MBS( "SmartCard.Release" ; $$SCContext ) ]
Else
Show Custom Dialog [ "Error"; "Failed to initialize" ]
End If
Else
Show Custom Dialog [ "Error"; "No SmartCard API on this OS." ]
End If
```

Transmit select file commands to go into folder for EID cards:

```
# select folder 3F00
MBS( "SmartCard.Transmit"; 58001; "T1"; "00A4020C023F0000"; 200 )
# select subfolder DF 01
MBS( "SmartCard.Transmit"; 58001; "T1"; "00A4020C02DF0100"; 200 )
# now do readfile of 4031
```

See also

<i>150.23. SMARTCARD.TRANSMIT</i>	7119
• 124.6 IsError	6266
• 150.1 SmartCard.Available	7087
• 150.5 SmartCard.Connect	7091
• 150.7 SmartCard.Disconnect	7094
• 150.9 SmartCard.GetActiveProtocol	7096
• 150.12 SmartCard.Init	7100
• 150.19 SmartCard.Release	7112
• 150.24 SmartCard.TransmitReceiveHeader	7120
• 150.25 SmartCard.Valid	7121
• 124.62 Version	6338

Example Databases

- [SmartCard/SmartCard ReadFile](#)

150.23.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr4](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)
- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 6th December 2019.

150.24 SmartCard.TransmitReceiveHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.TransmitReceiveHeader"; SmartCardContext)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Result Returns hex encoded data or error.

Description

See also

- 150.23 SmartCard.Transmit

7117

Created 19th June 2016, last changed 19th June 2016.

150.25 SmartCard.Valid

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
150 SmartCard	6.3	Yes	Yes	Yes	No	No

MBS("SmartCard.Valid"; SmartCardContext)

Parameters

SmartCardContext

The smartcard context reference number.

\$SmartCardContext

Result Returns 1, 0 or error.

Description

Value is 1 if valid or 0 if not.

See also

- [150.12 SmartCard.Init](#) 7100
- [150.23 SmartCard.Transmit](#) 7117

Example Databases

- [SmartCard/SmartCard ReadFile](#)
- [SmartCard/SmartCard Signatures](#)

150.25.1 Blog Entries

- [Talking to a SmartCard in FileMaker Pro](#)

Created 13th June 2016, last changed 18th June 2016.

Chapter 151

SNMP

Functions to query values via SNMP.

151.1 SNMP.Get

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
151 SNMP	3.1	Yes	No	Yes	Yes	No

MBS("SNMP.Get"; Community; Target; ObjectID)

Parameters

Community

The community name to use.

"public"

Target

The IP and port to connect to.

"192.168.2.5:1234"

ObjectID

The object ID to use.

"system.sysUpTime.0"

Result Returns the result or an error.

Description

Using version 1, no authentication and no security options.

Examples

Query uptime of demo server:

```
$r = MBS("SNMP.Get"; "demopublic"; "test.net-snmp.org"; "system.sysUpTime.0")
```

151.1.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)
- [MBS Filemaker Plugin, version 3.1pr1](#)

Created 18th August 2014, last changed 22nd May 2017.

151.2 SNMP.SetRetries

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
151 SNMP	3.1	Yes	Yes	Yes	Yes	Yes

MBS("SNMP.SetRetries"; value)

Parameters

value

The new retries value. Pass -1 to use default.

2

Result Returns OK.

Description

Examples

Set to allow 2 retries and a timeout of 2 seconds:

```
MBS( "SNMP.SetRetries"; 2 )
```

```
MBS( "SNMP.SetTimeout"; 2000000 )
```

See also

- [151.3 SNMP.SetTimeout](#)

7126

151.2.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr5](#)

Created 18th August 2014, last changed 18th August 2014.

151.3 SNMP.SetTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
151 SNMP	3.1	Yes	Yes	Yes	Yes	Yes

MBS("SNMP.SetTimeout"; value)

Parameters

value

The new timeout value. Pass -1 to use default.
2000000

Result Returns OK.

Description

Value is in microseconds (1 million microseconds per second)

Examples

Set to allow 2 retries and a timeout of 2 seconds:

```
MBS( "SNMP.SetRetries"; 2 )
```

```
MBS( "SNMP.SetTimeout"; 2000000 )
```

See also

- 102.31 LDAP.SetTimeOut 5413
- 151.2 SNMP.SetRetries 7125
- 157.12 SSH.GetTimeout 7496
- 157.27 SSH.SetTimeout 7514

151.3.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr5](#)

Created 18th August 2014, last changed 18th August 2014.

Chapter 152

Social

Functions to work with social networks on Mac, e.g. Twitter and Facebook.

152.1 Social.AccountProperty

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("Social.AccountProperty"; accountIdentifier; Selector)

Parameters

accountIdentifier

The ID for the account.

Selector

Which value to return. Can be identifier, accountDescription, username, credential, accountType or accountTypeIdentifier.

"username"

Result Returns value or error.

Description

Please use Social.Accounts function to find account identifiers.

Examples

List Twitter Accounts

```
Go to Layout [ "Accounts" (Accounts) ]
```

```
Delete All Records [ No dialog ]
```

```
Set Variable [ $list; Value:MBS( "Social.Accounts"; "Twitter" ) ]
```

```
If [ MBS("IsError") ]
```

```
Show Custom Dialog [ "Error finding accounts"; $list ]
```

```
Else
Set Variable [ $count; Value:ValueCount ( $list ) ]
If [ $count >0 ]
Set Variable [ $i; Value:1 ]
Loop
Set Variable [ $accountIdentifier; Value:GetValue ( $list ; $i ) ]
New Record/Request
Set Field [ Accounts::Identifier; MBS( "Social.AccountProperty"; $accountIdentifier; "Identifier" ) ]
Set Field [ Accounts::Description; MBS( "Social.AccountProperty"; $accountIdentifier; "Description" ) ]
Set Field [ Accounts::Username; MBS( "Social.AccountProperty"; $accountIdentifier; "username" ) ]
Set Field [ Accounts::Type; MBS( "Social.AccountProperty"; $accountIdentifier; "accountType" ) ]
Commit Records/Requests [ No dialog ]
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i >= $count ]
End Loop
End If
End If
```

See also

- 124.6 IsError 6266
- 152.2 Social.Accounts 7129

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 10th February 2016.

152.2 Social.Accounts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("Social.Accounts" { ; Type })

Parameters

Type

Optional

The type of accounts to find. If not provided or empty, all account types are used. Can be Twitter, Facebook, SinaWeibo, TencentWeibo or LinkedIn. LinkedIn is macOS only and not available on iOS.

"Twitter"

Result Returns list of identifiers or error.

Description

Works only on Mac OS X with 64-bit FileMaker.

Added iOS support for plugin version 7.3.

Examples

List Twitter Accounts

```

Go to Layout [ "Accounts" (Accounts) ]
Delete All Records [ No dialog ]
Set Variable [ $list; Value:MBS( "Social.Accounts"; "Twitter" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error finding accounts"; $list ]
Else
Set Variable [ $count; Value:ValueCount ( $list ) ]
If [ $count >0 ]
Set Variable [ $i; Value:1 ]
Loop
Set Variable [ $accountIdentifier; Value:GetValue ( $list ; $i ) ]
New Record/Request
Set Field [ Accounts::Identifier; MBS( "Social.AccountProperty"; $accountIdentifier; "Identifier" ) ]
Set Field [ Accounts::Description; MBS( "Social.AccountProperty"; $accountIdentifier; "Description" ) ]
Set Field [ Accounts::Username; MBS( "Social.AccountProperty"; $accountIdentifier; "username" ) ]
Set Field [ Accounts::Type; MBS( "Social.AccountProperty"; $accountIdentifier; "accountType" ) ]
Commit Records/Requests [ No dialog ]
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i >= $count ]
End Loop
End If
End If

```

Post on Twitter:

```

Set Variable [ $accounts; Value:MBS( "Social.Accounts"; "Twitter" ) ]
Set Variable [ $accountIdentifier; Value:GetValue($accounts; 1) ]
If [ $accountIdentifier = "" ]
Show Custom Dialog [ "No Twitter account allowed?" ]
Else
Set Variable [ $request; Value:MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.AddParameter"; $request; "status"; Tweets::Message ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.SetAccount"; $request; $accountIdentifier ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.Perform"; $request; Get(FileName); "TweetCompleted" ) ]
End If

```

See also

- 124.6 IsError 6266
- 152.1 Social.AccountProperty 7127
- 152.5 SocialRequest.AddParameter 7134
- 152.15 SocialRequest.New 7146
- 152.16 SocialRequest.Perform 7148
- 152.18 SocialRequest.SetAccount 7151

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 12nd June 2017.

152.3 Social.HasAccessForAccountType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("Social.HasAccessForAccountType"; Type)

Parameters

Type

The type of accounts to check. Can be Twitter, Facebook, SinaWeibo, TencentWeibo or LinkedIn. "Twitter"

Result Returns 0, 1 or error.

Description

Returns 1 if you have permissions. If it returns 0, please use Social.RequestAccessForAccountType function.

Examples

Check permissions:

```
Set Variable [ $r; Value:MBS( "Social.HasAccessForAccountType"; "Twitter" ) ]
If [ $r = 1 ]
Show Custom Dialog [ "Permissions"; "We do have permissions for Twitter." ]
Else If [ $r = 0 ]
Show Custom Dialog [ "Permissions"; "We don't have permissions for Twitter." ]
Else
Show Custom Dialog [ "Permissions"; "Failed to check: " & $r ]
End If
```

See also

- 152.4 Social.RequestAccessForAccountType

7132

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 10th February 2016.

152.4 Social.RequestAccessForAccountType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("Social.RequestAccessForAccountType"; Type { ; Filename; ScriptName })

Parameters

Type

The type of accounts to checks. Can be Twitter, Facebook, SinaWeibo, TencentWeibo or LinkedIn. LinkedIn is macOS only and not available on iOS.

"Twitter"

Filename

Optional

The database file name where the script is located.

"test.fmp12"

ScriptName

Optional

The script to call when access is decided.

"MyScript"

Result Returns OK or error.

Description

Obtains permission, if necessary, from the user to access protected properties, and utilize accounts of a particular type in protected operations, for example OAuth signing.

The provided script is called (if provided) to inform about whether access is granted.

The parameter of the script is a list of values containing first the type of service, second granted or failed as keyword and third an error message.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Request permissions for Twitter:

```
Set Variable [ $r; Value:MBS( "Social.RequestAccessForAccountType"; "Twitter"; Get(Filename); "RequestAccessForAccountTypeCompleted" ) ]
```

See also

- 152.3 Social.HasAccessForAccountType

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 11st June 2017.

152.5 SocialRequest.AddParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.AddParameter"; Request; Key; Value)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

Key

The name of the parameter.

"status"

Value

The value for this parameter.

"Hello World"

Result Returns OK or error.

Description

Examples

Post on Twitter:

```
Set Variable [ $accounts; Value:MBS( "Social.Accounts"; "Twitter" ) ]
Set Variable [ $accountIdentifier; Value:GetValue($accounts; 1) ]
If [ $accountIdentifier = "" ]
Show Custom Dialog [ "No Twitter account allowed?" ]
Else
Set Variable [ $request; Value:MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.AddParameter"; $request; "status"; Tweets::Message ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.SetAccount"; $request; $accountIdentifier ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.Perform"; $request; Get(FileName); "TweetCompleted" ) ]
End If
```

Test parameters:

```
Set Variable [ $request ; Value: MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
Set Variable [ $r ; Value: MBS( "SocialRequest.AddParameter"; $request; "test"; "value" ) ]
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
Set Variable [ $r ; Value: MBS( "SocialRequest.ClearParameter"; $request ) ]
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
Set Variable [ $r ; Value: MBS( "SocialRequest.Release"; $request ) ]
```

152.5. *SOCIALREQUEST.ADDPARAMETER* 7135

See also

- 152.2 Social.Accounts 7129
- 152.7 SocialRequest.ClearParameter 7137
- 152.10 SocialRequest.GetParameterCount 7140
- 152.15 SocialRequest.New 7146
- 152.16 SocialRequest.Perform 7148
- 152.17 SocialRequest.Release 7150
- 152.18 SocialRequest.SetAccount 7151

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 10th February 2016.

152.6 SocialRequest.ClearMultipartData

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.ClearMultipartData"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.
\$request

Result Returns OK or error.

Description

Useful to recycle a request and fill in new data.

See also

- 152.15 SocialRequest.New

7146

Created 28th August 2015, last changed 28th August 2015.

152.7 SocialRequest.ClearParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.ClearParameter"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

Result Returns OK or error.

Description

Examples

Test parameters:

```
Set Variable [ $request ; Value: MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
```

```
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
```

```
Set Variable [ $r ; Value: MBS( "SocialRequest.AddParameter"; $request; "test"; "value" ) ]
```

```
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
```

```
Set Variable [ $r ; Value: MBS( "SocialRequest.ClearParameter"; $request ) ]
```

```
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
```

```
Set Variable [ $r ; Value: MBS( "SocialRequest.Release"; $request ) ]
```

See also

- 152.5 SocialRequest.AddParameter 7134
- 152.10 SocialRequest.GetParameterCount 7140
- 152.15 SocialRequest.New 7146
- 152.17 SocialRequest.Release 7150

Created 28th August 2015, last changed 10th February 2016.

152.8 SocialRequest.GetAccount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.GetAccount"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

Result Returns identifier or error.

Description

See also

- 152.12 SocialRequest.GetResponse 7142
- 152.15 SocialRequest.New 7146
- 152.18 SocialRequest.SetAccount 7151

Created 28th August 2015, last changed 28th August 2015.

152.9 SocialRequest.GetMultiPartDataCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.GetMultiPartDataCount"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.
\$request

Result Returns number or error.

Description

See also

- 152.15 SocialRequest.New

7146

Created 28th August 2015, last changed 28th August 2015.

152.10 SocialRequest.GetParameterCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.GetParameterCount"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.
\$request

Result Returns number or error.

Description

Examples

Test parameters:

```
Set Variable [ $request ; Value: MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
Set Variable [ $r ; Value: MBS( "SocialRequest.AddParameter"; $request; "test"; "value" ) ]
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
Set Variable [ $r ; Value: MBS( "SocialRequest.ClearParameter"; $request ) ]
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetParameterCount"; $Request ) ]
Set Variable [ $r ; Value: MBS( "SocialRequest.Release"; $request ) ]
```

See also

- 152.5 SocialRequest.AddParameter 7134
- 152.7 SocialRequest.ClearParameter 7137
- 152.15 SocialRequest.New 7146
- 152.17 SocialRequest.Release 7150

Created 28th August 2015, last changed 10th February 2016.

152.11 SocialRequest.GetRequestMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.GetRequestMethod"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.
\$request

Result Returns method or error.

Description

Returns POST, GET, DELETE or PUT.

Examples

Check request method:

```
Set Variable [ $request ; Value: MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
```

```
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetRequestMethod"; $Request ) ]
```

```
Set Variable [ $r ; Value: MBS( "SocialRequest.Release"; $request ) ]
```

See also

- 152.15 SocialRequest.New 7146
- 152.17 SocialRequest.Release 7150
- 152.19 SocialRequest.SetRequestMethod 7153

Created 28th August 2015, last changed 10th February 2016.

152.12 SocialRequest.GetResponse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.GetResponse"; Request; Selector { ; Encoding })

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

Selector

Which value to query. Can be Error, Response, StatusCode, URL, MIMETYPE, expectedContentLength, textEncodingName, suggestedFilename, StatusCodeText, Headers or a HTTP header field.

"Response"

Encoding

Optional

The text encoding for result in case you use "Response" for selector. Default is UTF-8.

UTF8

Result Returns value or error.

Description

You can use this to query if the request was successful.

For a successful request, the error value is empty (no error sending) and StatusCode is 200 (no error in web service). The response text may be xml/json depending on service and have more details. MIMETYPE provides data type for the response, normally text/xml or application/json.

You can use Text.MimeTypeToFileExtension to find the file extension for mime type.

Examples

Script triggered after tweeting finished:

```
Set Variable [ $request; Value:Get(ScriptParameter) ]
Set Field [ Tweets::Status; MBS( "SocialRequest.GetResponse"; $request; "StatusCode" ) ]
Set Field [ Tweets::Response; MBS( "SocialRequest.GetResponse"; $request; "Response" ) ]
Set Field [ Tweets::ErrorMessage; MBS( "SocialRequest.GetResponse"; $request; "Error" ) ]
Set Field [ Tweets::Headers; MBS( "SocialRequest.GetResponse"; $request; "Headers" ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.Release"; $request ) ]
```

See also

- 152.8 SocialRequest.GetAccount 7138
- 152.14 SocialRequest.GetURL 7145
- 152.15 SocialRequest.New 7146
- 152.16 SocialRequest.Perform 7148

<i>152.12. SOCIALREQUEST.GETRESPONSE</i>	7143
• 152.17 SocialRequest.Release	7150
• 164.47 Text.MimeTypeToFileExtension	7841

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 10th February 2016.

152.13 SocialRequest.GetServiceType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.GetServiceType"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.
\$request

Result Returns type as text or error.

Description

Returns Twitter, Facebook, SinaWeibo, TencentWeibo or LinkedIn.

Examples

Check service type:

```
Set Variable [ $request ; Value: MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
```

```
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetServiceType"; $Request ) ]
```

```
Set Variable [ $r ; Value: MBS( "SocialRequest.Release"; $request ) ]
```

See also

- 152.15 SocialRequest.New 7146
- 152.17 SocialRequest.Release 7150
- 152.20 SocialRequest.SetServiceType 7154

Created 28th August 2015, last changed 10th February 2016.

152.14 SocialRequest.GetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.GetURL"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.
\$request

Result Returns URL as text or error.

Description

The URL returns via SocialRequest.GetResponse may be different due to redirection.

Examples

Check URL after creation:

```
Set Variable [ $request ; Value: MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
```

```
Show Custom Dialog [ "URL" ; MBS( "SocialRequest.GetURL"; $Request ) ]
```

```
Set Variable [ $r ; Value: MBS( "SocialRequest.Release"; $request ) ]
```

See also

- 152.12 SocialRequest.GetResponse 7142
- 152.15 SocialRequest.New 7146
- 152.17 SocialRequest.Release 7150
- 152.21 SocialRequest.SetURL 7155

Created 28th August 2015, last changed 10th February 2016.

152.15 SocialRequest.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.New" { ; ServiceType; URL; RequestMethod })

Parameters

ServiceType

Optional

The service type to use. Can be Twitter, Facebook, SinaWeibo, TencentWeibo or LinkedIn. LinkedIn is macOS only and not available on iOS.

"Twitter"

URL

Optional

The URL to use for this request. Depends on the webservice.

"https://api.twitter.com/1.1/statuses/update.json"

RequestMethod

Optional

What request method to use. Can be DELETE, PUT, POST or GET.

"POST"

Result Returns reference number or error.

Description

This function is for easily query social web services like Twitter or Facebook by using the user account defined in system preferences. So you don't need to implement calling web service yourself and you don't need to ask user for credentials.

Please use SocialRequest.Release later to free request.

Added iOS support for plugin version 7.3.

Examples

Post on Twitter:

```
Set Variable [ $accounts; Value:MBS( "Social.Accounts"; "Twitter" ) ]
Set Variable [ $accountIdentifier; Value:GetValue($accounts; 1) ]
If [ $accountIdentifier = "" ]
Show Custom Dialog [ "No Twitter account allowed?" ]
Else
Set Variable [ $request; Value:MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.AddParameter"; $request; "status"; Tweets::Message ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.SetAccount"; $request; $accountIdentifier ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.Perform"; $request; Get(FileName); "TweetCompleted" ) ]
End If
```

See also

- 152.22 SocialRequest.addMultipartContainer 7156
- 152.6 SocialRequest.ClearMultipartData 7136
- 152.8 SocialRequest.GetAccount 7138
- 152.10 SocialRequest.GetParameterCount 7140
- 152.11 SocialRequest.GetRequestMethod 7141
- 152.13 SocialRequest.GetServiceType 7144
- 152.14 SocialRequest.GetURL 7145
- 152.16 SocialRequest.Perform 7148
- 152.19 SocialRequest.SetRequestMethod 7153
- 152.20 SocialRequest.SetServiceType 7154

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 12nd June 2017.

152.16 SocialRequest.Perform

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.Perform"; Request; Filename; ScriptName)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script to call when access is decided.

"MyScript"

Result Returns OK or error.

Description

Once request is done, you can query the result with SocialRequest.GetResponse function. The plugin calls the given script and passes the request reference number as parameter.

Function requires 64-bit Mac application, so please use FileMaker 14 or newer.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Post on Twitter:

```
Set Variable [ $accounts; Value:MBS( "Social.Accounts"; "Twitter" ) ]
Set Variable [ $accountIdentifier; Value:GetValue($accounts; 1) ]
If [ $accountIdentifier = "" ]
Show Custom Dialog [ "No Twitter account allowed?" ]
Else
Set Variable [ $request; Value:MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.AddParameter"; $request; "status"; Tweets::Message ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.SetAccount"; $request; $accountIdentifier ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.Perform"; $request; Get(FileName); "TweetCompleted" ) ]
End If
```

Script triggered after tweeting finished:

152.16. SOCIALREQUEST.PERFORM

7149

```
Set Variable [ $request; Value:Get(ScriptParameter) ]
Set Field [ Tweets::Status; MBS( "SocialRequest.GetResponse"; $request; "StatusCode" ) ]
Set Field [ Tweets::Response; MBS( "SocialRequest.GetResponse"; $request; "Response" ) ]
Set Field [ Tweets::ErrorMessage; MBS( "SocialRequest.GetResponse"; $request; "Error" ) ]
Set Field [ Tweets::Headers; MBS( "SocialRequest.GetResponse"; $request; "Headers" ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.Release"; $request ) ]
```

See also

- 152.2 Social.Accounts 7129
- 152.5 SocialRequest.AddParameter 7134
- 152.12 SocialRequest.GetResponse 7142
- 152.15 SocialRequest.New 7146
- 152.17 SocialRequest.Release 7150
- 152.18 SocialRequest.SetAccount 7151

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 10th February 2016.

152.17 SocialRequest.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.Release"; Request)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.
\$request

Result Returns OK or error.

Description

Frees all memory used for this request.

Examples

Script triggered after tweeting finished:

```
Set Variable [ $request; Value:Get(ScriptParameter) ]
Set Field [ Tweets::Status; MBS( "SocialRequest.GetResponse"; $request; "StatusCode" ) ]
Set Field [ Tweets::Response; MBS( "SocialRequest.GetResponse"; $request; "Response" ) ]
Set Field [ Tweets::ErrorMessage; MBS( "SocialRequest.GetResponse"; $request; "Error" ) ]
Set Field [ Tweets::Headers; MBS( "SocialRequest.GetResponse"; $request; "Headers" ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.Release"; $request ) ]
```

See also

- 152.5 SocialRequest.AddParameter 7134
- 152.7 SocialRequest.ClearParameter 7137
- 152.10 SocialRequest.GetParameterCount 7140
- 152.11 SocialRequest.GetRequestMethod 7141
- 152.12 SocialRequest.GetResponse 7142
- 152.13 SocialRequest.GetServiceType 7144
- 152.14 SocialRequest.GetURL 7145
- 152.15 SocialRequest.New 7146
- 152.16 SocialRequest.Perform 7148

Example Databases

- [Mac only/Tweet on Twitter](#)

Created 28th August 2015, last changed 10th February 2016.

152.18 SocialRequest.SetAccount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.SetAccount"; Request; accountIdentifier)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

accountIdentifier

The ID for the account.

Result Returns OK or error.

Description

Examples

Post on Twitter:

```
Set Variable [ $accounts; Value:MBS( "Social.Accounts"; "Twitter" ) ]
Set Variable [ $accountIdentifier; Value:GetValue($accounts; 1) ]
If [ $accountIdentifier = "" ]
Show Custom Dialog [ "No Twitter account allowed?" ]
Else
Set Variable [ $request; Value:MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json"; "POST" ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.AddParameter"; $request; "status"; Tweets::Message ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.SetAccount"; $request; $accountIdentifier ) ]
Set Variable [ $r; Value:MBS( "SocialRequest.Perform"; $request; Get(FileName); "TweetCompleted" ) ]
End If
```

See also

- 152.2 Social.Accounts 7129
- 152.5 SocialRequest.AddParameter 7134
- 152.8 SocialRequest.GetAccount 7138
- 152.15 SocialRequest.New 7146
- 152.16 SocialRequest.Perform 7148

Example Databases

- [Mac only/Tweet on Twitter](#)

7152

CHAPTER 152. SOCIAL

Created 28th August 2015, last changed 10th February 2016.

152.19 SocialRequest.SetRequestMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.SetRequestMethod"; Request; RequestMethod)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

RequestMethod

What request method to use. Can be DELETE, PUT, POST or GET.

"POST"

Result Returns OK or error.

Description

Examples

Sets request:

```
Set Variable [ $request; Value:MBS( "SocialRequest.New"; "Twitter"; "https://api.twitter.com/1.1/statuses/update.json" ) ]
```

```
Set Variable [ $r; Value:MBS( "SocialRequest.SetRequestMethod"; $request; "POST" ) ]
```

See also

- 152.11 SocialRequest.GetRequestMethod 7141
- 152.15 SocialRequest.New 7146

Created 28th August 2015, last changed 10th February 2016.

152.20 SocialRequest.SetServiceType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.SetServiceType"; Request; ServiceType)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

ServiceType

The service type to use. Can be Twitter, Facebook, SinaWeibo, TencentWeibo or LinkedIn. LinkedIn is macOS only and not available on iOS.

"Twitter"

Result Returns OK or error.

Description

See also

- 152.13 SocialRequest.GetServiceType 7144
- 152.15 SocialRequest.New 7146

Created 28th August 2015, last changed 11st June 2017.

152.21 SocialRequest.SetURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.SetURL"; Request; URL)

Parameters**Request**

The reference number for the social request as you got it from SocialRequest.New function.

\$request

URL

The URL to use for this request. Depends on the webservice.

"https://api.twitter.com/1.1/statuses/update.json"

Result Returns OK or error.

Description**See also**

- 152.14 SocialRequest.GetURL 7145
- 152.15 SocialRequest.New 7146

Created 28th August 2015, last changed 28th August 2015.

152.22 SocialRequest.addMultipartContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.addMultipartContainer"; Request; Data; Name; MimeType; filename)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

Data

The container to get data from.

Name

The name for this parameter.

"image"

MimeType

The MIME type for this data.

"image/jpeg"

filename

The file name for this data.

"image.jpg"

Result Returns OK or error.

Description

Specify a named MIME multi-part value. If you set parameters, the parameters will automatically be added as form data in the multi-part data.

You can use Text.FileExtensionToMimeType to find the mime type for a file extension.

See also

- 152.23 SocialRequest.addMultipartText 7157
- 152.15 SocialRequest.New 7146
- 164.37 Text.FileExtensionToMimeType 7828

Created 28th August 2015, last changed 2nd October 2015.

152.23 SocialRequest.addMultipartText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
152 Social	5.3	Yes	No	No	No	Yes

MBS("SocialRequest.addMultipartText"; Request; Text; Name; MimeType; filename)

Parameters

Request

The reference number for the social request as you got it from SocialRequest.New function.

\$request

Text

The text to include in request.

"Hello World"

Name

The name for this parameter.

"status"

MimeType

The MIME type for this data.

"text/plain"

filename

The file name for this data.

"Hello.txt"

Result Returns OK or error.

Description

Specify a named MIME multi-part value. If you set parameters, the parameters will automatically be added as form data in the multi-part data.

You can use Text.FileExtensionToMimeType to find the mime type for a file extension.

See also

- 152.22 SocialRequest.addMultipartContainer 7156
- 152.15 SocialRequest.New 7146
- 164.37 Text.FileExtensionToMimeType 7828

Created 28th August 2015, last changed 2nd October 2015.

Chapter 153

SocialComposer

A panel for iOS to edit and post to social media.

You can post with text, URL and images to Facebook, Twitter, SinaWeibo and TencentWeibo.

153.1 SocialComposer.AddImageContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.AddImageContainer"; ImageContainer)

Parameters

ImageContainer

The container value containing the image.
myTable::MyImage

Result Returns OK or error.

Description

Returns error if the additional image will not fit within the character space currently available, or if the sheet has already been presented to the user.

Examples

Adds an image:

```
Set Variable [ $r ; Value: MBS( "SocialComposer.AddImageContainer"; Placeholder::Attachment1) ]
```

See also

- 153.2 SocialComposer.AddImageFile

7161

- 153.13 SocialComposer.Present

Example Databases

- [iOS/iOS Social Posting](#)

Created 11st June 2017, last changed 11st June 2017.

153.2 SocialComposer.AddImageFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.AddImageFile"; Path)

Parameters

Path

The native file path of the image file to add.

Result Returns OK or error.

Description

Returns error if the additional image will not fit within the character space currently available, or if the sheet has already been presented to the user.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 153.1 SocialComposer.AddImageContainer 7159

Created 11st June 2017, last changed 11st June 2017.

153.3 SocialComposer.AddURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.AddURL"; URL)

Parameters

URL

The URL to add.

"http://www.mbs-plugins.com"

Result Returns OK or error.

Description

Returns error if the additional URL will not fit within the character space currently available, or if the sheet has already been presented to the user.

Examples

Add an URL:

```
Set Variable [ $r ; Value: MBS( "SocialComposer.AddURL"; "http://www.mbs-plugins.com" ) ]
```

See also

- 153.12 SocialComposer.New 7171
- 153.13 SocialComposer.Present 7173
- 153.16 SocialComposer.Result 7177

Example Databases

- [iOS/iOS Social Posting](#)

Created 11st June 2017, last changed 11st June 2017.

153.4 SocialComposer.Dismiss

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.Dismiss")

Result Returns OK or error.

Description

Something you can call in a script to cancel the social creation.

See also

- 105.5 MailComposer.Dismiss 5614
- 114.7 MessageComposer.Dismiss 6012
- 153.16 SocialComposer.Result 7177

Created 11st June 2017, last changed 11st June 2017.

153.5 SocialComposer.GetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.GetEvaluate")

Result Returns expression or error.

Description

See also

- 105.9 MailComposer.GetEvaluate 5618
- 105.21 MailComposer.SetEvaluate 5631
- 114.8 MessageComposer.GetEvaluate 6013
- 114.18 MessageComposer.SetEvaluate 6024
- 153.6 SocialComposer.GetFileName 7165
- 153.18 SocialComposer.SetEvaluate 7179

Created 11st June 2017, last changed 11st June 2017.

153.6 SocialComposer.GetFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.GetFileName")

Result Returns text or error.

Description

See also

- 105.10 MailComposer.GetFileName 5619
- 114.9 MessageComposer.GetFileName 6014
- 153.5 SocialComposer.GetEvaluate 7164
- 153.8 SocialComposer.GetScriptName 7167
- 153.17 SocialComposer.ServiceType 7178
- 153.18 SocialComposer.SetEvaluate 7179

Created 11st June 2017, last changed 11st June 2017.

153.7 SocialComposer.GetInitialText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.GetInitialText")

Result Returns text or error.

Description

See also

- 153.19 SocialComposer.SetInitialText

7180

Created 11st June 2017, last changed 11st June 2017.

153.8 SocialComposer.GetScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.GetScriptName")

Result Returns text or error.

Description

See also

- 105.12 MailComposer.GetScriptName 5621
- 114.12 MessageComposer.GetScriptName 6017
- 153.6 SocialComposer.GetFileName 7165
- 153.20 SocialComposer.SetScript 7181

Created 11st June 2017, last changed 11st June 2017.

153.9 SocialComposer.ImageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.ImageCount")

Result Returns number or error.

Description

See also

- 153.21 SocialComposer.URLCount

7183

Created 11st June 2017, last changed 11st June 2017.

153.10 SocialComposer.IsAvailableForServiceType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.IsAvailableForServiceType"; Type)

Parameters

Type

The social service type. Can be Facebook, Twitter, SinaWeibo or TencentWeibo.
"Facebook"

Result Returns OK or error.

Description

Returns 1 if available or 0.

This function can be called before having a composer initialized.

Examples

Check for availability:

```
Set Variable [ $r ; Value: MBS( "SocialComposer.IsAvailableForServiceType"; Placeholder::Service ) ]
If [ $r = 1 ]
Show Custom Dialog [ "Can't send message." ; "This iOS device is not configured to post on " & Placeholder::Service & "" ]
Exit Script [ Text Result: "failed" ]
End If
```

See also

- 153.12 SocialComposer.New 7171
- 153.13 SocialComposer.Present 7173

Example Databases

- [iOS/iOS Social Posting](#)

Created 11st June 2017, last changed 18th June 2017.

153.11 SocialComposer.IsPresented

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.IsPresented")

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if not.

See also

- 105.15 MailComposer.IsPresented 5624
- 114.14 MessageComposer.IsPresented 6019
- 153.13 SocialComposer.Present 7173

Created 11st June 2017, last changed 11st June 2017.

153.12 SocialComposer.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.New"; Type)

Parameters

Type

The social service type. Can be Facebook, Twitter, SinaWeibo or TencentWeibo.
"Twitter"

Result Returns OK or error.

Description

Please check with SocialComposer.IsAvailableForServiceType before whether it's available.
Resets last error and clears last post content.
There is only one message composer at all times, so starting a new one will clear last one.

Examples

Post something to Twitter:

```
Set Variable [ $r ; Value: MBS( "SocialComposer.New"; "Twitter" ) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $r ; Value: MBS( "SocialComposer.SetInitialText"; "Greetings from FileMaker" ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.AddURL"; "http://www.mbs-plugins.com" ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.Present" ) ]
End If
```

See also

- [124.6 IsError](#) 6266
- [105.16 MailComposer.New](#) 5625
- [153.3 SocialComposer.AddURL](#) 7162
- [153.10 SocialComposer.IsAvailableForServiceType](#) 7169
- [153.13 SocialComposer.Present](#) 7173
- [153.16 SocialComposer.Result](#) 7177
- [153.19 SocialComposer.SetInitialText](#) 7180
- [153.20 SocialComposer.SetScript](#) 7181

Example Databases

- [iOS/iOS Social Posting](#)

7172

CHAPTER 153. SOCIALCOMPOSER

Created 11st June 2017, last changed 11st June 2017.

153.13 SocialComposer.Present

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.Present")

Result Returns OK or error.

Description

This will show the user interface and start the process.

Your script may call this in a script and then wait for the script trigger.

Examples

Make a posting:

```
Set Variable [ $r ; Value: MBS( "SocialComposer.IsAvailableForServiceType"; Placeholder::Service ) ]
If [ $r = 1 ]
Show Custom Dialog [ "Can't send message." ; "This iOS device is not configured to post on " & Placeholder::Service & "" ]
Exit Script [ Text Result: "failed" ]
End If
Set Variable [ $r ; Value: MBS( "SocialComposer.New"; Placeholder::Service ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.SetScript"; Get(FileName); "Sent" ) ]
If [ Length ( Placeholder::Text ) > 0 ]
Set Variable [ $r ; Value: MBS( "SocialComposer.SetInitialText"; Placeholder::Text ) ]
End If
If [ Length ( Placeholder::URL ) > 0 ]
Set Variable [ $r ; Value: MBS( "SocialComposer.AddURL"; Placeholder::URL ) ]
End If
If [ not IsEmpty ( Placeholder::Attachment1 ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.AddImageContainer"; Placeholder::Attachment1 ) ]
End If
If [ not IsEmpty ( Placeholder::Attachment2 ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.AddImageContainer"; Placeholder::Attachment2 ) ]
End If
If [ not IsEmpty ( Placeholder::Attachment3 ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.AddImageContainer"; Placeholder::Attachment3 ) ]
End If
Set Variable [ $r ; Value: MBS( "SocialComposer.Present" ) ]
```

Post something to Twitter:

```
Set Variable [ $r ; Value: MBS( "SocialComposer.New"; "Twitter" ) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $r ; Value: MBS( "SocialComposer.SetInitialText"; "Greetings from FileMaker" ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.AddURL"; "http://www.mbs-plugins.com" ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.Present" ) ]
```

End If

See also

- 124.6 `IsError` 6266
- 114.16 `MessageComposer.Present` 6021
- 153.1 `SocialComposer.AddImageContainer` 7159
- 153.10 `SocialComposer.IsAvailableForServiceType` 7169
- 153.11 `SocialComposer.IsPresented` 7170
- 153.12 `SocialComposer.New` 7171
- 153.16 `SocialComposer.Result` 7177
- 153.19 `SocialComposer.SetInitialText` 7180
- 153.20 `SocialComposer.SetScript` 7181
- 153.21 `SocialComposer.URLCount` 7183

Example Databases

- [iOS/iOS Social Posting](#)

Created 11st June 2017, last changed 11st June 2017.

153.14 SocialComposer.RemoveAllImages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.RemoveAllImages")

Result Returns OK or error.

Description

Returns error and does not perform an operation if the sheet has already been presented to the user.

See also

- 153.15 SocialComposer.RemoveAllURLs

7176

Created 11st June 2017, last changed 11st June 2017.

153.15 SocialComposer.RemoveAllURLs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.RemoveAllURLs")

Result Returns OK or error.

Description

Returns error and does not perform an operation if the sheet has already been presented to the user.

See also

- 153.14 SocialComposer.RemoveAllImages

7175

Created 11st June 2017, last changed 11st June 2017.

153.16 SocialComposer.Result

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.Result")

Result Returns OK or error.

Description

If email composer is not yet finished, the result is empty.
Status can be Cancelled or Done.

See also

- 105.18 MailComposer.Result 5628
- 114.17 MessageComposer.Result 6023
- 153.3 SocialComposer.AddURL 7162
- 153.4 SocialComposer.Dismiss 7163
- 153.12 SocialComposer.New 7171
- 153.13 SocialComposer.Present 7173
- 153.21 SocialComposer.URLCount 7183

Example Databases

- [iOS/iOS Social Posting](#)

Created 11st June 2017, last changed 11st June 2017.

153.17 SocialComposer.ServiceType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.ServiceType")

Result Returns value or error.

Description

Currently can be Facebook, Twitter, SinaWeibo or TencentWeibo.

See also

- 153.6 SocialComposer.GetFileName 7165
- 153.20 SocialComposer.SetScript 7181

Created 11st June 2017, last changed 11st June 2017.

153.18 SocialComposer.SetEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.SetEvaluate"; Expression)

Parameters**Expression**

The expression to evaluate.

Result Returns OK or error.

Description

In the script you can check with MailComposer.Result and MailComposer.Error what happened.

See also

- 105.6 MailComposer.Error 5615
- 105.9 MailComposer.GetEvaluate 5618
- 105.18 MailComposer.Result 5628
- 105.21 MailComposer.SetEvaluate 5631
- 114.8 MessageComposer.GetEvaluate 6013
- 114.18 MessageComposer.SetEvaluate 6024
- 153.5 SocialComposer.GetEvaluate 7164
- 153.6 SocialComposer.GetFileName 7165
- 153.20 SocialComposer.SetScript 7181

Created 11st June 2017, last changed 11st June 2017.

153.19 SocialComposer.SetInitialText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.SetInitialText"; Text)

Parameters

Text

The initial text.
"Hello World"

Result Returns OK or error.

Description

Returns error if the sheet has already been presented to the user.

You may supply text with a length greater than the service supports, and the sheet will allow the user to edit it accordingly.

Examples

Set initial text:

Set Variable [\$r ; Value: MBS("SocialComposer.SetInitialText"; "Hello World")]

See also

- 153.7 SocialComposer.GetInitialText 7166
- 153.12 SocialComposer.New 7171
- 153.13 SocialComposer.Present 7173

Example Databases

- [iOS/iOS Social Posting](#)

Created 11st June 2017, last changed 11st June 2017.

153.20 SocialComposer.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.SetScript"; FileName; ScriptName { ; Parameter })

Parameters

FileName

The file name for the script to trigger.

"test.fmp12"

ScriptName

The script name of the script to launch.

"EmailComposerFinished"

Parameter

Optional

The parameter to pass to the script.

Result Returns OK or error.

Description

In the script you can check with MailComposer.Result and MailComposer.Error what happened.

Examples

Sets the script:

```
Set Variable [ $r ; Value: MBS( "SocialComposer.New"; Placeholder::Service ) ]
Set Variable [ $r ; Value: MBS( "SocialComposer.SetScript"; Get(FileName); "Sent" ) ]
```

See also

- 105.6 MailComposer.Error 5615
- 105.18 MailComposer.Result 5628
- 105.23 MailComposer.SetScript 5633
- 114.21 MessageComposer.SetScript 6027
- 153.8 SocialComposer.GetScriptName 7167
- 153.12 SocialComposer.New 7171
- 153.13 SocialComposer.Present 7173
- 153.17 SocialComposer.ServiceType 7178
- 153.18 SocialComposer.SetEvaluate 7179

Example Databases

- [iOS/iOS Social Posting](#)

Created 11st June 2017, last changed 11st June 2017.

153.21 SocialComposer.URLCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
153 SocialComposer	7.3	No	No	No	No	Yes

MBS("SocialComposer.URLCount")

Result Returns count or error.

Description**See also**

- 153.9 SocialComposer.ImageCount 7168
- 153.13 SocialComposer.Present 7173
- 153.16 SocialComposer.Result 7177

Created 11st June 2017, last changed 11st June 2017.

Chapter 154

Socket

UDP and TCP sockets.

154.1 Socket.AcceptNewConnection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.AcceptNewConnection"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns new Socket ID or error message.

Description

Examples

In the script triggered for a new connection, connect a new socket:

```
Set Variable [ $sock; Value:Get(ScriptParameter) ]
Set Variable [ $newSock; Value:MBS("Socket.AcceptNewConnection"; $sock) ]
If [ GetAsNumber($newSock)>0 ]
Set Variable [ $r; Value:MBS("Socket.SetErrorHandler"; $newsock; Get(FileName); "SocketError") ]
Set Variable [ $r; Value:MBS("Socket.SetDataAvailableHandler"; $newsock; Get(FileName); "ReadSomething") ]
End If
```

See also

- 154.11 Socket.Connect 7197
- 154.25 Socket.Listen 7215
- 154.55 Socket.SetDataAvailableHandler 7253
- 154.58 Socket.SetErrorHandler 7257
- 154.63 Socket.SetNewConnectionEvaluate 7263
- 154.64 Socket.SetNewConnectionHandler 7264
- 154.65 Socket.SetNewConnectionURL 7266

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)
- [Network/TCP Send and Receive/TCP Receiver](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)

Created 18th August 2014, last changed 26th January 2016.

154.2 Socket.AddMembership

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	7.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.AddMembership"; SocketID; MultiAddress; InterfaceAddress)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

MultiAddress

The IPv4 address of the group to join.

InterfaceAddress

The IPv4 address of the network interface to use. Can be empty for any interface.

Result Returns OK or error.

Description

Internally this uses IPPROTO_IP/IP_ADD_MEMBERSHIP option.

Lasterror is set.

See also

- 154.11 Socket.Connect 7197
- 154.12 Socket.DropMembership 7202

154.2.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 19th October 2017, last changed 19th October 2017.

154.3 Socket.AvailableBytes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.AvailableBytes"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns number or error.

Description

May not work for SSL sockets.

The buffer size of the socket is managed by the OS and can be several megabytes big if needed.

Examples

Query available byte count:

MBS("Socket.AvailableBytes"; \$sock)

See also

- 154.11 Socket.Connect

7197

154.3.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 11st September 2014, last changed 17th March 2018.

154.4 Socket.Check

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.Check")

Result Returns OK.

Description

The plugin checks regularly if there are new events for the socket and calls the right scripts. In a tight loop you can call this method to check sockets and have events dispatched. Normally you have no need to call this function.

See also

- 154.5 Socket.CheckAll 7190
- 154.30 Socket.Peek 7223

Created 29th March 2015, last changed 29th March 2015.

154.5 Socket.CheckAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.CheckAll")

Result Returns list or error.

Description

Returns a list of sockets and what to do. The list is always build using a reference number of a socket followed by an entry with the status. Status can be error, read, write, or accept. So when you get a socket with read status, you can read data from it. With write status you can write some data to it. With accept, you can start a new connection with the incoming request. In case of error status, the plugin closes the socket automatically.

Returns empty text if there is nothing to do.

See also

- 154.4 Socket.Check 7189
- 154.10 Socket.CloseAll 7196
- 154.31 Socket.PeekAll 7224
- 154.35 Socket.ReadAll 7230

Example Databases

- [Network/HTTP Server hosted](#)

Created 29th March 2015, last changed 29th November 2018.

154.6 Socket.ClearDataAvailableHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ClearDataAvailableHandler"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns OK or error message.

Description

See also

- 125.3 PortMidi.ClearDataAvailableHandler 6343
- 144.3 SerialPort.ClearDataAvailableHandler 6934
- 154.11 Socket.Connect 7197
- 154.55 Socket.SetDataAvailableHandler 7253

Created 18th August 2014, last changed 18th August 2014.

154.7 Socket.ClearErrorHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ClearErrorHandler"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns OK or error message.

Description

See also

- 154.11 Socket.Connect 7197
- 154.58 Socket.SetErrorHandler 7257

Created 18th August 2014, last changed 18th August 2014.

154.8 Socket.ClearNewConnectionHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	7.2	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ClearNewConnectionHandler"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns OK or error message.

Description

See also

- 154.11 Socket.Connect 7197
- 154.64 Socket.SetNewConnectionHandler 7264

Created 19th March 2017, last changed 19th March 2017.

154.9 Socket.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.Close"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns OK or error message.

Description

Examples

Disconnect socket:

```
If [ IsEmpty($$sock) ]
Else
Set Variable [ $r; Value:MBS("Socket.Close"; $$Sock) ]
Set Variable [ $$Sock; Value:"" ]
End If
```

See also

- 154.10 Socket.CloseAll 7196
- 154.11 Socket.Connect 7197
- 154.19 Socket.IsClosed 7209
- 154.26 Socket.LocalIP 7217
- 154.27 Socket.LocalPort 7218
- 154.34 Socket.Read 7227
- 154.68 Socket.Write 7269
- 154.70 Socket.WriteHex 7272

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)

- Network/SSL/TCP Sender SSL
- Network/SSL/TCP Socket SSL
- Network/TCP Send and Receive/TCP Receiver
- Network/TCP Send and Receive/TCP Sender
- Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection
- Network/TCP Send and Receive persistent connection/TCP Sender persistent connection
- Network/TCP Socket

Created 18th August 2014, last changed 26th January 2016.

154.10 Socket.CloseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.CloseAll")

Result Returns OK or error.

Description

See also

- [154.5 Socket.CheckAll](#) 7190
- [154.9 Socket.Close](#) 7194

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)

154.10.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 10th September 2014, last changed 10th September 2014.

154.11 Socket.Connect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.Connect"; IPorDomain; Port; Timeout { ; ProtocolPreference })

Parameters

IPorDomain

The IP or domain. For a domain name, the DNS server is queried to find an IP address.
"127.0.0.1"

Port

The desired network port to connect to.
80

Timeout

The connection timeout in seconds. Default depends on operation system and can be e.g. 90 seconds.
5

ProtocolPreference

Optional

Pass 4 to connect via IPv4. Pass 6 to connect via IPv6. Default is to try whatever the DNS suggests first.
4

Result Returns socket ID for other functions or error message.

Description

You need to call Socket.Close later to release memory used for this socket.

Version 6.3 now supports passing IPv4, IPv6, or a host name.

Examples

Connect to MonkeybreadSoftware website:

```
$sock = MBS( "Socket.Connect"; "monkeybreadsoftware.de"; 80 )
```

Connect to localhost website:

```
$sock = MBS( "Socket.Connect"; "127.0.0.1"; 80 )
```

Connect if needed and send something:

```
# connect if needed
If [ IsEmpty($$sock) ]
Set Variable [ $$sock; Value:MBS("Socket.Connect"; TCP Sender::TargetIP; TCP Sender::Port) ]
If [ MBS("IsError") ]
Set Field [ TCP Sender::Result; "Failed to create socket: " & $$sock ]
```

```

Exit Script [ ]
End If
Set Variable [ $r; Value:MBS("Socket.SetDataAvailableHandler"; $$sock; Get(FileName); "DataAvailable")
]
Set Variable [ $r; Value:MBS("Socket.SetErrorHandler"; $$sock; Get(FileName); "SocketError") ]
End If
# send some data
Set Variable [ $r; Value:MBS("Socket.Write"; $$sock; TCP Sender::Message; "UTF-8") ]
If [ GetAsNumber($r) = 0 ]
Set Field [ TCP Sender::Result; "Failed to Send: "& $r ]
Else
Set Field [ TCP Sender::Result; "Sent "& $r& " Bytes." ]
End If

```

Connect to IP and send command and wait for answer:

```

Set Variable [ $sock; Value:MBS("Socket.Connect";test::IP; 16128) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to connect" ]
Else
Set Variable [ $write; Value:MBS("Socket.WriteHex"; $sock; test::query) ]
Pause/Resume Script [ Duration (seconds): 1 ]
Set Field [ test::response; MBS("Socket.ReadHex"; $sock; 20) ]
Show Custom Dialog [ "Hex: " & test::response & $& "Text: " & MBS( "Text.DecodeFromHex"; test::re-
sponse) ]
Set Variable [ $sock; Value:MBS("Socket.Close"; $sock) ]
End If

```

Measure from a specific scale:

```

# Open port
Set Variable [ $sock ; Value: MBS("Socket.Connect"; Scale::IP, Scale::Port) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to open socket" ; $sock ]
Exit Script [ Text Result: ]
End If
# Send reset command
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "@" ) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
# Disable keyboard
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "K 3" ) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
# Set scale to zero
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "Z" ) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]

```

```

Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
# Set to measure in grams
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "M21 1 0") ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "M21 0 0") ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
# Send expected weight and tolerance
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "PMW REL "& Scale::WeightExpected & " " &
Scale::Tolerance & " " & Scale::Tolerance & " g") ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
Set Variable [ $Counter ; Value: 1 ]
Set Variable [ $finished ; Value: 0 ]
Loop
Loop
# Wait for Answer
Set Variable [ $data ; Value: "" ]
Loop
Pause/Resume Script [ Duration (seconds): .01 ]
Set Variable [ $newdata ; Value: MBS("Socket.Read"; $sock; 1000) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $data ; Value: $data & $newData ]
End If
Exit Loop If [ Position($Data; "$"; 1; 1)>0 ]
End Loop
Set Variable [ $data ; Value: MBS("String.ReplaceNewline"; $data; 1) ]
If [ ValueCount ( $data ) = 1 ]
Set Variable [ $data ; Value: GetValue($data; 1) ]
End If
# Process Answer
If [ $data = "K A" ]
# Answer from keyboard turn off
# okay
Else If [ $data = "PMW A" ]
# Answer PMW
# okay
Else If [ $data = "K C 4" ]
# Return pressed on scale
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "S") ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
# Wait for Answer
Set Variable [ $data ; Value: "" ]
Loop
Pause/Resume Script [ Duration (seconds): .01 ]
Set Variable [ $newdata ; Value: MBS("Socket.Read"; $sock; 1000) ]

```

```

If [ MBS("IsError") = 0 ]
Set Variable [ $data ; Value: $data & $newData ]
End If
Exit Loop If [ Position($Data; "$"; 1; 1)>0 ]
End Loop
Set Variable [ $data ; Value: MBS("String.ReplaceNewline"; $data; 1) ]
If [ ValueCount ( $data ) = 1 ]
Set Variable [ $data ; Value: GetValue($data; 1) ]
End If
# Process Answer
If [ Left($Data; 3) = "S S" ]
Set Variable [ $Data ; Value: Substitute($Data; ","; "" ) ]
Set Variable [ $Data ; Value: Substitute($Data; "" ; ",") ]
Set Variable [ $Weight ; Value: GetAsNumber( Middle($Data; 4; 20)) ]
If [ Position ( $data; "kg"; 1;1) >0 ]
Set Variable [ $Weight ; Value: $Weight * 1000 ]
End If
Set Field [ Scale::Status ; "Weight read: " & $Weight ]
Set Field [ Scale::WeightGemessen ; $Weight ]
If [ ($Weight >= Scale::WeightExpected - Scale::Tolerance) and ($Weight <= Scale::WeightExpected +
Scale::Tolerance) ]
Set Variable [ $finished ; Value: 1 ]
Show Custom Dialog [ "Thanks" ]
Exit Loop If [ 1 ]
Else
Show Custom Dialog [ "Please measure again" ]
End If
End If
Exit Loop If [ $finished ]
End If
Exit Loop If [ $finished ]
End Loop
Exit Loop If [ $finished ]
End Loop
# Enable keyboard
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "K 2") ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
# Reset scale
Set Variable [ $r ; Value: MBS("Socket.Write"; $sock; "@" ) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 13) ]
Set Variable [ $r ; Value: MBS("Socket.WriteByte"; $sock; 10) ]
# short wait to let commands run to device
Pause/Resume Script [ Duration (seconds): ,01 ]
# close port
Set Variable [ $r ; Value: MBS("Socket.Close"; $sock) ]

```

154.11. *SOCKET.CONNECT* 7201

See also

- 154.27 *Socket.LocalPort* 7218
- 154.28 *Socket.NewTCPSocket* 7219
- 154.59 *Socket.SetErrorURL* 7259
- 154.61 *Socket.SetMulticastLoop* 7261
- 154.64 *Socket.SetNewConnectionHandler* 7264
- 154.65 *Socket.SetNewConnectionURL* 7266
- 154.69 *Socket.WriteByte* 7271
- 154.70 *Socket.WriteHex* 7272
- 154.71 *Socket.WriteMLLP* 7274
- 164.17 *Text.DecodeFromHex* 7800

Example Databases

- [Network/SSL/TCP Sender SSL](#)
- [Network/SSL/TCP Socket SSL](#)
- [Network/TCP Send and Receive/TCP Sender](#)
- [Network/TCP Send and Receive persistent connection/TCP Sender persistent connection](#)
- [Network/TCP Socket](#)

154.11.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)
- [MBS FileMaker Plugin, version 7.2pr4](#)
- [MBS FileMaker Plugin, version 6.3pr4](#)
- [MBS FileMaker Plugin, version 5.1pr3](#)

Created 18th August 2014, last changed 18th March 2018.

154.12 Socket.DropMembership

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	7.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.DropMembership"; SocketID; MultiAddress; InterfaceAddress)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

MultiAddress

The IPv4 address of the group to join.

InterfaceAddress

The IPv4 address of the network interface to use. Can be empty for any interface.

Result Returns OK or error.

Description

Internally this uses IPPROTO_IP/IP_DROP_MEMBERSHIP option.

Lasterror is set.

See also

- 154.2 Socket.AddMembership 7187
- 154.11 Socket.Connect 7197

154.12.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 19th October 2017, last changed 19th October 2017.

154.13 Socket.GetBroadcast

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.GetBroadcast"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns value or error.

Description

See also

- 154.11 Socket.Connect 7197
- 154.53 Socket.SetBroadcast 7251

154.13.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 22nd August 2015, last changed 22nd August 2015.

154.14 Socket.GetMulticastInterface

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	7.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.GetMulticastInterface"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns IP or error.

Description

May return 0.0.0.0 to indicate all interfaces.

See also

- 154.11 Socket.Connect 7197
- 154.16 Socket.GetMulticastTimeToLive 7206
- 154.60 Socket.SetMulticastInterface 7260

154.14.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 19th October 2017, last changed 19th October 2017.

154.15 Socket.GetMulticastLoop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.GetMulticastLoop"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns value or error.

Description

See also

- 154.11 Socket.Connect 7197
- 154.61 Socket.SetMulticastLoop 7261

154.15.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 22nd August 2015, last changed 22nd August 2015.

154.16 Socket.GetMulticastTimeToLive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.GetMulticastTimeToLive"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns value or error.

Description

Range from 0 to 255.

See also

- 154.11 Socket.Connect 7197
- 154.14 Socket.GetMulticastInterface 7204
- 154.62 Socket.SetMulticastTimeToLive 7262

154.16.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 22nd August 2015, last changed 22nd August 2015.

154.17 Socket.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	8.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.GetTag"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns tag value or error.

Description

See also Socket.SetTag.

With the tag, we allow you to associate a text with the socket, for example a record ID.

See also

- 154.11 Socket.Connect 7197
- 154.66 Socket.SetTag 7267

154.17.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 6th June 2018, last changed 6th June 2018.

154.18 Socket.GetTimeToLive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.GetTimeToLive"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns value or error.

Description

Range from 0 to 255.

See also

- 154.11 Socket.Connect 7197
- 154.67 Socket.SetTimeToLive 7268

154.18.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 22nd August 2015, last changed 22nd August 2015.

154.19 Socket.IsClosed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Socket.IsClosed"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns 1, 0 or error.

Description

MBS Plugin may close sockets that report an error.
Returns 1 if closed, but not yet freed.

See also

- 154.9 Socket.Close 7194
- 154.11 Socket.Connect 7197

154.19.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr1](#)

Created 29th November 2018, last changed 29th November 2018.

154.20 Socket.IsListening

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	9.0	Yes	Yes	Yes	Yes	Yes

MBS("Socket.IsListening"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns 1, 0 or error.

Description

Returns 1 if listening, e.g. Socket.Listen was called.

See also

- 154.11 Socket.Connect 7197
- 154.24 Socket.List 7214
- 154.25 Socket.Listen 7215

154.20.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr1](#)

Created 29th November 2018, last changed 28th November 2019.

154.21 Socket.LastError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.LastError"; SocketID)

Parameters**SocketID**

The socket ID received by Socket.Connect function.
\$sock

Result Returns error code.

Description

This is normally a platform dependent error code.

See also

- 154.11 Socket.Connect

7197

154.21.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

154.22 Socket.LastMessageIP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.LastMessageIP"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns IP of error message.

Description

See also

- 154.11 Socket.Connect 7197
- 154.23 Socket.LastMessagePort 7213
- 154.34 Socket.Read 7227
- 154.41 Socket.RemoteIP 7238

Example Databases

- [Network/UDP/UDP Broadcast](#)
- [Network/UDP/UDP Receiver](#)

Created 18th August 2014, last changed 18th August 2014.

154.23 Socket.LastMessagePort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.LastMessagePort"; SocketID)

Parameters**SocketID**

The socket ID received by Socket.Connect function.

\$sock

Result Returns port of error message.

Description**See also**

- 154.11 Socket.Connect 7197
- 154.22 Socket.LastMessageIP 7212
- 154.42 Socket.RemotePort 7239

Example Databases

- [Network/UDP/UDP Receiver](#)

Created 18th August 2014, last changed 18th August 2014.

154.24 Socket.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Socket.List")

Result Returns list or error.

Description

See also

- 154.20 Socket.IsListening 7210
- 154.25 Socket.Listen 7215
- 154.28 Socket.NewTCPSocket 7219
- 154.29 Socket.NewUDPSocket 7221
- 154.58 Socket.SetErrorHandler 7257

154.24.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr6](#)

Created 1st May 2019, last changed 1st May 2019.

154.25 Socket.Listen

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.Listen"; SocketID; Port { ; backlog })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Port

The port number to listen at.

8000

backlog

Optional

Available in MBS FileMaker Plugin 9.1 or newer.

The back log for connection. How many pending connections can be accepted on this socket. Once you call Socket.AcceptNewConnection, an entry is removed here. Default is 3.

3

Result Returns OK or error message.

Description

For UDP Socket, the socket starts receiving packets.

For TCP Socket, the socket can accept connections which causes a script to be called. You set the script name with Socket.SetNewConnectionHandler. In the script you call Socket.AcceptNewConnection to get a new socket for the new connection.

Be aware that FileMaker Server does not allow the plugin to operate if no script is running. So if you use sockets there, make sure a script is running or paused while you expect an answer coming in.

Examples

Listen to a given Port:

```
Set Variable [ $r; Value:MBS("Socket.Listen"; $$sock; 12345) ]
```

Create TCP Socket listening on a port:

```
Set Variable [ $$sock; Value:MBS("Socket.NewTCPSocket") ]
```

```
If [ MBS("IsError") ]
```

```
Show Custom Dialog [ "Failed to create Socket"; $$sock ]
```

```
Exit Script [ ]
```

```
End If
```

```
Set Variable [ $r; Value:MBS("Socket.SetNewConnectionHandler"; $$sock; Get(FileName); "NewConnection") ]
```

```

Set Variable [ $r; Value:MBS("Socket.SetErrorHandler"; $$sock; Get(FileName); "SocketError") ]
Set Variable [ $r; Value:MBS("Socket.Listen"; $$sock; TCP Receiver::ListenPort) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create Socket"; $$sock ]
Exit Script [ ]
End If

```

See also

- [124.6 IsError](#) 6266
- [154.1 Socket.AcceptNewConnection](#) 7185
- [154.11 Socket.Connect](#) 7197
- [154.20 Socket.IsListening](#) 7210
- [154.24 Socket.List](#) 7214
- [154.28 Socket.NewTCPSocket](#) 7219
- [154.29 Socket.NewUDPSocket](#) 7221
- [154.58 Socket.SetErrorHandler](#) 7257
- [154.64 Socket.SetNewConnectionHandler](#) 7264

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)
- [Network/TCP Send and Receive/TCP Receiver](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)
- [Network/UDP/UDP Broadcast](#)
- [Network/UDP/UDP Receiver](#)

154.25.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr6](#)

154.26 Socket.LocalIP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	8.0	Yes	Yes	Yes	Yes	Yes

MBS("Socket.LocalIP"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns OK or error.

Description

This is usually 0.0.0.0 for a brand new socket.

Can return IPv4 or IPv6 address.

Does not work on Windows 7 or older (requires Vista on Windows).

Examples

Get local port and IP:

```
Set Variable [ $sock ; Value: MBS("Socket.Connect"; "monkeybreadsoftware.de"; 80) ]
```

```
Set Variable [ $$LocalPort ; Value: MBS( "Socket.LocalPort"; $sock ) ]
```

```
Set Variable [ $$LocalIP ; Value: MBS( "Socket.LocalIP"; $sock ) ]
```

```
Set Variable [ $r ; Value: MBS("Socket.Close"; $sock) ]
```

See also

- 154.9 Socket.Close 7194
- 154.11 Socket.Connect 7197
- 154.27 Socket.LocalPort 7218

154.26.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr6](#)

Created 28th December 2017, last changed 28th December 2017.

154.27 Socket.LocalPort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	8.0	Yes	Yes	Yes	Yes	Yes

MBS("Socket.LocalPort"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns OK or error.

Description

This is usually 0 for a brand new socket.

Does not work on Windows 7 or older (requires Vista on Windows).

Examples

Get local port and IP:

```
Set Variable [ $sock ; Value: MBS("Socket.Connect"; "monkeybreadsoftware.de"; 80) ]
```

```
Set Variable [ $$LocalPort ; Value: MBS( "Socket.LocalPort"; $sock ) ]
```

```
Set Variable [ $$LocalIP ; Value: MBS( "Socket.LocalIP"; $sock ) ]
```

```
Set Variable [ $r ; Value: MBS("Socket.Close"; $sock) ]
```

See also

- 154.9 Socket.Close 7194
- 154.11 Socket.Connect 7197
- 154.26 Socket.LocalIP 7217

154.27.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr6](#)

Created 28th December 2017, last changed 28th December 2017.

154.28 Socket.NewTCPSocket

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.NewTCPSocket" { ; PreferIPv6 })

Parameters

PreferIPv6

Optional

Available in MBS FileMaker Plugin 8.4 or newer.

Pass 1 to get IPv6 or if not available IPv4. Pass 0 to get IPv4 or if not available IPv6. Default is 1 for preferring IPv6.

1

Result Returns a new socket ID or error message.

Description

Socket reference numbers are starting at 29000 and counting up for each new socket.

If you call Socket.Connect, you don't need to use this method first as the connect function creates its own socket.

For MBS Plugin 8.3 or newer this may be IPv6 or IPv4 socket.

Examples

Create TCP Socket listening on a port:

```
Set Variable [ $$sock; Value:MBS("Socket.NewTCPSocket") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create Socket"; $$sock ]
Exit Script [ ]
End If
Set Variable [ $r; Value:MBS("Socket.SetNewConnectionHandler"; $$sock; Get(FileName); "NewConnection") ]
Set Variable [ $r; Value:MBS("Socket.SetErrorHandler"; $$sock; Get(FileName); "SocketError") ]
Set Variable [ $r; Value:MBS("Socket.Listen"; $$sock; TCP Receiver::ListenPort) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create Socket"; $$sock ]
Exit Script [ ]
End If
```

See also

- 124.6 IsError 6266
- 154.11 Socket.Connect 7197
- 154.24 Socket.List 7214

- 154.25 Socket.Listen 7215
- 154.29 Socket.NewUDPSocket 7221
- 154.58 Socket.SetErrorHandler 7257
- 154.64 Socket.SetNewConnectionHandler 7264

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)
- [Network/TCP Send and Receive/TCP Receiver](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)

154.28.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr3](#)
- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 18th August 2014, last changed 19th September 2018.

154.29 Socket.NewUDPSocket

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.NewUDPSocket")

Result Returns a new socket ID or error message.

Description

Socket reference numbers are starting at 29000 and counting up for each new socket. For use with broadcast, we create IPv4 here.

Examples

Create a new UDP Socket:

```
Set Variable [ $$sock; Value:MBS("Socket.NewUDPSocket") ]
```

Create a new UDP socket for broadcast and listen on a port:

```
If [ not (GetAsNumber($$sock) >0) ]
Set Variable [ $$sock; Value:MBS("Socket.NewUDPSocket") ]
If [ GetAsNumber($$sock) = 0 ]
Show Custom Dialog [ "Failed to create Socket"; $$sock ]
Exit Script [ ]
End If
End If
Set Variable [ $r; Value:MBS("Socket.Listen"; $$sock; UDP Broadcast::Port) ]
Set Field [ UDP Broadcast::Send Result ]
Set Variable [ $r; Value:MBS("Socket.SetDataAvailableHandler"; $$sock; Get(FileName); "ReadMessage") ]
Set Variable [ $r; Value:MBS("Socket.SetBroadcast"; $$sock; 1) ]
Set Variable [ $r; Value:MBS("Socket.SetMulticastLoop"; $$sock; 0) ]
```

See also

- 154.24 Socket.List 7214
- 154.25 Socket.Listen 7215
- 154.28 Socket.NewTCPSocket 7219
- 154.53 Socket.SetBroadcast 7251
- 154.55 Socket.SetDataAvailableHandler 7253
- 154.61 Socket.SetMulticastLoop 7261

Example Databases

- [Network/UDP/UDP Broadcast](#)
- [Network/UDP/UDP Receiver](#)
- [Network/UDP/UDP Sender](#)

154.29.1 Blog Entries

- [UDP Broadcast for FileMaker](#)

Created 18th August 2014, last changed 21st June 2018.

154.30 Socket.Peek

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.Peek"; SocketID; length { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

length

Maximum number of bytes to read.

10

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns text or error message.

Description

The text returned may be shorter than length bytes.

If you like to look into the whole buffer, please use Socket.PeekAll function.

Examples

Read up to 8 bytes and decode them from Windows text encoding into FileMaker:

```
$value = MBS( "Socket.Read"; $sock; 8; "windows" )
```

See also

- 154.4 Socket.Check 7189
- 154.11 Socket.Connect 7197
- 154.31 Socket.PeekAll 7224
- 154.33 Socket.PeekHex 7226
- 154.34 Socket.Read 7227
- 154.35 Socket.ReadAll 7230

Created 18th August 2014, last changed 15th February 2019.

154.31 Socket.PeekAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.PeekAll"; SocketID { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns text or error message.

Description

This function will look how much is in read buffer and query all bytes inside.

Examples

Read all bytes and decode them from Windows text encoding into FileMaker:

```
$value = MBS( "Socket.PeekAll"; $sock; "windows" )
```

See also

- 154.5 Socket.CheckAll 7190
- 154.11 Socket.Connect 7197
- 154.30 Socket.Peek 7223
- 154.32 Socket.PeekAllHex 7225
- 154.33 Socket.PeekHex 7226
- 154.35 Socket.ReadAll 7230

154.31.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 11st September 2014, last changed 12nd November 2015.

154.32 Socket.PeekAllHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.PeekAllHex"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns text encoded as hex or error message.

Description

This function will look how much is in read buffer and query all bytes inside.

Examples

Read all bytes and return them as:

```
$value = MBS( "Socket.ReadAllHex"; $port )
```

See also

- 154.11 Socket.Connect 7197
- 154.31 Socket.PeekAll 7224
- 154.33 Socket.PeekHex 7226
- 154.34 Socket.Read 7227
- 154.35 Socket.ReadAll 7230
- 154.36 Socket.ReadAllHex 7232

154.32.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 11st September 2014, last changed 11st September 2014.

154.33 Socket.PeekHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.PeekHex"; SocketID; length)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

length

Maximum number of bytes to read.

10

Result Returns text encoded as hex or error message.

Description

The text returned may be shorter than length bytes.

If you like to look into the whole buffer, please use Socket.PeekAllHex function.

Examples

Read up to 8 bytes and return them as:

```
$value = MBS( "Socket.ReadHex"; $port; 8 )
```

See also

- 154.11 Socket.Connect 7197
- 154.30 Socket.Peek 7223
- 154.31 Socket.PeekAll 7224
- 154.32 Socket.PeekAllHex 7225
- 154.34 Socket.Read 7227
- 154.37 Socket.ReadHex 7233

Created 18th August 2014, last changed 15th February 2019.

154.34 Socket.Read

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.Read"; SocketID; length { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

length

Maximum number of bytes to read.

10

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns text or error message.

Description

The text returned may be shorter than length bytes.

The buffer size of the socket is managed by the OS and can be several megabytes big if needed.

To read the whole input buffer, use Socket.ReadAll. To look into buffer without removing text, please use Socket.Peek function instead.

Examples

Read up to 8 bytes and decode them from Windows text encoding into FileMaker:

```
$value = MBS( "Socket.Read"; $sock; 8; "windows" )
```

Connect to a HTTP Server and wait for answer:

```
Set Variable [ $r; Value:MBS("Trace") ]
```

```
Set Variable [ $sock; Value:MBS("Socket.Connect"; TCP Socket::DomainOrIP; 80) ]
```

```
If [ MBS("IsError") ]
```

```
Show Custom Dialog [ "Error"; $sock ]
```

```
Exit Script [ ]
```

```
End If
```

```
Set Variable [ $request; Value:"GET "& TCP Socket::Path& " HTTP/1.0$Host: "& TCP Socket::Domain-OrIP& "$$" ]
```

```
Set Variable [ $request; Value:MBS("String.ReplaceNewline"; $request; 2) ]
```

```
Set Field [ TCP Socket::RequestUsed; $request ]
```

```

Set Variable [ $r; Value:MBS("Socket.Write"; $sock; $request) ]
Pause/Resume Script [ Duration (seconds): 1 ]
Set Variable [ $data; Value:MBS("Socket.Read"; $sock; 1000) ]
Set Variable [ $data; Value:MBS("String.ReplaceNewline"; $data; 1) ]
Set Field [ TCP Socket::Result; $data ]
Set Variable [ $r; Value:MBS("Socket.Close"; $sock) ]

```

Read data and put in a new record:

```

Set Variable [ $r; Value:MBS("Socket.Read"; $$sock; 1500; "UTF-8") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error Reading"; $r ]
Else If [ Length($r) = 0 ]
Show Custom Dialog [ "Error Reading"; "No data available." ]
Else
New Record/Request
Set Field [ UDP Broadcast::Message Received; $r ]
Set Field [ UDP Broadcast::Sender; MBS("Socket.LastMessageIP"; $$sock) ]
Commit Records/Requests [ No dialog ]
End If

```

See also

- 154.22 Socket.LastMessageIP 7212
- 154.32 Socket.PeekAllHex 7225
- 154.33 Socket.PeekHex 7226
- 154.35 Socket.ReadAll 7230
- 154.38 Socket.ReadLine 7234
- 154.39 Socket.ReadLineHex 7236
- 154.54 Socket.SetDataAvailableEvaluate 7252
- 154.68 Socket.Write 7269
- 154.70 Socket.WriteHex 7272
- 124.52 Trace 6326

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)

- [Network/SSL/TCP Socket SSL](#)
- [Network/TCP Send and Receive/TCP Sender](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)
- [Network/TCP Send and Receive persistent connection/TCP Sender persistent connection](#)
- [Network/TCP Socket](#)
- [Network/UDP/UDP Broadcast](#)
- [Network/UDP/UDP Receiver](#)

154.34.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr3](#)

Created 18th August 2014, last changed 15th February 2019.

154.35 Socket.ReadAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ReadAll"; SocketID { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns OK or error.

Description

This function will look how much is in read buffer and query all bytes inside.
May not work for SSL sockets.

The buffer size of the socket is managed by the OS and can be several megabytes big if needed. To look into buffer without removing text, please use Socket.PeekAll function instead.

Examples

Read all bytes and decode them from Windows text encoding into FileMaker:

```
$value = MBS( "Socket.ReadAll"; $sock; "windows" )
```

See also

- 154.5 Socket.CheckAll 7190
- 154.11 Socket.Connect 7197
- 154.30 Socket.Peek 7223
- 154.31 Socket.PeekAll 7224
- 154.32 Socket.PeekAllHex 7225
- 154.34 Socket.Read 7227
- 154.36 Socket.ReadAllHex 7232
- 154.37 Socket.ReadHex 7233

<i>154.35. SOCKET.READALL</i>	7231
• 154.38 Socket.ReadLine	7234
• 154.40 Socket.ReadMLLP	7237

154.35.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 11st September 2014, last changed 15th February 2019.

154.36 Socket.ReadAllHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ReadAllHex"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns text encoded as hex or error message.

Description

This function will look how much is in read buffer and query all bytes inside.

Examples

Read all bytes and return them as:

```
$value = MBS( "Socket.ReadAllHex"; $port; 8 )
```

See also

- 154.11 Socket.Connect 7197
- 154.32 Socket.PeekAllHex 7225
- 154.34 Socket.Read 7227
- 154.35 Socket.ReadAll 7230
- 154.37 Socket.ReadHex 7233
- 154.39 Socket.ReadLineHex 7236

154.36.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 11st September 2014, last changed 11st September 2014.

154.37 Socket.ReadHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ReadHex"; SocketID; length)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

length

Maximum number of bytes to read.

10

Result Returns text encoded as hex or error message.

Description

The text returned may be shorter than length bytes.

Examples

Read up to 8 bytes and return them as:

```
$value = MBS( "Socket.ReadHex"; $port; 8 )
```

See also

- 154.11 Socket.Connect 7197
- 154.33 Socket.PeekHex 7226
- 154.34 Socket.Read 7227
- 154.35 Socket.ReadAll 7230
- 154.36 Socket.ReadAllHex 7232
- 154.38 Socket.ReadLine 7234
- 154.39 Socket.ReadLineHex 7236
- 154.40 Socket.ReadMLLP 7237
- 154.70 Socket.WriteHex 7272

Created 18th August 2014, last changed 18th August 2014.

154.38 Socket.ReadLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ReadLine"; SocketID; Delimiter { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Delimiter

Which character to use as delimiter. Pass number from 0 to 255 for the byte to use. e.g. 13 for CR line ending. Special handling is done if you pass 1310 as delimiter to cover CRLF as a 2 byte delimiter.

13

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns OK or error.

Description

The delimiter allows you to read from the buffer just one line. If two lines are in read buffer, we leave second line there for the next call.

Examples

Read one line and decode them from Windows text encoding into FileMaker:

```
$value = MBS( "Socket.Read"; $sock; 13; "windows" )
```

See also

- 154.11 Socket.Connect 7197
- 154.34 Socket.Read 7227
- 154.35 Socket.ReadAll 7230
- 154.37 Socket.ReadHex 7233
- 154.39 Socket.ReadLineHex 7236
- 154.40 Socket.ReadMLLP 7237

154.38.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 11st September 2014, last changed 12nd November 2015.

154.39 Socket.ReadLineHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ReadLineHex"; SocketID; Delimiter)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Delimiter

Which character to use as delimiter. Pass number from 0 to 255 for the byte to use. e.g. 13 for CR line ending. Special handling is done if you pass 1310 as delimiter to cover CRLF as a 2 byte delimiter.

13

Result Returns OK or error.

Description

The delimiter allows you to read from the buffer just one line. If two lines are in read buffer, we leave second line there for the next call.

Examples

Read one line and decode them from Windows text encoding into FileMaker:

```
$value = MBS( "Socket.Read"; $sock; 13; "windows" )
```

See also

- 154.11 Socket.Connect 7197
- 154.34 Socket.Read 7227
- 154.36 Socket.ReadAllHex 7232
- 154.37 Socket.ReadHex 7233
- 154.38 Socket.ReadLine 7234

154.39.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 11st September 2014, last changed 11st September 2014.

154.40 Socket.ReadMLLP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.ReadMLLP"; SocketID; length { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

length

Maximum number of bytes to read.

10

Encoding

Optional

The text encoding for result. Default is native.

UTF8

Result Returns text or error message.

Description

The text returned may be shorter than length bytes.

This function waits until a packet is complete (end byte received) and returns the text in the message.

Examples

Read up to 8 bytes and decode them from Windows text encoding into FileMaker:

```
$value = MBS( "Socket.ReadMLLP"; $sock; 8; "windows" )
```

See also

- 154.11 Socket.Connect 7197
- 154.34 Socket.Read 7227
- 154.35 Socket.ReadAll 7230
- 154.37 Socket.ReadHex 7233
- 154.38 Socket.ReadLine 7234

Created 18th August 2014, last changed 12nd November 2015.

154.41 Socket.RemoteIP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.RemoteIP"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns IP or error message.

Description

Only for TCP Sockets. For UDP Sockets, please use Socket.LastMessageIP.

See also

- 154.11 Socket.Connect 7197
- 154.22 Socket.LastMessageIP 7212
- 154.42 Socket.RemotePort 7239

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)
- [Network/TCP Send and Receive/TCP Receiver](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)

Created 18th August 2014, last changed 18th August 2014.

154.42 Socket.RemotePort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.RemotePort"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Return port number or error message.

Description

Only for TCP Sockets. For UDP Sockets, please use Socket.LastMessagePort.

See also

- 154.11 Socket.Connect 7197
- 154.23 Socket.LastMessagePort 7213
- 154.41 Socket.RemoteIP 7238

Example Databases

- [Network/Socket Test/Socket Test](#)
- [Network/TCP Send and Receive/TCP Receiver](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)

Created 18th August 2014, last changed 18th August 2014.

154.43 Socket.SSL.Accept

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SSL.Accept"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns OK or error.

Description

Calls internally Socket.SSL.Initialize if you did not yet call it.

See also

- 154.11 Socket.Connect 7197
- 154.44 Socket.SSL.Connect 7241
- 154.46 Socket.SSL.Initialize 7243

Created 18th August 2014, last changed 18th August 2014.

154.44 Socket.SSL.Connect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SSL.Connect"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns OK or error.

Description

Calls internally Socket.SSL.Initialize if you did not yet call it.

Instead of using this SSL socket, please consider letting CURL do the job: Use CURL.SetOptionConnectOnly to let CURL connect and then send data using CURL.SendData and CURL.SendText. For receiving, please use CURL.ReceiveData and CURL.ReceiveText. This gives you much more SSL options and proxy support.

See also

- 61.146 CURL.ReceiveData 1968
- 61.147 CURL.ReceiveText 1970
- 61.150 CURL.SendData 1975
- 61.151 CURL.SendText 1977
- 61.184 CURL.SetOptionConnectOnly 2032
- 154.11 Socket.Connect 7197
- 154.43 Socket.SSL.Accept 7240
- 154.46 Socket.SSL.Initialize 7243

Example Databases

- [Network/SSL/TCP Sender SSL](#)
- [Network/SSL/TCP Socket SSL](#)

Created 18th August 2014, last changed 10th April 2017.

154.45 Socket.SSL.GetMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SSL.GetMethod"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns OK on success.

Description

See also

- 154.11 Socket.Connect 7197
- 154.48 Socket.SSL.SetMethod 7245

Created 18th August 2014, last changed 18th August 2014.

154.46 Socket.SSL.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SSL.Initialize"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Result Returns OK or error.

Description

First you need to create TCP socket and accept or connect.

Optionally you can call Socket.SSL.Prepare first.

After Socket.SSL.Initialize you can call Socket.SSL.Connect or Socket.SSL.Accept.

Instead of using this SSL socket, please consider letting CURL do the job: Use CURL.SetOptionConnectOnly to let CURL connect and than send data using CURL.SendData and CURL.SendText. For receiving, please use CURL.ReceiveData and CURL.ReceiveText. This gives you much more SSL options and proxy support.

See also

- 61.146 CURL.ReceiveData 1968
- 61.147 CURL.ReceiveText 1970
- 61.150 CURL.SendData 1975
- 61.151 CURL.SendText 1977
- 61.184 CURL.SetOptionConnectOnly 2032
- 154.11 Socket.Connect 7197
- 154.43 Socket.SSL.Accept 7240
- 154.44 Socket.SSL.Connect 7241
- 154.47 Socket.SSL.Prepare 7244

Example Databases

- [Network/SSL/TCP Sender SSL](#)
- [Network/SSL/TCP Socket SSL](#)

Created 18th August 2014, last changed 10th April 2017.

154.47 Socket.SSL.Prepare

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SSL.Prepare"; SocketID)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Result Returns OK or error.

Description

See also

- 154.11 Socket.Connect 7197
- 154.46 Socket.SSL.Initialize 7243
- 154.48 Socket.SSL.SetMethod 7245

Created 18th August 2014, last changed 18th August 2014.

154.48 Socket.SSL.SetMethod

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SSL.SetMethod"; SocketID; Method)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Method

The new SSL method. Can be SSLv2, SSLv3, SSLv23, TLSv1.0, TLSv1.1, TLSv1.2 or DTLSv1.0. "SSLv2"

Result Returns OK or error.

Description

You first need to call Socket.SSL.Prepare to init SSL to the step where you can set method.

See also

- 154.11 Socket.Connect 7197
- 154.45 Socket.SSL.GetMethod 7242
- 154.47 Socket.SSL.Prepare 7244

Created 18th August 2014, last changed 18th August 2014.

154.49 Socket.SSL.UseCertificateFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SSL.UseCertificateFile"; SocketID; Path; Type)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Path

The path to the certificate file.

\$path

Type

The type of the file. Can be "PEM" or "ASN1".

"PEM"

Result Returns OK on success or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 154.11 Socket.Connect 7197

Created 18th August 2014, last changed 5th September 2014.

154.50 Socket.SSL.UsePrivateKeyFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SSL.UsePrivateKeyFile"; SocketID; Path; Type)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Path

The path to the certificate file.

\$path

Type

The type of the file. Can be "PEM" or "ASN1".

"PEM"

Result Returns OK on success or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 154.11 Socket.Connect 7197

Created 18th August 2014, last changed 5th September 2014.

154.51 Socket.SendMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SendMessage"; SocketID; IP; Port; Text { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

IP

The target IP or name.

"192.168.2.10"

Port

The target port to send to.

9000

Text

The text to send.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF8"

Result Returns the number of bytes written or an error message.

Description

Examples

Write something:

```
MBS( "Socket.SendMessage"; $sock; "Hello World" )
```

Write something with DOS text encoding:

```
MBS( "Socket.SendMessage"; $sock; "Umlauts: äöü"; "DOS" )
```

Send UDP Package:

```
Set Variable [ $r; Value:MBS("Socket.SendMessage"; $$sock; UDP Broadcast::BroadcastAddress; UDP Broadcast::Port; UDP Broadcast::Message To Send; "UTF-8") ]
```

```
If [ GetAsNumber($r) = 0 ]
```

```
Set Field [ UDP Broadcast::Send Result; "Failed to Send: "&$r ]
```

```
Else
```

```
Set Field [ UDP Broadcast::Send Result; "Sent "& $r& " Bytes." ]
End If
```

Opens stream to Midi device and plays notes with time offsets:

```
Set Variable [ $DeviceName; Value:"Your device name" ]
If [ $$stream = "" ]
Set Variable [ $$stream; Value:MBS("PortMidi.OpenOutput"; $DeviceName; 100; 10) ]
If [ MBS("ISError") ]
Show Custom Dialog [ "Failed to open Device"; $$stream ]
End If
End If
# Send notes
Set Variable [ $ts; Value:MBS( "PortMidi.TimeStamp" ) ]
Set Variable [ $r; Value:MBS("PortMidi.SendMessage"; $$stream; 144; 48; 95; $ts ) ]
Set Variable [ $r; Value:MBS("PortMidi.SendMessage"; $$stream; 128; 48; 0; $ts + 500 ) ]
Set Variable [ $r; Value:MBS("PortMidi.SendMessage"; $$stream; 144; 50; 95; $ts + 1000 ) ]
Set Variable [ $r; Value:MBS("PortMidi.SendMessage"; $$stream; 128; 50; 0; $ts + 1500 ) ]
Set Variable [ $r; Value:MBS("PortMidi.SendMessage"; $$stream; 144; 52; 95; $ts + 2000 ) ]
Set Variable [ $r; Value:MBS("PortMidi.SendMessage"; $$stream; 128; 52; 0; $ts + 2500 ) ]
```

See also

- [124.6 IsError](#) 6266
- [125.15 PortMidi.OpenOutput](#) 6356
- [125.19 PortMidi.SendMessage](#) 6361
- [125.26 PortMidi.TimeStamp](#) 6372
- [154.11 Socket.Connect](#) 7197
- [154.52 Socket.SendMessageHex](#) 7250

Example Databases

- [Network/UDP/UDP Broadcast](#)
- [Network/UDP/UDP Sender](#)

Created 18th August 2014, last changed 23th January 2017.

154.52 Socket.SendMessageHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SendMessageHex"; SocketID; IP; Port; Text)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

IP

The target IP or name.

"192.168.2.10"

Port

The target port to send to.

9000

Text

The text to send in hex encoding.

"48656C6C6F"

Result Returns the number of bytes written or an error message.

Description

Examples

Write some text:

MBS("Socket.SendMessageHex"; \$sock; "48656C6C6F")

See also

- 154.11 Socket.Connect 7197
- 154.51 Socket.SendMessage 7248

Created 18th August 2014, last changed 22nd April 2015.

154.53 Socket.SetBroadcast

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetBroadcast"; SocketID; Value)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Value

The new setting. 1 to enable to 0 to disable.
1

Result Returns OK or error.

Description

Examples

Enable Broadcast Mode:

```
Set Variable [ $r; Value:MBS("Socket.SetBroadcast"; $$sock; 1) ]
```

See also

- [154.11 Socket.Connect](#) 7197
- [154.13 Socket.GetBroadcast](#) 7203
- [154.29 Socket.NewUDPSocket](#) 7221

Example Databases

- [Network/UDP/UDP Broadcast](#)

154.53.1 Blog Entries

- [UDP Broadcast for FileMaker](#)
- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 22nd August 2015, last changed 26th January 2016.

154.54 Socket.SetDataAvailableEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	6.2	Yes	Yes	No	No	Yes

MBS("Socket.SetDataAvailableEvaluate"; SocketID; Expression)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

When new data arrives, this expression is evaluated, so you can call Socket.Read function.

Be aware that expression may be evaluated when just a few bytes are in the read buffer. So the data message you wait for may only be available partly. In that case, please read available bytes, check if whole packet/message arrived and if not, store read data for later and wait for next evaluation.

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the socket reference, so you can pass it to other functions if needed.

See also

- 125.23 PortMidi.SetDataAvailableEvaluate 6367
- 144.29 SerialPort.SetDataAvailableEvaluate 6967
- 148.19 Shell.GetDataAvailableEvaluate 7028
- 148.40 Shell.SetDataAvailableEvaluate 7050
- 154.11 Socket.Connect 7197
- 154.34 Socket.Read 7227
- 154.55 Socket.SetDataAvailableHandler 7253

154.54.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 24th November 2018.

154.55 Socket.SetDataAvailableHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	No	No	Yes

MBS("Socket.SetDataAvailableHandler"; SocketID; FileName; ScriptName)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

FileName

The name of the FileMaker File that contains the script

"MyDatabase.fp7"

ScriptName

The name of the script to run

"DataAvailable"

Result Returns OK or error message.

Description

When new data arrives, this script is called, so you can call Socket.Read function.

Be aware that script may be called when just a few bytes are in the read buffer. So the data message you wait for may only be available partly. In that case, please read available bytes, check if whole packet/message arrived and if not, store read data for later and wait for next script call.

The script parameter is the ID of the socket. You can associate additional values with Socket.SetTag function to the socket and use them in the script triggered.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Set script to be triggered if data is available:

```
Set Variable [ $r; Value:MBS("Socket.SetDataAvailableHandler"; $$sock; Get(FileName); "ReadMessage") ]
```

See also

- 125.24 PortMidi.SetDataAvailableHandler 6368
- 144.30 SerialPort.SetDataAvailableHandler 6968
- 154.1 Socket.AcceptNewConnection 7185

- 154.6 Socket.ClearDataAvailableHandler 7191
- 154.11 Socket.Connect 7197
- 154.29 Socket.NewUDPSocket 7221
- 154.34 Socket.Read 7227
- 154.54 Socket.SetDataAvailableEvaluate 7252
- 154.56 Socket.SetDataAvailableURL 7255
- 154.66 Socket.SetTag 7267

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)
- [Network/TCP Send and Receive/TCP Receiver](#)
- [Network/TCP Send and Receive/TCP Sender](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)
- [Network/TCP Send and Receive persistent connection/TCP Sender persistent connection](#)
- [Network/UDP/UDP Broadcast](#)
- [Network/UDP/UDP Receiver](#)

Created 18th August 2014, last changed 27th March 2019.

154.56 Socket.SetDataAvailableURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	6.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetDataAvailableURL"; SocketID; URL)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

URL

The URL to trigger.

Result Returns OK or error.

Description

\$\$ID\$\$ in the URL is replaced with socket ID.

Queries http/ftp/sftp URLs with CURL, other URLs passed to OS to open.

See also

- 154.11 Socket.Connect 7197
- 154.55 Socket.SetDataAvailableHandler 7253

154.56.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

154.57 Socket.SetErrorEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	6.2	Yes	Yes	No	No	Yes

MBS("Socket.SetErrorEvaluate"; SocketID; Expression)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

If the socket has an error, this expression is evaluated and you can react and close the socket.

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the socket reference, so you can pass it to other functions if needed.

See also

- 154.11 Socket.Connect

7197

154.57.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 17th June 2018.

154.58 Socket.SetErrorHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	No	No	Yes

MBS("Socket.SetErrorHandler"; SocketID; FileName; ScriptName)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

FileName

The name of the FileMaker File that contains the script

"MyDatabase.fp7"

ScriptName

The name of the script to run

"SocketError"

Result Returns OK or error message.

Description

If the socket has an error, this script is called and you can react and close the socket.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Create TCP Socket listening on a port:

```
Set Variable [ $$sock; Value:MBS("Socket.NewTCPSocket") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create Socket"; $$sock ]
Exit Script [ ]
End If
Set Variable [ $r; Value:MBS("Socket.SetNewConnectionHandler"; $$sock; Get(FileName); "NewConne-
tion") ]
Set Variable [ $r; Value:MBS("Socket.SetErrorHandler"; $$sock; Get(FileName); "SocketError") ]
Set Variable [ $r; Value:MBS("Socket.Listen"; $$sock; TCP Receiver::ListenPort) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create Socket"; $$sock ]
Exit Script [ ]
End If
```

See also

- 124.6 IsError 6266
- 154.1 Socket.AcceptNewConnection 7185
- 154.7 Socket.ClearErrorHandler 7192
- 154.11 Socket.Connect 7197
- 154.24 Socket.List 7214
- 154.25 Socket.Listen 7215
- 154.28 Socket.NewTCPSocket 7219
- 154.64 Socket.SetNewConnectionHandler 7264

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)
- [Network/TCP Send and Receive/TCP Receiver](#)
- [Network/TCP Send and Receive/TCP Sender](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)
- [Network/TCP Send and Receive persistent connection/TCP Sender persistent connection](#)

Created 18th August 2014, last changed 17th June 2018.

154.59 Socket.SetErrorURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	6.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetErrorURL"; SocketID; URL)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

URL

The URL to trigger.

Result Returns OK or error.

Description

\$\$ID\$\$ in the URL is replaced with socket ID.

Queries http/ftp/sftp URLs with CURL, other URLs passed to OS to open.

See also

- 154.11 Socket.Connect

7197

154.59.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

154.60 Socket.SetMulticastInterface

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	7.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetMulticastInterface"; SocketID; Interface)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Interface

The IPv4 for the interface.

"192.168.1.123"

Result Returns OK or error.

Description

If interface is empty text, we connect to all interfaces.

See also

- 154.11 Socket.Connect 7197
- 154.14 Socket.GetMulticastInterface 7204
- 154.62 Socket.SetMulticastTimeToLive 7262

154.60.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 19th October 2017, last changed 19th October 2017.

154.61 Socket.SetMulticastLoop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetMulticastLoop"; SocketID; Value)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Value

The new setting. Either 1 to loop or 0 to not loop.
1

Result Returns OK or error.

Description

Examples

Enable multicast loop:

```
Set Variable [ $r; Value:MBS("Socket.SetMulticastLoop"; $$sock; 0) ]
```

See also

- [154.11 Socket.Connect](#) 7197
- [154.15 Socket.GetMulticastLoop](#) 7205
- [154.29 Socket.NewUDPSocket](#) 7221

Example Databases

- [Network/UDP/UDP Broadcast](#)

154.61.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 22nd August 2015, last changed 26th January 2016.

154.62 Socket.SetMulticastTimeToLive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetMulticastTimeToLive"; SocketID; Value)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Value

The new time to live value.

5

Result Returns OK or error.

Description

Range from 0 to 255.

See also

- 154.11 Socket.Connect 7197
- 154.16 Socket.GetMulticastTimeToLive 7206
- 154.60 Socket.SetMulticastInterface 7260

154.62.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 22nd August 2015, last changed 22nd August 2015.

154.63 Socket.SetNewConnectionEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	6.2	Yes	Yes	No	No	Yes

MBS("Socket.SetNewConnectionEvaluate"; SocketID; Expression)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

"Let (\$\$Done = 1 ; 1)"

Result Returns OK or error.

Description

This expression is evaluated for listening TCP Socket when new connections arrive so you can call Socket.AcceptNewConnection.

Be aware that FileMaker Server does not allow the plugin to operate if no script is running. So if you use sockets there, make sure a script is running or paused while you expect an answer coming in.

In the expression the text \$\$ID\$\$ will be replaced when evaluated with the socket reference, so you can pass it to other functions if needed.

See also

- 154.1 Socket.AcceptNewConnection 7185
- 154.11 Socket.Connect 7197
- 154.64 Socket.SetNewConnectionHandler 7264

154.63.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)

Created 29th March 2016, last changed 17th June 2018.

154.64 Socket.SetNewConnectionHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	No	No	Yes

MBS("Socket.SetNewConnectionHandler"; SocketID; FileName; ScriptName)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

FileName

The name of the FileMaker File that contains the script

"MyDatabase.fp7"

ScriptName

The name of the script to run

"NewConnection"

Result Returns OK or error message.

Description

This script is called for listening TCP Socket when new connections arrive so you can call Socket.AcceptNewConnection.

Be aware that FileMaker Server does not allow the plugin to operate if no script is running. So if you use sockets there, make sure a script is running or paused while you expect an answer coming in.

The script parameter is the ID of the socket. You can associate additional values with Socket.SetTag function to the socket and use them in the script triggered.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 154.1 Socket.AcceptNewConnection 7185
- 154.8 Socket.ClearNewConnectionHandler 7193
- 154.11 Socket.Connect 7197
- 154.25 Socket.Listen 7215
- 154.28 Socket.NewTCPSocket 7219
- 154.58 Socket.SetErrorHandler 7257

154.64. <i>SOCKET.SETNEWCONNECTIONHANDLER</i>	7265
• 154.63 Socket.SetNewConnectionEvaluate	7263
• 154.65 Socket.SetNewConnectionURL	7266
• 154.66 Socket.SetTag	7267

Example Databases

- Network/HTTP Server hosted
- Network/HTTP Server local
- Network/Socket Test/Socket Test
- Network/TCP Send and Receive/TCP Receiver
- Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection

Created 18th August 2014, last changed 27th March 2019.

154.65 Socket.SetNewConnectionURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	6.5	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetNewConnectionURL"; SocketID; URL)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

URL

The URL to trigger.

Result Returns OK or error.

Description

\$\$ID\$\$ in the URL is replaced with socket ID.

Queries http/ftp/sftp URLs with CURL, other URLs passed to OS to open.

See also

- 154.1 Socket.AcceptNewConnection 7185
- 154.11 Socket.Connect 7197
- 154.64 Socket.SetNewConnectionHandler 7264

154.65.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

154.66 Socket.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	8.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetTag"; SocketID; value)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

value

The new tag value.

Get(RecordID)

Result Returns OK or error.

Description

See also Socket.GetTag.

With the tag, we allow you to associate a text with the socket, for example a record ID.

See also

- 154.11 Socket.Connect 7197
- 154.17 Socket.GetTag 7207
- 154.55 Socket.SetDataAvailableHandler 7253
- 154.64 Socket.SetNewConnectionHandler 7264

154.66.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 6th June 2018, last changed 6th June 2018.

154.67 Socket.SetTimeToLive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Socket.SetTimeToLive"; SocketID; Value)

Parameters

SocketID

The socket ID received by Socket.Connect function.
\$sock

Value

The new time to live value.
5

Result Returns OK or error.

Description

Range from 0 to 255.

See also

- 154.11 Socket.Connect 7197
- 154.18 Socket.GetTimeToLive 7208

154.67.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 22nd August 2015, last changed 22nd August 2015.

154.68 Socket.Write

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.Write"; SocketID; Text { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Text

The text to send.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF8"

Result Returns the number of bytes written or an error message.

Description

Returns number of bytes sent. It may take a few milliseconds till data arrives on the other socket.

Examples

Write something:

```
MBS( "Socket.Write"; $sock; "Hello World" )
```

Write something with DOS text encoding:

```
MBS( "Socket.Write"; $sock; "Umlauts: äöü"; "DOS" )
```

Connect to a HTTP Server and wait for answer:

```
Set Variable [ $r; Value:MBS("Trace") ]
```

```
Set Variable [ $sock; Value:MBS("Socket.Connect"; TCP Socket::DomainOrIP; 80) ]
```

```
If [ MBS("IsError") ]
```

```
Show Custom Dialog [ "Error"; $sock ]
```

```
Exit Script [ ]
```

```
End If
```

```
Set Variable [ $request; Value:"GET "& TCP Socket::Path& " HTTP/1.0$Host: "& TCP Socket::Domain-OrIP& "$$" ]
```

```
Set Variable [ $request; Value:MBS("String.ReplaceNewline"; $request; 2) ]
```

```
Set Field [ TCP Socket::RequestUsed; $request ]
```

```
Set Variable [ $r; Value:MBS("Socket.Write"; $sock; $request) ]
```

```
Pause/Resume Script [ Duration (seconds): 1 ]
```

```

Set Variable [ $data; Value:MBS("Socket.Read"; $sock; 1000) ]
Set Variable [ $data; Value:MBS("String.ReplaceNewline"; $data; 1) ]
Set Field [ TCP Socket::Result; $data ]
Set Variable [ $r; Value:MBS("Socket.Close"; $sock) ]

```

Send set zero command to scale for MT-SICS (METTLER TOLEDO Standard Interface Command Set):

```
MBS( "Socket.Write"; $sock; "Z" & Char(13) & Char(10) )
```

Send print weight command to scale for MT-SICS (METTLER TOLEDO Standard Interface Command Set):

```
MBS( "Socket.Write"; $sock; "P" & Char(13) & Char(10) )
```

See also

- [124.6 IsError](#) 6266
- [154.9 Socket.Close](#) 7194
- [154.11 Socket.Connect](#) 7197
- [154.34 Socket.Read](#) 7227
- [154.70 Socket.WriteHex](#) 7272
- [154.71 Socket.WriteMLLP](#) 7274
- [124.52 Trace](#) 6326

Example Databases

- [Network/HTTP Server hosted](#)
- [Network/HTTP Server local](#)
- [Network/Socket Test/Socket Test](#)
- [Network/SSL/TCP Sender SSL](#)
- [Network/SSL/TCP Socket SSL](#)
- [Network/TCP Send and Receive/TCP Receiver](#)
- [Network/TCP Send and Receive/TCP Sender](#)
- [Network/TCP Send and Receive persistent connection/TCP Receiver persistent connection](#)
- [Network/TCP Send and Receive persistent connection/TCP Sender persistent connection](#)
- [Network/TCP Socket](#)

Created 18th August 2014, last changed 19th September 2019.

154.69 Socket.WriteByte

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.WriteByte"; SocketID; Value)

Parameters**SocketID**

The socket ID received by Socket.Connect function.

\$sock

Value

The byte value. Range from 0 to 255.

13

Result Returns OK or error message.

Description

This is useful if you need to send single control bytes like message start or message end.

See also

- 154.11 Socket.Connect 7197
- 154.70 Socket.WriteHex 7272
- 154.71 Socket.WriteMLLP 7274

Created 18th August 2014, last changed 18th August 2014.

154.70 Socket.WriteHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.WriteHex"; SocketID; Text)

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Text

The text to send in hex encoding.

"48656C6C6F"

Result Returns the number of bytes written or an error message.

Description

You pass the text hex encoded. For example for "Hello" you pass "48656C6C6F".

Examples

Write some text:

```
MBS( "Socket.WriteHex"; $sock; "48656C6C6F" )
```

Send some command:

```
// sends
// <STX><6><CMD_ON><channels><CHECKSUM><ETX>
// In Hex : 0x02 0x06 0x4f 0x07 0xa2 0x03
```

```
MBS( "Socket.WriteHex"; $sock; "02064F07A203" )
```

Connect to IP and send command and wait for answer:

```
Set Variable [ $sock; Value:MBS("Socket.Connect";test::IP; 16128) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to connect" ]
Else
Set Variable [ $write; Value:MBS("Socket.WriteHex"; $sock; test::query) ]
Pause/Resume Script [ Duration (seconds): 1 ]
Set Field [ test::response; MBS("Socket.ReadHex"; $sock; 20) ]
Show Custom Dialog [ "Hex: " & test::response & $& "Text: " & MBS( "Text.DecodeFromHex"; test::response) ]
Set Variable [ $sock; Value:MBS("Socket.Close"; $sock) ]
End If
```

154.70. *SOCKET.WRITEHEX*

7273

See also

- 124.6 IsError 6266
- 154.9 Socket.Close 7194
- 154.11 Socket.Connect 7197
- 154.34 Socket.Read 7227
- 154.37 Socket.ReadHex 7233
- 154.68 Socket.Write 7269
- 154.69 Socket.WriteByte 7271
- 154.71 Socket.WriteMLLP 7274
- 164.17 Text.DecodeFromHex 7800

154.70.1 Blog Entries

- [More Text Encoding conversion for FileMaker](#)

Created 18th August 2014, last changed 22nd March 2016.

154.71 Socket.WriteMLLP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
154 Socket	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Socket.WriteMLLP"; SocketID; Text { ; Encoding })

Parameters

SocketID

The socket ID received by Socket.Connect function.

\$sock

Text

The text to send.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF8"

Result Returns the number of bytes written or an error message.

Description

This function wraps the given text into a MLLP packet by adding start and end bytes.

Examples

Write something:

```
MBS( "Socket.WriteMLLP"; $sock; "Hello World" )
```

Write something with DOS text encoding:

```
MBS( "Socket.WriteMLLP"; $sock; "Umlauts: äöü"; "DOS" )
```

See also

- 154.11 Socket.Connect 7197
- 154.68 Socket.Write 7269
- 154.69 Socket.WriteByte 7271
- 154.70 Socket.WriteHex 7272

Created 18th August 2014, last changed 12nd November 2015.

Chapter 155

Speech

Speak text on Mac, iOS & Windows.

Use SpeechRecognition functions on MacOS 10.15 or iOS 10 and newer to recognize text from audio files.

155.1 Speech.AvailableVoices

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	6.4	Yes	Yes	No	No	Yes

MBS("Speech.AvailableVoices" { ; Mode })

(old name: Text.Speak.AvailableVoices)

Parameters

Mode

Optional

Pass 1 to get list of identifiers. By default or pass 0 to get list of names.

0

Result Returns list or error.

Description

This returns the identifiers for voices.

Examples

Query voices:

MBS("Speech.AvailableVoices")

Created 2nd August 2016, last changed 13th July 2018.

155.2 Speech.IsPaused

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	8.3	Yes	Yes	No	No	Yes

MBS("Speech.IsPaused")

Result Returns boolean or error.

Description

Returns 1 if paused or 0 if not.

See also

- 155.4 Speech.Pause

7278

155.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 13th July 2018, last changed 13th July 2018.

155.3 Speech.IsSpeaking

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	7.5	Yes	Yes	No	No	Yes

MBS("Speech.IsSpeaking")

(old name: Text.IsSpeaking)

Result Returns 1, 0 or error.

Description

Returns 1 if voice is speaking or 0 if not.

Created 17th October 2017, last changed 13th July 2018.

155.4 Speech.Pause

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	8.3	Yes	Yes	No	No	Yes

MBS("Speech.Pause")

Result Returns OK or error.

Description

Examples

Test pausing:

```
Variable setzen [ $r ; Wert: MBS( "Speech.Speak"; "Hello World, just a test" ) ]
Scriptpause setzen [ Dauer (Sekunden): 1 ]
Variable setzen [ $r ; Wert: MBS( "Speech.Pause" ) ]
Scriptpause setzen [ Dauer (Sekunden): 1 ]
Variable setzen [ $r ; Wert: MBS( "Speech.IsPaused" ) ]
Variable setzen [ $r ; Wert: MBS( "Speech.Resume" ) ]
```

See also

- [155.2 Speech.IsPaused](#) 7276
- [155.5 Speech.Resume](#) 7279
- [155.6 Speech.Speak](#) 7280

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

155.4.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 13th July 2018, last changed 13th July 2018.

155.5 Speech.Resume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	8.3	Yes	Yes	No	No	Yes

MBS("Speech.Resume")

Result Returns OK or error.

Description

See also

- 155.4 Speech.Pause

7278

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

155.5.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 13th July 2018, last changed 13th July 2018.

155.6 Speech.Speak

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	6.3	Yes	Yes	No	No	Yes

MBS("Speech.Speak"; Text { ; Voice; Wait; Volume; Rate })

(old name: Text.Speak)

Parameters

Text

The text to speak

"Hello World"

Voice

Optional

The voice to use. Can be empty to use default voice.

"Agnes"

Wait

Optional

Whether to wait for completion. Pass 1 to wait or 0 to speak while your script continues. Default is 0.

1

Volume

Optional

Available in MBS FileMaker Plugin 7.2 or newer.

The volume to use. Default is full volume. Range from 0.0 (silent) to 1.0 (full).

1.0

Rate

Optional

Available in MBS FileMaker Plugin 7.2 or newer.

The speak rate. Default 1.0 for normal speed. Range from 0.0 to 2.0. 2.0 would be double speed while 0.5 is half speed. If the voice doesn't support rate, you hear no difference!

1.0

Result Returns OK or error.

Description

This is a function doing similar work as the speak script step in FileMaker.

If called with empty text, you can pass voice to test if voice exists. You get back OK if voice exists or an error if not.

If called without text, you stop existing speech.

Due to a bug in FM 13/14/15, the speak script step may freeze. This function is a suitable workaround until FileMaker fixes the issue.

You can use `Text.IsSpeaking` to check if asynchronously speaking is in use.

Examples

Say Hello

```
MBS( "Speech.Speak"; "Hello World")
```

Count to 100:

```
Set Variable [ $i; Value:0 ]
Loop
Set Variable [ $i; Value:$i + 1 ]
Set Field [ Speak Test::Counter; $i ]
Set Variable [ $r; Value:MBS( "Speech.Speak"; $i; ""; 1) ]
Commit Records/Requests [ ]
Exit Loop If [ $i >100 ]
End Loop
```

Speak with Windows voice:

```
MBS( "Speech.Speak"; "Hello World"; "Microsoft Hedda Desktop - German"; 1)
```

Speak with half volume:

```
MBS( "Speech.Speak"; "Hallo Leute"; ""; 0; 0,5 )
```

Using embedded text commands on Mac:

```
# literal speaking
MBS( "Speech.Speak"; "Hello [ [ char LTRL ] ] cat [ [ char NORM ] ] cat."; ""; 1)
# use emphasis:
MBS( "Speech.Speak"; "Do [ [ emph + ] ] not [ [ emph - ] ] over tighten the screw.")

# see
# https://developer.apple.com/library/content/documentation/UserExperience/Conceptual/SpeechSynthesisProgrammingGuide/FineTuning/FineTuning.html
```

See also

- 155.4 `Speech.Pause`

7278

Example Databases

- [Mac and iOS/MapKit/MapView BeeExample](#)

Created 30th May 2016, last changed 13th July 2018.

155.7 SpeechRecognition.AuthorizationStatus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("SpeechRecognition.AuthorizationStatus")

Result Returns status or error.

Description

Returns your app's current authorization to perform speech recognition.

The user can reject your app's request to perform speech recognition, but your request can also be denied if speech recognition is not supported on the device. The app can also change your app's authorization status at any time from the Settings app.

Value	Description
NotDetermined	The app's authorization status has not yet been determined.
Denied	The user denied your app's request to perform speech recognition.
Restricted	The device prevents your app from performing speech recognition.
Authorized	The user granted your app's request to perform speech recognition.

Example Databases

- [Mac and iOS/Speech Recognition](#)

Created 22nd August 2019, last changed 22nd August 2019.

155.8 SpeechRecognition.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("SpeechRecognition.Initialize")

Result Returns OK or error.

Description

Returns OK on success for MacOS 10.15 and iOS 10 or newer.

See also

- 155.9 SpeechRecognition.IsInitialized 7284
- 155.10 SpeechRecognition.Recognize 7285

Example Databases

- [Mac and iOS/Speech Recognition](#)

Created 22nd August 2019, last changed 22nd August 2019.

155.9 SpeechRecognition.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("SpeechRecognition.IsInitialized")

Result Returns 1, 0 or error.

Description

Returns 1 if initialized.

See also

- 155.8 SpeechRecognition.Initialize

7283

Example Databases

- [Mac and iOS/Speech Recognition](#)

Created 22nd August 2019, last changed 22nd August 2019.

155.10 SpeechRecognition.Recognize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("SpeechRecognition.Recognize"; FilePath { ; Locale; Hint; requiresOnDeviceRecognition; contextualStrings })

Parameters

FilePath

The file path to the audio file to analyze.

"/Users/cs/Desktop/test.m4a"

Locale

Optional

The locale to use. Leave empty to use user's current locale.

"en-US"

Hint

Optional

The hint on what kind of speech recognition being performed Can be Search, Dictation, Confirmation or Unspecified. Default is Unspecified.

"Dictation"

requiresOnDeviceRecognition

Optional

Whether you require on device recognition. Pass 1 to require on device recognition or 0 for the case it doesn't matter.

1

contextualStrings

Optional

Phrases which should be recognized even if they are not in the system vocabulary.

"Monkeybread Software\$Plugin"

Result Returns text or error.

Description

The plugin creates a new speech recognition request based on the given audio file. Then we let the system recognize the text and return it to you.

This may take a while and the plugin returns after a few seconds when work is done.

Requires MacOS 10.15 or iOS 10 or newer.

See also

- 155.8 SpeechRecognition.Initialize

7283

Example Databases

- [Mac and iOS/Speech Recognition](#)

Created 22nd August 2019, last changed 22nd August 2019.

155.11 SpeechRecognition.RequestAuthorization

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("SpeechRecognition.RequestAuthorization")

Result Returns OK or error.

Description

Asks the user to allow your app to perform speech recognition.

Call this method before performing any other tasks associated with speech recognition. This method executes asynchronously, returning shortly after you call it.

This may show a dialog and user may confirm later.

When your app's authorization status is NotDetermined, this method causes the system to prompt the user to grant or deny permission for your app to use speech recognition. The prompt includes the custom message you specify in the NSSpeechRecognitionUsageDescription key of your app's Info.plist file. The user's response is saved so that future calls to this method do not prompt the user again.

Examples

Request authorization:

```
Set Variable [ $r; MBS( "SpeechRecognition.RequestAuthorization" ) ]
```

Example Databases

- [Mac and iOS/Speech Recognition](#)

Created 22nd August 2019, last changed 22nd August 2019.

155.12 SpeechRecognition.SupportedLocales

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("SpeechRecognition.SupportedLocales")

Result Returns list of locale identifiers or error.

Description

Returns the set of locales that are supported by the speech recognizer.

This method returns the locales for which speech recognition is supported. Support for a locale does not guarantee that speech recognition is currently possible for that locale. For some locales, the speech recognizer requires an active Internet connection to communicate with Apple's servers. If the speech recognizer is currently unable to process requests, available returns false.

Speech recognition supports the same locales that are supported by the keyboard's dictation feature.

Examples

Query locales

```
Set Variable [ $list; Value: MBS( "SpeechRecognition.SupportedLocales" ) ]
```

Example result: nl-NL

```
es-MX
fr-FR
zh-TW
it-IT
vi-VN
fr-CH
es-CL
en-ZA
ko-KR
ca-ES
ro-RO
en-PH
es-419
en-CA
en-SG
en-IN
en-NZ
it-CH
fr-CA
hi-IN
da-DK
de-AT
```

pt-BR
yue-CN
zh-CN
sv-SE
hi-IN-translit
es-ES
ar-SA
hu-HU
fr-BE
en-GB
ja-JP
zh-HK
fi-FI
tr-TR
nb-NO
en-ID
en-SA
pl-PL
ms-MY
cs-CZ
el-GR
id-ID
hr-HR
en-AE
he-IL
ru-RU
wuu-CN
de-DE
de-CH
en-AU
nl-BE
th-TH
pt-PT
sk-SK
en-US
en-IE
es-CO
hi-Latn
uk-UA
es-US

Example Databases

- [Mac and iOS/Speech Recognition](#)

Created 22nd August 2019, last changed 22nd August 2019.

155.13 SpeechRecognition.SupportsOnDeviceRecognition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
155 Speech	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("SpeechRecognition.SupportsOnDeviceRecognition" { ; Locale })

Parameters

Locale

Optional

The locale to use. Leave empty to use user's current locale.

"en-US"

Result Returns 1, 0 or error.

Description

Returns 1 if supported or 0 if not.

Examples

Check for on device recognition for US-English:

MBS("SpeechRecognition.SupportsOnDeviceRecognition"; "en-US")

Example Databases

- [Mac and iOS/Speech Recognition](#)

Created 22nd August 2019, last changed 22nd August 2019.

Chapter 156

SQL

Connect to SQL databases and query data or run SQL commands.

Use this functions to connect to foreign databases. You can run queries, execute SQL statements and work with stored procedures. We support this database types: CubeSQL, Centura SQLBase, DB2, Firebird, Informix, InterBase, MariaDB, Microsoft Access, Microsoft SQL Server, MySQL, ODBC, Oracle Database Server, PostgreSQL, SQL Anywhere, SQLite, SQLCipher and Sybase.

If you look for SQL functions within FileMaker database, please check our FM SQL functions.

156.1 FM.SQL.InsertRecordsToSQL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 80 FMSQL 156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "FM.SQL.InsertRecordsToSQL"; SQLref; Connection; InsertTableName; FieldNames { ; StartRow; EndRow; Replace } )
```

Parameters

SQLref

The reference number returned by FM.SQL.Execute function.

\$SQLRef

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

InsertTableName

The name of the table to insert record into.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.
 "Model\$Names"

StartRow

Optional

The index of the start row. First row is 0. Pass -1 or nothing for default which is starting with row 0.
 -1

EndRow

Optional

The index of the end row. First row is 0. Last Row would be FM.SQL.RowCount-1. Pass -1 to use all rows and the plugin will internally use RowCount-1.
 -1

Replace

Optional

Available in MBS FileMaker Plugin 7.1 or newer.

Set to 1 to replace existing entries. Currently available for MySQL and databases with same syntax.
 0

Result Returns OK or error.

Description

This function allows to easily copy a lot of records from a query in FileMaker database into a SQL database. Please provide field names in other table. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Reports an error if field name list doesn't match column count of the query result.

Function will fail if data types in source and dest fields do not match for assignment. e.g. date and time fields will not work, only timestamp fields.

For insert within FileMaker, please use FM.SQL.InsertRecords.

Examples

Insert Records to SQL database:

```
Set Variable [ $InsertResult; Value:MBS( "FM.SQL.InsertRecordsToSQL"; $Records; $connection; $BaseTableName; $FieldNames) ]
```

Copy records to SQLite:

```
Set Variable [ $Connection ; Value: MBS("SQL.NewConnection") ]
# Tell plugin where SQLite library is
Set Variable [ $result ; Value: MBS("SQL.InternalSQLiteLibrary.Activate") ]
# Tell plugin we want to use SQLite
Set Variable [ $result ; Value: MBS("SQL.SetClient"; $Connection; "SQLite") ]
# Connect to database in read/write/create mode. Creates new file if none exists.
Set Variable [ $result ; Value: MBS("SQL.Connect"; $Connection; "/Users/cs/Desktop/mydatabase.sqlite") ]
```



```

If [ $result = "OK" ]
# Query records in FileMaker
Set Variable [ $Records ; Value: MBS( "FM.SQL.Execute"; Get(FileName); "SELECT FirstName, Last-
Name, Birthday FROM People" ) ]
# Transfer to other database
Set Variable [ $Records ; Value: MBS( "FM.SQL.InsertRecordsToSQL"; $Records; $Connection; "People";
"FirstName$LastName$Birthday" ) ]
# Cleanup
Set Variable [ $result2 ; Value: MBS("SQL.Commit"; $Connection) ]
Set Variable [ $result2 ; Value: MBS( "FM.SQL.Release"; $Records ) ]
If [ $result = "OK" ]
Show Custom Dialog [ "Error: " & $result ]
Else
Show Custom Dialog [ "Record exported." ]
End If
End If
Set Variable [ $result2 ; Value: MBS("SQL.FreeConnection"; $Connection) ]

```

See also

- [80.26 FM.SQL.Execute](#) 4138
- [80.30 FM.SQL.InsertRecords](#) 4146
- [109.18 Matrix.InsertRecordsToSQL](#) 5800
- [156.7 SQL.Commit](#) 7300
- [156.8 SQL.Connect](#) 7302
- [156.10 SQL.Execute](#) 7309
- [156.69 SQL.InsertRecords](#) 7397
- [156.70 SQL.InternalSQLiteLibrary.Activate](#) 7399
- [156.80 SQL.NewConnection](#) 7412
- [156.97 SQL.SetClient](#) 7434

Example Databases

- [SQL to other databases/SQL Export](#)
- [Third Party/FileMaker Snippet Storage](#)

156.1.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)

- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS FileMaker Plugin 6.4 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.4pr3](#)

156.1.2 FileMaker Magazin

- Ausgabe 3/2018, Seite 34

Created 1st August 2016, last changed 7th November 2018.

156.2 SQL.Cancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Cancel"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns "OK" or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_command.html

See also

- 156.79 SQL.NewCommand

7408

Created 18th August 2014, last changed 10th January 2020.

156.3 SQL.ClientVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.ClientVersion"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Result Returns client version number or error.

Description

The higher word contains the major client version (the XX value in the XX.YY version number); the lower word contains the minor client version (the YY value in the XX.YY version number).

If an DBMS client was not set calling ClientVersion method return an error.

See also

- 156.80 SQL.NewConnection

7412

Created 18th August 2014, last changed 18th August 2014.

156.4 SQL.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Close"; Command)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns "OK" or error message.

Description

Use the Close method to close the command explicitly.

A command will be implicitly closed in SQL.FreeCommand, so you don't have to call Close method explicitly.

See also

- 156.18 SQL.FreeCommand 7324
- 156.79 SQL.NewCommand 7408

Created 18th August 2014, last changed 13th January 2015.

156.5 SQL.CommandText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.CommandText"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result The command text or error message.

Description

Examples

Query command:

```
Set Variable [ $con ; Value: MBS( "SQL.NewConnection" ) ]
```

```
Set Variable [ $cmd ; Value: MBS( "SQL.NewCommand"; $con; "SELECT * FROM Table" ) ]
```

```
Show Custom Dialog [ MBS( "SQL.CommandText"; $cmd ) ]
```

See also

- 156.6 SQL.CommandType 7299
- 156.79 SQL.NewCommand 7408
- 156.80 SQL.NewConnection 7412
- 156.100 SQL.SetCommandText 7439

Created 18th August 2014, last changed 25th November 2017.

156.6 SQL.CommandType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.CommandType"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns command type or error message.

Description

Returns one of the following values:

CmdUnknown	Command type is not defined. Library will detect command type automatically when needed.
CmdSQLStmt	Command is an SQL statement.
CmdSQLStmtRaw	Command is an SQL statement that mustn't be interpreted by SQLAPI++.
CmdStoredProc	Command is a stored procedure or a function.

see also

https://www.sqlapi.com/ApiDoc/class_s_a_command.html

See also

- 156.5 SQL.CommandText 7298
- 156.79 SQL.NewCommand 7408
- 156.100 SQL.SetCommandText 7439

Created 18th August 2014, last changed 10th January 2020.

156.7 SQL.Commit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Commit"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Result Returns "OK" or error message.

Description

Use Commit method to write transaction changes permanently to a database. It commits the work of all commands that associated with that connection.

All changes to the database since the last commit are made permanent and cannot be undone. Before a commit, all changes made since the start of the transaction can be rolled back using SQL.Rollback method.

Examples

Run something in transaction:

```
$Command = MBS("SQL.NewCommand"; $Connection; "BEGIN TRANSACTION"
// run it
$result2 = MBS("SQL.Execute"; $Command)
// and free command
$result4 = MBS("SQL.FreeCommand"; $Command)

// create command
$Command = MBS("SQL.NewCommand"; $Connection; "some other SQL command here"
// run it
$result2 = MBS("SQL.Execute"; $Command)
// and free command
$result4 = MBS("SQL.FreeCommand"; $Command)

// create command
$Command = MBS("SQL.NewCommand"; $Connection; "some other SQL command here"
// run it
$result2 = MBS("SQL.Execute"; $Command)
// and free command
$result4 = MBS("SQL.FreeCommand"; $Command)

// commit changed
$result3 = MBS("SQL.Commit"; $Connection)
```

See also

<i>156.7. SQL.COMMIT</i>	7301
• 156.1 FM.SQL.InsertRecordsToSQL	7291
• 156.10 SQL.Execute	7309
• 156.18 SQL.FreeCommand	7324
• 156.68 SQL.InsertOrUpdateRecords	7394
• 156.79 SQL.NewCommand	7408
• 156.80 SQL.NewConnection	7412
• 156.86 SQL.Rollback	7420
• 156.106 SQL.SetParamAsContainer	7450
• 156.117 SQL.SetParamTypesValues	7467
• 156.120 SQL.SetParamValues	7472

Example Databases

- [SQL to other databases/MySQL example](#)
- [SQL to other databases/SQL Export](#)
- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)
- [Third Party/FileMaker Snippet Storage](#)

156.7.1 FileMaker Magazin

- Ausgabe 1/2016, Seite 30
- Ausgabe 4/2015, Seite 16

Created 18th August 2014, last changed 25th October 2018.

156.8 SQL.Connect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Connect"; Connection; DBString { ; Username; Password; Client })

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

DBString

Database connection string. Please specify port with comma after IP, not double colon.

"/test/database.db"

Username

Optional

The user name to use when establishing the connection.

""

Password

Optional

The password to use when establishing the connection.

""

Client

Optional

Optional, one of the following client values: CubeSQL, SQLAnywhere, ODBC, Oracle, SQLServer, Firebird, InterBase, SQLBase, DB2, Informix, Sybase, MySQL, PostgreSQL or SQLite.

"SQLite"

Result Returns "OK" or error message.

Description

Be aware that for most database servers, you need to specify client library with SQL.SetConnectionOption.

For server scripting, please use one connection for each script running on server, so multiple scripts running at the same data don't access the same connection or command objects in memory. And each connection has its own transaction and error state.

see also

https://www.sqlapi.com/ApiDoc/class_s_a_connection.html

If you get a crash here on MacOS, please check if crash report says Code Signature Invalid. Then you may need to code sign the dylib yourself to match the code signature of your runtime application.

Connect to Microsoft Access, FileMaker Server (or Pro), Microsoft Visual FoxPro and others via ODBC.

Examples

Connect to an Oracle Database:

```
MBS("SQL.Connect"; $Connection; "MyDatabase"; "MyName"; "MyPass"; "Oracle")
```

Connect to a Microsoft SQL Server Database:

```
MBS("SQL.Connect"; $Connection; "MyServer\SQLEXPRESS@pubs"; ""; ""; "SQLServer")
```

Connect to a Sybase Database:

```
MBS("SQL.Connect"; $Connection; "MyServer@MyDatabase"; $name; $pass; "Sybase")
```

Connect to a DB2 Database:

```
MBS("SQL.Connect"; $Connection; "Server=myAddress:myPortNumber;Database=myDataBase;UID=myUser-  
name;PWD=myPassword; CurrentSchema=mySchema;"; ""; ""; "DB2")
```

Connect to a Informix Database:

```
MBS("SQL.Connect"; $Connection; "Database=myDataBase;Host=192.168.10.10;Server=db_engine_tcp;Ser-  
vice=1492;"; $user; $pass; "Informix")
```

Connect to a InterBase Database:

```
MBS("SQL.Connect"; $Connection; "MyServer:MyDatabase"; $name; $pass; "InterBase")
```

Connect to a SQLBase Database:

```
MBS("SQL.Connect"; $Connection; "MyDatabase"; $name; $pass; "SQLBase")
```

Connect to a MySQL Database:

```
MBS("SQL.Connect"; $Connection; "MyServer@MyDatabase"; $name; $pass; "MySQL")
```

Connect to a PostgreSQL Database:

```
MBS("SQL.Connect"; $Connection; "MyServer@MyDatabase"; $name; $pass; "PostgreSQL")
```

Connect to a ODBC Database (e.g. Microsoft Access):

```
MBS("SQL.Connect"; $Connection; "Driver= { Microsoft Access Driver (*.mdb, *.accdb) } ;Dbq=C:\my-  
database.accdb;Uid=Admin;Pwd=;"; $name; $pass; "ODBC")
```

Connect to a local SQLite Database:

```
MBS("SQL.Connect"; $Connection; "/Users/cs/Desktop/test.db"; ""; ""; "SQLite")
```

Connect to Visual FoxPro via ODBC:

```
MBS("SQL.Connect"; $Connection; "Driver= { Microsoft Visual FoxPro Driver } ;SourceType=DBC;SourceDB=c:\myvf-  
pdb.dbc;Exclusive=No;NULL=NO;Collate=Machine;BACKGROUNDFETCH=NO;DELETED=NO;"; "";  
""; "ODBC")
```

Connect to a new in memory SQLite Database:

```
MBS("SQL.Connect"; $Connection; ":memory:"; ""; ""; "SQLite")
```

Connect to a MySQL Database via path:

```
MBS("SQL.Connect"; $Connection; "/Applications/MAMP/tmp/mysql/mysql.sock@MyDatabase"; $name;  
$pass; "MySQL")
```

Connect to Firebird Database:

```
# start a new connection  
Set Variable [ $Connection; Value:MBS( "SQL.NewConnection" ) ]  
# if you like set where to find the libraries  
Set Variable [ $r; Value:MBS( "SQL.SetConnectionOption"; $Connection; "IBASE.LIBS"; "c:\Firebird\fb-  
client.dll" ) ]  
# connect to database  
Set Variable [ $r; Value:MBS("SQL.Connect"; $Connection; "MyDatabase"; "MyName"; "MyPass"; "Fire-  
bird") ]
```

Connect to PostgreSQL with timeout and ssl:

```
MBS("SQL.Connect"; $Connection; "127.0.0.1,5432@dbname=postgres connect_timeout=10 sslmode=re-  
quire"; $name; $pass; "PostgreSQL")
```

Connect to Microsoft SQL Server from Mac via FreeTDS library:

```
Set Variable [ $Connection; Value:MBS("SQL.NewConnection" ) ]  
# Tell plugin we want to use Microsoft SQL Server via ODBC  
Set Variable [ $result; Value:MBS("SQL.SetClient"; $Connection; "ODBC" ) ]  
# Tell plugin where freetds library is  
Set Variable [ $result; Value:MBS( "SQL.SetConnectionOption"; $Connection; "ODBC.LIBS"; "/Users/cs/Desk-  
top/libtdsodbc.dylib" ) ]  
# Connect to database  
Set Variable [ $result; Value:MBS("SQL.Connect"; $Connection; "DRIVER= { FREETDS } ;Server=192.168.2.32;UID=SA;P-  
SION=7.2;Port=1433" ) ]  
If [ $result "OK" ]
```

```
Show Custom Dialog [ "Error: " & $result ]
Set Variable [ $result; Value:MBS("SQL.FreeConnection"; $Connection) ]
Halt Script
End If
```

Connect to ODBC via data source name:

```
MBS("SQL.Connect"; $Connection; "DSN"; $name; $pass; "ODBC")
```

Connect to MySQL and run a query:

```
# Start a new connection
Set Variable [ $Connection; Value:MBS("SQL.NewConnection") ]
# Tell plugin where MySQL library is (put it where you like)
Set Variable [ $result; Value:MBS("SQL.SetConnectionOption"; $Connection; "MYSQL.LIBS"; "/Users/cs/Desktop/libmysqlclient.dylib") ]
# Connect to a mysql database:
Set Variable [ $result; Value:MBS("SQL.Connect"; $Connection; "192.168.11.51@Server_Config"; "user"; "password"; "MySQL") ]
If [ $result "OK" ]
# Connection failed
Show Custom Dialog [ "Error: " & $result ]
Set Variable [ $result; Value:MBS("SQL.FreeConnection"; $Connection) ]
Halt Script
Else
# Create a query:
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "SELECT * FROM Server_Config where ServerName=:Name") ]
# If you use parameters, you can fill them here
Set Variable [ $r; Value:MBS("SQL.SetParamAsText"; $Command; "Name"; "MacMini") ]
# Execute it
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
If [ $result "OK" ]
Set Field [ MySQL Query::Result; $result ]
Show Custom Dialog [ "Error: " & $result ]
Else
Set Variable [ $lines; Value:"" ]
Set Variable [ $fieldcount; Value:MBS("SQL.FieldCount"; $command) ]
Loop
# call FetchNext to get the next record
Set Variable [ $result; Value:MBS("SQL.FetchNext"; $Command) ]
Exit Loop If [ $result 1 ]
Set Variable [ $line; Value:"" ]
Set Variable [ $i; Value:1 ]
Loop
# We query field names and values to show them later
Set Variable [ $v; Value:MBS("SQL.GetFieldAsText"; $command; $i) ]
```

```

Set Variable [ $n; Value:MBS("SQL.GetFieldName"; $command; $i) ]
Set Variable [ $line; Value:$line & $n & ": " & $v & $]
Set Variable [ $i; Value:$i+1 ]
Exit Loop If [ $i >$fieldCount ]
End Loop
Set Variable [ $lines; Value:$lines & ($line & $) ]
End Loop
Set Variable [ $lines; Value:$lines & $]
Show Custom Dialog [ "Result from Query:"; $lines ]
End If
# Cleanup
Set Variable [ $result2; Value:MBS("SQL.FreeCommand"; $Command) ]
End If
Set Variable [ $result2; Value:MBS("SQL.FreeConnection"; $Connection) ]

```

Connect to Microsoft SQL Server from Mac via FreeTDS library and point to library in connection string:

```

MBS("SQL.Connect"; $connection; "DRIVER=/Applications/FileMaker Pro 16 Advanced/libtdsodbc.dylib;Server=135.68.6
vorShip;PWD=xxx;Database=myDB;TDS_VERSION=7.2;Port=1433"; "ODBC")

```

See also

- [156.1 FM.SQL.InsertRecordsToSQL](#) 7291
- [156.13 SQL.FetchNext](#) 7316
- [156.16 SQL.FieldCount](#) 7321
- [156.18 SQL.FreeCommand](#) 7324
- [156.36 SQL.GetFieldAsText](#) 7350
- [156.40 SQL.GetFieldName](#) 7355
- [156.80 SQL.NewConnection](#) 7412
- [156.101 SQL.SetConnectionOption](#) 7441
- [156.111 SQL.SetParamAsText](#) 7460
- [157.2 SSH.Connect](#) 7481

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft Access Execute](#)
- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Query](#)

- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/ODBC to FileMaker/ODBC Test](#)
- [SQL to other databases/SQL Export](#)
- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)
- [Third Party/FileMaker Snippet Storage](#)

156.8.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [Tip of the day: Connect to MySQL and run a query](#)
- [SQLite in memory databases](#)
- [Connecting to Microsoft Visual FoxPro](#)

156.8.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 28](#)
- [Ausgabe 3/2016, Seite 29](#)
- [Ausgabe 1/2016, Seite 28](#)
- [Ausgabe 4/2015, Seite 16](#)

Created 18th August 2014, last changed 10th January 2020.

156.9 SQL.Disconnect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Disconnect"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Result Returns "OK" or error message.

Description

See also

- 156.122 SQL.isConnected 7475
- 156.80 SQL.NewConnection 7412
- 157.3 SSH.Disconnect 7485
- 163.9 TAPI.Disconnect 7736

Example Databases

- [Third Party/FileMaker Snippet Storage](#)

Created 18th August 2014, last changed 18th August 2014.

156.10 SQL.Execute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Execute"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns "OK" or error message.

Description

Use the Execute method to execute the query or stored procedure specified in the command text. Execute method calls Prepare method implicitly if needed. If the command has input parameters, they should be bound before calling Execute method. Input parameters represented by param object. To bind input variables, use the SetParam commands.

A command (an SQL statement or procedure) can have a result set after executing. To check whether a result set exists use SQL.isResultSet method. If result set exists, a set of Field objects is created after command execution. Rows from the result set can be fetched one by one using SQL.FetchNext method. To get field description or value use Field method.

Output parameters represented by param objects. They are available after command execution.

Examples

Executes a command:

```
MBS("SQL.Execute"; $Command)
```

Create a table:

```
// create comand
$Command = MBS("SQL.NewCommand"; $Connection; "CREATE TABLE Test(FirstName VARCHAR,
LastName VARCHAR, Birthday date, NumberOfOrders integer, TotalSales double)"
// run it
$result2 = MBS("SQL.Execute"; $Command)
// commit changed
$result3 = MBS("SQL.Commit"; $Connection)
// and free command
$result4 = MBS("SQL.FreeCommand"; $Command)
```

Run something in transaction:

```
$Command = MBS("SQL.NewCommand"; $Connection; "BEGIN TRANSACTION"
// run it
```

```

$result2 = MBS("SQL.Execute"; $Command)
// and free command
$result4 = MBS("SQL.FreeCommand"; $Command)

// create command
$Command = MBS("SQL.NewCommand"; $Connection; "some other SQL command here"
// run it
$result2 = MBS("SQL.Execute"; $Command)
// and free command
$result4 = MBS("SQL.FreeCommand"; $Command)

// create command
$Command = MBS("SQL.NewCommand"; $Connection; "some other SQL command here"
// run it
$result2 = MBS("SQL.Execute"; $Command)
// and free command
$result4 = MBS("SQL.FreeCommand"; $Command)

// commit changed
$result3 = MBS("SQL.Commit"; $Connection)

```

Call stored procedure sys.sp_setapprole via ODBC connection to Microsoft SQL Server:

```

# connect via SQL to a Microsoft SQL Server
Set Variable [ $$Connection ; Value: MBS ( "SQL.NewConnection" ) ]
Set Variable [ $$SetToODBC ; Value: MBS ( "SQL.SetClient" ; $$Connection ; "ODBC" ) ]
Set Variable [ $ConnectResult ; Value: MBS ( "SQL.Connect" ; $$Connection ; "connection string" ; "user"
; "password" ; "ODBC" ) ]
If [ MBS("IsError") = 0 ]
# make a new command for the stored procedure
Set Variable [ $StoredProcedure ; Value: MBS ( "SQL.NewCommand" ; $$Connection ; "sys.sp_setapprole"
) ]
If [ MBS("IsError") = 0 ]
# for debugging query list of parameters
Set Variable [ $Params ; Value: MBS( "SQL.GetParamNameList"; $StoredProcedure) ]
# set parameters
Set Variable [ $RoleName ; Value: MBS ( "SQL.SetParamAsText" ; $StoredProcedure ; "@rolename" ;
"xxx" ) ]
Set Variable [ $Password ; Value: MBS ( "SQL.SetParamAsText" ; $StoredProcedure ; "@password" ; "yyy"
) ]
Set Variable [ $Cookie ; Value: MBS ( "SQL.SetParamAsBoolean" ; $StoredProcedure ; "@fCreateCookie"
; 1) ]
Set Variable [ $Encrypt ; Value: MBS ( "SQL.SetParamAsText" ; $StoredProcedure ; "@encrypt"; "none" )
]
Set Variable [ $Execute ; Value: MBS ( "SQL.Execute" ; $StoredProcedure ) ]
// #
If [ MBS("IsError") = 0 ]

```

```

# query results on success
Set Variable [ $ReturnValue ; Value: MBS ( "SQL.GetParamAsNumber" ; $StoredProcedure ; "@RETURN_VALUE" ) ]
Set Variable [ $cookie ; Value: MBS ( "SQL.GetParamAsText" ; $StoredProcedure ; "@cookie" ) ]
End If
Set Variable [ $FreeStoredProcedure ; Value: MBS ( "SQL.FreeCommand" ; $StoredProcedure ) ]
End If
Set Variable [ $FreeConnection ; Value: MBS ( "SQL.FreeConnection" ; $$Connection ) ]
End If

```

See also

- 80.26 FM.SQL.Execute 4138
- 80.29 FM.SQL.FieldType 4145
- 123.1 PHP.Execute 6247
- 156.123 SQL.isExecuted 7476
- 156.125 SQL.isResultSet 7478
- 156.79 SQL.NewCommand 7408
- 156.80 SQL.NewConnection 7412
- 156.87 SQL.RowsAffected 7421
- 156.97 SQL.SetClient 7434
- 156.111 SQL.SetParamAsText 7460

Example Databases

- [SQL to other databases/Microsoft Access Execute](#)
- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Connect](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/SQL Export](#)
- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)
- [Third Party/FileMaker Snippet Storage](#)

156.10.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [Tip of the day: Connect to MySQL and run a query](#)
- [MBS FileMaker Plugin, version 5.1pr4](#)

156.10.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 28](#)
- [Ausgabe 3/2016, Seite 30](#)
- [Ausgabe 2/2016, Seite 14](#)
- [Ausgabe 1/2016, Seite 29](#)
- [Ausgabe 4/2015, Seite 16](#)

Created 18th August 2014, last changed 10th October 2019.

156.11 SQL.FetchFirst

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FetchFirst"; Command)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns 0, 1 or error message.

Description

Use SQL.FetchPrior, SQL.FetchFirst, SQL.FetchLast method to fetch rows from the scrollable result set. The scrollable result set option should be set before Command executed (SQLite and InterBase don't support this feature). See server specific notes to discover how SQLAPI supports the scrollable result set for certain DBMS.

To check whether a result set exists use SQL.isResultSet method.

Scrolling only works if enabled, so please call SQL.SetCommandOption function to enable it if needed.

Result is 1 on success or 0 on failure.

Examples

Fetch first record:

```
MBS("SQL.FetchFirst"; $Command)
```

Requests a scrollable record set:

```
MBS( "SQL.SetCommandOption"; $Command; "Scrollable"; "True" )
```

See also

- 156.12 SQL.FetchLast 7314
- 156.15 SQL.FetchPrior 7320
- 156.125 SQL.isResultSet 7478
- 156.79 SQL.NewCommand 7408
- 156.98 SQL.SetCommandOption 7436

Created 18th August 2014, last changed 24th April 2016.

156.12 SQL.FetchLast

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FetchLast"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns 0, 1 or error message.

Description

Use SQL.FetchPrior, SQL.FetchFirst, SQL.FetchLast method to fetch rows from the scrollable result set. The scrollable result set option should be set before Command executed (SQLite and InterBase don't support this feature). See server specific notes to discover how SQLAPI++ supports the scrollable result set for certain DBMS.

To check whether a result set exists use SQL.isResultSet method.

Scrolling only works if enabled, so please call SQL.SetCommandOption function to enable it if needed. Result is 1 on success or 0 on failure.

Examples

Fetch last record:

```
MBS("SQL.FetchLast"; $Command)
```

Requests a scrollable record set:

```
MBS( "SQL.SetCommandOption"; $Command; "Scrollable"; "True" )
```

See also

- 156.11 SQL.FetchFirst 7313
- 156.13 SQL.FetchNext 7316
- 156.14 SQL.FetchPos 7319
- 156.15 SQL.FetchPrior 7320
- 156.125 SQL.isResultSet 7478
- 156.79 SQL.NewCommand 7408

156.12. *SQL.FETCHLAST*

7315

- 156.98 *SQL.SetCommandOption*

7436

Created 18th August 2014, last changed 24th April 2016.

156.13 SQL.FetchNext

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FetchNext"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns 0, 1 or error message.

Description

Use FetchNext method to fetch row by row from the result set. You need to call it a first time to get to first row after you made a query.

To check whether a result set exists use SQL.isResultSet method.

Result is 1 on success or 0 on failure.

Examples

Fetch next record:

```
MBS("SQL.FetchNext"; $Command)
```

Run command and fetch first record

```
// create command
$Command = MBS("SQL.NewCommand"; $Connection; "SELECT * FROM Test")
// run select
$result2 = MBS("SQL.Execute"; $Command)
// go to first row
$result3 = MBS("SQL.FetchNext"; $Command)
// result 3 is 1 if we got a record
// read first name field from result:
$firstname = MBS("SQL.GetFieldAsText"; $command; "FirstName")
// later release command
MBS("SQL.FreeCommand"; $Command)
```

Run a stored procedure:

```
# new command for calling our test procedure on a Microsoft SQL Server
Set Variable [ $command; MBS( "SQL.NewCommand"; $Connection; "dbo.Test" ) ]
# set a parameter
Set Variable [ $r; MBS( "SQL.SetParamAsNumber"; $Command; "Param1"; 7 ) ]
# execute query
```


156.13. *SQL.FETCHNEXT*

7317

```
Set Variable [ $r; MBS( "SQL.Execute"; $Command ) ]  
# fetch first record  
Set Variable [ $r; MBS( "SQL.FetchNext"; $Command ) ]  
# get result field  
Set Variable [ $result; MBS( "SQL.GetFieldAsText"; $Command; 1 ) ]
```

See also

- [156.8 SQL.Connect](#) 7302
- [156.10 SQL.Execute](#) 7309
- [156.12 SQL.FetchLast](#) 7314
- [156.18 SQL.FreeCommand](#) 7324
- [156.36 SQL.GetFieldAsText](#) 7350
- [156.45 SQL.GetFieldValueList](#) 7362
- [156.67 SQL.GetRecordsAsText](#) 7392
- [156.125 SQL.isResultSet](#) 7478
- [156.79 SQL.NewCommand](#) 7408
- [156.110 SQL.SetParamAsNumber](#) 7458

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft Access Execute](#)
- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Connect](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/ODBC Query](#)
- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)

156.13.1 Blog Entries

- [Tip of the day: Connect to MySQL and run a query](#)

156.13.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 28
- Ausgabe 3/2016, Seite 30
- Ausgabe 2/2016, Seite 14
- Ausgabe 1/2016, Seite 29

Created 18th August 2014, last changed 24th April 2016.

156.14 SQL.FetchPos

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FetchPos"; Command; Offset { ; Relative })

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Offset

The index/offset of the row. Zero based.
1

Relative

Optional
Pass 1 for relative movement.
0

Result Returns 0, 1 or error message.

Description

You may need to request recordset to be scrollable to have this work. For that, please call MBS("SQL.Set-CommandOption"; \$Command; "Scrollable"; "True") before doing the query.

Result is 1 on success or 0 on failure.

See also

- 156.12 SQL.FetchLast 7314
- 156.15 SQL.FetchPrior 7320
- 156.79 SQL.NewCommand 7408
- 156.98 SQL.SetCommandOption 7436

Created 6th May 2015, last changed 24th April 2016.

156.15 SQL.FetchPrior

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FetchPrior"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns 0, 1 or error message.

Description

Use SQL.FetchPrior, SQL.FetchFirst, SQL.FetchLast method to fetch rows from the scrollable result set. The scrollable result set option should be set before Command executed (SQLite and InterBase don't support this feature). See server specific notes to discover how SQLAPI++ supports the scrollable result set for certain DBMS.

To check whether a result set exists use SQL.isResultSet method.

Scrolling only works if enabled, so please call SQL.SetCommandOption function to enable it if needed.

Result is 1 on success or 0 on failure.

Examples

Fetch previous record:

```
MBS("SQL.FetchPrior"; $Command)
```

Requests a scrollable record set:

```
MBS( "SQL.SetCommandOption"; $Command; "Scrollable"; "True" )
```

See also

- 156.11 SQL.FetchFirst 7313
- 156.12 SQL.FetchLast 7314
- 156.14 SQL.FetchPos 7319
- 156.125 SQL.isResultSet 7478
- 156.79 SQL.NewCommand 7408
- 156.98 SQL.SetCommandOption 7436

Created 18th August 2014, last changed 24th April 2016.

156.16 SQL.FieldCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FieldCount"; Command)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns field count or error message.

Description

FieldCount method returns the number of fields created implicitly after the command execution if a result set exists.

See also

- 80.26 FM.SQL.Execute 4138
- 80.27 FM.SQL.Field 4141
- 80.28 FM.SQL.FieldCount 4143
- 80.29 FM.SQL.FieldType 4145
- 80.35 FM.SQL.RowCount 4157
- 80.36 FM.SQL.Text 4159
- 109.32 Matrix.Text 5820
- 156.8 SQL.Connect 7302
- 156.79 SQL.NewCommand 7408
- 156.80 SQL.NewConnection 7412

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/ODBC Query](#)
- [Third Party/FileMaker Snippet Storage](#)

156.16.1 Blog Entries

- **Tip of the day:** [Connect to MySQL and run a query](#)

Created 18th August 2014, last changed 13th January 2015.

156.17 SQL.FreeAllConnections

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FreeAllConnections")

Result Returns OK or error.

Description

See also

- [156.19 SQL.FreeConnection](#)

7326

Example Databases

- [Third Party/FileMaker Snippet Storage](#)

156.17.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr6](#)

Created 8th July 2016, last changed 8th July 2016.

156.18 SQL.FreeCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FreeCommand"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns "OK" or error message.

Description

Examples

Free command object:

MBS("SQL.FreeCommand"; \$Command)

See also

- 156.4 SQL.Close 7297
- 156.7 SQL.Commit 7300
- 156.13 SQL.FetchNext 7316
- 156.67 SQL.GetRecordsAsText 7392
- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.69 SQL.InsertRecords 7397
- 156.84 SQL.ResetCommand 7418
- 156.106 SQL.SetParamAsContainer 7450
- 156.117 SQL.SetParamTypesValues 7467
- 156.120 SQL.SetParamValues 7472

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Connect](#)

- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/ODBC Query](#)
- [SQL to other databases/ODBC to FileMaker/ODBC Test](#)
- [SQL to other databases/SQL Export](#)
- [SQL to other databases/SQLite fun](#)
- [Third Party/FileMaker Snippet Storage](#)

156.18.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr7](#)
- [Tip of the day: Connect to MySQL and run a query](#)

156.18.2 FileMaker Magazin

- [Ausgabe 1/2016, Seite 30](#)
- [Ausgabe 4/2015, Seite 16](#)

Created 18th August 2014, last changed 7th December 2015.

156.19 SQL.FreeConnection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.FreeConnection"; Connection)

Parameters

Connection

The command reference number gained with SQL.NewConnection.

\$Connection

Result Returns "OK" or error message.

Description

This closes the connection and frees all memory allocated for it.

Examples

Free connection object:

MBS("SQL.FreeConnection"; \$Connection)

See also

- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 156.8 SQL.Connect 7302
- 156.10 SQL.Execute 7309
- 156.17 SQL.FreeAllConnections 7323
- 156.68 SQL.InsertOrUpdateRecords 7394
- 156.77 SQL.ListConnections 7406
- 156.79 SQL.NewCommand 7408
- 156.80 SQL.NewConnection 7412
- 156.85 SQL.ResetConnection 7419
- 156.101 SQL.SetConnectionOption 7441

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft Access Execute](#)
- [SQL to other databases/Microsoft SQL Execute](#)

- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/ODBC Query](#)
- [SQL to other databases/ODBC to FileMaker/ODBC Test](#)
- [SQL to other databases/SQL Export](#)
- [SQL to other databases/SQLite blob](#)

156.19.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [MBS FileMaker Plugin, version 9.3pr7](#)
- [Tip of the day: Connect to MySQL and run a query](#)

156.19.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 28](#)
- [Ausgabe 3/2016, Seite 30](#)
- [Ausgabe 3/2016, Seite 29](#)
- [Ausgabe 1/2016, Seite 30](#)
- [Ausgabe 1/2016, Seite 28](#)
- [Ausgabe 4/2015, Seite 16](#)

Created 18th August 2014, last changed 13th January 2015.

156.20 SQL.GetAutoCommit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetAutoCommit"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Result Returns text "Unknown", "On", "Off" or error message.

Description

Function returns autocommit option state that was previously set by SQL.SetAutoCommit. Returns "Unknown" if no autocommit mode was set. In that case see DBMS specific documentation for default autocommit option used.

See also

- 156.80 SQL.NewConnection 7412
- 156.96 SQL.SetAutoCommit 7433

156.20.1 FileMaker Magazin

- Ausgabe 1/2016, Seite 30

Created 18th August 2014, last changed 18th August 2014.

156.21 SQL.GetCommandOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetCommandOption"; Command; Key)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Key

A string key of the command option.
""

Result Returns value or error message.

Description

Call this method to get value(s) of server specific command options. See Server specific notes.

A command related option may be specified in either connection object or SACommand object. If it is specified in connection object it affects all the commands on that connection.

If an option is not specially assigned to the command object the Library takes this option from related connection object (see SQL.GetConnectionOption method). If an option is not specified in neither command nor connection objects, the Library takes the default option value.

see also

https://www.sqlapi.com/ApiDoc/class_s_a_command.html

See also

- 156.22 SQL.GetCommandOptions 7330
- 156.24 SQL.GetConnectionOption 7332
- 156.79 SQL.NewCommand 7408
- 156.98 SQL.SetCommandOption 7436

Created 18th August 2014, last changed 10th January 2020.

156.22 SQL.GetCommandOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	8.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetCommandOptions"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns list or error.

Description

See also

- 156.21 SQL.GetCommandOption 7329
- 156.79 SQL.NewCommand 7408
- 156.98 SQL.SetCommandOption 7436

156.22.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 20th September 2018, last changed 20th September 2018.

156.23 SQL.GetCommandTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetCommandTag"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns text or error.

Description

See also

- 156.79 SQL.NewCommand 7408
- 156.99 SQL.SetCommandTag 7438
- 156.100 SQL.SetCommandText 7439

156.23.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 11st September 2016, last changed 11st September 2016.

156.24 SQL.GetConnectionOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetConnectionOption"; Connection; Key)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Key

A string key of the connection or command option.

””

Result Returns the value or error message.

Description

Call this method to get value(s) of server specific connection or command options. See Server specific notes. If an option is not specified in connection objects, the Library takes the default option value.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_connection.html

See also

- 156.21 SQL.GetCommandOption 7329
- 156.25 SQL.GetConnectionOptions 7333
- 156.80 SQL.NewConnection 7412
- 156.101 SQL.SetConnectionOption 7441

Created 18th August 2014, last changed 10th January 2020.

156.25 SQL.GetConnectionOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	8.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetConnectionOptions"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.
\$Connection

Result Returns list or error.

Description

See also

- 156.24 SQL.GetConnectionOption 7332
- 156.80 SQL.NewConnection 7412
- 156.101 SQL.SetConnectionOption 7441

156.25.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 20th September 2018, last changed 20th September 2018.

156.26 SQL.GetConnectionTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetConnectionTag"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.
\$Connection

Result Returns text or error.

Description

See also

- 156.80 SQL.NewConnection 7412
- 156.102 SQL.SetConnectionTag 7446

156.26.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 11st September 2016, last changed 11st September 2016.

156.27 SQL.GetFieldAsBoolean

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsBoolean"; Command; Field)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns value or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

See also

- 156.31 SQL.GetFieldAsFloat 7340
- 156.47 SQL.GetParamAsBoolean 7365
- 156.79 SQL.NewCommand 7408
- 156.105 SQL.SetParamAsBoolean 7449

Created 18th August 2014, last changed 10th January 2020.

156.28 SQL.GetFieldAsContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.2	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsContainer"; Command; Field; FileName)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

FileName

The filename for the container. This will determinate the type of data to FileMaker.
"test.jpg"

Result Returns container value or error.

Description

If you can provide a file name, we can use it to auto detect the type of data and import it in the right format, e.g. add a preview for PDF or the image size for JPEG.

Examples

Query image field value:

```
MBS( "SQL.GetFieldAsContainer"; $Command; "MyBlob"; $FileName )
```

See also

- 156.48 SQL.GetParamAsContainer 7366
- 156.79 SQL.NewCommand 7408
- 156.106 SQL.SetParamAsContainer 7450

156.28.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 17th May 2016, last changed 17th May 2016.

156.29 SQL.GetFieldAsDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsDate"; Command; Field)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns date value or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

See also

- 156.32 SQL.GetFieldAsJPEG 7342
- 156.33 SQL.GetFieldAsNumber 7344
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348
- 156.36 SQL.GetFieldAsText 7350
- 156.37 SQL.GetFieldAsTime 7352
- 156.40 SQL.GetFieldName 7355
- 156.44 SQL.GetFieldValue 7361
- 156.49 SQL.GetParamAsDate 7367
- 156.79 SQL.NewCommand 7408

Example Databases

- [SQL to other databases/MySQL example](#)
- [SQL to other databases/SQLite fun](#)

156.29.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr7](#)

Created 18th August 2014, last changed 10th January 2020.

156.30 SQL.GetFieldAsDateTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsDateTime"; Command; Field)

(old name: SQL.GetFieldAsTimestamp)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns date and time value or error message.

Description

Converts if needed.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

See also

- 156.29 SQL.GetFieldAsDate 7337
- 156.37 SQL.GetFieldAsTime 7352
- 156.38 SQL.GetFieldDataType 7353
- 156.50 SQL.GetParamAsDateTime 7368
- 156.79 SQL.NewCommand 7408
- 156.108 SQL.SetParamAsDateTime 7454

Created 18th August 2014, last changed 22nd January 2020.

156.31 SQL.GetFieldAsFloat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsFloat"; Command; Field)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns number or error message.

Description

For integer values, you can use SQL.GetFieldAsNumber.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

For some databases, you get better precision, if you cast/convert to float data type in the SQL statement.

Examples

Reads floating point value from field TotalSales into variable:

```
$x = MBS("SQL.GetFieldAsFloat"; $command; "TotalSales")
```

Reads floating point value from 2nd field into variable:

```
$x = MBS("SQL.GetFieldAsFloat"; $command; 2)
```

See also

- 156.27 SQL.GetFieldAsBoolean 7335
- 156.29 SQL.GetFieldAsDate 7337
- 156.32 SQL.GetFieldAsJPEG 7342
- 156.33 SQL.GetFieldAsNumber 7344
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348

<i>156.31. SQL.GETFIELDASFLOAT</i>	7341
• 156.36 SQL.GetFieldAsText	7350
• 156.37 SQL.GetFieldAsTime	7352
• 156.51 SQL.GetParamAsFloat	7369
• 156.79 SQL.NewCommand	7408

Example Databases

- [SQL to other databases/MySQL example](#)
- [SQL to other databases/SQLite fun](#)

Created 18th August 2014, last changed 10th January 2020.

156.32 SQL.GetFieldAsJPEG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	3.0	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsJPEG"; Command; Field)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns container value or error message.

Description

Field must be a BLOB field. The plugin does not verify if the BLOB contains a valid JPEG image. See also SQL.GetFieldAsPDF and SQL.GetFieldAsPNG.

Examples

Read field value of field "JPEGData" into variable:

```
$firstname = MBS("SQL.GetFieldAsJPEG"; $command; "JPEGData")
```

See also

- 156.29 SQL.GetFieldAsDate 7337
- 156.31 SQL.GetFieldAsFloat 7340
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348
- 156.36 SQL.GetFieldAsText 7350
- 156.37 SQL.GetFieldAsTime 7352
- 156.39 SQL.GetFieldIsNull 7354
- 156.52 SQL.GetParamAsJPEG 7371
- 156.79 SQL.NewCommand 7408

Example Databases

- [SQL to other databases/SQLite blob](#)

156.32.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 13th January 2015.

156.33 SQL.GetFieldAsNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsNumber"; Command; Field)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns number or error message.

Description

For float values, you can use SQL.GetFieldAsFloat.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

Examples

Reads floating point value from field Count into variable:

```
$x = MBS("SQL.GetFieldAsNumber"; $command; "Count")
```

Reads floating point value from 2nd field into variable:

```
$x = MBS("SQL.GetFieldAsNumber"; $command; 2)
```

See also

- 156.29 SQL.GetFieldAsDate 7337
- 156.31 SQL.GetFieldAsFloat 7340
- 156.37 SQL.GetFieldAsTime 7352
- 156.39 SQL.GetFieldIsNull 7354
- 156.53 SQL.GetParamAsNumber 7373
- 156.79 SQL.NewCommand 7408

Example Databases

- [SQL to other databases/MySQL example](#)
- [SQL to other databases/SQLite fun](#)

156.33.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr5](#)
- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 18th August 2014, last changed 10th January 2020.

156.34 SQL.GetFieldAsPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsPDF"; Command; Field { ; DontRenderPreview })

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Field

The name or one based index of the field.

\$Field

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result Returns container value or error message.

Description

Field must be a BLOB field. The plugin does not verify if the BLOB contains a valid PDF document.

See also SQL.GetFieldAsJPEG and SQL.GetFieldAsPNG.

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

Read field value of field "PDFData" into variable:

```
$firstname = MBS("SQL.GetFieldAsPDF"; $command; "PDFData")
```

See also

- 156.29 SQL.GetFieldAsDate 7337
- 156.31 SQL.GetFieldAsFloat 7340
- 156.32 SQL.GetFieldAsJPEG 7342
- 156.35 SQL.GetFieldAsPNG 7348
- 156.36 SQL.GetFieldAsText 7350
- 156.37 SQL.GetFieldAsTime 7352
- 156.39 SQL.GetFieldIsNull 7354

<i>156.34. SQL.GETFIELDASPDF</i>	7347
• 156.44 SQL.GetFieldValue	7361
• 156.54 SQL.GetParamAsPDF	7375
• 156.79 SQL.NewCommand	7408

156.34.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 17th August 2018.

156.35 SQL.GetFieldAsPNG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	3.0	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsPNG"; Command; Field)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns container value or error message.

Description

Field must be a BLOB field. The plugin does not verify if the BLOB contains a valid PNG image. See also SQL.GetFieldAsJPEG and SQL.GetFieldAsPDF.

Examples

Read field value of field "PNGData" into variable:

```
$firstname = MBS("SQL.GetFieldAsPNG"; $command; "PNGData")
```

See also

- 156.29 SQL.GetFieldAsDate 7337
- 156.31 SQL.GetFieldAsFloat 7340
- 156.32 SQL.GetFieldAsJPEG 7342
- 156.34 SQL.GetFieldAsPDF 7346
- 156.36 SQL.GetFieldAsText 7350
- 156.37 SQL.GetFieldAsTime 7352
- 156.39 SQL.GetFieldIsNull 7354
- 156.44 SQL.GetFieldValue 7361
- 156.55 SQL.GetParamAsPNG 7377
- 156.79 SQL.NewCommand 7408

156.35.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 13th January 2015.

156.36 SQL.GetFieldAsText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsText"; Command; Field)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Field

The name or one based index of the field.

\$Field

Result Returns text or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

Examples

Read field value of field "FirstName" into variable:

```
$firstname = MBS("SQL.GetFieldAsText"; $command; "FirstName")
```

Run a stored procedure:

```
# new command for calling our test procedure on a Microsoft SQL Server
Set Variable [ $command; MBS( "SQL.NewCommand"; $Connection; "dbo.Test" ) ]
# set a parameter
Set Variable [ $r; MBS( "SQL.SetParamAsNumber"; $Command; "Param1"; 7 ) ]
# execute query
Set Variable [ $r; MBS( "SQL.Execute"; $Command ) ]
# fetch first record
Set Variable [ $r; MBS( "SQL.FetchNext"; $Command ) ]
# get result field
Set Variable [ $result; MBS( "SQL.GetFieldAsText"; $Command; 1 ) ]
```

See also

- 156.8 SQL.Connect 7302
- 156.10 SQL.Execute 7309
- 156.13 SQL.FetchNext 7316
- 156.29 SQL.GetFieldAsDate 7337

<i>156.36. SQL.GETFIELDASTEXT</i>	7351
• 156.31 SQL.GetFieldAsFloat	7340
• 156.32 SQL.GetFieldAsJPEG	7342
• 156.35 SQL.GetFieldAsPNG	7348
• 156.37 SQL.GetFieldAsTime	7352
• 156.39 SQL.GetFieldIsNull	7354
• 156.79 SQL.NewCommand	7408

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Connect](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/ODBC Query](#)
- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)

156.36.1 Blog Entries

- [Tip of the day: Connect to MySQL and run a query](#)

156.36.2 FileMaker Magazin

- [Ausgabe 3/2016, Seite 30](#)
- [Ausgabe 2/2016, Seite 14](#)
- [Ausgabe 1/2016, Seite 29](#)

Created 18th August 2014, last changed 10th January 2020.

156.37 SQL.GetFieldAsTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldAsTime"; Command; Field)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Field

The name or one based index of the field.

\$Field

Result Returns time or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

See also

- 156.29 SQL.GetFieldAsDate 7337
- 156.33 SQL.GetFieldAsNumber 7344
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348
- 156.36 SQL.GetFieldAsText 7350
- 156.40 SQL.GetFieldName 7355
- 156.42 SQL.GetFieldOption 7359
- 156.44 SQL.GetFieldValue 7361
- 156.57 SQL.GetParamAsTime 7380
- 156.79 SQL.NewCommand 7408

156.37.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr5](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 18th August 2014, last changed 10th January 2020.

156.38 SQL.GetFieldDataType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldDataType"; Command; Field)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result The field type or error message.

Description

The field data type can be: Bool, Short, UShort, Long, ULong, Double, Numeric, DateTime, Interval, String, Bytes, LongBinary, LongChar, BLOB, CLOB, Cursor, SpecificToDBMS or unknown

See also

- 156.30 SQL.GetFieldAsDateTime 7339
- 156.58 SQL.GetParamDataType 7381
- 156.79 SQL.NewCommand 7408

Created 18th August 2014, last changed 13th January 2015.

156.39 SQL.GetFieldIsNull

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldIsNull"; Command; Field)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns 1 if the value of current object is NULL; otherwise 0.

Description

See also

- 156.29 SQL.GetFieldAsDate 7337
- 156.32 SQL.GetFieldAsJPEG 7342
- 156.33 SQL.GetFieldAsNumber 7344
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348
- 156.36 SQL.GetFieldAsText 7350
- 156.37 SQL.GetFieldAsTime 7352
- 156.44 SQL.GetFieldValue 7361
- 156.60 SQL.GetParamIsNull 7383
- 156.79 SQL.NewCommand 7408

Created 18th August 2014, last changed 28th November 2019.

156.40 SQL.GetFieldName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldName"; Command; Field)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Field

The name or one based index of the field.

\$Field

Result Returns name or error message.

Description**See also**

- 156.8 SQL.Connect 7302
- 156.29 SQL.GetFieldAsDate 7337
- 156.37 SQL.GetFieldAsTime 7352
- 156.41 SQL.GetFieldNameList 7357
- 156.44 SQL.GetFieldValue 7361
- 156.45 SQL.GetFieldValueList 7362
- 156.79 SQL.NewCommand 7408
- 156.80 SQL.NewConnection 7412

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/ODBC Query](#)

156.40.1 Blog Entries

- [Tip of the day: Connect to MySQL and run a query](#)
- [MBS Filemaker Plugin, version 3.4pr1](#)

Created 18th August 2014, last changed 13th January 2015.

156.41 SQL.GetFieldNameList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldNameList"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns list or error.

Description

Examples

Create a command, fill parameters and query names and values list:

```
# Create select
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "SELECT * FROM Test") ]
# Run it
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
# get first row of result
Set Variable [ $result; Value:MBS("SQL.FetchNext"; $Command) ]
# Now query field names
Set Variable [ $FieldNames; Value:MBS("SQL.GetFieldNameList"; $Command) ]
# and field values of first row
Set Variable [ $FieldValues; Value:MBS("SQL.GetFieldValueList"; $Command) ]
```

See also

- 156.10 SQL.Execute 7309
- 156.13 SQL.FetchNext 7316
- 156.40 SQL.GetFieldName 7355
- 156.44 SQL.GetFieldValue 7361
- 156.45 SQL.GetFieldValueList 7362
- 156.62 SQL.GetParamNameList 7385
- 156.79 SQL.NewCommand 7408

Example Databases

- [SQL to other databases/Microsoft Access Execute](#)

156.41.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr4](#)

Created 8th April 2015, last changed 8th April 2015.

156.42 SQL.GetFieldOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldOption"; Command; Field; Key)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Key

A string key of the command option.
""

Result Returns "OK" or error message.

Description

Call this method to get value(s) of server specific field options. See Server specific notes.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

See also

- 156.37 SQL.GetFieldAsTime 7352
- 156.43 SQL.GetFieldOptions 7360
- 156.63 SQL.GetParamOption 7387
- 156.79 SQL.NewCommand 7408
- 156.103 SQL.SetFieldOption 7447

Created 18th August 2014, last changed 10th January 2020.

156.43 SQL.GetFieldOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	8.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldOptions"; Command; Field)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns list or error.

Description

See also

- 156.42 SQL.GetFieldOption 7359
- 156.64 SQL.GetParamOptions 7388
- 156.79 SQL.NewCommand 7408
- 156.103 SQL.SetFieldOption 7447

156.43.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 20th September 2018, last changed 20th September 2018.

156.44 SQL.GetFieldValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldValue"; Command; Field)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Result Returns value or error.

Description

The value is converted to a FileMaker value with matching type.
BLOBs are returned as hex strings and not as container values (could be changed).
NULL values are returned as empty container values.

See also

- 156.29 SQL.GetFieldAsDate 7337
- 156.34 SQL.GetFieldAsPDF 7346
- 156.35 SQL.GetFieldAsPNG 7348
- 156.37 SQL.GetFieldAsTime 7352
- 156.39 SQL.GetFieldIsNull 7354
- 156.40 SQL.GetFieldName 7355
- 156.41 SQL.GetFieldNameList 7357
- 156.45 SQL.GetFieldValueList 7362
- 156.65 SQL.GetParamValue 7389
- 156.79 SQL.NewCommand 7408

156.44.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 18th April 2015, last changed 20th April 2015.

156.45 SQL.GetFieldValueList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetFieldValueList"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns list or error.

Description

If value contains a new line or return character, we replace it with \n or \r.

Examples

Create a command, fill parameters and query names and values list:

```
# Create select
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "SELECT * FROM Test") ]
# Run it
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
# get first row of result
Set Variable [ $result; Value:MBS("SQL.FetchNext"; $Command) ]
# Now query field names
Set Variable [ $FieldNames; Value:MBS("SQL.GetFieldNameList"; $Command) ]
# and field values of first row
Set Variable [ $FieldValues; Value:MBS("SQL.GetFieldValueList"; $Command) ]
```

See also

- 156.10 SQL.Execute 7309
- 156.13 SQL.FetchNext 7316
- 156.40 SQL.GetFieldName 7355
- 156.41 SQL.GetFieldNameList 7357
- 156.44 SQL.GetFieldValue 7361
- 156.66 SQL.GetParamValueList 7390
- 156.79 SQL.NewCommand 7408

Example Databases

- [SQL to other databases/Microsoft Access Execute](#)

156.45.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr1](#)
- [MBS FileMaker Plugin, version 5.1pr4](#)

156.45.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 28
- Ausgabe 3/2016, Seite 30

Created 8th April 2015, last changed 8th April 2015.

156.46 SQL.GetIsolationLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetIsolationLevel"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Result Returns level name or error message.

Description

Function returns isolation level that was previously set by SQL.SetIsolationLevel. Returns "Unknown" if no isolation level was set. In that case see DBMS specific documentation for default isolation level used.

Returns one of the following strings: ReadUncommitted, ReadCommitted, RepeatableRead, Serializable or Unknown.

See also

- 156.80 SQL.NewConnection 7412
- 156.104 SQL.SetIsolationLevel 7448

Created 18th August 2014, last changed 18th August 2014.

156.47 SQL.GetParamAsBoolean

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsBoolean"; Command; Param)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.

"1"

Result Returns the value or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_param.html

Examples

Query value of first parameter:

MBS("SQL.GetParamAsBoolean"; \$Command; "# 0")

See also

- 156.27 SQL.GetFieldAsBoolean 7335
- 156.51 SQL.GetParamAsFloat 7369
- 156.79 SQL.NewCommand 7408
- 156.105 SQL.SetParamAsBoolean 7449

Created 18th August 2014, last changed 10th January 2020.

156.48 SQL.GetParamAsContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.2	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsContainer"; Command; Param; FileName)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

FileName

The filename for the container. This will determinate the type of data to FileMaker.

"test.jpg"

Result Returns container value or error.

Description

If you can provide a file name, we can use it to auto detect the type of data and import it in the right format, e.g. add a preview for PDF or the image size for JPEG.

Examples

Query image param value:

MBS("SQL.GetParamAsContainer"; \$Command; "MyBlob"; \$FileName)

See also

- 156.28 SQL.GetFieldAsContainer 7336
- 156.79 SQL.NewCommand 7408
- 156.106 SQL.SetParamAsContainer 7450

156.48.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 17th May 2016, last changed 17th May 2016.

156.49 SQL.GetParamAsDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsDate"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns the value or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_param.html

Examples

Query value of first parameter:

MBS("SQL.GetParamAsDate"; \$Command; "# 0")

See also

- 156.50 SQL.GetParamAsDateTime 7368
- 156.56 SQL.GetParamAsText 7379
- 156.60 SQL.GetParamIsNull 7383
- 156.61 SQL.GetParamName 7384
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.108 SQL.SetParamAsDateTime 7454
- 156.109 SQL.SetParamAsFloat 7456
- 156.111 SQL.SetParamAsText 7460
- 156.112 SQL.SetParamAsTime 7462

Created 18th August 2014, last changed 10th January 2020.

156.50 SQL.GetParamAsDateTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsDateTime"; Command; Param)

(old name: SQL.GetParamAsTimestamp)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.
"1"

Result Returns the value or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_param.html

Examples

Query value of first parameter:

MBS("SQL.GetParamAsDateTime"; \$Command; "# 0")

See also

- 156.30 SQL.GetFieldAsDateTime 7339
- 156.49 SQL.GetParamAsDate 7367
- 156.57 SQL.GetParamAsTime 7380
- 156.58 SQL.GetParamDataType 7381
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.108 SQL.SetParamAsDateTime 7454
- 156.112 SQL.SetParamAsTime 7462

Created 18th August 2014, last changed 10th January 2020.

156.51 SQL.GetParamAsFloat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsFloat"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.
"1"

Result Returns the value or error message.

Description

For integer values, you can use SQL.GetParamAsNumber.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_param.html

Examples

Query value of first parameter:

MBS("SQL.GetParamAsFloat"; \$Command; "# 0")

See also

- 156.47 SQL.GetParamAsBoolean 7365
- 156.53 SQL.GetParamAsNumber 7373
- 156.54 SQL.GetParamAsPDF 7375
- 156.55 SQL.GetParamAsPNG 7377
- 156.56 SQL.GetParamAsText 7379
- 156.57 SQL.GetParamAsTime 7380
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.109 SQL.SetParamAsFloat 7456

- 156.111 SQL.SetParamAsText

Created 18th August 2014, last changed 10th January 2020.

156.52 SQL.GetParamAsJPEG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	3.0	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsJPEG"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.
"1"

Result Returns container value or error message.

Description

Field must be a BLOB parameter. The plugin does not verify if the BLOB contains a valid JPEG image.
See also SQL.GetParamAsPDF and SQL.GetParamAsPNG.

Examples

Read field value of field "JPEGData" into variable:

```
$firstname = MBS("SQL.GetParamAsJPEG"; $command; "JPEGData")
```

Query value of first parameter:

```
MBS( "SQL.GetParamAsJPEG"; $Command; "# 0" )
```

See also

- 156.49 SQL.GetParamAsDate 7367
- 156.51 SQL.GetParamAsFloat 7369
- 156.54 SQL.GetParamAsPDF 7375
- 156.55 SQL.GetParamAsPNG 7377
- 156.56 SQL.GetParamAsText 7379
- 156.57 SQL.GetParamAsTime 7380
- 156.60 SQL.GetParamIsNull 7383
- 156.107 SQL.SetParamAsDate 7452

- 156.111 SQL.SetParamAsText 7460
- 156.112 SQL.SetParamAsTime 7462

156.52.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 13th January 2015.

156.53 SQL.GetParamAsNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsNumber"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.
"1"

Result Returns the value or error message.

Description

For float values, you can use SQL.GetParamAsFloat.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_param.html

Examples

Query value of first parameter:

MBS("SQL.GetParamAsNumber"; \$Command; "# 0")

See also

- 156.10 SQL.Execute 7309
- 156.33 SQL.GetFieldAsNumber 7344
- 156.49 SQL.GetParamAsDate 7367
- 156.51 SQL.GetParamAsFloat 7369
- 156.57 SQL.GetParamAsTime 7380
- 156.60 SQL.GetParamIsNull 7383
- 156.79 SQL.NewCommand 7408
- 156.110 SQL.SetParamAsNumber 7458
- 156.112 SQL.SetParamAsTime 7462

156.53.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr5](#)
- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 18th August 2014, last changed 10th January 2020.

156.54 SQL.GetParamAsPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsPDF"; Command; Param { ; DontRenderPreview })

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result Returns container value or error message.

Description

Field must be a BLOB parameter. The plugin does not verify if the BLOB contains a valid PDF document. See also SQL.GetParamAsJPEG and SQL.GetParamAsPNG.

For PDF content: If you have a DynaPDF Pro license and DynaPDF functions initialized, this function can add previews for the PDF file on Windows and Linux. For MacOS, we make them with PDFKit.

Examples

Read field value of field "PDFData" into variable:

```
$firstname = MBS("SQL.GetParamAsPDF"; $command; "PDFData")
```

Query value of first parameter:

```
MBS( "SQL.GetParamAsPDF"; $Command; "# 0" )
```

See also

- 156.51 SQL.GetParamAsFloat 7369
- 156.52 SQL.GetParamAsJPEG 7371
- 156.55 SQL.GetParamAsPNG 7377
- 156.56 SQL.GetParamAsText 7379

- 156.57 SQL.GetParamAsTime 7380
- 156.60 SQL.GetParamIsNull 7383
- 156.65 SQL.GetParamValue 7389
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.111 SQL.SetParamAsText 7460

156.54.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 4.3pr1](#)

Created 18th August 2014, last changed 17th August 2018.

156.55 SQL.GetParamAsPNG

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	3.0	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsPNG"; Command; Param)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns container value or error message.

Description

Field must be a BLOB parameter. The plugin does not verify if the BLOB contains a valid PNG image.

See also SQL.GetParamAsJPEG and SQL.GetParamAsPDF.

Examples

Read field value of field "PNGData" into variable:

```
$firstname = MBS("SQL.GetParamAsPNG"; $command; "PNGData")
```

Query value of first parameter:

```
MBS( "SQL.GetParamAsPNG"; $Command; "# 0" )
```

See also

- 156.51 SQL.GetParamAsFloat 7369
- 156.52 SQL.GetParamAsJPEG 7371
- 156.54 SQL.GetParamAsPDF 7375
- 156.56 SQL.GetParamAsText 7379
- 156.57 SQL.GetParamAsTime 7380
- 156.60 SQL.GetParamIsNull 7383
- 156.65 SQL.GetParamValue 7389
- 156.79 SQL.NewCommand 7408

- 156.111 SQL.SetParamAsText 7460
- 156.112 SQL.SetParamAsTime 7462

156.55.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 13th January 2015.

156.56 SQL.GetParamAsText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsText"; Command; Param)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns the value or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_param.html

Examples

Query value of first parameter:

MBS("SQL.GetParamAsText"; \$Command; "# 0")

See also

- 156.51 SQL.GetParamAsFloat 7369
- 156.54 SQL.GetParamAsPDF 7375
- 156.55 SQL.GetParamAsPNG 7377
- 156.57 SQL.GetParamAsTime 7380
- 156.60 SQL.GetParamIsNull 7383
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.109 SQL.SetParamAsFloat 7456
- 156.111 SQL.SetParamAsText 7460
- 156.112 SQL.SetParamAsTime 7462

Created 18th August 2014, last changed 10th January 2020.

156.57 SQL.GetParamAsTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamAsTime"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns the value or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_param.html

Examples

Query value of first parameter:

MBS("SQL.GetParamAsTime"; \$Command; "# 0")

See also

- 156.49 SQL.GetParamAsDate 7367
- 156.56 SQL.GetParamAsText 7379
- 156.61 SQL.GetParamName 7384
- 156.65 SQL.GetParamValue 7389
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.108 SQL.SetParamAsDateTime 7454
- 156.110 SQL.SetParamAsNumber 7458
- 156.111 SQL.SetParamAsText 7460
- 156.112 SQL.SetParamAsTime 7462

Created 18th August 2014, last changed 10th January 2020.

156.58 SQL.GetParamDataType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamDataType"; Command; Param)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result The parameter type or error message.

Description

The parameter data type can be: Bool, Short, UShort, Long, ULong, Double, Numeric, DateTime, Interval, String, Bytes, LongBinary, LongChar, Blob, Clob, Cursor, SpecificToDBMS or unknown.

Examples

Query data type of first parameter:

MBS("SQL.GetParamDataType"; \$Command; "# 0")

See also

- 156.38 SQL.GetFieldDataType 7353
- 156.50 SQL.GetParamAsDateTime 7368
- 156.79 SQL.NewCommand 7408
- 156.113 SQL.SetParamDataType 7463

Created 18th August 2014, last changed 13th January 2015.

156.59 SQL.GetParamIsDefault

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamIsDefault"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns 1 if you called SQL.setParamDefault function; 0 otherwise.

Description

See also

- 156.60 SQL.GetParamIsNull 7383
- 156.79 SQL.NewCommand 7408
- 156.114 SQL.SetParamDefault 7464

Created 18th August 2014, last changed 18th April 2015.

156.60 SQL.GetParamIsNull

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamIsNull"; Command; Param)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.
"1"

Result Returns 1 if the value of current object is NULL; otherwise 0.

Description**See also**

- 156.49 SQL.GetParamAsDate 7367
- 156.53 SQL.GetParamAsNumber 7373
- 156.54 SQL.GetParamAsPDF 7375
- 156.55 SQL.GetParamAsPNG 7377
- 156.56 SQL.GetParamAsText 7379
- 156.57 SQL.GetParamAsTime 7380
- 156.59 SQL.GetParamIsDefault 7382
- 156.65 SQL.GetParamValue 7389
- 156.79 SQL.NewCommand 7408
- 156.115 SQL.SetParamNull 7465

Created 18th August 2014, last changed 28th November 2019.

156.61 SQL.GetParamName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamName"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.
"1"

Result The name of the parameter or error message.

Description

Examples

Query name of first parameter:

MBS("SQL.GetParamName"; \$Command; "# 0")

See also

- 156.10 SQL.Execute 7309
- 156.49 SQL.GetParamAsDate 7367
- 156.57 SQL.GetParamAsTime 7380
- 156.62 SQL.GetParamNameList 7385
- 156.65 SQL.GetParamValue 7389
- 156.66 SQL.GetParamValueList 7390
- 156.79 SQL.NewCommand 7408
- 156.115 SQL.SetParamNull 7465
- 156.119 SQL.SetParamValue 7470

Created 18th August 2014, last changed 13th January 2015.

156.62 SQL.GetParamNameList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamNameList"; Command)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns list or error.

Description**Examples**

Create a command, fill parameters and query names and values list:

```
# Create command for insert
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "INSERT INTO 'Test' (First-
Name, LastName, Birthday, NumberOfOrders, TotalSales) VALUES (:1,:2,:3,:4,:5)") ]
# now fill some parameters
Set Variable [ $result; Value:MBS("SQL.SetParamAsText"; $Command; 1; SQLite fun::FirstName) ]
Set Variable [ $result; Value:MBS("SQL.SetParamAsText"; $Command; 2; SQLite fun::LastName) ]
Set Variable [ $result; Value:MBS("SQL.SetParamAsDate"; $Command; 3; SQLite fun::Birthday) ]
Set Variable [ $result; Value:MBS("SQL.SetParamAsNumber"; $Command; 4; SQLite fun::NumberOfOrders)
]
Set Variable [ $result; Value:MBS("SQL.SetParamAsFloat"; $Command; 5; SQLite fun::TotalSales) ]
# query list of parameter names:
Set Variable [ $ParameterNames; Value:MBS("SQL.GetParamNameList"; $Command) ]
# query list of parameter values:
Set Variable [ $ParameterValues; Value:MBS("SQL.GetParamValueList"; $Command) ]
```

See also

- 156.10 SQL.Execute 7309
- 156.41 SQL.GetFieldNameList 7357
- 156.61 SQL.GetParamName 7384
- 156.65 SQL.GetParamValue 7389
- 156.66 SQL.GetParamValueList 7390
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452

- 156.109 SQL.SetParamAsFloat 7456
- 156.110 SQL.SetParamAsNumber 7458
- 156.111 SQL.SetParamAsText 7460

156.62.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr4](#)

Created 8th April 2015, last changed 8th April 2015.

156.63 SQL.GetParamOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	8.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamOption"; Command; Param; Key)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Key

A string key of the command option.

""

Result Returns OK or error.

Description**See also**

- 156.42 SQL.GetFieldOption 7359
- 156.57 SQL.GetParamAsTime 7380
- 156.64 SQL.GetParamOptions 7388
- 156.79 SQL.NewCommand 7408
- 156.116 SQL.SetParamOption 7466

156.63.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 20th September 2018, last changed 20th September 2018.

156.64 SQL.GetParamOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	8.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamOptions"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns list or error.

Description

See also

- 156.43 SQL.GetFieldOptions 7360
- 156.63 SQL.GetParamOption 7387
- 156.79 SQL.NewCommand 7408
- 156.116 SQL.SetParamOption 7466

156.64.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 20th September 2018, last changed 20th September 2018.

156.65 SQL.GetParamValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamValue"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns value or error.

Description

The value is converted to a FileMaker value with matching type.

BLOBs are returned as hex strings and not as container values (could be changed).

NULL values are returned as empty container values.

See also

- 156.44 SQL.GetFieldValue 7361
- 156.49 SQL.GetParamAsDate 7367
- 156.55 SQL.GetParamAsPNG 7377
- 156.57 SQL.GetParamAsTime 7380
- 156.60 SQL.GetParamIsNull 7383
- 156.61 SQL.GetParamName 7384
- 156.62 SQL.GetParamNameList 7385
- 156.66 SQL.GetParamValueList 7390
- 156.79 SQL.NewCommand 7408
- 156.120 SQL.SetParamValues 7472

156.65.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 18th April 2015, last changed 20th April 2015.

156.66 SQL.GetParamValueList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetParamValueList"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns list or error.

Description

If value contains a new line or return character, we replace it with \n or \r.

Examples

Create a command, fill parameters and query names and values list:

```
# Create command for insert
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "INSERT INTO 'Test' (First-
Name, LastName, Birthday, NumberOfOrders, TotalSales) VALUES (:1,:2,:3,:4,:5)") ]
# now fill some parameters
Set Variable [ $result; Value:MBS("SQL.SetParamAsText"; $Command; 1; SQLite fun::FirstName) ]
Set Variable [ $result; Value:MBS("SQL.SetParamAsText"; $Command; 2; SQLite fun::LastName) ]
Set Variable [ $result; Value:MBS("SQL.SetParamAsDate"; $Command; 3; SQLite fun::Birthday) ]
Set Variable [ $result; Value:MBS("SQL.SetParamAsNumber"; $Command; 4; SQLite fun::NumberOfOrders)
]
Set Variable [ $result; Value:MBS("SQL.SetParamAsFloat"; $Command; 5; SQLite fun::TotalSales) ]
# query list of parameter names:
Set Variable [ $ParameterNames; Value:MBS("SQL.GetParamNameList"; $Command) ]
# query list of parameter values:
Set Variable [ $ParameterValues; Value:MBS("SQL.GetParamValueList"; $Command) ]
```

See also

- 156.45 SQL.GetFieldValueList 7362
- 156.61 SQL.GetParamName 7384
- 156.62 SQL.GetParamNameList 7385
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.109 SQL.SetParamAsFloat 7456
- 156.110 SQL.SetParamAsNumber 7458

<i>156.66. SQL.GETPARAMVALUELIST</i>	7391
• 156.111 SQL.SetParamAsText	7460
• 156.119 SQL.SetParamValue	7470
• 156.120 SQL.SetParamValues	7472

156.66.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr4](#)

Created 8th April 2015, last changed 8th April 2015.

156.67 SQL.GetRecordsAsText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.GetRecordsAsText"; Command { ; FieldDelimiter; RowDelimiter })

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

FieldDelimiter

Optional

The delimiter for between fields. Default is a tab character.

RowDelimiter

Optional

The delimiter between records. Default is newline character.

Result Returns text or error.

Description

Don't call SQL.FetchNext before as this function will call it for you to loop over records.

Converts all field content to text.

If you just want one field, maybe you just select the required field with your select statement.

Examples

Run and query result as text:

```
# Create select and run it
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "SELECT * FROM Test") ]
# Run it
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
If [ $result "OK" ]
Show Custom Dialog [ "Error: " & $result ]
Else
Show Custom Dialog [ "Inhalt"; MBS("SQL.GetRecordsAsText"; $command) ]
End If
# Cleanup
Set Variable [ $result2; Value:MBS("SQL.FreeCommand"; $Command) ]
```

See also

- 156.10 SQL.Execute 7309
- 156.13 SQL.FetchNext 7316
- 156.18 SQL.FreeCommand 7324

156.67. *SQL.GETRECORDSASTEXT*

7393

- 156.79 SQL.NewCommand

7408

156.67.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 10th August 2015, last changed 11st August 2015.

156.68 SQL.InsertOrUpdateRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	7.3	Yes	Yes	Yes	Yes	Yes

```
MBS( "SQL.InsertOrUpdateRecords"; Command; InsertFileName; InsertTableName; FieldNames; PrimaryKeyDB1; PrimaryKeyFM1 { ; SecondaryKeyDB2; SecondaryKeyFM2; TertariyKeyDB3; TertariyKeyFM3 } )
```

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.
Get(FileName)

InsertTableName

The name of the table to insert record into.
"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.
"Model"

PrimaryKeyDB1

The name of the primary key in the record set. Must be one of the columns in the record from SQL. If empty, we use primaryKeyFM1 here.
"RowID"

PrimaryKeyFM1

The name of the primary key for the update statements. Must be one of the columns in the FileMaker table. If empty, we use primaryKeyDB1 here.
"RowID"

SecondaryKeyDB2

Optional

Available in MBS FileMaker Plugin 8.1 or newer.

The name of the secondary key in the record set. Must be one of the columns in the record from SQL. If empty, we use primaryKeyFM2 here.
"ClientID"

SecondaryKeyFM2

Optional

Available in MBS FileMaker Plugin 8.1 or newer.

The name of the secondary key for the update statements. Must be one of the columns in the FileMaker table. If empty, we use primaryKeyDB2 here.
"ClientID"

TertiaryKeyDB3

Optional

Available in MBS FileMaker Plugin 8.1 or newer.

The name of the tertiary key in the record set. Must be one of the columns in the record from SQL. If empty, we use primaryKeyFM3 here.

"CompanyID"

TertiaryKeyFM3

Optional

Available in MBS FileMaker Plugin 8.1 or newer.

The name of the tertiary key for the update statements. Must be one of the columns in the FileMaker table. If empty, we use primaryKeyDB3 here.

"CompanyID"

Result Returns list or error.**Description**

This function allows to easily copy a lot of records from SQL database into FileMaker table.

Please provide field names in FileMaker. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

This will not work for BLOBs as they are stored currently as hex encoded text only.

Function will fail if data types in FileMaker and other SQL database do not match for assignment. e.g. date and time fields will not work, only timestamp fields.

For copying record within FileMaker, please use FM.InsertRecordQuery or FM.SQL.InsertRecords functions.

Returns list with three values: Number of records inserted, number of records updated and number of errors. Primary key in FM must be defined as unique and validate always, so FileMaker properly reports a duplicate.

We first do a select to count how many we have and than do either insert or update. If insert returns duplicate error, we try update, too. Up to ten pairs of DB and FM keys are possible.

Examples

Insert or update records:

```
# get connection before.
# Create select and run it
Set Variable [ $Command ; Value: MBS("SQL.NewCommand"; $Connection; "SELECT RowID, FirstName,
LastName, TotalSales, NumberOfOrders FROM Test") ]
# Run it
Set Variable [ $result ; Value: MBS("SQL.Execute"; $Command) ]
If [ $result "OK" ]
Show Custom Dialog [ "Error: " & $result ]
Else
```

```

Set Variable [ $result ; Value: MBS("SQL.InsertOrUpdateRecords"; $Command; Get(FileName); "SQLite
fun"; "PKey$FirstName$LastName$TotalSales$NumberOfOrders"; "RowID"; "PKey") ]
Show Custom Dialog [ "Records imported." & $& $& $result ]
End If
# Cleanup
Set Variable [ $result2 ; Value: MBS("SQL.FreeCommand"; $Command) ]
Set Variable [ $result2 ; Value: MBS("SQL.Commit"; $Connection) ]
Set Variable [ $result2 ; Value: MBS("SQL.FreeConnection"; $Connection) ]

```

See also

- [80.8 FM.ExecuteSQL](#) 4088
- [80.9 FM.ExecuteSQL.LastError](#) 4094
- [80.14 FM.InsertOrUpdateRecord](#) 4104
- [80.15 FM.InsertOrUpdateRecord2](#) 4107
- [80.16 FM.InsertOrUpdateRecord3](#) 4110
- [80.18 FM.InsertRecord](#) 4115
- [80.20 FM.InsertRecordQuery](#) 4122
- [156.7 SQL.Commit](#) 7300
- [156.69 SQL.InsertRecords](#) 7397
- [156.79 SQL.NewCommand](#) 7408

156.68.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [MBS FileMaker Plugin v8.1 with 5100 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.1](#)
- [MBS FileMaker Plugin, version 8.1pr4](#)
- [MBS FileMaker Plugin, version 8.1pr2](#)
- [MBS FileMaker Plugin, version 8.1pr1](#)
- [MBS FileMaker Plugin, version 7.3pr3](#)

Created 21st June 2017, last changed 5th February 2018.

156.69 SQL.InsertRecords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.2	Yes	Yes	Yes	Yes	Yes

MBS("SQL.InsertRecords"; Command; InsertFileName; InsertTableName; FieldNames { ; IgnoreDuplicates })

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

InsertFileName

The file name of where the insert table is inside. Can be empty to look for the table in all files.

Get(FileName)

InsertTableName

The name of the table to insert record into.

"Assets"

FieldNames

A list of field names for the insert. Empty entries in the list are ignored.

"Model"

IgnoreDuplicates

Optional

Available in MBS FileMaker Plugin 7.3 or newer.

If 1, ignores duplicates or with 0 or by default reports error for duplicates. If duplicates are found, the function returns number of duplicates instead of OK.

0

Result Returns number of duplicates, OK or error.

Description

This function allows to easily copy a lot of records from SQL database into FileMaker table.

Please provide field names in FileMaker. The order has to match those in the record set.

Due to passing in new field names, you can even rearrange values from one column to other while copying.

In the SQL you can use functions for sums or join data from several tables together to fill a new table.

Use FM.ExecuteSQL.LastErrorMessage and FM.ExecuteSQL.LastError to see error message.

Reports an error if field name list doesn't match column count of the query result.

This will not work for BLOBs as they are stored currently as hex encoded text only.

Function will fail if data types in FileMaker and other SQL database do not match for assignment. e.g. date and time fields will not work, only timestamp fields.

For copying record within FileMaker, please use FM.InsertRecordQuery or FM.SQL.InsertRecords functions.

Examples

Insert records to FileMaker from SQL database:

```

# Create select command and run it
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "SELECT FirstName, Last-
Name, Birthday, NumberOfOrders, TotalSales FROM Test") ]
# Run it
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
If [ $result = "OK" ]
Show Custom Dialog [ "Error: " & $result ]
Else
Set Variable [ $result; Value:MBS("SQL.InsertRecords"; $Command; Get(FileName) ;"SQLite fun"; "First-
Name$LastName$Birthday$NumberOfOrders$TotalSales") ]
Show Custom Dialog [ "Records imported."; $result ]
End If
# Cleanup
Set Variable [ $result2; Value:MBS("SQL.FreeCommand"; $Command) ]

```

See also

- [80.8 FM.ExecuteSQL](#) 4088
- [80.9 FM.ExecuteSQL.LastError](#) 4094
- [80.17 FM.InsertOrUpdateRecordQuery](#) 4113
- [80.20 FM.InsertRecordQuery](#) 4122
- [80.21 FM.InsertRecordQueryIgnoreDuplicates](#) 4126
- [109.17 Matrix.InsertRecords](#) 5798
- [156.10 SQL.Execute](#) 7309
- [156.18 SQL.FreeCommand](#) 7324
- [156.68 SQL.InsertOrUpdateRecords](#) 7394
- [156.79 SQL.NewCommand](#) 7408

Example Databases

- [Third Party/FileMaker Snippet Storage](#)

156.69.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [MBS FileMaker Plugin, version 7.3pr1](#)
- [MBS FileMaker Plugin, version 7.2pr3](#)
- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 29th July 2015, last changed 18th May 2017.

156.70 SQL.InternalSQLiteLibrary.Activate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.InternalSQLiteLibrary.Activate")

Result Returns OK or error.

Description

If you use this command, you don't need to provide sqlite3.dll or sqlite3.dylib yourself.

Examples

Activate the internal SQLite library if not already activated:

```
If [ MBS( "SQL.InternalSQLiteLibrary.Activated" ) = 1 ]
Set Variable [ $r; Value:MBS( "SQL.InternalSQLiteLibrary.Activate" ) ]
End If
```

See also

- [156.1 FM.SQL.InsertRecordsToSQL](#) 7291
- [156.71 SQL.InternalSQLiteLibrary.Activated](#) 7400
- [156.72 SQL.InternalSQLiteLibrary.Deactivate](#) 7401
- [156.73 SQL.InternalSQLiteLibrary.SourceID](#) 7402
- [156.74 SQL.InternalSQLiteLibrary.Version](#) 7403

Example Databases

- [SQL to other databases/SQL Export](#)
- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)
- [Third Party/FileMaker Snippet Storage](#)

156.70.1 Blog Entries

- [Use JSON functions with SQLite](#)
- [Embedded SQLite and encryption](#)

Created 23th September 2015, last changed 23th September 2015.

156.71 SQL.InternalSQLiteLibrary.Activated

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.InternalSQLiteLibrary.Activated")

Result Returns 0 or 1.

Description

Returns 1 if used and 0 if not.

Examples

Activate the internal SQLite library if not already activated:

```
If [ MBS( "SQL.InternalSQLiteLibrary.Activated" ) = 1 ]
Set Variable [ $r; Value:MBS( "SQL.InternalSQLiteLibrary.Activate" ) ]
End If
```

See also

- 156.70 SQL.InternalSQLiteLibrary.Activate 7399
- 156.72 SQL.InternalSQLiteLibrary.Deactivate 7401
- 156.73 SQL.InternalSQLiteLibrary.SourceID 7402
- 156.74 SQL.InternalSQLiteLibrary.Version 7403

Created 23th September 2015, last changed 23th September 2015.

156.72 **SQL.InternalSQLiteLibrary.Deactivate**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.InternalSQLiteLibrary.Deactivate")

Result Returns OK or error.

Description

You should normally never need to call this.

See also

- 156.70 [SQL.InternalSQLiteLibrary.Activate](#) 7399
- 156.71 [SQL.InternalSQLiteLibrary.Activated](#) 7400
- 156.73 [SQL.InternalSQLiteLibrary.SourceID](#) 7402
- 156.74 [SQL.InternalSQLiteLibrary.Version](#) 7403

Created 23th September 2015, last changed 23th September 2015.

156.73 SQL.InternalSQLiteLibrary.SourceID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.InternalSQLiteLibrary.SourceID")

Result Returns text.

Description

Examples

Check the source ID:

MBS("SQL.InternalSQLiteLibrary.SourceID")

e.g. 2015-07-29 20:00:57 cf538e2783e468bbc25e7cb2a9ee64d3e0e80b2f

See also

- 156.70 SQL.InternalSQLiteLibrary.Activate 7399
- 156.71 SQL.InternalSQLiteLibrary.Activated 7400
- 156.72 SQL.InternalSQLiteLibrary.Deactivate 7401
- 156.74 SQL.InternalSQLiteLibrary.Version 7403

Created 23th September 2015, last changed 23th September 2015.

156.74 SQL.InternalSQLiteLibrary.Version

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.InternalSQLiteLibrary.Version")

Result Returns version as text.

Description**Examples**

Checks version:

MBS("SQL.InternalSQLiteLibrary.Version")

e.g. "3.8.11.1"

See also

- 156.70 SQL.InternalSQLiteLibrary.Activate 7399
- 156.71 SQL.InternalSQLiteLibrary.Activated 7400
- 156.72 SQL.InternalSQLiteLibrary.Deactivate 7401
- 156.73 SQL.InternalSQLiteLibrary.SourceID 7402
- 156.75 SQL.InternalSQLiteLibrary.VersionNumber 7404

Created 23th September 2015, last changed 23th September 2015.

156.75 SQL.InternalSQLiteLibrary.VersionNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.InternalSQLiteLibrary.VersionNumber")

Result Returns number.

Description

Examples

Checks version:

```
MBS( "SQL.InternalSQLiteLibrary.VersionNumber" )
# e.g. 3008011
```

See also

- 156.74 SQL.InternalSQLiteLibrary.Version

7403

Created 23th September 2015, last changed 23th September 2015.

156.76 SQL.ListCommands

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.ListCommands")

Result Returns list or error.

Description

This can help to see if there are any open commands left to close.

Examples

List commands:

```
Set Variable [ $list; Value:MBS("SQL.ListCommands") ]
```

See also

- 156.84 SQL.ResetCommand

7418

156.76.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 12nd September 2016, last changed 12nd September 2016.

156.77 SQL.ListConnections

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.ListConnections")

Result Returns list or error.

Description

This can help to see if there are any open connections left to close.

Examples

List connections:

```
Set Variable [ $list; Value:MBS("SQL.ListConnections") ]
```

See also

- 156.19 SQL.FreeConnection 7326
- 156.80 SQL.NewConnection 7412
- 156.85 SQL.ResetConnection 7419

156.77.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 12nd September 2016, last changed 12nd September 2016.

156.78 SQL.MySQL.InsertID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.9	Yes	Yes	Yes	Yes	Yes

MBS("SQL.MySQL.InsertID"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.
\$Connection

Result Returns the ID or error message.

Description

see also

<http://dev.mysql.com/doc/refman/5.1/en/mysql-insert-id.html>

See also

- 156.80 SQL.NewConnection

7412

156.78.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr6](#)

Created 18th August 2014, last changed 18th August 2014.

156.79 SQL.NewCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.NewCommand"; Connection { ; Command; CommandType; ID })

Parameters

Connection

The command reference number gained with SQL.NewConnection.

\$Connection

Command

Optional

This represents command text string (an SQL statement or a stored procedure name). If it is empty string, no command text is associated with the command, and you have to call SQL.SetCommandText method later.

"SELECT * FROM Test"

CommandType

Optional

Type of a command. Can be CmdSQLStmt, CmdSQLStmtRaw or CmdStoredProc.

"CmdSQLStmt"

ID

Optional

The ID to use instead of default one. Must be unique. If none is provided, the plugin will create one.

Result Returns command reference number or error message.

Description

Don't forget to free command with SQL.FreeCommand.

SQL command reference numbers are starting at 23000 and counting up for each new command.

For server scripting, please use one connection for each script running on server, so multiple scripts running at the same data don't access the same connection or command objects in memory. And each connection has its own transaction and error state.

Examples

Creates a new command to create table:

```
MBS("SQL.NewCommand"; $Connection; "CREATE TABLE Test(FirstName VARCHAR, LastName VARCHAR, Birthday date, NumberOfOrders integer, TotalSales double)")
```

Run a stored procedure:

```
# new command for calling our test procedure on a Microsoft SQL Server
Set Variable [ $command; MBS( "SQL.NewCommand"; $Connection; "dbo.Test" ) ]
# set a parameter
```

```

Set Variable [ $r; MBS( "SQL.SetParamAsNumber"; $Command; "Param1"; 7 ) ]
# execute query
Set Variable [ $r; MBS( "SQL.Execute"; $Command ) ]
# fetch first record
Set Variable [ $r; MBS( "SQL.FetchNext"; $Command ) ]
# get result field
Set Variable [ $result; MBS( "SQL.GetFieldAsText"; $Command; 1 ) ]

```

New command with named parameters:

```

MBS("SQL.NewCommand"; $Connection; "update Documents set ProductNumber=:ProductNumber, Pub-
OptionNo=:PubOptionNo, DueInStock=:DueInStock, ProductTypeID=:ProductTypeID where DocID=:Do-
cID" )

```

Call stored procedure sys.sp_setapprole via ODBC connection to Microsoft SQL Server:

```

# connect via SQL to a Microsoft SQL Server
Set Variable [ $$Connection ; Value: MBS ( "SQL.NewConnection" ) ]
Set Variable [ $$SetToODBC ; Value: MBS ( "SQL.SetClient" ; $$Connection ; "ODBC" ) ]
Set Variable [ $ConnectResult ; Value: MBS ( "SQL.Connect" ; $$Connection ; "connection string" ; "user"
; "password" ; "ODBC" ) ]
If [ MBS("IsError") = 0 ]
# make a new command for the stored procedure
Set Variable [ $StoredProcedure ; Value: MBS ( "SQL.NewCommand" ; $$Connection ; "sys.sp_setapprole"
) ]
If [ MBS("IsError") = 0 ]
# for debugging query list of parameters
Set Variable [ $Params ; Value: MBS( "SQL.GetParamNameList"; $StoredProcedure) ]
# set parameters
Set Variable [ $RoleName ; Value: MBS ( "SQL.SetParamAsText" ; $StoredProcedure ; "@rolename" ;
"xxx" ) ]
Set Variable [ $Password ; Value: MBS ( "SQL.SetParamAsText" ; $StoredProcedure ; "@password" ; "yyy"
) ]
Set Variable [ $Cookie ; Value: MBS ( "SQL.SetParamAsBoolean" ; $StoredProcedure ; "@fCreateCookie"
; 1 ) ]
Set Variable [ $Encrypt ; Value: MBS ( "SQL.SetParamAsText" ; $StoredProcedure ; "@encrypt"; "none" )
]
Set Variable [ $Execute ; Value: MBS ( "SQL.Execute" ; $StoredProcedure ) ]
// #
If [ MBS("IsError") = 0 ]
# query results on success
Set Variable [ $ReturnValue ; Value: MBS ( "SQL.GetParamAsNumber" ; $StoredProcedure ; "@RE-
TURN_VALUE" ) ]
Set Variable [ $cookie ; Value: MBS ( "SQL.GetParamAsText" ; $StoredProcedure ; "@cookie" ) ]
End If
Set Variable [ $FreeStoredProcedure ; Value: MBS ( "SQL.FreeCommand" ; $StoredProcedure ) ]
End If

```

```
Set Variable [ $FreeConnection ; Value: MBS ( "SQL.FreeConnection" ; $$Connection ) ]
End If
```

See also

- 156.45 [SQL.GetFieldValueList](#) 7362
- 156.62 [SQL.GetParamNameList](#) 7385
- 156.123 [SQL.isExecuted](#) 7476
- 156.124 [SQL.isOpened](#) 7477
- 156.125 [SQL.isResultSet](#) 7478
- 156.84 [SQL.ResetCommand](#) 7418
- 156.97 [SQL.SetClient](#) 7434
- 156.110 [SQL.SetParamAsNumber](#) 7458
- 156.119 [SQL.SetParamValue](#) 7470
- 156.120 [SQL.SetParamValues](#) 7472

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft Access Execute](#)
- [SQL to other databases/Microsoft SQL Server Connect](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/ODBC Query](#)
- [SQL to other databases/ODBC to FileMaker/ODBC Test](#)
- [SQL to other databases/SQL Export](#)
- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)

156.79.1 Blog Entries

- [Can FileMaker connect to a Microsoft Access database?](#)
- [MBS FileMaker Plugin IDs](#)
- [Tip of the day: Connect to MySQL and run a query](#)
- [MBS FileMaker Plugin, version 6.4pr7](#)
- [MBS Filemaker Plugin, version 3.0pr4](#)

156.79.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 28
- Ausgabe 3/2016, Seite 30
- Ausgabe 2/2016, Seite 14
- Ausgabe 1/2016, Seite 29
- Ausgabe 4/2015, Seite 16

Created 18th August 2014, last changed 10th October 2019.

156.80 SQL.NewConnection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.NewConnection" { ; ID })

Parameters

ID

Optional

The ID to use instead of default one. Must be unique. If none is provided, the plugin will create one.

Result An error or a connection reference number.

Description

The Connection represents a database connection. You must have a connection before you can operate on the database - furthermore the connection needs to be connected. It is important to note that connection objects are not connected during construction - it is up to the user to explicitly call Connect method for the object after it is created and before it is used. Once connected, a connection object is normally shared by the other objects that require a connection (e.g. commands).

Use SQL.FreeConnection to release connection after you finished.

read also:

https://www.sqlapi.com/ApiDoc/class_s_a_connection.html

SQL connection reference numbers are starting at 22000 and counting up for each new connection.

Examples

Create new connection

```
$Connection = MBS("SQL.NewConnection")
```

Connect to MySQL and run a query:

```
# Start a new connection
Set Variable [ $Connection; Value:MBS("SQL.NewConnection") ]
# Tell plugin where MySQL library is (put it where you like)
Set Variable [ $result; Value:MBS("SQL.SetConnectionOption"; $Connection; "MYSQL.LIBS"; "/Users/cs/Desktop/libmysqlclient.dylib") ]
# Connect to a mysql database:
Set Variable [ $result; Value:MBS("SQL.Connect"; $Connection; "192.168.11.51@Server_Config"; "user"; "password"; "MySQL") ]
If [ $result = "OK" ]
# Connection failed
Show Custom Dialog [ "Error: " & $result ]
```



```

Set Variable [ $result; Value:MBS("SQL.FreeConnection"; $Connection) ]
Halt Script
Else
# Create a query:
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "SELECT * FROM Server_Con-
fig where ServerName=:Name" ) ]
# If you use parameters, you can fill them here
Set Variable [ $r; Value:MBS("SQL.SetParamAsText"; $Command; "Name"; "MacMini" ) ]
# Execute it
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
If [ $result "OK" ]
Set Field [ MySQL Query::Result; $result ]
Show Custom Dialog [ "Error: " & $result ]
Else
Set Variable [ $lines; Value:"" ]
Set Variable [ $fieldcount; Value:MBS("SQL.FieldCount"; $command) ]
Loop
# call FetchNext to get the next record
Set Variable [ $result; Value:MBS("SQL.FetchNext"; $Command) ]
Exit Loop If [ $result 1 ]
Set Variable [ $line; Value:"" ]
Set Variable [ $i; Value:1 ]
Loop
# We query field names and values to show them later
Set Variable [ $v; Value:MBS("SQL.GetFieldAsText"; $command; $i) ]
Set Variable [ $n; Value:MBS("SQL.GetFieldName"; $command; $i) ]
Set Variable [ $line; Value:$line & $n & ": " & $v & $]
Set Variable [ $i; Value:$i+1 ]
Exit Loop If [ $i >$fieldCount ]
End Loop
Set Variable [ $lines; Value:$lines & ($line & $) ]
End Loop
Set Variable [ $lines; Value:$lines & $]
Show Custom Dialog [ "Result from Query: "; $lines ]
End If
# Cleanup
Set Variable [ $result2; Value:MBS("SQL.FreeCommand"; $Command) ]
End If
Set Variable [ $result2; Value:MBS("SQL.FreeConnection"; $Connection) ]

```

See also

- 156.13 SQL.FetchNext 7316
- 156.16 SQL.FieldCount 7321
- 156.19 SQL.FreeConnection 7326
- 156.26 SQL.GetConnectionTag 7334

- 156.36 SQL.GetFieldAsText 7350
- 156.40 SQL.GetFieldName 7355
- 156.122 SQL.isConnected 7475
- 156.77 SQL.ListConnections 7406
- 156.97 SQL.SetClient 7434
- 156.104 SQL.SetIsolationLevel 7448

Example Databases

- [SQL to other databases/Microsoft Access Execute](#)
- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Connect](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/ODBC Query](#)
- [SQL to other databases/ODBC to FileMaker/ODBC Test](#)
- [SQL to other databases/SQL Export](#)
- [SQL to other databases/SQLite fun](#)
- [Third Party/FileMaker Snippet Storage](#)

156.80.1 Blog Entries

- [MBS FileMaker Plugin IDs](#)
- [Tip of the day: Connect to MySQL and run a query](#)
- [MBS FileMaker Plugin, version 6.4pr7](#)
- [Connecting to Microsoft Visual FoxPro](#)

156.80.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 28](#)
- [Ausgabe 3/2016, Seite 29](#)
- [Ausgabe 1/2016, Seite 28](#)
- [Ausgabe 4/2015, Seite 15](#)

156.81 SQL.Open

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Open"; Command)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns "OK" or error message.

Description

Use the Open method to open the command explicitly.

A command will be implicitly opened by any method that needs an open command, therefore you don't have to call it explicitly.

To test whether a command is opened use isOpened method.

See also

- 156.79 SQL.NewCommand

7408

Created 18th August 2014, last changed 13th January 2015.

156.82 SQL.ParamCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.ParamCount"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns number of Parameters or error message.

Description

See also

- 156.79 SQL.NewCommand

7408

Created 18th August 2014, last changed 13th January 2015.

156.83 SQL.Prepare

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Prepare"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Result Returns "OK" or error message.

Description

Prepare method compiles the command, but does not execute it. The method detects syntax errors in command text and verifies the existence of database objects.

Execute method calls Prepare method implicitly if needed, therefore you don't have to call it explicitly.

See also

- 156.79 SQL.NewCommand

7408

Created 18th August 2014, last changed 13th January 2015.

156.84 SQL.ResetCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.ResetCommand"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns "OK" or error message.

Description

See also

- 156.18 SQL.FreeCommand 7324
- 156.76 SQL.ListCommands 7405
- 156.79 SQL.NewCommand 7408

Created 18th August 2014, last changed 13th January 2015.

156.85 SQL.ResetConnection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.ResetConnection"; Connection)

Parameters**Connection**

The connection reference number gained with SQL.NewConnection.
\$Connection

Result Returns "OK" or error message.

Description**See also**

- 156.19 SQL.FreeConnection 7326
- 156.77 SQL.ListConnections 7406
- 156.80 SQL.NewConnection 7412

Example Databases

- [Third Party/FileMaker Snippet Storage](#)

Created 18th August 2014, last changed 18th August 2014.

156.86 SQL.Rollback

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.Rollback"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Result Returns "OK" or error message.

Description

Rollback method rolls back the database to the state it was in at the completion of the last commit operation.

All uncommitted work is undone.

Rollback method rolls back the work of all commands that associated with that connection.

To commit all changes made since the start of the transaction use SQL.Commit method.

See also

- 156.7 SQL.Commit 7300
- 156.80 SQL.NewConnection 7412

156.86.1 FileMaker Magazin

- Ausgabe 1/2016, Seite 30

Created 18th August 2014, last changed 18th August 2014.

156.87 SQL.RowsAffected

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.RowsAffected"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns number of rows or error message.

Description

Returns the number of rows affected by the last insert/update/delete command execution.
This normally only works if enabled, so please call SQL.SetCommandOption function to enable it if needed.

You may need to define cursor to be scrollable or cached in order to get number of rows in a recordset (For SELECT).

Examples

Requests a scrollable record set:

```
MBS( "SQL.SetCommandOption"; $Command; "Scrollable"; "True" )
```

Query number of records found:

```
Set Variable [ $query ; Value: "SELECT ID, Name, ChangedTS FROM Trainings WHERE ChangedTS  
>=:1 " ]
Set Variable [ $command ; Value: MBS("SQL.NewCommand"; $connection; $query ) ]
Set Variable [ $r; Value: MBS("SQL.SetParamAsDatetime"; $command; 1; $search_date ) ]
Set Variable [ $r; Value: MBS("SQL.SetCommandOption"; $Command; "Scrollable"; "True" ) ]
Set Variable [ $r ; Value: MBS("SQL.Execute"; $command ) ]
Set Variable [ $count ; MBS( "SQL.RowsAffected"; $Command ) ]
# read records
Set Variable [ $r ; Value: MBS("SQL.FreeCommand"; $command ) ]
```

See also

- 156.10 SQL.Execute 7309
- 156.18 SQL.FreeCommand 7324
- 156.79 SQL.NewCommand 7408
- 156.98 SQL.SetCommandOption 7436

- 156.107 SQL.SetParamAsDate 7452
- 156.108 SQL.SetParamAsDateTime 7454

Example Databases

- [Third Party/FileMaker Snippet Storage](#)

Created 18th August 2014, last changed 20th December 2019.

156.88 SQL.SQLite3.EnableLoadExtension

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	4.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SQLite3.EnableLoadExtension"; Connection; Enable)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.
\$Connection

Enable

Pass 1 to enable or 0 to disable.
1

Result Returns OK or error.

Description

See also

- 156.80 SQL.NewConnection

7412

156.88.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr9](#)

Created 4th November 2014, last changed 4th November 2014.

156.89 SQL.SQLite3.LastInsertRowID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.9	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SQLite3.LastInsertRowID"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.
\$Connection

Result Returns the ID or error message.

Description

see also

http://www.sqlite.org/c3ref/last_insert_rowid.html

See also

- 156.80 SQL.NewConnection

7412

156.89.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr6](#)

Created 18th August 2014, last changed 18th August 2014.

156.90 SQL.SQLite3.MemoryHighwater

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SQLite3.MemoryHighwater" { ; Reset })

Parameters

Reset

Optional

Whether to reset the high water mark. Pass 1 to reset.

1

Result Returns number or error.

Description

Can be reset with reset parameter.

156.90.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 11st August 2017, last changed 11st August 2017.

156.91 SQL.SQLite3.MemoryUsed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	7.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SQLite3.MemoryUsed")

Result Returns number or error.

Description

This is memory allocated, but not yet freed.

156.91.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 11st August 2017, last changed 11st August 2017.

156.92 SQL.SQLite3.ReKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SQLite3.ReKey"; Connection; Key { ; Encoding })

Parameters

Connection

The connection reference number gained with SQL.NewConnection.
\$Connection

Key

The new encryption key.
"Hello World"

Encoding

Optional
The text encoding for the key. Default is UTF-8.
"UTF-8"

Result Returns OK or error.

Description

An empty key decrypts the database.

Rekeying requires that every page of the database file be read, decrypted, reencrypted with the new key, then written out again. Consequently, rekeying can take a long time on a larger database.

Most SEE variants allow you to encrypt an existing database that was created using the public domain version of SQLite. This is not possible when using the authenticating version of the encryption extension in see-aes128-ccm. If you do encrypt a database that was created with the public domain version of SQLite, no nonce will be used and the file will be vulnerable to a chosen-plaintext attack. If you call SetKey() immediately after Open when you are first creating the database, space will be reserved in the database for a nonce and the encryption will be much stronger. If you do not want to encrypt right away, call SetKey() anyway, with an empty key, and the space for the nonce will be reserved in the database even though no encryption is done initially.

A public domain version of the SQLite library can read and write an encrypted database with an empty key. You only need the encryption extension if the key is non-empty.

Examples

Change key to AES-256:

```
MBS( "SQL.SQLite3.ReKey"; $Connection; "aes256:" & $Key; "UTF-8" )
```

See also

7428

CHAPTER 156. SQL

- 156.80 SQL.NewConnection
- 156.93 SQL.SQLite3.SetKey

7412

7429

Created 23th September 2015, last changed 12nd November 2015.

156.93 SQL.SQLite3.SetKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.3	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SQLite3.SetKey"; Connection; Key { ; Encoding })

Parameters

Connection

The connection reference number gained with SQL.NewConnection.
\$Connection

Key

The new encryption key.
"Hello World"

Encoding

Optional
The text encoding for the key. Default is UTF-8.
"UTF-8"

Result Returns OK or error.

Description

This key is applied to the database after connecting. In case of an error, the plugin raises an exception. An empty key can be used for having no encryption.

The amount of key material actually used by the encryption extension depends on which variant of SEE you are using. With RC4, the first 256 byte of key are used. With the AES128, the first 16 bytes of the key are used. With AES256, the first 32 bytes of key are used.

If you specify a key that is shorter than the maximum key length, then the key material is repeated as many times as necessary to complete the key. If you specify a key that is larger than the maximum key length, then the excess key material is silently ignored.

The key must begin with an ASCII prefix to specify which algorithm to use. The prefix must be one of "rc4:", "aes128:", or "aes256:". The prefix is not used as part of the key sent into the encryption algorithm. So the real key should begin on the first byte after the prefix. If no prefix is given, we default to AES 128. To be compatible to Xojo (Real Studio), you can use AES128.

Make sure you pass right text encoding (or none for UTF-8). e.g. using "Müller" as key in text encoding Windows ANSI will not open a database which used that key in UTF-8 encoding.

Examples

Use an encryption key:

```
MBS( "SQL.SQLite3.SetKey"; $Connection; "xxx" )
```

Clear encryption key:

```
MBS( "SQL.SQLite3.SetKey"; $Connection; "" )
```

Use an encryption key with UTF-8 and AES-256:

```
MBS( "SQL.SQLite3.SetKey"; $Connection; "aes256:" & $key; "UTF-8" )
```

See also

- 156.80 [SQL.NewConnection](#) 7412
- 156.92 [SQL.SQLite3.ReKey](#) 7427

156.93.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)
- [Embedded SQLite and encryption](#)

Created 23th September 2015, last changed 12nd November 2015.

156.94 SQL.ServerVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.ServerVersion"; Connection)

Parameters

Connection

The connection reference number gained with `SQL.NewConnection`.

\$Connection

Result Returns version number or error.

Description

The higher word contains the major server version (the XX value in the XX.YY version number); the lower word contains the minor server version (the YY value in the XX.YY version number).

See also

- 156.80 `SQL.NewConnection`

7412

Created 18th August 2014, last changed 18th August 2014.

156.95 SQL.ServerVersionString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.ServerVersionString"; Connection)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Result Returns version string or error.

Description

A server version string may contain some useful information about server brand, configuration and so on. It is a good idea to display this information in all your applications.

See also

- 156.80 SQL.NewConnection

7412

Created 18th August 2014, last changed 18th August 2014.

156.96 SQL.SetAutoCommit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetAutoCommit"; Connection; AutoCommit)

Parameters**Connection**

The connection reference number gained with SQL.NewConnection.
\$Connection

AutoCommit

Whether to turn auto commit on or off. Can be "On" or "Off".
"On"

Result Returns "OK" or error message.

Description

If autocommit is on, the database is committed automatically after each SQL command. Otherwise, transaction is committed only after Commit calling.

Examples

Turn auto commit off:

MBS("SQL.SetAutoCommit"; \$Connection; "off")

See also

- 156.20 SQL.GetAutoCommit 7328
- 156.80 SQL.NewConnection 7412

156.96.1 FileMaker Magazin

- Ausgabe 1/2016, Seite 30

Created 18th August 2014, last changed 25th October 2018.

156.97 SQL.SetClient

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetClient"; Connection; Client)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

Client

The name of the database client to use.

"SQLite"

Result Returns "OK" on success.

Description

You can set a client in Connect method, in this case you don't need to use setClient method. The main destination of this method is to connect to a server with no connection to a database (for example, to check a client availability and version). But if you are calling Connect method with no specified client you have to use setClient method before.

If you are calling setClient method when the connection is set to another client the previous connection will be disconnected and new client will be set.

Pass one of this values: CubeSQL, SQLAnywhere, ODBC, Oracle, SQLServer, Firebird, InterBase, SQLBase, DB2, Informix, Sybase, MySQL, PostgreSQL or SQLite. Connect to Microsoft Access, FileMaker Server (or Pro), Microsoft Visual FoxPro and others via ODBC.

Be aware that for most database servers, you need to specify client library with SQL.SetConnectionOption first.

Examples

Sets client to be SQLite:

```
MBS( "SQL.SetClient"; $Connection; "SQLite" )
```

Sets client to be Oracle:

```
MBS( "SQL.SetClient"; $Connection; "Oracle" )
```

See also

- 156.1 FM.SQL.InsertRecordsToSQL 7291
- 156.8 SQL.Connect 7302

<i>156.97. SQL.SETCLIENT</i>	7435
• 156.10 SQL.Execute	7309
• 156.79 SQL.NewCommand	7408
• 156.80 SQL.NewConnection	7412
• 156.101 SQL.SetConnectionOption	7441

Example Databases

- [SQL to other databases/Firebird Query](#)
- [SQL to other databases/Microsoft Access Execute](#)
- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Connect](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/ODBC Query](#)
- [SQL to other databases/ODBC to FileMaker/ODBC Test](#)
- [SQL to other databases/SQLite blob](#)
- [Third Party/FileMaker Snippet Storage](#)

156.97.1 FileMaker Magazin

- Ausgabe 4/2016, Seite 28
- Ausgabe 3/2016, Seite 29
- Ausgabe 1/2016, Seite 28
- Ausgabe 4/2015, Seite 15

Created 18th August 2014, last changed 29th December 2019.

156.98 SQL.SetCommandOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetCommandOption"; Command; Key; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Key

A string key of the command option.

""

Value

The new value.

""

Result Returns "OK" or error message.

Description

Call this method to set value(s) of server specific command options. See Server specific notes.

A command related option may be specified in either connection object or command object. If it is specified in connection object it affects all the commands on that connection.

If an option is not specially assigned to the command object the Library takes this option from related connection object (see SQL.GetCommandOption function). If an option is not specified in neither command nor connection objects, the Library takes the default option value.

SQL.SetCommandOption method is safe to use in cross-server applications. An option related to a particular server does not affect others.

see also

https://www.sqlapi.com/ApiDoc/class_s_a_command.html

Examples

Requests a scrollable record set:

```
MBS( "SQL.SetCommandOption"; $Command; "Scrollable"; "True" )
```

Store MySQL RecordSet locally:

```
MBS( "SQL.SetCommandOption"; $Command; "HandleResult"; "Store" )
```


Requests 100 rows to be prefetched:

```
MBS( "SQL.SetCommandOption"; $Command; "PreFetchRows"; "100" )
```

Set an option we may for ODBC to FileMaker:

```
MBS( "SQL.SetCommandOption"; $Command; "ODBCAddLongTextBufferSpace"; "false" )
// newer plugins automatically set it right when connecting to FileMaker
```

Allow multiple connections for Microsoft SQL Server:

```
MBS( "SQL.SetCommandOption"; $Command; "SQL_ATTR_CURSOR_TYPE"; "SQL_CURSOR_DYNAMIC" )
```

Set option for concurrency on MS SQL Server:

```
MBS( "SQL.SetCommandOption"; $Command; "SQL_ATTR_CONCURRENCY"; "SQL_CONCUR_READ-
ONLY" )
# Sets the statement concurrency attribute. See SQNCLI documentation for an additional information.
# Valid values: "SQL_CONCUR_READONLY", "SQL_CONCUR_VALUES", "SQL_CONCUR_ROWVER",
"SQL_CONCUR_LOCK".
```

See also

- 156.11 [SQL.FetchFirst](#) 7313
- 156.12 [SQL.FetchLast](#) 7314
- 156.14 [SQL.FetchPos](#) 7319
- 156.15 [SQL.FetchPrior](#) 7320
- 156.21 [SQL.GetCommandOption](#) 7329
- 156.22 [SQL.GetCommandOptions](#) 7330
- 156.79 [SQL.NewCommand](#) 7408
- 156.87 [SQL.RowsAffected](#) 7421

156.98.1 Blog Entries

- [Prefetching records from databases](#)
- [Multiple recordsets with Microsoft SQL Server](#)

Created 18th August 2014, last changed 10th January 2020.

156.99 SQL.SetCommandTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetCommandTag"; Command; Tag)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Tag

The new tag value.

Result Returns OK or error.

Description

This is a value where you can associate any value with the command.

See also

- 156.23 SQL.GetCommandTag 7331
- 156.79 SQL.NewCommand 7408
- 156.100 SQL.SetCommandText 7439

156.99.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 11st September 2016, last changed 11st September 2016.

156.100 SQL.SetCommandText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetCommandText"; Command; CommandText { ; CommandType })

Parameters**Command**

The command reference number gained with `SQL.NewCommand`.

`$Command`

CommandText

A string that represents command text string (an SQL statement or a stored procedure name).

"SELECT * FROM MyTable"

CommandType

Optional

Type of command. Can be `CmdUnknown`, `CmdSQLStmt`, `CmdSQLStmtRaw` or `CmdStoredProc`. `CmdUnknown` is default.

"CmdSQLStmtRaw"

Result Returns "OK" or error message.

Description

Use `SQL.setCommandText` method to set the command text. Command text can also be set in `SQL.NewCommand`.

It's not necessary to set a command type explicitly, because it is defined automatically in terms of command text string. But if you still have any reason to do it, use one of the following values:

<code>CmdUnknown</code>	Command type is not defined. Library will detect command type automatically when needed.
<code>CmdSQLStmt</code>	Command is an SQL statement.
<code>CmdSQLStmtRaw</code>	Command is an SQL statement that mustn't be interpreted by <code>SQLAPI++</code> .
<code>CmdStoredProc</code>	Command is a stored procedure or a function.

To get command type use `SQL.CommandType` method.

If the command is an SQL statement and it has parameters, a set of parameter objects creates implicitly.

See also

- 156.5 `SQL.CommandText` 7298
- 156.6 `SQL.CommandType` 7299

7440

CHAPTER 156. SQL

- 156.23 SQL.GetCommandTag 7331
- 156.79 SQL.NewCommand 7408
- 156.99 SQL.SetCommandTag 7438

Created 18th August 2014, last changed 13th January 2015.

156.101 SQL.SetConnectionOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetConnectionOption"; Connection; Key; Value)

Parameters**Connection**

The connection reference number gained with SQL.NewConnection.
\$Connection

Key

A string key of the connection or command option.
""

Value

The new option value.
""

Result Returns "OK" or error message.

Description

Call this method to set value(s) of server specific connection or command options. See Server specific notes. SetOption method is safe to use in cross-server applications. An option related to a particular server does not affect others.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_connection.html

Examples

Set Oracle client library path:

```
MBS( "SQL.SetConnectionOption"; $Connection; "OCI8.LIBS"; "c:\Oracle\oci.dll" )
```

Set Microsoft SQL Server client database provider:

```
MBS( "SQL.SetConnectionOption"; $Connection; "UseAPI"; "OLEDB" )
```

```
MBS( "SQL.SetConnectionOption"; $Connection; "SQLNCLI.LIBS"; "sqlsrv32.dll" )
```

Set Sybase Database libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "SYBINTL.LIBS"; "/sybase/libsybintl.so" )
```

```
MBS( "SQL.SetConnectionOption"; $Connection; "SYBCOMN.LIBS"; "/sybase/libsybcomn.so" )
```

```
MBS( "SQL.SetConnectionOption"; $Connection; "SYBTCL.LIBS"; "/sybase/libsybtcl.so" )
```

```
MBS( "SQL.SetConnectionOption"; $Connection; "SYBCT.LIBS"; "/sybase/libsybct.so" )
```

```
MBS( "SQL.SetConnectionOption"; $Connection; "SYBCS.LIBSS"; "/sybase/libsybcs.so" )
```

Set MySQL library:

```
# Windows
Set Variable [ $r; MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL.LIBS"; "c:\MySQL\libmysql.dll"
) ]
# Mac OS X
Set Variable [ $r; MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL.LIBS"; "/test/libmysqlclient.16.dylib"
) ]
```

Set DB2 libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "DB2CLI.LIBS"; "c:\DB2\db2cli.dll" )
```

Set Informix libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "INFCLI.LIBS"; "c:\Informix\ICLIT09B.DLL" )
```

Set InterBase/Firebird libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "IBASE.LIBS"; "c:\Firebird\fbclient.dll" )
```

Set SQLBase libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "SQLBASE.LIBS"; "c:\SQLBase\sqlwntm.dll" )
```

Set PostgreSQL libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "LIBPQ.LIBS"; "/usr/lib/libpq.dylib" )
```

Set ODBC libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "ODBC.LIBS"; "odbc32.dll" )
```

Set SQLite libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "SQLITE.LIBS"; "/usr/lib/libsqlite3.dylib" )
```

For SQLite, set flag to open database file read only:

```
MBS( "SQL.SetConnectionOption"; $Connection; "SQLiteVFSFlags"; "1" )
```

Set MySQL Timeouts:

```
MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_OPT_CONNECT_TIMEOUT"; 10 )
```

```
MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_OPT_READ_TIMEOUT"; 10 )
```

```
MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_OPT_WRITE_TIMEOUT"; 10 )
```

Connect to Microsoft SQL Server from Mac via FreeTDS library:

```
Set Variable [ $Connection; Value:MBS("SQL.NewConnection") ]
# Tell plugin we want to use Microsoft SQL Server via ODBC
Set Variable [ $result; Value:MBS("SQL.SetClient"; $Connection; "ODBC") ]
# Tell plugin where freetds library is
Set Variable [ $result; Value:MBS("SQL.SetConnectionOption"; $Connection; "ODBC.LIBS"; "/Users/cs/Desktop/libtdsodbc.dylib") ]
# Connect to database
Set Variable [ $result; Value:MBS("SQL.Connect"; $Connection; "DRIVER= { FREETDS } ;Server=192.168.2.32;Uid=SA;P
SION=7.2;Port=1433" ) ]
# or TDS_VERSION=8.0;
If [ $result      "OK" ]
Show Custom Dialog [ "Error: " & $result ]
Set Variable [ $result; Value:MBS("SQL.FreeConnection"; $Connection) ]
Halt Script
End If
```

Set an option we need for ODBC to FileMaker:

```
MBS( "SQL.SetConnectionOption"; $Connection; "ODBCAddLongTextBufferSpace"; "false" )
```

// newer plugins automatically set it right when connecting to FileMaker

The MySQL SSL Cipher:

```
MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_SSL_CIPHER"; "DHE-RSA-AES256-SHA" )
```

Requests 100 rows to be prefetched:

```
MBS( "SQL.SetConnectionOption"; $Connection; "PreFetchRows"; "100" )
# will propagate down to all commands on that connection.
```

Store MySQL RecordSet locally:

```
MBS( "SQL.SetConnectionOption"; $Connection; "HandleResult"; "Store" )
```

Set ODBC timeout property:

```
MBS( "SQL.SetConnectionOption"; $Connection; "SQL_ATTR_CONNECTION_TIMEOUT"; "10" )
```

Enable SSL for MySQL:

all options optional, but you need at least one set to activate SSL.

```
MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_SSL_KEY"; "/Users/cs/Desktop/key.pem" )
```

```

MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_SSL_CERT"; "/Users/cs/Desktop/cert.pem"
)
MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_SSL_CA"; "/Users/cs/Desktop/cacert.pem"
)
MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_SSL_CAPATH"; "" )
MBS( "SQL.SetConnectionOption"; $Connection; "MYSQL_SSL_CIPHER"; "DHE-RSA-AES256-SHA" )

```

Set connection timeout for CubeSQL:

```
MBS( "SQL.SetConnectionOption"; $Connection; "ConnectionTimeout"; "30" )
```

Set CubeSQL libraries:

```
MBS( "SQL.SetConnectionOption"; $Connection; "CUBESQL_LIBS"; "c:\CubeSQL\cubesql.dll" )
```

Set ODBC libraries on MacOS:

```
MBS( "SQL.SetConnectionOption"; $Connection; "ODBC_LIBS"; "/usr/lib/libiodbc.dylib" )
```

Droz Consulting

See also

- [156.8 SQL.Connect](#) 7302
- [156.19 SQL.FreeConnection](#) 7326
- [156.24 SQL.GetConnectionOption](#) 7332
- [156.25 SQL.GetConnectionOptions](#) 7333
- [156.80 SQL.NewConnection](#) 7412
- [156.97 SQL.SetClient](#) 7434

Example Databases

- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/Microsoft SQL Server Connect](#)
- [SQL to other databases/Microsoft SQL Server Query](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/MySQL Query](#)
- [SQL to other databases/ODBC Query](#)
- [SQL to other databases/SQL Export](#)

- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)
- [Third Party/FileMaker Snippet Storage](#)

156.101.1 Blog Entries

- [CubeSQL Library for Mac](#)
- [MBS FileMaker Plugin, version 9.2pr1](#)
- [Prefetching records from databases](#)
- [Tip of the day: Connect to MySQL and run a query](#)
- [MBS Filemaker Plugin, version 4.3pr5](#)
- [SQL Connectivity for Filemaker](#)

156.101.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 28](#)
- [Ausgabe 3/2016, Seite 29](#)
- [Ausgabe 1/2016, Seite 28](#)
- [Ausgabe 4/2015, Seite 15](#)

Created 18th August 2014, last changed 10th January 2020.

156.102 SQL.SetConnectionTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	6.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetConnectionTag"; Connection; Tag)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.
\$Connection

Tag

The new tag value.

Result Returns OK or error.

Description

This is a value where you can associate any value with the connection.

See also

- 156.26 SQL.GetConnectionTag 7334
- 156.80 SQL.NewConnection 7412

156.102.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 11st September 2016, last changed 11st September 2016.

156.103 SQL.SetFieldOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetFieldOption"; Command; Field; Key; Value)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Field

The name or one based index of the field.
\$Field

Key

A string key of the command option.
""

Value

The new option value.
""

Result Returns value or error message.

Description

Call this method to set value(s) of server specific field options. See Server specific notes.

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_field.html

See also

- 156.42 SQL.GetFieldOption 7359
- 156.43 SQL.GetFieldOptions 7360
- 156.79 SQL.NewCommand 7408
- 156.116 SQL.SetParamOption 7466

Created 18th August 2014, last changed 10th January 2020.

156.104 SQL.SetIsolationLevel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetIsolationLevel"; Connection; IsolationLevel)

Parameters

Connection

The connection reference number gained with SQL.NewConnection.

\$Connection

IsolationLevel

The new isolation level. One of the following strings: ReadUncommitted, ReadCommitted, RepeatableRead or Serializable.

"ReadUncommitted"

Result Returns "OK" or error message.

Description

see also:

https://www.sqlapi.com/ApiDoc/class_s_a_connection.html

See also

- 156.46 SQL.GetIsolationLevel 7364
- 156.80 SQL.NewConnection 7412

Created 18th August 2014, last changed 10th January 2020.

156.105 SQL.SetParamAsBoolean

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamAsBoolean"; Command; Param; Value)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Value

The new value

1

Result Returns "OK" or error message.

Description**See also**

- 156.10 SQL.Execute 7309
- 156.27 SQL.GetFieldAsBoolean 7335
- 156.47 SQL.GetParamAsBoolean 7365
- 156.79 SQL.NewCommand 7408
- 156.109 SQL.SetParamAsFloat 7456

Created 18th August 2014, last changed 13th January 2015.

156.106 SQL.SetParamAsContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	3.0	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamAsContainer"; Command; Param; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Value

The new value

\$image

Result Returns "OK" or error message.

Description

Examples

Set parameter with ID = 1 to image

```
MBS("SQL.SetParamAsText"; $Command; 1; $image)
```

Set parameter JPEGData with image:

```
MBS("SQL.SetParamAsText"; $Command; "JPEGData"; $image)
```

Update BLOB field:

```
# Create update command to fill blob field:
```

```
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "UPDATE 'Test' SET My-Blob=:image WHERE ID=:id") ]
```

```
Set Variable [ $result; Value:MBS("SQL.SetParamAsText"; $Command; "id"; 123 ) ]
```

```
Set Variable [ $result; Value:MBS("SQL.SetParamAsContainer"; $Command; "image"; MyTable::MyImage) ]
```

```
# Run it
```

```
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
```

```
# Cleanup
```

```
Set Variable [ $result2; Value:MBS("SQL.Commit"; $Connection) ]
```

```
Set Variable [ $result2; Value:MBS("SQL.FreeCommand"; $Command) ]
```

156.106. *SQL.SETPARAMASCONTAINER*

7451

See also

- 156.7 *SQL.Commit* 7300
- 156.10 *SQL.Execute* 7309
- 156.18 *SQL.FreeCommand* 7324
- 156.28 *SQL.GetFieldAsContainer* 7336
- 156.48 *SQL.GetParamAsContainer* 7366
- 156.79 *SQL.NewCommand* 7408
- 156.111 *SQL.SetParamAsText* 7460

Example Databases

- [SQL to other databases/SQLite blob](#)

156.106.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr3](#)

Created 18th August 2014, last changed 22nd November 2018.

156.107 SQL.SetParamAsDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamAsDate"; Command; Param; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Value

The new value

Result Returns "OK" or error message.

Description

Reports an error for invalid date. Version 8.0 and newer set parameter to NULL if you pass empty value.

Examples

Set parameter with ID 3 to a date value:

```
MBS("SQL.SetParamAsDate"; $Command; 3; $Birthday)
```

Set parameter with name "Date" to a date value:

```
MBS("SQL.SetParamAsDate"; $Command; "Date"; $Birthday)
```

See also

- 156.49 SQL.GetParamAsDate 7367
- 156.56 SQL.GetParamAsText 7379
- 156.57 SQL.GetParamAsTime 7380
- 156.62 SQL.GetParamNameList 7385
- 156.66 SQL.GetParamValueList 7390
- 156.108 SQL.SetParamAsDateTime 7454
- 156.109 SQL.SetParamAsFloat 7456
- 156.110 SQL.SetParamAsNumber 7458

156.107. <i>SQL.SETPARAMASDATE</i>	7453
• 156.111 SQL.SetParamAsText	7460
• 156.112 SQL.SetParamAsTime	7462

Example Databases

- [SQL to other databases/MySQL example](#)
- [SQL to other databases/SQLite fun](#)

156.107.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)

Created 18th August 2014, last changed 11st December 2017.

156.108 SQL.SetParamAsDateTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamAsDateTime"; Command; Param; Value)

(old name: SQL.SetParamAsTimestamp)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.
"1"

Value

The new value

Result Returns "OK" or error message.

Description

Reports an error for invalid date. Version 8.0 and newer set parameter to NULL if you pass empty value.

See also

- 156.30 SQL.GetFieldAsDateTime 7339
- 156.49 SQL.GetParamAsDate 7367
- 156.50 SQL.GetParamAsDateTime 7368
- 156.57 SQL.GetParamAsTime 7380
- 156.79 SQL.NewCommand 7408
- 156.87 SQL.RowsAffected 7421
- 156.107 SQL.SetParamAsDate 7452
- 156.112 SQL.SetParamAsTime 7462
- 156.113 SQL.SetParamDataType 7463

156.108.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr2](#)
- [MBS Filemaker Plugin, version 4.3pr2](#)

156.108. *SQL.SETPARAMASDATETIME*

7455

Created 18th August 2014, last changed 31st January 2019.

156.109 SQL.SetParamAsFloat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamAsFloat"; Command; Param; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.

"1"

Value

The new value
123.456

Result Returns "OK" or error message.

Description

For integer numbers, please use SQL.SetParamAsNumber.

Examples

Set value for parameter with ID 5 to a floating point number:

```
MBS("SQL.SetParamAsFloat"; $Command; 5; $TotalSales)
```

Set value for parameter with name "Sales" to a floating point number:

```
MBS("SQL.SetParamAsFloat"; $Command; "Sales"; $TotalSales)
```

See also

- 156.49 SQL.GetParamAsDate 7367
- 156.51 SQL.GetParamAsFloat 7369
- 156.56 SQL.GetParamAsText 7379
- 156.62 SQL.GetParamNameList 7385
- 156.66 SQL.GetParamValueList 7390
- 156.79 SQL.NewCommand 7408
- 156.105 SQL.SetParamAsBoolean 7449

<i>156.109. SQL.SETPARAMASFLOAT</i>	7457
• 156.107 SQL.SetParamAsDate	7452
• 156.110 SQL.SetParamAsNumber	7458
• 156.112 SQL.SetParamAsTime	7462

Example Databases

- [SQL to other databases/MySQL example](#)
- [SQL to other databases/SQLite fun](#)

Created 18th August 2014, last changed 13th January 2015.

156.110 SQL.SetParamAsNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamAsNumber"; Command; Param; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Value

The new value

123

Result Returns "OK" or error message.

Description

For floating point numbers, please use SQL.SetParamAsFloat.

Examples

Sets an integer value for parameter with ID 4:

```
MBS("SQL.SetParamAsNumber"; $Command; 4; $NumberOfOrders)
```

Sets an integer value for parameter with name "NumberOfOrders":

```
MBS("SQL.SetParamAsNumber"; $Command; "NumberOfOrders"; $NumberOfOrders)
```

Run a stored procedure:

```
# new command for calling our test procedure on a Microsoft SQL Server
Set Variable [ $command; MBS( "SQL.NewCommand"; $Connection; "dbo.Test" ) ]
# set a parameter
Set Variable [ $r; MBS( "SQL.SetParamAsNumber"; $Command; "Param1"; 7 ) ]
# execute query
Set Variable [ $r; MBS( "SQL.Execute"; $Command ) ]
# fetch first record
Set Variable [ $r; MBS( "SQL.FetchNext"; $Command ) ]
# get result field
Set Variable [ $result; MBS( "SQL.GetFieldAsText"; $Command; 1 ) ]
```

156.110. *SQL.SETPARAMASNUMBER* 7459

See also

- 156.10 *SQL.Execute* 7309
- 156.13 *SQL.FetchNext* 7316
- 156.36 *SQL.GetFieldAsText* 7350
- 156.53 *SQL.GetParamAsNumber* 7373
- 156.57 *SQL.GetParamAsTime* 7380
- 156.62 *SQL.GetParamNameList* 7385
- 156.79 *SQL.NewCommand* 7408
- 156.107 *SQL.SetParamAsDate* 7452
- 156.109 *SQL.SetParamAsFloat* 7456
- 156.112 *SQL.SetParamAsTime* 7462

Example Databases

- [SQL to other databases/Microsoft SQL Execute](#)
- [SQL to other databases/MySQL example](#)
- [SQL to other databases/SQLite fun](#)

Created 18th August 2014, last changed 26th May 2017.

156.111 SQL.SetParamAsText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamAsText"; Command; Param; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Value

The new value

"Hello World"

Result Returns "OK" or error message.

Description

Examples

Set parameter with ID = 1 to text

```
MBS("SQL.SetParamAsText"; $Command; 1; $FirstName)
```

Set parameter Lastname with text:

```
MBS("SQL.SetParamAsText"; $Command; "Lastname"; $LastName)
```

Set Param with index 0 to FirstName field:

```
MBS("SQL.SetParamAsText"; $Command; "# 0"; SQLite fun::FirstName)
```

See also

- 156.49 SQL.GetParamAsDate 7367
- 156.51 SQL.GetParamAsFloat 7369
- 156.54 SQL.GetParamAsPDF 7375
- 156.55 SQL.GetParamAsPNG 7377
- 156.56 SQL.GetParamAsText 7379

<i>156.111. SQL.SETPARAMASTEXT</i>	7461
• 156.57 SQL.GetParamAsTime	7380
• 156.62 SQL.GetParamNameList	7385
• 156.80 SQL.NewConnection	7412
• 156.107 SQL.SetParamAsDate	7452
• 156.109 SQL.SetParamAsFloat	7456

Example Databases

- [SQL to other databases/MySQL example](#)
- [SQL to other databases/ODBC to FileMaker/ODBC Test](#)
- [SQL to other databases/SQLite blob](#)
- [SQL to other databases/SQLite fun](#)

156.111.1 Blog Entries

- [Tip of the day: Connect to MySQL and run a query](#)

Created 18th August 2014, last changed 13th January 2015.

156.112 SQL.SetParamAsTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamAsTime"; Command; Param; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Value

The new value

Result Returns "OK" or error message.

Description

See also

- 156.55 SQL.GetParamAsPNG 7377
- 156.56 SQL.GetParamAsText 7379
- 156.57 SQL.GetParamAsTime 7380
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.108 SQL.SetParamAsDateTime 7454
- 156.109 SQL.SetParamAsFloat 7456
- 156.111 SQL.SetParamAsText 7460
- 156.116 SQL.SetParamOption 7466
- 156.119 SQL.SetParamValue 7470

156.112.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)

Created 18th August 2014, last changed 13th January 2015.

156.113 SQL.SetParamDataType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamDataType"; Command; Param; Datatype)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.
"1"

Datatype

The new data type.
"Short"

Result Returns "OK" or error message.

Description

The parameter data type can be: Bool, Short, UShort, Long, ULong, Double, Numeric, DateTime, Interval, String, Bytes, LongBinary, LongChar, Blob, CLob, Cursor, SpecificToDBMS or unknown.

See also

- 156.58 SQL.GetParamDataType 7381
- 156.79 SQL.NewCommand 7408
- 156.108 SQL.SetParamAsDateTime 7454

Created 18th August 2014, last changed 13th January 2015.

156.114 SQL.SetParamDefault

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamDefault"; Command; Param)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns "OK" or error message.

Description

Forces DBMS API to use the default parameter value as the input value for an input or input/output parameter in a procedure.

If DBMS API does not support the concept of "default parameter values" in stored procedures, this setting will be ignored.

If you set this flag for the parameter that doesn't have a default value, the effect is DBMS defined (e.g. an error can be returned or NULL can be bound).

To cancel using the default parameter value you should call any other SetParam* function to bind a parameter value.

To check whether this flag is set or not use SQL.GetParamIsDefault method.

See also

- 156.59 SQL.GetParamIsDefault 7382
- 156.79 SQL.NewCommand 7408
- 156.119 SQL.SetParamValue 7470

Created 18th August 2014, last changed 13th January 2015.

156.115 SQL.SetParamNull

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamNull"; Command; Param)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Result Returns "OK" or error message.

Description**See also**

- 156.60 SQL.GetParamIsNull 7383
- 156.61 SQL.GetParamName 7384
- 156.79 SQL.NewCommand 7408
- 156.119 SQL.SetParamValue 7470

Created 18th August 2014, last changed 13th January 2015.

156.116 SQL.SetParamOption

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	8.4	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamOption"; Command; Param; Key; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.

"1"

Key

A string key of the command option.

""

Value

The new option value.

""

Result Returns OK or error.

Description

See also

- 156.63 SQL.GetParamOption 7387
- 156.64 SQL.GetParamOptions 7388
- 156.79 SQL.NewCommand 7408
- 156.103 SQL.SetFieldOption 7447
- 156.112 SQL.SetParamAsTime 7462
- 156.118 SQL.SetParamUnknown 7469

156.116.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr10](#)

Created 20th September 2018, last changed 20th September 2018.

156.117 SQL.SetParamTypesValues

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamTypesValues"; Command; Type; Value)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Type

Pass one type parameter for each value. Type can be Default, Null, Unknown, Integer, Double, Text, Container, Boolean, Short, UShort, Long, ULong, Date, Time or TimeStamp.

"Integer"

Value

Pass one parameter for each parameter.

"Hello"

Result Returns OK or error.

Description

Please pass a type and a value for each parameter.

Please match the number of parameters in your SQL query and their order.

If value is the result of FM.Null function in this plugin, the value is passed as NULL to the database.

Examples

Set 4 parameters:

```
MBS( "SQL.SetParamTypesValues"; $Command; "Text"; "Bob"; "Text"; "Miller"; "Date"; $BirthDay;
"BLOB"; MyTable::PersonPicture )
```

Export row

```
# create command
```

```
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "INSERT INTO 'Test' (First-
Name, LastName, Birthday, NumberOfOrders, TotalSales) VALUES (:1,:2,:3,:4,:5)") ]
```

```
# fill all parameters
```

```
Set Variable [ $result; Value:MBS("SQL.SetParamTypesValues"; $Command; "Text"; SQLite fun::First-
Name; "Text"; SQLite fun::LastName; "Date"; SQLite fun::Birthday; "Integer"; SQLite fun::NumberO-
fOrders; "Double"; SQLite fun::TotalSales) ]
```

```
# Run it
```

```
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
```

```
# Cleanup
```

```
Set Variable [ $result2; Value:MBS("SQL.Commit"; $Connection) ]
```

```
Set Variable [ $result2; Value:MBS("SQL.FreeCommand"; $Command) ]
```

See also

- 80.24 FM.NULL 4134
- 156.7 SQL.Commit 7300
- 156.10 SQL.Execute 7309
- 156.18 SQL.FreeCommand 7324
- 156.79 SQL.NewCommand 7408
- 156.119 SQL.SetParamValue 7470
- 156.120 SQL.SetParamValues 7472

Created 21st April 2015, last changed 21st April 2015.

156.118 SQL.SetParamUnknown

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamUnknown"; Command; Param)

Parameters**Command**

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix.
e.g. "# 0" for first parameter.

"1"

Result Returns "OK" or error message.

Description**See also**

- 156.79 SQL.NewCommand 7408
- 156.116 SQL.SetParamOption 7466

Created 18th August 2014, last changed 13th January 2015.

156.119 SQL.SetParamValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamValue"; Command; Param; Value)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Param

The parameter name or ID. Pass number for ID, a text with parameter name or the index with # prefix. e.g. "# 0" for first parameter.

"1"

Value

The new value

"Hello World"

Result Returns OK or error.

Description

The value is passed in a matching SQL data type.

If value is the result of FM.Null function in this plugin, the value is passed as NULL to the database.

See also SQL.SetParamTypesValues.

Examples

Set parameter with ID 1 to Hello:

```
MBS( "SQL.SetParamValue"; $command; 1; "Hello" )
```

Set parameter with ID 1 to NULL:

```
MBS( "SQL.SetParamValue"; $command; 1; MBS("FM.NULL"))
```

See also

- 80.24 FM.NULL 4134
- 156.61 SQL.GetParamName 7384
- 156.66 SQL.GetParamValueList 7390
- 156.79 SQL.NewCommand 7408
- 156.107 SQL.SetParamAsDate 7452
- 156.112 SQL.SetParamAsTime 7462

<i>156.119. SQL.SETPARAMVALUE</i>	7471
• 156.114 SQL.SetParamDefault	7464
• 156.115 SQL.SetParamNull	7465
• 156.117 SQL.SetParamTypesValues	7467
• 156.120 SQL.SetParamValues	7472

156.119.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 18th April 2015, last changed 21st April 2015.

156.120 SQL.SetParamValues

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("SQL.SetParamValues"; Command; Values)

Parameters

Command

The command reference number gained with SQL.NewCommand.

\$Command

Values

Pass one parameter for each value.

"Hello"

Result Returns OK or error.

Description

The values are passed in a matching SQL data type.

Please match the number of parameters in your SQL query and their order.

If value is the result of FM.Null function in this plugin, the value is passed as NULL to the database.

See also SQL.SetParamTypesValues.

Examples

Set 4 parameters:

```
MBS( "SQL.SetParamValues"; $Command; "Bob"; "Miller"; $BirthDay; MyTable::PersonPicture )
```

Export row

```
# create command
Set Variable [ $Command; Value:MBS("SQL.NewCommand"; $Connection; "INSERT INTO 'Test' (First-
Name, LastName, Birthday, NumberOfOrders, TotalSales) VALUES (:1,:2,:3,:4,:5)") ]
# fill all parameters
Set Variable [ $result; Value:MBS("SQL.SetParamValues"; $Command; SQLite fun::FirstName; SQLite
fun::LastName; SQLite fun::Birthday; SQLite fun::NumberOfOrders; SQLite fun::TotalSales) ]
# Run it
Set Variable [ $result; Value:MBS("SQL.Execute"; $Command) ]
# Cleanup
Set Variable [ $result2; Value:MBS("SQL.Commit"; $Connection) ]
Set Variable [ $result2; Value:MBS("SQL.FreeCommand"; $Command) ]
```

See also

- 80.24 FM.NULL 4134
- 156.7 SQL.Commit 7300

<i>156.120. SQL.SETPARAMVALUES</i>	7473
• 156.10 SQL.Execute	7309
• 156.18 SQL.FreeCommand	7324
• 156.65 SQL.GetParamValue	7389
• 156.66 SQL.GetParamValueList	7390
• 156.79 SQL.NewCommand	7408
• 156.117 SQL.SetParamTypesValues	7467
• 156.119 SQL.SetParamValue	7470

156.120.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)

Created 18th April 2015, last changed 21st April 2015.

156.121 SQL.isAlive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.isAlive"; Connection)

Parameters**Connection**

The connection reference number gained with SQL.NewConnection.

\$Connection

Result Returns 1 if the database server is active and accessible; otherwise 0.

Description

This method uses the safe query execution for most supported DBMS-es. The query uses the well known database table or procedure (mysql_ping is used for MySQL). If the query fails the method returns false.

Examples

Check alive status:

```
Set Variable [ $r; Value:MBS( "SQL.isAlive"; $Connection ) ]
```

See also

- 156.80 SQL.NewConnection

7412

Created 18th August 2014, last changed 17th May 2016.

156.122 SQL.isConnected

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.isConnected"; Connection)

Parameters**Connection**

The connection reference number gained with SQL.NewConnection.
\$Connection

Result Returns 1 if connected; otherwise 0.

Description**Examples**

Check connection status:

Set Variable [\$r; Value:MBS("SQL.isConnected"; \$Connection)]

See also

- 156.9 SQL.Disconnect 7308
- 156.80 SQL.NewConnection 7412

Example Databases

- [Third Party/FileMaker Snippet Storage](#)

Created 18th August 2014, last changed 17th May 2016.

156.123 SQL.isExecuted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.isExecuted"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns 1 if command was executed, else 0.

Description

Examples

Check execution status:

```
Set Variable [ $r; Value:MBS( "SQL.isExecuted"; $Connection ) ]
```

See also

- 156.10 SQL.Execute 7309
- 156.79 SQL.NewCommand 7408

Created 18th August 2014, last changed 17th May 2016.

156.124 SQL.isOpened

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.isOpened"; Command)

Parameters**Command**

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns 1 if the command object is opened; otherwise 0.

Description**Examples**

Check open status:

Set Variable [\$r; Value:MBS("SQL.isOpen"; \$Connection)]

See also

- 156.79 SQL.NewCommand

156.125 SQL.isResultSet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
156 SQL	2.6	Yes	Yes	Yes	Yes	Yes

MBS("SQL.isResultSet"; Command)

Parameters

Command

The command reference number gained with SQL.NewCommand.
\$Command

Result Returns 1 if the result set exists; otherwise 0.

Description

Examples

Check result status:

```
Set Variable [ $r; Value:MBS( "SQL.isResultSet"; $Command ) ]
```

See also

- 156.10 SQL.Execute 7309
- 156.11 SQL.FetchFirst 7313
- 156.12 SQL.FetchLast 7314
- 156.13 SQL.FetchNext 7316
- 156.15 SQL.FetchPrior 7320
- 156.79 SQL.NewCommand 7408

156.125.1 FileMaker Magazin

- Ausgabe 4/2016, Seite 28
- Ausgabe 3/2016, Seite 30
- Ausgabe 2/2016, Seite 14
- Ausgabe 1/2016, Seite 29

Created 18th August 2014, last changed 10th January 2017.

Chapter 157

SSH

Secure Shell connection to server.

Can be used to login remotely into a Linux or Mac OS X (or Windows) machine if there is a SSH server running and run various commands.

157.1 SSH.CloseChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

```
MBS( "SSH.CloseChannel"; SSH { ; Wait } )
```

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Wait

Optional

Whether to wait if it takes longer. Default is 0.

1

Result Returns OK or error.

Description

This closes it now. Normally all channels are closed automatically when you release connection with SSH.Release.

Examples

Close channel:

Set Variable [\$r; Value:MBS("SSH.CloseChannel"; \$ssh)]

See also

- 157.5 SSH.Execute 7487
- 157.7 SSH.FreeChannel 7491
- 157.17 SSH.New 7501
- 157.21 SSH.Release 7508

Example Databases

- [Network/SSH](#)

Created 29th May 2016, last changed 12nd November 2017.

157.2 SSH.Connect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Connect"; SSH; IP { ; Port; Timeout; ProtocolPreference })

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

IP

The IP to connect to.

"192.168.1.123"

Port

Optional

The port number to connect to. Default is 22 which is standard port for ssh.

22

Timeout

Optional

The connection timeout in seconds for the TCP/IP connection. Default is 30 seconds.

30

ProtocolPreference

Optional

Pass 4 to connect via IPv4. Pass 6 to connect via IPv6. Default is to try whatever the DNS suggests first.

4

Result Returns OK or error.

Description

Timeout defines timeout for connection in seconds. While waiting, the plugin yields time to other threads.

Version 6.3 now supports passing IPv4, IPv6, or a host name.

Examples

Connect to IP:

```
Set Variable [ $r; Value:MBS( "SSH.Connect"; $ssh; "192.168.2.1" ) ]
```

Full example:

```
# Start a new SSH session
Set Variable [ $ssh; Value:MBS( "SSH.New" ) ]
# Connect to an IP
Set Variable [ $r; Value:MBS( "SSH.Connect"; $ssh; SSH::Host; SSH::Port ) ]
```

```

If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# Run the session handshake.
Set Variable [ $r; Value:MBS( "SSH.SessionHandshake"; $ssh ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# We can show the hostkey. You can compare it to known hostkey.
Set Field [ SSH::HostKeyHash; MBS( "SSH.HostKey"; $ssh ) ]
# We query supported authentication ways
Set Variable [ $authuserlist; Value:MBS( "SSH.userauthlist"; $ssh; SSH::Username) ]
Set Field [ SSH::UserAuthList; $authuserlist ]
Set Variable [ $pos1; Value:Position ( $authuserlist ; "password"; 1; 1 ) ]
Set Variable [ $pos2; Value:Position ( $authuserlist ; "keyboard-interactive"; 1; 1 ) ]
Set Variable [ $pos3; Value:Position ( $authuserlist ; "publickey"; 1; 1 ) ]
If [ $pos1 >0 ]
# Authenticate with password
Set Variable [ $r; Value:MBS( "SSH.UserAuthPassword"; $ssh; SSH::Username; SSH::Password ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End If
Else If [ $pos2 >0 ]
# Authenticate with answering question. Plugin passes password for answer.
Set Variable [ $r; Value:MBS( "SSH.UserAuthKeyboardInteractive"; $ssh; SSH::Username; SSH::Password
) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End If
Else If [ $pos3 >0 ]
# Authenticate with public key file
Set Variable [ $r; Value:MBS( "SSH.UserAuthPublicKey"; $ssh; SSH::Username; "your key path"; "your key
path"; SSH::Password ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End If
End If
If [ MBS( "SSH.IsAuthenticated"; $ssh ) 1 ]
Show Custom Dialog [ "Authentication"; "no authenticated. Supported ways: " & $authuserlist ]
Else
# Start a new channel
Set Variable [ $r; Value:MBS( "SSH.OpenSession"; $ssh ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# Execute a command
Set Variable [ $r; Value:MBS( "SSH.Execute"; $ssh; SSH::Command ) ]
If [ MBS("IsError") ]

```

```

Show Custom Dialog [ "Connect error"; $r ]
Else
# We read text in several chunks until no new text is coming any more:
Set Variable [ $text; Value:"" ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
# Read some text:
Set Variable [ $newtext; Value:MBS( "SSH.ReadText"; $ssh; 10000; "UTF8" ) ]
If [ MBS("iserror") = 0 ]
If [ Length($newText) >0 ]
Set Variable [ $text; Value:$text & $newText ]
End If
Exit Loop If [ Length($newText) = 0 ]
End If
End Loop
Set Field [ SSH::Result; $text ]
End If
End If
# Close channel
Set Variable [ $r; Value:MBS( "SSH.Close"; $ssh ) ]
# Disconnect
Set Variable [ $r; Value:MBS( "SSH.Disconnect"; $ssh ) ]
End If
End If
End If
# Release memory.
Set Variable [ $r; Value:MBS( "SSH.Release"; $ssh ) ]

```

See also

- 156.8 SQL.Connect 7302
- 157.14 SSH.HostKey 7498
- 157.16 SSH.IsAuthenticated 7500
- 157.17 SSH.New 7501
- 157.18 SSH.OpenSession 7504
- 157.20 SSH.ReadText 7506
- 157.24 SSH.SessionHandshake 7511
- 157.36 SSH.UserAuthKeyboardInteractive 7524
- 157.37 SSH.UserAuthList 7525
- 157.38 SSH.UserAuthPassword 7526

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

157.2.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr3](#)
- [MBS FileMaker Plugin, version 7.2pr4](#)
- [MBS FileMaker Plugin 6.3 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.3pr4](#)

Created 29th May 2016, last changed 4th December 2019.

157.3 SSH.Disconnect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Disconnect"; SSH; Description { ; Reason; Lang })

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Description

Human readable reason for disconnection.

Reason

Optional

One of the Disconnect Reason values.

Lang

Optional

Localization string describing the language/encoding of the description provided.

Result Returns OK or error.

Description

Examples

Disconnect:

```
Set Variable [ $r; Value:MBS( "SSH.Disconnect"; $ssh ) ]
```

See also

- 156.9 SQL.Disconnect 7308
- 157.2 SSH.Connect 7481
- 157.5 SSH.Execute 7487
- 157.17 SSH.New 7501
- 163.9 TAPI.Disconnect 7736

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 29th May 2016, last changed 30th May 2016.

157.4 SSH.EOF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.EOF"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns state or error.

Description

Check if the remote host has sent an EOF status for the selected stream.

Returns 1 if the remote host has sent EOF, otherwise 0.

Created 29th May 2016, last changed 29th May 2016.

157.5 SSH.Execute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Execute"; SSH; Command)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Command

The command to execute.

"ls"

Result Returns OK or error.

Description

Examples

Run a command:

```
Set Variable [ $r; Value:MBS( "SSH.Execute"; $ssh; "whoami" ) ]
```

Full example:

```
# Start a new SSH session
Set Variable [ $ssh; Value:MBS( "SSH.New" ) ]
# Connect to an IP
Set Variable [ $r; Value:MBS( "SSH.Connect"; $ssh; SSH::Host; SSH::Port ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# Run the session handshake.
Set Variable [ $r; Value:MBS( "SSH.SessionHandshake"; $ssh ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# We can show the hostkey. You can compare it to known hostkey.
Set Field [ SSH::HostKeyHash; MBS( "SSH.HostKey"; $ssh ) ]
# We query supported authentication ways
Set Variable [ $authuserlist; Value:MBS( "SSH.userauthlist"; $ssh; SSH::Username ) ]
Set Field [ SSH::UserAuthList; $authuserlist ]
Set Variable [ $pos1; Value:Position ( $authuserlist ; "password"; 1; 1 ) ]
Set Variable [ $pos2; Value:Position ( $authuserlist ; "keyboard-interactive"; 1; 1 ) ]
Set Variable [ $pos3; Value:Position ( $authuserlist ; "publickey"; 1; 1 ) ]
If [ $pos1 >0 ]
```

```

# Authenticate with password
Set Variable [ $r; Value:MBS( "SSH.UserAuthPassword"; $ssh; SSH::Username; SSH::Password ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End If
Else If [ $pos2 >0 ]
# Authenticate with answering question. Plugin passes password for answer.
Set Variable [ $r; Value:MBS( "SSH.UserAuthKeyboardInteractive"; $ssh; SSH::Username; SSH::Password
) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End If
Else If [ $pos3 >0 ]
# Authenticate with public key file
Set Variable [ $r; Value:MBS( "SSH.UserAuthPublicKey"; $ssh; SSH::Username; "your key path"; "your key
path"; SSH::Password ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End If
End If
If [ MBS( "SSH.IsAuthenticated"; $ssh ) = 1 ]
Show Custom Dialog [ "Authentication"; "no authenticated. Supported ways: " & $authuserlist ]
Else
# Start a new channel
Set Variable [ $r; Value:MBS( "SSH.OpenSession"; $ssh ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# Execute a command
Set Variable [ $r; Value:MBS( "SSH.Execute"; $ssh; SSH::Command ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# We read text in several chunks until no new text is coming any more:
Set Variable [ $text; Value:"" ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
# Read some text:
Set Variable [ $newtext; Value:MBS( "SSH.ReadText"; $ssh; 10000; "UTF8" ) ]
If [ MBS("iserror") = 0 ]
If [ Length($newText) >0 ]
Set Variable [ $text; Value:$text & $newText ]
End If
Exit Loop If [ Length($newText) = 0 ]
End If
End Loop
Set Field [ SSH::Result; $text ]
End If

```

157.5. *SSH.EXECUTE*

7489

```
End If
# Close channel
Set Variable [ $r; Value:MBS( "SSH.CloseChannel"; $ssh ) ]
# Disconnect
Set Variable [ $r; Value:MBS( "SSH.Disconnect"; $ssh ) ]
End If
End If
End If
# Release memory.
Set Variable [ $r; Value:MBS( "SSH.Release"; $ssh ) ]
```

See also

- 157.2 SSH.Connect 7481
- 157.3 SSH.Disconnect 7485
- 157.16 SSH.IsAuthenticated 7500
- 157.17 SSH.New 7501
- 157.20 SSH.ReadText 7506
- 157.21 SSH.Release 7508
- 157.36 SSH.UserAuthKeyboardInteractive 7524
- 157.37 SSH.UserAuthList 7525
- 157.38 SSH.UserAuthPassword 7526
- 157.39 SSH.UserAuthPublicKey 7527

Example Databases

- [Network/SSH](#)

Created 29th May 2016, last changed 12nd November 2017.

157.6 SSH.Flush

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Flush"; SSH { ; Mode })

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Mode

Optional

What to flush. Can be empty, "stdout", "stderr", "all" or "ExtendedData".

"stdout"

Result Returns OK or error.

Description

Created 29th May 2016, last changed 29th May 2016.

157.7 SSH.FreeChannel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.FreeChannel"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

This is done automatically when you release the connection with SSH.Release or you start a new channel with SSH.OpenSession.

See also

- 157.1 SSH.CloseChannel 7479
- 157.18 SSH.OpenSession 7504
- 157.21 SSH.Release 7508

Created 29th May 2016, last changed 7th June 2016.

157.8 SSH.GetExitState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.GetExitState"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns state or error.

Description

Returns the exit code raised by the process running on the remote host at the other end of the named channel. Note that the exit status may not be available if the remote end has not yet set its status to closed. Returns 0 on failure, otherwise the Exit Status reported by remote host.

Created 29th May 2016, last changed 29th May 2016.

157.9 SSH.GetIP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.GetIP"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns IP or error.

Description

Created 29th May 2016, last changed 29th May 2016.

157.10 SSH.GetPort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.GetPort"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns number or error.

Description

Created 29th May 2016, last changed 29th May 2016.

157.11 SSH.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.GetTag"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns value or error.

Description

There is only a tag if set one with SSH.SetTag before.

See also

- 157.26 SSH.SetTag

7513

Created 29th May 2016, last changed 7th June 2016.

157.12 SSH.GetTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.GetTimeout"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns value or error.

Description

See also

- 151.3 SNMP.SetTimeout 7126
- 157.27 SSH.SetTimeout 7514

Created 29th May 2016, last changed 29th May 2016.

157.13 SSH.GetUserName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.GetUserName"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns user name or error.

Description

Created 29th May 2016, last changed 29th May 2016.

157.14 SSH.HostKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.HostKey"; SSH { ; Selector })

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Selector

Optional

What value to return. Default is hex. hex: Return the key hex encoded. base64: Return key as base 64 encoded. length: Length of key in bytes. type: RSA or DSS or unknown.

"type"

Result Returns text or error.

Description

Examples

Query length of key:

```
MBS( "SSH.HostKey"; $SSH; "length")
```

Query type of key:

```
MBS( "SSH.HostKey"; $SSH; "type")
```

See also

- [157.2 SSH.Connect](#) 7481
- [157.5 SSH.Execute](#) 7487
- [157.17 SSH.New](#) 7501

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 29th May 2016, last changed 12nd November 2017.

157.15 SSH.HostKeyHash

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.HostKeyHash"; SSH { ; Type })

Parameters**SSH**

The SSH session reference number from the plugin.

\$ssh

Type

Optional

Which type to return. Can be MD5 or SHA1. SHA1 is default if empty or not provided.

"SHA1"

Result Returns text or error.

Description

MD5 is 16 bytes, so 32 hex characters. SHA1 is 20 bytes, so 40 hex characters.

Added SHA256 for MBS Plugin 9.5 with 32 bytes.

Created 7th June 2016, last changed 18th September 2019.

157.16 SSH.IsAuthenticated

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.IsAuthenticated"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns state or error.

Description

Returns 1 if authenticated or 0 if not.

See also

- [157.2 SSH.Connect](#) 7481
- [157.5 SSH.Execute](#) 7487
- [157.17 SSH.New](#) 7501

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 29th May 2016, last changed 29th May 2016.

157.17 SSH.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.New")

Result Returns reference number or error.

Description

Please use SSH.Release later to free memory.

If you just need SSH file transfers, please use CURL functions.

Examples

New session and later free it:

```
Set Variable [ $ssh; Value:MBS( "SSH.New" ) ]
# later
Set Variable [ $r; Value:MBS( "SSH.Release"; $ssh ) ]
```

Full example:

```
# Start a new SSH session
Set Variable [ $ssh; Value:MBS( "SSH.New" ) ]
# Connect to an IP
Set Variable [ $r; Value:MBS( "SSH.Connect"; $ssh; SSH::Host; SSH::Port ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# Run the session handshake.
Set Variable [ $r; Value:MBS( "SSH.SessionHandshake"; $ssh ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# We can show the hostkey. You can compare it to known hostkey.
Set Field [ SSH::HostKeyHash; MBS( "SSH.HostKey"; $ssh ) ]
# We query supported authentication ways
Set Variable [ $authuserlist; Value:MBS( "SSH.userauthlist"; $ssh; SSH::Username ) ]
Set Field [ SSH::UserAuthList; $authuserlist ]
Set Variable [ $pos1; Value:Position ( $authuserlist ; "password"; 1; 1 ) ]
Set Variable [ $pos2; Value:Position ( $authuserlist ; "keyboard-interactive"; 1; 1 ) ]
Set Variable [ $pos3; Value:Position ( $authuserlist ; "publickey"; 1; 1 ) ]
If [ $pos1 >0 ]
# Authenticate with password
Set Variable [ $r; Value:MBS( "SSH.UserAuthPassword"; $ssh; SSH::Username; SSH::Password ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
```

```

End If
Else If [ $pos2 >0 ]
# Authenticate with answering question. Plugin passes password for answer.
Set Variable [ $r; Value:MBS( "SSH.UserAuthKeyboardInteractive"; $ssh; SSH::Username; SSH::Password
) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End If
Else If [ $pos3 >0 ]
# Authenticate with public key file
Set Variable [ $r; Value:MBS( "SSH.UserAuthPublicKey"; $ssh; SSH::Username; "your key path"; "your key
path"; SSH::Password ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End If
End If
If [ MBS( "SSH.IsAuthenticated"; $ssh ) = 1 ]
Show Custom Dialog [ "Authentication"; "no authenticated. Supported ways: " & $authuserlist ]
Else
# Start a new channel
Set Variable [ $r; Value:MBS( "SSH.OpenSession"; $ssh ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# Execute a command
Set Variable [ $r; Value:MBS( "SSH.Execute"; $ssh; SSH::Command ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
Else
# We read text in several chunks until no new text is coming any more:
Set Variable [ $text; Value:"" ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
# Read some text:
Set Variable [ $newtext; Value:MBS( "SSH.ReadText"; $ssh; 10000; "UTF8" ) ]
If [ MBS("iserror") = 0 ]
If [ Length($newText) >0 ]
Set Variable [ $text; Value:$text & $newText ]
End If
Exit Loop If [ Length($newText) = 0 ]
End If
End Loop
Set Field [ SSH::Result; $text ]
End If
End If
# Close channel
Set Variable [ $r; Value:MBS( "SSH.CloseChannel"; $ssh ) ]
# Disconnect

```

157.17. SSH.NEW

7503

```
Set Variable [ $r; Value:MBS( "SSH.Disconnect"; $ssh ) ]  
End If  
End If  
End If  
# Release memory.  
Set Variable [ $r; Value:MBS( "SSH.Release"; $ssh ) ]
```

See also

- [157.2 SSH.Connect](#) 7481
- [157.3 SSH.Disconnect](#) 7485
- [157.5 SSH.Execute](#) 7487
- [157.14 SSH.HostKey](#) 7498
- [157.16 SSH.IsAuthenticated](#) 7500
- [157.18 SSH.OpenSession](#) 7504
- [157.20 SSH.ReadText](#) 7506
- [157.36 SSH.UserAuthKeyboardInteractive](#) 7524
- [157.37 SSH.UserAuthList](#) 7525
- [157.38 SSH.UserAuthPassword](#) 7526

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 29th May 2016, last changed 12nd November 2017.

157.18 SSH.OpenSession

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.OpenSession"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

You need to be connected with your session.

Examples

Open Session:

Set Variable [\$r; Value:MBS("SSH.OpenSession"; \$ssh)]

See also

- 157.2 SSH.Connect 7481
- 157.5 SSH.Execute 7487
- 157.7 SSH.FreeChannel 7491
- 157.17 SSH.New 7501

Example Databases

- [Network/SSH](#)

Created 29th May 2016, last changed 30th May 2016.

157.19 SSH.ReadHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.ReadHex"; SSH; length { ; Stream })

Parameters**SSH**

The SSH session reference number from the plugin.

\$ssh

length

Maximum number of bytes to read.

10

Stream

Optional

Which stream to read. Can be stdout or stderr. Stdout is default if parameter is empty or missing.

"StdOut"

Result Returns text encoded as hex or error message.

Description

The text returned may be shorter than length bytes.

See also

- 157.20 SSH.ReadText

157.20 SSH.ReadText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.ReadText"; SSH { ; length; Encoding; Stream })

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

length

Optional

Maximum number of bytes to read.

10

Encoding

Optional

The text encoding for result. Default is UTF-8.

UTF8

Stream

Optional

Which stream to read. Can be stdout or stderr. Stdout is default if parameter is empty or missing.

"StdOut"

Result Returns text or error message.

Description

The text returned may be shorter than length bytes.

Examples

Read all text:

```
# We read text in several chunks until no new text is coming any more:
Set Variable [ $text; Value:"" ]
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
# Read some text:
Set Variable [ $newtext; Value:MBS( "SSH.ReadText"; $ssh; 10000; "UTF8" ) ]
If [ MBS("iserror") = 0 ]
If [ Length($newText) >0 ]
Set Variable [ $text; Value:$text & $newText ]
End If
Exit Loop If [ Length($newText) = 0 ]
End If
End Loop
Set Field [ SSH::Result; $text ]
```

157.20. *SSH.READTEXT*

7507

See also

- 124.6 IsError 6266
- 157.2 SSH.Connect 7481
- 157.5 SSH.Execute 7487
- 157.17 SSH.New 7501
- 157.19 SSH.ReadHex 7505

Example Databases

- [Network/SSH](#)

Created 29th May 2016, last changed 27th May 2017.

157.21 SSH.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Release"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.
\$ssh

Result Returns OK or error.

Description

If needed the channel, session and socket is closed.

See also

- 100.66 JSON.Release 5336
- 157.1 SSH.CloseChannel 7479
- 157.2 SSH.Connect 7481
- 157.5 SSH.Execute 7487
- 157.7 SSH.FreeChannel 7491
- 157.17 SSH.New 7501
- 191.29 XML.Release 9299

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 29th May 2016, last changed 29th May 2016.

157.22 SSH.RequestPTY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.RequestPTY"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

Note that this does not make sense for all channel types and may be ignored by the server despite returning success.

Created 29th May 2016, last changed 29th May 2016.

157.23 SSH.SendEOF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.SendEOF"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

Tell the remote host that no further data will be sent on the specified channel. Processes typically interpret this as a closed stdin descriptor.

Created 29th May 2016, last changed 29th May 2016.

157.24 SSH.SessionHandshake

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.SessionHandshake"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

You may want to set timeout with SSH.SetTimeout function.

Examples

Do session handshake:

```
Set Variable [ $r; Value:MBS( "SSH.SessionHandshake"; $ssh ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Connect error"; $r ]
End if
```

See also

- [124.6 IsError](#) 6266
- [157.2 SSH.Connect](#) 7481
- [157.5 SSH.Execute](#) 7487
- [157.17 SSH.New](#) 7501
- [157.27 SSH.SetTimeout](#) 7514

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 29th May 2016, last changed 4th December 2019.

157.25 SSH.SetEnv

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.SetEnv"; SSH; Name; Value)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Name

The name of the variable.

"test"

Value

The value for the variable.

"test"

Result Returns OK or error.

Description

Created 29th May 2016, last changed 29th May 2016.

157.26 SSH.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.SetTag"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

The tag value allows you to associate any value with the session, e.g. a record ID.

See also

- 157.11 SSH.GetTag

7495

Created 29th May 2016, last changed 29th May 2016.

157.27 SSH.SetTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.SetTimeout"; SSH; Timeout)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Timeout

The new timeout value in milliseconds.

30000

Result Returns OK or error.

Description

See also

- 151.3 SNMP.SetTimeout 7126
- 157.12 SSH.GetTimeout 7496
- 157.24 SSH.SessionHandshake 7511

Created 29th May 2016, last changed 29th May 2016.

157.28 SSH.Shell

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Shell"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

Created 29th May 2016, last changed 29th May 2016.

157.29 SSH.Tunnel.BytesReceived

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	8.5	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Tunnel.BytesReceived"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns number or error.

Description

Created 22nd October 2018, last changed 22nd October 2018.

157.30 SSH.Tunnel.BytesSent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	8.5	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Tunnel.BytesSent"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns number or error.

Description

Created 22nd October 2018, last changed 22nd October 2018.

157.31 SSH.Tunnel.Cancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	8.5	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Tunnel.Cancel"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

This sets cancel flag, but cancelling happens asynchronous, so please check running flag later.

Tunnel is automatically cancelled when session is closed.

See also

- 157.32 SSH.Tunnel.Cancelled

7519

Example Databases

- [Network/SSH Tunnel](#)

Created 22nd October 2018, last changed 22nd October 2018.

157.32 SSH.Tunnel.Cancelled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	8.5	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Tunnel.Cancelled"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns 1, 0 or error.

Description

See also

- 157.31 SSH.Tunnel.Cancel

7518

Created 22nd October 2018, last changed 22nd October 2018.

157.33 SSH.Tunnel.Messages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	8.5	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Tunnel.Messages"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns text or error.

Description

We log messages so you can see what is going on and check the messages if things are not working well.

157.33.1 Blog Entries

- [SSH tunnel in FileMaker](#)

Created 22nd October 2018, last changed 22nd October 2018.

157.34 SSH.Tunnel.Run

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	8.5	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Tunnel.Run"; SSH; RemoteHost; RemotePort; LocalHost; LocalPort)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

RemoteHost

The remote host to forward to. Can be IP or domain name.

"monkeybreadsoftware.de"

RemotePort

The destination port to connect to.

80

LocalHost

The local interface to listen on.

"127.0.0.1"

LocalPort

The local port to listen on.

8000

Result Returns OK or error.

Description

Please create, connect and authenticate a session for use as a tunnel.

For best result, please don't use the same session for other things while tunnel is running.

The tunnel allows currently one connection through it, e.g. run one tunnel per MySQL connection to go through the tunnel. If you need multiple tunnels, please create multiple SSH connections.

The MBS Plugin can spin of a new preemptive thread to run a tunnel to forward a SSH connection from local socket to remote server via SSH tunnel.

This works well e.g. for database access with MySQL.

By using our own thread, we are not blocking or blocked by your FileMaker scripts.

See also

- 157.35 SSH.Tunnel.Running

7523

Example Databases

- [Network/SSH Tunnel](#)

157.34.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr3](#)
- [SSH tunnel in FileMaker](#)

Created 22nd October 2018, last changed 22nd October 2018.

157.35 SSH.Tunnel.Running

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	8.5	Yes	Yes	Yes	Yes	Yes

MBS("SSH.Tunnel.Running"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns boolean or error.

Description

Returns 1 if running or 0 if not.

See also

- 157.34 SSH.Tunnel.Run

Created 22nd October 2018, last changed 22nd October 2018.

157.36 SSH.UserAuthKeyboardInteractive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.UserAuthKeyboardInteractive"; SSH; Username; Password)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Username

Name of user to attempt plain password authentication for.

"cs"

Password

Password to use for authenticating username.

"test"

Result Returns OK or error.

Description

The server will send question to plugin and plugin answers with the given password.

Examples

Login interactively:

```
Set Variable [ $r; Value:MBS( "SSH.UserAuthKeyboardInteractive"; $ssh; SSH::Username; SSH::Password ) ]
```

See also

- 157.2 SSH.Connect 7481
- 157.5 SSH.Execute 7487
- 157.17 SSH.New 7501

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 29th May 2016, last changed 30th May 2016.

157.37 SSH.UserAuthList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.UserAuthList"; SSH; Username)

Parameters**SSH**

The SSH session reference number from the plugin.

\$ssh

Username

Username which will be used while authenticating. Note that most server implementations do not permit attempting authentication with different usernames between requests. Therefore this must be the same username you will use on later userauth calls.

"cs"

Result Returns OK or error.

Description

Send a SSH_USERAUTH_NONE request to the remote host. Unless the remote host is configured to accept none as a viable authentication scheme (unlikely), it will return SSH_USERAUTH_FAILURE along with a listing of what authentication schemes it does support. In the unlikely event that none authentication succeeds, this method will return "". This case may be distinguished from a failing case by examining Authenticated.

Examples

Query authentication list:

Set Variable [\$authuserlist; Value:MBS("SSH.userauthlist"; \$ssh; SSH::Username)]

See also

- 157.2 SSH.Connect 7481
- 157.5 SSH.Execute 7487
- 157.17 SSH.New 7501

Created 29th May 2016, last changed 30th May 2016.

157.38 SSH.UserAuthPassword

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.UserAuthPassword"; SSH; Username; Password)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Username

Name of user to attempt plain password authentication for.

"cs"

Password

Password to use for authenticating username.

"test"

Result Returns OK or error.

Description

Attempt basic password authentication. Note that many SSH servers which appear to support ordinary password authentication actually have it disabled and use Keyboard Interactive authentication (routed via PAM or another authentication backed) instead.

Examples

Login with password:

```
Set Variable [ $r; Value:MBS( "SSH.UserAuthPassword"; $ssh; SSH::Username; SSH::Password ) ]
```

See also

- [157.2 SSH.Connect](#) 7481
- [157.5 SSH.Execute](#) 7487
- [157.17 SSH.New](#) 7501

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 29th May 2016, last changed 30th May 2016.

157.39 SSH.UserAuthPublicKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.UserAuthPublicKey"; SSH; Username; PublicKey; PrivateKey; Passphrase)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Username

user name to authenticate as.

"cs"

PublicKey

The public key. Optional. Pass empty text if you only have private key.

""

PrivateKey

The private key. A PEM encoded private key file stored in memory.

Passphrase

Passphrase to use when decoding privatekey.

Result Returns OK or error.

Description

Attempt public key authentication using a PEM encoded private key file stored in text variable or field.

Examples

Login with keys:

```
Set Variable [ $r; Value: MBS( "SSH.UserAuthPublicKey"; $ssh; "cs"; "";  
"—BEGIN RSA PRIVATE KEY—"  
MIIEpQIBAAKCAQEAzXhH+HE2k8bpRvm4q9TlbD7B7/p2I0NXmVDz1CULU1FqN2OC$  
Q+3sUIUxWS2Fbyt5eTWeM5FkiYJyofjy6S+AK8C9+LmTS1NpMra8i4hnlGhwIfKk$  
LnzxmECgYEA1hopk2yfGXZg8yMYKdRD1JToH0QDxpIRHjHFy17eKbj79opB6zfU$  
WuCgiy1S0oNZfM/5gzYrUCBSdjbpk23rN3JqKI8J9/E2Ry7q4z0uVIRuQUS6mBnn$  
+r6DhI+hCQP7nR5APxJkLPdOCAnMKfjvEcvVwtcIAVz7sljR53J3e/A=$  
—END RSA PRIVATE KEY—"; "" ) ]
```

See also

- 157.2 SSH.Connect 7481
- 157.5 SSH.Execute 7487
- 157.17 SSH.New 7501

- 157.40 SSH.UserAuthPublicKeyFile

Example Databases

- [Network/SSH Tunnel](#)
- [Network/SSH](#)

Created 8th June 2016, last changed 20th June 2016.

157.40 SSH.UserAuthPublicKeyFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.UserAuthPublicKeyFile"; SSH; Username; PublicKey; PrivateKey { ; Passphrase })

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Username

user name to authenticate as.

"cs"

PublicKey

Path of the public key file. (e.g. /etc/ssh/hostkey.pub). Optional. Pass empty text if you only have private key.

"/Users/cs/Desktop/id_rsa.pub"

PrivateKey

Path of the private key file. (e.g. /etc/ssh/hostkey)

"/Users/cs/Desktop/id_rsa"

Passphrase

Optional

Passphrase to use when decoding privatekey. Can be empty.

""

Result Returns OK or error.

Description

Attempt public key authentication using a PEM encoded private key file stored on disk.

Examples

Login with public key:

```
Set Variable [ $r; Value:MBS( "SSH.UserAuthPublicKeyFile"; $ssh; SSH::Username; "your key path"; "your key path"; SSH::Password ) ]
```

Login with keys:

```
Set Variable [ $r; Value: MBS( "SSH.UserAuthPublicKeyFile"; $ssh; SSH::Username; "/Users/cs/Desktop/id_rsa.pub"; "/Users/cs/Desktop/id_rsa"; SSH::Password ) ]
```

See also

- 157.39 SSH.UserAuthPublicKey

157.41 SSH.WaitClosed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.WaitClosed"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

Enter a temporary blocking state until the remote host closes the named channel. Typically sent after Close in order to examine the exit status.

Created 29th May 2016, last changed 29th May 2016.

157.42 SSH.WaitEOF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.WaitEOF"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

Created 29th May 2016, last changed 29th May 2016.

157.43 SSH.WaitSocket

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.WaitSocket"; SSH)

Parameters

SSH

The SSH session reference number from the plugin.

\$ssh

Result Returns OK or error.

Description

Created 29th May 2016, last changed 29th May 2016.

157.44 SSH.WriteHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.WriteHex"; SSH; Text { ; Stream })

Parameters**SSH**

The SSH session reference number from the plugin.

\$ssh

Text

The text to send in hex encoding.

"48656C6C66"

Stream

Optional

Which stream to write. Can be stdout or stderr. Stdout is default if parameter is empty or missing.

"StdOut"

Result Returns the number of bytes written or an error message.

Description

You pass the text hex encoded. For example for "Hello" you pass "48656C6C66".

See also

- 157.45 SSH.WriteText

7535

Created 29th May 2016, last changed 1st June 2016.

157.45 SSH.WriteText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
157 SSH	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SSH.WriteText"; SSH; Text { ; Encoding; Stream })

Parameters**SSH**

The SSH session reference number from the plugin.

\$ssh

Text

The text to send.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Stream

Optional

Which stream to write. Can be stdout or stderr. Stdout is default if parameter is empty or missing.

"StdOut"

Result Returns the number of bytes written or an error message.

Description**See also**

- 157.44 SSH.WriteHex

Chapter 158

StoreKit

In-app purchases in the Mac/iOS App Store

158.1 StoreKit.AddPayment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.AddPayment"; productIdentifier { ; quantity })

Parameters

productIdentifier

The product identifier.

1234

quantity

Optional

The quantity of the product. Default is 1.

1

Result Returns OK or error.

Description

When a payment request is added to the queue, the payment queue processes that request with the Apple App Store and arranges for payment from the user. When that transaction is complete or if a failure occurs, the payment queue sends the payment transaction object that encapsulates the request to all transaction observers.

Use StoreKit.Transactions later to query status.

Examples

Start order of item:

Set Variable [\$r ; Value: MBS("StoreKit.AddPayment"; "123"; 1)]

See also

- 158.15 StoreKit.Transactions 7552

158.1.1 Blog Entries

- [Working on new Store Kit functions](#)

Created 22nd April 2018, last changed 22nd April 2018.

158.2 StoreKit.CanMakePayments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.CanMakePayments")

Result Returns 1 or 0.

Description

Returns 1 if the user is allowed to authorize payment. 0 if they do not have permission.

An iPhone can be restricted from accessing the Apple App Store. For example, parents can restrict their children's ability to purchase additional content. Your application should confirm that the user is allowed to authorize payments before adding a payment to the queue. Your application may also want to alter its behavior or appearance when the user is not allowed to authorize payments.

Examples

Check status:

Set Variable [\$r ; Value: MBS("StoreKit.CanMakePayments")]

Created 22nd April 2018, last changed 22nd April 2018.

158.3 StoreKit.FinishTransaction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.FinishTransaction"; TransactionID)

Parameters

TransactionID

The ID of the transaction.

Result Returns OK or error.

Description

Your application should call this method on pending transaction to finish them. Calling StoreKit.FinishTransaction on a transaction removes it from the queue. Your application should call finishTransaction only after it has successfully processed the transaction and unlocked the functionality purchased by the user. Calling StoreKit.FinishTransaction on a transaction that is in the Purchasing state returns an error.

158.3.1 Blog Entries

- [Working on new Store Kit functions](#)

Created 22nd April 2018, last changed 22nd April 2018.

158.4 StoreKit.InvalidProductIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.InvalidProductIdentifiers")

Result Returns list or error.

Description

Please call StoreKit.QueryProducts first to query products and wait for StoreKit.ProductRequestRunning returning 0.

See also

- 158.8 StoreKit.QueryProducts

7545

Created 22nd April 2018, last changed 22nd April 2018.

158.5 StoreKit.IsProductViewVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.IsProductViewVisible")

Result Returns 1 or 0.

Description

Created 22nd April 2018, last changed 22nd April 2018.

158.6 StoreKit.ProductQueryRunning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.ProductQueryRunning")

Result Returns 1 or 0.

Description

Returns 1 if query started by StoreKit.QueryProducts is still running in background.

See also

- 158.8 StoreKit.QueryProducts

7545

Created 22nd April 2018, last changed 28th November 2019.

158.7 StoreKit.Products

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.Products")

Result Returns JSON or error.

Description

Please call StoreKit.QueryProducts first to query products and wait for StoreKit.ProductRequestRunning returning 0.

The JSON contains an array of products and each product has the following values: localizedDescription, localizedTitle, priceLocale, price, productIdentifier, downloadable and formattedPrice.

Examples

Queries list of products:

```
Set Variable [ $products ; Value: MBS( "StoreKit.Products" ) ]
```

See also

- 158.8 StoreKit.QueryProducts

7545

158.7.1 Blog Entries

- [Working on new Store Kit functions](#)

Created 22nd April 2018, last changed 22nd April 2018.

158.8 StoreKit.QueryProducts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.QueryProducts")

Result Returns OK or error.

Description

Your app uses an StoreKit.QueryProducts and StoreKit.Products to present localized prices and other information to the user without having to maintain that list of product information itself.

Please call in start script of solution, so a few seconds later when you want to call StoreKit.Products the information is available.

Examples

Query for two products:

Set Variable [\$r ; Value: MBS("StoreKit.QueryProducts"; "123\$456")]

See also

- [158.4 StoreKit.InvalidProductIdentifiers](#) 7541
- [158.6 StoreKit.ProductQueryRunning](#) 7543
- [158.7 StoreKit.Products](#) 7544

158.8.1 Blog Entries

- [Working on new Store Kit functions](#)

Created 22nd April 2018, last changed 23th April 2018.

158.9 StoreKit.RequestReview

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	No	No	No	No	Yes

MBS("StoreKit.RequestReview")

Result Returns OK or error.

Description

Tells StoreKit to ask the user to rate or review your app, if appropriate. Works asynchronously, so function returns immediately and starts dialog later.

Although you should call this method when it makes sense in the user experience flow of your app, the actual display of a rating/review request view is governed by App Store policy. Because this method may or may not present an alert, it's not appropriate to call it in response to a button tap or other user action.

Note

When you call this method while your app is still in development mode, a rating/review request view is always displayed so that you can test the user interface and experience. However, this method has no effect when you call it in an app that you distribute using TestFlight.

When you call this method in your shipping app and a rating/review request view is displayed, the system handles the entire process for you. In addition, you can continue to include a persistent link in the settings or configuration screens of your app that deep-links to your App Store product page. To automatically open a page on which users can write a review in the App Store, append the query parameter `action=write-review` to your product URL.

158.9.1 Blog Entries

- [Let users review your FileMaker iOS application](#)

Created 22nd April 2018, last changed 22nd April 2018.

158.10 StoreKit.RestoreCompletedTransactions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.RestoreCompletedTransactions" { ; Username })

Parameters

Username

Optional

An opaque identifier for the user's account on your system.

Result Returns OK or error.

Description

Your application calls this method to restore transactions that were previously finished so that you can process them again. For example, your application would use this to allow a user to unlock previously purchased content onto a new device.

When you create a new product to be sold in your store, you choose whether that product can be restored or not. See the In-App Purchase Programming Guide for more information.

The payment queue will deliver a new transaction for each previously completed transaction that can be restored. Each transaction includes a copy of the original transaction.

See also

- 158.12 StoreKit.SetRestoreCompletedTransactionsTrigger

7549

Created 22nd April 2018, last changed 22nd April 2018.

158.11 StoreKit.SetProductViewFinishedTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	No	No	No	No	Yes

MBS("StoreKit.SetProductViewFinishedTrigger"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

Parameter to pass.

Result Returns OK or error.

Description

Script is triggered when the dialog showed via StoreKit.ShowProductView finished.

See also

- 158.14 StoreKit.ShowProductView

7551

Created 22nd April 2018, last changed 22nd April 2018.

158.12 StoreKit.SetRestoreCompletedTransactionsTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.SetRestoreCompletedTransactionsTrigger"; Filename; ScriptName)

Parameters**Filename**

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Parameter is either OK or the error from restoring.

See also

- 158.10 StoreKit.RestoreCompletedTransactions

7547

Created 22nd April 2018, last changed 22nd April 2018.

158.13 StoreKit.SetUpdatedTransactionsTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.SetUpdatedTransactionsTrigger"; Filename; ScriptName { ; Parameter })

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Parameter

Optional

Parameter to pass.

Result Returns OK or error.

Description

This method may be called often when something changes on the transactions. So you can check if they still match your state and process changes.

Created 22nd April 2018, last changed 22nd April 2018.

158.14 StoreKit.ShowProductView

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	No	No	No	No	Yes

MBS("StoreKit.ShowProductView"; iTunesItemIdentifier)

Parameters

iTunesItemIdentifier

The ID of the product to show. Must be a number.
1234

Result Returns OK or error.

Description

Be aware that this works asynchronously and the functions returns directly while the dialog shows later. It App Store doesn't return information, nothing happens.

Examples

Show product page for FileMaker Go 16:

```
Set Variable [ $r ; Value: MBS( "StoreKit.ShowProductView"; 1097917885 ) ]
```

See also

- 158.11 StoreKit.SetProductViewFinishedTrigger

7548

Created 22nd April 2018, last changed 23th April 2018.

158.15 StoreKit.Transactions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
158 StoreKit	8.2	Yes	No	No	No	Yes

MBS("StoreKit.Transactions")

Result Returns JSON or error.

Description

For each transaction, you find values for transactionState, error, payment, originalTransaction, transactionDate and transactionIdentifier. State can be Purchasing, Purchased, Failed, Restored or Deferred.

Examples

Queries list of transactions:

Set Variable [\$transactions; Value: MBS("StoreKit.Transactions")]

See also

- 158.1 StoreKit.AddPayment

7537

158.15.1 Blog Entries

- [Working on new Store Kit functions](#)

Created 22nd April 2018, last changed 22nd April 2018.

Chapter 159

SyntaxColoring

Control the syntax coloring in script and calculation editor.

159.1 SyntaxColoring.AddContextMenuCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	9.5	Yes	No	No	No	No

```
MBS( "SyntaxColoring.AddContextMenuCommand"; Title; Expression; InstallWhen { ; keyEquivalent; KeyEquivalentModifierMask } )
```

Parameters

Title

The title for the menu command. If multi line, we build submenus based on the path described. If title is just "-", we add a separator.

"MyCommands\$Hello"

Expression

The expression to evaluate in FileMaker when menu command is choosen.

InstallWhen

Whether to enable only if selection is present. 0: always on 1: need no row selected 2: need exactly one row selected 3: need one or more rows selected 4: need all rows selected

Add 8 to allow for discontinuous selections (in version 10.0 or later).

0

keyEquivalent

Optional

Available in MBS FileMaker Plugin 10.0 or newer.

The key equivalent. Is shown right in the menu and can be pressed while menu is open.

"T"

KeyEquivalentModifierMask

Optional

Available in MBS FileMaker Plugin 10.0 or newer.

The menu items's keyboard equivalent modifiers. NSShiftKeyMask is a valid modifier for any key equivalent in mask. This allows you to specify key-equivalents such as Command-Shift-1 that are consistent across all keyboards. However, with a few exceptions (such as the German "ß" character), a lowercase character with NSShiftKeyMask is interpreted the same as the uppercase character without that mask. For example, Command-Shift-c and Command-C are considered to be identical key equivalents.

NSShiftKeyMask 131072 Shift Key NSControlKeyMask 262144 Control Key NSAlternateKeyMask 524288 Alternate/Option Key NSCommandKeyMask 1048576 Command Key
524288 + 131072

Result Returns OK or error.

Description

Given commands are added to contextual menu in Script Workspace when right clicking on script steps. Commands are stored in preferences file and can be removed via SyntaxColoring.ClearContextMenuCommands function.

If you use Clipboard.GetFileMakerData and Clipboard.SetFileMakerData functions, you can get the XML for the current step. You may want to use Menubar.RunMenuCommand to run cut/copy/paste/delete commands from the FileMaker menu with the respective command IDs: 57635 for cut, 57634 for copy, 57637 for paste, 57632 for delete and 57642 for select all.

Possible uses include commands

- to add new script steps.
- to check scripts for errors.
- to search and replace things
- to add common snippets, possibly using SQL or text file functions to read the XML for them.
- to pass script steps as XML to external tools.

Use SyntaxColoring.RemoveContextMenuCommand to remove one or SyntaxColoring.ClearContextMenuCommands to clear all.

Examples

Add a greeting command:

```
MBS( "SyntaxColoring.AddContextMenuCommand"; "Greeting"; "MBS(\\"Msgbox\\"; \\"Hello World\\")";
0 )
```

Add a rename command for variable:

```
MBS( "SyntaxColoring.AddContextMenuCommand";
"Rename $I to $counter";
"Let ( [ r = MBS( \"Menubar.RunMenuCommand\"; 57634 /* copy */ ); xml = MBS( \"Clipboard.GetFile-
MakerData\"; \"ScriptStep\" ); xml = Substitute ( xml; \"$i\"; \"$counter\" ); r = MBS( \"Clipboard.Set-
FileMakerData\"; \"ScriptStep\"; xml ); r = MBS( \"Menubar.RunMenuCommand\"; 57637 /* paste */ )
]; \"\" ); 0 )
```

Add an insert loop command:

```
MBS( "SyntaxColoring.AddContextMenuCommand";
"Insert For Loop";
"Let ( [
xml = \"<fmxmlsnippet type=\\\"FMObjectList\\\"><Step enable=\\\"True\\\" id=\\\"89\\\" name=\\\"#
(comment)\\\"><Text>loop counting up from 1 to $count</Text></Step><Step enable=\\\"True\\\"
id=\\\"141\\\" name=\\\"Set Variable\\\"><Value><Calculation><! [ CDATA [ \\\"/* add count
here */\\\" ] ] ></Calculation></Value><Repetition><Calculation><! [ CDATA [ 1 ] ] ></Calcula-
tion></Repetition><Name>$count</Name></Step><Step enable=\\\"True\\\" id=\\\"141\\\" name=\\\"Set
Variable\\\"><Value><Calculation><! [ CDATA [ 1 ] ] ></Calculation></Value><Repetition><Cal-
culation><! [ CDATA [ 1 ] ] ></Calculation></Repetition><Name>$index</Name></Step><Step
enable=\\\"True\\\" id=\\\"68\\\" name=\\\"If\\\"><Calculation><! [ CDATA [ $index $count ] ]
></Calculation></Step><Step enable=\\\"True\\\" id=\\\"71\\\" name=\\\"Loop\\\"></Step><Step
enable=\\\"True\\\" id=\\\"89\\\" name=\\\"# (comment)\\\"><Text>your script steps here</Text></Step><Step
enable=\\\"True\\\" id=\\\"89\\\" name=\\\"# (comment)\\\"></Step><Step enable=\\\"True\\\"
id=\\\"89\\\" name=\\\"# (comment)\\\"><Text>next</Text></Step><Step enable=\\\"True\\\"
id=\\\"141\\\" name=\\\"Set Variable\\\"><Value><Calculation><! [ CDATA [ $index + 1 ] ] ></Cal-
culation></Value><Repetition><Calculation><! [ CDATA [ 1 ] ] ></Calculation></Repetition><Name>$in-
dex</Name></Step><Step enable=\\\"True\\\" id=\\\"72\\\" name=\\\"Exit Loop If\\\"><Calcu-
lation><! [ CDATA [ $index >$count ] ] ></Calculation></Step><Step enable=\\\"True\\\" id=\\\"73\\\"
name=\\\"End Loop\\\"></Step><Step enable=\\\"True\\\" id=\\\"70\\\" name=\\\"End If\\\"></Step></fmxml-
snippet>\";
r = MBS( \"Clipboard.SetFileMakerData\"; \"ScriptStep\"; xml );
r = MBS( \"Menubar.RunMenuCommand\"; 57637 /* paste */ )
]; \"\" ); 0 )
```

Add a search and replace command:

```
MBS( "SyntaxColoring.AddContextMenuCommand";
"Search and Replace";
"Let ( [
/* ask for search text via dialog */
ResetResult = MBS( \"Dialog.Reset\" );
ClearResult = MBS( \"Dialog.ClearFields\" );
MessageResult = MBS( \"Dialog.SetMessage\"; \"Search and replace in script:\" );
InfoResult = MBS( \"Dialog.SetInformativeText\"; \"Search text can include XML tags.\" );
Field1Result = MBS( \"Dialog.AddField\"; \"Search for:\" );
Field2Result = MBS( \"Dialog.AddField\"; \"Replace with:\" );
Button1Result = MBS( \"Dialog.SetDefaultButton\"; \"Replace\");
```



```
\”UTF-8\”
); 0 )
```

Add separator item:

```
MBS( ”SyntaxColoring.AddContextMenuCommand”; ”-”; ”-”; 0 )
```

// needs version 10.0 of the plugin.

Add function header:

```
MBS( ”SyntaxColoring.AddContextMenuCommand”;
”Insert function header”;
”Let ( [
xml = \”<fmxmlsnippet type=\\”FMObjectList\\”><Step enable=\\”True\\” id=\\”89\\” name=\\”#
(comment)\\”><Text>Description</Text></Step><Step enable=\\”True\\” id=\\”89\\” name=\\”#
(comment)\\”><Text>Author</Text></Step><Step enable=\\”True\\” id=\\”89\\” name=\\”#
(comment)\\”><Text>Modifications</Text></Step><Step enable=\\”True\\” id=\\”89\\” name=\\”#
(comment)\\”></Step><Step enable=\\”True\\” id=\\”85\\” name=\\”Allow User Abort\\”><Set
state=\\”False\\”></Set></Step><Step enable=\\”True\\” id=\\”86\\” name=\\”Set Error
Capture\\”><Set state=\\”True\\”></Set></Step><Step enable=\\”True\\” id=\\”89\\” name=\\”#
(comment)\\”></Step><Step enable=\\”True\\” id=\\”141\\” name=\\”Set Variable\\”><Value><Cal-
culation><! [ CDATA [ Get(ScriptParameter) ] ] ></Calculation></Value><Repetition><Calculation><!
[ CDATA [ 1 ] ] ></Calculation></Repetition><Name>$param</Name></Step><Step enable=\\”True\\”
id=\\”89\\” name=\\”# (comment)\\”></Step><Step enable=\\”True\\” id=\\”89\\” name=\\”#
(comment)\\”></Step><Step enable=\\”True\\” id=\\”89\\” name=\\”# (comment)\\”></Step><Step
enable=\\”True\\” id=\\”141\\” name=\\”Set Variable\\”><Value><Calculation><! [ CDATA
[ \\”\\” ] ] ></Calculation></Value><Repetition><Calculation><! [ CDATA [ 1 ] ] ></Calcula-
tion></Repetition><Name>$result</Name></Step><Step enable=\\”True\\” id=\\”103\\” name=\\”Exit
Script\\”><Calculation><! [ CDATA [ $result ] ] ></Calculation></Step></fmxmlsnippet>\””;
r = MBS( \”Clipboard.SetFileMakerData\”; \”ScriptStep\”; xml );
r = MBS( \”MenuBar.RunMenuCommand\”; 57637 /* paste */ )
]; \”\” ); 0 )
```

Add command to paste snippet from folder picked by dialog:

// put snippets as xml files into ~/Library/Application Support/FileMaker/Snippets folder.

```
MBS( ”SyntaxColoring.AddContextMenuCommand”;
”Insert snippet from snippet folder”;
”Let( [
Path = MBS( \”Path.AddPathComponent\”; MBS( \”Folders.UserHome\” ); \”Library\”; \”Application
Support\”; \”FileMaker\”; \”Snippets\”);
Files = MBS( \”Files.List\”; Path; 1+4);
Names = MBS( \”List.RemovePostfix\”; Files; \”.xml\”; 1);
r = MBS( \”ListDialog.Reset\” ) & MBS( \”ListDialog.AddItemToList\”; Names; Files ) & MBS( \”List-
Dialog.SetPrompt\”; \”Choose snippet to insert:\” );
```

```
answer = MBS( \”ListDialog.ShowDialog\” );
r = If(answer = \”OK\”; MBS( \”Clipboard.SetFileMakerData\”; \”ScriptStep\”; MBS( \”Text.Read-
TextFile\”; MBS( \”Path.AddPathComponent\”; Path; MBS( \”ListDialog.GetSelectedTag\” )); \”UTF-
8\” ) ) & MBS( \”Menuubar.RunMenuCommand\”; 57637 /* paste */ ) ] ; 0” ; 0 )
```

Add duplicate context menu entry:

```
MBS( ”SyntaxColoring.AddContextMenuCommand”; ”Duplicate”;
”Let ( [ r = MBS( \”Menuubar.RunMenuCommand\”; 49182 /* duplicate */ ) ] ; \”\” ); 3 )
```

See also

- 104.2 ListDialog.AddItemToList 5565
- 104.18 ListDialog.GetSelectedTag 5581
- 104.25 ListDialog.Reset 5588
- 142.11 ScriptWorkspace.ScriptText 6859
- 159.9 SyntaxColoring.Clear 7572
- 159.10 SyntaxColoring.ClearContextMenuCommands 7573
- 159.44 SyntaxColoring.ListContextMenuCommand 7609
- 159.47 SyntaxColoring.RemoveContextMenuCommand 7612
- 164.49 Text.ReadTextFile 7843
- 164.68 Text.WriteTextFile 7871

159.1.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.6pr2](#)
- [Formatting and error checking expressions in FileMaker](#)
- [MBS FileMaker Plugin, version 9.6pr1](#)
- [Insert snippet for FileMaker on Windows](#)
- [MBS FileMaker Plugin 9.5 video](#)
- [Add a search and replace command for FileMaker Script Workspace](#)
- [Neues MBS FileMaker Plugin 9.5](#)
- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)

Created 18th October 2019, last changed 9th January 2020.

159.2 SyntaxColoring.AddTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.AddTag"; Selector; Text; Color)

Parameters

Selector

What item to color with this tag. Can be ScriptStep, Function, Variable or Formula.
"Formula"

Text

The name of the item. Up to five words from the left name of the command.
"If"

Color

The color value. Can be one of a few english color names or "# 123456" notation like in html.
"red"

Result Returns OK on success.

Description

Settings are saved in preferences files and you can use different settings in different FileMaker versions.
Works with FileMaker 11 or newer.

Default tags defined for script steps:

Possible tag names for syntax coloring in calculations:

Some color names you can use for syntax coloring:

Black, Gray, DarkGray, LightGray, Blue, Brown, Cyan, Green, Magenta, Orange, Purple, Red, Yellow, White, alternateSelectedControlColor, alternateSelectedControlTextColor, controlBackgroundColor, controlColor, controlDarkShadowColor, controlHighlightColor, controlLightHighlightColor, controlShadowColor, controlTextColor, disabledControlTextColor, gridColor, headerColor, headerTextColor, highlightColor, keyboardFocusIndicatorColor, knobColor, scrollBarColor, secondarySelectedControlColor, selectedControlColor, selectedControlTextColor, selectedKnobColor, selectedMenuItemColor, selectedMenuItemTextColor, selectedTextBackgroundColor, selectedTextColor, shadowColor, textBackgroundColor, textColor, windowBackgroundColor, windowFrameColor, windowFrameTextColor, Cantaloupe, Honeydew, Spindrift, Sky, Lavender, Carnation, Licorice, Snow, Salmon, Banana, Flora, Ice, Orchid, Bubblegum, Lead, Mercury, Tangerine, Lime, "Sea Foam", Aqua, Grape, Strawberry, Tungsten, Silver, Maraschino, Lemon, Spring, Turquoise, Blueberry, Magenta, Iron, Magnesium, Mocha, Fern, Moss, Ocean, Eggplant, Maroon, Steel, Aluminum, Cayenne, Asparagus, Clover, Teal, Midnight, Plum, Tin and Nickel.

Examples

Enable coloring for set variable script step in German:

Sonst	blue
Sonst,	blue
Wenn	blue
Ende	blue
Schleife	teal
Verlasse	teal
If	blue
Else	blue
End If	blue
Loop	teal
End Loop	teal
Exit Loop	teal
Si	blue
Simon	blue
Fin de si	blue
Boucle	teal
Fin de Boucle	teal
commented formula	red

```
MBS( "SyntaxColoring.AddTag"; "ScriptStep"; "Variable setzen"; "# FF0000" )
```

Set blue color for round bracket:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "round bracket color"; "blue" )
```

Set green color for equal sign:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "equal bracket color"; "green" )
```

Set green color for plus sign:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "plus sign color"; "# 00FF00" )
```

Enable coloring for set variable script step for missing field:

```
MBS( "SyntaxColoring.AddTag"; "ScriptStep"; "*<Missing Field>*"; "# FF0000" )
```

Color Hole() function blue in formulas:

```
MBS( "SyntaxColoring.AddTag"; "Function"; "Hole"; "blue" )
```

Color variable \$\$UserID blue in formulas:

```
MBS( "SyntaxColoring.AddTag"; "Variable"; "$$UserID"; "blue" )
```

Name	Default
round bracket color	blue
square bracket color	purple
curly bracket color	purple
wrong bracket color	red
text color	teal
variable color	plum
tilde variable color	-
underscore variable color	-
cent variable color	-
plus sign color	-
minus sign color	-
function color	-
and sign color	-
slash sign color	-
star sign color	-
paragraph sign color	-
caret sign color	-
equal sign color	-
not equal sign color	-
bigger sign color	-
smaller sign color	-
bigger equal sign color	-
smaller equal sign color	-
number color	-
comment color	-
function color	-
and color	-
or color	-
not color	-
xor color	-
field color	-

Color all other functions in light red:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "function color"; "Salmon" )
```

Set comment color to gray:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "comment color"; "gray" )
```

Set color for undefined variables in script to red:

```
MBS( "SyntaxColoring.AddTag"; "ScriptStep"; "undefined variable color"; "red" )
```

Set color for tilde variable names:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "tilde variable color"; "green" )
```

Set color for underscore variable names:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "underscore variable color"; "red" )
```

Set color for cent variable names:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "cent variable color"; "green" )
```

Set color for field names:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "field color"; "blue" )
```

Set color for and:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "and color"; "red" )
```

Set comment script steps to be dark green:

```
MBS( "SyntaxColoring.AddTag"; "ScriptStep"; "# "; "# 007700" )
```

Color red all values starting with comment:

```
MBS( "SyntaxColoring.AddTag"; "ScriptStep"; "**Value: /**"; "red" )
```

Set color for global variables:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "global variable color"; "# ff69b4" )
```

Set color for <>in formula:

```
MBS( "SyntaxColoring.AddTag"; "Formula"; "smaller bigger sign color"; "# 0000FF" )
```

See also

- 159.9 SyntaxColoring.Clear 7572
- 159.16 SyntaxColoring.Enable 7580
- 159.19 SyntaxColoring.Format 7583
- 159.36 SyntaxColoring.GetTag 7600
- 159.37 SyntaxColoring.GetTags 7601

159.2. SYNTAXCOLORING.ADDTAG

7563

- 159.48 SyntaxColoring.RemoveTag

7613

Example Databases

- [Mac only/SyntaxColoring for Mac](#)

159.2.1 Blog Entries

- [Different colors for variables in FileMaker](#)
- [Formatting and error checking expressions in FileMaker](#)
- [MBS FileMaker Plugin, version 9.5pr2](#)
- [MBS Filemaker Plugin, version 3.0pr7](#)
- [Syntax Coloring Improvements](#)

159.2.2 FileMaker Magazin

- [Ausgabe 5/2015, Seite 31](#)

Created 18th August 2014, last changed 7th October 2019.

159.3 SyntaxColoring.CheckVariableDeclaration.Disable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.5	Yes	No	No	No	No

MBS("SyntaxColoring.CheckVariableDeclaration.Disable")

Result Returns OK on success.

Description

Settings are saved in preferences files and you can use different settings in different FileMaker versions.

Works with FileMaker 11 or newer.

Checking variable declarations can only be enabled in FileMaker Pro, not in server or runtime versions.

This setting can be set via the preferences dialog, too.

Examples

Enable or disable checking variable declarations:

If (Enable)

```
Set Variable [ $r; MBS( "SyntaxColoring.CheckVariableDeclaration.Enable" ) ]
```

else

```
Set Variable [ $r; MBS( "SyntaxColoring.CheckVariableDeclaration.Disable" ) ]
```

end if

Declare variable via comment:

```
# Declare variables via comment as plugin has no way to know easily that $test is defined here
```

```
# @parameter $param1
```

```
# @parameter $param2
```

```
Set Variable [ $r ; Value: Let ( [ parameters = Get(ScriptParameter); $param1 = GetValue(parameters; 1);  
$param2 = GetValue(parameters; 2) ] ; 1 ) ]
```

See also

- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.6 SyntaxColoring.CheckVariableDeclaration.Notification.Disable 7569
- 159.7 SyntaxColoring.CheckVariableDeclaration.Notification.Enable 7570

Created 18th August 2014, last changed 15th December 2019.

159.4 SyntaxColoring.CheckVariableDeclaration.Enable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.5	Yes	No	No	No	No

MBS("SyntaxColoring.CheckVariableDeclaration.Enable")

Result Returns OK on success.

Description

Settings are saved in preferences files and you can use different settings in different FileMaker versions.

Works with FileMaker 11 or newer.

Checking variable declarations can only be enabled in FileMaker Pro, not in server or runtime versions.

By default this is off. It takes some additional CPU time for drawing the script and not everyone may want to have it on. Of course the extra work for the CPU should not be noticeable to the developer. Variable names declared inside Let commands are not recognized.

May only work in Advanced version of FileMaker.

You can declare variables in comment when writing @param, @variable or @constant in the comment followed by variable name.

Examples

Enable or disable checking variable declarations:

If (Enable)

```
Set Variable [ $r; MBS( "SyntaxColoring.CheckVariableDeclaration.Enable" ) ]
```

else

```
Set Variable [ $r; MBS( "SyntaxColoring.CheckVariableDeclaration.Disable" ) ]
```

end if

Use @variable to declare variable:

```
# Declare variable via comment as plugin has no way to know easily that $test is defined here
```

```
# @variable $test
```

```
Insert Current Time [ Select ; Target: $test ]
```

Declare variable via comment:

```
# Declare variables via comment as plugin has no way to know easily that $test is defined here
```

```
# @parameter $param1
```

```
# @parameter $param2
```

```
Set Variable [ $r ; Value: Let ( [ parameters = Get(ScriptParameter); $param1 = GetValue(parameters; 1); $param2 = GetValue(parameters; 2) ] ; 1 ) ]
```

See also

- 159.3 SyntaxColoring.CheckVariableDeclaration.Disable

- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.7 SyntaxColoring.CheckVariableDeclaration.Notification.Enable 7570
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled 7615
- 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled 7621
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633

159.4.1 Blog Entries

- [Goodies video from FMValencia conference](#)
- [Checking Variable Declarations in FileMaker with MBS Plugin](#)
- [New Text for unknown variables in scripts](#)
- [MBS Filemaker Plugin, version 3.5pr7](#)

Created 18th August 2014, last changed 15th December 2019.

159.5 SyntaxColoring.CheckVariableDeclaration.Enabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.5	Yes	No	No	No	No

MBS("SyntaxColoring.CheckVariableDeclaration.Enabled")

Result Returns 1 if checking variable declarations are enabled and 0 if not.

Description

Examples

Check if enabled:

```
Set Variable [ $emab; MBS( "SyntaxColoring.CheckVariableDeclaration.Enabled" ) ]
```

Enable all the plugin enhancements for FileMaker:

```
MBS("SyntaxColoring.CopyButton.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptGoTOBox.SetEnabled"; 1)
MBS("SyntaxColoring.RelationGraphSearchBox.SetEnabled"; 1)
MBS( "SyntaxColoring.CheckVariableDeclaration.Enable" )
MBS( "SyntaxColoring.LineNumbers.Enable" )
MBS( "SyntaxColoring.SetScriptHighlightColor"; "# CCCCFF" )
```

Use @variable to declare variable:

```
# Declare variable via comment as plugin has no way to know easily that $test is defined here
# @variable $test
Insert Current Time [ Select ; Target: $test ]
```

Declare variable via comment:

```
# Declare variables via comment as plugin has no way to know easily that $test is defined here
# @parameter $param1
# @parameter $param2
Set Variable [ $r ; Value: Let ( [ parameters = Get(ScriptParameter); $param1 = GetValue(parameters; 1);
$param2 = GetValue(parameters; 2) ] ; 1 ) ]
```

See also

- 159.3 SyntaxColoring.CheckVariableDeclaration.Disable 7564
- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.7 SyntaxColoring.CheckVariableDeclaration.Notification.Enable 7570

- 159.8 SyntaxColoring.CheckVariableDeclaration.Notification.Enabled 7571
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled 7615
- 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled 7621
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633

Created 18th August 2014, last changed 15th December 2019.

159.6 SyntaxColoring.CheckVariableDeclaration.Notification.Disable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.1	Yes	No	No	No	No

MBS("SyntaxColoring.CheckVariableDeclaration.Notification.Disable")

Result Returns OK or error.

Description

See also

- 159.3 SyntaxColoring.CheckVariableDeclaration.Disable 7564
- 159.7 SyntaxColoring.CheckVariableDeclaration.Notification.Enable 7570
- 159.8 SyntaxColoring.CheckVariableDeclaration.Notification.Enabled 7571

Created 2nd February 2017, last changed 2nd February 2017.

159.7 SyntaxColoring.CheckVariableDeclaration.Notification.Enable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.1	Yes	No	No	No	No

MBS("SyntaxColoring.CheckVariableDeclaration.Notification.Enable")

Result Returns OK or error.

Description

If enabled, the plugin will notify you automatically about missing variables.

See also

- 159.3 SyntaxColoring.CheckVariableDeclaration.Disable 7564
- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.6 SyntaxColoring.CheckVariableDeclaration.Notification.Disable 7569
- 159.8 SyntaxColoring.CheckVariableDeclaration.Notification.Enabled 7571

Created 2nd February 2017, last changed 2nd February 2017.

159.8 SyntaxColoring.CheckVariableDeclaration.Notification.Enabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.1	Yes	No	No	No	No

MBS("SyntaxColoring.CheckVariableDeclaration.Notification.Enabled")

Result Returns 0, 1 or error.

Description

If enabled, the plugin will notify you automatically about missing variables.

See also

- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.6 SyntaxColoring.CheckVariableDeclaration.Notification.Disable 7569
- 159.7 SyntaxColoring.CheckVariableDeclaration.Notification.Enable 7570

Created 2nd February 2017, last changed 2nd February 2017.

159.9 SyntaxColoring.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.Clear")

Result Returns OK on success.

Description

Examples

Clears all rules:

MBS("SyntaxColoring.Clear")

See also

- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553
- [159.2 SyntaxColoring.AddTag](#) 7559
- [159.19 SyntaxColoring.Format](#) 7583
- [159.36 SyntaxColoring.GetTag](#) 7600

Example Databases

- [Mac only/SyntaxColoring for Mac](#)

159.9.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr5](#)

Created 18th August 2014, last changed 18th August 2014.

159.10 SyntaxColoring.ClearContextMenuCommands

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	9.5	Yes	No	No	No	No

MBS("SyntaxColoring.ClearContextMenuCommands")

Result Returns OK or error.

Description

You can use SyntaxColoring.RemoveContextMenuCommand to remove just one command.

See also

- 159.1 SyntaxColoring.AddContextMenuCommand 7553
- 159.44 SyntaxColoring.ListContextMenuCommand 7609
- 159.47 SyntaxColoring.RemoveContextMenuCommand 7612

159.10.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr4](#)

Created 18th October 2019, last changed 20th October 2019.

159.11 SyntaxColoring.ContextualMenuEnabled.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.0	Yes	No	No	No	No

MBS("SyntaxColoring.ContextualMenuEnabled.GetEnabled")

Result Returns 0, 1 or error.

Description

See also

- 159.12 SyntaxColoring.ContextualMenuEnabled.SetEnabled

7575

159.11.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 11st January 2016, last changed 11st January 2016.

159.12 SyntaxColoring.ContextualMenuEnabled.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.0	Yes	No	No	No	No

MBS("SyntaxColoring.ContextualMenuEnabled.SetEnabled"; Value)

Parameters

Value

The new setting: 1 to enable or 0 to disable.

Result Returns OK or error.

Description

The plugin provides a Copy Table Content command for all FileMaker tables.

Unless FileMaker has it's own contextual menu.

This setting can be set via the preferences dialog, too.

See also

- 159.11 SyntaxColoring.ContextualMenuEnabled.GetEnabled

7574

159.12.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr6](#)

Created 11st January 2016, last changed 11st November 2019.

159.13 SyntaxColoring.CopyButton.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.2	Yes	No	No	No	No

MBS("SyntaxColoring.CopyButton.GetEnabled")

Result Returns value or error.

Description

Returns 1 if enabled or 0 if disabled.

See also

- [159.14 SyntaxColoring.CopyButton.SetEnabled](#) 7577
- [159.76 SyntaxColoring.ZoomButton.GetEnabled](#) 7644
- [159.77 SyntaxColoring.ZoomButton.SetEnabled](#) 7645

159.13.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr1](#)

Created 20th May 2015, last changed 10th October 2015.

159.14 SyntaxColoring.CopyButton.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.2	Yes	No	No	No	No

MBS("SyntaxColoring.CopyButton.SetEnabled"; Value)

Parameters

Value

The new setting. Pass 1 to show button or 0 to disable.

1

Result Returns OK or error.

Description

MBS Plugin offers to add a script button on Mac OS X and this function sets the preferences on whether it's visible or not.

This setting can be set via the preferences dialog, too.

Examples

Enable button:

```
MBS( "SyntaxColoring.CopyButton.SetEnabled"; 1 )
```

Disable copy button:

```
MBS("SyntaxColoring.CopyButton.SetEnabled"; 0)
```

Enable all the plugin enhancements for FileMaker:

```
MBS("SyntaxColoring.CopyButton.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptGoToBox.SetEnabled"; 1)
MBS("SyntaxColoring.RelationGraphSearchBox.SetEnabled"; 1)
MBS( "SyntaxColoring.CheckVariableDeclaration.Enable" )
MBS( "SyntaxColoring.LineNumbers.Enable" )
MBS( "SyntaxColoring.SetScriptHighlightColor"; "# CCCCFF" )
```

See also

- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.13 SyntaxColoring.CopyButton.GetEnabled 7576
- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled 7615

- 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled 7621
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633
- 159.76 SyntaxColoring.ZoomButton.GetEnabled 7644
- 159.77 SyntaxColoring.ZoomButton.SetEnabled 7645

159.14.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr1](#)

Created 20th May 2015, last changed 11st November 2019.

159.15 SyntaxColoring.Disable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.Disable")

Result Returns OK on success.

Description

Settings are saved in preferences files and you can use different settings in different FileMaker versions. Works with FileMaker 11 or newer.

Syntax color can only be enabled in FileMaker Pro, not in server or runtime versions. See also SyntaxColoring.Enable.

Disabling colors also disables line numbers and script search.

Examples

Enable or disable syntax coloring:

```
If (Enable)
Set Variable [ $r; MBS( "SyntaxColoring.Enable" ) ]
else
Set Variable [ $r; MBS( "SyntaxColoring.Disable" ) ]
end if
```

See also

- [159.16 SyntaxColoring.Enable](#) 7580
- [159.17 SyntaxColoring.Enabled](#) 7581

Example Databases

- [Mac only/SyntaxColoring for Mac](#)

159.15.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr1](#)

Created 18th August 2014, last changed 15th June 2016.

159.16 SyntaxColoring.Enable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.Enable")

Result Returns OK on success.

Description

Our color syntax code is very careful. It registers a callback to change the color just before FileMaker draws a text in the table in script editor. If future FileMaker versions, change something there, it's most likely the plugin will simply stop coloring and FileMaker works as before.

Settings are saved in preferences files and you can use different settings in different FileMaker versions.

Works with FileMaker 11 or newer.

Syntax color can only be enabled in FileMaker Pro, not in server or runtime versions.

See also [SyntaxColoring.Disable](#).

This setting can be set via the preferences dialog, too.

Examples

Enable or disable syntax coloring:

```
If (Enable)
Set Variable [ $r; MBS( "SyntaxColoring.Enable" ) ]
else
Set Variable [ $r; MBS( "SyntaxColoring.Disable" ) ]
end if
```

See also

- [159.2 SyntaxColoring.AddTag](#) 7559
- [159.15 SyntaxColoring.Disable](#) 7579
- [159.17 SyntaxColoring.Enabled](#) 7581
- [159.19 SyntaxColoring.Format](#) 7583
- [159.36 SyntaxColoring.GetTag](#) 7600

Example Databases

- [Mac only/SyntaxColoring for Mac](#)

Created 18th August 2014, last changed 11st November 2019.

159.17 SyntaxColoring.Enabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.Enabled")

Result Returns 1 if syntax coloring is enabled and 0 if not.

Description

See also SyntaxColoring.Enable and SyntaxColoring.Disable.

Examples

Check if enabled:

Set Variable [\$emab; MBS("SyntaxColoring.Enabled")]

See also

- [159.15 SyntaxColoring.Disable](#) 7579
- [159.16 SyntaxColoring.Enable](#) 7580

159.17.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr7](#)

Created 18th August 2014, last changed 17th November 2014.

159.18 SyntaxColoring.FactoryDefaults

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.FactoryDefaults")

Result Returns OK on success.

Description

This only applies the color rules. You may still need to enable other features like copy button.

Examples

Resets syntax coloring to defaults:

MBS("SyntaxColoring.FactoryDefaults")

159.18.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)
- [MBS Filemaker Plugin, version 3.0pr6](#)
- [MBS Filemaker Plugin, version 3.0pr5](#)

Created 18th August 2014, last changed 23th June 2016.

159.19 SyntaxColoring.Format

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.Format"; Text; Copy)

Parameters

Text

The formula text to format.

"5+6+cos(\$test)"

Copy

Pass 1 to copy result to clipboard. This preserves links and all formatting.

Result Returns formatted text.

Description

Examples

Format a line:

```
$r = MBS( "SyntaxColoring.Format"; "5+6+cos($test)" )
```

See also

- [159.2 SyntaxColoring.AddTag](#) 7559
- [159.9 SyntaxColoring.Clear](#) 7572
- [159.16 SyntaxColoring.Enable](#) 7580
- [159.36 SyntaxColoring.GetTag](#) 7600
- [159.37 SyntaxColoring.GetTags](#) 7601

Example Databases

- [Utility functions/Evaluate](#)

159.19.1 Blog Entries

- [Formatting and error checking expressions in FileMaker](#)
- [MBS FileMaker Plugin, version 9.6pr1](#)
- [Define hot keys for functions in the FileMaker development](#)
- [MBS Filemaker Plugin, version 3.0pr10](#)

Created 18th August 2014, last changed 12nd December 2016.

159.20 SyntaxColoring.GetAddFindbars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	8.0	Yes	No	No	No	No

MBS("SyntaxColoring.GetAddFindbars")

Result Returns 1, 0 or error.

Description

See also

- 159.57 SyntaxColoring.SetAddFindbars

7624

159.20.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr5](#)

Created 21st December 2017, last changed 21st December 2017.

159.21 SyntaxColoring.GetBlackFieldPicker

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.4	Yes	No	No	No	No

MBS("SyntaxColoring.GetBlackFieldPicker")

Result Returns 1, 0 or error.

Description

See also

- [159.28 SyntaxColoring.GetResizeFieldPicker](#) 7592
- [159.58 SyntaxColoring.SetBlackFieldPicker](#) 7625
- [159.65 SyntaxColoring.SetResizeFieldPicker](#) 7632

159.21.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 20th September 2017, last changed 20th September 2017.

159.22 SyntaxColoring.GetFontName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	10.1	Yes	No	No	No	No

MBS("SyntaxColoring.GetFontName")

Result Returns text or error.

Description

See also

- [159.23 SyntaxColoring.GetFontSize](#) 7587
- [159.59 SyntaxColoring.SetFontName](#) 7626
- [159.60 SyntaxColoring.SetFontSize](#) 7627

159.22.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 25th January 2020, last changed 25th January 2020.

159.23 SyntaxColoring.GetFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	10.1	Yes	No	No	No	No

MBS("SyntaxColoring.GetFontSize")

Result Returns number or error.

Description

Size is zero for default. Range should be 11 to 18.

See also

- [159.22 SyntaxColoring.GetFontName](#) 7586
- [159.25 SyntaxColoring.GetMinCalcFontSize](#) 7589
- [159.59 SyntaxColoring.SetFontName](#) 7626
- [159.60 SyntaxColoring.SetFontSize](#) 7627

159.23.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS Filemaker Plugin, version 3.5pr9](#)

Created 28th January 2020, last changed 30th January 2020.

159.24 SyntaxColoring.GetFormulasWithLinks

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	10.0	Yes	No	No	No	No

MBS("SyntaxColoring.GetFormulasWithLinks")

Result Returns 1, 0 or error.

Description

See also

- 159.61 SyntaxColoring.SetFormulasWithLinks

7628

159.24.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 23th November 2019, last changed 23th November 2019.

159.25 SyntaxColoring.GetMinCalcFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.2	Yes	No	No	No	No

MBS("SyntaxColoring.GetMinCalcFontSize")

Result Returns number or error.

Description

See also

- [159.23 SyntaxColoring.GetFontSize](#) 7587
- [159.62 SyntaxColoring.SetMinCalcFontSize](#) 7629

159.25.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr3](#)

Created 19th April 2017, last changed 19th April 2017.

159.26 SyntaxColoring.GetRelationGraphSearchBoxPreferredSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.3	Yes	No	Yes, macOS only	No	No

MBS("SyntaxColoring.GetRelationGraphSearchBoxPreferredSize")

Result Returns number or error.

Description

Default is 0 which leaves it to the plugin to pick a size.

See also

- 159.63 SyntaxColoring.SetRelationGraphSearchBoxPreferredSize

7630

159.26.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr2](#)

Created 3th June 2016, last changed 3th June 2016.

159.27 SyntaxColoring.GetRememberColumnWidths

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	8.5	Yes	No	No	No	No

MBS("SyntaxColoring.GetRememberColumnWidths")

Result Returns 1, 0 or error.

Description

See also

- 159.64 SyntaxColoring.SetRememberColumnWidths

7631

159.27.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)

Created 27th October 2018, last changed 27th October 2018.

159.28 SyntaxColoring.GetResizeFieldPicker

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.4	Yes	No	No	No	No

MBS("SyntaxColoring.GetResizeFieldPicker")

Result Returns 1, 0 or error.

Description

See also

- [159.21 SyntaxColoring.GetBlackFieldPicker](#) 7585
- [159.58 SyntaxColoring.SetBlackFieldPicker](#) 7625
- [159.65 SyntaxColoring.SetResizeFieldPicker](#) 7632

159.28.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 20th September 2017, last changed 20th September 2017.

159.29 SyntaxColoring.GetScriptHighlightColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.4	Yes	No	No	No	No

MBS("SyntaxColoring.GetScriptHighlightColor" { ; ReturnAsNumbers })

Parameters**ReturnAsNumbers**

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

Pass 1 to return color as list of red, green and blue, e.g. "123\$234\$56" Pass 0 (default) for return as hex value, e.g. "7788FF".

0

Result Returns color or error.

Description**Examples**

Query color:

MBS("SyntaxColoring.GetScriptHighlightColor")

See also

- [159.30 SyntaxColoring.GetScriptIfColor](#) 7594
- [159.31 SyntaxColoring.GetScriptLoopColor](#) 7595
- [159.32 SyntaxColoring.GetScriptSearchColor](#) 7596
- [159.66 SyntaxColoring.SetScriptHighlightColor](#) 7633
- [159.69 SyntaxColoring.SetScriptSearchColor](#) 7637

159.29.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin, version 5.4pr1](#)

Created 9th October 2015, last changed 13th June 2018.

159.30 SyntaxColoring.GetScriptIfColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.1	Yes	No	No	No	No

MBS("SyntaxColoring.GetScriptIfColor" { ; ReturnAsNumbers })

Parameters

ReturnAsNumbers

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

Pass 1 to return color as list of red, green and blue, e.g. "123\$234\$56" Pass 0 (default) for return as hex value, e.g. "7788FF".

0

Result Returns color or error.

Description

See also

- 159.29 SyntaxColoring.GetScriptHighlightColor 7593
- 159.31 SyntaxColoring.GetScriptLoopColor 7595
- 159.32 SyntaxColoring.GetScriptSearchColor 7596
- 159.67 SyntaxColoring.SetScriptIfColor 7635
- 159.68 SyntaxColoring.SetScriptLoopColor 7636
- 159.69 SyntaxColoring.SetScriptSearchColor 7637

159.30.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin, version 6.1pr1](#)

Created 1st February 2016, last changed 13th June 2018.

159.31 SyntaxColoring.GetScriptLoopColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.1	Yes	No	No	No	No

MBS("SyntaxColoring.GetScriptLoopColor" { ; ReturnAsNumbers })

Parameters**ReturnAsNumbers**

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

Pass 1 to return color as list of red, green and blue, e.g. "123\$234\$56" Pass 0 (default) for return as hex value, e.g. "7788FF".

0

Result Returns color or error.

Description**See also**

- 159.29 SyntaxColoring.GetScriptHighlightColor 7593
- 159.30 SyntaxColoring.GetScriptIfColor 7594
- 159.32 SyntaxColoring.GetScriptSearchColor 7596
- 159.67 SyntaxColoring.SetScriptIfColor 7635
- 159.68 SyntaxColoring.SetScriptLoopColor 7636
- 159.69 SyntaxColoring.SetScriptSearchColor 7637

159.31.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin, version 6.1pr1](#)

Created 1st February 2016, last changed 13th June 2018.

159.32 SyntaxColoring.GetScriptSearchColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.1	Yes	No	No	No	No

MBS("SyntaxColoring.GetScriptSearchColor" { ; ReturnAsNumbers })

Parameters

ReturnAsNumbers

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

Pass 1 to return color as list of red, green and blue, e.g. "123\$234\$56" Pass 0 (default) for return as hex value, e.g. "7788FF".

0

Result Returns color or error.

Description

See also

- 159.29 SyntaxColoring.GetScriptHighlightColor 7593
- 159.30 SyntaxColoring.GetScriptIfColor 7594
- 159.31 SyntaxColoring.GetScriptLoopColor 7595
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633
- 159.67 SyntaxColoring.SetScriptIfColor 7635
- 159.68 SyntaxColoring.SetScriptLoopColor 7636
- 159.69 SyntaxColoring.SetScriptSearchColor 7637

159.32.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS FileMaker Plugin, version 6.1pr1](#)

Created 1st February 2016, last changed 13th June 2018.

159.33 SyntaxColoring.GetShowFieldAndTableIDs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.4	Yes	No	No	No	No

MBS("SyntaxColoring.GetShowFieldAndTableIDs")

Result Returns 1, 0 or error.

Description

See also

- 159.70 SyntaxColoring.SetShowFieldAndTableIDs

7638

159.33.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 20th September 2017, last changed 20th September 2017.

159.34 SyntaxColoring.GetShowLayoutIDs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.5	Yes	No	No	No	No

MBS("SyntaxColoring.GetShowLayoutIDs")

Result Returns 1, 0 or error.

Description

Returns 1 if enabled or 0 if not.

See also

- 159.35 SyntaxColoring.GetShowScriptIDs 7599
- 159.71 SyntaxColoring.SetShowLayoutIDs 7639
- 159.72 SyntaxColoring.SetShowScriptIDs 7640

159.34.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 19th October 2017, last changed 20th October 2017.

159.35 SyntaxColoring.GetShowScriptIDs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.4	Yes	No	No	No	No

MBS("SyntaxColoring.GetShowScriptIDs")

Result Returns 1, 0 or error.

Description

See also

- [159.34 SyntaxColoring.GetShowLayoutIDs](#) 7598
- [159.71 SyntaxColoring.SetShowLayoutIDs](#) 7639
- [159.72 SyntaxColoring.SetShowScriptIDs](#) 7640

159.35.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 20th September 2017, last changed 20th September 2017.

159.36 SyntaxColoring.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.GetTag"; Text)

Parameters

Text

The name of the item. Up to five words from the left name of the command.
"If"

Result Returns the color in hex style (e.g. # FF0000 for red)

Description

Examples

Queries the color for plus sign:

MBS("SyntaxColoring.GetTag"; "+")

See also

- [159.2 SyntaxColoring.AddTag](#) 7559
- [159.9 SyntaxColoring.Clear](#) 7572
- [159.16 SyntaxColoring.Enable](#) 7580
- [159.19 SyntaxColoring.Format](#) 7583
- [159.37 SyntaxColoring.GetTags](#) 7601
- [159.48 SyntaxColoring.RemoveTag](#) 7613

Example Databases

- [Mac only/SyntaxColoring for Mac](#)

159.36.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr6](#)

Created 18th August 2014, last changed 18th August 2014.

159.37 SyntaxColoring.GetTags

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.GetTags")

Result Returns newline separated line of tag names.

Description

Examples

Shows all rules in a dialog:

Show Dialog ["SyntaxColoring"; MBS("SyntaxColoring.GetTags")]

See also

- [159.2 SyntaxColoring.AddTag](#) 7559
- [159.19 SyntaxColoring.Format](#) 7583
- [159.36 SyntaxColoring.GetTag](#) 7600
- [159.48 SyntaxColoring.RemoveTag](#) 7613

Example Databases

- [Mac only/SyntaxColoring for Mac](#)

159.37.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr6](#)

Created 18th August 2014, last changed 18th August 2014.

159.38 SyntaxColoring.GetUseBoldFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.1	Yes	No	No	No	No

MBS("SyntaxColoring.GetUseBoldFont")

Result Returns 1, 0 or error.

Description

The MBS Plugin uses bold font for brackets in syntax coloring, so you see it better.

You can disable that as some people have problems with brackets being invisible due to font problems.

See also

- 159.73 SyntaxColoring.SetUseBoldFont

7641

Created 29th January 2016, last changed 29th January 2016.

159.39 SyntaxColoring.LineNumbers.Disable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.5	Yes	No	No	No	No

MBS("SyntaxColoring.LineNumbers.Disable")

Result Returns OK on success.

Description

Settings are saved in preferences files and you can use different settings in different FileMaker versions.

Works with FileMaker 11 or newer.

Line numbers can only be enabled in FileMaker Pro, not in server or runtime versions.

This setting can be set via the preferences dialog, too.

Examples

Enable or disable Line Numbers:

If (Enable)

Set Variable [\$r; MBS("SyntaxColoring.LineNumbers.Enable")]

else

Set Variable [\$r; MBS("SyntaxColoring.LineNumbers.Disable")]

end if

See also

- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.41 SyntaxColoring.LineNumbers.Enabled 7606
- 159.42 SyntaxColoring.LineNumbers.GetColor 7607
- 159.43 SyntaxColoring.LineNumbers.SetColor 7608

Created 18th August 2014, last changed 11st November 2019.

159.40 SyntaxColoring.LineNumbers.Enable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.5	Yes	No	No	No	No

MBS("SyntaxColoring.LineNumbers.Enable")

Result Returns OK on success.

Description

Settings are saved in preferences files and you can use different settings in different FileMaker versions.

Works with FileMaker 11 or newer.

Line numbers can only be enabled in FileMaker Pro, not in server or runtime versions.

This setting can be set via the preferences dialog, too.

Examples

Enable or disable line numbers:

If (Enable)

Set Variable [\$r; MBS("SyntaxColoring.LineNumbers.Enable")]

else

Set Variable [\$r; MBS("SyntaxColoring.LineNumbers.Disable")]

end if

Enable all the plugin enhancements for FileMaker:

MBS("SyntaxColoring.CopyButton.SetEnabled"; 1)

MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; 1)

MBS("SyntaxColoring.ScriptGoTOBox.SetEnabled"; 1)

MBS("SyntaxColoring.RelationGraphSearchBox.SetEnabled"; 1)

MBS("SyntaxColoring.CheckVariableDeclaration.Enable")

MBS("SyntaxColoring.LineNumbers.Enable")

MBS("SyntaxColoring.SetScriptHighlightColor"; "# CCCCFF")

See also

- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.39 SyntaxColoring.LineNumbers.Disable 7603
- 159.41 SyntaxColoring.LineNumbers.Enabled 7606
- 159.42 SyntaxColoring.LineNumbers.GetColor 7607
- 159.43 SyntaxColoring.LineNumbers.SetColor 7608

<i>159.40. SYNTAXCOLORING.LINENUMBERS.ENABLE</i>	7605
• 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled	7615
• 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled	7621
• 159.66 SyntaxColoring.SetScriptHighlightColor	7633

Created 18th August 2014, last changed 11st November 2019.

159.41 SyntaxColoring.LineNumbers.Enabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.5	Yes	No	No	No	No

MBS("SyntaxColoring.LineNumbers.Enabled")

Result Returns 1 if line numbers are enabled and 0 if not.

Description

Examples

Check if enabled:

Set Variable [\$emab; MBS("SyntaxColoring.LineNumbers.Enabled")]

See also

- 159.39 SyntaxColoring.LineNumbers.Disable 7603
- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.42 SyntaxColoring.LineNumbers.GetColor 7607
- 159.43 SyntaxColoring.LineNumbers.SetColor 7608

Created 18th August 2014, last changed 18th August 2014.

159.42 SyntaxColoring.LineNumbers.GetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.5	Yes	No	No	No	No

MBS("SyntaxColoring.LineNumbers.GetColor" { ; ReturnAsNumbers })

Parameters

ReturnAsNumbers

Optional

Available in MBS FileMaker Plugin 8.3 or newer.

Pass 1 to return color as list of red, green and blue, e.g. "123§234§56" Pass 0 (default) for return as hex value, e.g. "7788FF".

0

Result Returns color or error.

Description

Color is returned in hex notation like with HTML. e.g. "# 123456"

See also

- 159.39 SyntaxColoring.LineNumbers.Disable 7603
- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.41 SyntaxColoring.LineNumbers.Enabled 7606
- 159.43 SyntaxColoring.LineNumbers.SetColor 7608

159.42.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)
- [MBS Filemaker Plugin, version 3.5pr3](#)

Created 18th August 2014, last changed 13th June 2018.

159.43 SyntaxColoring.LineNumbers.SetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.5	Yes	No	No	No	No

MBS("SyntaxColoring.LineNumbers.SetColor"; Color)

Parameters

Color

The color value. Can be one of a few english color names or "# 123456" notation like in html. "red"

Result Returns OK or error.

Description

May not take effect until you close and reopen some windows with line numbers.

Examples

use gray color:

MBS("SyntaxColoring.LineNumbers.SetColor"; "gray")

See also

- 159.39 SyntaxColoring.LineNumbers.Disable 7603
- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.41 SyntaxColoring.LineNumbers.Enabled 7606
- 159.42 SyntaxColoring.LineNumbers.GetColor 7607

159.43.1 Blog Entries

- [MBS Filemaker Plugin, version 3.5pr3](#)

Created 18th August 2014, last changed 18th August 2014.

159.44 SyntaxColoring.ListContextMenuCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	10.0	Yes	No	No	No	No

MBS("SyntaxColoring.ListContextMenuCommand")

Result Returns list or error.

Description

If command titles contain a newline, we replace it with §in the result.

See also

- 159.1 SyntaxColoring.AddContextMenuCommand 7553
- 159.10 SyntaxColoring.ClearContextMenuCommands 7573
- 159.47 SyntaxColoring.RemoveContextMenuCommand 7612

159.44.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 5th December 2019, last changed 5th December 2019.

159.45 SyntaxColoring.RelationshipGraphSearchBox.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.4	Yes	No	No	No	No

MBS("SyntaxColoring.RelationshipGraphSearchBox.GetEnabled")

Result Returns value or error.

Description

Returns 1 if enabled or 0 if disabled.

See also

- 159.46 SyntaxColoring.RelationshipGraphSearchBox.SetEnabled

7611

Created 10th October 2015, last changed 11st October 2015.

159.46 SyntaxColoring.RelationshipGraphSearchBox.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.4	Yes	No	No	No	No

MBS("SyntaxColoring.RelationshipGraphSearchBox.SetEnabled"; Value)

Parameters

Value

The new setting. Pass 1 to show button or 0 to disable.

1

Result Returns OK or error.

Description

MBS Plugin offers to add a search box on Mac OS X to the relation graph and this function sets the preferences on whether it's added or not.

This setting can be set via the preferences dialog, too.

Examples

Disables search box:

```
MBS("SyntaxColoring.RelationGraphSearchBox.SetEnabled"; 0)
```

Enables search box:

```
MBS("SyntaxColoring.RelationGraphSearchBox.SetEnabled"; 1)
```

See also

- 159.45 SyntaxColoring.RelationshipGraphSearchBox.GetEnabled

7610

Created 10th October 2015, last changed 11st November 2019.

159.47 SyntaxColoring.RemoveContextMenuCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	9.5	Yes	No	No	No	No

MBS("SyntaxColoring.RemoveContextMenuCommand"; Title)

Parameters

Title

The title for the menu command.

"MyCommands\$Hello"

Result Returns OK or error.

Description

See also

- [159.1 SyntaxColoring.AddContextMenuCommand](#) 7553
- [159.10 SyntaxColoring.ClearContextMenuCommands](#) 7573
- [159.44 SyntaxColoring.ListContextMenuCommand](#) 7609

159.47.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)
- [MBS FileMaker Plugin, version 9.5pr4](#)

Created 19th October 2019, last changed 19th October 2019.

159.48 SyntaxColoring.RemoveTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	3.0	Yes	No	No	No	No

MBS("SyntaxColoring.RemoveTag"; Text)

Parameters

Text

The name of the item. Up to five words from the left name of the command.
"If"

Result Returns OK on success.

Description

Settings are saved in preferences files and you can use different settings in different FileMaker versions.
Works with FileMaker 11 or newer.

Examples

Disable coloring for set variable script step in German:

MBS("SyntaxColoring.RemoveTag"; "Variable setzen")

See also

- 159.2 SyntaxColoring.AddTag 7559
- 159.36 SyntaxColoring.GetTag 7600
- 159.37 SyntaxColoring.GetTags 7601

Example Databases

- [Mac only/SyntaxColoring for Mac](#)

Created 18th August 2014, last changed 12nd September 2019.

159.49 SyntaxColoring.ScriptGoToBox.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.4	Yes	No	No	No	No

MBS("SyntaxColoring.ScriptGoToBox.GetEnabled")

Result Returns value or error.

Description

Returns 1 if enabled or 0 if disabled.

See also

- 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled 7615
- 159.53 SyntaxColoring.ScriptSearchBox.GetEnabled 7619
- 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled 7621

Created 10th October 2015, last changed 10th October 2015.

159.50 SyntaxColoring.ScriptGoToBox.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.4	Yes	No	No	No	No

MBS("SyntaxColoring.ScriptGoToBox.SetEnabled"; Value)

Parameters

Value

The new setting. Pass 1 to show button or 0 to disable.

1

Result Returns OK or error.

Description

MBS Plugin offers to add a go to box on Mac OS X to the script editor and this function sets the preferences on whether it's added or not.

Does not work if Syntax Highlighting is off.

This setting can be set via the preferences dialog, too.

Examples

Disables go to box:

```
MBS("SyntaxColoring.ScriptGoToBox.SetEnabled"; 0)
```

Enables the go to box:

```
MBS("SyntaxColoring.ScriptGoToBox.SetEnabled"; 1)
```

Enable all the plugin enhancements for FileMaker:

```
MBS("SyntaxColoring.CopyButton.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptGoTOBox.SetEnabled"; 1)
MBS("SyntaxColoring.RelationGraphSearchBox.SetEnabled"; 1)
MBS( "SyntaxColoring.CheckVariableDeclaration.Enable" )
MBS( "SyntaxColoring.LineNumbers.Enable" )
MBS( "SyntaxColoring.SetScriptHighlightColor"; "# CCCCFF" )
```

See also

- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.40 SyntaxColoring.LineNumbers.Enable 7604

- 159.49 SyntaxColoring.ScriptGoToBox.GetEnabled 7614
- 159.53 SyntaxColoring.ScriptSearchBox.GetEnabled 7619
- 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled 7621
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633

159.50.1 FileMaker Magazin

- Ausgabe 5/2015, Seite 31

Created 10th October 2015, last changed 11st November 2019.

159.51 SyntaxColoring.ScriptIfLoopHighlight.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.5	Yes	No	No	No	No

MBS("SyntaxColoring.ScriptIfLoopHighlight.GetEnabled")

Result Returns 0, 1 or error.

Description

See also

- 159.52 SyntaxColoring.ScriptIfLoopHighlight.SetEnabled

7618

159.51.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 22nd November 2016, last changed 22nd November 2016.

159.52 SyntaxColoring.ScriptIfLoopHighlight.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.5	Yes	No	No	No	No

MBS("SyntaxColoring.ScriptIfLoopHighlight.SetEnabled"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Default is enabled.

This setting can be set via the preferences dialog, too.

Examples

Turn if/loop highlighting on:

```
MBS( "SyntaxColoring.ScriptIfLoopHighlight.SetEnabled"; 1 )
```

Turn if/loop highlighting off:

```
MBS( "SyntaxColoring.ScriptIfLoopHighlight.SetEnabled"; 0 )
```

See also

- 159.51 SyntaxColoring.ScriptIfLoopHighlight.GetEnabled

7617

159.52.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 22nd November 2016, last changed 11st November 2019.

159.53 SyntaxColoring.ScriptSearchBox.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.4	Yes	No	No	No	No

MBS("SyntaxColoring.ScriptSearchBox.GetEnabled")

Result Returns value or error.

Description

Returns 1 if enabled or 0 if disabled.

See also

- 159.49 SyntaxColoring.ScriptGoToBox.GetEnabled 7614
- 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled 7615
- 159.54 SyntaxColoring.ScriptSearchBox.GetText 7620
- 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled 7621
- 159.56 SyntaxColoring.ScriptSearchBox.SetText 7623

Created 10th October 2015, last changed 10th October 2015.

159.54 SyntaxColoring.ScriptSearchBox.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.5	Yes	No	No	No	No

MBS("SyntaxColoring.ScriptSearchBox.GetText")

Result Returns text or error.

Description

Examples

Query value:

```
Show Custom Dialog [ "search" ; MBS( "SyntaxColoring.ScriptSearchBox.GetText" ) ]
```

See also

- [159.53 SyntaxColoring.ScriptSearchBox.GetEnabled](#) 7619
- [159.55 SyntaxColoring.ScriptSearchBox.SetEnabled](#) 7621
- [159.56 SyntaxColoring.ScriptSearchBox.SetText](#) 7623

159.54.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)

Created 12nd November 2017, last changed 12nd November 2017.

159.55 SyntaxColoring.ScriptSearchBox.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.4	Yes	No	No	No	No

MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; Value)

Parameters

Value

The new setting. Pass 1 to show button or 0 to disable.

1

Result Returns OK or error.

Description

MBS Plugin offers to add a search box on Mac OS X to the script editor and this function sets the preferences on whether it's added or not.

This setting can be set via the preferences dialog, too.

Examples

Disables search box:

```
MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; 0)
```

Enables search box:

```
MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; 1)
```

Enable all the plugin enhancements for FileMaker:

```
MBS("SyntaxColoring.CopyButton.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptGoToBox.SetEnabled"; 1)
MBS("SyntaxColoring.RelationGraphSearchBox.SetEnabled"; 1)
MBS( "SyntaxColoring.CheckVariableDeclaration.Enable" )
MBS( "SyntaxColoring.LineNumbers.Enable" )
MBS( "SyntaxColoring.SetScriptHighlightColor"; "# CCCCFF" )
```

See also

- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.49 SyntaxColoring.ScriptGoToBox.GetEnabled 7614

- 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled 7615
- 159.53 SyntaxColoring.ScriptSearchBox.GetEnabled 7619
- 159.54 SyntaxColoring.ScriptSearchBox.GetText 7620
- 159.56 SyntaxColoring.ScriptSearchBox.SetText 7623
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633

Created 10th October 2015, last changed 11st November 2019.

159.56 SyntaxColoring.ScriptSearchBox.SetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.5	Yes	No	No	No	No

MBS("SyntaxColoring.ScriptSearchBox.SetText"; Text)

Parameters

Text

The new search text.

"Hello"

Result Returns OK or error.

Description

Examples

Set text and run search:

Set Variable [\$r ; Value: MBS("SyntaxColoring.ScriptSearchBox.SetText"; "hello")]

See also

- [159.53 SyntaxColoring.ScriptSearchBox.GetEnabled](#) 7619
- [159.54 SyntaxColoring.ScriptSearchBox.GetText](#) 7620
- [159.55 SyntaxColoring.ScriptSearchBox.SetEnabled](#) 7621

159.56.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)

Created 12nd November 2017, last changed 12nd November 2017.

159.57 SyntaxColoring.SetAddFindbars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	8.0	Yes	No	No	No	No

MBS("SyntaxColoring.SetAddFindbars"; Value)

Parameters

Value

The new setting. Can be 1 or 0.

1

Result Returns OK or error.

Description

The plugin watches Command-F and if you are focussed on a scrollable text view, we can show the find bar from macOS. That's a standard feature of macOS and we just enable it.

It can be that FileMaker does not draw everything perfectly as we add a control to the view hierarchy. Also the find bar is probably not designed to be running in a modal dialog. Still it is helpful.

This option also enables to copy the content of the field with formatting using Command-Option-C.

This setting can be set via the preferences dialog, too.

See also

- [159.20 SyntaxColoring.GetAddFindbars](#) 7584

159.57.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr5](#)

Created 21st December 2017, last changed 11st November 2019.

159.58 SyntaxColoring.SetBlackFieldPicker

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.4	Yes	No	No	No	No

MBS("SyntaxColoring.SetBlackFieldPicker"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Our plugin can on macOS optionally make the field picker black to better read text.

Also applied for settings panel for buttons, popover and button bar.

This setting can be set via the preferences dialog, too.

See also

- 159.21 SyntaxColoring.GetBlackFieldPicker 7585
- 159.28 SyntaxColoring.GetResizeFieldPicker 7592
- 159.65 SyntaxColoring.SetResizeFieldPicker 7632

159.58.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 20th September 2017, last changed 11st November 2019.

159.59 SyntaxColoring.SetFontName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	10.1	Yes	No	No	No	No

MBS("SyntaxColoring.SetFontName"; FontName)

Parameters

FontName

The new font name to use. Pass empty text to disable feature.
"JetBrains Mono"

Result Returns OK or error.

Description

Our plugin replaces the font used in script workspace and calculation dialog with the given font. After setting font you may need to restart FileMaker before script workspace applies the new font.

Works for FileMaker 16 and newer.

You may need to restart FileMaker to see the change!

See also

- 159.22 SyntaxColoring.GetFontName 7586
- 159.23 SyntaxColoring.GetFontSize 7587
- 159.60 SyntaxColoring.SetFontSize 7627

159.59.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 25th January 2020, last changed 28th January 2020.

159.60 SyntaxColoring.SetFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	10.1	Yes	No	No	No	No

MBS("SyntaxColoring.SetFontSize"; FontSize)

Parameters

FontSize

The new font size.

12

Result Returns OK or error.

Description

Size is zero for default. Range should be 11 to 18.

Works for FileMaker 16 and newer.

You may need to restart FileMaker to see the change!

See also

- 159.22 SyntaxColoring.GetFontName 7586
- 159.23 SyntaxColoring.GetFontSize 7587
- 159.59 SyntaxColoring.SetFontName 7626
- 159.62 SyntaxColoring.SetMinCalcFontSize 7629

159.60.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)
- [MBS Filemaker Plugin, version 3.5pr9](#)

Created 28th January 2020, last changed 30th January 2020.

159.61 SyntaxColoring.SetFormulasWithLinks

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	10.0	Yes	No	No	No	No

MBS("SyntaxColoring.SetFormulasWithLinks"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

See also

- [159.24 SyntaxColoring.GetFormulasWithLinks](#) 7588

159.61.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)

Created 23th November 2019, last changed 28th November 2019.

159.62 SyntaxColoring.SetMinCalcFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.2	Yes	No	No	No	No

MBS("SyntaxColoring.SetMinCalcFontSize"; FontSize)

Parameters

FontSize

The new minimum font size. Range 0 (off) to 30.
16

Result Returns OK or error.

Description

The plugin will apply this font size setting when formatting the text in the formula fields. You may need to actually click in the field and press a key to activate it. This setting can be set via the preferences dialog, too.

Examples

Use 14 point big font:

MBS("SyntaxColoring.SetMinCalcFontSize"; 14)

Turn off by using 0:

MBS("SyntaxColoring.SetMinCalcFontSize"; 0)

See also

- 159.25 SyntaxColoring.GetMinCalcFontSize 7589
- 159.60 SyntaxColoring.SetFontSize 7627

159.62.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr3](#)

Created 19th April 2017, last changed 11st November 2019.

159.63 SyntaxColoring.SetRelationGraphSearchBoxPreferredSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.3	Yes	No	Yes, macOS only	No	No

MBS("SyntaxColoring.SetRelationGraphSearchBoxPreferredSize"; Size)

Parameters

Size

The preferred size of the search box.

200

Result Returns OK or error.

Description

This setting can be set via the preferences dialog, too.

Examples

Request 500 pixel width:

MBS("SyntaxColoring.SetRelationGraphPreferredSize"; 500)

See also

- 159.26 SyntaxColoring.GetRelationGraphSearchBoxPreferredSize 7590

159.63.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr2](#)

Created 3th June 2016, last changed 11st November 2019.

159.64 SyntaxColoring.SetRememberColumnWidths

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	8.5	Yes	No	No	No	No

MBS("SyntaxColoring.SetRememberColumnWidths"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable. Default is 1 to enable.

1

Result Returns OK or error.

Description

This setting can be set via the preferences dialog, too.

Examples

Disable column width saving:

```
MBS( "SyntaxColoring.SetRememberColumnWidths"; 0 )
```

Enable column width saving:

```
MBS( "SyntaxColoring.SetRememberColumnWidths"; 1 )
```

See also

- [159.27 SyntaxColoring.GetRememberColumnWidths](#)

7591

159.64.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr4](#)

Created 27th October 2018, last changed 11st November 2019.

159.65 SyntaxColoring.SetResizeFieldPicker

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.4	Yes	No	No	No	No

MBS("SyntaxColoring.SetResizeFieldPicker"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Our plugin can on macOS optionally make the field picker resizable. You can than make it bigger and better read long field names.

Also applied for settings panel for buttons, popover and button bar on FileMaker 16.

This setting can be set via the preferences dialog, too.

See also

- 159.21 SyntaxColoring.GetBlackFieldPicker 7585
- 159.28 SyntaxColoring.GetResizeFieldPicker 7592
- 159.58 SyntaxColoring.SetBlackFieldPicker 7625

159.65.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 20th September 2017, last changed 11st November 2019.

159.66 SyntaxColoring.SetScriptHighlightColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	5.4	Yes	No	No	No	No

MBS("SyntaxColoring.SetScriptHighlightColor"; Color)

Parameters

Color

The color value. Can be one of a few english color names or "# 123456" notation like in html.
"red"

Result Returns OK or error.

Description

If a color is set, the MBS Plugin overlays the selections in FileMaker script editor with this color.

Set to nothing to clear color.

Only for FileMaker 14 and newer.

Does not work if Syntax Highlighting is off.

Examples

Set to red with hex color:

```
MBS("SyntaxColoring.SetScriptHighlightColor"; "# FF0000")
```

Set to dark blue:

```
MBS("SyntaxColoring.SetScriptHighlightColor"; "blue")
```

Set to red:

```
MBS( "SyntaxColoring.SetScriptHighlightColor"; "# FF8888" )
```

Set to blue:

```
MBS( "SyntaxColoring.SetScriptHighlightColor"; "# CCCCFF" )
```

Enable all the plugin enhancements for FileMaker:

```
MBS("SyntaxColoring.CopyButton.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptSearchBox.SetEnabled"; 1)
MBS("SyntaxColoring.ScriptGoTOBox.SetEnabled"; 1)
MBS("SyntaxColoring.RelationGraphSearchBox.SetEnabled"; 1)
MBS( "SyntaxColoring.CheckVariableDeclaration.Enable" )
MBS( "SyntaxColoring.LineNumbers.Enable" )
MBS( "SyntaxColoring.SetScriptHighlightColor"; "# CCCCFF" )
```

See also

- 159.4 SyntaxColoring.CheckVariableDeclaration.Enable 7565
- 159.5 SyntaxColoring.CheckVariableDeclaration.Enabled 7567
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.29 SyntaxColoring.GetScriptHighlightColor 7593
- 159.32 SyntaxColoring.GetScriptSearchColor 7596
- 159.40 SyntaxColoring.LineNumbers.Enable 7604
- 159.50 SyntaxColoring.ScriptGoToBox.SetEnabled 7615
- 159.55 SyntaxColoring.ScriptSearchBox.SetEnabled 7621
- 159.68 SyntaxColoring.SetScriptLoopColor 7636
- 159.69 SyntaxColoring.SetScriptSearchColor 7637

159.66.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr1](#)

159.66.2 FileMaker Magazin

- Ausgabe 5/2015, Seite 30

Created 9th October 2015, last changed 11st November 2019.

159.67 SyntaxColoring.SetScriptIfColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.1	Yes	No	No	No	No

MBS("SyntaxColoring.SetScriptIfColor"; Color)

Parameters

Color

The color value. Can be one of a few english color names or "# 123456" notation like in html.
"red"

Result Returns OK or error.

Description

Uses to highlight the script lines (if, endif and else) for the current if block if one of those steps is selected.
Set to nothing to use default color.

Does not work if Syntax Highlighting is off.

Examples

Set to red:

MBS("SyntaxColoring.SetScriptIfColor"; "# FF8888")

See also

- 159.30 SyntaxColoring.GetScriptIfColor 7594
- 159.31 SyntaxColoring.GetScriptLoopColor 7595
- 159.32 SyntaxColoring.GetScriptSearchColor 7596
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633
- 159.68 SyntaxColoring.SetScriptLoopColor 7636
- 159.69 SyntaxColoring.SetScriptSearchColor 7637

159.67.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr1](#)

Created 1st February 2016, last changed 1st February 2016.

159.68 SyntaxColoring.SetScriptLoopColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.1	Yes	No	No	No	No

MBS("SyntaxColoring.SetScriptLoopColor"; Color)

Parameters

Color

The color value. Can be one of a few english color names or "# 123456" notation like in html.
"red"

Result Returns OK or error.

Description

Uses to highlight the script lines (loop, end loop and exif loop if) for the current loop if one of those steps is selected.

Set to nothing to use default color.

Does not work if Syntax Highlighting is off.

Examples

Set to red:

MBS("SyntaxColoring.SetScriptLoopColor"; "# FF8888")

See also

- 159.30 SyntaxColoring.GetScriptIfColor 7594
- 159.31 SyntaxColoring.GetScriptLoopColor 7595
- 159.32 SyntaxColoring.GetScriptSearchColor 7596
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633
- 159.67 SyntaxColoring.SetScriptIfColor 7635
- 159.69 SyntaxColoring.SetScriptSearchColor 7637

159.68.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr1](#)

Created 1st February 2016, last changed 1st February 2016.

159.69 SyntaxColoring.SetScriptSearchColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.1	Yes	No	No	No	No

MBS("SyntaxColoring.SetScriptSearchColor"; Color)

Parameters

Color

The color value. Can be one of a few english color names or "# 123456" notation like in html. "red"

Result Returns OK or error.

Description

Uses to highlight the script lines matching the current search terms.

Set to nothing to use default color.

Does not work if Syntax Highlighting is off.

Examples

Set to red:

MBS("SyntaxColoring.SetScriptSearchColor"; "# FF8888")

See also

- 159.29 SyntaxColoring.GetScriptHighlightColor 7593
- 159.30 SyntaxColoring.GetScriptIfColor 7594
- 159.31 SyntaxColoring.GetScriptLoopColor 7595
- 159.32 SyntaxColoring.GetScriptSearchColor 7596
- 159.66 SyntaxColoring.SetScriptHighlightColor 7633
- 159.67 SyntaxColoring.SetScriptIfColor 7635
- 159.68 SyntaxColoring.SetScriptLoopColor 7636

159.69.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr1](#)

Created 1st February 2016, last changed 1st February 2016.

159.70 SyntaxColoring.SetShowFieldAndTableIDs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.4	Yes	No	No	No	No

MBS("SyntaxColoring.SetShowFieldAndTableIDs"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Our plugin can optionally show checkboxes for field and table IDs in database design dialog.

You can check them to show a column with IDs. As querying IDs can take a while, we make those checkboxes and have them off by default.

If IDs can not be found, we show a question mark.

If between two IDs one is missing, we add a star.

Please report sample databases which do not show them so we can fix issues.

This setting can be set via the preferences dialog, too.

See also

- 159.33 SyntaxColoring.GetShowFieldAndTableIDs

7597

159.70.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 20th September 2017, last changed 11st November 2019.

159.71 SyntaxColoring.SetShowLayoutIDs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.5	Yes	No	No	No	No

MBS("SyntaxColoring.SetShowLayoutIDs"; Value)

Parameters

Value

The new setting.

1

Result Returns OK or error.

Description

Pass 1 to enable or 0 to disable.

This setting can be set via the preferences dialog, too.

See also

- [159.34 SyntaxColoring.GetShowLayoutIDs](#) 7598
- [159.35 SyntaxColoring.GetShowScriptIDs](#) 7599
- [159.72 SyntaxColoring.SetShowScriptIDs](#) 7640

159.71.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)

Created 19th October 2017, last changed 28th November 2019.

159.72 SyntaxColoring.SetShowScriptIDs

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.4	Yes	No	No	No	No

MBS("SyntaxColoring.SetShowScriptIDs"; Value)

Parameters

Value

The new setting. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Our plugin can optionally show script IDs in the script workspace.

The plugin adds an extra column with ID. If the ID can't be queried for any reason, you should see a question mark.

This setting can be set via the preferences dialog, too.

See also

- 159.34 SyntaxColoring.GetShowLayoutIDs 7598
- 159.35 SyntaxColoring.GetShowScriptIDs 7599
- 159.71 SyntaxColoring.SetShowLayoutIDs 7639

159.72.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 20th September 2017, last changed 11st November 2019.

159.73 SyntaxColoring.SetUseBoldFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	6.1	Yes	No	No	No	No

MBS("SyntaxColoring.SetUseBoldFont"; Value)

Parameters

Value

The new setting. Pass 1 to use bold or 0 to keep normal font.

1

Result Returns OK or error.

Description

The MBS Plugin uses bold font for brackets in syntax coloring, so you see it better.

You can disable that as some people have problems with brackets being invisible due to font problems.

This may happen more often on asian character sets like Japanese where OS X uses different fonts.

Examples

Disable bold font:

MBS("SyntaxColoring.SetUseBoldFont"; 0)

Enable bold font:

MBS("SyntaxColoring.SetUseBoldFont"; 1)

See also

- 159.38 SyntaxColoring.GetUseBoldFont

7602

159.73.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr1](#)

Created 29th January 2016, last changed 30th January 2016.

159.74 SyntaxColoring.ShowTextPositions.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	9.5	Yes	No	No	No	No

MBS("SyntaxColoring.ShowTextPositions.GetEnabled")

Result Returns 1, 0 or error.

Description

The MBS Plugin can show text position and selection length for calculation dialog or custom functions dialog.

Can be enabled/disabled in preferences dialog, too.

See also

- 159.75 SyntaxColoring.ShowTextPositions.SetEnabled

7643

159.74.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr4](#)

Created 18th October 2019, last changed 18th October 2019.

159.75 SyntaxColoring.ShowTextPositions.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	9.5	Yes	No	No	No	No

MBS("SyntaxColoring.ShowTextPositions.SetEnabled"; Value)

Parameters

Value

The new value. Pass 1 to enable or 0 to disable.

Result Returns OK or error.

Description

The MBS Plugin can show text position and selection length for calculation dialog or custom functions dialog.

Can be enabled/disabled in preferences dialog, too.

Text positions are only enabled by the plugin if the advanced tools in FileMaker preferences are enabled, so they don't show up for ordinary people just installing FileMaker Pro.

See also

- [159.74 SyntaxColoring.ShowTextPositions.GetEnabled](#)

7642

159.75.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr4](#)
- [MBS Plugin shows text position and selection in FileMaker](#)

Created 18th October 2019, last changed 27th December 2019.

159.76 SyntaxColoring.ZoomButton.GetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.2	Yes	No	No	No	No

MBS("SyntaxColoring.ZoomButton.GetEnabled")

Result Returns 1, 0 or error.

Description

See also

- 159.13 SyntaxColoring.CopyButton.GetEnabled 7576
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.77 SyntaxColoring.ZoomButton.SetEnabled 7645

Created 19th April 2017, last changed 19th April 2017.

159.77 SyntaxColoring.ZoomButton.SetEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
159 SyntaxColoring	7.2	Yes	No	No	No	No

MBS("SyntaxColoring.ZoomButton.SetEnabled"; State)

Parameters**State**

The new enabled state. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

The MBS Plugin adds zoom controls to FileMaker's script workspace.

This setting can be set via the preferences dialog, too.

See also

- 159.13 SyntaxColoring.CopyButton.GetEnabled 7576
- 159.14 SyntaxColoring.CopyButton.SetEnabled 7577
- 159.76 SyntaxColoring.ZoomButton.GetEnabled 7644

Created 19th April 2017, last changed 11st November 2019.

Chapter 160

System

Global functions affecting the computer system.

160.1 System.Logout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
160 System	3.1	Yes	Yes	Yes	No	No

MBS("System.Logout")

Result Returns OK or error number.

Description

It is possible that user or other application stops the logout process. Operation will run asynchronously. The function returns immediately and logout process starts a second later.

Example Databases

- [Shutdown](#)

160.1.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 21st May 2018.

160.2 System.Restart

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
160 System	3.1	Yes	Yes	Yes	No	No

MBS("System.Restart")

Result Returns OK or error number.

Description

It is possible that user or other application stops the shutdown process.

Operation will run asynchronously. The function returns immediately and shutdown process starts a second later.

Example Databases

- [Shutdown](#)

160.2.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 21st May 2018.

160.3 System.Shutdown

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
160 System	3.1	Yes	Yes	Yes	No	No

MBS("System.Shutdown")

Result Returns OK or error number.

Description

It is possible that user or other application stops the shutdown process.

Operation will run asynchronously. The function returns immediately and shutdown process starts a second later.

See also

- [124.31 Plugin.LimitFunction](#) 6297
- [124.40 Plugin.SetFunctions](#) 6309

Example Databases

- [Shutdown](#)

160.3.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 21st May 2018.

160.4 System.Sleep

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
160 System	3.1	Yes	Yes	Yes	No	No

MBS("System.Sleep")

Result Returns OK or error number.

Description

It is possible that user or other application stops the sleep process.

Operation will run asynchronously. The function returns immediately and sleep starts a second later.

Example Databases

- [Shutdown](#)

160.4.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 21st May 2018.

Chapter 161

SystemInfo

Query system information details.

161.1 SystemInfo.ADSystemInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo 102 LDAP	9.3	No	Yes	No	No	No

MBS("SystemInfo.ADSystemInfo")

Result Returns JSON or error.

Description

This call may take a second if a query needs to be sent to server.

Returns JSON with details including UserName, ComputerName, SiteName, DomainShortName, DomainDNSName, ForestDNSName, PDCRoleOwner, SchemaRoleOwner, IsNativeMode, DCName and DCSiteName.

The result is an empty JSON object in case of no Active Directory in use.

Examples

Query Active Directory details on Windows:

MBS("SystemInfo.ADSystemInfo")

Example result: {

"UserName": "CN=John Doe,OU=2SH User,DC=2SXXX,DC=2S",

"ComputerName": "CN=2SMBP16W10,CN=Computers,DC=2SXXX,DC=2S",

"SiteName": "Default-First-Site-Name",

"DomainShortName": "2SXXX",

"DomainDNSName": "2SXXX.2S",

"ForestDNSName": "2SXXX.2S",

"PDCRoleOwner": "CN=NTDS Settings,CN=2SDCERP,CN=Servers,CN=Default-First-Site-Name,CN=Sites,CN=Configuration,DC=2SXXX,DC=2S"

```
"SchemaRoleOwner": "CN=NTDS Settings,CN=2SDCERP,CN=Servers,CN=Default-First-Site-Name,CN=Sites,CN=Configuration,DC=example,DC=com",
"IsNativeMode": true,
"DCName": "2SDCSTORAGE.2SXXX.2S",
"DCSiteName": "Default-First-Site-Name"
}
```

See also

- [102.5 LDAP.Bind](#) 5373
- [161.31 SystemInfo.SystemFont](#) 7684

161.1.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr2](#)

Created 4th June 2019, last changed 18th October 2019.

161.2 SystemInfo.AvailableRAM

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.AvailableRAM")

Result Returns byte count.

Description

See also SystemInfo.AvailableRAM and App.MemoryUsed.

Examples

Show RAM available:

```
Set Variable [ $a; Round(MBS("SystemInfo.AvailableRAM") / 1024 / 1024 / 1024; 1) ]
```

```
Set Variable [ $b; Round(MBS("SystemInfo.PhysicalRAM") / 1024 / 1024 / 1024; 1) ]
```

```
Show Custom Dialog [ $a & " of " & $b & " GB free." ]
```

See also

- 34.9 App.MemoryUsed 917
- 161.29 SystemInfo.PhysicalRAM 7682

161.2.1 FileMaker Magazin

- Ausgabe 6/2018, Seite 23

Created 18th August 2014, last changed 18th January 2018.

161.3 SystemInfo.CPUBrandString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.CPUBrandString")

Result Returns brand or empty text.

Description

If it is an Intel x86 Chip or something compatible, you get strings like this: "Intel(R) Core(TM) i7 CPU M 620 @ 2.67GHz".

on FileMaker Cloud with a small EC2 instance, e.g. "Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz"

Examples

Shows CPU Brand String:

Show Custom Dialog ["Info"; MBS("SystemInfo.CPUBrandString")]

Created 18th August 2014, last changed 3th October 2016.

161.4 SystemInfo.ComputerName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.ComputerName")

Result Returns name or error.

Description

Examples

Shows computer name:

Show Custom Dialog [MBS("SystemInfo.ComputerName")]

See also

- [161.5 SystemInfo.DomainName](#)

7656

161.4.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr5](#)
- [Filemaker Notes](#)

Created 18th August 2014, last changed 18th August 2014.

161.5 SystemInfo.DomainName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.DomainName")

Result Returns error or text.

Description

Mac supported added in plugin version 4.5.

The name may not be set for a computer.

See also SystemInfo.HostDNSName and SystemInfo.HostName.

Examples

Shows Domainname:

```
Show Custom Dialog [ "Info"; MBS( "SystemInfo.DomainName" ) ]
```

See also

- 161.4 SystemInfo.ComputerName 7655
- 161.8 SystemInfo.HostDNSName 7659
- 161.9 SystemInfo.HostName 7660

Created 18th August 2014, last changed 24th February 2016.

161.6 SystemInfo.DoubleClickTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	3.1	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.DoubleClickTime")

Result Returns number with double click time.

Description

You can use that value to determine if two mouse clicks should be handled as a double click or as two single clicks.

Examples

Queries double click time:

```
$r = MBS( "SystemInfo.DoubleClickTime" )
```

161.6.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr4](#)

Created 18th August 2014, last changed 18th August 2014.

161.7 SystemInfo.HardDiscSerial

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.HardDiscSerial")

Result Returns text with serial number or empty text.

Description

Can be empty if no serial number exists, the plugin fails to query it, e.g. due to missing permissions.

Examples

Shows hard disk serial:

```
Show Custom Dialog [ "Info"; MBS( "SystemInfo.HardDiscSerial" ) ]
```

161.7.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr8](#)
- [MBS FileMaker Plugin, version 8.0pr7](#)

Created 18th August 2014, last changed 12nd May 2017.

161.8 SystemInfo.HostDNSName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	5.0	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.HostDNSName")

Result Returns name or error.

Description

See also SystemInfo.DomainName and SystemInfo.HostName.

See also

- 161.5 SystemInfo.DomainName 7656
- 161.9 SystemInfo.HostName 7660

161.8.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 27th November 2014, last changed 28th November 2014.

161.9 SystemInfo.HostName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.HostName")

Result Returns name or error.

Description

See also SystemInfo.HostDNSName and SystemInfo.DomainName.

With FileMaker Cloud (Linux) the result may be just the IP if no hostname is configured, e.g. "ip-172-31-21-142"

Examples

Shows host name:

```
Show Custom Dialog [ MBS("SystemInfo.HostName") ]
```

See also

- [161.5 SystemInfo.DomainName](#) 7656
- [161.8 SystemInfo.HostDNSName](#) 7659
- [161.27 SystemInfo.OSName](#) 7680
- [161.33 SystemInfo.UserName](#) 7686

161.9.1 Blog Entries

- [MBS FileMaker Plugin registration dialogs](#)

Created 18th August 2014, last changed 3th October 2016.

161.10 SystemInfo.IdleTime

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	3.3	Yes	Yes	No	No	No

MBS("SystemInfo.IdleTime")

(old name: SystemInfo.MacGlobalIdleTime)

Result Returns value or error.

Description

This time comes from HID system and informs you how long no mouse or keyboard has been used. You can check this regularly in a timer script and do things like an auto logout.

If you use EventMonitor.Install function, this function may be better with remote control. With remote controlled PC, the local mouse and keyboard devices are not used, so the HID idle time is high. But with event monitor we see events from user and can reset idle counter.

Examples

Shows idle time:

```
Pause/Resume Script [ Duration (seconds): 2 ]
Show Custom Dialog [ "Info"; MBS( "SystemInfo.IdleTime" ) ]
```

See also

- [75.4 EventMonitor.Install](#) 3496
- [161.32 SystemInfo.Time](#) 7685

161.10.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr4](#)

Created 18th August 2014, last changed 19th March 2017.

161.11 SystemInfo.Is64bitWindows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.Is64bitWindows")

Result Returns 1 or 0.

Description

Returns 1 if you are in a 32-bit app running on a 64-bit windows.
Returns 0 otherwise, e.g. 64-bit app on 64-bit Windows.

See also Is64bit function to know if you are in a 64-bit application.

Examples

Shows 64-bit Windows:

```
Show Custom Dialog [ "Info"; MBS( "SystemInfo.Is64bitWindows" ) ]
```

See also

- 124.4 Is64bit

6264

Created 18th August 2014, last changed 12nd May 2017.

161.12 SystemInfo.IsAdminUser

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	5.2	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.IsAdminUser")

Result Returns 0 or 1.

Description

Returns 1 for admin or 0 for non admin.

Normally you should not need to know, because you try what you plan to do and see if you get a permission error. Than you can report that error.

Examples

Checks for admin account:

```
$r = MBS( "SystemInfo.IsAdminUser" )
```

161.12.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr4](#)

Created 18th June 2015, last changed 18th June 2015.

161.13 SystemInfo.MACAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.MACAddress")

Result The MAC Address string.

Description

Examples

Shows MAC address:

Show Custom Dialog ["Info"; MBS("SystemInfo.MACAddress")]

Example Databases

- [Utility functions/Generate and Verify License Key](#)

161.13.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr8](#)

Created 18th August 2014, last changed 24th February 2016.

161.14 SystemInfo.MacAppDarkMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	9.5	Yes	No	No	No	No

MBS("SystemInfo.MacAppDarkMode")

Result Returns 1, 0 or error.

Description

Returns 1 if application runs in dark mode.

Examples

Query dark mode values:

```
MBS( "SystemInfo.MacSystemDarkMode" ) & §& MBS( "SystemInfo.MacAppDarkMode" )
```

See also

- [161.23 SystemInfo.MacSystemDarkMode](#)

7674

161.14.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)

Created 28th October 2019, last changed 28th October 2019.

161.15 SystemInfo.MacBoardID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	9.4	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacBoardID")

Result Returns text or error.

Description

e.g. "Mac-1234567890123456"

See also

- [161.20 SystemInfo.MacModel](#) 7671
- [161.24 SystemInfo.MacUUID](#) 7675

161.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 10th September 2019, last changed 10th September 2019.

161.16 SystemInfo.MacBugFixVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacBugFixVersion")

Result The minor version number.

Description

In Mac OS X 10.4.17 this would be the decimal value 17.

Examples

Shows Mac OS Version:

```
Show Custom Dialog [ "OS Version"; MBS( "SystemInfo.MacMajorVersion" ) & "." & MBS( "System-Info.MacMinorVersion" ) & "." & MBS( "SystemInfo.MacBugfixVersion" ) ]
```

See also

- 161.18 SystemInfo.MacMajorVersion 7669
- 161.19 SystemInfo.MacMinorVersion 7670
- 161.21 SystemInfo.MacROMBootVersion 7672

Created 18th August 2014, last changed 24th February 2016.

161.17 SystemInfo.MacHasHardwareAcceleratedCoreImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacHasHardwareAcceleratedCoreImage")

Description

Created 18th August 2014, last changed 18th August 2014.

161.18 SystemInfo.MacMajorVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacMajorVersion")

Result The major version number.

Description

In Mac OS X 10.4.17 this would be the decimal value 10.

Examples

Shows Mac OS Version:

```
Show Custom Dialog [ "OS Version"; MBS( "SystemInfo.MacMajorVersion" ) & "." & MBS( "System-Info.MacMinorVersion" ) & "." & MBS( "SystemInfo.MacBugfixVersion" ) ]
```

See also

- 161.16 SystemInfo.MacBugFixVersion 7667
- 161.19 SystemInfo.MacMinorVersion 7670
- 161.21 SystemInfo.MacROMBootVersion 7672
- 161.37 SystemInfo.WinMajorVersion 7690
- 161.38 SystemInfo.WinMinorVersion 7691

Created 18th August 2014, last changed 24th February 2016.

161.19 SystemInfo.MacMinorVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacMinorVersion")

Result The minor version number.

Description

In Mac OS X 10.4.17 this would be the decimal value 4.

Examples

Shows Mac OS Version:

```
Show Custom Dialog [ "OS Version"; MBS( "SystemInfo.MacMajorVersion" ) & "." & MBS( "System-Info.MacMinorVersion" ) & "." & MBS( "SystemInfo.MacBugfixVersion" ) ]
```

See also

- 161.16 SystemInfo.MacBugFixVersion 7667
- 161.18 SystemInfo.MacMajorVersion 7669
- 161.21 SystemInfo.MacROMBootVersion 7672
- 161.36 SystemInfo.WinCSDVersion 7689
- 161.37 SystemInfo.WinMajorVersion 7690
- 161.38 SystemInfo.WinMinorVersion 7691

Created 18th August 2014, last changed 24th February 2016.

161.20 SystemInfo.MacModel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacModel")

Description

e.g. "MacBookPro2,2"

Examples

Check for Mac Model:

Show Custom Dialog ["Mac Model?" ; MBS("SystemInfo.MacModel")]

See also

- 161.15 SystemInfo.MacBoardID 7666
- 161.24 SystemInfo.MacUUID 7675

Created 18th August 2014, last changed 25th November 2019.

161.21 SystemInfo.MacROMBootVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	9.4	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacROMBootVersion")

Result Returns text or error.

Description

e.g. "220.270.99.0.0 (iBridge: 16.16.6571.0.0,0)"

See also

- 161.16 SystemInfo.MacBugFixVersion 7667
- 161.18 SystemInfo.MacMajorVersion 7669
- 161.19 SystemInfo.MacMinorVersion 7670

161.21.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 10th September 2019, last changed 10th September 2019.

161.22 SystemInfo.MacSerialNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacSerialNumber")

Description

This is a unique ID for each Mac. You can see this number by choosing "About this Mac" from the Apple menu, and then selecting more information.

Examples

Check for serial number:

```
Show Custom Dialog [ "Mac SerialNumber?" ; MBS( "SystemInfo.MacSerialNumber" ) ]
```

Created 18th August 2014, last changed 25th November 2019.

161.23 SystemInfo.MacSystemDarkMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	9.5	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacSystemDarkMode")

Result Returns OK or error.

Description

Returns 1 if system runs in dark mode.

The application may not run in dark mode, even if system has dark mode.

Examples

Query dark mode values:

```
MBS( "SystemInfo.MacSystemDarkMode" ) & §& MBS( "SystemInfo.MacAppDarkMode" )
```

See also

- 161.14 SystemInfo.MacAppDarkMode

7665

161.23.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)

Created 28th October 2019, last changed 28th October 2019.

161.24 SystemInfo.MacUUID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacUUID")

Description

This is a unique ID for a the Mac system. In its canonical form, a UUID consists of 32 hexadecimal digits, displayed in 5 groups separated by hyphens, in the form 8-4-4-4-12 for a total of 36 characters. For example: 550e8400-e29b-41d4-a716-446655440000

Examples

Shows Mac UUID:

Show Custom Dialog ["Mac UUID"; MBS("SystemInfo.MacUUID")]

See also

- 161.15 SystemInfo.MacBoardID 7666
- 161.20 SystemInfo.MacModel 7671

Example Databases

- [Utility functions/Generate and Verify License Key](#)

Created 18th August 2014, last changed 24th February 2016.

161.25 SystemInfo.MacVRAMSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.MacVRAMSize")

Description

Created 18th August 2014, last changed 18th August 2014.

161.26 SystemInfo.NetworkStats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	10.0	Yes	No	Yes, macOS only	No	No

MBS("SystemInfo.NetworkStats"; Name)

Parameters

Name

The name of the interface to query. Can be empty for array of all interfaces. Pass "sum" to sum up all counters.

"en0"

Result Returns OK or error.

Description

Returns JSON array of objects, each with the following keys:

Name, PhysicalType, Type, MTU, Baudrate, InputPackets, InputErrors, OutputPackets, OutputErrors, Collisions, InputBytes, OutputBytes, InputMulticasts, OutputMulticasts.

Type is the type of device which includes 1 for ethernet and 6 for Wifi.

Baudrate	The linespeed.
Collisions	The number of collisions on csma interfaces.
InputBytes	Total number of octets received.
InputErrors	The number of input errors on interface.
InputMulticasts	The number of packets received via multicast.
InputPackets	The number of packets received.
MTU	The maximum transmission unit.
Name	The name of the interface.
OutputBytes	Total number of octets sent.
OutputErrors	The number of output errors.
OutputMulticasts	The number of packets sent via multicast.
OutputPackets	The number of packets sent.
PhysicalType	The physical network type. e.g., AUI, Thinnet, 10base-T, etc
Type	The network type.

Examples

Query statistics for all interfaces:

MBS("SystemInfo.NetworkStats")

Example result: [

```
{
  "Name": "lo0",
  "PhysicalType": 24,
  "Type": 24,
  "MTU": 16384,
  "Baudrate": 0,
  "InputPackets": 1211504,
  "InputErrors": 0,
  "OutputPackets": 1211504,
  "OutputErrors": 0,
  "Collisions": 0,
  "InputBytes": 424215552,
  "OutputBytes": 424215552,
  "InputMulticasts": 866700,
  "OutputMulticasts": 0
},
...
]
```

Query statistics for en0, first ethernet card:

```
MBS( "SystemInfo.NetworkStats"; "en0" )
```

Example result: {

```
"Name": "en0",
"PhysicalType": 6,
"Type": 6,
"MTU": 1500,
"Baudrate": 112050000,
"InputPackets": 3349997,
"InputErrors": 0,
"OutputPackets": 9122258,
"OutputErrors": 28815,
"Collisions": 0,
"InputBytes": 2294099968,
"OutputBytes": 9673651200,
"InputMulticasts": 67811,
"OutputMulticasts": 0
}
```

Query sum of statistics:

```
MBS( "SystemInfo.NetworkStats"; "sum" )
```

Example result: {

```
"Name": "sum",
"InputPackets": 3393156,
"InputErrors": 0,
```

```
"OutputPackets": 9154972,  
"OutputErrors": 29387,  
"Collisions": 0,  
"InputBytes": 2303736832,  
"OutputBytes": 9682581504,  
"InputMulticasts": 88721,  
"OutputMulticasts": 0  
}
```

161.26.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 3th December 2019, last changed 4th December 2019.

161.27 SystemInfo.OSName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.OSName")

Description

e.g. "Windows 2000", "Windows XP", "Mac OS X", "Vista".

Examples

Shows OS Name:

Show Custom Dialog [MBS("SystemInfo.OSName")]

See also

- 161.9 SystemInfo.HostName 7660
- 161.32 SystemInfo.Time 7685
- 161.33 SystemInfo.UserName 7686

Created 18th August 2014, last changed 24th February 2016.

161.28 SystemInfo.OSVersionString

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.OSVersionString")

Result Returns version text.

Description

e.g. Mac OS X 10.5.1"

Examples

Shows OS Version String:

Show Custom Dialog [MBS("SystemInfo.OSVersionString")]

161.28.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)
- [MBS FileMaker Plugin, version 5.3pr5](#)
- [MBS Filemaker Plugin 1.8pr4](#)

Created 18th August 2014, last changed 24th February 2016.

161.29 SystemInfo.PhysicalRAM

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.PhysicalRAM")

Result Returns byte count.

Description

Examples

Show RAM available:

```
Set Variable [ $a; Round(MBS("SystemInfo.AvailableRAM") / 1024 / 1024 / 1024; 1) ]
```

```
Set Variable [ $b; Round(MBS("SystemInfo.PhysicalRAM") / 1024 / 1024 / 1024; 1) ]
```

```
Show Custom Dialog [ $a & " of " & $b & " GB free." ]
```

See also

- 161.2 SystemInfo.AvailableRAM

7653

Created 18th August 2014, last changed 18th August 2014.

161.30 SystemInfo.ProcessorCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.ProcessorCount")

Result Returns number of cores.

Description

Examples

Shows processor count:

Show Custom Dialog [MBS("SystemInfo.ProcessorCount")]

Created 18th August 2014, last changed 24th February 2016.

161.31 SystemInfo.SystemFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	Yes	Yes	No	No

MBS("SystemInfo.SystemFont")

Description

Examples

Shows system font:

Show Custom Dialog [MBS("SystemInfo.SystemFont")]

See also

- 161.1 SystemInfo.ADSYSTEMINFO

7651

Created 18th August 2014, last changed 12nd August 2016.

161.32 SystemInfo.Time

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	3.0	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.Time")

Result Returns time stamp in seconds.

Description

This value is very precise. Should be at least allow milliseconds measurements. Perfect for calculating how long an operation takes.

Examples

Shows time:

Show Custom Dialog [MBS("SystemInfo.Time")]

See also

- [161.10 SystemInfo.IdleTime](#) 7661
- [161.27 SystemInfo.OSName](#) 7680

Example Databases

- [List/QuickList Test](#)
- [Time Measurement](#)

161.32.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr2](#)
- [Functions added on the Filemaker Conference](#)

161.32.2 FileMaker Magazin

- [Ausgabe 1/2015, Seite 20](#)
- [Ausgabe 1/2015, Seite 19](#)

Created 18th August 2014, last changed 24th February 2016.

161.33 SystemInfo.UserName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.UserName")

Result Returns text with user name.

Description

This is not effected by the FileMaker Preferences' "other" setting. This is the actual user name. For FileMaker Server the name is the name of the account the server operates in. This could be always "System" or "fmsserver".

Examples

Shows user name:

Show Custom Dialog [MBS("SystemInfo.UserName") & §& MBS("SystemInfo.UserShortName")]

See also

- 161.9 SystemInfo.HostName 7660
- 161.54 SystemInfo.isMojave 7708
- 161.27 SystemInfo.OSName 7680
- 161.34 SystemInfo.UserShortName 7687

161.33.1 Blog Entries

- [Network share access from script on FileMaker Server](#)
- [MBS FileMaker Plugin, version 8.5pr4](#)
- [MBS FileMaker Plugin, version 7.6pr2](#)

161.33.2 FileMaker Magazin

- Ausgabe 6/2019, Seite 33

Created 18th August 2014, last changed 24th February 2016.

161.34 SystemInfo.UserName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	1.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.UserName")

Description

Examples

Shows user name:

Show Custom Dialog [MBS("SystemInfo.UserName") & §& MBS("SystemInfo.UserName")]

See also

- 161.33 SystemInfo.UserName

7686

Created 18th August 2014, last changed 24th February 2016.

161.35 SystemInfo.WinBuildNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes	Yes	No

MBS("SystemInfo.WinBuildNumber")

Result The build number.

Description

For example returns 2600 on Windows XP Build 2600.
Created 18th August 2014, last changed 17th June 2018.

161.36 SystemInfo.WinCSDVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinCSDVersion")

Result The service pack version string.

Description

Shows "Service Pack 3" on a Windows XP SP3 installation.

If no Service Pack has been installed, the string is empty.

See also

- 161.19 SystemInfo.MacMinorVersion 7670
- 161.37 SystemInfo.WinMajorVersion 7690
- 161.38 SystemInfo.WinMinorVersion 7691

Created 18th August 2014, last changed 18th August 2014.

161.37 SystemInfo.WinMajorVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinMajorVersion")

Result Returns the major version number.

Description

Returns 5 on Windows 2000/XP and 6 on Windows Vista/7/8.

See also

- 161.18 SystemInfo.MacMajorVersion 7669
- 161.19 SystemInfo.MacMinorVersion 7670
- 161.36 SystemInfo.WinCSDVersion 7689
- 161.38 SystemInfo.WinMinorVersion 7691

Created 18th August 2014, last changed 18th August 2014.

161.38 SystemInfo.WinMinorVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinMinorVersion")

Result Returns the minor version number.

Description

Returns 0 on Windows 2000/Vista and 1 on Windows XP/7 and 2 on Windows 8.
Windows 8.1 is MajorVersion = 6 and MinorVersion = 3.

See also

- 161.18 SystemInfo.MacMajorVersion 7669
- 161.19 SystemInfo.MacMinorVersion 7670
- 161.36 SystemInfo.WinCSDVersion 7689
- 161.37 SystemInfo.WinMajorVersion 7690

Created 18th August 2014, last changed 26th September 2015.

161.39 SystemInfo.WinPlatformId

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinPlatformId")

Result Returns the platform ID as number.

Description

For example 2 for NT kernels.

Created 18th August 2014, last changed 18th August 2014.

161.40 SystemInfo.WinProductKey

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinProductKey")

Result Returns product key or empty string.

Description

See also

- [161.41 SystemInfo.WinProductType](#)

7694

Example Databases

- [Utility functions/Generate and Verify License Key](#)

Created 18th August 2014, last changed 14th May 2017.

161.41 SystemInfo.WinProductType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinProductType")

Result Returns product type as number.

Description

e.g. 1 on Windows XP.

This member can be one of the following values:

VER_NT_DOMAIN_CONTROLLER	2	The system is a domain controller and the operating system is Windows Server 2008, Windows Server 2003, or Windows 2000 Server.
VER_NT_SERVER	3	The operating system is Windows Server 2008, Windows Server 2003, or Windows 2000 Server. Note that a server that is also a domain controller is reported as VER_NT_DOMAIN_CONTROLLER, not VER_NT_SERVER.
VER_NT_WORKSTATION	1	The operating system is Windows Vista, Windows XP Professional, Windows XP Home Edition, or Windows 2000 Professional.

See also

- 161.40 SystemInfo.WinProductKey

7693

Created 18th August 2014, last changed 18th August 2014.

161.42 SystemInfo.WinServicePackMajor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinServicePackMajor")

Result The version number.

Description

For example, for Service Pack 3, the major version number is 3. If no Service Pack has been installed, the value is zero.

See also

- 161.43 SystemInfo.WinServicePackMinor

7696

Created 18th August 2014, last changed 18th August 2014.

161.43 SystemInfo.WinServicePackMinor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinServicePackMinor")

Result The version number.

Description

For example, for Service Pack 3, the minor version number is 0.

See also

- 161.42 SystemInfo.WinServicePackMajor

7695

Created 18th August 2014, last changed 18th August 2014.

161.44 SystemInfo.WinSuiteMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinSuiteMask")

Result The mask as number.

Description

for example 256 on Windows XP.

This member can be a combination of the following values.

VER_SUITE_BACKOFFICE	4	Microsoft BackOffice components are installed.
VER_SUITE_BLADE	& h0400	Windows Server 2003, Web Edition is installed.
VER_SUITE_COMPUTE_SERVER	& h4000	Windows Server 2003, Compute Cluster Edition is installed.
VER_SUITE_DATACENTER	& h0080	Windows Server 2008 Datacenter, Windows Server 2003, Datacenter Edition, or Windows 2000 Datacenter Server is installed.
VER_SUITE_ENTERPRISE	2	Windows Server 2008 Enterprise, Windows Server 2003, Enterprise Edition, or Windows 2000 Advanced Server is installed. Refer to the Remarks section for more information about this bit flag.
VER_SUITE_EMBEDDEDNT	& h0040	Windows XP Embedded is installed.
VER_SUITE_PERSONAL	& h0200	Windows Vista Home Premium, Windows Vista Home Basic, or Windows XP Home Edition is installed.
VER_SUITE_SINGLEUSERTS	& h0100	Remote Desktop is supported, but only one interactive session is supported. This value is set unless the system is running in application server mode.
VER_SUITE_SMALLBUSINESS	1	Microsoft Small Business Server was once installed on the system, but may have been upgraded to another version of Windows. Refer to the Remarks section for more information about this bit flag.
VER_SUITE_SMALLBUSINESS_RESTRICTED	& h0020	Microsoft Small Business Server is installed with the restrictive client license in force. Refer to the Remarks section for more information about this bit flag.
VER_SUITE_STORAGE_SERVER	& h2000	Windows Storage Server 2003 R2 or Windows Storage Server 2003 is installed.
VER_SUITE_TERMINAL	& h0010	Terminal Services is installed. This value is always set. If VER_SUITE_TERMINAL is set but VER_SUITE_SINGLEUSERTS is not set, the system is running in application server mode.
VER_SUITE_WH_SERVER	& h8000	Windows Home Server is installed.

Created 18th August 2014, last changed 18th August 2014.

161.45 SystemInfo.WinSystemMetrics

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	6.3	No	Yes	Yes, Windows only	No	No

MBS("SystemInfo.WinSystemMetrics"; ID)

Parameters

ID

The ID of the value to query. Can be the name of the value without SM_ prefix like "CMONITORS" or the numeric value like 80.

"CMONITORS"

Result Returns value or error.

Description

Note that all dimensions retrieved by GetSystemMetrics are in pixels.

Please see Microsoft website for all the possible parameters and return values:

[https://msdn.microsoft.com/en-us/library/windows/desktop/ms724385\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/ms724385(v=vs.85).aspx)

Values for Digitizer query:

Name	Value	Meaning
NID_INTEGRATED_TOUCH	1	The device has an integrated touch digitizer.
NID_EXTERNAL_TOUCH	2	The device has an external touch digitizer.
NID_INTEGRATED_PEN	4	The device has an integrated pen digitizer.
NID_EXTERNAL_PEN	8	The device has an external pen digitizer.
NID_MULTI_INPUT	64	The device supports multiple sources of digitizer input.
NID_READY	128	The device is ready to receive digitizer input.

Examples

Query number of display monitors on a desktop.

```
MBS( "SystemInfo.WinSystemMetrics"; "CMONITORS")
```

Example result: 1

Query size of screen:

```
MBS( "SystemInfo.WinSystemMetrics"; "CXScreen")
& " x " &
MBS( "SystemInfo.WinSystemMetrics"; "CYScreen")
```

Example result: 1280 x 768

Query whether we are shutton down:

```
# Returns 1 if FileMaker Window Close Script Trigger was called due to shutdown  
MBS( "SystemInfo.WinSystemMetrics"; "SHUTTINGDOWN")
```

Example result: 0

Query whether system is a Tablet PC:

```
MBS( "SystemInfo.WinSystemMetrics"; "TabletPC")
```

Example result: 1

Query whether we are in slate mode:

```
# Returns 0 for slate mode, else non-zero  
MBS( "SystemInfo.WinSystemMetrics"; "ConvertibleSlateMode")
```

Example result: 0

Query whether mouse is installed:

```
MBS( "SystemInfo.WinSystemMetrics"; "MousePresent")
```

Example result: 1

Query whether a mouse wheel is present:

```
MBS( "SystemInfo.WinSystemMetrics"; "MouseWheelPresent")
```

Example result: 1

Query whether we have a digitizer

```
# Nonzero if the current operating system is Windows 7 or Windows Server 2008 R2 and the Tablet PC  
Input service is started; otherwise, 0.
```

```
# The return value is a bitmask that specifies the type of digitizer input supported by the device.
```

```
# e.g. 193 for a ready touch device with multi touch.
```

```
MBS( "SystemInfo.WinSystemMetrics"; "Digitizer")
```

Example result: 193

Query whether we have a remote session:

```
MBS( "SystemInfo.WinSystemMetrics"; 4096 )
```

161.45.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 15th June 2016, last changed 9th November 2018.

161.46 SystemInfo.WindowsAero

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.WindowsAero")

Result Returns Aero status.

Description

Value is 1 if aero is used and 0 if the status is unknown (e.g. on Windows XP) or Aero is not used.

See also

- 161.58 SystemInfo.isWindows10 7712
- 161.59 SystemInfo.isWindows2000 7713
- 161.60 SystemInfo.isWindows7 7714
- 161.61 SystemInfo.isWindows8 7715
- 161.63 SystemInfo.isWindowsXP 7717

Created 18th August 2014, last changed 17th June 2018.

161.47 SystemInfo.isCatalina

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	9.3	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isCatalina")

Result Returns 1 or 0.

Description

Examples

Check for MacOS Catalina:

Show Custom Dialog ["MacOS Catalina?" ; If(MBS("SystemInfo.isCatalina"); "yes"; "no")]

See also

- 161.48 SystemInfo.isElCapitan

161.48 SystemInfo.isElCapitan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isElCapitan")

Result Returns 1 or 0.

Description

Examples

Check for MacOS El Capitan:

```
Show Custom Dialog [ "MacOS ElCapitan?" ; If(MBS( "SystemInfo.isElCapitan" ); "yes"; "no" ) ]
```

See also

- 161.47 SystemInfo.isCatalina

7701

Created 4th July 2016, last changed 25th November 2019.

161.49 SystemInfo.isHighSierra

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	7.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isHighSierra")

Result Returns 1 or 0.

Description**Examples**

Check for MacOS HighSierra:

Show Custom Dialog ["MacOS HighSierra?" ; If(MBS("SystemInfo.isHighSierra"); "yes"; "no")]

See also

- 161.56 SystemInfo.isSierra

7710

161.49.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr6](#)

Created 4th November 2017, last changed 25th November 2019.

161.50 SystemInfo.isLeopard

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isLeopard")

Result Returns 1 or 0.

Description

Examples

Check for MacOS Leopard:

```
Show Custom Dialog [ "MacOS Leopard?" ; If(MBS( "SystemInfo.isLeopard" ); "yes"; "no" ) ]
```

See also

- 161.51 SystemInfo.isLion 7705
- 161.54 SystemInfo.isMojave 7708
- 161.57 SystemInfo.isSnowLeopard 7711

Created 18th August 2014, last changed 25th November 2019.

161.51 SystemInfo.isLion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isLion")

Result Returns 1 or 0.

Description

Examples

Check for MacOS Lion:

```
Show Custom Dialog [ "MacOS Lion?" ; If(MBS( "SystemInfo.isLion" ); "yes"; "no") ]
```

See also

- 161.50 SystemInfo.isLeopard 7704
- 161.56 SystemInfo.isSierra 7710

Created 18th August 2014, last changed 25th November 2019.

161.52 SystemInfo.isMacOSX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isMacOSX")

Result Returns 1 or 0.

Description

See also

- [41.3 AVRecorder.AudioDeviceInfo](#) 1092
- [41.17 AVRecorder.Init](#) 1108
- [41.25 AVRecorder.SetFilePath](#) 1118
- [41.36 AVRecorder.VideoDeviceInfo](#) 1132
- [110.7 MatrixDongle.Initialize](#) 5830
- [161.54 SystemInfo.isMojave](#) 7708

Example Databases

- [AVRecorder/AVRecorder Devices](#)
- [AVRecorder/AVRecorder](#)
- [CURL/CURL Download on Server](#)
- [MatrixDongle](#)
- [Registration/Debugging and Registration](#)

161.52.1 Blog Entries

- [MBS FileMaker Plugin debugging help](#)

Created 18th August 2014, last changed 18th August 2014.

161.53 SystemInfo.isMavericks

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	3.5	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isMavericks")

Result Returns 1 or 0.

Description

Examples

Check for MacOS Mavericks:

```
Show Custom Dialog [ "MacOS Mavericks?" ; If(MBS( "SystemInfo.isMavericks" ); "yes"; "no" ) ]
```

Created 18th August 2014, last changed 25th November 2019.

161.54 SystemInfo.isMojave

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	8.4	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isMojave")

Result Returns 1 or 0.

Description

Examples

Check for MacOS Mojave:

```
Show Custom Dialog [ "MacOS Mojave?" ; If(MBS( "SystemInfo.isMojave" ); "yes"; "no") ]
```

See also

- [161.50 SystemInfo.isLeopard](#) 7704
- [161.52 SystemInfo.isMacOSX](#) 7706
- [161.33 SystemInfo.UserName](#) 7686

161.54.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.4 - Über 5400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.4 - More than 5400 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.4pr1](#)

Created 27th July 2018, last changed 25th November 2019.

161.55 SystemInfo.isMountainLion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isMountainLion")

Result Returns 1 or 0.

Description

Examples

Check for MacOS MountainLion:

```
Show Custom Dialog [ "MacOS MountainLion?" ; If(MBS( "SystemInfo.isMountainLion" ); "yes"; "no") ]
```

Created 18th August 2014, last changed 25th November 2019.

161.56 SystemInfo.isSierra

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isSierra")

Result Returns 1 or 0.

Description**Examples**

Check for MacOS Sierra:

Show Custom Dialog ["MacOS Sierra?" ; If(MBS("SystemInfo.isSierra"); "yes"; "no")]

See also

- 161.49 SystemInfo.isHighSierra 7703
- 161.51 SystemInfo.isLion 7705

Created 4th July 2016, last changed 25th November 2019.

161.57 SystemInfo.isSnowLeopard

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isSnowLeopard")

Result Returns 1 or 0.

Description

Examples

Check for MacOS SnowLeopard:

Show Custom Dialog ["MacOS SnowLeopard?" ; If(MBS("SystemInfo.isSnowLeopard"); "yes"; "no")]

See also

- 161.50 SystemInfo.isLeopard

161.58 SystemInfo.isWindows10

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	5.2	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isWindows10")

Result Returns 1 or 0.

Description

And 0 on Mac OS X, Linux, Windows 8/7/Vista/XP/2000/ME/98/95.

Examples

Check for Windows 10:

```
Show Custom Dialog [ "Windows 10?" ; If(MBS( "SystemInfo.isWindows10" ); "yes"; "no" ) ]
```

See also

- 161.59 SystemInfo.isWindows2000 7713
- 161.60 SystemInfo.isWindows7 7714
- 161.61 SystemInfo.isWindows8 7715
- 161.62 SystemInfo.isWindowsVista 7716
- 161.63 SystemInfo.isWindowsXP 7717
- 161.46 SystemInfo.WindowsAero 7700

161.58.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr9](#)

Created 30th July 2015, last changed 25th November 2019.

161.59 SystemInfo.isWindows2000

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isWindows2000")

Result Returns 1 or 0.

Description

And 0 on Mac OS X, Linux, Windows 10/8/7/XP/Vista/ME/98/95.

Examples

Check for Windows 2000:

Show Custom Dialog ["Windows 2000?" ; If(MBS("SystemInfo.isWindows2000"); "yes"; "no")]

See also

- 161.58 SystemInfo.isWindows10 7712
- 161.60 SystemInfo.isWindows7 7714
- 161.61 SystemInfo.isWindows8 7715
- 161.62 SystemInfo.isWindowsVista 7716
- 161.63 SystemInfo.isWindowsXP 7717
- 161.46 SystemInfo.WindowsAero 7700

Created 18th August 2014, last changed 25th November 2019.

161.60 SystemInfo.isWindows7

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isWindows7")

Result Returns 1 or 0.

Description

And 0 on Mac OS X, Linux, Windows 10/8/Vista/XP/2000/ME/98/95.

Examples

Check for Windows 7:

```
Show Custom Dialog [ "Windows 7?" ; If(MBS( "SystemInfo.isWindows7" ); "yes"; "no" ) ]
```

See also

- 161.58 SystemInfo.isWindows10 7712
- 161.59 SystemInfo.isWindows2000 7713
- 161.61 SystemInfo.isWindows8 7715
- 161.62 SystemInfo.isWindowsVista 7716
- 161.63 SystemInfo.isWindowsXP 7717
- 161.46 SystemInfo.WindowsAero 7700

Created 18th August 2014, last changed 25th November 2019.

161.61 SystemInfo.isWindows8

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isWindows8")

Result Returns 1 or 0.

Description

And 0 on Mac OS X, Linux, Windows 10/7/Vista/XP/2000/ME/98/95.

Examples

Check for Windows 8:

Show Custom Dialog ["Windows 8?" ; If(MBS("SystemInfo.isWindows8"); "yes"; "no")]

See also

- [161.58 SystemInfo.isWindows10](#) 7712
- [161.59 SystemInfo.isWindows2000](#) 7713
- [161.60 SystemInfo.isWindows7](#) 7714
- [161.62 SystemInfo.isWindowsVista](#) 7716
- [161.63 SystemInfo.isWindowsXP](#) 7717
- [161.46 SystemInfo.WindowsAero](#) 7700

161.61.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr5](#)

Created 18th August 2014, last changed 25th November 2019.

161.62 SystemInfo.isWindowsVista

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isWindowsVista")

Result Returns 1 or 0.

Description

And 0 on Mac OS X, Linux, Windows 10/8/7/XP/2000/ME/98/95.

Examples

Check for Windows Vista:

```
Show Custom Dialog [ "Windows Vista?" ; If(MBS( "SystemInfo.isWindowsVista" ); "yes"; "no" ) ]
```

See also

- 161.58 SystemInfo.isWindows10 7712
- 161.59 SystemInfo.isWindows2000 7713
- 161.60 SystemInfo.isWindows7 7714
- 161.61 SystemInfo.isWindows8 7715
- 161.63 SystemInfo.isWindowsXP 7717

Created 18th August 2014, last changed 25th November 2019.

161.63 SystemInfo.isWindowsXP

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	2.8	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isWindowsXP")

Result Returns 1 or 0.

Description

And 0 on Mac OS X, Linux, Windows 10/8/7/Vista/2000/ME/98/95.

Examples

Check for Windows XP:

Show Custom Dialog ["Windows XP?" ; If(MBS("SystemInfo.isWindowsXP"); "yes"; "no")]

See also

- 161.58 SystemInfo.isWindows10 7712
- 161.59 SystemInfo.isWindows2000 7713
- 161.60 SystemInfo.isWindows7 7714
- 161.61 SystemInfo.isWindows8 7715
- 161.62 SystemInfo.isWindowsVista 7716
- 161.46 SystemInfo.WindowsAero 7700

Created 18th August 2014, last changed 25th November 2019.

161.64 SystemInfo.isYosemite

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
161 SystemInfo	6.3	Yes	Yes	Yes	Yes	Yes

MBS("SystemInfo.isYosemite")

Result Returns 1 or 0.

Description

Examples

Check for MacOS Yosemite:

```
Show Custom Dialog [ "MacOS Yosemite?" ; If(MBS( "SystemInfo.isYosemite" ); "yes"; "no" ) ]
```

Created 4th July 2016, last changed 25th November 2019.

Chapter 162

SystemUIMode

Kiosk mode for Mac.

162.1 GetSystemUIMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
162 SystemUIMode	2.1	Yes	No	No	No	No

MBS("GetSystemUIMode")

Result The current mode value.

Description

See also

- 162.3 SetSystemUIMode

7721

Created 18th August 2014, last changed 18th August 2014.

162.2 GetSystemUIModeOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
162 SystemUIMode	2.1	Yes	No	No	No	No

MBS("GetSystemUIModeOptions")

Result The current options value.

Description

Created 18th August 2014, last changed 18th August 2014.

162.3 SetSystemUIMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
162 SystemUIMode	2.1	Yes	No	No	No	No

MBS("SetSystemUIMode"; Mode; Options)

Parameters

Mode

The mode you want.

1

Options

The options you want.

0

Description

The System UI Mode controls the presentation of system-provided user interface elements.

Note that the system UI mode is a per-process state. Switching from a process that is suppressing system UI to another process that is not will cause system UI elements to become visible automatically. Switching back to the first process will suppress system UI elements again.

In this mode, all standard system UI elements are visible.

kUIModeNormal = 0

In this mode, system UI elements which cover the "content area" of the screen (the area other than the menubar) are hidden. However, these elements may automatically show themselves in response to mouse movements or other user activity; specifically, the Dock will still show itself automatically when the mouse moves into the Dock's auto-show region.

kUIModeContentSuppressed = 1

In this mode, system UI elements which cover the "content area" of the screen (the area other than the menubar) are hidden. Unlike kUIModeContentSuppressed, most UI elements will not automatically show themselves in this mode.

kUIModeContentHidden = 2,

In this mode, all system UI elements, including the menubar, are hidden. However, these elements may automatically show themselves in response to mouse movements or other user activity; specifically, the Dock and menubar will still show themselves automatically when the mouse moves into the Dock's

auto-show region. Available in Mac OS X 10.3 and later.

kUIModeAllSuppressed = 4,

In this mode, all system UI elements, including the menubar, are hidden. Most system UI elements will not automatically show themselves in this mode. The application may request that the menubar automatically show itself while in this mode by passing the kUIOptionAutoShowMenuBar flag to SetSystemUIMode.

kUIModeAllHidden = 3

Options which you can combine by adding them together:

Requests that the menubar automatically show itself when the user moves the mouse into the screen area that would ordinarily be occupied by the menubar. Only valid with kUIModeAllHidden.

kUIOptionAutoShowMenuBar = 1

Disables all items in the Apple menu. Valid for all modes.

kUIOptionAnimateMenuBar = 2

Requests that the menubar animate on or offscreen, if the UIMode is also being changed such that the menubar will change visibility. Unlike other UI options, this option is not stored and only affects the behavior of this call to SetSystemUIMode. Valid for all modes. Available in Mac OS X 10.7 and later.

kUIOptionDisableAppleMenu = 4

The active application may not be changed while this process is active. Currently disables the Command-Tab and Command-Shift-Tab key sequences to switch the active process, and the global window rotation key sequence selected by the user in the Keyboard preference pane. SetFrontProcess may still be used to explicitly switch the active process. Only valid with modes other than kUIModeNormal.

kUIOptionDisableProcessSwitch = 8

The Force Quit window may not be displayed while this process is active. Currently disables the Command-Option-Escape key sequence to open the Force Quit window and the Force Quit menu item in the Apple menu. Only valid with modes other than kUIModeNormal.

kUIOptionDisableForceQuit = 16

The current login session may not be terminated while this process is active. Currently disables the Power key and the Restart, Shut Down, and Log Out menu items in the Apple menu. Only valid with modes other than kUIModeNormal.

kUIOptionDisableSessionTerminate = 32

The Hide menu item in the Application menu is disabled. Note that this option does not prevent this application from being hidden if Hide Others is selected in some other application. Available in Mac OS X 10.3 and later.

kUIOptionDisableHide = 64

Provides the ability to specify whether the menu bar will disable its adaptive transparency. Note this should be used in conjunction with a full-screen window using kUIModeContentSuppressed or kUIModeContentHidden. Available in Mac OS X 10.6 and later. This constant was published in the Mac OS X 10.5 version of MacApplication.h, but had the wrong value (7) and should not be used in Mac OS X 10.5.

kUIOptionDisableMenuBarTransparency = 512

Examples

Sets mode with hidden content:

```
MBS("SetSystemUIMode"; 1; 0)
```

See also

- 162.1 GetSystemUIMode

7719

Created 18th August 2014, last changed 18th August 2014.

Chapter 163

TAPI

Telephone functions for Windows

163.1 TAPI.AddressCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.AddressCount")

Result Returns number or error.

Description

The local computer may have several TAPI adapters with different addresses. This function counts them.

See also

- [163.2 TAPI.AddressValue](#) 7727

Example Databases

- [Win Only/TAPI/Tapi](#)

163.1.1 Blog Entries

- [Use of TAPI functions in MBS FileMaker Plugin](#)

163.1.2 FileMaker Magazin

- Ausgabe 1/2019, Seite 36

163.2 TAPI.AddressValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.AddressValue"; Index; Selector)

Parameters

Index

The index of the address. Must be in range from 0 to TAPI.AddressCount-1.

0

Selector

Which value to return.

"AddressName"

Result Returns OK or error.

Description

Properties include: AddressName, DialableAddress, ServiceProviderName, State, DoNotDisturb and MessageWaiting. State can be InService or OutOfService.

See also

- 163.1 TAPI.AddressCount

7725

Example Databases

- [Win Only/TAPI/Tapi](#)

163.2.1 Blog Entries

- [Use of TAPI functions in MBS FileMaker Plugin](#)

163.2.2 FileMaker Magazin

- Ausgabe 1/2019, Seite 36

Created 22nd October 2014, last changed 1st November 2014.

163.3 TAPI.Answer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Answer"; Call)

Parameters

Call

The call reference number.

\$Call

Result Returns OK or error.

Description

This function can succeed only if the call state is offering.

Created 22nd October 2014, last changed 1st December 2014.

163.4 TAPI.BlindTransfer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.BlindTransfer"; Call; DestAddress)

Parameters

Call

The call reference number.

\$Call

DestAddress

Destination address for the transfer.

Result Returns OK or error.

Description

The application must be the owner of the call. After a successful transfer, the call state transitions to disconnected.

Created 22nd October 2014, last changed 1st December 2014.

163.5 TAPI.CallInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.CallInfo"; Call; Selector)

Parameters

Call

The call reference number.

\$Call

Selector

Which value to query.

"CalledIDName"

Result Returns OK or error.

Description

Possible properties to query:

- CallerIDName: The name of the caller.
- CallerIDNumber: The number of the caller.
- CalledIDName: The name of the called location.
- CalledIDNumber: The number of the called location.
- ConnectedIDName: The name of the connected location.
- ConnectedIDNumber: The number of the connected location.
- RedirectionIDName: The name of the location to which a call has been redirected.
- RedirectionIDNumber: The number of the location to which a call has been redirected.
- RedirectingIDName: The name of the location that redirected the call.
- RedirectingIDNumber: The number of the location that redirected the call.
- CalledPartyFriendlyName: The called party friendly name.
- Comment: A comment about the call provided by the application that originated the call.
- DisplayableAddress: A displayable version of the called or calling address.
- CallingPartyID: The identifier of the calling party.
- State: The state of the call: Idle, InProgress, Connected, Disconnected, Offering, Hold or Queued.
- CountryCode: Country or region code.

- CallID: Call identifier. Some service providers assign a unique code to each call.
- Ref: Unique number of the call info object.
- Privilege: The privilege level. Either Owner or Monitor.
- Origin: Where the call is from. Can be Conference, External, InBound, Internal, OutBound, Unavailable or Unknown.
- Reason: Why the call was coming. Can be CallCompletion, CampedOn, Direct, ForwardedBudy, ForwardedNoAnswer, ForwardedUnconditionally, Intrude, Parked, Pickup, Redirect, Reminder, Router-Request, Transfer, Unavailable, Unknown or Unpark.
- CallerIDAddressType: What type the caller ID has.
- CalledIDAddressType: What type the called ID has.
- ConnectedIDAddressType: What type the connected ID has.
- RedirectionAddressType: What type the redirection ID has.
- RedirectedAddressType: What type the redirected ID has.

The address type properties on bottom define what the number properties above specify. Can be Phone Number, SDP, E-Mail Name, Domain Name or IP Address.

See also

- 163.31 TAPI.SetCallStateEvaluate 7758
- 163.32 TAPI.SetCallStateScript 7759
- 163.34 TAPI.SetNewCallEvaluate 7761
- 163.35 TAPI.SetNewCallScript 7762

Example Databases

- [Win Only/TAPI/Tapi](#)

163.5.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 22nd October 2014, last changed 8th April 2016.

163.6 TAPI.Connect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Connect"; Call; Sync)

Parameters

Call

The call reference number.

\$Call

Sync

Boolean indicating whether connection is to be performed synchronously (1) or asynchronously (0).

0

Result Returns OK or error.

Description

Examples

Creates a call and connects:

```
$Call = MBS( "TAPI.CreateCall"; "MyPhone"; "1234567899"; 1; 8)
```

```
$r = MBS( "TAPI.Connect"; $Call; 1 )
```

See also

- 102.6 LDAP.Connect 5375
- 163.7 TAPI.CreateCall 7733

163.6.1 Blog Entries

- [Use of TAPI functions in MBS FileMaker Plugin](#)

163.6.2 FileMaker Magazin

- Ausgabe 1/2019, Seite 36

Created 22nd October 2014, last changed 7th December 2015.

163.7 TAPI.CreateCall

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.CreateCall"; AddressNameIndex; DestAddress; AddressType; MediaTypes)

Parameters

AddressNameIndex

The index of the address or the name of the address to identify which device to use.

0

DestAddress

This text contains a destination address. The format is provider-specific. This can be "" for non-dialed addresses (such as with a hot phone) or when all dialing is performed using TAPI.Dial. "" in combination with a "" GroupID in TAPI.Pickup results in a group pickup. Service providers that have inverse multiplexing capabilities can allow an application to specify multiple addresses at once.

"123456789"

AddressType

Contains an address type constant, such as phone number (1), which describes the format of the address. Phone Number is 1, Session Description Protocol (SDP) conference is 2, an e-mail name is 4, a domain name is 8, an IP address is 16.

1

MediaTypes

Identifies the media type or types that will be involved in the call session. Can be 8 for audio.

8

Result Returns Call Reference ID or error.

Description

The new call will be the new current call, so the TAPI.Dial function (and others) should work on it.

See for media types:

[http://msdn.microsoft.com/de-de/library/windows/desktop/ms734210\(v=vs.85\).aspx](http://msdn.microsoft.com/de-de/library/windows/desktop/ms734210(v=vs.85).aspx)

See for line address constants:

[http://msdn.microsoft.com/de-de/library/windows/desktop/ms733291\(v=vs.85\).aspx](http://msdn.microsoft.com/de-de/library/windows/desktop/ms733291(v=vs.85).aspx)

If your TAPI drivers are 32-bit only, it may or may not work in 64-bit.

Examples

Creates a call and connects:

```
$Call = MBS( "TAPI.CreateCall"; "MyPhone"; "1234567899"; 1; 8)
```

```
$r = MBS( "TAPI.Connect"; $Call; 1 )
```

See also

- [163.6 TAPI.Connect](#) 7732
- [163.8 TAPI.Dial](#) 7735
- [163.38 TAPI.Transfer](#) 7765

163.7.1 Blog Entries

- [Use of TAPI functions in MBS FileMaker Plugin](#)
- [MBS Filemaker Plugin, version 4.5pr2](#)
- [MBS Filemaker Plugin, version 4.4pr10](#)

163.7.2 FileMaker Magazin

- [Ausgabe 1/2019, Seite 36](#)

Created 8th November 2014, last changed 11st May 2016.

163.8 TAPI.Dial

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Dial"; Call; DestAddress)

Parameters

Call

The call reference number.

\$Call

DestAddress

Representation of address to be dialed. The format must conform to a standard dialable address.

123456789

Result Returns OK or error.

Description

You can dial on calls made with TAPI.CreateCall.

See also

- 163.7 TAPI.CreateCall

163.9 TAPI.Disconnect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Disconnect"; Call; DisconnectCode)

Parameters

Call

The call reference number.

\$Call

DisconnectCode

Can be Normal, NoAnswer or Rejected.

"Normal"

Result Returns OK or error.

Description

The call state will transition to Disconnected after the method completes successfully.

Disconnect codes:

Normal: The call is being disconnected as part of the normal cycle of the call.

NoAnswer: The call is being disconnected because it has not been answered. (For example, an application may set a certain amount of time for the user to answer the call. If the user does not answer, the application can call Disconnect with the NoAnswer code.)

Rejected: The user rejected the offered call.

See also

- 156.9 SQL.Disconnect 7308
- 157.3 SSH.Disconnect 7485

Created 22nd October 2014, last changed 3th December 2014.

163.10 TAPI.Finish

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Finish"; Call; Mode)

Parameters

Call

The call reference number.

\$Call

Mode

Can be "AsTransfer" or "AsConference".

"AsTransfer"

Result Returns OK or error.

Description

See also

- 163.38 TAPI.Transfer

7765

Created 22nd October 2014, last changed 1st December 2014.

163.11 TAPI.GetCallStateEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	6.5	No	Yes	Yes, Windows only	No	No

MBS("TAPI.GetCallStateEvaluate")

Result Returns text or error.

Description

See also

- 163.31 TAPI.SetCallStateEvaluate

7758

163.11.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

163.12 TAPI.GetCallStateScriptFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	Yes, Windows only	No	No

MBS("TAPI.GetCallStateScriptFileName")

Result Returns file name or error.

Description

See also

- 163.13 TAPI.GetCallStateScriptName 7740
- 163.16 TAPI.GetNewCallScriptFileName 7743

163.12.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 30th November 2014, last changed 30th November 2014.

163.13 TAPI.GetCallStateScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	Yes, Windows only	No	No

MBS("TAPI.GetCallStateScriptName")

Result Returns script name or error.

Description

See also

- [163.12 TAPI.GetCallStateScriptFileName](#) 7739
- [163.32 TAPI.SetCallStateScript](#) 7759

163.13.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 30th November 2014, last changed 30th November 2014.

163.14 TAPI.GetCallStateURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	6.5	No	Yes	Yes, Windows only	No	No

MBS("TAPI.GetCallStateURL")

Result Returns text or error.

Description

See also

- 163.33 TAPI.SetCallStateURL

7760

163.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

163.15 TAPI.GetNewCallEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	6.5	No	Yes	Yes, Windows only	No	No

MBS("TAPI.GetNewCallEvaluate")

Result Returns text or error.

Description

See also

- 163.34 TAPI.SetNewCallEvaluate 7761

163.15.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

163.16 TAPI.GetNewCallScriptFileName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	Yes, Windows only	No	No

MBS("TAPI.GetNewCallScriptFileName")

Result Returns file name or error.

Description

See also

- 163.12 TAPI.GetCallStateScriptFileName 7739
- 163.17 TAPI.GetNewCallScriptName 7744

163.16.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 30th November 2014, last changed 30th November 2014.

163.17 TAPI.GetNewCallScriptName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	Yes, Windows only	No	No

MBS("TAPI.GetNewCallScriptName")

Result Returns script name or error.

Description

See also

- 163.16 TAPI.GetNewCallScriptFileName 7743
- 163.35 TAPI.SetNewCallScript 7762

163.17.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 30th November 2014, last changed 30th November 2014.

163.18 TAPI.GetNewCallURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	6.5	No	Yes	Yes, Windows only	No	No

MBS("TAPI.GetNewCallURL")

Result Returns text or error.

Description

See also

- 163.36 TAPI.SetNewCallURL

7763

163.18.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

163.19 TAPI.HandoffDirect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.HandoffDirect"; Call; MediaType)

Parameters**Call**

The call reference number.

\$Call

MediaType

Media type to transfer to.

Result Returns OK or error.

Description

If multiple applications have registered as able to handle the types involved, TAPI will hand off to the highest-priority application, which is usually the one that registered first.

This indicates that the application no longer requires ownership of the call.

for media types, please take a look here:

[http://msdn.microsoft.com/en-us/library/windows/desktop/ms734210\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/desktop/ms734210(v=vs.85).aspx)

Created 22nd October 2014, last changed 1st December 2014.

163.20 TAPI.Hold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Hold"; Call; Hold)

Parameters

Call

The call reference number.

\$Call

Hold

Whether to put call on hold. Pass 1 for hold and 0 for unhold.

1

Result Returns OK or error.

Description

Created 22nd October 2014, last changed 1st December 2014.

163.21 TAPI.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Initialize")

Result Returns OK or error.

Description

Must be called once before any other TAPI function.

If your TAPI drivers are 32-bit only, it may or may not work in 64-bit.

See also

- 97.6 Java.Initialize 5166
- 120.9 OCR.Initialize 6119
- 131.2 Proj.Initialize 6546
- 163.22 TAPI.IsInitialized 7749
- 169.37 Twain.Initialize 8025
- 181.12 WIA.Initialize 8511

Example Databases

- [Win Only/TAPI/Tapi](#)

163.21.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr2](#)
- [Use of TAPI functions in MBS FileMaker Plugin](#)

163.21.2 FileMaker Magazin

- [Ausgabe 1/2019, Seite 36](#)

Created 22nd October 2014, last changed 7th July 2018.

163.22 TAPI.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	8.3	No	Yes	Yes, Windows only	No	No

MBS("TAPI.IsInitialized")

Result Returns boolean or error.

Description

Returns 0 if not initialized or 1 if initialized.

See also

- 120.10 OCR.IsInitialized 6121
- 123.7 PHP.IsInitialized 6255
- 131.3 Proj.IsInitialized 6547
- 163.21 TAPI.Initialize 7748
- 169.39 Twain.IsInitialized 8028
- 190.116 XL.IsInitialized 9008

163.22.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr5](#)

Created 7th July 2018, last changed 7th July 2018.

163.23 TAPI.ListenOnAddress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	Yes, Windows only	No	No

MBS("TAPI.ListenOnAddress"; AddressNameIndex)

Parameters

AddressNameIndex

The index of the address or the name of the address to identify which device to use.

0

Result Returns OK or error.

Description

You can call this function for several addresses or just TAPI.ListenOnAllAddresses for all.

See also

- 163.24 TAPI.ListenOnAllAddresses

7751

163.23.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 25th November 2014, last changed 25th November 2014.

163.24 TAPI.ListenOnAllAddresses

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.ListenOnAllAddresses")

Result Returns OK or error.

Description

See also

- 163.23 TAPI.ListenOnAddress

7750

Example Databases

- [Win Only/TAPI/Tapi](#)

Created 22nd October 2014, last changed 2nd November 2014.

163.25 TAPI.ParkDirect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.ParkDirect"; Call; Park)

Parameters

Call

The call reference number.

\$Call

Park

The address where the call is to be parked.

Result Returns OK or error.

Description

With directed park, the application determines the address at which it wants to park the call. With TAPI.ParkIndirect the switch determines the address and provides this to the application. In either case, a parked call can be unparked by specifying this address.

The parked call enters the disconnected state after it has been successfully parked.

Some switches can remind the user after a call has been parked for some long amount of time. The application sees an offering call with a call reason set to reminder.

See also

- 163.26 TAPI.ParkIndirect

7753

Created 22nd October 2014, last changed 1st December 2014.

163.26 TAPI.ParkIndirect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.ParkIndirect"; Call)

Parameters**Call**

The call reference number.

\$Call

Result Returns address or error.

Description

With TAPI.ParkDirect, the application determines the address at which it wants to park the call. With nondirected park, the switch determines the address and provides this to the application. In either case, a parked call can be unparked by specifying this address.

The parked call enters the disconnected state after it has been successfully parked.

Some switches can remind the user after a call has been parked for some long amount of time. The application sees an offering call with a call reason set to reminder.

See also

- 163.25 TAPI.ParkDirect

7752

Created 22nd October 2014, last changed 1st December 2014.

163.27 TAPI.Pickup

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Pickup"; Call; GroupID)

Parameters

Call

The call reference number.

\$Call

GroupID

The group identifier to which the alerting station belongs.

Result Returns OK or error.

Description

Created 22nd October 2014, last changed 1st December 2014.

163.28 TAPI.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Release"; Call)

Parameters

Call

The call reference number.

\$Call

Result Returns OK or error.

Description

See also

- 102.16 LDAP.Release 5393
- 163.29 TAPI.ReleaseAll 7756

Created 30th November 2014, last changed 1st January 2015.

163.29 TAPI.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	Yes, Windows only	No	No

MBS("TAPI.ReleaseAll")

Result Returns OK or error.

Description

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

See also

- 97.11 Java.ReleaseAll 5174
- 100.67 JSON.ReleaseAll 5338
- 112.24 Menu.ReleaseAll 5888
- 163.28 TAPI.Release 7755
- 191.30 XML.ReleaseAll 9300

Created 30th November 2014, last changed 9th January 2020.

163.30 TAPI.RemoveFromConference

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.RemoveFromConference"; Call)

Parameters

Call

The call reference number.

\$Call

Result Returns OK or error.

Description

Created 22nd October 2014, last changed 1st December 2014.

163.31 TAPI.SetCallStateEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	6.5	No	Yes	Yes, Windows only	No	No

MBS("TAPI.SetCallStateEvaluate"; Expression)

Parameters

Expression

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

Result Returns OK or error.

Description

The \$\$ID\$\$ in evaluate is replaced with the reference number of the call as defined by our plugin. You can than use TAPI.CallInfo and other functions to query information.

See also

- 163.5 TAPI.CallInfo 7730
- 163.11 TAPI.GetCallStateEvaluate 7738

163.31.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 4th April 2018.

163.32 TAPI.SetCallStateScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	No	No	No

MBS("TAPI.SetCallStateScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

The script is called when an existing call changes state.

The parameter to your script will be the reference number of the call as defined by our plugin. You can than use TAPI.CallInfo and other functions to query information like the state of the call.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- [163.5 TAPI.CallInfo](#) 7730
- [163.13 TAPI.GetCallStateScriptName](#) 7740

Example Databases

- [Win Only/TAPI/Tapi](#)

163.32.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 30th November 2014, last changed 27th January 2016.

163.33 TAPI.SetCallStateURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	6.5	No	Yes	Yes, Windows only	No	No

MBS("TAPI.SetCallStateURL"; URL)

Parameters

URL

The URL to trigger.

Result Returns OK or error.

Description

\$\$ID\$\$ in the URL is replaced with call ID.

Queries http/ftp/sftp URLs with CURL, other URLs passed to OS to open.

See also

- 163.14 TAPI.GetCallStateURL

7741

163.33.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

163.34 TAPI.SetNewCallEvaluate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	6.5	No	Yes	Yes, Windows only	No	No

MBS("TAPI.SetNewCallEvaluate"; Expression)

Parameters**Expression**

The expression to evaluate. Can be in local language of FileMaker Pro or english. For Server must always be in english.

Result Returns OK or error.

Description

The \$\$ID\$\$ in evaluate is replaced with the reference number of the call as defined by our plugin. You can than use TAPI.CallInfo and other functions to query information.

See also

- 163.5 TAPI.CallInfo 7730
- 163.15 TAPI.GetNewCallEvaluate 7742

163.34.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 4th April 2018.

163.35 TAPI.SetNewCallScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	No	No	No

MBS("TAPI.SetNewCallScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

The parameter to your script will be the reference number of the call as defined by our plugin. You can than use TAPI.CallInfo and other functions to query information.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Set the script to trigger for new calls:

```
Set Variable [ $r; Value:MBS("TAPI.SetNewCallScript"; Get(Filename); "NewCallScript") ]
```

See also

- [163.5 TAPI.CallInfo](#) 7730
- [163.17 TAPI.GetNewCallScriptName](#) 7744

Example Databases

- [Win Only/TAPI/Tapi](#)

163.35.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr2](#)

Created 30th November 2014, last changed 25th November 2019.

163.36 TAPI.SetNewCallURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	6.5	No	Yes	Yes, Windows only	No	No

MBS("TAPI.SetNewCallURL"; URL)

Parameters

URL

The URL to trigger.

Result Returns OK or error.

Description

\$\$ID\$\$ in the URL is replaced with menu ID.

Queries http/ftp/sftp URLs with CURL, other URLs passed to OS to open.

See also

- 163.18 TAPI.GetNewCallURL

7745

163.36.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)

Created 11st October 2016, last changed 11st October 2016.

163.37 TAPI.Shutdown

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Shutdown")

Result Returns OK or error.

Description

This function frees all system resources allocated for TAPI.
Created 22nd October 2014, last changed 22nd October 2014.

163.38 TAPI.Transfer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	5.0	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Transfer"; Call; OtherCall; Sync)

Parameters

Call

The call reference number.

\$Call

OtherCall

The other call reference number. This is the consultation call created for the transfer.

\$Call2

Sync

Indicates whether the method should be completed synchronously (1) or asynchronously (0).

1

Result Returns OK or error.

Description

Call transfer involves setting up a consultation call in preparation for the transfer. Call2 is the identifier returned TAPI.CreateCall following the creation of a consultation call. TAPI.Finish (with AsTransfer) completes the transfer.

If the consultation call is not in the Connected state when Transfer is called, TAPI will use the destination address (as specified when the consultation call was first created via TAPI.CreateCall and try to connect at that time. If the original call had an empty destination address, Transfer will fail with error (invalid argument).

See also

- 163.7 TAPI.CreateCall 7733
- 163.10 TAPI.Finish 7737

163.38.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr3](#)

Created 3th December 2014, last changed 3th December 2014.

163.39 TAPI.Unpark

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
163 TAPI	4.4	No	Yes	Yes, Windows only	No	No

MBS("TAPI.Unpark"; Call)

Parameters

Call

The call reference number.

\$Call

Result Returns OK or error.

Description

Created 22nd October 2014, last changed 1st December 2014.

Chapter 164

Text

Functions for working with text.

164.1 Text.AddLineNumbers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	8.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.AddLineNumbers"; Text { ; StyleTemplate; Delimiter })

Parameters

Text

The text to process.

"Hello World"

StyleTemplate

Optional

The styled text to use as template for line numbers. We only use style for the nubers and text is ignored. If empty, this parameter is ignored.

TextFont("test"; "Courier"; "")

Delimiter

Optional

The optional delimiter. Default are two space characters.

": "

Result Returns text or error.

Description

Preserves the styles in the text and adds line numbers as prefix.

Depending on how many lines we have, we may use 2 to 6 digits for numbers.

Works fine for JSON, XML, JavaScript, HTML or any other text.

See also XML.Format & JSON.Format to format and XML.Colorize & JSON.Colorize for colors.

Examples

Format, colorize and apply line numbers:

```
MBS( "Text.AddLineNumbers";
// colorize it
MBS("JSON.Colorize";
// format before colorize
MBS( "JSON.Format"; JSON Input)
);
// define which style to use for numbers
TextColor (
TextFont ( " "; "Courier" );
RGB ( 0 ; 0 ; 255 )
)
)
```

See also

- [100.15 JSON.Colorize](#) 5261
- [100.39 JSON.Format](#) 5295
- [191.5 XML.Colorize](#) 9261
- [191.8 XML.Format](#) 9267

Example Databases

- [CURL/Amazon S3 Buckets](#)
- [JSON/JSON Colored](#)
- [Network/Bonjour](#)

164.1.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [MBS FileMaker Plugin, version 8.3pr1](#)
- [Colorize JSON or XML in FileMaker with line numbers](#)

Created 27th May 2018, last changed 5th July 2018.

164.2 Text.AppendTextFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.8	Yes	Yes	Yes	Yes	Yes

MBS("Text.AppendTextFile"; Text; FilePath { ; encoding })

(old name: String.AppendTextFile)

Parameters

Text

The text to save.

"Hello World"

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac.

"test.txt"

encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns "OK" or an error message.

Description

If the file does not exist, it will be created. You can use this function for logging to a text file.

Please use `Text.ReplaceNewline` to define which line endings the file has.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Write UTF-8 file with some text:

```
MBS("Text.AppendTextFile"; $Text; $Path; "utf8" )
```

Write a test text file:

```
MBS("Text.AppendTextFile"; "Hello World. Some umlauts: äöü"; "/Users/cs/Desktop/testfile.txt"; "native")
```

See also

- 44.1 BinaryFile.Append

- 79.11 FM.DataViewerContent 3897
- 88.15 HotKey.SetEvaluate 4848
- 121.2 Path.FileMakerPathToNativePath 6139
- 164.49 Text.ReadTextFile 7843
- 164.59 Text.ReplaceNewline 7857
- 164.68 Text.WriteTextFile 7871

164.2.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)

Created 18th August 2014, last changed 16th September 2016.

164.3 Text.CapitalCase

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.CapitalCase"; Text)

Parameters

Text

The text to process.

"hello WORLD"

Result Returns text or error.

Description

First letter of a word is made upper case, all others to lower case.

Often people enter in forms all kinds of upper/lower case letters and you may want to normalize using this function.

See also Text.UpperCase, Text.LowerCase and Text.RemoveAccents.

Examples

Fix HAMBURG:

MBS("Text.CapitalCase"; "HAMBURG")

MBS("Text.CapitalCase"; "HAMBurg")

Example result: Hamburg

Fix Schleswig-Holstein:

MBS("Text.CapitalCase"; "SCHLESWIG-HOLSTEIN")

Example result: Schleswig-Holstein

See also

- 164.45 Text.LowerCase 7838
- 164.52 Text.RemoveAccents 7849
- 164.67 Text.UpperCase 7870

Example Databases

- [Text functions/Change Letter Case](#)

164.3.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 10th March 2015, last changed 11st December 2016.

164.4 Text.Character

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.Character"; Character Number)

Parameters

Character Number

The unicode codepoint.

65

Result Returns OK or error.

Description

The FileMaker Char() function works only for unicode values up to 65535. This function works with higher values up to 2 billion.

See also Text.Code.

Examples

Test the function:

```
"Shows a musical symbol: " & char(119070) & " " & MBS("Text.Character"; 119070)
```

Example result: Shows a musical symbol:

Get smiley:

```
MBS("Text.Character"; 128512)
```

Example result:

Build country flag from country code:

```
MBS( "Text.Character"; 127397 + Code ( "D" )) & MBS( "Text.Character"; 127397 + Code ( "E" ))
```

Example result:

See also

- 164.5 Text.Characters 7775
- 164.6 Text.Code 7776
- 164.9 Text.ConvertUnicodeToCharacterComposition 7790
- 164.10 Text.ConvertUnicodeToCharacterDecomposition 7792

164.4.1 Blog Entries

- [Using Emojis in FileMaker](#)
- [MBS FileMaker Plugin, version 5.2pr2](#)
- [Just added functions](#)

Created 4th June 2015, last changed 17th September 2018.

164.5 Text.Characters

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.Characters"; Text)

Parameters

Text

The text to process.

"Hello"

Result Returns text or error.

Description

Similar to walking over all characters, getting the unicode code point for the character and return its number.

Examples

Get characters from Hello:

MBS("Text.Characters"; "Hello")

Example result: 72 101 108 108 111

See also

- 164.4 Text.Character 7773
- 164.9 Text.ConvertUnicodeToCharacterComposition 7790
- 164.10 Text.ConvertUnicodeToCharacterDecomposition 7792

Example Databases

- [Text functions/Unicode Compositions](#)

Created 3th August 2015, last changed 4th November 2019.

164.6 Text.Code

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.Code"; Char)

Parameters

Char

The text character to look at.
 ""

Result Returns OK or error.

Description

Returns the unicode code point. Compared to FileMaker's Code() function, this function does handle codes over 65535.

See also Text.Character.

Examples

Query code for a smiley:

```
MBS( "Text.Code"; "" )
```

Example result: 128512

See also

- 164.4 Text.Character

7773

164.6.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr2](#)
- [Just added functions](#)

Created 4th June 2015, last changed 11st December 2016.

164.7 Text.ConvertFromTextEncoding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	9.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.ConvertFromTextEncoding"; Text; Encoding)

Parameters

Text

The hex encoded text to convert.
"48656C6C6F209B9D"

Encoding

The source encoding.
"CP465"

Result Returns text or error.

Description

Returns text in unicode as FileMaker needs it.

As we use iconv library here, we can handle many more encodings than the standard FileMaker text functions used within the plugin.

Encoding list with alternative names:

- ANSI_X3.4-1968,ANSI_X3.4-1986,ASCII,CP367,IBM367,ISO-IR-6,ISO646-US,ISO_646.IRV:1991,US,US-ASCII,CSASCII
- UTF-8
- ISO-10646-UCS-2,UCS-2,CSUNICODE
- UCS-2BE,UNICODE-1-1,UNICODEBIG,CSUNICODE11
- UCS-2LE,UNICODELITTLE
- ISO-10646-UCS-4,UCS-4,CSUCS4
- UCS-4BE
- UCS-4LE
- UTF-16
- UTF-16BE
- UTF-16LE
- UTF-32

- UTF-32BE
- UTF-32LE
- UNICODE-1-1-UTF-7,UTF-7,CSUNICODE11UTF7
- UCS-2-INTERNAL
- UCS-2-SWAPPED
- UCS-4-INTERNAL
- UCS-4-SWAPPED
- C99
- JAVA
- CP819,IBM819,ISO-8859-1,ISO-IR-100,ISO8859-1,ISO_8859-1,ISO_8859-1:1987,L1,LATIN1,CSISOLATIN1
- ISO-8859-2,ISO-IR-101,ISO8859-2,ISO_8859-2,ISO_8859-2:1987,L2,LATIN2,CSISOLATIN2
- ISO-8859-3,ISO-IR-109,ISO8859-3,ISO_8859-3,ISO_8859-3:1988,L3,LATIN3,CSISOLATIN3
- ISO-8859-4,ISO-IR-110,ISO8859-4,ISO_8859-4,ISO_8859-4:1988,L4,LATIN4,CSISOLATIN4
- CYRILLIC,ISO-8859-5,ISO-IR-144,ISO8859-5,ISO_8859-5,ISO_8859-5:1988,CSISOLATINCYRILLIC
- ARABIC,ASMO-708,ECMA-114,ISO-8859-6,ISO-IR-127,ISO8859-6,ISO_8859-6,ISO_8859-6:1987,CSISOLATINARABIC
- ECMA-118,ELOT_928,GREEK,GREEK8,ISO-8859-7,ISO-IR-126,ISO8859-7,ISO_8859-7,ISO_8859-7:1987,ISO_8859-7:2003,CSISOLATINGREEK
- HEBREW,ISO-8859-8,ISO-IR-138,ISO8859-8,ISO_8859-8,ISO_8859-8:1988,CSISOLATINHEBREW
- ISO-8859-9,ISO-IR-148,ISO8859-9,ISO_8859-9,ISO_8859-9:1989,L5,LATIN5,CSISOLATIN5
- ISO-8859-10,ISO-IR-157,ISO8859-10,ISO_8859-10,ISO_8859-10:1992,L6,LATIN6,CSISOLATIN6
- ISO-8859-11,ISO8859-11,ISO_8859-11
- ISO-8859-13,ISO-IR-179,ISO8859-13,ISO_8859-13,L7,LATIN7
- ISO-8859-14,ISO-CELTIC,ISO-IR-199,ISO8859-14,ISO_8859-14,ISO_8859-14:1998,L8,LATIN8
- ISO-8859-15,ISO-IR-203,ISO8859-15,ISO_8859-15,ISO_8859-15:1998,LATIN-9
- ISO-8859-16,ISO-IR-226,ISO8859-16,ISO_8859-16,ISO_8859-16:2001,L10,LATIN10
- KOI8-R,CSKOI8R
- KOI8-U
- KOI8-RU
- CP1250,MS-EE,WINDOWS-1250
- CP1251,MS-CYRL,WINDOWS-1251

- CP1252,MS-ANSI,WINDOWS-1252
- CP1253,MS-GREEK,WINDOWS-1253
- CP1254,MS-TURK,WINDOWS-1254
- CP1255,MS-HEBR,WINDOWS-1255
- CP1256,MS-ARAB,WINDOWS-1256
- CP1257,WINBALTRIM,WINDOWS-1257
- CP1258,WINDOWS-1258
- 850,CP850,IBM850,CSPC850MULTILINGUAL
- 862,CP862,IBM862,CSPC862LATINHEBREW
- 866,CP866,IBM866,CSIBM866
- CP1131
- MAC,MACINTOSH,MACROMAN,CSMACINTOSH
- MACCENTRALEUROPE
- MACICELAND
- MACCROATIAN
- MACROMANIA
- MACCYRILLIC
- MACUKRAINE
- MACGREEK
- MACTURKISH
- MACHEBREW
- MACARABIC
- MACTHAI
- HP-ROMAN8,R8,ROMAN8,CSHPROMAN8
- NEXTSTEP
- ARMSII-8
- GEORGIAN-ACADEMY
- GEORGIAN-PS
- KOI8-T

- CP154,CYRILLIC-ASIAN,PT154,PTCP154,CSPTCP154
- KZ-1048,RK1048,STRK1048-2002,CSKZ1048
- MULELAO-1
- CP1133,IBM-CP1133
- ISO-IR-166,TIS-620,TIS620,TIS620-0,TIS620.2529-1,TIS620.2533-0,TIS620.2533-1
- CP874,WINDOWS-874
- VISCI,VISCI1.1-1,CSVISCI
- TCVN,TCVN-5712,TCVN5712-1,TCVN5712-1:1993
- ISO-IR-14,ISO646-JP,JIS_C6220-1969-RO,JP,CSISO14JISC6220RO
- JISX0201-1976,JIS_X0201,X0201,CSHALFWIDTHKATAKANA
- ISO-IR-87,JIS0208,JIS_C6226-1983,JIS_X0208,JIS_X0208-1983,JIS_X0208-1990,X0208,CSISO87JISX0208
- ISO-IR-159,JIS_X0212,JIS_X0212-1990,JIS_X0212.1990-0,X0212,CSISO159JISX02121990
- CN,GB_1988-80,ISO-IR-57,ISO646-CN,CSISO57GB1988
- CHINESE,GB_2312-80,ISO-IR-58,CSISO58GB231280
- CN-GB-ISOIR165,ISO-IR-165
- ISO-IR-149,KOREAN,KSC_5601,KS_C_5601-1987,KS_C_5601-1989,CSKSC56011987
- EUC-JP,EUCJP,EXTENDED_UNIX_CODE_PACKED_FORMAT_FOR_JAPANESE,CSEUCPKDFMTJAPANESE
- MS_KANJI,SHIFT-JIS,SHIFT_JIS,SJIS,CS SHIFTJIS
- CP932
- ISO-2022-JP,CSISO2022JP
- ISO-2022-JP-1
- ISO-2022-JP-2,CSISO2022JP2
- CP50221,ISO-2022-JP-MS
- CN-GB,EUC-CN,EUCCN,GB2312,CSGB2312
- GBK
- CP936,MS936,WINDOWS-936
- GB18030
- ISO-2022-CN,CSISO2022CN
- ISO-2022-CN-EXT

- HZ,HZ-GB-2312
- EUC-TW,EUCTW,CSEUCTW
- BIG-5,BIG-FIVE,BIG5,BIGFIVE,CN-BIG5,CSBIG5
- CP950
- BIG5-HKSCS:1999
- BIG5-HKSCS:2001
- BIG5-HKSCS:2004
- BIG5-HKSCS,BIG5-HKSCS:2008,BIG5HKSCS
- EUC-KR,EUCKR,CSEUCKR
- CP949,UHC
- CP1361,JOHAB
- ISO-2022-KR,CSISO2022KR
- CP856
- CP922
- CP943
- CP1046
- CP1124
- CP1129
- CP1161,IBM-1161,IBM1161,CSIBM1161
- CP1162,IBM-1162,IBM1162,CSIBM1162
- CP1163,IBM-1163,IBM1163,CSIBM1163
- DEC-KANJI
- DEC-HANYU
- 437,CP437,IBM437,CSPC8CODEPAGE437
- CP737
- CP775,IBM775,CSPC775BALTIC
- 852,CP852,IBM852,CSPCP852
- CP853
- 855,CP855,IBM855,CSIBM855

- 857,CP857,IBM857,CSIBM857
- CP858
- 860,CP860,IBM860,CSIBM860
- 861,CP-IS,CP861,IBM861,CSIBM861
- 863,CP863,IBM863,CSIBM863
- CP864,IBM864,CSIBM864
- 865,CP865,IBM865,CSIBM865
- 869,CP-GR,CP869,IBM869,CSIBM869
- CP1125
- EUC-JIS-2004,EUC-JISX0213
- SHIFT_JIS-2004,SHIFT_JISX0213
- ISO-2022-JP-2004,ISO-2022-JP-3
- BIG5-2003
- ISO-IR-230,TDS565
- ATARI,ATARIST
- RISCOS-LATIN1

See also `Text.ConvertToTextEncoding` function.

Examples

Convert from nordic:

```
MBS( "Text.ConvertFromTextEncoding"; "48656C6C6F209B9D"; "CP865" )
```

Example result: "Hello øØ"

See also

- 164.8 `Text.ConvertToTextEncoding`

7783

164.7.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [Neues MBS FileMaker Plugin 9.4](#)
- [MBS FileMaker Plugin 9.4 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.4pr2](#)
- [More Text Encoding conversion for FileMaker](#)

Created 13th August 2019, last changed 13th August 2019.

164.8 Text.ConvertToTextEncoding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	9.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.ConvertToTextEncoding"; Text; Encoding)

Parameters

Text

The text to convert.

"Hello World"

Encoding

The desired encoding. Maybe appended by //TRANSLIT or //IGNORE to reduce number of errors.

"UTF8//TRANSLIT"

Result Returns hex text or error.

Description

Returns text in hex encoded bytes.

As we use iconv library here, we can handle many more encodings than the standard FileMaker text functions used within the plugin.

If the string //IGNORE is appended to to-encoding, characters that cannot be converted are discarded and an error is printed after conversion.

If the string //TRANSLIT is appended to to-encoding, characters being converted are transliterated when needed and possible. This means that when a character cannot be represented in the target character set, it can be approximated through one or several similar looking characters. Characters that are outside of the target character set and cannot be transliterated are replaced with a question mark (?) in the output.

Encoding list with alternative names:

- ANSI_X3.4-1968,ANSI_X3.4-1986,ASCII,CP367,IBM367,ISO-IR-6,ISO646-US,ISO_646.IRV:1991,US,US-ASCII,CSASCII
- UTF-8
- ISO-10646-UCS-2,UCS-2,CSUNICODE
- UCS-2BE,UNICODE-1-1,UNICODEBIG,CSUNICODE11
- UCS-2LE,UNICODELITTLE
- ISO-10646-UCS-4,UCS-4,CSUCS4
- UCS-4BE

- UCS-4LE
- UTF-16
- UTF-16BE
- UTF-16LE
- UTF-32
- UTF-32BE
- UTF-32LE
- UNICODE-1-1-UTF-7,UTF-7,CSUNICODE11UTF7
- UCS-2-INTERNAL
- UCS-2-SWAPPED
- UCS-4-INTERNAL
- UCS-4-SWAPPED
- C99
- JAVA
- CP819,IBM819,ISO-8859-1,ISO-IR-100,ISO8859-1,ISO_8859-1,ISO_8859-1:1987,L1,LATIN1,CSISOLATIN1
- ISO-8859-2,ISO-IR-101,ISO8859-2,ISO_8859-2,ISO_8859-2:1987,L2,LATIN2,CSISOLATIN2
- ISO-8859-3,ISO-IR-109,ISO8859-3,ISO_8859-3,ISO_8859-3:1988,L3,LATIN3,CSISOLATIN3
- ISO-8859-4,ISO-IR-110,ISO8859-4,ISO_8859-4,ISO_8859-4:1988,L4,LATIN4,CSISOLATIN4
- CYRILLIC,ISO-8859-5,ISO-IR-144,ISO8859-5,ISO_8859-5,ISO_8859-5:1988,CSISOLATINCYRILLIC
- ARABIC,ASMO-708,ECMA-114,ISO-8859-6,ISO-IR-127,ISO8859-6,ISO_8859-6,ISO_8859-6:1987,CSISOLATINARABIC
- ECMA-118,ELOT_928,GREEK,GREEK8,ISO-8859-7,ISO-IR-126,ISO8859-7,ISO_8859-7,ISO_8859-7:1987,ISO_8859-7:2003,CSISOLATINGREEK
- HEBREW,ISO-8859-8,ISO-IR-138,ISO8859-8,ISO_8859-8,ISO_8859-8:1988,CSISOLATINHEBREW
- ISO-8859-9,ISO-IR-148,ISO8859-9,ISO_8859-9,ISO_8859-9:1989,L5,LATIN5,CSISOLATIN5
- ISO-8859-10,ISO-IR-157,ISO8859-10,ISO_8859-10,ISO_8859-10:1992,L6,LATIN6,CSISOLATIN6
- ISO-8859-11,ISO8859-11,ISO_8859-11
- ISO-8859-13,ISO-IR-179,ISO8859-13,ISO_8859-13,L7,LATIN7
- ISO-8859-14,ISO-CELTIC,ISO-IR-199,ISO8859-14,ISO_8859-14,ISO_8859-14:1998,L8,LATIN8
- ISO-8859-15,ISO-IR-203,ISO8859-15,ISO_8859-15,ISO_8859-15:1998,LATIN-9
- ISO-8859-16,ISO-IR-226,ISO8859-16,ISO_8859-16,ISO_8859-16:2001,L10,LATIN10

- KOI8-R,CSKOI8R
- KOI8-U
- KOI8-RU
- CP1250,MS-EE,WINDOWS-1250
- CP1251,MS-CYRL,WINDOWS-1251
- CP1252,MS-ANSI,WINDOWS-1252
- CP1253,MS-GREEK,WINDOWS-1253
- CP1254,MS-TURK,WINDOWS-1254
- CP1255,MS-HEBR,WINDOWS-1255
- CP1256,MS-ARAB,WINDOWS-1256
- CP1257,WINBALTRIM,WINDOWS-1257
- CP1258,WINDOWS-1258
- 850,CP850,IBM850,CSPC850MULTILINGUAL
- 862,CP862,IBM862,CSPC862LATINHEBREW
- 866,CP866,IBM866,CSIBM866
- CP1131
- MAC,MACINTOSH,MACROMAN,CSMACINTOSH
- MACCENTRALEUROPE
- MACICELAND
- MACCROATIAN
- MACROMANIA
- MACCYRILLIC
- MACUKRAINE
- MACGREEK
- MACTURKISH
- MACHEBREW
- MACARABIC
- MACTHAI
- HP-ROMAN8,R8,ROMAN8,CSHPROMAN8

- NEXTSTEP
- ARMSCH-8
- GEORGIAN-ACADEMY
- GEORGIAN-PS
- KOI8-T
- CP154,CYRILLIC-ASIAN,PT154,PTCP154,CSPTCP154
- KZ-1048,RK1048,STRK1048-2002,CSKZ1048
- MULELAO-1
- CP1133,IBM-CP1133
- ISO-IR-166,TIS-620,TIS620,TIS620-0,TIS620.2529-1,TIS620.2533-0,TIS620.2533-1
- CP874,WINDOWS-874
- VISCII,VISCII1.1-1,CSVISCII
- TCVN,TCVN-5712,TCVN5712-1,TCVN5712-1:1993
- ISO-IR-14,ISO646-JP,JIS_C6220-1969-RO,JP,CSISO14JISC6220RO
- JISX0201-1976,JIS_X0201,X0201,CSHALFWIDTHKATAKANA
- ISO-IR-87,JIS0208,JIS_C6226-1983,JIS_X0208,JIS_X0208-1983,JIS_X0208-1990,X0208,CSISO87JISX0208
- ISO-IR-159,JIS_X0212,JIS_X0212-1990,JIS_X0212.1990-0,X0212,CSISO159JISX02121990
- CN,GB_1988-80,ISO-IR-57,ISO646-CN,CSISO57GB1988
- CHINESE,GB_2312-80,ISO-IR-58,CSISO58GB231280
- CN-GB-ISOIR165,ISO-IR-165
- ISO-IR-149,KOREAN,KSC_5601,KS_C_5601-1987,KS_C_5601-1989,CSKSC56011987
- EUC-JP,EUCJP,EXTENDED_UNIX_CODE_PACKED_FORMAT_FOR_JAPANESE,CSEUCPKDFMTJAPANESE
- MS_KANJI,SHIFT-JIS,SHIFT_JIS,SJIS,CSHIFTJIS
- CP932
- ISO-2022-JP,CSISO2022JP
- ISO-2022-JP-1
- ISO-2022-JP-2,CSISO2022JP2
- CP50221,ISO-2022-JP-MS
- CN-GB,EUC-CN,EUCCN,GB2312,CSGB2312

- GBK
- CP936,MS936,WINDOWS-936
- GB18030
- ISO-2022-CN,CSISO2022CN
- ISO-2022-CN-EXT
- HZ,HZ-GB-2312
- EUC-TW,EUCTW,CSEUCTW
- BIG-5,BIG-FIVE,BIG5,BIGFIVE,CN-BIG5,CSBIG5
- CP950
- BIG5-HKSCS:1999
- BIG5-HKSCS:2001
- BIG5-HKSCS:2004
- BIG5-HKSCS,BIG5-HKSCS:2008,BIG5HKSCS
- EUC-KR,EUCKR,CSEUCKR
- CP949,UHC
- CP1361,JOHAB
- ISO-2022-KR,CSISO2022KR
- CP856
- CP922
- CP943
- CP1046
- CP1124
- CP1129
- CP1161,IBM-1161,IBM1161,CSIBM1161
- CP1162,IBM-1162,IBM1162,CSIBM1162
- CP1163,IBM-1163,IBM1163,CSIBM1163
- DEC-KANJI
- DEC-HANYU
- 437,CP437,IBM437,CSPC8CODEPAGE437

- CP737
- CP775,IBM775,CSPC775BALTIC
- 852,CP852,IBM852,CSPCP852
- CP853
- 855,CP855,IBM855,CSIBM855
- 857,CP857,IBM857,CSIBM857
- CP858
- 860,CP860,IBM860,CSIBM860
- 861,CP-IS,CP861,IBM861,CSIBM861
- 863,CP863,IBM863,CSIBM863
- CP864,IBM864,CSIBM864
- 865,CP865,IBM865,CSIBM865
- 869,CP-GR,CP869,IBM869,CSIBM869
- CP1125
- EUC-JIS-2004,EUC-JISX0213
- SHIFT_JIS-2004,SHIFT_JISX0213
- ISO-2022-JP-2004,ISO-2022-JP-3
- BIG5-2003
- ISO-IR-230,TDS565
- ATARI,ATARIST
- RISCOS-LATIN1

See also `Text.ConvertFromTextEncoding` function.

Examples

Encode and decode to check:

```
HexDecode( MBS( "Text.ConvertToTextEncoding"; "Hello World äöü"; "UTF-8" ))
```

Example result: "Hello World äöü"

Convert to CP1252 and back:

```
MBS( "Text.DecodeFromHex"; MBS( "Text.ConvertToTextEncoding"; "Hello World äöü"; "CP1252" );  
"Windows")
```


Example result: "Hello World äöü"

Convert to PC865 (Nordic):

MBS("Text.ConvertToTextEncoding"; "Hello øØ"; "CP865")

Example result: "48656C6C6F209B9D"

See also

- [164.7 Text.ConvertFromTextEncoding](#) 7777
- [164.17 Text.DecodeFromHex](#) 7800

164.8.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [Neues MBS FileMaker Plugin 9.4](#)
- [MBS FileMaker Plugin 9.4 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.4pr2](#)
- [More Text Encoding conversion for FileMaker](#)

Created 13th August 2019, last changed 13th August 2019.

164.9 Text.ConvertUnicodeToCharacterComposition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.ConvertUnicodeToCharacterComposition"; Text)

Parameters

Text

The text to process.

"Hello"

Result Returns text or error.

Description

This function replaces character represented by decomposed representation with the composed representation.

see also

https://en.wikipedia.org/wiki/Unicode_equivalence

Examples

Test function:

```
# some text
Set Variable [ $text; Value:"ä ö ü" ]
# now make decomposed
Set Variable [ $decomposedText; Value:MBS("Text.ConvertUnicodeToCharacterDecomposition"; $text) ]
# and composed again
Set Variable [ $composedText; Value:MBS("Text.ConvertUnicodeToCharacterComposition"; $decomposed-
Text) ]
# Now show results. See the 776 for the Diaeresis?
Show Custom Dialog [ "Result"; $text & " " & MBS("Text.Characters"; $text) & $& $decomposedText &
" " & MBS("Text.Characters..." ]
```

Test character composition with ä and Char function:

```
MBS("Text.Characters"; MBS( "Text.ConvertUnicodeToCharacterComposition"; Char(97) & Char(776) ))
```

Example result: 228

See also

- 122.19 PDFKit.GetPDFPageText 6184
- 164.4 Text.Character 7773
- 164.5 Text.Characters 7775

164.9. *TEXT.CONVERTUNICODETOCHARACTERCOMPOSITION*

7791

- 164.10 Text.ConvertUnicodeToCharacterDecomposition

7792

Example Databases

- [Text functions/Unicode Compositions](#)

164.9.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr4](#)

Created 3th August 2015, last changed 14th February 2020.

164.10 Text.ConvertUnicodeToCharacterDecomposition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.ConvertUnicodeToCharacterDecomposition"; Text)

Parameters

Text

The text to process.

"Hello"

Result Returns text or error.

Description

This function replaces character represented by one unicode character by the decomposed variant.

see also

https://en.wikipedia.org/wiki/Unicode_equivalence

Examples

Test function with ä:

```
MBS("Text.Characters"; MBS( "Text.ConvertUnicodeToCharacterComposition"; "ä" ))
```

Test with ä as 228:

```
MBS("Text.Characters"; MBS( "Text.ConvertUnicodeToCharacterDecomposition"; Char(228) ))
```

Example result: 97 776

See also

- 164.4 Text.Character 7773
- 164.5 Text.Characters 7775
- 164.9 Text.ConvertUnicodeToCharacterComposition 7790

Example Databases

- [Text functions/Unicode Compositions](#)

Created 3th August 2015, last changed 14th February 2020.

164.11 Text.CountWords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	8.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.CountWords"; Text)

Parameters

Text

The text to count words.

"Hello World Hello"

Result Returns list or error.

Description

We split the text into words and then count for each how often it happens.

The result contains count, tab and the word and is not sorted.

Examples

Count words:

MBS("Text.CountWords"; "Hello World Hello")

Example result: 1 World

2 Hello

Works with umlauts:

MBS("Text.CountWords"; "ä ö ü ä ö ö ö ß ß")

Example result: 2 ß

2 ä

5 ö

1 ü

See also

- 164.44 Text.ListWords

7837

Example Databases

- [Text functions/Word Count functions](#)

164.11.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr2](#)

Created 5th February 2018, last changed 9th February 2020.

164.12 Text.DecodeBytesFromBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeBytesFromBase64"; text)

(old name: String.DecodeBytesFromBase64)

Parameters

text

The text to process.

"QUJD"

Result Returns byte values text.

Description

See also

- 164.13 Text.DecodeFromBase64 7795
- 164.21 Text.DecodeHexFromBase64 7806
- 164.25 Text.EncodeBytesToBase64 7810

Created 18th August 2014, last changed 18th April 2016.

164.13 Text.DecodeFromBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeFromBase64"; text { ; encoding })

(old name: String.DecodeFromBase64)

Parameters

text

The text to process.

"R3LDvMOfEdvdHQulFRlc3Qg4pi6"

encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

Result Returns decoded text.

Description

This is for text only. Data encoded as base64 would probably be truncated as FileMaker texts do not contain NULL bytes.

Examples

Decode Base64 as UTF-8:

MBS("Text.DecodeFromBase64"; "R3LDvMOfEdvdHQulFRlc3Qg4pi6"; "utf8")

Example result: "Grüß Gott. Test "

See also

- 86.12 Hash.SHA256.HMAC 4809
- 164.12 Text.DecodeBytesFromBase64 7794
- 164.14 Text.DecodeFromBase64URL 7796
- 164.15 Text.DecodeFromBytes 7797
- 164.17 Text.DecodeFromHex 7800
- 164.21 Text.DecodeHexFromBase64 7806
- 164.28 Text.EncodeToBase64 7813
- 164.29 Text.EncodeToBase64URL 7814

Created 18th August 2014, last changed 11st December 2016.

164.14 Text.DecodeFromBase64URL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	7.5	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeFromBase64URL"; text { ; encoding })

Parameters

text

The text to process.

"R3LDvMOflEdvdHQulFRlc3Qg4pi6"

encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

Result Returns decoded text.

Description

This is for text only. Data encoded as base64 would probably be truncated as FileMaker texts do not contain NULL bytes.

Examples

Decode Base64 as UTF-8:

MBS("Text.DecodeFromBase64"; "SGVsbG8gV29ybGQ"; "utf8")

See also

- 164.13 Text.DecodeFromBase64 7795
- 164.21 Text.DecodeHexFromBase64 7806
- 164.29 Text.EncodeToBase64URL 7814

Created 21st October 2017, last changed 21st October 2017.

164.15 Text.DecodeFromBytes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeFromBytes"; text { ; Encoding })

(old name: String.DecodeFromBytes)

Parameters

text

The text to process.

"65 66 67"

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

Result Returns decoded text.

Description

A byte string here is a text string with byte numbers like this: "65 66 67" which as text would be "ABC".

Examples

Decode Hex as UTF-8:

MBS("Text.DecodeFromBytes"; "65 66 67"; "utf8")

Example result: "ABC"

See also

- 164.13 Text.DecodeFromBase64 7795
- 164.17 Text.DecodeFromHex 7800
- 164.16 Text.DecodeFromHTML 7798
- 164.19 Text.DecodeFromURL 7803
- 164.20 Text.DecodeFromXML 7805
- 164.30 Text.EncodeToBytes 7816

164.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr4](#)

Created 18th August 2014, last changed 11st December 2016.

164.16 Text.DecodeFromHTML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeFromHTML"; text { ; Options })

(old name: String.DecodeFromHTML)

Parameters

text

The text you want to decode.

"Gr& uuml;& szlig;e"

Options

Optional

Pass 1 to leave XML escapes unchanged.

0

Result The decoded text.

Description

Removes escaping for special characters. e.g. converts "& uuml;" to "ü".

Examples

Decode html text

MBS("Text.DecodeFromHTML"; "Gr& uuml;& szlig;e")

Example result: GrüÙe

Decode html entities, but leave xml entities unchanged:

MBS("Text.DecodeFromHTML"; "<test>& auml;& amp;& lt;</test>"; 1)

Example result: "<test>ä& amp;& lt;</test>"

See also

- 72.8 EmailParser.HTMLToPlainText 3415
- 164.15 Text.DecodeFromBytes 7797
- 164.17 Text.DecodeFromHex 7800
- 164.19 Text.DecodeFromURL 7803
- 164.20 Text.DecodeFromXML 7805
- 164.31 Text.EncodeToHTML 7817

Example Databases

- [Text functions/HTML Conversion with UTF32](#)

164.16.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr6](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS FileMaker Plugin, version 5.0pr7](#)

Created 18th August 2014, last changed 11st December 2016.

164.17 Text.DecodeFromHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeFromHex"; text { ; Encoding })

(old name: String.DecodeFromHex)

Parameters

text

The text to process.

"48656C6C6F20576F726C64"

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

Result Returns decoded text.

Description

Examples

Decode Hex as UTF-8:

MBS("Text.DecodeFromHex"; "48656C6C6F20576F726C64"; "utf8")

Example result: Hello World

Fix encoding of a string:

MBS("Text.DecodeFromHex"; MBS("Text.EncodeToHex"; "<string>Eine M/|bel-Handelsgesellschaft m.b.H</string>"; "Native"); "UTF-8")

Example result: <string>Eine Möbel-Handelsgesellschaft m.b.H</string>

See also

- 154.11 Socket.Connect 7197
- 154.70 Socket.WriteHex 7272
- 164.8 Text.ConvertToTextEncoding 7783
- 164.13 Text.DecodeFromBase64 7795
- 164.15 Text.DecodeFromBytes 7797
- 164.16 Text.DecodeFromHTML 7798

<i>164.17. TEXT.DECODEFROMHEX</i>	7801
• 164.19 Text.DecodeFromURL	7803
• 164.20 Text.DecodeFromXML	7805
• 164.32 Text.EncodeToHex	7819

Example Databases

- [Text functions/Repair Text Encoding Problems](#)

164.17.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 18th August 2014, last changed 11st December 2016.

164.18 Text.DecodeFromQuotedPrintable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeFromQuotedPrintable"; Text { ; Encoding })

(old name: String.DecodeFromQuotedPrintable)

Parameters

Text

The text to decode.

Encoding

Optional

The text encoding for result. Default is native.

"UTF-8"

Result Returns OK or error.

Description

Examples

Decode Wünsche:

```
MBS( "Text.DecodeFromQuotedPrintable"; "W=C3=BCnsche"; "UTF8")
```

Example result: Wünsche

See also

- 164.33 Text.EncodeToQuotedPrintable

7821

Created 3th September 2014, last changed 11st December 2016.

164.19 Text.DecodeFromURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.6	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeFromURL"; text { ; Encoding })

(old name: String.DecodeFromURL)

Parameters

text

The text to process.

"Hello+% C3% B6% C3% A4% C3% BC"

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

"UTF-8"

Result Returns decoded text.

Description

This function should work the same as PHP's urldecode function.

Examples

Decode URL as UTF-8:

```
MBS( "Text.DecodeFromURL"; "Hello+World"; "utf8" )
```

Example result: Hello World

Encode and Decode with umlauts and UTF-8:

```
$v = "Hello öäü"
```

```
$e = MBS( "Text.EncodeToURL"; "$v; "utf8" )
```

```
# e has now value "Hello+% C3% B6% C3% A4% C3% BC"
```

```
$d = MBS( "Text.DecodeFromURL"; $e; "utf8" )
```

```
# d has now value "Hello öäü"
```

See also

- 164.15 Text.DecodeFromBytes 7797
- 164.17 Text.DecodeFromHex 7800
- 164.16 Text.DecodeFromHTML 7798
- 164.20 Text.DecodeFromXML 7805
- 164.34 Text.EncodeToURL 7822

164.20 Text.DecodeFromXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeFromXML"; text)

(old name: String.DecodeFromXML)

Parameters

text

The text you want to decode.

"test & lt; this"

Result The decoded text.

Description

Removes escaping for special characters.

Examples

Decode xml text

MBS("Text.DecodeFromXML"; "test & lt; this")

Example result: test <this

See also

- 164.15 Text.DecodeFromBytes 7797
- 164.17 Text.DecodeFromHex 7800
- 164.16 Text.DecodeFromHTML 7798
- 164.19 Text.DecodeFromURL 7803
- 191.26 XML.Query 9293

164.20.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

164.20.2 FileMaker Magazin

- Ausgabe 4/2016, Seite 19

Created 18th August 2014, last changed 11st December 2016.

164.21 Text.DecodeHexFromBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeHexFromBase64"; text)

(old name: String.DecodeHexFromBase64)

Parameters

text

The text to process.

"QUJD"

Result Returns hex encoded text.

Description

See also

- 164.12 Text.DecodeBytesFromBase64 7794
- 164.13 Text.DecodeFromBase64 7795
- 164.14 Text.DecodeFromBase64URL 7796
- 164.27 Text.EncodeHexToBase64 7812

Created 18th August 2014, last changed 18th April 2016.

164.22 Text.DecodeIMAPFolderName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	9.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeIMAPFolderName"; Text)

Parameters

Text

The text in IMAP's modified UTF-7 encoding.
"Test& AOk-"

Result Returns OK or error.

Description

Use this for IMAP folder names to decode the name and show to user.

Examples

Decode Entwürfe:

MBS("Text.DecodeIMAPFolder"; "Entw& APw-rfe")

Example result: "Entwürfe"

Decode Testé&

MBS("Text.DecodeIMAPFolder"; "Test& AOk-& -")

Example result: "Testé& "

Decode path with chinese characters:

MBS("Text.DecodeIMAPFolder"; "~peter/mail/& ZeVnLIqe-/& U,BTFw-")

Example result: "~peter/mail//"

164.22.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 18th March 2019, last changed 18th March 2019.

164.23 Text.DecodeURLComponent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.DecodeURLComponent"; text)

(old name: String.DecodeURLComponent)

Parameters

text

The text to decode.

\$URL

Result Returns encoded string.

Description

Examples

Decode an URL:

```
MBS("Text.DecodeURLComponent"; "http% 3A% 2F% 2Fwww% 2Embsplugins% 2Ede")
```

Example result: <http://www.mbsplugins.de>

See also

- 164.36 Text.EncodeURLComponent

7826

Created 18th August 2014, last changed 11st December 2016.

164.24 Text.Deserialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.Deserialize"; Text)

Parameters

Text

The serialized data as text.

Result Returns text or error.

Description

See also

- 103.11 List.Deserialize 5432
- 164.60 Text.Serialize 7860

164.24.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 28th October 2015, last changed 28th October 2015.

164.25 Text.EncodeBytesToBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeBytesToBase64"; text)

(old name: String.EncodeBytesToBase64)

Parameters

text

The text to process.

"65 66 67"

Result Returns base64 encoded text.

Description

Examples

Encode ABC:

MBS("Text.EncodeBytesToBase64"; "65 66 67")

Example result: QUJD

See also

- 164.12 Text.DecodeBytesFromBase64 7794
- 164.27 Text.EncodeHexToBase64 7812
- 164.28 Text.EncodeToBase64 7813

Created 18th August 2014, last changed 11st December 2016.

164.26 Text.EncodeEmailSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeEmailSubject"; Text)

(old name: String.EncodeEmailSubject)

Parameters

Text

The text to encode.

"Hello World äöü"

Result Returns email subject text.

Description

Text is encoded with UTF-8 Quoted Printable encoding.

If text does not need to be encoded (pure ASCII), we return the input text.

Examples

Encode a text which does not need encoding:

MBS("Text.EncodeEmailSubject"; "Hello World")

Example result: Hello World

Encodes a text with umlauts:

MBS("Text.EncodeEmailSubject"; "Hello äöü")

Example result: "=?UTF-8?Q?Hello_=C3=A4=C3=B6=C3=BC?="

Created 18th August 2014, last changed 16th February 2018.

164.27 Text.EncodeHexToBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeHexToBase64"; text)

(old name: String.EncodeHexToBase64)

Parameters

text

The text to process.

"414243"

Result Returns base64 encoded text.

Description

See also

- 164.21 Text.DecodeHexFromBase64 7806
- 164.25 Text.EncodeBytesToBase64 7810
- 164.28 Text.EncodeToBase64 7813
- 164.29 Text.EncodeToBase64URL 7814

Example Databases

- [Encryption and Hash/Certificate Info](#)

Created 18th August 2014, last changed 18th April 2016.

164.28 Text.EncodeToBase64

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeToBase64"; text { ; encoding })

(old name: String.EncodeToBase64)

Parameters

text

The text to process.

"Hello World"

encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns encoded text.

Description

Please check what text encoding you want to use. Especially what the software processing the base64 string expects.

Examples

Encode Base64 as UTF-8:

MBS("Text.EncodeToBase64"; "Hello World"; "utf8")

Example result: "SGVsbG8gV29ybGQ="

See also

- 86.12 Hash.SHA256.HMAC 4809
- 164.13 Text.DecodeFromBase64 7795
- 164.25 Text.EncodeBytesToBase64 7810
- 164.27 Text.EncodeHexToBase64 7812
- 164.29 Text.EncodeToBase64URL 7814
- 164.30 Text.EncodeToBytes 7816

Example Databases

- [WebView/WebView link targets](#)

Created 18th August 2014, last changed 11st December 2016.

164.29 Text.EncodeToBase64URL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	7.5	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeToBase64URL"; text { ; encoding })

Parameters

text

The text to process.

"Hello World"

encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns encoded text.

Description

Please check what text encoding you want to use. Especially what the software processing the base64 string expects.

Similar to normal Base64, but + replaced by - and / by _ and the = on the end are omitted.

Examples

Encode Base64 as UTF-8:

```
MBS( "Text.EncodeToBase64URL"; "Hello World"; "utf8" )
```

Example result: "SGVsbG8gV29ybGQ"

Encode with/without URL option:

```
MBS( "Text.EncodeToBase64URL"; "Hello World? öäü"; "UTF-8" ) & §&
```

```
MBS( "Text.EncodeToBase64"; "Hello World? öäü"; "UTF-8" )
```

Calculate a JSON Web Token (JWT) in FileMaker:

```
// Header: { \alg\":"HS256\","typ\":"JWT\ " }
// Payload: { "iss":"scotch.io","exp":1300819380,"name":"Chris Sevilleja","admin":true }
```

```
// expected result: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJsb2dnZWV29ybGQ"
raSYS8EXBxLN_oWnFSRgCzcm.JmMjLiuy5CSpyHI
```

```
Let ( [
```

```
secret = "secretkey";
```

```
header = " { \alg\":"HS256\","typ\":"JWT\ " } ";
```

```
payload = " { \loggedInAs\":"admin\","iat\":"1422779638 } ";
```

```
encodedString = MBS( "Text.EncodeToBase64URL"; header; "UTF-8") & " " & MBS( "Text.EncodeTo-
```

```
Base64URL"; payload; "UTF-8");  
// calculate hash  
hash = MBS( "Hash.SHA256.HMAC"; secret; encodedString; 1 );  
// transcode from Base64 to Base64 URL:  
hash = MBS( "Text.EncodeToBase64URL"; MBS( "Text.DecodeFromBase64"; hash; "Windows" ); "Win-  
dows" );  
// and built final result:  
result = MBS( "Text.EncodeToBase64URL"; header; "UTF-8" ) & "." & MBS( "Text.EncodeToBase64URL";  
payload; "UTF-8" ) & "." & hash  
]; result )
```

See also

- 86.11 Hash.SHA256 4807
- 86.12 Hash.SHA256.HMAC 4809
- 164.13 Text.DecodeFromBase64 7795
- 164.14 Text.DecodeFromBase64URL 7796
- 164.27 Text.EncodeHexToBase64 7812
- 164.28 Text.EncodeToBase64 7813

Created 21st October 2017, last changed 1st February 2020.

164.30 Text.EncodeToBytes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeToBytes"; text { ; Encoding })

(old name: String.EncodeToBytes)

Parameters

text

The text to process.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns encoded text.

Description

Please check what text encoding you want to use. Especially what the software processing the hex string expects.

A byte string here is a text string with byte numbers like this: "65 66 67" which as text would be "ABC".

Examples

Encode bytes as UTF-8:

MBS("Text.EncodeToBytes"; "Hello World"; "utf8")

Example result: "72 101 108 108 111 32 87 111 114 108 100"

See also

- 164.15 Text.DecodeFromBytes 7797
- 164.28 Text.EncodeToBase64 7813
- 164.32 Text.EncodeToHex 7819
- 164.31 Text.EncodeToHTML 7817

Created 18th August 2014, last changed 11st December 2016.

164.31 Text.EncodeToHTML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeToHTML"; text { ; mode })

(old name: String.EncodeToHTML)

Parameters

text

The text you want to encode.

"Grüße"

mode

Optional

Default 0 for using named entities. Pass 1 for decimal and 2 for hex encoded numbers instead. Add 8 to encode all characters (new in plugin version 8.4)

0

Result The encoded text.

Description

All special and unicode characters are escaped.

Lower ASCII control characters are ignored.

You may want to use Text.ReplaceNewline after this function to replace new line characters with
(mode 4) or
(mode 5).

Examples

Encode text as html

MBS("Text.EncodeToHTML"; "Grüße")

Example result: "Gr& uuml;& szlig;e"

Encode smileys:

MBS("Text.EncodeToHTML"; "")

Example result: "& # 128512;& # 128513;& # 128514;& # 128515;"

Encode ä three ways:

MBS("Text.EncodeToHTML"; "ä"; 0) & §&

MBS("Text.EncodeToHTML"; "ä"; 1) & §&

MBS("Text.EncodeToHTML"; "ä"; 2)

Encode normal and all with decimal or hexadecimal:

```
MBS("Text.EncodeToHTML"; "Hello World ä"; 0) & §&
MBS("Text.EncodeToHTML"; "Hello World ä"; 8) & §&
MBS("Text.EncodeToHTML"; "Hello World ä"; 8+2)
```

Example result: "Hello World & auml;

```
& # 72;& # 101;& # 108;& # 108;& # 111;& # 32;& # 87;& # 111;& # 114;& # 108;& # 100;& # 32;& auml;
& # x48;& # x65;& # x6c;& # x6c;& # x6f;& # x20;& # x57;& # x6f;& # x72;& # x6c;& # x64;& # x20;& #
xe4;"
```

See also

- [143.28 SendMail.SetHTMLText](#) 6915
- [164.16 Text.DecodeFromHTML](#) 7798
- [164.30 Text.EncodeToBytes](#) 7816
- [164.32 Text.EncodeToHex](#) 7819
- [164.34 Text.EncodeToURL](#) 7822
- [164.35 Text.EncodeToXML](#) 7824
- [164.59 Text.ReplaceNewline](#) 7857
- [164.64 Text.TextToHTML](#) 7865

Example Databases

- [CURL/Email/Batch Emailer](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)
- [CURL/Email/IMAP Email](#)
- [Text functions/HTML Conversion with UTF32](#)
- [WebView/Text To WebView](#)

164.31.1 Blog Entries

- [Text to Webviewer Script for FileMaker](#)
- [Smileys and UTF32](#)
- [MBS FileMaker Plugin, version 8.4pr8](#)
- [MBS FileMaker Plugin, version 7.2pr6](#)
- [MBS FileMaker Plugin, version 5.1pr5](#)
- [MBS FileMaker Plugin, version 5.0pr7](#)

Created 18th August 2014, last changed 13th September 2018.

164.32 Text.EncodeToHex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeToHex"; text { ; Encoding })

(old name: String.EncodeToHex)

Parameters

text

The text to process.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns encoded text.

Description

Please check what text encoding you want to use. Especially what the software processing the hex string expects.

Similar to HexEncode function in FileMaker 16, but we can specify text encoding. For containers see Container.GetHex and Container.DecodeFromHex.

Examples

Encode Hex as UTF-8:

MBS("Text.EncodeToHex"; "Hello World"; "utf8")

Example result: 48656C6C6F20576F726C64

Check for hex encoding:

Length(MBS("Text.EncodeToHex"; MBS("Text.DecodeFromHex"; "41004200")))

Example result: Returns 8 in FileMaker 16 and 6 in FileMaker 15 due to different text handling.

See also

- 55.3 Container.DecodeFromHex 1609
- 55.12 Container.GetHex 1623
- 86.9 Hash.SHA1 4802
- 164.17 Text.DecodeFromHex 7800

7820

CHAPTER 164. TEXT

- 164.30 Text.EncodeToBytes 7816
- 164.31 Text.EncodeToHTML 7817
- 164.34 Text.EncodeToURL 7822
- 164.35 Text.EncodeToXML 7824
- 176.3 UUID.Hex 8251

Example Databases

- [Text functions/Repair Text Encoding Problems](#)
- [Text functions/Unicode Compositions](#)

Created 18th August 2014, last changed 18th December 2017.

164.33 Text.EncodeToQuotedPrintable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeToQuotedPrintable"; Text { ; Encoding; LineLen })

(old name: String.EncodeToQuotedPrintable)

Parameters**Text**

The text to use.

"Wünsche"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

LineLen

Optional

The line length to use. Default is 72

72

Result Returns OK or error.

Description

Line wrap is per default at 72 characters but you can pass some other positive value here.

Examples

Encode Wünsche:

```
MBS( "Text.EncodeToQuotedPrintable"; "Wünsche"; "UTF8")
```

Example result: W=C3=BCnsche

See also

- 164.18 Text.DecodeFromQuotedPrintable

7802

Created 3th September 2014, last changed 11st December 2016.

164.34 Text.EncodeToURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.6	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeToURL"; text { ; Encoding })

(old name: String.EncodeToURL)

Parameters

text

The text to process.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns encoded text.

Description

Please check what text encoding you want to use. Especially what the software processing the hex string expects.

This function should work the same as PHP's `urlencode` function.

Examples

Encode URL as UTF-8:

```
MBS( "Text.EncodeToURL"; "Hello World"; "utf8" )
```

Example result: Hello+World

Encode and Decode with umlauts and UTF-8:

```
$v = "Hello öäü"
```

```
$e = MBS( "Text.EncodeToURL"; "$v"; "utf8" )
```

```
# e has now value "Hello+% C3% B6% C3% A4% C3% BC"
```

```
$d = MBS( "Text.DecodeFromURL"; $e; "utf8" )
```

```
# d has now value "Hello öäü"
```

See also

- 164.19 Text.DecodeFromURL 7803
- 164.32 Text.EncodeToHex 7819
- 164.31 Text.EncodeToHTML 7817
- 164.35 Text.EncodeToXML 7824

Example Databases

- [CURL/WebServices/Google Maps API/Google Maps API](#)
- [Markdown](#)

164.34.1 Blog Entries

- [Query geolocation in FileMaker via MBS Plugin and Google Maps API](#)

Created 18th August 2014, last changed 11st December 2016.

164.35 Text.EncodeToXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeToXML"; text)

(old name: String.EncodeToXML)

Parameters

text

The text you want to encode.

"Grüße"

Result The encoded text.

Description

Only escapes quotes, ampersand, smaller and greater characters.

If you need all html entities to be encoded, please use Text.EncodeToHTML instead.

Lower ASCII control characters are ignored (removed).

Examples

Encode text as xml:

MBS("Text.EncodeToXML"; "Grüße <test>")

Example result: "Grüße & lt;test& gt;"

See also

- 61.328 [CURL.SetOptionSSLCert](#) 2232
- 164.32 [Text.EncodeToHex](#) 7819
- 164.31 [Text.EncodeToHTML](#) 7817
- 164.34 [Text.EncodeToURL](#) 7822

Example Databases

- [CURL/WebServices/magento older](#)
- [CURL/WebServices/Sales Force Test](#)
- [CURL/WebServices/Swiss Post Addresscheck V4-02-00](#)
- [CURL/WebServices/Swiss Post Addresscheck](#)

164.35.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)
- [Swiss Post Webservice to verify addresses](#)
- [MBS FileMaker Plugin, version 5.2pr1](#)

164.35.2 FileMaker Magazin

- [Ausgabe 4/2016, Seite 19](#)
- [Ausgabe 4/2016, Seite 18](#)

Created 18th August 2014, last changed 27th April 2017.

164.36 Text.EncodeURLComponent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.EncodeURLComponent"; text { ; encoding })

(old name: String.EncodeURLComponent)

Parameters

text

The text to encode.

\$URL

encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns encoded string.

Description

Please check what text encoding you want to use. Especially what the software processing the hex string expects.

Examples

Encode blog URL:

```
MBS("Text.EncodeURLComponent"; "http://www.mbsplugins.de")
```

Example result: "http% 3A% 2F% 2Fwww% 2Embsplugins% 2Ede"

See also

- 148.1 Shell.AddArgument 7001
- 164.23 Text.DecodeURLComponent 7808
- 180.90 WebView.LoadURL 8396

Example Databases

- [CURL/Amazon S3 Download Picture](#)
- [CURL/Amazon S3 Upload File](#)
- [CURL/Amazon S3 Upload Picture](#)
- [CURL/WebServices/CURL FMS Admin API v18](#)
- [CURL/WebServices/WeatherBit.io test](#)

164.36.1 Blog Entries

- [Storing files for download on FileMaker Server with download URLs](#)

164.36.2 FileMaker Magazin

- Ausgabe 6/2018, Seite 31
- Ausgabe 6/2018, Seite 30

Created 18th August 2014, last changed 11st December 2016.

164.37 Text.FileExtensionToMimeType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.FileExtensionToMimeType"; FileExtension)

Parameters

FileExtension

The file extension to lookup. Anything before a dot is ignored, so you can pass whole file name or path. "test.pdf"

Result Returns OK or error.

Description

Please report any missing mime type in our lookup table, so we can add more. See also Text.MimeTypeToFileExtension.

Examples

Find mime type for PDF:

```
MBS("Text.FileExtensionToMimeType"; "pdf")
```

Example result: application/pdf

Find mime type for whole file name:

```
MBS("Text.FileExtensionToMimeType"; "my.test.pdf")
```

Example result: application/pdf

See also

- 61.28 [CURL.FormAddKeyValueContentType](#) 1810
- 105.2 [MailComposer.AddAttachmentFile](#) 5611
- 105.3 [MailComposer.AddAttachmentText](#) 5612
- 114.1 [MessageComposer.AddAttachmentContainer](#) 6005
- 114.2 [MessageComposer.AddAttachmentFile](#) 6007
- 143.1 [SendMail.AddAttachmentContainer](#) 6875
- 143.2 [SendMail.AddAttachmentFile](#) 6878
- 143.3 [SendMail.AddAttachmentText](#) 6881
- 152.23 [SocialRequest.addMultipartText](#) 7157
- 164.47 [Text.MimeTypeToFileExtension](#) 7841

Example Databases

- [iOS/iOS Email Sending](#)
- [iOS/iOS Message Sending](#)

164.37.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr2](#)
- [MBS FileMaker Plugin, version 5.4pr1](#)

Created 2nd October 2015, last changed 11st December 2016.

164.38 Text.FilterUTF16

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	9.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.FilterUTF16"; Text { ; Replacement })

Parameters

Text

The text to process.

"Hello World"

Replacement

Optional

Replacement text for invalid characters. Default is empty.

" [emoji] "

Result Returns text or error.

Description

Removes all UTF-32 characters which can't fit into UTF-16.

Normally UTF-32 range characters exceeding the UTF-16 range are stored as two characters in UTF-16.

This function removes those for software, which may not handle them correctly.

Examples

Remove emojis:

MBS("Text.FilterUTF16"; "Hello World"; " [emoji] ")

Example result: "Hello [emoji] World"

164.38.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 20th June 2019, last changed 20th June 2019.

164.39 Text.FindBetween

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.0	Yes	Yes	Yes	Yes	Yes

MBS("Text.FindBetween"; Text; StartTag; EndTag { ; IgnoreCase; NthItem })

(old name: String.FindBetween)

Parameters**Text**

The text to search inside.

"<x>Hello</x>"

StartTag

The first search text, e.g. start tag.

"<x>"

EndTag

The end tag to search, e.g. second search text.

"</x>"

IgnoreCase

Optional

Optional, whether to ignore case in search. Default is 0 for case sensitive search.

0

NthItem

Optional

How many items to ignore before doing real search. Pass 1 to get second item.

0

Result Returns found text.

Description

This function is useful for quickly scanning XML documents.

For more complex XML queries, please use XML.Query function.

Examples

Find CountryCode value in some XML:

```
MBS("Text.FindBetween"; $result; "<v6:CountryCode>"; "</v6:CountryCode>")
```

Find second value tag text:

```
MBS("Text.FindBetween"; $result; "<v6:Value>"; "</v6:Value>";0; 1)
```

Find second item:

MBS("Text.FindBetween"; "<1><2><3>"; "<"; ">"; 0; 1)

Example result: 2

See also

- 61.328 [CURL.SetOptionSSLCert](#) 2232
- 191.26 [XML.Query](#) 9293

Example Databases

- [CURL/Amazon S3 Upload File](#)

164.39.1 Blog Entries

- [Using Apple's Global Service Exchange web service in FileMaker](#)

Created 18th August 2014, last changed 20th October 2018.

164.40 Text.InvalidCharactersForEncoding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.InvalidCharactersForEncoding"; text; Encoding)

Parameters

text

The text to process.

"Hello World"

Encoding

The text encoding for the resulting string. Default is native.

"Latin1"

Result Returns text or error.

Description

Returns an empty text if all characters are supported in given encoding. The returned text should have no duplicates, so each character shows only once in the order of first appearance.

Some characters may not be directly supported, but still convert to similar looking characters.

Examples

Check if checkmark is allowed in Latin1:

```
MBS("Text.InvalidCharactersForEncoding"; "Hello äöü"; "Latin1" )
```

Example result:

Checks for characters:

```
MBS("Text.InvalidCharactersForEncoding"; ""; "Latin1" )
```

Example result:

164.40.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr6](#)
- [MBS FileMaker Plugin, version 5.2pr4](#)

Created 14th June 2015, last changed 11st December 2016.

164.41 Text.JaroWinklerDistance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Text.JaroWinklerDistance"; a; b)

(old name: String.JaroWinklerDistance)

Parameters

a

First text string.

"Hello"

b

Second text string.

"Hallo"

Result Returns difference.

Description

Value is normalized, so 0.0 is equal text and 1.0 is totally unequal.

see also

http://en.wikipedia.org/wiki/Jaro-Winkler_distance

Examples

Calculate difference between two strings:

MBS("Text.JaroWinklerDistance"; "Hello"; "Hallo")

See also

- 85.172 GImage.Hash

4555

Created 18th August 2014, last changed 18th April 2016.

164.42 Text.Length

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	7.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.Length"; Text)

Parameters

Text

The text to check.

"Hello"

Result Returns number or error.

Description

This is number of UTF16 code points.

Some characters need 2 code points.

Created 25th April 2017, last changed 25th April 2017.

164.43 Text.LevenshteinDistance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.9	Yes	Yes	Yes	Yes	Yes

MBS("Text.LevenshteinDistance"; a; b)

(old name: String.LevenshteinDistance)

Parameters

a

First text string.

"Hello"

b

Second text string.

"Hallo"

Result Returns difference.

Description

Value is normalized, so 0.0 is equal text and 1.0 is totally unequal.

see also

http://en.wikipedia.org/wiki/Levenshtein_distance

Examples

Calculate difference between two strings:

MBS("Text.LevenshteinDistance"; "Hello"; "Hallo")

Example result: 0.2

See also

- 85.172 GImage.Hash 4555
- 103.6 List.BestMatch 5424
- 103.49 QuickList.BestMatch 5491

Created 18th August 2014, last changed 19th July 2017.

164.44 Text.ListWords

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	8.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.ListWords"; Text)

Parameters

Text

The text to split.

"Hello World"

Result Returns list or error.

Description

Words are listed in same order.

We find words based on alpha and numeric characters and use all others as separator.

You can use List.CountValues to count the values in the list or directly use Text.CountWords.

Examples

Split words:

MBS("Text.ListWords"; "Hello World,äöü.")

Example result: Hello

World

äöü

See also

- [103.8 List.CountValues](#) 5427
- [164.11 Text.CountWords](#) 7793

Example Databases

- [Text functions/Word Count functions](#)

164.44.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr2](#)

Created 5th February 2018, last changed 5th February 2018.

164.45 Text.LowerCase

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.LowerCase"; Text)

Parameters

Text

The text to process.

"hello WORLD"

Result Returns text or error.

Description

See also Text.UpperCase, Text.CapitalCase and Text.RemoveAccents.

Examples

Lower case of Hamburg:

MBS("Text.LowerCase"; "HAMBurg")

Example result: hamburg

Test accented characters:

MBS("Text.LowerCase"; "ÄÖÜÉÁÓÚÍÂÊÎÔÛ")

Example result: äöüéáóúíâêîôû

See also

- 164.3 Text.CapitalCase 7771
- 164.52 Text.RemoveAccents 7849
- 164.67 Text.UpperCase 7870

Example Databases

- [Text functions/Change Letter Case](#)

164.45.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 10th March 2015, last changed 11st December 2016.

164.46 Text.MergeFields

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	8.5	Yes	Yes	Yes	Yes	Yes

MBS("Text.MergeFields"; Text; Flags)

Parameters

Text

The input text.

"Hello «\$name»"

Flags

The various flags. 1 to allow field names. 2 to allow variables. 4 to allow expressions to evaluate. 16 to output XML 32 to output HTML.

1+2+4+32

Result Returns OK or error.

Description

This functions look for items between «and »to replace those with real values from fields, variables or expressions. This function does not preserve formatting.

For use in XML or HTML, we can encode all replacement values for you.

If you allow expressions, that may include plugins calls, so user could do anything via MBS calls!

Examples

Use function with Variable:

```
Set Variable [ $FirstName ; Value: "Christian" ]
Set Variable [ $text ; Value: "Hello «$FirstName»" ]
Set Variable [ $text ; Value: MBS( "Text.MergeFields"; $text; 1+2 ) ]
Show Custom Dialog [ $text ]
```

See also

- 143.28 SendMail.SetHTMLText 6915
- 143.31 SendMail.SetPlainText 6919
- 186.20 WinSendMail.SetText 8765

Example Databases

- [Text functions/Merge Fields](#)

164.46.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr5](#)
- [Neues MBS FileMaker Plugin 8.5 - Über 5500 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.5 - More than 5500 Functions In One Plugin](#)
- [Merge field values into text](#)
- [MBS FileMaker Plugin, version 8.5pr3](#)

164.46.2 FileMaker Magazin

- [Ausgabe 6/2018, Seite 33](#)

Created 14th October 2018, last changed 6th December 2019.

164.47 Text.MimeTypeToFileExtension

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.MimeTypeToFileExtension"; MimeType)

Parameters

MimeType

The mime type to lookup.

"application/pdf"

Result Returns text or error.

Description

Extension is returned with dot prefix.

Please report any missing file extensions in our lookup table, so we can add more.

See also [Text.FileExtensionToMimeType](#).

Examples

Checks for PDF:

MBS("Text.MimeTypeToFileExtension"; "application/pdf")

Example result: .pdf

See also

- [72.4 EmailParser.Attachment](#) 3408
- [72.14 EmailParser.Inline](#) 3422
- [152.12 SocialRequest.GetResponse](#) 7142
- [164.37 Text.FileExtensionToMimeType](#) 7828

164.47.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr1](#)

Created 2nd October 2015, last changed 11st December 2016.

164.48 Text.ReadEMLXFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.ReadEMLXFile"; FilePath { ; Encoding })

Parameters

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac. `"test.txt"`

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns text on success and error on failure.

Description

This function provides the raw text from an eml file as Apple Mail uses them to store emails. You may need to use `Text.ReplaceNewline` function to change new line characters.

You have to decide which encoding to use (if not native). We support a few encodings, but we can add more if you need something special.

See also `Text.ReadTextFile` for normal text files and eml files.

See also

- [72.18 EmailParser.Parse](#) 3427
- [72.19 EmailParser.ParseContainer](#) 3431
- [72.20 EmailParser.ParseFile](#) 3432
- [164.49 Text.ReadTextFile](#) 7843
- [164.59 Text.ReplaceNewline](#) 7857

164.48.1 Blog Entries

- [MBS FileMaker Plugin, version 5.3pr3](#)

Created 14th September 2015, last changed 12nd November 2015.

164.49 Text.ReadTextFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.ReadTextFile"; FilePath { ; Encoding })

(old name: String.ReadTextFile)

Parameters

FilePath

The native file path. Something like `"/Users/cs/desktop/test.txt"` on Mac and `"C:\Programs\Data\test.txt"` on Windows. Files without path end in the root directory on Mac.
`"test.txt"`

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

`"UTF8"`

Result Returns text on success and error on failure.

Description

You have to decide which encoding to use (if not native). We support a few encodings, but we can add more if you need something special. Some characters will be wrong if the encoding is not correct.

See also `Files.ReadJPEG`, `Files.ReadPDF`, `Files.ReadPNG`, `Files.ReadFile` and `RichText.ReadFile`.

This function reads only up to 1 GB of text. And even than a 32-bit FileMaker may fail to allocate enough memory to handle the text.

When passing UTF-16 as encoding, we can detect byte order if there is a Byte Order Mark.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read system.log file:

```
MBS("Text.ReadTextFile"; "/var/log/system.log"; "utf8")
```

Read Windows ANSI XML:

```
# read and convert to from Windows ANSI to unicode
Set Variable [ $text; Value:MBS("Text.ReadTextFile"; "/Users/cs/Desktop/test.xml"; "Windows") ]
# remove the encoding hint:
```

```
Set Variable [ $text; Value:Substitute($text; "<?xml version=\\"1.0\\" encoding=\\"WINDOWS-1252\\"?>";
"" ) ]
# now xml is unicode text and can be passed to XML functions.
```

Read file on Windows from desktop folder:

```
MBS( "Text.ReadTextFile"; "C:\Users\Christian\Desktop\test.txt"
```

Read file with UTF-16 Big Endian:

```
MBS( "Text.ReadTextFile"; "/Users/cs/Desktop/test.txt" ; "UTF-16BE" )
```

Parse in VCard with MBS functions:

```
# Loop over files on desktop
Set Variable [ $folder ; Value: MBS( "Folders.UserDesktop" ) ]
Set Variable [ $files ; Value: MBS( "Files.List"; $folder; 1+4; ".vcf" ) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $count ; Value: ValueCount ( $files ) ]
Set Variable [ $index ; Value: 1 ]
If [ $count >0 ]
Loop
# Read in vcard
Set Variable [ $filename ; Value: GetValue($files; $index) ]
Set Variable [ $filepath ; Value: MBS( "Path.AddPathComponent"; $folder; $filename ) ]
Set Variable [ $text ; Value: MBS( "Text.ReadTextFile"; $FilePath; "UTF-8" ) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $text ; Value: MBS( "Text.ReplaceNewline"; $text; 1) ]
# Process all text lines
Set Variable [ $LineCount ; Value: ValueCount ( $text ) ]
Set Variable [ $LineIndex ; Value: 1 ]
# TODO: Create new record here
Loop
Set Variable [ $Line ; Value: GetValue($text; $lineindex) ]
If [ Left ( $line ; 2 ) = "N:" ]
# Name
Set Variable [ $z ; Value: Middle ( $line ; 3; Length ( $line ) ) ]
Set Variable [ $list ; Value: MBS( "List.CSVSplit"; $z ) ]
Set Variable [ $FirstName ; Value: GetValue($list; 1) ]
Set Variable [ $SureName ; Value: GetValue($list; 2) ]
Set Field [ CON::nameGiven ; $firstName ]
Set Field [ CON::nameFamily ; $sureName ]
Else If [ Left($line; 6) = "EMAIL;" ]
# TODO
Else If [ Left($line; 27) = "PHOTO;ENCODING=b;TYPE=JPEG:" ]
# Photo as base64 coded JPEG:
Set Variable [ $data ; Value: Middle ( $line ; 28; Length ( $line ) ) ]
```



```

Set Variable [ $LineIndex ; Value: $LineIndex + 1 ]
Loop
Set Variable [ $Line ; Value: GetValue($text; $lineindex) ]
Exit Loop If [ Left ( $line ; 1 ) = " " ]
Set Variable [ $data ; Value: $data & $& $line ]
# next
Set Variable [ $LineIndex ; Value: $LineIndex + 1 ]
Exit Loop If [ $LineIndex >$LineCount ]
End Loop
Set Variable [ $LineIndex ; Value: $LineIndex - 1 ]
Set Variable [ $image ; Value: Base64Decode ( $data; "image.jpg" ) ]
Set Field [ CON::imageOrLogo ; $image ]
End If
# next
Set Variable [ $LineIndex ; Value: $LineIndex + 1 ]
Exit Loop If [ $LineIndex >$LineCount ]
End Loop
# TODO: Commit record
End If
# next
Set Variable [ $index ; Value: $index + 1 ]
Exit Loop If [ $index >$count ]
End Loop
End If
End If

```

See also

- 100.56 JSON.Import 5322
- 121.1 Path.AddPathComponent 6135
- 138.10 RichText.ReadFile 6724
- 139.8 RunTask.Launch 6763
- 143.32 SendMail.SetRichText 6921
- 159.1 SyntaxColoring.AddContextMenuCommand 7553
- 164.2 Text.AppendTextFile 7769
- 164.59 Text.ReplaceNewline 7857
- 164.68 Text.WriteTextFile 7871
- 191.12 XML.Import 9273

Example Databases

- [CURL/Email/IMAP Email](#)
- [Drag and Drop/for Mac/DragTest Email](#)
- [XML/XML Import](#)

164.49.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [Parsing VCard file](#)

164.49.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)

Created 18th August 2014, last changed 6th March 2019.

164.50 Text.ReadTextFromContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	4.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.ReadTextFromContainer"; Container { ; Encoding })

Parameters

Container

The container field or variable containing container value.

\$myData

Encoding

Optional

The text encoding for result. Default is native. This function can also handle UTF-16 as well as UTF-16LE and UTF-16BE for little/big endian byte order.

UTF8

Result Returns text or error.

Description

You need to be sure it is text and the text encoding. Else you may get garbage.

Examples

Reads text from container:

```
MBS( "Text.ReadTextFromContainer"; test::test; "UTF8" )
```

See also

- 44.14 BinaryFile.ReadText

1189

164.50.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr6](#)

164.50.2 FileMaker Magazin

- Ausgabe 2/2019, Seite 13

Created 18th October 2014, last changed 12nd November 2015.

164.51 Text.RedefineEncoding

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.RedefineEncoding"; text; InputEncoding; OutputEncoding)

Parameters

text

The text to process.

"Hello World"

InputEncoding

The text encoding for the input text.

"native"

OutputEncoding

The text encoding for the resulting string.

"UTF-8"

Result Returns text or error.

Description

This can be used to fix bad imported texts.

Examples

Fix umlaut in Mac encoded UTF-8 text:

```
MBS( "Text.RedefineEncoding" ; "M√bel"; "mac" ; "UTF8" )
```

Fix umlaut in Latin1 encoded UTF-8 text:

```
MBS( "Text.RedefineEncoding" ; "MÃ\§bel"; "Latin1"; "UTF-8" )
# needs a backslash so FileMaker doesn't evaluate §to be a new line.
```

164.51.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr7](#)

Created 10th July 2015, last changed 12nd November 2015.

164.52 Text.RemoveAccents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.RemoveAccents"; Text)

(old name: String.RemoveAccents)

Parameters

Text

The input string.
"Müller"

Result Returns the string without accents.

Description

for example é to e

If you miss a certain character in our substitution list, please email us.

Examples

Removes umlaut:

MBS("Text.RemoveAccents"; "Müller")

Example result: Muller

Removes Polish L with stroke:

MBS("Text.RemoveAccents"; "Łużica")

Example result: Luzica

See also

- 164.3 Text.CapitalCase 7771
- 164.45 Text.LowerCase 7838
- 164.53 Text.RemoveAccentsCaseInsensitive 7850
- 164.67 Text.UpperCase 7870

164.52.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 18th August 2014, last changed 11st December 2016.

164.53 Text.RemoveAccentsCaseInsensitive

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.RemoveAccentsCaseInsensitive"; Text)

(old name: String.RemoveAccentsCaseInsensitive)

Parameters

Text

The input string.

"Müller"

Result Returns the string without accents in upper case letters.

Description

For example é to E and ä to A

If you miss a certain character in our substitution list, please email us.

Examples

Removes umlauts from Müller:

MBS("Text.RemoveAccentsCaseInsensitive"; "Müller")

Example result: MULLER

See also

- 164.52 Text.RemoveAccents

7849

Created 18th August 2014, last changed 11st December 2016.

164.54 Text.RemoveControlCharacters

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.RemoveControlCharacters"; Text)

Parameters

Text

The text to process.

"Hello World"

Result Returns text or error.

Description

Leaves tab, return and new line characters in the text, but removes other characters with code point <32.

See also Text.ReplaceNewline for replacing line endings.

See also

- 164.59 Text.ReplaceNewline

7857

Example Databases

- [WebViewer/TinyMCE/TinyMCE](#)

Created 22nd April 2015, last changed 27th April 2017.

164.55 Text.RemoveNewLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.RemoveNewLine"; Text)

(old name: String.RemoveNewLine)

Parameters

Text

The text to process.

"Hello World"

Result Text without newline characters.

Description

FileMaker has a text replace command, but can't process all combinations of newline characters with it. As this function removes all newlines independent of whether you have CR, LF or CRLF in any combination. We needed this for a client in combination with `WebView.RunJavaScriptReturnTitle`. An older version of Internet Explorer made trouble with newline characters inside javascript text, so we removed them.

Examples

Remove newlines from field

MBS("Text.RemoveNewLine"; Test Database::TextField)

See also

- 164.59 Text.ReplaceNewline 7857
- 180.109 WebView.RunJavaScript 8423
- 180.110 WebView.RunJavaScriptReturnTitle 8433

Created 18th August 2014, last changed 29th April 2016.

164.56 Text.RemovePostfix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.RemovePostfix"; Text; Prefix { ; CaseSensitive })

Parameters

Text

The text to check.

">Hello World"

Prefix

The prefix to remove.

">"

CaseSensitive

Optional

Pass 1 to check case sensitive. Default is 0 for case insensitive.

0

Result Returns text.

Description

Examples

Removes postfix:

MBS("Text.RemovePostfix"; "Hello World>"; ">")

Example result: Hello World

See also

- [103.28 List.RemovePostfix](#) 5455
- [164.57 Text.RemovePrefix](#) 7854

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/IMAP Email](#)

164.56.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 28th February 2016, last changed 11st December 2016.

164.57 Text.RemovePrefix

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.RemovePrefix"; Text; Prefix { ; CaseSensitive })

Parameters

Text

The text to check.

">Hello World"

Prefix

The prefix to remove.

">"

CaseSensitive

Optional

Pass 1 to check case sensitive. Default is 0 for case insensitive.

0

Result Returns text.

Description

Examples

Removes prefix:

```
MBS( "Text.RemovePrefix"; ">Hello World"; ">" )
```

Creates directory and shows error:

```
Set Variable [ $r; Value:MBS("Files.CreateDirectory"; $path) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to create directory"; MBS("Text.RemovePrefix"; $r; " [ MBS ] ") ]
Exit Script [ ]
End If
```

See also

- 39.6 AVExport.ExportAsynchronously 1033
- 39.7 AVExport.ExportSession 1035
- 76.18 Events.AuthorizationStatusForEntityType 3525
- 76.173 Events.requestAccessToEntityType 3706
- 91.87 ImageCapture.RequestSelectFunctionalUnit 5021

164.57. TEXT.REMOVEPREFIX	7855
• 91.91 ImageCapture.SetParameter	5026
• 124.6 IsError	6266
• 103.29 List.RemovePrefix	5457
• 132.13 QTExport.OpenExporter	6563
• 164.56 Text.RemovePostfix	7853

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/IMAP Email](#)
- [Encryption and Hash/RSA Sign and Verify](#)
- [Mac and iOS/Events/Events Changes](#)
- [Mac and iOS/Events/Events Create Event](#)
- [Mac and iOS/Events/Events Create Reminder](#)
- [Mac and iOS/Events/Events Sync](#)
- [Mac only/ImageCapture/ImageCapture](#)
- [Mac only/Movies/AVAsset Export Session](#)
- [Mac only/Movies/QTMovieExporter](#)

164.57.1 Blog Entries

- [Print WebViewer on macOS in FileMaker](#)
- [ImageCapture functions for Mac OS X](#)
- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 28th February 2016, last changed 28th February 2016.

164.58 Text.ReplaceAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	7.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.ReplaceAll"; Text; Find; ReplaceWithText)

Parameters

Text

The text to search.

"Hello World"

Find

The text to find.

"o"

ReplaceWithText

The new text.

"a"

Result Returns text or error.

Description

Quickly looks for all occurrences of a given text in another text and replaces it with a new text.

Optimized code for extra speed if you replace one character with another character.

Examples

Simple replace:

```
MBS( "Text.ReplaceAll"; "Hello"; "e"; "a" )
```

Example result: "Hallo"

See also

- [135.16 RegEx.ReplaceAll](#)

6668

164.58.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)
- [MBS FileMaker Plugin, version 7.3pr6](#)

Created 13th July 2017, last changed 13th July 2017.

164.59 Text.ReplaceNewline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.ReplaceNewline"; Text; Mode { ; Wrap })

(old name: String.ReplaceNewline)

Parameters

Text

The text to process.

"Hello World"

Mode

The operation mode. First a value for the output newline type: 0 = nothing, 1 = CR (Mac), 2 = LF (Unix), 3 = CRLF (Windows), 4 =
for html, 5 =
for xml. Second you can add 8 to remove duplicate newlines.

Wrap

Optional

Optional whether to wrap lines longer than given number of characters. Default is 0 for no wrap.

80

Result Text with modified newline characters.

Description

Can remove, convert to Mac, Windows and Linux specific end of line characters. Also can remove duplicates. FileMaker uses Mac line endings on all platforms.

Examples

Remove newlines from field:

```
MBS( "Text.ReplaceNewline"; Test Database::TextField; 0 )
```

Replaces newlines from field with Mac newlines:

```
MBS( "Text.ReplaceNewline"; Test Database::TextField; 1 )
```

Replaces newlines from field with Mac newlines and remove duplicates:

```
MBS( "Text.ReplaceNewline"; Test Database::TextField; 1+8 )
```

Write UTF-8 CRLF file:

```
Set Variable [ $text ; Value: "Joe,1234 Main St.$John Glen,3132 Elm$Johnson,5233 Wreybird$Ray,263 Birch$äöü" ]
```

```
Set Variable [ $path ; Value: "/Users/cs/Desktop/test.txt" ]
```

```
Set Variable [ $text ; Value: MBS( "Text.ReplaceNewline"; $text; 3) // CRLF ]
```

Set Variable [\$r ; Value: MBS("Text.WriteTextFile"; \$text; \$path; "UTF8")]

See also

- [86.12 Hash.SHA256.HMAC](#) 4809
- [86.13 Hash.SHA512](#) 4812
- [143.25 SendMail.PrepareCURL](#) 6910
- [143.28 SendMail.SetHTMLText](#) 6915
- [148.9 Shell.Execute](#) 7011
- [164.2 Text.AppendTextFile](#) 7769
- [164.31 Text.EncodeToHTML](#) 7817
- [164.49 Text.ReadTextFile](#) 7843
- [164.54 Text.RemoveControlCharacters](#) 7851
- [164.55 Text.RemoveNewLine](#) 7852

Example Databases

- [Barcode/Swiss QR-Code for invoices ISO 20022](#)
- [CURL/Email/Build and send Email](#)
- [CURL/Email/Build and send HTML Email with inline graphic](#)
- [CURL/Email/IMAP Email Upload](#)
- [CURL/SFTP/CURL sFTP Operations](#)
- [DynaPDF/Create PDF with sum form field](#)
- [Network/HTTP Server local](#)
- [Shell/Shell](#)
- [Text functions/Write Text File](#)
- [WebView/Google Translation](#)

164.59.1 Blog Entries

- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [Text to Webviewer Script for FileMaker](#)
- [Tips for FileMaker Data Migration Tool](#)
- [Execute defaults command with Shell functions](#)
- [QR Codes for Invoices in Switzerland](#)
- [Upload email to Sent folder via IMAP](#)
- [Convert to MP3 with new Shell commands and ffmpeg](#)
- [Parsing VCard file](#)
- [MBS FileMaker Plugin, version 6.4pr9](#)
- [Tip of the day: DynaPDF form creation with calculation with FileMaker](#)

164.59.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 29](#)

Created 18th August 2014, last changed 3th August 2017.

164.60 Text.Serialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.Serialize"; Text)

Parameters

Text

The styled text to serialize.
"Hello World"

Result Returns text or error.

Description

The styled text content is stored in a base64 encoded string which the plugin function Text.Deserialize can read.

Using this function allows to store a styled text in a text field or transmit it with Socket functions, SerialPort functions or by writing it to a file.

See also

- [103.32 List.Serialize](#) 5462
- [164.24 Text.Deserialize](#) 7809

Example Databases

- [Text functions/Text to RTF or HTML](#)

164.60.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 28th October 2015, last changed 28th October 2015.

164.61 Text.SoundEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.SoundEx"; Text)

(old name: String.SoundEx)

Parameters**Text**

The input string.

"Müller"

Result Returns soundex string.

Description

Similar names like Mayer, Maier, Meyer and Meier return the same SoundEx so you can have searches which match all of those names.

This is the english version while String.SoundExGerman is optimized for German.

Examples

SoundEx of Müller:

MBS("Text.SoundEx"; "Müller")

See also

- 164.62 Text.SoundExGerman

7862

Created 18th August 2014, last changed 18th April 2016.

164.62 Text.SoundExGerman

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	3.5	Yes	Yes	Yes	Yes	Yes

MBS("Text.SoundExGerman"; Text)

(old name: String.SoundExGerman)

Parameters

Text

The input string.

"Müller"

Result Returns soundex string.

Description

Similar names like Mayer, Maier, Meyer and Meier return the same SoundEx so you can have searches which match all of those names.

This is the german version while String.SoundEx was created for english mainly.

Examples

SoundEx of Müller:

MBS("Text.SoundExGerman"; "Müller")

See also

- 164.61 Text.SoundEx

7861

Created 18th August 2014, last changed 18th April 2016.

164.63 Text.Styles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	9.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.Styles"; Text)

Parameters

Text

The styled text to check.

"Hello World"

Result Returns JSON or error.

Description

Returns a JSON array with objects containing details.

Includes booleans hasColor, hasFont, hasSize and hasFace to inform you which features are available for text block.

If hasColor is true, you can get color (numeric), colorHex (string) and values in range 0 to 255 for red, blue, green and alpha.

If hasFont is true, you can get fontID, fontScript and font with the name.

If hasSize is true, the size field contains the size of the font in points.

If hasFace is true, you get the face as integer. We also provide bold, italic, underline, outline, shadow, condense, extend, strikethrough, smallCaps, superscript, subscript, wordUnderline and doubleUnderline as booleans.

Examples

Check some text:

```
MBS("Text.Styles"; TextColor ( "Hello" ; RGB ( 255 ; 0 ; 0 ) ))
```

```
Example result: [ {
  "hasColor": true,
  "color": 16711680,
  "colorHex": "FF0000",
  "red": 255,
  "green": 0,
  "blue": 0,
  "alpha": 255,
  "hasFont": false,
  "hasSize": false,
  "hasFace": false
} ]
```

Example Databases

- [Text functions/Text Styles](#)

164.63.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr5](#)

Created 9th July 2019, last changed 9th July 2019.

164.64 Text.TextToHTML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	4.3	Yes	Yes	Yes	Yes	Yes

MBS("Text.TextToHTML"; Text { ; Options })

Parameters**Text**

Formatted text to convert.

"Hello World"

Options

Optional

Available in MBS FileMaker Plugin 6.5 or newer.

The options number for html creation. Add 1 for having no body around. Add 2 to have no font names. Add 4 to have no font sizes. Add 8 to use strong instead of b tag for bold. Add 16 to keep links in HTML to pass through <a.>tags. (new in 7.4).

1+2+4+8

Result Returns OK or error.

Description

Supports styles like bold, italic, underline, font size and text color. Other style features may be added in the future on demand.

See also Text.EncodeToHTML and GetAsCSS in FileMaker.

Examples

Convert some text to HTML

MBS("Text.TextToHTML"; "Hello World")

```
Example result: <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="de">
<head>
<meta http-equiv="content-type" content="application/xhtml+xml; charset=utf-8" />
</head>
<body>
<p>Hello World</p></body>
</html>
```

Convert some text to RTF

MBS("Text.TextToRTF"; "Hello World")

```
Example result: { \rtf1\ansi\ansicpg1252
Hello World
}
```

Convert without body/header:

```
MBS( "Text.TextToHTML"; "Hello World"; 1 )
```

Example result: <p>Hello World</p>

See also

- 164.31 [Text.EncodeToHTML](#) 7817
- 164.65 [Text.TextToRTF](#) 7867

Example Databases

- [Text functions/Text to RTF or HTML](#)

164.64.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)
- [MBS FileMaker Plugin, version 6.5pr7](#)
- [MBS FileMaker Plugin, version 5.4pr4](#)
- [MBS FileMaker Plugin, version 5.0pr10](#)
- [MBS Filemaker Plugin, version 4.3pr10](#)

164.64.2 FileMaker Magazin

- [Ausgabe 5/2014, Seite 25](#)

Created 7th September 2014, last changed 12nd February 2020.

164.65 Text.TextToRTF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.TextToRTF"; Text)

(old name: TextToRTF)

Parameters**Text**

Formatted text to convert.

"Hello World"

Result some text you could put into rtf file.

Description

Currently only ANSI text encoding. Supports styles like bold, italic, underline, font size and text color. Other style features may be added in the future on demand.

Can be used with Clipboard.SetRTFText to bring styled text to the clipboard.

Examples

Convert some text to RTF

MBS("Text.TextToRTF"; "Hello World")

Example result: { \rtf1\ansi\ansicpg1252

Hello World

}

Convert some text to HTML

MBS("Text.TextToHTML"; "Hello World")

Example result: <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose

<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="de">

<head>

<meta http-equiv="content-type" content="application/xhtml+xml; charset=utf-8" />

</head>

<body>

<p>Hello World</p></body>

</html>

Write RTF file:

Set Variable [\$rtf; Value:MBS("Text.TextToRTF"; "Hello World äöü ß")]

Set Variable [\$r; Value:MBS("Text.WriteTextFile"; \$rtf; "/Users/cs/Desktop/test.rtf"; "Windows")]

See also

- 51.15 Clipboard.SetRTFText 1455
- 51.16 Clipboard.SetStyledText 1457
- 164.64 Text.TextToHTML 7865
- 164.68 Text.WriteTextFile 7871

Example Databases

- [Text functions/Text to RTF or HTML](#)

164.65.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr4](#)

164.65.2 FileMaker Magazin

- Ausgabe 5/2014, Seite 25

Created 18th August 2014, last changed 11st December 2016.

164.66 Text.Trim

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	8.2	Yes	Yes	Yes	Yes	Yes

MBS("Text.Trim"; Text)

Parameters

Text

The text to trim.

" Hello "

Result Returns OK or error.

Description

May remove low ASCII characters like tab, CR, LF and space.

Examples

Trim hello:

MBS("Text.Trim"; " \$Hello \$")

Example result: Hello

Example Databases

- [List/Sort Benchmark](#)

164.66.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr5](#)

Created 30th April 2018, last changed 30th April 2018.

164.67 Text.UpperCase

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	5.1	Yes	Yes	Yes	Yes	Yes

MBS("Text.UpperCase"; Text)

Parameters

Text

The text to process.

"hello WORLD"

Result Returns text or error.

Description

See also Text.LowerCase, Text.CapitalCase and Text.RemoveAccents.

Examples

Upper case of Hamburg:

MBS("Text.LowerCase"; "HAMBurg")

Example result: HAMBURG

See also

- 164.3 Text.CapitalCase 7771
- 164.45 Text.LowerCase 7838
- 164.52 Text.RemoveAccents 7849

Example Databases

- [Text functions/Change Letter Case](#)

164.67.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 10th March 2015, last changed 11st December 2016.

164.68 Text.WriteTextFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	2.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.WriteTextFile"; Text; FilePath { ; Encoding })

(old name: String.WriteTextFile)

Parameters

Text

The text to save.

"Hello World"

FilePath

The native file path. Something like "/Users/cs/desktop/test.txt" on Mac and "C:\Programs\Data\test.txt" on Windows. Files without path end in the root directory on Mac.

"test.txt"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

Result Returns "OK" or an error message.

Description

You have to decide which encoding to use (if not native). We support a few encodings, but we can add more if you need something special.

Please use Text.ReplaceNewline to define which line endings the file has.

In order to append to a text file, you can use Text.AppendTextFile instead.

If text encoding doesn't support given characters, they are converted to close match if possible or replaced by question marks.

Existing file is overwritten if permissions allow it.

Added support for UTF-16 in plugin version 7.2. You can pass UTF-16, UTF-16LE or UTF-16BE for encoding.

See Text.ReadTextFile for reading text files.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Write UTF-8 file with some text:

```
MBS("Text.WriteTextFile"; $Text; $Path; "utf8" )
```

Write a test text file on Mac:

```
MBS("Text.WriteTextFile"; "Hello World. Some umlauts: äöü"; "/Users/cs/Desktop/testfile.txt"; "native")
```

Write text in UTF-8 with Byte Order Mark (BOM):

```
MBS("Text.WriteTextFile"; Char(65279) & "Hello World"; $Path; "utf8")
```

Write a test text file on Win:

```
MBS("Text.WriteTextFile"; "Hello World. Some umlauts: äöü"; "c:\test\testfile.txt"; "native")
```

Write RTF file:

```
Set Variable [ $rtf; Value:MBS( "Text.TextToRTF"; "Hello World äöü ß" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $rtf; "/Users/cs/Desktop/test.rtf"; "Windows") ]
```

Export data via SQL to text file:

```
Set Variable [ $sql; Value:"SELECT \"Item\", \"Model\", \"Serial Number\" FROM \"Assets\"" ]
Set Variable [ $text; Value:MBS( "FM.ExecuteSQL"; $sql; 9; 13 ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; $text; "/tmp/test.txt"; "UTF-8" ) ]
```

Write UTF-16 with LE, BE or default with BOM:

```
MBS("Text.WriteTextFile"; Char(65279) & "Hello World"; "/Users/cs/Desktop/test UTF-16LE.txt"; "UTF-16LE")
```

```
MBS("Text.WriteTextFile"; Char(65279) & "Hello World"; "/Users/cs/Desktop/test UTF-16BE.txt"; "UTF-16BE")
```

```
MBS("Text.WriteTextFile"; Char(65279) & "Hello World"; "/Users/cs/Desktop/test UTF-16.txt"; "UTF-16")
```

Write UTF-8 CRLF file:

```
Set Variable [ $text ; Value: "Joe,1234 Main St.§John Glen,3132 Elm§Johnson,5233 Wreybird§Ray,263 Birch§äöü" ]
Set Variable [ $path ; Value: "/Users/cs/Desktop/test.txt" ]
Set Variable [ $text ; Value: MBS( "Text.ReplaceNewline"; $text; 3) // CRLF ]
Set Variable [ $r ; Value: MBS( "Text.WriteTextFile"; $text; $path; "UTF8" ) ]
```

Write a HTML file and an image file to load in web viewer:

```

Set Variable [ $folder ; Value: MBS( "Folders.UserTemporary" ) ]
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $folder; "test.jpg" ) ]
Set Variable [ $r ; Value: MBS( "Container.WriteFile"; Images::Image; $path ) ]
#
Set Variable [ $html ; Value: "<html><body><p>Hello World</p><img src=test.jpg width=300></body></html>" ]
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $folder; "test.html" ) ]
Set Variable [ $r ; Value: MBS( "Text.WriteTextFile"; $html; $path ) ]
#
Set Variable [ $URL ; Value: MBS( "Path.FilePathToFileURL"; $Path ) ]
Set Web Viewer [ Object Name: "web" ; URL: $URL ]

```

See also

- 81.16 Folders.UserTemporary 4187
- 88.13 HotKey.Register 4843
- 88.15 HotKey.SetEvaluate 4848
- 109.6 Matrix.CSV 5785
- 113.3 Menubar.ListMenuCommands 5997
- 121.1 Path.AddPathComponent 6135
- 124.31 Plugin.LimitFunction 6297
- 164.2 Text.AppendTextFile 7769
- 164.49 Text.ReadTextFile 7843
- 164.59 Text.ReplaceNewline 7857

Example Databases

- [CURL/Email/Email Parser and Preview](#)
- [CURL/Email/IMAP Email](#)
- [RunTask/Run Shell Script on Mac](#)
- [Text functions/Text to RTF or HTML](#)
- [Text functions/Write Text File](#)

164.68.1 Blog Entries

- [Define hot keys for functions in the FileMaker development](#)
- [FileMaker 18 File Script Steps vs. BinaryFile functions](#)
- [Xojo Web Apps on FileMaker Cloud Server](#)
- [CSV functions in MBS FileMaker Plugin](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS FileMaker Plugin, version 5.2pr5](#)

164.68.2 FileMaker Magazin

- [Ausgabe 2/2019, Seite 14](#)

Created 18th August 2014, last changed 23th February 2020.

164.69 Text.WriteToContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
164 Text	4.4	Yes	Yes	Yes	Yes	Yes

MBS("Text.WriteToContainer"; Text { ; Encoding; FilePath })

(old name: String.WriteToContainer)

Parameters

Text

The text to save.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is native.

"UTF-8"

FilePath

Optional

The file name to include in the container value.

"test.txt"

Result Returns OK or error.

Description

The result can be assigned to a container field and later be exported.

Examples

Writes some text to container:

```
MBS("Text.WriteToContainer"; "Hello World"; "UTF-8"; "test.txt")
```

See also

- 44.21 BinaryFile.WriteText 1199
- 138.24 RichText.WriteContainer 6743

164.69.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr6](#)

Created 18th October 2014, last changed 18th April 2016.

Chapter 165

TextView

Functions for an independent text field.

Our plugin can place an independent text view on the layout to show or edit text. Offers OS provided spell checking and RTF support.

165.1 TextView.CanUndo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.CanUndo"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns 1, 0 or error.

Description

Returns 1 if undo is possible or 0 if not.

See also

- 165.44 TextView.Undo

7923

Created 15th April 2019, last changed 15th April 2019.

165.2 TextView.Copy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.Copy"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns OK or error.

Description

Puts text on the clipboard and returns OK.

See also

- 165.8 TextView.Cut 7886
- 180.37 WebView.Copy 8324

Created 15th April 2019, last changed 15th July 2019.

165.3 TextView.CreateOnPopoverWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

```
MBS( "TextView.CreateOnPopoverWithControl"; WindowRef; Popover Name; ControlName { ; DX; DY }
)
```

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Popover Name

The name of the popover to look for on the window.

"MyPopover"

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move text view more to left or right.

0

DY

Optional

A delta to move text view more to top or bottom.

0

Result Returns text view reference number on success.

Description

Use TextView.Release later to destroy the text view.

Text view reference numbers are starting at 81000 and counting up for each new text view.

See also

- 69.4 DragDrop.CreateOnPopoverWithControl 2483
- 165.4 TextView.CreateOnPopoverWithSize 7881
- 165.27 TextView.Release 7905
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

165.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 15th April 2019, last changed 15th April 2019.

165.4 TextView.CreateOnPopoverWithSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.CreateOnPopoverWithSize"; WindowRef; Popover Name; x; y; w; h)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Popover Name

The name of the popover to look for on the window.

"MyPopover"

x

The left coordinate in the popover.

0

y

The top coordinate in the popover.

0

w

The width of the text view in the popover.

600

h

The height of the text view in the popover.

400

Result Returns text view reference number on success.

Description

Use TextView.Release later to destroy the text view.

Text view reference numbers are starting at 81000 and counting up for each new text view.

See also

- 69.5 DragDrop.CreateOnPopoverWithSize 2485
- 165.3 TextView.CreateOnPopoverWithControl 7879
- 165.27 TextView.Release 7905
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Created 15th April 2019, last changed 15th April 2019.

165.5 TextView.CreateWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.CreateWithControl"; WindowRef; ControlName { ; DX; DY })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move text view more to left or right.

0

DY

Optional

A delta to move text view more to top or bottom.

0

Result Returns text view reference number on success.

Description

Use TextView.Release later to destroy the text view.

If you use a register (tab controls) on the window, be aware that the text view actually is in front of the register (tab controls). You may hide the text view if another register is visible.

Text view reference numbers are starting at 81000 and counting up for each new text view.

When creating on a card window, please pass reference to parent window or just 0 for front window. On MacOS you may need to pass delta y value to adjust position.

If you create a control on a new window, you may do window update command in your script first to have FileMaker actually build the window with controls and display it. A short script pause or using FM.RunScriptLater with 0.1 delay can help having all controls draw themselves. Then you can use this command to put our control on top. We use GetControl() to query left, top, width and height and this gives empty value if control is not yet here.

See also

- 79.52 FM.RunScript 3986
- 79.54 FM.RunScriptLater 3990

165.5. <i>TEXTVIEW.CREATEWITHCONTROL</i>	7883
• 93.2 <i>ImageView.CreateWithControl</i>	5092
• 106.8 <i>MapView.CreateWithControl</i>	5650
• 165.7 <i>TextView.CreateWithWindow</i>	7885
• 165.27 <i>TextView.Release</i>	7905
• 165.33 <i>TextView.SetFrameWithControl</i>	7912
• 182.15 <i>Window.FindByIndex</i>	8550
• 182.16 <i>Window.FindByTitle</i>	8552

Example Databases

- [TextView](#)

165.5.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 15th April 2019, last changed 9th December 2019.

165.6 TextView.CreateWithSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.CreateWithSize"; WindowRef; x; y; w; h)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

x

The left coordinate in the window.

0

y

The top coordinate in the window.

0

w

The width of the text view in the window.

100

h

The height of the text view in the window.

100

Result Returns text view reference number on success.

Description

Use TextView.Release later to destroy the text view.

If you use a register (tab controls) on the window, be aware that the text view actually is in front of the register (tab controls). You may hide the text view if another register is visible.

Text view reference numbers are starting at 81000 and counting up for each new text view.

See also

- 93.3 ImageView.CreateWithSize 5094
- 106.9 MapView.CreateWithSize 5652
- 165.7 TextView.CreateWithWindow 7885
- 165.27 TextView.Release 7905
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Created 15th April 2019, last changed 15th April 2019.

165.7 TextView.CreateWithWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.CreateWithWindow"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns text view reference number on success.

Description

Use TextView.Release later to destroy the text view.

If you use a register (tab controls) on the window, be aware that the text view actually is in front of the register (tab controls). You may hide the text view if another register is visible.

Text view reference numbers are starting at 81000 and counting up for each new text view.

See also

- 93.4 ImageView.CreateWithWindow 5096
- 165.5 TextView.CreateWithControl 7882
- 165.6 TextView.CreateWithSize 7884
- 165.27 TextView.Release 7905
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Created 15th April 2019, last changed 15th April 2019.

165.8 TextView.Cut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.Cut"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns OK or error.

Description

See also

- 165.2 TextView.Copy 7878
- 165.25 TextView.List 7903
- 180.41 WebView.Cut 8330

Created 15th April 2019, last changed 15th April 2019.

165.9 TextView.GetAutoCorrectionEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetAutoCorrectionEnabled"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns 1, 0 or error.

Description

See also

- 165.29 TextView.SetAutoCorrectionEnabled

7907

Created 15th April 2019, last changed 15th April 2019.

165.10 TextView.GetAutoResizingMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	No	No	No	No

MBS("TextView.GetAutoResizingMask"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns number or error.

Description

This defines whether view changes its size based on the surrounding window.

Name	Value	Description
NotSizable	0	The view cannot be resized.
MinXMargin	1	The left margin between the view and its superview is flexible.
WidthSizable	2	The view's width is flexible.
MaxXMargin	4	The right margin between the view and its superview is flexible.
MinYMargin	8	The bottom margin between the view and its superview is flexible.
HeightSizable	16	The view's height is flexible.
MaxYMargin	32	The top margin between the view and its superview is flexible.

e.g. the value 18 means the view can resize both horizontally and vertically with the parent view (window).

See also

- 69.9 DragDrop.GetAutoResizingMask 2493
- 106.15 MapView.GetAutoResizingMask 5659
- 106.65 MapView.SetAutoResizingMask 5712
- 165.30 TextView.SetAutoResizingMask 7908
- 180.52 WebView.GetAutoResizingMask 8347
- 180.122 WebView.SetAutoResizingMask 8449

Created 15th April 2019, last changed 15th April 2019.

165.11 TextView.GetHTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	No	No	No	Yes

MBS("TextView.GetHTMLText")

Result Returns html text or error.

Description

This is a HTML representation of the text with styles, which can be loaded again later.

See also

- 165.14 TextView.GetPlainText 7892
- 165.34 TextView.SetHTMLText 7913
- 180.65 WebView.GetHTMLText 8365

Example Databases

- [TextView](#)

Created 16th April 2019, last changed 16th April 2019.

165.12 TextView.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetHeight"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns height or error.

Description

See also

- 93.5 ImageView.GetHeight 5097
- 106.18 MapView.GetHeight 5662
- 165.13 TextView.GetLeft 7891
- 165.23 TextView.GetWidth 7901

Created 15th April 2019, last changed 15th April 2019.

165.13 TextView.GetLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetLeft"; TextView)

Parameters**TextView**

The reference number to the text view.

\$textview

Result Returns x coordinate or error.

Description**See also**

- 106.19 MapView.GetLeft 5663
- 165.12 TextView.GetHeight 7890
- 165.15 TextView.GetRTF 7893
- 165.20 TextView.GetTag 7898
- 165.21 TextView.GetTop 7899
- 165.23 TextView.GetWidth 7901

Created 15th April 2019, last changed 15th April 2019.

165.14 TextView.GetPlainText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetPlainText"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns text or error.

Description

Returns the text of the text view without formatting.

See also

- 165.11 TextView.GetHTMLText 7889
- 165.35 TextView.SetPlainText 7914
- 180.73 WebView.GetPlainText 8375

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.15 TextView.GetRTF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetRTF"; TextView)

Parameters**TextView**

The reference number to the text view.

\$textview

Result Returns RTF text or error.

Description

This is a RTF representation of the text with styles, which can be loaded again later.

See also

- 165.13 TextView.GetLeft 7891
- 165.20 TextView.GetTag 7898
- 165.21 TextView.GetTop 7899
- 165.36 TextView.SetRTF 7915
- 165.41 TextView.SetTag 7920

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.16 TextView.GetReadOnly

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetReadOnly"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns 1, 0 or error.

Description

See also

- 165.37 TextView.SetReadOnly

7916

Created 15th April 2019, last changed 15th April 2019.

165.17 TextView.GetRulerVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	No	No	No	No

MBS("TextView.GetRulerVisible"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns 1, 0 or error.

Description

Returns 1 if visible or 0 if not.

See also

- 165.22 TextView.GetVisible 7900
- 165.38 TextView.SetRulerVisible 7917

Created 15th April 2019, last changed 15th April 2019.

165.18 TextView.GetSpellCheckingEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetSpellCheckingEnabled"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns 1, 0 or error.

Description

See also

- 165.39 TextView.SetSpellCheckingEnabled

7918

Created 15th April 2019, last changed 15th April 2019.

165.19 TextView.GetStyled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetStyled"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns 1, 0 or error.

Description

See also

- 165.40 TextView.SetStyled

7919

Created 15th April 2019, last changed 15th April 2019.

165.20 TextView.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetTag"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns the stored tag value or an error.

Description

See also

- 106.40 MapView.GetTag 5685
- 165.13 TextView.GetLeft 7891
- 165.15 TextView.GetRTF 7893
- 165.21 TextView.GetTop 7899
- 165.36 TextView.SetRTF 7915
- 165.41 TextView.SetTag 7920

Created 15th April 2019, last changed 15th April 2019.

165.21 TextView.GetTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetTop"; TextView; swap)

Parameters

TextView

The reference number to the text view.

\$textview

swap

Whether to swap y coordinate. By default we swap them. Pass 0 to disable or 1 to swap.

1

Result Returns y coordinate or error.

Description

As Cocoa framework uses zero for the bottom coordinate, we have to swap for the normal topdown coordinates to be used.

See also

- 106.42 MapView.GetTop 5687
- 165.13 TextView.GetLeft 7891
- 165.15 TextView.GetRTF 7893
- 165.20 TextView.GetTag 7898
- 165.36 TextView.SetRTF 7915
- 165.41 TextView.SetTag 7920

Created 15th April 2019, last changed 15th April 2019.

165.22 TextView.GetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetVisible"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if hidden.

See also

- 93.10 ImageView.GetVisible 5102
- 106.43 MapView.GetVisible 5688
- 106.89 MapView.SetVisible 5739
- 165.17 TextView.GetRulerVisible 7895
- 165.42 TextView.SetVisible 7921

Created 15th April 2019, last changed 15th April 2019.

165.23 TextView.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetWidth"; TextView)

Parameters**TextView**

The reference number to the text view.

\$textview

Result Returns width or error.

Description**See also**

- 93.11 [ImageView.GetWidth](#) 5103
- 106.45 [MapView.GetWidth](#) 5690
- 165.12 [TextView.GetHeight](#) 7890
- 165.13 [TextView.GetLeft](#) 7891

Created 15th April 2019, last changed 15th April 2019.

165.24 TextView.GetWindowRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.GetWindowRef"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns window reference number or error.

Description

Created 15th April 2019, last changed 15th April 2019.

165.25 TextView.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.List")

Result Returns list of IDs.

Description

This helps debugging, especially finding scripts which do not release their objects properly.

See also

- 165.8 TextView.Cut 7886
- 165.26 TextView.Paste 7904

Created 15th April 2019, last changed 15th April 2019.

165.26 TextView.Paste

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.Paste"; TextView)

Parameters**TextView**

The reference number to the text view.

\$textview

Result Returns OK or error.

Description**See also**

- 165.25 TextView.List 7903
- 180.97 WebView.Paste 8406

Created 15th April 2019, last changed 15th April 2019.

165.27 TextView.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.Release"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns OK or error.

Description

If you go to layout editor and text views are still active, this may cause trouble. Like you can't drag & drop controls.

See also

- 106.53 MapView.Release 5699
- 165.3 TextView.CreateOnPopoverWithControl 7879
- 165.4 TextView.CreateOnPopoverWithSize 7881
- 165.5 TextView.CreateWithControl 7882
- 165.6 TextView.CreateWithSize 7884
- 165.7 TextView.CreateWithWindow 7885
- 165.28 TextView.ReleaseAll 7906
- 180.103 WebView.Release 8415

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.28 TextView.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.ReleaseAll")

Result Returns number of text views released.

Description

See also

- 93.13 ImageView.ReleaseAll 5105
- 106.54 MapView.ReleaseAll 5700
- 165.27 TextView.Release 7905

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.29 TextView.SetAutoCorrectionEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetAutoCorrectionEnabled"; TextView; Enable)

Parameters

TextView

The reference number to the text view.

\$textview

Enable

Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

See also

- 165.9 TextView.GetAutoCorrectionEnabled

7887

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.30 TextView.SetAutoResizingMask

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	No	No	No	No

MBS("TextView.SetAutoResizingMask"; TextView; Value)

Parameters

Text View

The reference number to the text view.

\$textview

Value

The new setting.

4+8

Result Returns OK or error.

Description

This defines whether view changes its size based on the surrounding window.

Name	Value	Description
NotSizable	0	The view cannot be resized.
MinXMargin	1	The left margin between the view and its superview is flexible.
WidthSizable	2	The view's width is flexible.
MaxXMargin	4	The right margin between the view and its superview is flexible.
MinYMargin	8	The bottom margin between the view and its superview is flexible.
HeightSizable	16	The view's height is flexible.
MaxYMargin	32	The top margin between the view and its superview is flexible.

e.g. the value 18 means the view can resize both horizontally and vertically with the parent view (window).

See also

- 69.38 DragDrop.SetAutoResizingMask 2530
- 106.15 MapView.GetAutoResizingMask 5659
- 106.65 MapView.SetAutoResizingMask 5712
- 165.10 TextView.GetAutoResizingMask 7888
- 180.52 WebView.GetAutoResizingMask 8347
- 180.122 WebView.SetAutoResizingMask 8449

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.31 TextView.SetFocus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetFocus"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns OK or error.

Description

See also

- 165.32 TextView.SetFrame 7911
- 180.125 WebView.SetFocus 8454

Created 17th April 2019, last changed 17th April 2019.

165.32 TextView.SetFrame

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetFrame"; TextView; X; Y; Width; Height { ; swap })

Parameters

TextView

The reference number to the text view.

\$textview

X

The x coordinate.

Y

The y coordinate.

Width

The width of the control.

Height

The height of the control.

swap

Optional

Whether to swap y coordinate. By default we swap them. Pass 0 to disable or 1 to swap.

1

Result Returns OK or error.

Description

As Cocoa framework uses zero for the bottom coordinate, we have to swap for the normal topdown coordinates to be used.

See also

- 93.14 ImageView.SetFrame 5106
- 106.68 MapView.SetFrame 5716
- 165.31 TextView.SetFocus 7910
- 165.40 TextView.SetStyled 7919
- 165.41 TextView.SetTag 7920

Created 15th April 2019, last changed 15th April 2019.

165.33 TextView.SetFrameWithControl

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetFrameWithControl"; TextView; ControlName { ; DX; DY })

Parameters

TextView

The reference number to the text view.

\$textview

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move text view more to left or right.

0

DY

Optional

A delta to move text view more to top or bottom.

0

Result Returns OK or error.

Description

If you moved control in layout mode, this can move the text view back to the new position.

Also useful to switch between different locations on the layout.

See also

- 69.44 DragDrop.SetFrameWithControl 2541
- 93.15 ImageView.SetFrameWithControl 5107
- 106.69 MapView.SetFrameWithControl 5717
- 165.5 TextView.CreateWithControl 7882

165.33.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)

Created 15th April 2019, last changed 15th April 2019.

165.34 TextView.SetHTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	No	No	No	Yes

MBS("TextView.SetHTMLText"; TextView; HTML Text)

Parameters

TextView

The reference number to the text view.

\$textview

HTML Text

The new html text.

Result Returns OK or error.

Description

You pass HTML text and the field shows it.

See also

- 165.11 TextView.GetHTMLText 7889
- 165.35 TextView.SetPlainText 7914
- 180.65 WebView.GetHTMLText 8365

Example Databases

- [TextView](#)

Created 16th April 2019, last changed 16th April 2019.

165.35 `TextView.SetPlainText`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetPlainText"; TextView; Text)

Parameters

TextView

The reference number to the text view.

\$textview

Text

The new text.

"Hello"

Result Returns OK or error.

Description

See also

- 165.14 `TextView.GetPlainText` 7892
- 165.34 `TextView.SetHTMLText` 7913
- 180.73 `WebView.GetPlainText` 8375

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.36 TextView.SetRTF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetRTF"; TextView; RTF Text)

Parameters**TextView**

The reference number to the text view.

\$textview

RTF Text

The new text.

Result Returns OK or error.

Description

You pass RTF text and the field shows it.

See also

- 165.15 TextView.GetRTF 7893
- 165.20 TextView.GetTag 7898
- 165.21 TextView.GetTop 7899
- 165.41 TextView.SetTag 7920

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 16th April 2019.

165.37 TextView.SetReadOnly

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetReadOnly"; TextView; Value)

Parameters

TextView

The reference number to the text view.

\$textview

Value

The new setting. Pass 1 to enable read only mode or 0 to enable editing.

1

Result Returns OK or error.

Description

If text view is read only, the user can't edit the content.

See also

- 165.16 TextView.GetReadOnly

7894

Created 15th April 2019, last changed 15th April 2019.

165.38 TextView.SetRulerVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	No	No	No	No

MBS("TextView.SetRulerVisible"; TextView; Value)

Parameters**TextView**

The reference number to the text view.

\$textview

Value

The new setting. Pass 1 to show ruler or 0 to hide it.

1

Result Returns OK or error.

Description**See also**

- 165.17 [TextView.GetRulerVisible](#) 7895
- 165.42 [TextView.SetVisible](#) 7921

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 28th November 2019.

165.39 TextView.SetSpellCheckingEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetSpellCheckingEnabled"; TextView; Enable)

Parameters

TextView

The reference number to the text view.

\$textview

Enable

Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Only for Windows 8 and newer (on Windows).

See also

- 165.18 TextView.GetSpellCheckingEnabled

7896

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.40 TextView.SetStyled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetStyled"; TextView; Value)

Parameters

TextView

The reference number to the text view.

\$textview

Value

The new setting. Pass 1 for styled text or 0 for plain text.

1

Result Returns OK or error.

Description

If styled is enabled (by default), the text can be formatted with styles by the user.

See also

- 165.19 TextView.GetStyled 7897
- 165.32 TextView.SetFrame 7911

Example Databases

- [TextView](#)

Created 15th April 2019, last changed 15th April 2019.

165.41 TextView.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetTag"; TextView; tag)

Parameters

TextView

The reference number to the text view.

\$textview

tag

A string you want to associate with the text view.

Result Returns OK or error.

Description

Use the tag to store whatever value you want to associate with the text view. You can later query it using `TextView.GetTag`.

See also

- 106.87 `MapView.SetTag` 5737
- 165.15 `TextView.GetRTF` 7893
- 165.20 `TextView.GetTag` 7898
- 165.21 `TextView.GetTop` 7899
- 165.32 `TextView.SetFrame` 7911
- 165.36 `TextView.SetRTF` 7915

Created 15th April 2019, last changed 15th April 2019.

165.42 TextView.SetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.SetVisible"; TextView; Visible)

Parameters

TextView

The reference number to the text view.

\$textview

Visible

The new visible state. Pass 0 to hide or 1 to show.

1

Result Returns OK or error.

Description

By default we create it visible, but you can hide it if it's on a register and the user clicked to other tab.

See also

- 93.19 ImageView.SetVisible 5111
- 106.43 MapView.GetVisible 5688
- 106.89 MapView.SetVisible 5739
- 165.22 TextView.GetVisible 7900
- 165.38 TextView.SetRulerVisible 7917

Created 15th April 2019, last changed 25th December 2019.

165.43 TextView.ShowFontPanel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	No

MBS("TextView.ShowFontPanel"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns OK or error.

Description

For MacOS opens the font panel. When making changes in the panel, the textview updates live.

For Windows shows the font dialog. You can make changes and apply them with OK button.

Example Databases

- [TextView](#)

165.43.1 Blog Entries

- [Windows Font Dialog](#)

Created 16th April 2019, last changed 16th April 2019.

165.44 TextView.Undo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
165 TextView	9.2	Yes	Yes	No	No	Yes

MBS("TextView.Undo"; TextView)

Parameters

TextView

The reference number to the text view.

\$textview

Result Returns OK or error.

Description

See also

- 165.1 TextView.CanUndo

7877

Created 15th April 2019, last changed 15th April 2019.

Chapter 166

Time

Time functions.

166.1 Time.Format

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
166 Time	6.4	Yes	Yes	Yes	Yes	Yes

```
MBS( "Time.Format"; TimeStamp; FormatString { ; Locale } )
```

Parameters

TimeStamp

The FileMaker time stamp.

```
Get(CurrentTimeStamp)
```

FormatString

The format string.

Locale

Optional

The locale to use. Be aware that identifiers are not the same on Mac, Windows and Linux.

```
"FR_fr"
```

Result Returns text or error.

Description

locale is the name of the locale to use. You can pass empty string to use default/current locale.

Format is a format string like for strftime command in C.

The format specification is a string and may contain special character sequences called conversion specifications, each of which is introduced by a '%' character and terminated by some other character known as a

conversion specifier character. All other character sequences are ordinary character sequences.

The characters of ordinary character sequences (including the null byte) are copied verbatim from format to s. However, the characters of conversion specifications are replaced as follows:

Some conversion specifications can be modified by preceding the conversion specifier character by the E or O modifier to indicate that an alternative format should be used. If the alternative format or specification does not exist for the current locale, the behavior will be as if the unmodified conversion specification were used. (SU) The Single UNIX Specification mentions % Ec, % EC, % Ex, % EX, % Ey, % EY, % Od, % Oe, % OH, % OI, % Om, % OM, % OS, % Ou, % OU, % OV, % Ow, % OW, % Oy, where the effect of the O modifier is to use alternative numeric symbols (say, roman numerals), and that of the E modifier is to use a locale-dependent alternative representation.

Examples

Formats a date:

```
MBS( "Time.Format"; Get ( CurrentTimeStamp ); "% d % B % Y" )
```

Example result: 11 December 2016

Formats a date in french:

```
MBS( "Time.Format"; Get ( CurrentTimeStamp ); "% d % B % Y"; "FR_fr" )
```

Example result: 11 décembre 2016

Format a timestamp for MySQL:

```
MBS( "Time.Format"; Get ( CurrentTimeStamp ); "% Y-% m-% d % H:% M:% S" )
```

Example result: 2016-12-11 11:35:26

Time for HTTP Request:

```
MBS( "Time.Format"; Get ( CurrentTimeStamp ); "% a, % d % b % Y % H:% M:% S % Z" )
```

Example result: Sun, 11 Dec 2016 11:36:18 CET

Query week number:

```
MBS( "Time.Format"; Get(HostTimeStamp); "% W" )
```

See also

- 166.2 Time.Parse

7929

Example Databases

- [WebViewer/Calendar/Calendar](#)

166.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr1](#)
- [MBS FileMaker Plugin, version 8.1pr5](#)
- [MBS FileMaker Plugin, version 6.4pr4](#)
- [Tip of the day: Query connected clients on FileMaker Server by script](#)

Created 17th August 2016, last changed 31st May 2019.

- % a The abbreviated weekday name according to the current locale.
- % A The full weekday name according to the current locale.
- % b The abbreviated month name according to the current locale.
- % B The full month name according to the current locale.
- % c The preferred date and time representation for the current locale.
- % C The century number (year/100) as a 2-digit integer. (SU)
- % d The day of the month as a decimal number (range 01 to 31).
- % D Equivalent to % m/% d/% y. (Yecch-for Americans only. Americans should note that in other countries % d/% m/% y is rather common. This means that in international context this format is ambiguous and should not be used.) (SU)
- % e Like % d, the day of the month as a decimal number, but a leading zero is replaced by a space. (SU)
- % E Modifier: use alternative format, see below. (SU)
- % F Equivalent to % Y-% m-% d (the ISO 8601 date format). (Not on Windows)
- % G The ISO 8601 week-based year (see NOTES) with century as a decimal number. The 4-digit year corresponding to the ISO week number (see % V). This has the same format and value as % Y, except that if the ISO week number belongs to the previous or next year, that year is used instead. (TZ)
- % g Like % G, but without century, that is, with a 2-digit year (00-99). (TZ)
- % h Equivalent to % b. (SU)
- % H The hour as a decimal number using a 24-hour clock (range 00 to 23).
- % I The hour as a decimal number using a 12-hour clock (range 01 to 12).
- % j The day of the year as a decimal number (range 001 to 366).
- % k The hour (24-hour clock) as a decimal number (range 0 to 23); single digits are preceded by a blank. (See also % H.) (TZ)
- % l The hour (12-hour clock) as a decimal number (range 1 to 12); single digits are preceded by a blank. (See also % I.) (TZ)
- % m The month as a decimal number (range 01 to 12).
- % M The minute as a decimal number (range 00 to 59).
- % n A newline character. (SU)
- % O Modifier: use alternative format, see below. (SU)
- % p Either "AM" or "PM" according to the given time value, or the corresponding strings for the current locale. Noon is treated as "PM" and midnight as "AM".
- % P Like % p but in lowercase: "am" or "pm" or a corresponding string for the current locale. (GNU)
- % r The time in a.m. or p.m. notation. In the POSIX locale this is equivalent to % I:% M:% S % p. (SU)
- % R The time in 24-hour notation (% H:% M). (SU) For a version including the seconds, see % T below.
- % s The number of seconds since the Epoch, 1970-01-01 00:00:00 +0000 (UTC). (TZ)
- % S The second as a decimal number (range 00 to 60). (The range is up to 60 to allow for occasional leap seconds.)
- % t A tab character. (SU)
- % T The time in 24-hour notation (% H:% M:% S). (SU)
- % u The day of the week as a decimal, range 1 to 7, Monday being 1. See also % w. (SU)
- % U The week number of the current year as a decimal number, range 00 to 53,

166.2 Time.Parse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
166 Time	6.4	Yes	No	Yes	Yes	Yes

MBS("Time.Parse"; Text; FormatString { ; Locale })

Parameters

Text

The text to parse for date and/or time

"2016-11-30"

FormatString

The format string.

Locale

Optional

The locale to use. Be aware that identifiers are not the same on Mac, Windows and Linux.

"FR_fr"

Result Returns timestamp or error.

Description

The Time.Parse function parses the string in the parameter, according to the string pointed to by format parameter, and returns the result as timestamp. The resulting values will be relative to the local time zone. Thus, it can be considered the reverse operation of Time.Format.

The Time.Parse function is the converse function to FormateDateMBS and converts the character string pointed to by s to values which are stored in the date, using the format specified by format. Here format is a character string that consists of field descriptors and text characters, reminiscent of scanf (in C++). Each field descriptor consists of a % character followed by another character that specifies the replacement for the field descriptor. All other characters in the format string must have a matching character in the input string, except for whitespace, which matches zero or more whitespace characters in the input string. There should be whitespace or other alphanumeric characters between any two field descriptors.

The Time.Parse function processes the input string from left to right. Each of the three possible input elements (whitespace, literal, or format) are handled one after the other. If the input cannot be matched to the format string the function stops. The remainder of the format and input strings are not processed.

The supported input field descriptors are listed below. In case a text string (such as a weekday or month name) is to be matched, the comparison is case insensitive. In case a number is to be matched, leading zeros are permitted but not required.

Some field descriptors can be modified by the E or O modifier characters to indicate that an alternative format or specification should be used. If the alternative format or specification does not exist in the current locale, the unmodified field descriptor is used.

The E modifier specifies that the input string may contain alternative locale-dependent versions of the date and time representation:

Returns true on success. If the functions fails to match all of the format string and therefore an error occurred the function returns false.

Before libc 5.4.13 whitespace (and the 'n' and 't' specifications) was not handled, no 'E' and 'O' locale modifier characters were accepted, and the 'C' specification was a synonym for the 'c' specification.

The 'y' (year in century) specification is taken to specify a year in the 20th century by libc4 and libc5. It is taken to be a year in the range 1950-2049 by glibc 2.0. It is taken to be a year in 1969-2068 since glibc 2.1.

For reasons of symmetry, glibc tries to support for ParseDateMBS the same format characters as for FormatDateMBS. (In most cases the corresponding fields are parsed, but no field in tm is changed.) This leads to

Similarly, because of GNU extensions to FormatDateMBS, % k is accepted as a synonym for % H, and % l should be accepted as a synonym for % I, and % P is accepted as a synonym for % p. Finally

The glibc implementation does not require whitespace between two field descriptors.

Examples

Parse a date:

```
MBS( "Time.Parse"; "2016-11-30"; "% Y-% m-% d" )
```

Example result: 30.11.2016 00:00

Parse a timestamp:

```
MBS( "Time.Parse"; "2016-11-30 13:31"; "% Y-% m-% d % H:% M" )
```

Example result: 30.11.2016 13:31

See also

- 166.1 Time.Format

7925

166.2.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr4](#)
- [Tip of the day: Query connected clients on FileMaker Server by script](#)

Created 17th August 2016, last changed 17th June 2018.

% %	The % character.
% a or % A	The weekday name according to the current locale, in abbreviated form or the full name.
% b or % B or % h	The month name according to the current locale, in abbreviated form or the full name.
% c	The date and time representation for the current locale.
% C	The century number (0-99).
% d or % e	The day of month (1-31).
% D	Equivalent to % m/% d/% y. (This is the American style date, very confusing to non-Americans, especially since % d/% m/% y is widely used in Europe. The ISO 8601 standard format is % Y-% m-% d.)
% H	The hour (0-23).
% I	The hour on a 12-hour clock (1-12).
% j	The day number in the year (1-366).
% m	The month number (1-12).
% M	The minute (0-59).
% n	Arbitrary whitespace.
% p	The locale's equivalent of AM or PM. (Note: there may be none.)
% r	The 12-hour clock time (using the locale's AM or PM). In the POSIX locale equivalent to % I:% M:% S % p. If t_fmt_ampm is empty in the LC_TIME part of the current locale then the behavior is undefined.
% R	Equivalent to % H:% M.
% S	The second (0-60; 60 may occur for leap seconds; earlier also 61 was allowed).
% t	Arbitrary whitespace.
% T	Equivalent to % H:% M:% S.
% U	The week number with Sunday the first day of the week (0-53). The first Sunday of January is the first day of week 1.
% w	The weekday number (0-6) with Sunday = 0.
% W	The week number with Monday the first day of the week (0-53). The first Monday of January is the first day of week 1.
% x	The date, using the locale's date format.
% X	The time, using the locale's time format.
% y	The year within century (0-99). When a century is not otherwise specified, values in the range 69-99 refer to years in the twentieth century (1969-1999); values in the range 00-68 refer to years in the twenty-first century (2000-2068).
% Y	The year, including century (for example, 1991).

<code>% Ec</code>	The locale's alternative date and time representation.
<code>% EC</code>	The name of the base year (period) in the locale's alternative representation.
<code>% Ex</code>	The locale's alternative date representation.
<code>% EX</code>	The locale's alternative time representation.
<code>% Ey</code>	The offset from <code>% EC</code> (year only) in the locale's alternative representation.
<code>% EY</code>	The full alternative year representation. The <code>O</code> modifier specifies that the numerical input may be in an alternative locale-dependent format:
<code>% Od</code> or <code>% Oe</code>	The day of the month using the locale's alternative numeric symbols; leading zeros are permitted but not required.
<code>% OH</code>	The hour (24-hour clock) using the locale's alternative numeric symbols.
<code>% OI</code>	The hour (12-hour clock) using the locale's alternative numeric symbols.
<code>% Om</code>	The month using the locale's alternative numeric symbols.
<code>% OM</code>	The minutes using the locale's alternative numeric symbols.
<code>% OS</code>	The seconds using the locale's alternative numeric symbols.
<code>% OU</code>	The week number of the year (Sunday as the first day of the week) using the locale's alternative numeric symbols.
<code>% Ow</code>	The number of the weekday (Sunday=0) using the locale's alternative numeric symbols.
<code>% OW</code>	The week number of the year (Monday as the first day of the week) using the locale's alternative numeric symbols.
<code>% Oy</code>	The year (offset from <code>% C</code>) using the locale's alternative numeric symbols.
<code>% F</code>	Equivalent to <code>% Y-% m-% d</code> , the ISO 8601 date format.
<code>% g</code>	The year corresponding to the ISO week number, but without the century (0-99).
<code>% G</code>	The year corresponding to the ISO week number. (For example, 1991.)
<code>% u</code>	The day of the week as a decimal number (1-7, where Monday = 1).
<code>% V</code>	The ISO 8601:1988 week number as a decimal number (1-53). If the week (starting on Monday) containing 1 January has four or more days in the new year, then it is considered week 1. Otherwise, it is the last week of the previous year, and the next week is week 1.
<code>% z</code>	An RFC-822/ISO 8601 standard timezone specification.
<code>% Z</code>	The timezone name.
<code>% s</code>	The number of seconds since the Epoch, 1970-01-01 00:00:00 +0000 (UTC). Leap seconds are not counted unless leap second support is available.

166.3 Time.TimeStampToUTC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
166 Time	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Time.TimeStampToUTC"; TimeStamp { ; AsText })

Parameters

TimeStamp

The input time stamp in local time zone.

AsText

Optional

Boolean to decide whether to pass back timestamp (0, default) or text (1).

1

Result Returns OK or error.

Description

Returns either timestamp in UTC (by removing time zone offset) or as text in format like this: 2014-08-18T12:00:00Z.

Examples

Convert local time to UTC:

```
MBS( "Time.TimeStampToUTC"; Get(CurrentTimeStamp) )
```

Example result: 11.12.2016 10:36:44

Convert time to UTC text:

```
MBS( "Time.TimeStampToUTC"; Get(CurrentTimeStamp); 1 )
```

Example result: 2016-12-11T10:36:50Z

166.3.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 6th February 2016, last changed 11st December 2016.

166.4 Time.TimeZoneOffset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
166 Time	9.1	Yes	Yes	Yes	Yes	Yes

MBS("Time.TimeZoneOffset"; AsText)

Parameters

AsText

Pass 1 to get back time zone as text like "+03:00". Otherwise default is zero to return as number of seconds.
1

Result Returns value or error.

Description

Returns either seconds or formatted text.

Time zone changes on Windows don't take effect until you restart FileMaker. For MacOS, the functions notice the changes in system automatically.

Examples

Query time zone as text:

```
MBS( "Time.TimeZoneOffset"; 1 )
```

Example result: "+01:00"

Query time zone as number:

```
MBS( "Time.TimeZoneOffset"; 0 )
```

Example result: 3600

166.4.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr4](#)

Created 20th February 2019, last changed 20th February 2019.

166.5 Time.UnixTimeStampToFileMaker

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
166 Time	8.3	Yes	Yes	Yes	Yes	Yes

MBS("Time.UnixTimeStampToFileMaker"; UnixTime { ; GMT })

Parameters

UnixTime

The time value from unix.

1527786192

GMT

Optional

Pass 1 for GMT or 0 for local time zone. Default is 0 for local time.

0

Result Returns OK or error.

Description

Pass unix time, which is number of seconds since 1970.

Examples

Convert time:

MBS("Time.UnixTimeStampToFileMaker"; 1527786192)

Example result: "31.05.2018 19:03:12"

See also

- 175.14 Time.UnixTimeStamp

8245

166.5.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)

Created 31st May 2018, last changed 31st May 2018.

Chapter 167

Toolbar

Extend FileMaker toolbar with new buttons.

167.1 Toolbar.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Toolbar.Install")

Result Returns OK or error.

Description

You call this functions once at startup. You can use `Toolbar.Register` after or before to introduce new identifiers. Use `Window.SetToolbarConfiguration` to install a new configuration including your custom identifiers or use customize toolbar palette.

See also

- 182.3 `Toolbar.Register` 8534
- 167.4 `Toolbar.SetImage` 7942
- 167.5 `Toolbar.SetLabel` 7944
- 167.6 `Toolbar.SetPaletteLabel` 7946
- 167.7 `Toolbar.SetTooltip` 7947
- 182.99 `Window.SetToolbarConfiguration` 8656

Example Databases

- [Mac only/Toolbar/Custom Toolbar Items](#)

167.1.1 Blog Entries

- [Toolbar functions for FileMaker on Mac](#)

Created 20th August 2014, last changed 20th August 2014.

167.2 Toolbar.InstallBackground

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Toolbar.InstallBackground"; Image { ; Mode; DisableTitle })

Parameters

Image

The image to you. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$img

Mode

Optional

Can be 0 to stretch (default) or 1 to left align image.

0

DisableTitle

Optional

If 1, we do not draw the window title on top of the image.

0

Result Returns OK or error.

Description

There is currently only one style for all FileMaker windows on Mac OS X.

We draw an image below the toolbar buttons. Either we stretch it to full width we align it to left and fill the space on the right with last pixel colors.

There are little redraw issues, especially when resizing window.

Currently doesn't work in FileMaker 14 and newer. If you need that to work, please contact us.

Example Databases

- [Mac only/Toolbar/Custom Toolbar Background](#)

167.2.1 Blog Entries

- [MBS FileMaker Plugin 4.3 for OS X/Windows - More than 2700 Functions In One Plugin](#)
- [Toolbar functions for FileMaker on Mac](#)

Created 25th August 2014, last changed 28th August 2016.

167.3 Toolbar.Register

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Toolbar.Register"; Identifier; FileName; ScriptName; Parameter; Label; PaletteLabel; Tooltip; Image)

Parameters

Identifier

The toolbar identifier. Must be an unique string.

"Test"

FileName

The file name of the FileMaker database where the script is located.

"Toolbar.fmp12"

ScriptName

The name of the script to call when toolbar item is pressed.

"ToolbarScript"

Parameter

The parameter to pass to the script. This can be same as identifier. Using different parameters allows you to use one script for all toolbar items.

"SwitchToMainLayout"

Label

The label, which normally appears in the toolbar and in the overflow menu.

"Hello"

PaletteLabel

The label that appears when it is in the customization palette. Can be same as label or different.

"Hello World"

Tooltip

The tooltip for the label!

"click me"

Image

The image to use for the toolbar item. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Please use an identifier with your own prefix/suffix to make sure you have no conflict with existing identifiers.

Once your item is registered, the next time the toolbar updates itself it will use it.

You can use Window.SetToolbarConfiguration or the customize palette to add your toolbar item.

You need to call `Toolbar.Install` at least once before using this command to have it take effect.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 182.1 `Toolbar.Install` 8531
- 182.4 `Toolbar.Unregister` 8536
- 182.99 `Window.SetToolbarConfiguration` 8656

Example Databases

- [Mac only/Toolbar/Custom Toolbar Items](#)

167.3.1 Blog Entries

- [Replace toolbar images and labels](#)
- [Toolbar functions for FileMaker on Mac](#)

Created 20th August 2014, last changed 12nd September 2016.

167.4 Toolbar.SetImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar	6.4	Yes	No	No	No	No

MBS("Toolbar.SetImage"; Identifier; Image)

Parameters

Identifier

The toolbar identifier.

Possible toolbar identifiers: RecordNavigationToolbarItemIdentifier, ShowAllToolbarItemIdentifier, NSToolbarSpaceItem, NewRecordToolbarItemIdentifier, DeleteRecordToolbarItemIdentifier, NSToolbarSpaceItem, FindDropdownToolbarItemIdentifier, SortToolbarItemIdentifier, UploadServerToolbarItemIdentifier, QuickFindToolbarItemIdentifier, DuplicateRecordToolbarItemIdentifier, ManageToolbarItemIdentifier, SaveAsExcelToolbarItemIdentifier, SaveAsPDFToolbarItemIdentifier, SaveAsSnapshotLinkToolbarItemIdentifier, ImportToolbarItemIdentifier, ExportToolbarItemIdentifier, PrintToolbarItemIdentifier, PageSetupToolbarItemIdentifier, SendMailToolbarItemIdentifier, OmitRecordToolbarItemIdentifier, ShowOmittedToolbarItemIdentifier, NewWindowToolbarItemIdentifier, DebuggerToolbarItemIdentifier, DataViewerToolbarItemIdentifier, SavedFindToolbarItemIdentifier, NewLayoutAnyModeToolbarItemIdentifier
"NewRecordToolbarItemIdentifier"

Image

The image to use for the toolbar item. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Use an empty image to remove image from table.

You need to call `Toolbar.Install` at least once before using this command to have it take effect.

Examples

Sets images for new and delete toolbar:

```
Set Variable [ $r; Value:MBS( "Toolbar.SetImage"; "NewRecordToolbarItemIdentifier"; Toolbar::NewRecordImage) ]
```

```
Set Variable [ $r; Value:MBS( "Toolbar.SetImage"; "DeleteRecordToolbarItemIdentifier"; Toolbar::DeleteRecordImage) ]
```

See also

- 182.1 `Toolbar.Install` 8531
- 167.5 `Toolbar.SetLabel` 7944

167.4.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 12nd September 2016, last changed 12nd September 2016.

167.5 Toolbar.SetLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar	6.4	Yes	No	No	No	No

MBS("Toolbar.SetLabel"; Identifier; Text)

Parameters

Identifier

The toolbar identifier.

Possible toolbar identifiers: RecordNavigationToolbarItemIdentifier, ShowAllToolbarItemIdentifier, NSToolbarSpaceItem, NewRecordToolbarItemIdentifier, DeleteRecordToolbarItemIdentifier, NSToolbarSpaceItem, FindDropdownToolbarItemIdentifier, SortToolbarItemIdentifier, UploadServerToolbarItemIdentifier, QuickFindToolbarItemIdentifier, DuplicateRecordToolbarItemIdentifier, ManageToolbarItemIdentifier, SaveAsExcelToolbarItemIdentifier, SaveAsPDFToolbarItemIdentifier, SaveAsSnapshotLinkToolbarItemIdentifier, ImportToolbarItemIdentifier, ExportToolbarItemIdentifier, PrintToolbarItemIdentifier, PageSetupToolbarItemIdentifier, SendMailToolbarItemIdentifier, OmitRecordToolbarItemIdentifier, ShowOmittedToolbarItemIdentifier, NewWindowToolbarItemIdentifier, DebuggerToolbarItemIdentifier, DataViewerToolbarItemIdentifier, SavedFindToolbarItemIdentifier, NewLayoutAnyModeToolbarItemIdentifier
"NewRecordToolbarItemIdentifier"

Text

The text to use for label.

"New Person"

Result Returns OK or error.

Description

Use an empty text to remove entry from labels table.

You need to call Toolbar.Install at least once before using this command to have it take effect.

Examples

Overwrite labels:

```
Set Variable [ $r; Value:MBS( "Toolbar.SetLabel"; "NewRecordToolbarItemIdentifier"; "New Person" ) ]
Set Variable [ $r; Value:MBS( "Toolbar.SetLabel"; "DeleteRecordToolbarItemIdentifier"; "Delete Person" ) ]
```

See also

- 182.1 Toolbar.Install 8531
- 167.4 Toolbar.SetImage 7942

167.5.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 12nd September 2016, last changed 12nd September 2016.

167.6 Toolbar.SetPaletteLabel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar	6.4	Yes	No	No	No	No

MBS("Toolbar.SetPaletteLabel"; Identifier; Text)

Parameters

Identifier

The toolbar identifier.

Possible toolbar identifiers: RecordNavigationToolbarItemIdentifier, ShowAllToolbarItemIdentifier, NSToolbarSpaceItem, NewRecordToolbarItemIdentifier, DeleteRecordToolbarItemIdentifier, NSToolbarSpaceItem, FindDropdownToolbarItemIdentifier, SortToolbarItemIdentifier, UploadServerToolbarItemIdentifier, QuickFindToolbarItemIdentifier, DuplicateRecordToolbarItemIdentifier, ManageToolbarItemIdentifier, SaveAsExcelToolbarItemIdentifier, SaveAsPDFToolbarItemIdentifier, SaveAsSnapshotLinkToolbarItemIdentifier, ImportToolbarItemIdentifier, ExportToolbarItemIdentifier, PrintToolbarItemIdentifier, PageSetupToolbarItemIdentifier, SendMailToolbarItemIdentifier, OmitRecordToolbarItemIdentifier, ShowOmittedToolbarItemIdentifier, NewWindowToolbarItemIdentifier, DebuggerToolbarItemIdentifier, DataViewerToolbarItemIdentifier, SavedFindToolbarItemIdentifier, NewLayoutAnyModeToolbarItemIdentifier
"NewRecordToolbarItemIdentifier"

Text

The text to use for palette label.

"New Person"

Result Returns OK or error.

Description

Use an empty text to remove entry from labels table.

You need to call Toolbar.Install at least once before using this command to have it take effect.

See also

- 182.1 Toolbar.Install

8531

167.6.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 12nd September 2016, last changed 12nd September 2016.

167.7 Toolbar.SetTooltip

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar	6.4	Yes	No	No	No	No

MBS("Toolbar.SetTooltip"; Identifier; Text)

Parameters

Identifier

The toolbar identifier.

Possible toolbar identifiers: RecordNavigationToolbarItemIdentifier, ShowAllToolbarItemIdentifier, NSToolbarSpaceItem, NewRecordToolbarItemIdentifier, DeleteRecordToolbarItemIdentifier, NSToolbarSpaceItem, FindDropdownToolbarItemIdentifier, SortToolbarItemIdentifier, UploadServerToolbarItemIdentifier, QuickFindToolbarItemIdentifier, DuplicateRecordToolbarItemIdentifier, ManageToolbarItemIdentifier, SaveAsExcelToolbarItemIdentifier, SaveAsPDFToolbarItemIdentifier, SaveAsSnapshotLinkToolbarItemIdentifier, ImportToolbarItemIdentifier, ExportToolbarItemIdentifier, PrintToolbarItemIdentifier, PageSetupToolbarItemIdentifier, SendMailToolbarItemIdentifier, OmitRecordToolbarItemIdentifier, ShowOmittedToolbarItemIdentifier, NewWindowToolbarItemIdentifier, DebuggerToolbarItemIdentifier, DataViewerToolbarItemIdentifier, SavedFindToolbarItemIdentifier, NewLayoutAnyModeToolbarItemIdentifier
"NewRecordToolbarItemIdentifier"

Text

The text to use for tooltip.

"Creates a new person record."

Result Returns OK or error.

Description

Use an empty text to remove entry from tooltips table.

You need to call Toolbar.Install at least once before using this command to have it take effect.

See also

- 182.1 Toolbar.Install

8531

167.7.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr7](#)

Created 12nd September 2016, last changed 12nd September 2016.

167.8 Toolbar.Unregister

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Toolbar.Unregister"; Identifier)

Parameters

Identifier

The toolbar item identifier.

"Test"

Result Returns OK or error.

Description

The changes apply as soon as the toolbar updates itself.

See also

- 182.3 Toolbar.Register

8534

Created 20th August 2014, last changed 20th August 2014.

167.9 Window.ConfigureToolBarMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	8.3	Yes	No	No	No	No

MBS("Window.ConfigureToolBarMenu"; Mode)

Parameters

Mode

Pass 1 to disable menu completely. Pass 2 to remove the show/hide command. Pass 4 to remove the configuration command. Pass 6 to remove both commands.

1

Result Returns OK or error.

Description

The plugin can watch what menu is about to show up for the toolbar. We can remove menu or remove some entries.

Examples

Disable toolbar menus:

Set Variable [\$r; Value: MBS("Window.ConfigureToolBarMenu"; 1)]

167.9.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)
- [Configure Toolbar Menu with MBS FileMaker Plugin](#)

167.9.2 FileMaker Magazin

- [Ausgabe 4/2018, Seite 38](#)

Created 9th June 2018, last changed 27th August 2019.

167.10 Window.GetToolBarConfiguration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.GetToolBarConfiguration"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns configuration xml or error.

Description

Contains displayMode, visible, and a list of the item identifiers currently in the toolbar.

Do not depend on any details of the normal contents of a configuration dictionary. This may change with an update to Mac OS X or FileMaker.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.99 Window.SetToolBarConfiguration 8656

Example Databases

- [Mac only/Toolbar/Window Toolbar](#)

167.10.1 Blog Entries

- [Toolbar functions for FileMaker on Mac](#)

Created 19th August 2014, last changed 20th August 2014.

167.11 Window.GetToolBarCustomizationPaletteIsRunning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.GetToolBarCustomizationPaletteIsRunning"; WindowRef)

Parameters**WindowRef**

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns state or error.

Description

Returns 1 if palette is visible or 0 if not.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.65 Window.RunToolBarCustomizationPalette 8612

Created 19th August 2014, last changed 20th August 2014.

167.12 Window.GetToolBarVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.GetToolBarVisible"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns state or error.

Description

Value is 0 if invisible or 1 if visible.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.29 Window.GetTitleVisible 8569
- 182.74 Window.ScrollbarsVisible 8623
- 182.97 Window.SetTitleVisible 8654
- 182.100 Window.SetToolBarVisible 8657

Example Databases

- [Mac only/Toolbar/Window Toolbar](#)

Created 19th August 2014, last changed 20th August 2014.

167.13 Window.RunToolBarCustomizationPalette

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.RunToolBarCustomizationPalette"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

You can use Window.GetToolBarCustomizationPaletteIsRunning to query if customization sheet is open.

Examples

Run toolbar customization for current window:

MBS("Window.RunToolBarCustomizationPalette"; 0)

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.32 Window.GetToolBarCustomizationPaletteIsRunning 8572

Example Databases

- [Mac only/ToolBar/Custom Toolbar Items](#)
- [Mac only/ToolBar/Window Toolbar](#)

167.13.1 Blog Entries

- [ToolBar functions for FileMaker on Mac](#)

Created 19th August 2014, last changed 20th August 2014.

167.14 Window.SetShowsToolBarButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	2.4	Yes	No	No	No	No

MBS("Window.SetShowsToolBarButton"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

Whether to ignore mouse events or not. Pass 1 to ignore mouse events or 0 to not ignore mouse events.

1

Result Returns "OK" on success.

Description

Examples

Hide toolbar button for frontmost window:

```
MBS("Window.SetShowsToolBarButton"; 0; 0)
```

Show toolbar button for window:

```
MBS("Window.SetShowsToolBarButton"; $WindowRef; 1)
```

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.110 Window.ShowsToolBarButton](#) 8671

Example Databases

- [Window/Dialog from Filemaker Form](#)

167.14.1 Blog Entries

- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)

- [Dialogs with Filemaker](#)
- [MBS Filemaker Plugin, version 2.4pr8](#)

167.14.2 FileMaker Magazin

- Ausgabe 5/2011, Seite 55

Created 18th August 2014, last changed 20th August 2014.

167.15 Window.SetToolbarConfiguration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.SetToolbarConfiguration"; WindowRef; ConfigurationXML)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

ConfigurationXML

The configuration XML. Should be the one returned by Window.GetToolbarConfiguration.

\$ConfigurationXML

Result Returns OK or error.

Description

Pass a xml with the toolbar's configuration information. If you want to provide a custom xml, you should first get the receiver's current configuration xml, then create a modified copy, rather than trying to construct one yourself.

Do not depend on any details of the normal contents of a configuration dictionary. This may change with an update to Mac OS X or FileMaker.

See also

- 182.1 Toolbar.Install 8531
- 182.3 Toolbar.Register 8534
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.31 Window.GetToolbarConfiguration 8571

Example Databases

- [Mac only/Toolbar/Window Toolbar](#)

167.15.1 Blog Entries

- [Toolbar functions for FileMaker on Mac](#)

Created 19th August 2014, last changed 20th August 2014.

167.16 Window.SetToolBarVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.SetToolBarVisible"; WindowRef; State)

Parameters**WindowRef**

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

State

The new state. Pass 0 to hide or 1 to show toolbar.

1

Result Returns OK or error.

Description**Examples**

Show toolbar in current window:

```
MBS( "Window.SetToolBarVisible"; 0; 1 )
```

Hide toolbar in current window:

```
MBS( "Window.SetToolBarVisible"; 0; 0 )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.29 Window.GetTitleVisible 8569
- 182.33 Window.GetToolBarVisible 8573
- 182.74 Window.ScrollbarsVisible 8623
- 182.97 Window.SetTitleVisible 8654

Example Databases

- [Mac only/ToolBar/Window Toolbar](#)

Created 19th August 2014, last changed 20th August 2014.

167.17 Window.ShowsToolBarButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	2.4	Yes	No	No	No	No

MBS("Window.ShowsToolBarButton"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 0 if toolbar button is hidden or 1 if toolbar button is visible.

Description

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.93 Window.SetShowsToolBarButton](#) 8649

167.17.1 Blog Entries

- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr8](#)

167.17.2 FileMaker Magazin

- Ausgabe 5/2011, Seite 55

Created 18th August 2014, last changed 20th August 2014.

Chapter 168

TouchBar

Create your own TouchBar for Macbook Pro.

168.1 App.ClearTouchBar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
34 App 168 TouchBar	8.4	Yes	No	No	No	No

MBS("App.ClearTouchBar")

Result Returns OK or error.

Description

You assign the TouchBar with TouchBar.AssignToApp function.

See also

- 168.3 TouchBar.AssignToApp

7963

168.1.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr2](#)

Created 8th August 2018, last changed 8th August 2018.

168.2 TouchBar.AddButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.AddButton"; TouchBarRef; Identifier; Text; Image; CustomizationLabel; visibilityPriority; fileName; scriptName { ; Expression })

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Identifier

The identifier for the new item.

"com.yourdomain.send"

Text

The text of the button. Can be empty to show no text.

"Send"

Image

The image of the button. Pass container here with PNG for best result. JPEG may not work due to missing transparency. Can be one of the following texts to pick a default image: `NSImageNameTouchBarAddDetailTemplate`, `NSImageNameTouchBarAddTemplate`, `NSImageNameTouchBarAlarmTemplate`, `NSImageNameTouchBarAudioInputMuteTemplate`, `NSImageNameTouchBarAudioInputTemplate`, `NSImageNameTouchBarAudioOutputMuteTemplate`, `NSImageNameTouchBarAudioOutputVolumeHighTemplate`, `NSImageNameTouchBarAudioOutputVolumeLowTemplate`, `NSImageNameTouchBarAudioOutputVolumeMediumTemplate`, `NSImageNameTouchBarAudioOutputVolumeOffTemplate`, `NSImageNameTouchBarBookmarksTemplate`, `NSImageNameTouchBarColorPickerFill`, `NSImageNameTouchBarColorPickerFont`, `NSImageNameTouchBarColorPickerStroke`, `NSImageNameTouchBarCommunicationAudioTemplate`, `NSImageNameTouchBarCommunicationVideoTemplate`, `NSImageNameTouchBarComposeTemplate`, `NSImageNameTouchBarDeleteTemplate`, `NSImageNameTouchBarDownloadTemplate`, `NSImageNameTouchBarEnterFullScreenTemplate`, `NSImageNameTouchBarExitFullScreenTemplate`, `NSImageNameTouchBarFastForwardTemplate`, `NSImageNameTouchBarFolderCopyToTemplate`, `NSImageNameTouchBarFolderMoveToTemplate`, `NSImageNameTouchBarFolderTemplate`, `NSImageNameTouchBarGetInfoTemplate`, `NSImageNameTouchBarGoBackTemplate`, `NSImageNameTouchBarGoDownTemplate`, `NSImageNameTouchBarGoForwardTemplate`, `NSImageNameTouchBarGoUpTemplate`, `NSImageNameTouchBarHistoryTemplate`, `NSImageNameTouchBarIconViewTemplate`, `NSImageNameTouchBarListViewTemplate`, `NSImageNameTouchBarMailTemplate`, `NSImageNameTouchBarNewFolderTemplate`, `NSImageNameTouchBarNewMessageTemplate`, `NSImageNameTouchBarOpenInBrowserTemplate`, `NSImageNameTouchBarPauseTemplate`, `NSImageNameTouchBarPlayheadTemplate`, `NSImageNameTouchBarPlayPauseTemplate`, `NSImageNameTouchBarPlayTemplate`, `NSImageNameTouchBarQuickLookTemplate`, `NSImageNameTouchBarRecordStartTemplate`, `NSImageNameTouchBarRecordStopTemplate`, `NSImageNameTouchBarRefreshTemplate`, `NSImageNameTouchBarRewindTemplate`, `NSImageNameTouchBarRotateLeftTemplate`, `NSImageNameTouchBarRotateRightTemplate`, `NSImageNameTouchBarSearchTemplate`, `NSImageNameTouchBarShareTemplate`, `NSImageNameTouchBarSidebarTemplate`, `NSImageNameTouchBarSkipAhead15SecondsTemplate`, `NSImageNameTouchBarSkipAhead30SecondsTemplate`, `NSImageNameTouchBarSkipAheadTemplate`, `NSImageNameTouchBarSkipBack15SecondsTemplate`, `NSImageNameTouchBarSkipBack30Sec-`

ondsTemplate, NSImageNameTouchBarSkipBackTemplate, NSImageNameTouchBarSkipToEndTemplate, NSImageNameTouchBarSkipToStartTemplate, NSImageNameTouchBarSlideshowTemplate, NSImageNameTouchBarTagIconTemplate, NSImageNameTouchBarTextBoldTemplate, NSImageNameTouchBarTextBoldTemplate, NSImageNameTouchBarTextCenterAlignTemplate, NSImageNameTouchBarTextItalicTemplate, NSImageNameTouchBarTextJustifiedAlignTemplate, NSImageNameTouchBarTextLeftAlignTemplate, NSImageNameTouchBarTextListTemplate, NSImageNameTouchBarTextRightAlignTemplate, NSImageNameTouchBarTextStrikethroughTemplate, NSImageNameTouchBarTextUnderlineTemplate, NSImageNameTouchBarUserAddTemplate, NSImageNameTouchBarUserGroupTemplate, NSImageNameTouchBarUserTemplate, NSImageNameTouchBarVolumeDownTemplate or NSImageNameTouchBarVolumeUpTemplate.
 ”NSImageNameTouchBarMailTemplate”

CustomizationLabel

The customization label.

”Send Email”

visibilityPriority

The visibility priority. Ranges from -1000 for low to 1000 for high.

0

fileName

The file name where the script is stored.

Get(fileName)

scriptName

The script name (or ID) to trigger when button is used. Parameter to the script is the identifier.

”TouchBar SendEmail”

Expression

Optional

An expression to execute when button is pressed.

””

Result Returns OK or error.

Description**Examples**

Add a back button:

```
Set Variable [ $r ; Value: MBS( "TouchBar.AddButton"; $t; "PrevRecord"; "" ; "NSImageNameTouchBar-GoBackTemplate"; "Previous"; 0; Get(fileName); "PrevRecordTouchBar" ) ]
```

Add a next button:

```
Set Variable [ $r ; Value: MBS( "TouchBar.AddButton"; $t; "NextRecord"; "" ; "NSImageNameTouchBar-GoForwardTemplate"; "Previous"; 0; Get(fileName); "NextRecordTouchBar" ) ]
```

Add a plus button:

```
Set Variable [ $r ; Value: MBS( "TouchBar.AddButton"; $t; "AddRecord"; "" ; "NSImageNameTouchBarAd-
```

```
dTemplate"; "Add"; 0; Get(FileName); "AddRecordTouchBar" ) ]
```

Add a delete button:

```
Set Variable [ $r ; Value: MBS( "TouchBar.AddButton"; $t; "DeleteRecord"; ""; "NSImageNameTouch-  
BarDeleteTemplate"; "Delete"; 0; Get(FileName); "DeleteRecordTouchBar" ) ]
```

Add button to trigger data viewer:

```
Set Variable [ $r ; Value: MBS( "TouchBar.AddButton"; $t; "DataViewerButton"; "DataViewer"; "";  
"DataViewer"; 0; ""; ""; "MBS(\\"MenuBar.RunMenuCommand\\"; 49297)" ) ]
```

Add button to trigger debugger:

```
Set Variable [ $r ; Value: MBS( "TouchBar.AddButton"; $t; "DebuggerButton"; "Debugger"; ""; "Debug-  
ger"; 0; ""; ""; "MBS(\\"MenuBar.RunMenuCommand\\"; 49260)" ) ]
```

See also

- 113.5 MenuBar.RunMenuCommand 5999
- 168.3 TouchBar.AssignToApp 7963
- 168.4 TouchBar.AssignToWindow 7965

Example Databases

- [Mac only/TouchBar](#)

168.2.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 1st November 2016, last changed 5th October 2017.

168.3 TouchBar.AssignToApp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.AssignToApp"; TouchBarRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Result Returns OK or error.

Description

Examples

Build App TouchBar:

```
# Create a new TouchBar
Set Variable [ $t; Value:MBS( "TouchBar.Create" ) ]
# Add two buttons
Set Variable [ $r; Value:MBS( "TouchBar.AddButton"; $t; "AddRecord"; ""; "NSImageNameTouchBarAddTemplate"; "Add"; 0; Get(FileName); "AddRecordTouchBar" ) ]
Set Variable [ $r; Value:MBS( "TouchBar.AddButton"; $t; "DeleteRecord"; ""; "NSImageNameTouchBarDeleteTemplate"; "Delete"; 0; Get(FileName); "DeleteRecordTouchBar" ) ]
Set Variable [ $r; Value:MBS( "TouchBar.AddButton"; $t; "InfoButton"; ""; TouchBar::MBS; "Info"; 0; Get(FileName); "InfoTouchBar" ) ]
# Set which button show by default:
Set Variable [ $r; Value:MBS( "TouchBar.SetDefaultItemIdentifiers"; $t; "AddRecord$InfoButton$NSTouchBarItemIdentifierOtherItemsProxy" ) ]
# Set the primary button:
Set Variable [ $r; Value:MBS( "TouchBar.SetPrincipalItemIdentifier"; $t; "AddRecord" ) ]
# Set which buttons can be configured:
Set Variable [ $r; Value:MBS( "TouchBar.SetCustomizationAllowedItemIdentifiers"; $t; "AddRecord$InfoButton$DeleteRecord" ) ]
# Set this touch bar to be the app one:
Set Variable [ $r; Value:MBS( "TouchBar.AssignToApp"; $t ) ]
```

See also

- 168.1 App.ClearTouchBar 7959
- 168.2 TouchBar.AddButton 7960
- 168.7 TouchBar.Create 7969
- 168.17 TouchBar.SetCustomizationAllowedItemIdentifiers 7979

- 168.20 TouchBar.SetDefaultItemIdentifiers 7982
- 168.21 TouchBar.SetPrincipalItemIdentifier 7983

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 3th November 2016.

168.4 TouchBar.AssignToWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.AssignToWindow"; TouchBarRef; WindowRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

Examples

Build TouchBar for Window:

```
# Create a new TouchBar
Set Variable [ $t; Value:MBS( "TouchBar.Create" ) ]
# Add two buttons
Set Variable [ $r; Value:MBS( "TouchBar.AddButton"; $t; "PrevRecord"; ""; "NSImageNameTouchBarGoBackTemplate"; "Previous"; 0; Get(FileName); "PrevRecordTouchBar" ) ]
Set Variable [ $r; Value:MBS( "TouchBar.AddButton"; $t; "NextRecord"; ""; "NSImageNameTouchBarGoForwardTemplate"; "Previous"; 0; Get(FileName); "NextRecordTouchBar" ) ]
# Set which button show by default:
Set Variable [ $r; Value:MBS( "TouchBar.SetDefaultItemIdentifiers"; $t; "PrevRecord$NextRecord$NSTouchBarItemIdentifierOtherItemsProxy" ) ]
# Set the primary button:
Set Variable [ $r; Value:MBS( "TouchBar.SetPrincipalItemIdentifier"; $t; "NextRecord" ) ]
# Set which buttons can be configured:
Set Variable [ $r; Value:MBS( "TouchBar.SetCustomizationAllowedItemIdentifiers"; $t; "PrevRecord$NextRecord" ) ]
# Assign touchbar to current window:
Set Variable [ $r; Value:MBS( "TouchBar.AssignToWindow"; $t; 0 ) ]
```

See also

- 168.2 TouchBar.AddButton 7960
- 168.7 TouchBar.Create 7969
- 168.17 TouchBar.SetCustomizationAllowedItemIdentifiers 7979

- 168.20 TouchBar.SetDefaultItemIdentifiers 7982
- 168.21 TouchBar.SetPrincipalItemIdentifier 7983
- 182.9 Window.ClearTouchBar 8543
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 3th November 2016.

168.5 TouchBar.Available

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.Available")

Result Returns 1 or 0.

Description

Returns 1 on Mac OS X 10.12.1 with TouchBar support.

The value 1 does not mean that there is a TouchBar, just the software to handle it.

But 0 clearly says that there is none.

Examples

Check touchbar:

```
If [ MBS( "TouchBar.Available" ) ]
Show Custom Dialog [ "TouchBar" ; "Is available and may be installed." ]
Else
Show Custom Dialog [ "TouchBar" ; "Is not available." ]
End If
```

See also

- 168.16 TouchBar.SetAutomaticCustomizeTouchBarMenuItemEnabled 7978
- 168.22 TouchBar.ToggleCustomizationPalette 7984

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 28th November 2019.

168.6 TouchBar.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.Clear"; TouchBarRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Result Returns OK or error.

Description

See also

- 168.7 TouchBar.Create 7969
- 168.15 TouchBar.Release 7977

Created 1st November 2016, last changed 1st November 2016.

168.7 TouchBar.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.Create")

Result Returns reference number or error.

Description

Returns an error if TouchBar is not available.

See also

- 168.3 TouchBar.AssignToApp 7963
- 168.4 TouchBar.AssignToWindow 7965
- 168.6 TouchBar.Clear 7968
- 168.15 TouchBar.Release 7977

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 1st November 2016.

168.8 TouchBar.GetAutomaticCustomizeTouchBarItemEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.GetAutomaticCustomizeTouchBarItemEnabled")

Result Returns 0, 1 or error.

Description

Whether or not a menu item to customize the touch bar can be automatically added to the main menu. It will only actually be added when a touch bar hardware or simulator is present. Defaults to 0. Setting this property to 1 is the recommended way to add the customization menu item.

But if non-standard placement of the menu item is needed, creating a menu item with an action of toggle-TouchBarCustomizationPalette can be used instead.

See also

- 168.16 TouchBar.SetAutomaticCustomizeTouchBarItemEnabled 7978

Created 1st November 2016, last changed 1st November 2016.

168.9 TouchBar.GetCustomizationAllowedItemIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.GetCustomizationAllowedItemIdentifiers"; TouchBarRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Result Returns OK or error.

Description

The items that are presented in the customization palette for the user to add to the touch bar. These items will be presented to the user in the order specified in this array.

See also

- 168.11 TouchBar.GetCustomizationRequiredItemIdentifiers 7973
- 168.17 TouchBar.SetCustomizationAllowedItemIdentifiers 7979
- 168.19 TouchBar.SetCustomizationRequiredItemIdentifiers 7981

Created 1st November 2016, last changed 1st November 2016.

168.10 TouchBar.GetCustomizationIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.GetCustomizationIdentifier"; TouchBarRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Result Returns text or error.

Description

A string uniquely identifying this bar for customization purposes. All bars with this identifier will have their items coordinated automatically during customization or instantiation.

Touch bars lacking a customizationIdentifier are not customizable.

See also

- 168.18 TouchBar.SetCustomizationIdentifier

7980

Created 1st November 2016, last changed 1st November 2016.

168.11 TouchBar.GetCustomizationRequiredItemIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.GetCustomizationRequiredItemIdentifiers"; TouchBarRef)

Parameters**TouchBarRef**

The reference number for the touch bar.

\$TouchBar

Result Returns OK or error.

Description

Some items are too important to be removed. The corresponding item identifiers should be listed here. During customization the user will be prevented from removing these items from the touch bar.

See also

- 168.9 TouchBar.GetCustomizationAllowedItemIdentifiers 7971
- 168.17 TouchBar.SetCustomizationAllowedItemIdentifiers 7979
- 168.19 TouchBar.SetCustomizationRequiredItemIdentifiers 7981

Created 1st November 2016, last changed 1st November 2016.

168.12 TouchBar.GetDefaultItemIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.GetDefaultItemIdentifiers"; TouchBarRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Result Returns OK or error.

Description

An array of identifiers specifying the items in this touch bar.

Item identifiers should be globally unique, excepting NSTouchBarItemIdentifierFixedSpaceSmall, NSTouchBarItemIdentifierFixedSpaceLarge, NSTouchBarItemIdentifierFlexibleSpace, and NSTouchBarItemIdentifierOtherItemsProxy.

This array also corresponds to the item ordering for the receiver in the “default set” in the customization palette.

See also

- 168.13 TouchBar.GetItemIdentifiers 7975
- 168.14 TouchBar.GetPrincipalItemIdentifier 7976
- 168.20 TouchBar.SetDefaultItemIdentifiers 7982

Created 1st November 2016, last changed 1st November 2016.

168.13 TouchBar.GetItemIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.GetItemIdentifiers"; TouchBarRef)

Parameters**TouchBarRef**

The reference number for the touch bar.

\$TouchBar

Result Returns list or error.

Description

If the bar has not been customized this will match the defaultItemIdentifiers.

See also

- 168.12 TouchBar.GetDefaultItemIdentifiers 7974
- 168.20 TouchBar.SetDefaultItemIdentifiers 7982

Created 1st November 2016, last changed 1st November 2016.

168.14 TouchBar.GetPrincipalItemIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.GetPrincipalItemIdentifier"; TouchBarRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Result Returns text or error.

Description

Specifying a principal item identifier communicates that the item with that identifier has special significance to this touch bar. Currently, that item will be placed in the center of the resolved touch row. Note that multiple visible bars may each specify a principal item identifier - but only one of them can have the request honored.

See also

- 168.12 TouchBar.GetDefaultItemIdentifiers 7974
- 168.21 TouchBar.SetPrincipalItemIdentifier 7983

Created 1st November 2016, last changed 1st November 2016.

168.15 TouchBar.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.Release"; TouchBarRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Result Returns OK or error.

Description

See also

- 168.6 TouchBar.Clear 7968
- 168.7 TouchBar.Create 7969

Created 1st November 2016, last changed 1st November 2016.

168.16 TouchBar.SetAutomaticCustomizeTouchBarItemEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.SetAutomaticCustomizeTouchBarItemEnabled"; Setting)

Parameters

Setting

The new setting. Can be 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Whether or not a menu item to customize the touch bar can be automatically added to the main menu. It will only actually be added when a touch bar hardware or simulator is present. Defaults to 0. Setting this property to 1 is the recommended way to add the customization menu item.

But if non-standard placement of the menu item is needed, creating a menu item with an action of toggle-TouchBarCustomizationPalette can be used instead.

Examples

Enable menu command:

```
If [ MBS( "TouchBar.Available" ) ]
Set Variable [ $r; Value:MBS( "TouchBar.SetAutomaticCustomizeTouchBarItemEnabled"; 1 ) ]
End If
```

See also

- 168.5 TouchBar.Available 7967
- 168.8 TouchBar.GetAutomaticCustomizeTouchBarItemEnabled 7970

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 3th November 2016.

168.17 TouchBar.SetCustomizationAllowedItemIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.SetCustomizationAllowedItemIdentifiers"; TouchBarRef; List)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

List

The list of items.

Result Returns OK or error.

Description

The items that are presented in the customization palette for the user to add to the touch bar. These items will be presented to the user in the order specified in this array.

See also

- 168.3 TouchBar.AssignToApp 7963
- 168.4 TouchBar.AssignToWindow 7965
- 168.9 TouchBar.GetCustomizationAllowedItemIdentifiers 7971
- 168.11 TouchBar.GetCustomizationRequiredItemIdentifiers 7973
- 168.19 TouchBar.SetCustomizationRequiredItemIdentifiers 7981

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 1st November 2016.

168.18 TouchBar.SetCustomizationIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.SetCustomizationIdentifier"; TouchBarRef; Identifier)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Identifier

The identifier you want to use.

"test"

Result Returns OK or error.

Description

A string uniquely identifying this bar for customization purposes. All bars with this identifier will have their items coordinated automatically during customization or instantiation.

Touch bars lacking a customizationIdentifier are not customizable.

See also

- 168.10 TouchBar.GetCustomizationIdentifier

7972

Created 1st November 2016, last changed 1st November 2016.

168.19 TouchBar.SetCustomizationRequiredItemIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.SetCustomizationRequiredItemIdentifiers"; TouchBarRef; List)

Parameters**TouchBarRef**

The reference number for the touch bar.

\$TouchBar

List

The list of items.

Result Returns OK or error.

Description

Some items are too important to be removed. The corresponding item identifiers should be listed here. During customization the user will be prevented from removing these items from the touch bar.

See also

- 168.9 TouchBar.GetCustomizationAllowedItemIdentifiers 7971
- 168.11 TouchBar.GetCustomizationRequiredItemIdentifiers 7973
- 168.17 TouchBar.SetCustomizationAllowedItemIdentifiers 7979

Created 1st November 2016, last changed 1st November 2016.

168.20 TouchBar.SetDefaultItemIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.SetDefaultItemIdentifiers"; TouchBarRef; List)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

List

The list of items.

Result Returns OK or error.

Description

An array of identifiers specifying the items in this touch bar.

Item identifiers should be globally unique, excepting NSTouchBarItemIdentifierFixedSpaceSmall, NSTouchBarItemIdentifierFixedSpaceLarge, NSTouchBarItemIdentifierFlexibleSpace, and NSTouchBarItemIdentifierOtherItemsProxy.

This array also corresponds to the item ordering for the receiver in the “default set” in the customization palette.

Examples

Sets an item some space and a proxy for others:

```
MBS( "TouchBar.SetDefaultItemIdentifiers"; $TouchBar; "Print$NSTouchBarItemIdentifierFixedSpaceSmall$NSTouchBarItemIdentifierOtherItemsProxy" )
```

See also

- 168.3 TouchBar.AssignToApp 7963
- 168.4 TouchBar.AssignToWindow 7965
- 168.12 TouchBar.GetDefaultItemIdentifiers 7974
- 168.13 TouchBar.GetItemIdentifiers 7975
- 168.21 TouchBar.SetPrincipalItemIdentifier 7983

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 1st November 2016.

168.21 TouchBar.SetPrincipalItemIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.SetPrincipalItemIdentifier"; TouchBarRef; Identifier)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Identifier

The identifier for the main command.

"Analyze"

Result Returns OK or error.

Description

Specifying a principal item identifier communicates that the item with that identifier has special significance to this touch bar. Currently, that item will be placed in the center of the resolved touch row. Note that multiple visible bars may each specify a principal item identifier - but only one of them can have the request honored.

Examples

Set main item:

```
Set Variable [ $r; Value:MBS( "TouchBar.SetPrincipalItemIdentifier"; $t; "NextRecord" ) ]
```

See also

- 168.3 TouchBar.AssignToApp 7963
- 168.4 TouchBar.AssignToWindow 7965
- 168.14 TouchBar.GetPrincipalItemIdentifier 7976
- 168.20 TouchBar.SetDefaultItemIdentifiers 7982

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 3th November 2016.

168.22 TouchBar.ToggleCustomizationPalette

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.ToggleCustomizationPalette")

Result Returns OK or error.

Description

NSApplication validates this selector against whether the current touch bars are customizable and, if configured on a menu item, will standardize and localize the title. If the current system does not have touch bar support, the menu item will be automatically hidden.

Examples

Toggle Customization:

```
If [ MBS( "TouchBar.Available" ) ]
Set Variable [ $r; Value:MBS("TouchBar.ToggleCustomizationPalette") ]
Else
Show Custom Dialog [ "No TouchBar supported on this Mac." ]
End If
```

See also

- 168.5 TouchBar.Available

7967

Example Databases

- [Mac only/TouchBar](#)

Created 1st November 2016, last changed 3th November 2016.

168.23 TouchBar.Visible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
168 TouchBar	6.5	Yes	No	No	No	No

MBS("TouchBar.Visible"; TouchBarRef)

Parameters

TouchBarRef

The reference number for the touch bar.

\$TouchBar

Result Returns 0, 1 or error.

Description

When 1, the touch bar is attached to an eligible touch bar provider, and its items are displayable, assuming adequate space.

Created 1st November 2016, last changed 1st November 2016.

168.24 Window.ClearTouchBar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window 168 TouchBar	8.4	Yes	No	No	No	No

MBS("Window.ClearTouchBar"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

You assign the TouchBar with TouchBar.AssignToWindow function.

Examples

Clear touch bar for front window:

```
MBS( "Window.ClearTouchBar"; 0 )
```

See also

- 168.4 TouchBar.AssignToWindow 7965
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

168.24.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr2](#)

Created 8th August 2018, last changed 25th November 2019.

Chapter 169

Twain

Functions to acquire images from scanners.

169.1 Twain.Acquire

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.Acquire" { ; Modal; ShowUI; BringWindowToFront })

Parameters

Modal

Optional

Whether to run the process modal. Default is 0 for running non modal. Ignored in most cases.

0

ShowUI

Optional

Whether to show the dialog. Pass 1 to show dialog or 0 to not show it. Default is 1.

1

BringWindowToFront

Optional

For Windows only a flag. Pass 1 to have the plugin watch for new windows and bring them to front and avoid them showing behind FileMaker's windows. Default 0.

1

Result Returns OK or the Twain error code.

Description

The acquire process will go asynchronously. You can define a script with Twain.SetNotificationScript to be

called when transfers are done. If you acquire without UI, you can make script pause to let the acquire work and check with `Twain.GetImageCount` function whether images have been received.

Even when using no UI, you can pass `Modal = 1` to have the plugin transfer the image right after acquire without waiting for an event from twain driver.

Examples

Acquire with UI, window to front and modal:

```
MBS( "Twain.Acquire"; 1; 1; 1)
```

See also

- [169.23 Twain.GetFilePaths](#) 8010
- [169.28 Twain.GetImageCount](#) 8015
- [169.44 Twain.SetAutofeed](#) 8033
- [169.50 Twain.SetCloseAfterTransfer](#) 8039
- [169.56 Twain.SetFeededEnabled](#) 8045
- [169.61 Twain.SetNotificationScript](#) 8051
- [169.65 Twain.SetPixelType](#) 8056

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [Twain/Twain](#)

169.1.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr6](#)

Created 18th August 2014, last changed 9th May 2017.

169.2 Twain.ClearCancelScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.3	Yes	Yes	No	No	No

MBS("Twain.ClearCancelScript")

Result Returns OK.

Description

See also Twain.SetCancelScript.

See also

- 169.49 Twain.SetCancelScript

8038

169.2.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr6](#)

Created 18th August 2014, last changed 18th August 2014.

169.3 Twain.ClearNotificationScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.3	Yes	Yes	No	No	No

MBS("Twain.ClearNotificationScript")

Result Returns OK.

Description

See also Twain.SetNotificationScript.

See also

- 169.61 Twain.SetNotificationScript

8051

169.3.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr6](#)

Created 18th August 2014, last changed 18th August 2014.

169.4 Twain.CloseDS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.CloseDS")

Result Returns OK or the Twain error code.

Description

This function is called automatically if needed.

Call it only if you know what you do.

See also

- 169.5 Twain.CloseDSM

7992

Created 18th August 2014, last changed 18th August 2014.

169.5 Twain.CloseDSM

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.CloseDSM")

Description

This function is called automatically if needed.

Call it only if you know what you do.

See also

- 169.4 Twain.CloseDS

7991

Created 18th August 2014, last changed 18th August 2014.

169.6 Twain.CurrentDSIdentity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.CurrentDSIdentity" { ; Selector })

Parameters

Selector

Optional

Optional, which value to query. If you have no selector string, you receive the product name. "ProductFamily"

Result Returns requested value or error message.

Description

Possible selector values: Manufacturer, ProductFamily, ProductName, SupportedGroups, ProtocolMajor, Id, VersionMajorNum, VersionMinorNum, VersionLanguage, VersionCountry or VersionInfo.

See also

- 169.18 Twain.GetDSIdentity 8005
- 169.43 Twain.SelectDSIdentity 8032

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 18th August 2014.

169.7 Twain.CurrentImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.CurrentImage")

Result Returns error or image reference.

Description

Returns the image reference for use with GImage functions.

Please use functions like GImage.WriteToPNGContainer and later GImage.Release to free memory.

If you get no image here, you may have called Twain.SetFolderPath before and images are written to folder.

See also

- 85.214 GImage.Release 4612
- 85.340 GImage.WriteToPNGContainer 4777
- 169.28 Twain.GetImageCount 8015
- 169.58 Twain.SetFolderPath 8048

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 21st December 2018.

169.8 Twain.DisableDS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.DisableDS")

Result Returns OK or the Twain error code.

Description

This function is called automatically if needed.

Call it only if you know what you do.

Created 18th August 2014, last changed 18th August 2014.

169.9 Twain.GetAutofeed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetAutofeed")

Result Return current setting.

Description

Value is -1 if you didn't yet call Twain.SetAutofeed before.

See also

- 169.44 Twain.SetAutofeed

8033

Created 18th August 2014, last changed 18th August 2014.

169.10 Twain.GetAutomaticBorderDetection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.3	Yes	Yes	No	No	No

MBS("Twain.GetAutomaticBorderDetection")

Result Return current setting.

Description

Value is -1 if you didn't yet call Twain.SetAutomaticBorderDetection before.
0 = off, 1 = on, -1 = default/undefined.

See also

- 169.45 Twain.SetAutomaticBorderDetection

8034

169.10.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

169.11 Twain.GetAutomaticBrightness

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.GetAutomaticBrightness")

Result Returns the value.

Description

The setting is -1 if not set.

See also

- 169.46 Twain.SetAutomaticBrightness

8035

Created 18th August 2014, last changed 18th August 2014.

169.12 Twain.GetAutomaticRotate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.3	Yes	Yes	No	No	No

MBS("Twain.GetAutomaticRotate")

Result Return current setting.

Description

Value is -1 if you didn't yet call Twain.SetAutomaticRotate before.

See also

- 169.47 Twain.SetAutomaticRotate

8036

169.12.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

169.13 Twain.GetBrightness

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.GetBrightness")

Result Returns the value.

Description

Source should normalize the values into the range. Make sure that a '0' value is available as the Current Value when the Source starts up. If the Source's \pm range is asymmetric about the '0' value, set range maxima to ± 1000 and scale homogeneously from the '0' value in each direction. This will yield a positive range whose step size differs from the negative range's step size.

Plugin uses value -10000 for undefined/default.

See also

- 169.48 Twain.SetBrightness

8037

Created 18th August 2014, last changed 18th August 2014.

169.14 Twain.GetCloseAfterTransfer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetCloseAfterTransfer")

Result Returns current setting (0 or 1).

Description

GUI is only closed when being used.

See also

- 169.50 Twain.SetCloseAfterTransfer

8039

169.14.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

169.15 Twain.GetCompressionQuality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetCompressionQuality")

Result Returns the quality.

Description

Use Twain.SetCompressionQuality to set this.

See also

- 169.51 Twain.SetCompressionQuality

8040

169.15.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

169.16 Twain.GetContrast

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.GetContrast")

Result Returns the value.

Description

Scale the values available internally into a homogeneous range between -1000 and 1000. Make sure that a '0' value is available as the Current value when the Source starts up. If the Source's \pm range is asymmetric about the '0' value, set range maxima to ± 1000 and scale homogeneously from the '0' value in each direction. This will yield a positive range whose step size differs from the negative range's step size. Plugin uses value -10000 for undefined/default.

See also

- 169.52 Twain.SetContrast

8041

Created 18th August 2014, last changed 18th August 2014.

169.17 Twain.GetDSIdentitiesCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetDSIdentitiesCount")

Result Returns number or error message.

Description

See also

- 169.18 Twain.GetDSIdentity

8005

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 18th August 2014.

169.18 Twain.GetDSIdentity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetDSIdentity"; Index { ; Selector })

Parameters

Index

The index of the data source. From 1 to Twain.GetDSIdentitiesCount.

1

Selector

Optional

Optional, which value to query. If you have no selector string, you receive the product name.

"ProductFamily"

Result Returns requested value or error message.

Description

Possible selector values: Manufacturer, ProductFamily, ProductName, SupportedGroups, ProtocolMajor, Id, VersionMajorNum, VersionMinorNum, VersionLanguage, VersionCountry or VersionInfo.

See also

- 169.6 Twain.CurrentDSIdentity 7993
- 169.17 Twain.GetDSIdentitiesCount 8004
- 169.43 Twain.SelectDSIdentity 8032

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 18th August 2014.

169.19 Twain.GetDefaultIdentity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetDefaultIdentity" { ; Selector })

Parameters

Selector

Optional

Optional, which value to query. If you have no selector string, you receive the product name. "ProductFamily"

Result Returns requested value or error message.

Description

Possible selector values: Manufacturer, ProductFamily, ProductName, SupportedGroups, ProtocolMajor, Id, VersionMajorNum, VersionMinorNum, VersionLanguage, VersionCountry or VersionInfo.

See also

- 169.53 Twain.SetDefaultDSIdentity 8042

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 18th August 2014.

169.20 Twain.GetDiscardBlankPages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.2	Yes	Yes	No	No	No

MBS("Twain.GetDiscardBlankPages")

Result Return current setting.

Description

Value is -1 if you didn't yet call Twain.SetDiscardBlankPages before.

See also

- 169.54 Twain.SetDiscardBlankPages

8043

169.20.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 18th August 2014.

169.21 Twain.GetDuplexEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.2	Yes	Yes	No	No	No

MBS("Twain.GetDuplexEnabled")

Result Return current setting.

Description

Value is -1 if you didn't yet call Twain.SetDuplexEnabled before.

See also

- [169.22 Twain.GetFeededEnabled](#) 8009
- [169.55 Twain.SetDuplexEnabled](#) 8044
- [169.56 Twain.SetFeededEnabled](#) 8045

169.21.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 18th August 2014.

169.22 Twain.GetFeededEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetFeededEnabled")

Result Return current setting.

Description

Value is -1 if you didn't yet call Twain.SetFeededEnabled before.

See also

- 169.21 Twain.GetDuplexEnabled 8008
- 169.55 Twain.SetDuplexEnabled 8044
- 169.56 Twain.SetFeededEnabled 8045

Created 18th August 2014, last changed 18th August 2014.

169.23 Twain.GetFilePaths

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetFilePaths")

Result Returns file paths.

Description

This is set by Twain.Acquire.

See also

- [169.1 Twain.Acquire](#) 7987
- [169.24 Twain.GetFileType](#) 8011
- [169.25 Twain.GetFolderPath](#) 8012
- [169.58 Twain.SetFolderPath](#) 8048

Example Databases

- [Twain/Twain](#)

169.23.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

169.24 Twain.GetFileType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetFileType")

Result Returns current file type.

Description

See also

- [169.23 Twain.GetFilesPaths](#) 8010
- [169.31 Twain.GetPixelType](#) 8018
- [169.57 Twain.SetFileType](#) 8047
- [169.65 Twain.SetPixelType](#) 8056

169.24.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

169.25 Twain.GetFolderPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetFolderPath")

Result Returns folder path.

Description

Set by Twain.SetFolderPath.

See also

- [169.23 Twain.GetFilesPaths](#) 8010
- [169.58 Twain.SetFolderPath](#) 8048

169.25.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

169.26 Twain.GetGamma

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.GetGamma")

Result Returns the value.

Description

Default value 2.2. The setting is -10000 if not set.

See also

- 169.30 Twain.GetPaper 8017
- 169.59 Twain.SetGamma 8049

Created 18th August 2014, last changed 18th August 2014.

169.27 Twain.GetHighlight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.GetHighlight")

Result Returns the value.

Description

Value can be between 0 and 255.

Plugin uses value -10000 for undefined/default.

See also

- 169.60 Twain.SetHighlight

8050

Created 18th August 2014, last changed 15th May 2016.

169.28 Twain.GetImageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetImageCount")

Result Returns number of images in memory.

Description

A scan may give several images. So the plugin caches them and you can query them in a loop with Twain.CurrentImage.

See also

- [169.1 Twain.Acquire](#) 7987
- [169.7 Twain.CurrentImage](#) 7994

Example Databases

- [Twain/Twain](#)

169.28.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

169.29 Twain.GetOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetOrientation")

Result Returns current setting.

Description

See also

- 169.62 Twain.SetOrientation

8052

Created 18th August 2014, last changed 18th August 2014.

169.30 Twain.GetPaper

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	5.1	Yes	Yes	No	No	No

MBS("Twain.GetPaper")

Result Returns value or error.

Description

This queries the setting you made with Twain.SetPaper.

See also

- 169.26 Twain.GetGamma 8013
- 169.63 Twain.SetPaper 8053

169.30.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr9](#)

Created 15th May 2015, last changed 15th May 2015.

169.31 Twain.GetPixelFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetPixelFormat")

Result Returns current pixel type setting.

Description

Value is -1 if not yet set.

See also

- 169.24 Twain.GetFileType 8011
- 169.57 Twain.SetFileType 8047
- 169.65 Twain.SetPixelFormat 8056

169.31.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

169.32 Twain.GetResolutionX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetResolutionX")

Result Returns resolution number.

Description

Value is -1 if you didn't call Twain.SetResolutionX before.

See also

- 169.33 Twain.GetResolutionY 8020
- 169.66 Twain.SetResolutionX 8057
- 169.67 Twain.SetResolutionY 8058

Created 18th August 2014, last changed 18th August 2014.

169.33 Twain.GetResolutionY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.GetResolutionY")

Result Returns resolution number.

Description

Value is -1 if you didn't call Twain.SetResolutionY before.

See also

- 169.32 Twain.GetResolutionX 8019
- 169.66 Twain.SetResolutionX 8057
- 169.67 Twain.SetResolutionY 8058

Created 18th August 2014, last changed 18th August 2014.

169.34 Twain.GetShadow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.GetShadow")

Result Returns the value.

Description

All values darker than this value will be clipped to this value.

Whether darker values are smaller or larger can be determined by examining the Current value of PixelFlavor.

Source

If more or less than 8 bits are used to describe the image, the actual data values should be normalized to fit within the 0-255 range. The normalization need not result in a homogeneous distribution if the original distribution was not homogeneous.

Plugin uses value -10000 for undefined/default.

See also

- 169.68 Twain.SetShadow

8059

Created 18th August 2014, last changed 18th August 2014.

169.35 Twain.GetUIVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.3	Yes	Yes	No	No	No

MBS("Twain.GetUIVisible")

Result Returns 0 or 1.

Description

169.35.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr6](#)

Created 18th August 2014, last changed 18th August 2014.

169.36 Twain.ImageInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.ImageInfo"; Selector)

Parameters

Selector

Which information you want to have.
"Width"

Result Return error message or value.

Description

Possible keys:

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 18th August 2014.

XResolution	Horizontal resolution. In pixels per inch.
YResolution	Vertical resolution. In pixels per inch.
ImageWidth	How wide, in pixels, the entire image to be transferred is.
ImageLength	How tall/long, in pixels, the image to be transferred is.
SamplesPerPixel	The number of samples being returned. For R-G-B, this field would be set to 3. For C-M-Y-K, 4. For Grayscale or Black and White, 1.
BitsPerSample	For each sample, the number of bits of information. 24-bit R-G-B will typically have 8 bits of information in each sample (8+8+8). Some 8-bit color is sampled at 3 bits Red, 3 bits Green, and 2 bits Blue. Such a scheme would put 3, 3, and 2 into the first 3 elements of this array. The supplied array allows up to 8 samples. Samples are not limited to 8 bits. However, both the application and Source must simultaneously support sample sizes greater than 8 bits per color.
BitsPerPixel	The number of bits in each image pixel (or bit depth). This value is invariant across the image. 24-bit R-G-B has BitsPerPixel = 24. 40-bit C-M-Y-K has BitsPerPixel=40. 8-bit Grayscale has BitsPerPixel = 8. Black and White has BitsPerPixel = 1.
Planar	Whether image is planar. If SamplesPerPixel > 1, indicates whether the samples follow one another on a pixel-by-pixel basis (R-G-B-R-G-B-R-G-B...) as is common with a one-pass scanner or all the pixels for each sample are grouped together (complete group of R, complete group of G, complete group of B) as is common with a three-pass scanner. If the pixel-by-pixel method (also known as "chunky") is used, the Source should set Planar = false. If the grouped method (also called "planar") is used, the Source should set Planar = true.
PixelFormat	This is the highest categorization for how the data being transferred should be interpreted by the application. This is how the application can tell if the data is Black and White, Grayscale, or Color. Currently, the only color type defined is "tri-stimulus", or color described by three characteristics. Most popular color description methods use tri-stimulus descriptors. For simplicity, the constant used to identify tri-stimulus color is called TWPT_RGB, for R-G-B color. There is no default for this value.
Compression	The compression method used to process the data being transferred. Default is no compression.

169.37 Twain.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.Initialize"; Country; Language)

Parameters

Country

The country code.

"USA"

Language

The language code.

"ENGLISH"

Result Returns OK or an error message.

Description

You pass a language and country code to request language settings. Some drivers may ignore that to prefer the system language setting.

Possible Countries: Afghanistan, Algeria, Americansamoa, Andorra, Angola, Anguilla, Antigua, Argentina, Aruba, Ascension, Australia, Austria, Bahamas, Bahrain, Bangladesh, Barbados, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Botswana, Britain, Britvirginis, Brazil, Brunei, Bulgaria, Burkinafaso, Burma, Burundi, Camaroon, Canada, Capeverdeis, Caymanis, Centralafrep, Chad, Chile, China, Christmasis, Cocosis, Colombia, Comoros, Congo, Cookis, Costarica, Cuba, Cyprus, Czechoslovakia, Denmark, Djibouti, Dominica, Dominicanrep, Easteris, Ecuador, Egypt, Elsalvador, Eqguinea, Ethiopia, Falklandis, Faeroeis, Fijiislands, Finland, France, Frantilles, Frguiana, Frpolyneisa, Futanais, Gabon, Gambia, Germany, Ghana, Gibraltar, Greece, Greenland, Grenada, Gredines, Guadeloupe, Guam, Guantanamobay, Guatemala, Guinea, Guineabissau, Guyana, Haiti, Honduras, Hongkong, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Ivorycoast, Jamaica, Japan, Jordan, Kenya, Kiribati, Korea, Kuwait, Laos, Lebanon, Liberia, Libya, Liechtenstein, Luxembourg, Macao, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshallis, Mauritania, Mauritius, Mexico, Micronesia, Miquelon, Monaco, Mongolia, Montserrat, Morocco, Mozambique, Namibia, Nauru, Nepal, Netherlands, Nethantilles, Nevis, Newcaledonia, Newzealand, Nicaragua, Niger, Nigeria, Niue, Norfolk, Norway, Oman, Pakistan, Palau, Panama, Paraguay, Peru, Phillipines, Pitcairnis, Pnewguinea, Poland, Portugal, Qatar, Reunioni, Romania, Rwanda, Saipan, Sanmarino, Saotome, Saudiarabia, Senegal, Seychellesis, Sierraleone, Singapore, Solomonis, Somali, Southafrica, Spain, Srilanka, Sthelena, Stkitts, Stlucia, Stpierre, Stvincent, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syria, Taiwan, Tanzania, Thailand, Tobago, Togo, Tongais, Trinidad, Tunisia, Turkey, Turkscaicos, Tuvalu, Uganda, Ussr, Uaemirates, Unitedkingdom, Usa, Uruguay, Vanuatu, Vaticancity, Venezuela, Wake, Wallisis, Westernsahara, Westernsamoa, Yemen, Yugoslavia, Zaire, Zambia, Zimbabwe, Albania, Armenia, Azerbaijan, Belarus, Bosniaherzgo, Cambodia, Croatia, Czechrepublic, Diegogarcia, Eritrea, Estonia, Georgia, Latvia, Lesotho, Lithuania, Macedonia, Mayotteis, Moldova, Myanmar, Northkorea, Puertorico, Russia, Serbia, Slovakia, Slovenia, Southkorea, Ukraine, Usvirginis, Vietnam.

When FileMaker Pro is used (32 bit), we can of course only see and use devices with 32 bit drivers.

For FileMaker Server with 64bit, we only see 64bit drivers.

For 64-bit on Windows you can find 64-bit TwainDSM.dll here:
<https://sourceforge.net/projects/twain-dsm/>

Examples

Initialize for english:

```
MBS("Twain.Initialize"; "USA"; "ENGLISH")
```

See also

- 97.6 Java.Initialize 5166
- 163.21 TAPI.Initialize 7748
- 169.39 Twain.IsInitialized 8028

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [Twain/Twain](#)

Created 18th August 2014, last changed 4th August 2016.

169.38 Twain.IsDSEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.IsDSEnabled")

Result Returns 1 if enabled and 0 if not.

Description

Created 18th August 2014, last changed 18th August 2014.

169.39 Twain.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	4.2	Yes	Yes	No	No	No

MBS("Twain.IsInitialized")

Result Returns 1 or 0.

Description

If value is 1, everything is okay.

If value is zero, the library is not initialized and you need to call Twain.Initialize function.

On a hosted database this function is better than using a global variable, as the variable can't see if initialization was made on server or client side.

See also

- 120.10 OCR.IsInitialized 6121
- 123.7 PHP.IsInitialized 6255
- 131.3 Proj.IsInitialized 6547
- 163.22 TAPI.IsInitialized 7749
- 169.37 Twain.Initialize 8025

169.39.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr6](#)

Created 18th August 2014, last changed 18th August 2014.

169.40 Twain.OpenDS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.OpenDS")

Result Returns OK or the Twain error code.

Description

This function is called automatically if needed.

Call it only if you know what you do.

See also

- 169.41 Twain.OpenDSM

8030

Created 18th August 2014, last changed 18th August 2014.

169.41 Twain.OpenDSM

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.OpenDSM")

Description

This function is called automatically if needed.

Call it only if you know what you do.

See also

- 169.40 Twain.OpenDS

8029

Created 18th August 2014, last changed 18th August 2014.

169.42 Twain.SelectDS

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SelectDS")

Result Returns OK or the Twain error code.

Description

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 18th August 2014.

169.43 Twain.SelectDSIdentity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SelectDSIdentity"; IndexOrName)

Parameters

IndexOrName

Which data source to use. Can be name of product or index in list of identities.

1

Result Returns OK or error message.

Description

See also

- 169.6 Twain.CurrentDSIdentity 7993
- 169.18 Twain.GetDSIdentity 8005
- 169.53 Twain.SetDefaultDSIdentity 8042

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 18th August 2014.

169.44 Twain.SetAutofeed

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetAutofeed"; Value)

Parameters

Value

The new settings. Can be 1 to enable auto feeder or 0 to disable.

0

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to enable/disable auto feed. If the scanner does not support auto feeding, the scanner will ignore this setting.

Examples

Set options and acquire:

```
$r = MBS( "Twain.SetCloseAfterTransfer"; 1 )
```

```
$r = MBS( "Twain.SetFeededEnabled"; 1 )
```

```
$r = MBS( "Twain.SetAutofeed"; 1 )
```

```
$r = MBS( "Twain.Acquire" )
```

See also

- [169.1 Twain.Acquire](#) 7987
- [169.9 Twain.GetAutofeed](#) 7996
- [169.50 Twain.SetCloseAfterTransfer](#) 8039
- [169.56 Twain.SetFeededEnabled](#) 8045

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [Twain/Twain](#)

169.44.1 Blog Entries

- [Scanning Options](#)

Created 18th August 2014, last changed 18th August 2014.

169.45 Twain.SetAutomaticBorderDetection

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.3	Yes	Yes	No	No	No

MBS("Twain.SetAutomaticBorderDetection"; Value)

Parameters

Value

The new settings. Can be 1 to enable automatic border detection or 0 to disable.

0

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to enable/disable automatic border detection. If the scanner does not support automatic border detection, the scanner will ignore this setting and set it back to -1.

0 = off, 1 = on, -1 = default/undefined.

See also

- [169.10 Twain.GetAutomaticBorderDetection](#) 7997

169.45.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

169.46 Twain.SetAutomaticBrightness

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.SetAutomaticBrightness"; Value)

Parameters

Value

The new settings. Can be 1 to enable automatic brightness or 0 to disable.

0

Result Returns OK.

Description

The setting is -1 if not set.

See also

- 169.11 Twain.GetAutomaticBrightness

7998

Created 18th August 2014, last changed 18th August 2014.

169.47 Twain.SetAutomaticRotate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.3	Yes	Yes	No	No	No

MBS("Twain.SetAutomaticRotate"; Value)

Parameters

Value

The new settings. Can be 1 to enable automatic rotation or 0 to disable.

0

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to enable/disable automatic rotation. If the scanner does not support automatic rotation, the scanner will ignore this setting and set it back to -1.

See also

- [169.12 Twain.GetAutomaticRotate](#) 7999

169.47.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr1](#)

Created 18th August 2014, last changed 18th August 2014.

169.48 Twain.SetBrightness

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.SetBrightness"; Value)

Parameters**Value**

The new brightness setting.

0

Result Returns OK.

Description

Source should normalize the values into the range. Make sure that a '0' value is available as the Current Value when the Source starts up. If the Source's \pm range is asymmetric about the '0' value, set range maxima to ± 1000 and scale homogeneously from the '0' value in each direction. This will yield a positive range whose step size differs from the negative range's step size.

Plugin uses value -10000 for undefined/default.

See also

- 169.13 Twain.GetBrightness

8000

Created 18th August 2014, last changed 18th August 2014.

169.49 Twain.SetCancelScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.3	Yes	Yes	No	No	No

```
MBS( "Twain.SetCancelScript"; FileName; ScriptName { ; Parameter } )
```

Parameters

FileName

The name of the FileMaker File that contains the script.

```
"MyDatabase.fp7"
```

ScriptName

The name of the script to run

```
"CancelledScript"
```

Parameter

Optional

The parameter to pass.

```
""
```

Result Returns OK or error.

Description

This may also be called on errors. The plugin simply calls whenever the dialog closes and we have no images.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers fail handler:

```
MBS( "Twain.SetCancelScript"; Get ( FileName ); "CancelledScript"
```

See also

- [169.2 Twain.ClearCancelScript](#) 7989

169.49.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr6](#)

Created 18th August 2014, last changed 27th January 2016.

169.50 Twain.SetCloseAfterTransfer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetCloseAfterTransfer"; Value)

Parameters**Value**

The new settings. Can be 1 to closing or 0 to disable. Default is 0.

0

Result Returns OK.

Description

GUI is only closed when being used.

Examples

Set options and acquire:

```
$r = MBS( "Twain.SetCloseAfterTransfer"; 1 )
```

```
$r = MBS( "Twain.SetFeededEnabled"; 1 )
```

```
$r = MBS( "Twain.SetAutofeed"; 1 )
```

```
$r = MBS( "Twain.Acquire" )
```

See also

- [169.1 Twain.Acquire](#) 7987
- [169.14 Twain.GetCloseAfterTransfer](#) 8001
- [169.44 Twain.SetAutofeed](#) 8033
- [169.56 Twain.SetFeededEnabled](#) 8045

Example Databases

- [Twain/Twain](#)

169.50.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

169.51 Twain.SetCompressionQuality

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetCompressionQuality"; quality)

Parameters

quality

The quality to use for JPEG compression.

80

Result Returns OK.

Description

Only used if you use Twain.SetFolderPath

See also

- [169.15 Twain.GetCompressionQuality](#) 8002
- [169.58 Twain.SetFolderPath](#) 8048

Example Databases

- [Twain/Twain](#)

169.51.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

169.52 Twain.SetContrast

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.SetContrast"; Value)

Parameters**Value**

The new brightness setting.

0

Result Returns OK.

Description

Scale the values available internally into a homogeneous range between -1000 and 1000. Make sure that a '0' value is available as the Current value when the Source starts up. If the Source's \pm range is asymmetric about the '0' value, set range maxima to ± 1000 and scale homogeneously from the '0' value in each direction. This will yield a positive range whose step size differs from the negative range's step size.

Plugin uses value -10000 for undefined/default.

See also

- 169.16 Twain.GetContrast

8003

Created 18th August 2014, last changed 18th August 2014.

169.53 Twain.SetDefaultDSIdentity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetDefaultDSIdentity"; IndexOrName)

Parameters

IndexOrName

Which data source to use. Can be name of product or index in list of identities.

1

Result Returns OK or error message.

Description

See also

- 169.19 Twain.GetDefaultIdentity 8006
- 169.43 Twain.SelectDSIdentity 8032

169.53.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr8](#)

Created 18th August 2014, last changed 18th August 2014.

169.54 Twain.SetDiscardBlankPages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.2	Yes	Yes	No	No	No

MBS("Twain.SetDiscardBlankPages"; Value)

Parameters

Value

The new settings. Can be 1 to enable or 0 to disable.

0

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to enable/disable blank page removal. If the scanner does not support this feature, the scanner will ignore this setting and set it back to -1.

See also

- 169.20 Twain.GetDiscardBlankPages

8007

169.54.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 18th August 2014.

169.55 Twain.SetDuplexEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.2	Yes	Yes	No	No	No

MBS("Twain.SetDuplexEnabled"; Value)

Parameters

Value

The new settings. Can be 1 to enable duplex or 0 to disable.

0

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to enable/disable duplex. If the scanner does not support duplex, the scanner will ignore this setting and set it back to -1.

Examples

Enable duplex

MBS("Twain.SetDuplexEnabled"; 1)

See also

- [169.21 Twain.GetDuplexEnabled](#) 8008
- [169.22 Twain.GetFeededEnabled](#) 8009
- [169.56 Twain.SetFeededEnabled](#) 8045

169.55.1 Blog Entries

- [Scanning Options](#)
- [MBS FileMaker Plugin, version 5.1pr6](#)
- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 8th January 2018.

169.56 Twain.SetFeededEnabled

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetFeededEnabled"; Value)

Parameters**Value**

The new settings. Can be 1 to enable feeder or 0 to disable.

0

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to enable/disable feeder. If the scanner does not support the feeder, the scanner will ignore this setting and set it back to -1.

Examples

Set options and acquire:

```
$r = MBS( "Twain.SetCloseAfterTransfer"; 1 )
```

```
$r = MBS( "Twain.SetFeededEnabled"; 1 )
```

```
$r = MBS( "Twain.SetAutofeed"; 1 )
```

```
$r = MBS( "Twain.Acquire" )
```

See also

- [169.1 Twain.Acquire](#) 7987
- [169.21 Twain.GetDuplexEnabled](#) 8008
- [169.22 Twain.GetFeededEnabled](#) 8009
- [169.44 Twain.SetAutofeed](#) 8033
- [169.50 Twain.SetCloseAfterTransfer](#) 8039
- [169.55 Twain.SetDuplexEnabled](#) 8044

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [Twain/Twain](#)

169.56.1 Blog Entries

- [Scanning Options](#)

Created 18th August 2014, last changed 18th August 2014.

169.57 Twain.SetFileType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetFileType"; filetype)

Parameters

filetype

The new file type. Can be BMP, JPEG, TIFF, PNG or GIF. Default is JPEG. "TIFF"

Result Returns OK on success.

Description

Only used if you use Twain.SetFolderPath.

For PDF, you can use DynaPDF / PDFKit functions to convert image to PDF.

See also

- [169.24 Twain.GetFileType](#) 8011
- [169.31 Twain.GetPixelType](#) 8018
- [169.58 Twain.SetFolderPath](#) 8048
- [169.65 Twain.SetPixelType](#) 8056

Example Databases

- [Twain/Twain](#)

169.57.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 6th November 2015.

169.58 Twain.SetFolderPath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetFolderPath"; path)

Parameters

path

The path to the folder to use for storing image files. If empty clears the file path
"/Users/cs/Desktop/"

Result Returns OK on success.

Description

If you set the path with this function, images are not available with the Twain.CurrentImage function and Twain.ImageCount returns always zero. But with Twain.GetFilePaths you can learn where files have been stored.

The path must end with a slash on Mac and a backslash on Windows.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 169.7 Twain.CurrentImage 7994
- 169.23 Twain.GetFilePaths 8010
- 169.25 Twain.GetFolderPath 8012
- 169.51 Twain.SetCompressionQuality 8040
- 169.57 Twain.SetFileType 8047

Example Databases

- [Mac and iOS/PDFKit/Pictures to PDF](#)
- [Twain/Twain](#)

169.58.1 Blog Entries

- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 5th September 2014.

169.59 Twain.SetGamma

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.SetGamma"; Value)

Parameters

Value

The new brightness setting.

0

Result Returns OK.

Description

Default value 2.2. The setting is -10000 if not set.

See also

- 169.26 Twain.GetGamma 8013
- 169.63 Twain.SetPaper 8053

Created 18th August 2014, last changed 18th August 2014.

169.60 Twain.SetHighlight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.SetHighlight"; Value)

Parameters**Value**

The new brightness setting.

0

Result Returns OK.

Description

All values lighter than this value will be clipped to this value. Whether lighter values are smaller or larger can be determined by examining the Current value of PixelFlavor.

If more or less than 8 bits are used to describe the image, the actual data values should be normalized to fit within the 0-255 range. The normalization need not result in a homogeneous distribution if the original distribution was not homogeneous.

Value can be between 0 and 255.

Plugin uses value -10000 for undefined/default.

See also

- 169.27 Twain.GetHighlight

8014

Created 18th August 2014, last changed 18th August 2014.

169.61 Twain.SetNotificationScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetNotificationScript"; FileName; ScriptName { ; Parameter })

Parameters

FileName

The name of the FileMaker File that contains the script.

"MyDatabase.fp7"

ScriptName

The name of the script to run

"GotImage"

Parameter

Optional

The parameter to pass.

"Twain"

Result Returns OK or error.

Description

In the target script you can call ImageInfo and CurrentImage functions to query image and process it.

For example save it as JPEG or PNG in a container. Of course the JPEG or PNG can easily be added to a PDF file.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers fail handler:

```
MBS( "Twain.SetNotificationScript"; Get ( FileName ); "GotImage"
```

See also

- 169.1 Twain.Acquire 7987
- 169.3 Twain.ClearNotificationScript 7990

Example Databases

- [Twain/Twain](#)

Created 18th August 2014, last changed 27th January 2016.

169.62 Twain.SetOrientation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetOrientation"; Value)

Parameters

Value

the new orientation value.

0

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to enable/disable feeder. If the scanner does not support the feeder, the scanner will ignore this setting.

Value can be:

- 0 0 degree
- 1 90 degree
- 2 180 degree
- 3 270 degree
- 0 Portrait
- 3 Landscape

See also

- 169.29 Twain.GetOrientation

8016

Created 18th August 2014, last changed 18th August 2014.

169.63 Twain.SetPaper

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	5.1	Yes	Yes	No	No	No

MBS("Twain.SetPaper"; Paper)

Parameters**Paper**

The paper ID to request.

1

Result Returns OK or error.

Description

This is what the plugin will ask the scanner to provide. If scanner doesn't support it (or driver), we ignore the request.

Possible paper values:

See also

- 169.30 Twain.GetPaper 8017
- 169.59 Twain.SetGamma 8049
- 169.64 Twain.SetPaperSize 8055

169.63.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr9](#)

Created 15th May 2015, last changed 15th May 2015.

Auto	0
A4 Letter	1
B5 Letter	2
US Letter	3
US Legal	4
A5	5
B4	6
B6	7
US Ledger	9
US Executive	10
A3	11
B3	12
A6	13
C4	14
C5	15
C6	16
4A0	17
2A0	18
A0	19
A1	20
A2	21
A4	1
A7	22
A8	23
A9	24
A10	25
ISO B0	26
ISO B1	27
ISO B2	28
ISO B3	12
ISO B4	6
ISO B5	29
ISO B6	7
ISO B7	30
ISO B8	31
ISO B9	32
ISO B10	33
JIS B0	34
JIS B1	35
JIS B2	36
JIS B3	37
JIS B4	38
JIS B5	2
JIS B6	39
JIS B7	40
JIS B8	41
JIS B9	42
JIS B10	43
C0	44
C1	45
C2	46
C3	47
C7	48
C8	49

169.64 Twain.SetPaperSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	5.1	Yes	Yes	No	No	No

MBS("Twain.SetPaperSize"; Width; Height)

Parameters**Width**

Width of paper in inches.

8

Height

Height of paper in inches.

11

Result Returns OK or error.

Description

If scanner doesn't support this, we ignore the request.

See also

- [169.63 Twain.SetPaper](#)

8053

169.64.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr9](#)

Created 15th May 2015, last changed 15th May 2015.

169.65 Twain.SetPixelFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetPixelFormat"; value)

Parameters

value

The new pixel type setting.

2

Result Returns OK.

Description

Value can be 0 for BW, 1 for Gray, 2 for RGB, 3 for Palette.

The plugin can request als CMY (4), CMYK (5), YUV (6), YUVK (7) and CIEXYZ (8), but can't currently decode those.

See also

- [169.1 Twain.Acquire](#) 7987
- [169.24 Twain.GetFileType](#) 8011
- [169.31 Twain.GetPixelFormat](#) 8018
- [169.57 Twain.SetFileType](#) 8047

Example Databases

- [Twain/Twain](#)

169.65.1 Blog Entries

- [Scanning Options](#)
- [MBS Filemaker Plugin, version 3.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

169.66 Twain.SetResolutionX

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetResolutionX"; Value)

Parameters

Value

The horizontal resolution value.

300

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to use this resolution. If the scanner does not support the resolution, the scanner will use the last valid setting.

If the scanner only supports certain resolutions as with HP M175 (75, 100, 200, 300, 600, 1200), use only one of the resolutions according the GUI Acquire settings in the dialogue. In this case "150" is not possible!

See also

- 169.32 Twain.GetResolutionX 8019
- 169.33 Twain.GetResolutionY 8020
- 169.67 Twain.SetResolutionY 8058

169.66.1 Blog Entries

- [Scanning Options](#)

Created 18th August 2014, last changed 15th May 2016.

169.67 Twain.SetResolutionY

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SetResolutionY"; Value)

Parameters

Value

The vertical resolution value.

300

Result Returns OK.

Description

This value is stored and next time you call Acquire the plugin will ask the scanner to use this resolution. If the scanner does not support the resolution, the scanner will use the last valid setting.

If the scanner only supports certain resolutions as with HP M175 (75, 100, 200, 300, 600, 1200), use only one of the resolutions according the GUI Acquire settings in the dialogue. In this case "150" is not possible!

See also

- 169.32 Twain.GetResolutionX 8019
- 169.33 Twain.GetResolutionY 8020
- 169.66 Twain.SetResolutionX 8057

169.67.1 Blog Entries

- [Scanning Options](#)

Created 18th August 2014, last changed 15th May 2016.

169.68 Twain.SetShadow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.5	Yes	Yes	No	No	No

MBS("Twain.SetShadow"; Value)

Parameters**Value**

The new brightness setting.

0

Result Returns OK.

Description

All values darker than this value will be clipped to this value.

Whether darker values are smaller or larger can be determined by examining the Current value of PixelFlavor.

Source

If more or less than 8 bits are used to describe the image, the actual data values should be normalized to fit within the 0-255 range. The normalization need not result in a homogeneous distribution if the original distribution was not homogeneous.

Plugin uses value -10000 for undefined/default.

See also

- 169.34 Twain.GetShadow

8021

Created 18th August 2014, last changed 18th August 2014.

169.69 Twain.SupportsBW

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SupportsBW")

Result Returns 1 if RGB is supported and 0 if not. Or error.

Description

See also

- 169.70 Twain.SupportsGray 8061
- 169.72 Twain.SupportsRGB 8063

Created 18th August 2014, last changed 18th August 2014.

169.70 Twain.SupportsGray

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SupportsGray")

Result Returns 1 if RGB is supported and 0 if not. Or error.

Description

See also

- 169.69 Twain.SupportsBW 8060
- 169.72 Twain.SupportsRGB 8063

Created 18th August 2014, last changed 18th August 2014.

169.71 Twain.SupportsMemoryTransfer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SupportsMemoryTransfer")

Result Returns 1 if memory transfers are supported and 0 if not. Or error.

Description

Created 18th August 2014, last changed 18th August 2014.

169.72 Twain.SupportsRGB

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.SupportsRGB")

Result Returns 1 if RGB is supported and 0 if not. Or error.

Description

See also

- 169.69 Twain.SupportsBW 8060
- 169.70 Twain.SupportsGray 8061

Created 18th August 2014, last changed 18th August 2014.

169.73 Twain.TransferImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
169 Twain	3.1	Yes	Yes	No	No	No

MBS("Twain.TransferImage")

Result Returns OK or the Twain error code.

Description

This function is called automatically if needed.

Call it only if you know what you do.

Created 18th August 2014, last changed 18th August 2014.

Chapter 170

UNNotification

User notifications for iOS and MacOS

You can receive push notifications as well as use local notifications to remind user about events and locations.

170.1 UNNotification.Action

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Action"; UNNotificationRef)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Result Returns text or error.

Description

If this notification had an action triggered, the action identifier is returned.

Else an empty result is returned.

See also

- 170.8 UNNotification.Date 8073
- 170.9 UNNotification.Deliver 8074
- 170.19 UNNotification.Region 8086
- 170.32 UNNotification.SetBody 8102

8066

CHAPTER 170. UNNOTIFICATION

- 170.40 UNNotification.SetSound 8114
- 170.44 UNNotification.SetTitle 8119
- 170.48 UNNotification.Title 8124

Created 15th April 2017, last changed 15th April 2017.

170.2 UNNotification.AddUserInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.AddUserInfo"; UNNotificationRef; Key; Value)

Parameters

UNNotificationRef

The reference number of the notification.
\$Notification

Key

The key to use.
"RecordID"

Value

The value to use.
Get(RecordID)

Result Returns OK or error.

Description

This allows you to include any data you like with the notification and later query it.

Examples

Add record ID to notification:

```
MBS( "UNNotification.AddUserInfo"; $Notification; "RecordID"; Get(RecordID) )
```

See also

- 170.30 UNNotification.SetActionScript 8099
- 170.39 UNNotification.SetScript 8112
- 170.50 UNNotification.UserInfoKeys 8127
- 174.19 UserNotification.GetUserInfo 8176
- 174.37 UserNotification.SetUserInfo 8196

Example Databases

- [Mac and iOS/UNNotification](#)

Created 15th April 2017, last changed 17th April 2017.

170.3 UNNotification.AuthorizationError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.3	Yes	No	No	No	Yes

MBS("UNNotification.AuthorizationError")

Result Returns text message.

Description

If you are not allowed to do notifications, this will return localized error message.
Returns empty text if no error happened.

See also

- [170.4 UNNotification.AuthorizationGranted](#)

8069

170.3.1 Blog Entries

- [Schedule Notifications with MBS Plugin in iOS](#)
- [Push Notifications for FileMaker iOS SDK](#)
- [MBS FileMaker Plugin, version 7.3pr2](#)
- [Remote Notifications for FileMaker iOS SDK](#)

Created 7th June 2017, last changed 7th June 2017.

170.4 UNNotification.AuthorizationGranted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.3	Yes	No	No	No	Yes

MBS("UNNotification.AuthorizationGranted")

Result Returns 1 or 0.

Description

Returns 1 if allowed or 0 if not. Please check UNNotification.AuthorizationError for the reason.

See also

- [170.3 UNNotification.AuthorizationError](#)

8068

170.4.1 Blog Entries

- [Schedule Notifications with MBS Plugin in iOS](#)
- [Push Notifications for FileMaker iOS SDK](#)
- [MBS FileMaker Plugin, version 7.3pr2](#)
- [Remote Notifications for FileMaker iOS SDK](#)

Created 7th June 2017, last changed 7th June 2017.

170.5 UNNotification.Badge

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Badge"; UNNotificationRef)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Result Returns number, empty result or error.

Description

Can be empty to leave badge unchanged.

Zero means no badge. Else the given number is used for application badge on delivery.

Examples

Test badge property:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# set a badge
Set Variable [ $r; Value:MBS("UNNotification.SetBadge"; $notification; 123) ]
# and query back
Set Variable [ $value; Value:MBS("UNNotification.Badge"; $notification) ]
# free memory
Set Variable [ $r; Value:MBS("UNNotification.Release"; $notification) ]
```

See also

- 170.6 UNNotification.Body 8071
- 170.8 UNNotification.Date 8073
- 170.15 UNNotification.New 8080
- 170.20 UNNotification.Release 8088
- 170.31 UNNotification.SetBadge 8100
- 170.48 UNNotification.Title 8124
- 170.49 UNNotification.Type 8126

Created 15th April 2017, last changed 17th April 2017.

170.6 UNNotification.Body

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Body"; UNNotificationRef)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Result Returns text or error.

Description

Examples

Test body property:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# set a body
Set Variable [ $r; Value:MBS("UNNotification.SetBody"; $notification; "Hello World") ]
# and query back
Set Variable [ $value; Value:MBS("UNNotification.Body"; $notification) ]
# free memory
Set Variable [ $r; Value:MBS("UNNotification.Release"; $notification) ]
```

See also

- 170.5 UNNotification.Badge 8070
- 170.8 UNNotification.Date 8073
- 170.15 UNNotification.New 8080
- 170.20 UNNotification.Release 8088
- 170.32 UNNotification.SetBody 8102
- 170.48 UNNotification.Title 8124
- 170.49 UNNotification.Type 8126

Created 15th April 2017, last changed 17th April 2017.

170.7 UNNotification.CategoryIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.CategoryIdentifier"; UNNotificationRef)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Result Returns text or error.

Description

Examples

Try category identifier:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set category identifier:
Set Variable [ $r; Value:MBS("UNNotification.SetCategoryIdentifier"; $notification; "Hello") ]
# and query back values
Set Variable [ $value; Value:MBS("UNNotification.CategoryIdentifier"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.15 UNNotification.New 8080
- 170.29 UNNotification.Schedule 8097
- 170.35 UNNotification.SetCategoryIdentifier 8107
- 170.42 UNNotification.SetThreadIdentifier 8116
- 170.46 UNNotification.ThreadIdentifier 8122

Created 15th April 2017, last changed 17th April 2017.

170.8 UNNotification.Date

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Date"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.
\$Notification

Result Returns date or error.

Description

Empty if notification is not delivered

See also

- 170.1 UNNotification.Action 8065
- 170.5 UNNotification.Badge 8070
- 170.6 UNNotification.Body 8071
- 170.9 UNNotification.Deliver 8074
- 170.15 UNNotification.New 8080
- 170.20 UNNotification.Release 8088
- 170.28 UNNotification.Repeats 8096
- 170.48 UNNotification.Title 8124
- 170.49 UNNotification.Type 8126

Created 15th April 2017, last changed 15th April 2017.

170.9 UNNotification.Deliver

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	9.3	Yes	No	No	No	Yes

MBS("UNNotification.Deliver"; UNNotificationRef { ; Identifier })

Parameters

UNNotificationRef

The reference number of the notification.
\$Notification

Identifier

Optional

The identifier for the notification. Should be unique unless you want to replace an existing one.

Result Returns OK or error.

Description

See also

- 170.1 UNNotification.Action 8065
- 170.8 UNNotification.Date 8073
- 170.12 UNNotification.Identifier 8077
- 170.19 UNNotification.Region 8086
- 170.20 UNNotification.Release 8088
- 170.28 UNNotification.Repeats 8096
- 170.32 UNNotification.SetBody 8102
- 170.44 UNNotification.SetTitle 8119

170.9.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 19th June 2019, last changed 19th June 2019.

170.10 UNNotification.DeliveredNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.DeliveredNotifications")

Result Returns list or error.

Description**See also**

- 170.24 UNNotification.RemoveAllDeliveredNotifications 8092
- 174.39 UserNotification.deliveredNotifications 8198
- 174.38 UserNotification.deliverNotification 8197
- 174.45 UserNotification.removeDeliveredNotification 8204
- 174.48 UserNotification.scheduledNotifications 8207

Example Databases

- [Mac and iOS/UNNotification](#)

Created 15th April 2017, last changed 15th April 2017.

170.11 UNNotification.GetDescription

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	9.3	Yes	No	No	No	Yes

MBS("UNNotification.GetDescription"; UNNotificationRef)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Result Returns text or error.

Description

Shows technical details from framework about notification.

See also

- 170.38 UNNotification.SetNFCScript 8111
- 170.39 UNNotification.SetScript 8112
- 174.10 UserNotification.GetDescription 8167

Example Databases

- [Mac and iOS/UNNotification](#)

170.11.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 19th June 2019, last changed 19th June 2019.

170.12 UNNotification.Identifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Identifier"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.

\$Notification

Result Returns text or error.

Description

The unique identifier for this notification request. It can be used to replace or remove a pending notification request or a delivered notification.

Examples

Queries identifier:

MBS("UNNotification.Identifier"; \$Notification)

See also

- 170.9 UNNotification.Deliver 8074
- 170.46 UNNotification.ThreadIdentifier 8122
- 174.11 UserNotification.GetIdentifier 8168
- 174.30 UserNotification.SetIdentifier 8189

Created 15th April 2017, last changed 17th April 2017.

170.13 UNNotification.IsRegisteredForRemoteNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.IsRegisteredForRemoteNotifications")

Result Returns 1, 0 or error.

Description

Returns 1 if the application is currently registered for remote notifications, taking into account any system-wide settings; doesn't relate to connectivity.

Examples

Check registration state:

```
Show Custom Dialog [ "Check registration state"; MBS( "UNNotification.IsRegisteredForRemoteNotifications" ) ]
```

170.13.1 Blog Entries

- [Push Notifications for FileMaker iOS SDK](#)
- [Remote Notifications for FileMaker iOS SDK](#)

Created 15th April 2017, last changed 17th April 2017.

170.14 UNNotification.LaunchImageName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	No	No	No	No	Yes

MBS("UNNotification.LaunchImageName"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.

\$Notification

Result Returns text or error.

Description

The launch image that will be used when the app is opened from the notification.

Examples

Test launch image:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set launch image name:
Set Variable [ $r; Value:MBS("UNNotification.SetLaunchImageName"; $notification; "MyLogo") ]
# and query back
Set Variable [ $value; Value:MBS("UNNotification.LaunchImageName"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.15 UNNotification.New 8080
- 170.29 UNNotification.Schedule 8097
- 170.36 UNNotification.SetLaunchImageName 8108

Created 15th April 2017, last changed 17th April 2017.

170.15 UNNotification.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.New")

Result Returns notification reference number or error.

Description

Set values and call UNNotification.Add later to schedule it.

Works on MacOS 10.14 or newer with MBS Plugin 9.1 or newer.

Examples

Create new notification and set title:

```
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
Set Variable [ $r; Value:MBS("UNNotification.SetTitle"; $notification; "Hello") ]
```

See also

- 170.5 UNNotification.Badge 8070
- 170.6 UNNotification.Body 8071
- 170.8 UNNotification.Date 8073
- 170.19 UNNotification.Region 8086
- 170.35 UNNotification.SetCategoryIdentifier 8107
- 170.36 UNNotification.SetLaunchImageName 8108
- 170.37 UNNotification.SetLocationTrigger 8109
- 170.42 UNNotification.SetThreadIdentifier 8116
- 170.43 UNNotification.SetTimeIntervalTrigger 8117
- 170.44 UNNotification.SetTitle 8119

Example Databases

- [Mac and iOS/UNNotification](#)

170.15.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)
- [Schedule Notifications with MBS Plugin in iOS](#)

Created 15th April 2017, last changed 25th January 2019.

170.16 UNNotification.NextTriggerDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.NextTriggerDate"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.
\$Notification

Result Returns timestamp, empty or error.

Description

This is only available for time interval and calendar based notification triggers.
Returns empty result if not applicable.

See also

- 170.29 UNNotification.Schedule 8097
- 170.43 UNNotification.SetTimeIntervalTrigger 8117

Created 15th April 2017, last changed 15th April 2017.

170.17 UNNotification.NotificationSettings

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.NotificationSettings"; Selector)

Parameters**Selector**

What value to return or what action to do.

"authorizationStatus"

Result Returns value or error.

Description

You can pass "update" to query new settings. This may be needed to know about changes the user may have made.

Pass "AuthorizationStatus" to get authorization status. Can be NotDetermined, Denied and Authorized.

Pass "alertStyle" to query alert style. Can be None, Banner or Alert.

Pass "soundSetting", "badgeSetting", "alertSetting", "notificationCenterSetting", "lockScreenSetting" or "carPlaySetting" to query settings. Can be NotSupported, Disabled or Enabled.

For MBS Plugin 9.1 or newer, you can also pass providesAppNotificationSettings (1 or 0), showPreviewsSetting (Always, WhenAuthenticated, Never) and criticalAlertSetting (NotSupported, Disabled, Enabled) to query those.

Examples

Query authorization status:

```
MBS( "UNNotification.NotificationSettings"; "AuthorizationStatus" )
```

Query alert style:

```
MBS( "UNNotification.NotificationSettings"; "alertStyle" )
```

Request update to settings:

```
MBS( "UNNotification.NotificationSettings"; "Update" )
```

Query sound setting:

```
MBS("UNNotification.NotificationSettings"; "soundSetting")
```

Query badge setting:

```
MBS("UNNotification.NotificationSettings"; "badgeSetting")
```

Query alert setting:

```
MBS("UNNotification.NotificationSettings"; "alertSetting")
```

Query notification center setting:

```
MBS("UNNotification.NotificationSettings"; "notificationCenterSetting")
```

Query lock screen setting:

```
MBS("UNNotification.NotificationSettings"; "lockScreenSetting")
```

Query car play setting:

```
MBS("UNNotification.NotificationSettings"; "carPlaySetting")
```

170.17.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr1](#)
- [Push Notifications for FileMaker iOS SDK](#)
- [Remote Notifications for FileMaker iOS SDK](#)

Created 15th April 2017, last changed 25th January 2019.

170.18 UNNotification.PendingNotificationRequests

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.PendingNotificationRequests")

Result Returns list or error.

Description

Examples

Query IDs of pending notifications:

MBS("UNNotification.PendingNotificationRequests")

See also

- 170.25 UNNotification.RemoveAllPendingNotificationRequests

8093

Example Databases

- [Mac and iOS/UNNotification](#)

Created 15th April 2017, last changed 17th April 2017.

170.19 UNNotification.Region

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	No	No	No	No	Yes

MBS("UNNotification.Region"; UNNotificationRef)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Result Returns list or error.

Description

Returns list with following values: Latitude, Longitude, Radius, Identifier.

Examples

Create location trigger and query back values:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set Title and Body
Set Variable [ $r; Value:MBS("UNNotification.SetTitle"; $notification; "Hello") ]
Set Variable [ $r; Value:MBS("UNNotification.SetBody"; $notification; "Greetings from FileMaker") ]
# set a location trigger
Set Variable [ $r; Value:MBS( "UNNotification.SetLocationTrigger"; $notification; 37,354444; -121,969167;
50000; "Santa Clara area") ]
# and query back trigger settings
Set Variable [ $value; Value:MBS("UNNotification.Region"; $notification) ]
Set Variable [ $value; Value:MBS("UNNotification.Repeats"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.1 UNNotification.Action 8065
- 170.9 UNNotification.Deliver 8074
- 170.15 UNNotification.New 8080
- 170.20 UNNotification.Release 8088
- 170.28 UNNotification.Repeats 8096
- 170.29 UNNotification.Schedule 8097
- 170.32 UNNotification.SetBody 8102

<i>170.19. UNNOTIFICATION.REGION</i>	8087
• 170.37 UNNotification.SetLocationTrigger	8109
• 170.40 UNNotification.SetSound	8114
• 170.44 UNNotification.SetTitle	8119

Created 15th April 2017, last changed 17th April 2017.

170.20 UNNotification.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Release"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.
\$Notification

Result Returns OK or error.

Description**See also**

- 170.5 UNNotification.Badge 8070
- 170.6 UNNotification.Body 8071
- 170.8 UNNotification.Date 8073
- 170.21 UNNotification.ReleaseAll 8089
- 170.28 UNNotification.Repeats 8096
- 170.29 UNNotification.Schedule 8097
- 170.31 UNNotification.SetBadge 8100
- 170.44 UNNotification.SetTitle 8119
- 170.48 UNNotification.Title 8124
- 174.21 UserNotification.Release 8178

Created 15th April 2017, last changed 15th April 2017.

170.21 UNNotification.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.ReleaseAll")

Result Returns OK or error.

Description

This renders all existing notification reference numbers invalid.

See also

- 170.20 UNNotification.Release 8088
- 170.28 UNNotification.Repeats 8096
- 174.21 UserNotification.Release 8178

Created 15th April 2017, last changed 15th April 2017.

170.22 UNNotification.RemoteNotificationsDeviceToken

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.RemoteNotificationsDeviceToken")

Result Returns text.

Description

If the registration for remote notifications is successful, this function will return the hex encoded device token. You can pass the device token to your server sending the push notifications.

Text is empty if registration failed.

e.g. "416204F694DA65CC1AFD9E473C7E44C22DD66B61FD4DA61B255A89EE436B6F61"

See UNNotification.RemoteNotificationsError for the reason. Push notifications are not supported in iOS Simulator!

Examples

Show device token:

```
Show Custom Dialog [ "Device Token"; MBS("UNNotification.RemoteNotificationsDeviceToken") ]
```

See also

- [170.23 UNNotification.RemoteNotificationsError](#)

8091

170.22.1 Blog Entries

- [Schedule Notifications with MBS Plugin in iOS](#)
- [Push Notifications for FileMaker iOS SDK](#)
- [Remote Notifications for FileMaker iOS SDK](#)

Created 15th April 2017, last changed 7th June 2017.

170.23 UNNotification.RemoteNotificationsError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.RemoteNotificationsError")

Result Returns error text.

Description

If not error happened, the text is empty.

Examples

Show error:

Show Custom Dialog ["Remote Notifications Error"; MBS("UNNotification.RemoteNotificationsError")]

See also

- 170.22 UNNotification.RemoteNotificationsDeviceToken 8090

170.23.1 Blog Entries

- [Push Notifications for FileMaker iOS SDK](#)
- [Remote Notifications for FileMaker iOS SDK](#)

Created 15th April 2017, last changed 17th April 2017.

170.24 UNNotification.RemoveAllDeliveredNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.RemoveAllDeliveredNotifications")

Result Returns OK or error.

Description

You can normally query delivered notifications for your application until they are removed.

Examples

Remove all pending and delivered notifications:

```
MBS( "UNNotification.RemoveAllDeliveredNotifications" ) &
MBS( "UNNotification.RemoveAllPendingNotificationRequests" )
```

See also

- 170.10 UNNotification.DeliveredNotifications 8075
- 170.25 UNNotification.RemoveAllPendingNotificationRequests 8093
- 174.43 UserNotification.removeAllDeliveredNotifications 8202
- 174.44 UserNotification.removeAllScheduledNotifications 8203
- 174.45 UserNotification.removeDeliveredNotification 8204

Created 15th April 2017, last changed 17th April 2017.

170.25 UNNotification.RemoveAllPendingNotificationRequests

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.RemoveAllPendingNotificationRequests")

Result Returns OK or error.

Description

Clears all notifications which are not yet delivered.

Examples

Remove all pending and delivered notifications:

```
MBS( "UNNotification.RemoveAllDeliveredNotifications" ) &  
MBS( "UNNotification.RemoveAllPendingNotificationRequests" )
```

See also

- 170.18 UNNotification.PendingNotificationRequests 8085
- 170.24 UNNotification.RemoveAllDeliveredNotifications 8092

Created 15th April 2017, last changed 17th April 2017.

170.26 UNNotification.RemoveDeliveredNotificationsWithIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.RemoveDeliveredNotificationsWithIdentifiers"; Identifiers)

Parameters

Identifiers

List of notification identifiers.

Result Returns OK or error.

Description

You can normally query delivered notifications for your application until they are removed. This function removes all notifications matching given identifiers.

See also

- 170.27 UNNotification.RemovePendingNotificationRequestsWithIdentifiers

8095

Created 15th April 2017, last changed 15th April 2017.

170.27. UNNOTIFICATION.REMOVEPENDINGNOTIFICATIONREQUESTSWITHIDENTIFIERS8095

170.27 UNNotification.RemovePendingNotificationRequestsWithIdentifiers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.RemovePendingNotificationRequestsWithIdentifiers"; Identifiers)

Parameters

Identifiers

List of notification identifiers.

Result Returns OK or error.

Description

Clears all notifications which are not yet delivered matching given identifiers.

See also

- 170.26 UNNotification.RemoveDeliveredNotificationsWithIdentifiers 8094

Created 15th April 2017, last changed 15th April 2017.

170.28 UNNotification.Repeats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Repeats"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.

\$Notification

Result Returns 1, 0 or error.

Description

Returns 1 if the trigger has repeat flag enabled or 0 if not.

Examples

Query repeat flag:

MBS("UNNotification.Repeats"; \$Notification)

See also

- 170.8 UNNotification.Date 8073
- 170.9 UNNotification.Deliver 8074
- 170.19 UNNotification.Region 8086
- 170.21 UNNotification.ReleaseAll 8089
- 170.29 UNNotification.Schedule 8097
- 170.31 UNNotification.SetBadge 8100
- 170.43 UNNotification.SetTimeIntervalTrigger 8117
- 170.44 UNNotification.SetTitle 8119
- 170.49 UNNotification.Type 8126
- 174.21 UserNotification.Release 8178

Created 15th April 2017, last changed 17th April 2017.

170.29 UNNotification.Schedule

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Schedule"; UNNotificationRef { ; Identifier })

Parameters

UNNotificationRef

The reference number of the notification.
\$Notification

Identifier

Optional

The identifier for the notification. Should be unique unless you want to replace an existing one. Optional for 9.3 or newer.

Result Returns OK or error.

Description

Only for new notifications and you need to define trigger before scheduling.

The new notification when presented will get a new notification reference number.

Works on MacOS 10.14 or newer with MBS Plugin 9.1 or newer.

Examples

Create notification and add a time trigger:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set Title and Body
Set Variable [ $r; Value:MBS("UNNotification.SetTitle"; $notification; "Hello") ]
Set Variable [ $r; Value:MBS("UNNotification.SetBody"; $notification; "Greetings from FileMaker") ]
# set a time interval trigger
Set Variable [ $r; Value:MBS("UNNotification.SetTimeIntervalTrigger"; $notification; 60; 0) ]
# and query back trigger settings
Set Variable [ $value; Value:MBS("UNNotification.TimeInterval"; $notification) ]
Set Variable [ $value; Value:MBS("UNNotification.Repeats"; $notification) ]
Set Variable [ $value; Value:MBS("UNNotification.NextTriggerDate"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.28 UNNotification.Repeats 8096
- 170.31 UNNotification.SetBadge 8100

- 170.32 UNNotification.SetBody 8102
- 170.35 UNNotification.SetCategoryIdentifier 8107
- 170.36 UNNotification.SetLaunchImageName 8108
- 170.37 UNNotification.SetLocationTrigger 8109
- 170.42 UNNotification.SetThreadIdentifier 8116
- 170.43 UNNotification.SetTimeIntervalTrigger 8117
- 170.45 UNNotification.SubTitle 8121
- 170.46 UNNotification.ThreadIdentifier 8122

Example Databases

- [Mac and iOS/UNNotification](#)

170.29.1 Blog Entries

- [Schedule Notifications with MBS Plugin in iOS](#)

Created 15th April 2017, last changed 19th June 2019.

170.30 UNNotification.SetActionScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetActionScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Called for both local and remote notifications.

Parameter to the script is a list with first the ID of the notification and second the action identifier.

Use UNNotification.AddUserInfo to associate your own values with the notifications, which you can then use in the triggered script.

Examples

Sets action script:

MBS("UNNotification.SetActionScript"; Get(Filename); "NotificationActionTriggered")

See also

- 170.2 UNNotification.AddUserInfo 8067
- 170.38 UNNotification.SetNFCScript 8111
- 170.39 UNNotification.SetScript 8112

Example Databases

- [Mac and iOS/UNNotification](#)

Created 15th April 2017, last changed 13th December 2019.

170.31 UNNotification.SetBadge

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetBadge"; UNNotificationRef; Badge)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Badge

The new badge number. Can be empty to clear. Can be zero to remove badge. Or a number to set.

Result Returns OK or error.

Description

Examples

Test badge property:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# set a badge
Set Variable [ $r; Value:MBS("UNNotification.SetBadge"; $notification; 123) ]
# and query back
Set Variable [ $value; Value:MBS("UNNotification.Badge"; $notification) ]
# free memory
Set Variable [ $r; Value:MBS("UNNotification.Release"; $notification) ]
```

See also

- 170.5 UNNotification.Badge 8070
- 170.15 UNNotification.New 8080
- 170.20 UNNotification.Release 8088
- 170.28 UNNotification.Repeats 8096
- 170.29 UNNotification.Schedule 8097
- 170.32 UNNotification.SetBody 8102
- 170.39 UNNotification.SetScript 8112
- 170.40 UNNotification.SetSound 8114
- 170.44 UNNotification.SetTitle 8119

170.31. *UNNOTIFICATION.SETBADGE*

8101

- 170.45 UNNotification.SubTitle

8121

Created 15th April 2017, last changed 17th April 2017.

170.32 UNNotification.SetBody

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetBody"; UNNotificationRef; Body)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Body

The new body text.

"Greetings from FileMaker"

Result Returns OK or error.

Description

Examples

Test body property:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# set a body
Set Variable [ $r; Value:MBS("UNNotification.SetBody"; $notification; "Hello World") ]
# and query back
Set Variable [ $value; Value:MBS("UNNotification.Body"; $notification) ]
# free memory
Set Variable [ $r; Value:MBS("UNNotification.Release"; $notification) ]
```

See also

- 170.1 UNNotification.Action 8065
- 170.6 UNNotification.Body 8071
- 170.20 UNNotification.Release 8088
- 170.28 UNNotification.Repeats 8096
- 170.29 UNNotification.Schedule 8097
- 170.31 UNNotification.SetBadge 8100
- 170.39 UNNotification.SetScript 8112
- 170.40 UNNotification.SetSound 8114
- 170.43 UNNotification.SetTimeIntervalTrigger 8117

170.32. *UNNOTIFICATION.SETBODY*

8103

- 170.44 UNNotification.SetTitle

8119

Example Databases

- [Mac and iOS/UNNotification](#)

170.32.1 Blog Entries

- [Schedule Notifications with MBS Plugin in iOS](#)

Created 15th April 2017, last changed 17th April 2017.

170.33 UNNotification.SetCalendarDateTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	9.3	Yes	No	No	No	Yes

MBS("UNNotification.SetCalendarDateTrigger"; UNNotificationRef; TimeStamp)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

TimeStamp

The time stamp for the date and time to use.

Get(SystemTimeStamp)

Result Returns OK or error.

Description

Can be scheduled on the device to notify based on date and time values.

Will schedule to run at the given date and time.

See also

- [170.34 UNNotification.SetCalendarTrigger](#) 8105
- [170.43 UNNotification.SetTimeIntervalTrigger](#) 8117

Example Databases

- [Mac and iOS/UNNotification](#)

170.33.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 19th June 2019, last changed 19th June 2019.

170.34 UNNotification.SetCalendarTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetCalendarTrigger"; UNNotificationRef { ; Year; Month; Day; Hour; Minute; Second; Repeat })

Parameters**UNNotificationRef**

The reference number of the notification.

\$Notification

Year

Optional

The year to use. Can be empty.

Month

Optional

The month to use. Can be empty.

Day

Optional

The day to use. Can be empty.

Hour

Optional

The hour to use. Can be empty.

Minute

Optional

The minute to use. Can be empty.

Second

Optional

The second to use. Can be empty.

Repeat

Optional

Whether to repeat. Can be 1 to enable or 0 to disable. Default is 0.

0

Result Returns OK or error.

Description

Can be scheduled on the device to notify based on date and time values, and optionally repeat. For example, if a notification should be delivered at the next 8:00 AM then set the 'hour' parameter to 8. If the notification should be delivered every day at 8:00 AM then set repeats to 1.

Examples

Repeat daily 8am:

```
MBS( "UNNotification.SetCalendarTrigger"; $NotificationRef; ""; ""; ""; 8; ""; ""; 1 )
```

Schedule to show up 10:30 am every day:

```
# Create a new notification
```

```
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
```

```
Set Variable [ $r; Value:MBS( "UNNotification.SetTitle"; $Notification; "Hello World") ]
```

```
# Set calendar trigger:
```

```
Set Variable [ $r; Value:MBS( "UNNotification.SetCalendarTrigger"; $Notification; ""; ""; ""; 10; 30; ""; 1 ) ]
```

```
# and schedule
```

```
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.15 UNNotification.New 8080
- 170.29 UNNotification.Schedule 8097
- 170.33 UNNotification.SetCalendarDateTrigger 8104
- 170.37 UNNotification.SetLocationTrigger 8109
- 170.43 UNNotification.SetTimeIntervalTrigger 8117
- 170.44 UNNotification.SetTitle 8119

Created 15th April 2017, last changed 17th April 2017.

170.35 UNNotification.SetCategoryIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetCategoryIdentifier"; UNNotificationRef; CategoryIdentifier)

Parameters**UNNotificationRef**

The reference number of the notification.

\$Notification

CategoryIdentifier

The new category identifier.

Result Returns OK or error.

Description**Examples**

Try category identifier:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set category identifier:
Set Variable [ $r; Value:MBS("UNNotification.SetCategoryIdentifier"; $notification; "Hello") ]
# and query back values
Set Variable [ $value; Value:MBS("UNNotification.CategoryIdentifier"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.7 UNNotification.CategoryIdentifier 8072
- 170.15 UNNotification.New 8080
- 170.29 UNNotification.Schedule 8097
- 170.42 UNNotification.SetThreadIdentifier 8116

Created 15th April 2017, last changed 17th April 2017.

170.36 UNNotification.SetLaunchImageName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	No	No	No	No	Yes

MBS("UNNotification.SetLaunchImageName"; UNNotificationRef; ImageName)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

ImageName

The name of the image to show. Can be system image name or name of an image included with application.
"MBSLogo"

Result Returns OK or error.

Description

The launch image that will be used when the app is opened from the notification.

Examples

Test launch image:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set launch image name:
Set Variable [ $r; Value:MBS("UNNotification.SetLaunchImageName"; $notification; "MyLogo") ]
# and query back
Set Variable [ $value; Value:MBS("UNNotification.LaunchImageName"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.14 UNNotification.LaunchImageName 8079
- 170.15 UNNotification.New 8080
- 170.29 UNNotification.Schedule 8097

Created 15th April 2017, last changed 17th April 2017.

170.37 UNNotification.SetLocationTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	No	No	No	No	Yes

MBS("UNNotification.SetLocationTrigger"; UNNotificationRef; Latitude; Longitude; Radius; Identifier { ; Repeat })

Parameters**UNNotificationRef**

The reference number of the notification.
\$Notification

Latitude

The latitude of the region center.
37.354444

Longitude

The longitude of the region center.
-121.969167

Radius

The radius of the circular region in meter.
50000

Identifier

The user displayable identifier for the region.
"Santa Clara area"

Repeat

Optional
Whether to repeat this notification. Pass 1 to enable or 0 to disable. Default is 0.
0

Result Returns OK or error.

Description

Can be scheduled on the device to notify when the user enters or leaves a geographic region. The identifier on region must be unique. Scheduling multiple notifications with different regions containing the same identifier will result in undefined behavior. The number of location triggers that may be scheduled by an application at any one time is limited by the system. Applications must have "when-in-use" authorization through CoreLocation.

Examples

Create location trigger and query back values:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set Title and Body
Set Variable [ $r; Value:MBS("UNNotification.SetTitle"; $notification; "Hello") ]
```

```
Set Variable [ $r; Value:MBS("UNNotification.SetBody"; $notification; "Greetings from FileMaker") ]
# set a location trigger
Set Variable [ $r; Value:MBS( "UNNotification.SetLocationTrigger"; $Notification; 37,354444; -121,969167;
50000; "Santa Clara area") ]
# and query back trigger settings
Set Variable [ $value; Value:MBS("UNNotification.Region"; $notification) ]
Set Variable [ $value; Value:MBS("UNNotification.Repeats"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.15 UNNotification.New 8080
- 170.19 UNNotification.Region 8086
- 170.28 UNNotification.Repeats 8096
- 170.29 UNNotification.Schedule 8097
- 170.32 UNNotification.SetBody 8102
- 170.34 UNNotification.SetCalendarTrigger 8105
- 170.44 UNNotification.SetTitle 8119

Created 15th April 2017, last changed 17th April 2017.

170.38 UNNotification.SetNFCScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	9.4	No	No	No	No	Yes

MBS("UNNotification.SetNFCScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

If you use Background Tag Reading for NFC tags with CoreNFC framework, you can call this function in start script to define the script to trigger.

You need to add an associated domain to your iOS application.

See

https://developer.apple.com/documentation/security/password_autofill/setting_up_an_app_s_associated_domains

Examples

Sets action script:

MBS("UNNotification.SetNFCScript"; Get(Filename); "NFC Detected")

See also

- 170.11 UNNotification.GetDescription 8076
- 170.30 UNNotification.SetActionScript 8099
- 170.39 UNNotification.SetScript 8112

170.38.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.4](#)
- [MBS FileMaker Plugin 9.4 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.4pr2](#)

Created 14th August 2019, last changed 15th August 2019.

170.39 UNNotification.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetScript"; Filename; ScriptName)

Parameters

Filename

The database file name where the script is located.

"test.fmp12"

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

Called for both local and remote notifications.

Parameter to the script is the ID of the notification.

Use UNNotification.AddUserInfo to associate your own values with the notifications, which you can then use in the triggered script.

Examples

Sets script:

MBS("UNNotification.SetScript"; Get(Filename); "NotificationReceived")

See also

- 170.2 UNNotification.AddUserInfo 8067
- 170.11 UNNotification.GetDescription 8076
- 170.30 UNNotification.SetActionScript 8099
- 170.31 UNNotification.SetBadge 8100
- 170.32 UNNotification.SetBody 8102
- 170.38 UNNotification.SetNFCScript 8111
- 170.40 UNNotification.SetSound 8114
- 170.41 UNNotification.SetSubTitle 8115
- 170.44 UNNotification.SetTitle 8119

Example Databases

- [Mac and iOS/UNNotification](#)

Created 15th April 2017, last changed 13th December 2019.

170.40 UNNotification.SetSound

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetSound"; UNNotificationRef; SoundName)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

SoundName

Pass empty to have no sound. Pass "default" for the default system sound. Or pass the name of a sound, one of the system sounds or a sound file included with the app.

"default"

Result Returns OK or error.

Description

Examples

Use default sound:

```
MBS( "UNNotification.SetSound"; $Notification; "default" )
```

Use no sound:

```
MBS( "UNNotification.SetSound"; $Notification; "" )
```

Use my sound:

```
MBS( "UNNotification.SetSound"; $Notification; "mySound" )
```

See also

- 170.1 UNNotification.Action 8065
- 170.19 UNNotification.Region 8086
- 170.29 UNNotification.Schedule 8097
- 170.31 UNNotification.SetBadge 8100
- 170.32 UNNotification.SetBody 8102
- 170.39 UNNotification.SetScript 8112
- 170.44 UNNotification.SetTitle 8119

Created 15th April 2017, last changed 17th April 2017.

170.41 UNNotification.SetSubTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetSubTitle"; UNNotificationRef; Subtitle)

Parameters**UNNotificationRef**

The reference number of the notification.

\$Notification

Subtitle

The new subtitle text.

"World"

Result Returns OK or error.

Description**Examples**

Set sub title:

Set Variable [\$r; Value:MBS("UNNotification.SetSubTitle"; \$notification; "Hello")]

See also

- 170.39 UNNotification.SetScript 8112
- 170.44 UNNotification.SetTitle 8119
- 170.45 UNNotification.SubTitle 8121
- 174.17 UserNotification.GetSubTitle 8174
- 174.18 UserNotification.GetTitle 8175
- 174.35 UserNotification.SetSubTitle 8194
- 174.36 UserNotification.SetTitle 8195

Example Databases

- [Mac and iOS/UNNotification](#)

Created 15th April 2017, last changed 16th April 2017.

170.42 UNNotification.SetThreadIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetThreadIdentifier"; UNNotificationRef; Identifier)

Parameters

UNNotificationRef

The reference number of the notification.
\$Notification

Identifier

The new thread identifier.
"Chat123"

Result Returns OK or error.

Description

The unique identifier for the thread or conversation related to this notification request. It will be used to visually group notifications together.

Examples

Test thread identifier:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set thread identifier for grouping:
Set Variable [ $r; Value:MBS("UNNotification.SetThreadIdentifier"; $notification; "Hello") ]
# and query back
Set Variable [ $value; Value:MBS("UNNotification.ThreadIdentifier"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.7 UNNotification.CategoryIdentifier 8072
- 170.15 UNNotification.New 8080
- 170.29 UNNotification.Schedule 8097
- 170.35 UNNotification.SetCategoryIdentifier 8107
- 170.46 UNNotification.ThreadIdentifier 8122

Created 15th April 2017, last changed 17th April 2017.

170.43 UNNotification.SetTimeIntervalTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetTimeIntervalTrigger"; UNNotificationRef; TimeInterval { ; Repeat })

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

TimeInterval

The delay until the notification shows. In seconds.

3600

Repeat

Optional

Whether to repeat. Can be 1 to enable or 0 to disable. Default is 0.

0

Result Returns OK or error.

Description

Can be scheduled on the device to notify after the time interval, and optionally repeat.

Time Interval must be at least 60 seconds if repeating.

Examples

Create notification and add a time trigger:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set Title and Body
Set Variable [ $r; Value:MBS("UNNotification.SetTitle"; $notification; "Hello") ]
Set Variable [ $r; Value:MBS("UNNotification.SetBody"; $notification; "Greetings from FileMaker") ]
# set a time interval trigger
Set Variable [ $r; Value:MBS("UNNotification.SetTimeIntervalTrigger"; $notification; 60; 0) ]
# and query back trigger settings
Set Variable [ $value; Value:MBS("UNNotification.TimeInterval"; $notification) ]
Set Variable [ $value; Value:MBS("UNNotification.Repeats"; $notification) ]
Set Variable [ $value; Value:MBS("UNNotification.NextTriggerDate"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.15 UNNotification.New 8080
- 170.16 UNNotification.NextTriggerDate 8082

- 170.28 UNNotification.Repeats 8096
- 170.29 UNNotification.Schedule 8097
- 170.32 UNNotification.SetBody 8102
- 170.33 UNNotification.SetCalendarDateTrigger 8104
- 170.34 UNNotification.SetCalendarTrigger 8105
- 170.44 UNNotification.SetTitle 8119
- 170.47 UNNotification.TimeInterval 8123

170.43.1 Blog Entries

- [Schedule Notifications with MBS Plugin in iOS](#)

Created 15th April 2017, last changed 17th April 2017.

170.44 UNNotification.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SetTitle"; UNNotificationRef; Title)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Title

The new title.

"Hello"

Result Returns OK or error.

Description

Examples

Create new notification and set title:

```
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
Set Variable [ $r; Value:MBS("UNNotification.SetTitle"; $notification; "Hello") ]
```

Try title:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# set a title
Set Variable [ $r; Value:MBS("UNNotification.SetTitle"; $notification; "Hello") ]
# and query back
Set Variable [ $title; Value:MBS("UNNotification.Title"; $notification) ]
# free memory
Set Variable [ $r; Value:MBS("UNNotification.Release"; $notification) ]
```

See also

- 170.20 UNNotification.Release 8088
- 170.29 UNNotification.Schedule 8097
- 170.31 UNNotification.SetBadge 8100
- 170.34 UNNotification.SetCalendarTrigger 8105
- 170.37 UNNotification.SetLocationTrigger 8109
- 170.39 UNNotification.SetScript 8112

- 170.40 UNNotification.SetSound 8114
- 170.41 UNNotification.SetSubTitle 8115
- 170.43 UNNotification.SetTimeIntervalTrigger 8117
- 174.35 UserNotification.SetSubTitle 8194

Example Databases

- [Mac and iOS/UNNotification](#)

170.44.1 Blog Entries

- [Schedule Notifications with MBS Plugin in iOS](#)

Created 15th April 2017, last changed 17th April 2017.

170.45 UNNotification.SubTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.SubTitle"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.
\$Notification

Result Returns text or error.

Description**See also**

- 170.29 UNNotification.Schedule 8097
- 170.31 UNNotification.SetBadge 8100
- 170.41 UNNotification.SetSubTitle 8115
- 170.44 UNNotification.SetTitle 8119
- 170.48 UNNotification.Title 8124
- 174.17 UserNotification.GetSubTitle 8174
- 174.18 UserNotification.GetTitle 8175
- 174.35 UserNotification.SetSubTitle 8194
- 174.36 UserNotification.SetTitle 8195

Created 15th April 2017, last changed 15th April 2017.

170.46 UNNotification.ThreadIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.ThreadIdentifier"; UNNotificationRef)

Parameters

UNNotificationRef

The reference number of the notification.

\$Notification

Result Returns text or error.

Description

The unique identifier for the thread or conversation related to this notification request. It will be used to visually group notifications together.

Examples

Test thread identifier:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# Set thread identifier for grouping:
Set Variable [ $r; Value:MBS("UNNotification.SetThreadIdentifier"; $notification; "Hello") ]
# and query back
Set Variable [ $value; Value:MBS("UNNotification.ThreadIdentifier"; $notification) ]
# and schedule
Set Variable [ $r; Value:MBS("UNNotification.Schedule"; $notification; "test") ]
```

See also

- 170.7 UNNotification.CategoryIdentifier 8072
- 170.12 UNNotification.Identifier 8077
- 170.15 UNNotification.New 8080
- 170.29 UNNotification.Schedule 8097
- 170.42 UNNotification.SetThreadIdentifier 8116
- 174.11 UserNotification.GetIdentifier 8168
- 174.30 UserNotification.SetIdentifier 8189

Created 15th April 2017, last changed 17th April 2017.

170.47 UNNotification.TimeInterval

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.TimeInterval"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.
\$Notification

Result Returns value or error.

Description

Returns empty result if not applicable.

Examples

Query time interval:

MBS("UNNotification.TimeInterval"; \$Notification)

See also

- 170.29 UNNotification.Schedule 8097
- 170.43 UNNotification.SetTimeIntervalTrigger 8117

Created 15th April 2017, last changed 17th April 2017.

170.48 UNNotification.Title

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Title"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.

\$Notification

Result Returns text or error.

Description**Examples**

Try title:

```
# Create a new notification
Set Variable [ $notification; Value:MBS("UNNotification.New") ]
# set a title
Set Variable [ $r; Value:MBS("UNNotification.SetTitle"; $notification; "Hello") ]
# and query back
Set Variable [ $title; Value:MBS("UNNotification.Title"; $notification) ]
# free memory
Set Variable [ $r; Value:MBS("UNNotification.Release"; $notification) ]
```

See also

- 170.1 UNNotification.Action 8065
- 170.5 UNNotification.Badge 8070
- 170.6 UNNotification.Body 8071
- 170.8 UNNotification.Date 8073
- 170.15 UNNotification.New 8080
- 170.20 UNNotification.Release 8088
- 170.44 UNNotification.SetTitle 8119
- 170.45 UNNotification.SubTitle 8121
- 170.49 UNNotification.Type 8126

Example Databases

- [Mac and iOS/UNNotification](#)

Created 15th April 2017, last changed 17th April 2017.

170.49 UNNotification.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.Type"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.

\$Notification

Result Returns text or error.

Description

Can be Push, Calendar, Interval, Location or nothing.

As type is defined by trigger, a new notification without a trigger returns empty result.

Examples

Query type

MBS("UNNotification.Type"; \$Notification)

See also

- 170.5 UNNotification.Badge 8070
- 170.6 UNNotification.Body 8071
- 170.8 UNNotification.Date 8073
- 170.15 UNNotification.New 8080
- 170.28 UNNotification.Repeats 8096
- 170.48 UNNotification.Title 8124

Created 15th April 2017, last changed 17th April 2017.

170.50 UNNotification.UserInfoKeys

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.UserInfoKeys"; UNNotificationRef)

Parameters**UNNotificationRef**

The reference number of the notification.
\$Notification

Result Returns list of keys or error.

Description

You can pass data with push or local notifications and later query it here.

Examples

List all keys available:

MBS("UNNotification.UserInfoKeys"; \$Notification)

See also

- 170.2 UNNotification.AddUserInfo 8067
- 170.51 UNNotification.UserInfoValue 8128

Created 15th April 2017, last changed 17th April 2017.

170.51 UNNotification.UserInfoValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
170 UNNotification	7.2	Yes	No	No	No	Yes

MBS("UNNotification.UserInfoValue"; UNNotificationRef; Key)

Parameters

UNNotificationRef

The reference number of the notification.
\$Notification

Key

The key to lookup.
"RecordID"

Result Returns value or error.

Description

Examples

Query record ID:

```
MBS( "UNNotification.UserInfoValue"; $Notification; "RecordID" )
# you need to earlier put the value in the user info!
```

See also

- 170.50 UNNotification.UserInfoKeys

8127

Created 15th April 2017, last changed 17th April 2017.

Chapter 171

Updater

Functions to control the Updater engine of FileMaker.

All the updater functions require FileMaker 15 or newer. They may break if FileMaker changes their updater engine. For example check when updater check run last time.

171.1 Updater.CheckForUpdates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	Yes	No	No	No

MBS("Updater.CheckForUpdates")

Result Returns OK or error.

Description

Created 29th September 2016, last changed 29th September 2016.

171.2 Updater.CheckForUpdatesInBackground

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	Yes	No	No	No

MBS("Updater.CheckForUpdatesInBackground")

Result Returns OK or error.

Description

This is meant for programmatically initiating a check for updates. That is, it will display no UI unless it actually finds an update, in which case it proceeds as usual.

Created 29th September 2016, last changed 29th September 2016.

171.3 Updater.GetAutomaticallyChecksForUpdates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	Yes	No	No	No

MBS("Updater.GetAutomaticallyChecksForUpdates")

Result Returns 1, 0 or error.

Description

You may use this to detect if FileMaker told the updater to check automatically for updates.

See also

- 171.4 Updater.GetAutomaticallyDownloadsUpdates 8132
- 171.8 Updater.SetAutomaticallyChecksForUpdates 8136
- 171.9 Updater.SetAutomaticallyDownloadsUpdates 8137

Created 29th September 2016, last changed 29th September 2016.

171.4 Updater.GetAutomaticallyDownloadsUpdates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	No	No	No	No

MBS("Updater.GetAutomaticallyDownloadsUpdates")

Result Returns 1, 0 or error.

Description

This is by default off in FileMaker Pro.

See also

- 171.3 Updater.GetAutomaticallyChecksForUpdates 8131
- 171.8 Updater.SetAutomaticallyChecksForUpdates 8136
- 171.9 Updater.SetAutomaticallyDownloadsUpdates 8137

Created 29th September 2016, last changed 29th September 2016.

171.5 Updater.GetFeedURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	No	No	No	No

MBS("Updater.GetFeedURL")

Result Returns text or error.

Description

This is an URL for a XML file which provides update details.

If you get this URL and download the XML file, you can find the download URLs for the updaters.

Created 29th September 2016, last changed 29th September 2016.

171.6 Updater.GetSendsSystemProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	No	No	No	No

MBS("Updater.GetSendsSystemProfile")

Result Returns 1, 0 or error.

Description

This is off by default in FileMaker 15.

See also

- 171.10 Updater.SetSendsSystemProfile

8138

Created 29th September 2016, last changed 29th September 2016.

171.7 Updater.LastUpdateCheckDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	Yes	No	No	No

MBS("Updater.LastUpdateCheckDate")

Result Returns timestamp or error.

Description

Your solution can query this date and check if it should complain to user about not checking for updates for a long time.

Returns empty result if not known.

Created 29th September 2016, last changed 29th September 2016.

171.8 Updater.SetAutomaticallyChecksForUpdates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	Yes	No	No	No

MBS("Updater.SetAutomaticallyChecksForUpdates"; Flag)

Parameters

Flag

The new flag. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Changing this only influences the Sparkle framework doing the updates, not the FileMaker preferences.

See also

- 171.3 Updater.GetAutomaticallyChecksForUpdates 8131
- 171.4 Updater.GetAutomaticallyDownloadsUpdates 8132
- 171.9 Updater.SetAutomaticallyDownloadsUpdates 8137

Created 29th September 2016, last changed 29th September 2016.

171.9 Updater.SetAutomaticallyDownloadsUpdates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	No	No	No	No

MBS("Updater.SetAutomaticallyDownloadsUpdates"; Flag)

Parameters**Flag**

The new flag. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Changing this only influences the Sparkle framework doing the updates, not the FileMaker preferences.

See also

- 171.3 Updater.GetAutomaticallyChecksForUpdates 8131
- 171.4 Updater.GetAutomaticallyDownloadsUpdates 8132
- 171.8 Updater.SetAutomaticallyChecksForUpdates 8136

Created 29th September 2016, last changed 29th September 2016.

171.10 Updater.SetSendsSystemProfile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	No	No	No	No

MBS("Updater.SetSendsSystemProfile"; Flag)

Parameters

Flag

The new flag. Pass 1 to enable or 0 to disable.

1

Result Returns OK or error.

Description

Changing this only influences the Sparkle framework doing the updates, not the FileMaker preferences.

See also

- 171.6 Updater.GetSendsSystemProfile

8134

Created 29th September 2016, last changed 29th September 2016.

171.11 Updater.UpdateInProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
171 Updater	6.5	Yes	No	No	No	No

MBS("Updater.UpdateInProgress")

Result Returns 1, 0 or error.

Description

Created 29th September 2016, last changed 29th September 2016.

Chapter 172

URLScheme

Handle URL schemes in your Mac runtime.

172.1 URLScheme.GetDefaultHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
172 URLScheme	3.0	Yes	Yes	Yes	No	No

MBS("URLScheme.GetDefaultHandler"; scheme)

Parameters

scheme

The schema name.

"http", "https", "mailto" or something else

Result Returns handler.

Description

On Mac returns the bundle id. e.g. com.fetchsoftworks.Fetch for Fetch.app.

On Windows returns command line for launching target app. e.g. '"C:\Program Files\Internet Explorer\iexplore.exe" % 1'

Examples

Query default email application:

```
MBS("URLScheme.GetDefaultHandler"; "mailto")
```

See also

- 172.3 URLScheme.SetDefaultHandler

8144

Example Databases

- [Query URL Scheme](#)

172.1.1 Blog Entries

- [MBS Filemaker Plugin, version 3.0pr6](#)

Created 18th August 2014, last changed 22nd October 2018.

172.2 URLScheme.InstallURLEventHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
172 URLScheme	2.0	Yes	No	No	No	No

MBS("URLScheme.InstallURLEventHandler"; FileName; ScriptName)

(old name: InstallURLEventHandler)

Parameters

FileName

The name of the FileMaker File that contains the script

ScriptName

The name of the script to run

Result Returns OK or an error message.

Description

Using this event you can register your application as the handler for an URL schema and get the URL if the user clicks a link for your schemas.

This function is only useful in a locked FileMaker solution. Please check the Readme in the examples for more details.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Installs a script:

```
MBS("URLScheme.InstallURLEventHandler"; "MyDatabase.fp7"; "MyURLScript")
```

172.2.1 Blog Entries

- [Redirect fmp URL scheme for runtimes](#)
- [MBS Filemaker Plugin, version 3.0pr6](#)

Created 18th August 2014, last changed 18th April 2016.

172.3 URLScheme.SetDefaultHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
172 URLScheme	2.0	Yes	Yes	No	No	No

MBS("URLScheme.SetDefaultHandler"; scheme { ; bundleID })

(old name: SetDefaultHandlerForURLScheme)

Parameters

scheme

The schema name.

"http", "https", "mailto" or something else

bundleID

Optional

Available in MBS FileMaker Plugin 7.5 or newer.

The bundle ID for the application. If empty, we use the one of the current application.

Result Returns OK or an error message on failure.

Description

It's probably best to ask the user's permission before changing their default browser!

With plugin version 5.3 this works on Windows if FileMaker or runtime is launched as admin. Still that may not help much as when FileMaker is launched with URL, it shows an error message.

Examples

Set runtime to be default email application:

```
MBS("URLScheme.SetDefaultHandler"; "mailto")
```

Register URL scheme for runtime:

```
If [ MBS("IsMacOSX") and MBS("IsRuntime") ]
```

```
# make us the default app for FMP URL scheme
```

```
Set Variable [ $vorher; Value:MBS( "URLScheme.GetDefaultHandler"; "fmp" ) ]
```

```
Set Variable [ $setResult; Value:MBS( "URLScheme.SetDefaultHandler"; "fmp" ) ]
```

```
Set Variable [ $r; Value:MBS( "URLScheme.GetDefaultHandler"; "fmp" ) ]
```

```
# okay or failure?
```

```
If [ $r "com.filemaker.client.runtime12.Test" ]
```

```
# Register by using lsregister tool on command line
```

```
Set Variable [ $r; Value:MBS( "RunTask.NewTask" ) ]
```

```
Set Variable [ $r; Value:MBS( "RunTask.SetLaunchPath"; "/System/Library/Frameworks/CoreServices.framework/Versions/A/Frameworks/LaunchServices.framework/Versions/A/Support/lsregister" ) ]
```

```
Set Variable [ $path; Value:MBS( "App.GetProcessPath" ) ]
```

```
Set Variable [ $r; Value:MBS( "RunTask.SetArguments"; "-f"; $path /*"/Applications/Test/Test.app" */) ]
```

```

Set Variable [ $r; Value:MBS( "RunTask.Launch" ) ]
# wait until finished
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS("RunTask.IsRunning") = 1 ]
End Loop
# Check again
Set Variable [ $setResult; Value:MBS( "URLScheme.SetDefaultHandler"; "fmp" ) ]
Set Variable [ $r; Value:MBS( "URLScheme.GetDefaultHandler"; "fmp" ) ]
End If
End If

```

Select this FileMaker Pro to receive fmp URLs:

```
MBS("URLScheme.SetDefaultHandler"; "fmp")
```

Set fmp handler to FMP Advanced:

```
MBS( "URLScheme.SetDefaultHandler"; "fmp"; "com.filemaker.client.advanced12")
```

See also

- 34.8 App.GetProcessPath 916
- 124.14 IsRuntime 6277
- 139.7 RunTask.IsRunning 6762
- 139.8 RunTask.Launch 6763
- 139.9 RunTask.NewTask 6766
- 139.13 RunTask.SetArguments 6771
- 139.15 RunTask.SetLaunchPath 6775
- 172.1 URLScheme.GetDefaultHandler 8141

172.3.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)
- [MBS FileMaker Plugin, version 5.3pr3](#)
- [MBS Filemaker Plugin, version 3.0pr6](#)

Created 18th August 2014, last changed 22nd October 2018.

Chapter 173

USB

Query USB devices.

173.1 USB.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
173 USB	2.4	Yes	Yes	Yes	No	No

MBS("USB.Count")

Result The number of devices found.

Description

This function must be called before all the other USB functions to initialize the plugin and to refresh the USB device list.

Examples

Query number of devices

MBS("USB.Count")

See also

- 173.2 USB.FindDevice 8149
- 173.3 USB.FindSerialNumber 8150
- 173.4 USB.GetProductID 8151
- 173.5 USB.GetProductName 8152
- 173.6 USB.GetSerialNumber 8153

- 173.7 USB.GetVendorID 8154
- 173.8 USB.GetVendorName 8155

Example Databases

- [USB Devices](#)

Created 18th August 2014, last changed 18th August 2014.

173.2 USB.FindDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
173 USB	2.4	Yes	Yes	Yes	No	No

MBS("USB.FindDevice"; VendorID; ProductID)

Parameters

VendorID

The vendor ID of the device to find. Typically a number between 1 and 65535.
1452

ProductID

The product ID of the device. Typically a number between 1 and 65535.
545

Result The index of the device in our USB device list.

Description

Please call USB.Count before you use this function. Pass IDs for vendor and product. e.g. Apple has vendor ID 1452 (hex 05ac). An Apple keyboard can have a product ID of 545 (hex 0221). Please note that product and vendor IDs are shown usually as hexadecimal values.

Examples

Find a device and query it's product name:

```
$count = MBS( "USB.Count" )
$index = MBS( "USB.FindDevice"; $VendorID; $ProductID )
$name = MBS( "USB.GetProductName"; $index )
```

See also

- 173.1 USB.Count 8147
- 173.5 USB.GetProductName 8152

Example Databases

- [USB Devices](#)

Created 18th August 2014, last changed 18th August 2014.

173.3 USB.FindSerialNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
173 USB	2.4	Yes	Yes	Yes	No	No

MBS("USB.FindSerialNumber"; serialNumber)

Parameters

serialNumber

The serial number to search for.

"8JA4A2X4UECLJA12"

Result The index of the device found.

Description

Please call USB.Count before you use this function.

See also

- 173.1 USB.Count 8147
- 173.6 USB.GetSerialNumber 8153

Example Databases

- [USB Devices](#)

Created 18th August 2014, last changed 18th August 2014.

173.4 USB.GetProductID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
173 USB	2.4	Yes	Yes	Yes	No	No

MBS("USB.GetProductID"; index)

Parameters

index

The index in the USB device table.

0

Result The product ID, e.g. 772.

Description

Please call USB.Count before you use this function.

See also

- 173.1 USB.Count 8147
- 173.5 USB.GetProductName 8152

Example Databases

- [USB Devices](#)

Created 18th August 2014, last changed 18th August 2014.

173.5 USB.GetProductName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
173 USB	2.4	Yes	Yes	Yes	No	No

MBS("USB.GetProductName"; index)

Parameters

index

The index in the USB device table.

0

Result The product name, e.g. "Apple Keyboard".

Description

Please call USB.Count before you use this function.

Examples

Query name of first USB device:

MBS("USB.GetProductName"; 0)

See also

- [173.1 USB.Count](#) 8147
- [173.2 USB.FindDevice](#) 8149
- [173.4 USB.GetProductID](#) 8151

Example Databases

- [USB Devices](#)

Created 18th August 2014, last changed 17th May 2016.

173.6 USB.GetSerialNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
173 USB	2.4	Yes	Yes	Yes	No	No

MBS("USB.GetSerialNumber"; index)

Parameters

index

The index in the USB device table.

0

Result The serial number, e.g. "J678234".

Description

Please call USB.Count before you use this function.

Examples

Query serial of first USB device:

MBS("USB.GetSerialNumber"; 0)

See also

- 173.1 USB.Count 8147
- 173.3 USB.FindSerialNumber 8150

Example Databases

- [USB Devices](#)

Created 18th August 2014, last changed 17th May 2016.

173.7 USB.GetVendorID

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
173 USB	2.4	Yes	Yes	Yes	No	No

MBS("USB.GetVendorID"; index)

Parameters

index

The index in the USB device table.

0

Result The vendor ID, e.g. 1452.

Description

Please call USB.Count before you use this function.

Examples

Query vendor ID of first USB device:

MBS("USB.GetVendorID"; 0)

See also

- 173.1 USB.Count 8147
- 173.8 USB.GetVendorName 8155

Example Databases

- [USB Devices](#)

Created 18th August 2014, last changed 17th May 2016.

173.8 USB.GetVendorName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
173 USB	2.4	Yes	Yes	Yes	No	No

MBS("USB.GetVendorName"; index)

Parameters**index**

The index in the USB device table.

0

Result The product name, e.g. "Apple, Inc".

Description

Please call USB.Count before you use this function.

Examples

Query vendor name of first device:

MBS("USB.GetVendorName"; 0)

See also

- 173.1 USB.Count 8147
- 173.7 USB.GetVendorID 8154

Example Databases

- [USB Devices](#)

Created 18th August 2014, last changed 17th May 2016.

Chapter 174

UserNotification

Show user notifications on Mac OS X 10.8 and Windows 8 or newer.

Added Windows notifications in plugin version 7.2. For newer MacOS development, please use UNNotification functions.

174.1 UserNotification.ClearDidActivateNotificationScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.ClearDidActivateNotificationScript")

Result Returns "OK" on success.

Description

Basically the reverse of SetDidActivateNotificationScript.

Examples

Clears all handlers:

```
MBS( "UserNotification.ClearDidDeliverNotificationScript" )  
MBS( "UserNotification.ClearDidActivateNotificationScript" )
```

See also

- 174.2 UserNotification.ClearDidDeliverNotificationScript 8159
- 174.26 UserNotification.SetDidActivateNotificationScript 8183
- 174.27 UserNotification.SetDidDeliverNotificationScript 8185

174.2 UserNotification.ClearDidDeliverNotificationScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.ClearDidDeliverNotificationScript")

Result Returns "OK" on success.

Description

Basically the reverse of SetDidDeliverNotificationScript.

Examples

Clears all handlers:

MBS("UserNotification.ClearDidDeliverNotificationScript")

MBS("UserNotification.ClearDidActivateNotificationScript")

See also

- 174.1 UserNotification.ClearDidActivateNotificationScript 8157
- 174.26 UserNotification.SetDidActivateNotificationScript 8183
- 174.27 UserNotification.SetDidDeliverNotificationScript 8185

Created 18th August 2014, last changed 18th August 2014.

174.3 UserNotification.ContentImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.ContentImage"; UserNotificationReference { ; ImageType; Filename })

Parameters

UserNotificationReference

An user notification reference.

\$ref

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image or error.

Description

Requires Mac OS X 10.9.

See also

- 174.23 UserNotification.SetContentImage

8180

Created 18th August 2014, last changed 18th August 2014.

174.4 UserNotification.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.Create")

Result Returns new user notification reference number.

Description

All UserNotification functions require Mac OS X 10.8.

This is for sending user notifications to the Mac your FileMaker solution runs on. Not for remote notifications or notifications to iOS devices.

See also

- [174.18 UserNotification.GetTitle](#) 8175
- [174.42 UserNotification.isRemote](#) 8201
- [174.21 UserNotification.Release](#) 8178
- [174.36 UserNotification.SetTitle](#) 8195

Example Databases

- [Mac only/User Notifications/UserNotification](#)

174.4.1 Blog Entries

- [Mac OS X 10.8 User Notifications with Filemaker and Real Studio](#)

Created 18th August 2014, last changed 18th August 2014.

174.5 UserNotification.GetActionButtonTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetActionButtonTitle"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns text for button title.

Description

See also UserNotification.SetActionButtonTitle

See also

- 174.6 UserNotification.GetActivationType 8163
- 174.13 UserNotification.GetOtherButtonTitle 8170
- 174.40 UserNotification.hasActionButton 8199
- 174.22 UserNotification.SetActionButtonTitle 8179
- 174.28 UserNotification.SetHasActionButton 8187
- 174.32 UserNotification.SetOtherButtonTitle 8191

Created 18th August 2014, last changed 18th August 2014.

174.6 UserNotification.GetActivationType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetActivationType"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns activation state.

Description

Returns values like "none", "ContentsClicked" or "ActionButtonClicked".

See also

- 174.5 UserNotification.GetActionButtonTitle 8162
- 174.22 UserNotification.SetActionButtonTitle 8179

Created 18th August 2014, last changed 18th August 2014.

174.7 UserNotification.GetActualDeliveryDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetActualDeliveryDate"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns timestamp value.

Description

The date at which this notification was actually delivered. The notification center will set this value if a notification is put in the scheduled list and the delivery time arrives. If the notification is delivered directly using the UserNotification.deliverNotification function, this value will be set to the deliveryDate value (unless deliveryDate is not defined, in which case this value is set to the current date). This value is used to sort the list of notifications in the user interface.

See also

- 174.38 UserNotification.deliverNotification 8197
- 174.8 UserNotification.GetDeliveryDate 8165
- 174.24 UserNotification.SetDeliveryDate 8181

Created 18th August 2014, last changed 18th August 2014.

174.8 UserNotification.GetDeliveryDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetDeliveryDate"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns timestamp value.

Description

See also UserNotification.SetDeliveryDate

See also

- 174.7 UserNotification.GetActualDeliveryDate 8164
- 174.9 UserNotification.GetDeliveryTimeZone 8166
- 174.24 UserNotification.SetDeliveryDate 8181
- 174.25 UserNotification.SetDeliveryTimeZone 8182

Created 18th August 2014, last changed 18th August 2014.

174.9 UserNotification.GetDeliveryTimeZone

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetDeliveryTimeZone"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns time zone name.

Description

See also UserNotification.SetDeliveryTimeZone

See also

- 174.8 UserNotification.GetDeliveryDate 8165
- 174.24 UserNotification.SetDeliveryDate 8181
- 174.25 UserNotification.SetDeliveryTimeZone 8182

Created 18th August 2014, last changed 18th August 2014.

174.10 UserNotification.GetDescription

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetDescription"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns description text.

Description

This is an information text to show content to developer, not to end user.

See also

- [170.11 UNNotification.GetDescription](#) 8076
- [174.14 UserNotification.GetResponse](#) 8171
- [174.19 UserNotification.GetUserInfo](#) 8176

Example Databases

- [Mac only/User Notifications/UserNotification](#)

174.10.1 Blog Entries

- [MBS Filemaker Plugin, version 2.8pr9](#)

Created 18th August 2014, last changed 18th August 2014.

174.11 UserNotification.GetIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.GetIdentifier"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns identifier or error.

Description

A notification delivered with the same identifier as an existing notification will replace that notification, rather than display a new one.

Requires Mac OS X 10.9.

See also

- 170.12 UNNotification.Identifier 8077
- 170.46 UNNotification.ThreadIdentifier 8122
- 174.14 UserNotification.GetResponse 8171
- 174.16 UserNotification.GetSoundName 8173
- 174.17 UserNotification.GetSubTitle 8174
- 174.19 UserNotification.GetUserInfo 8176
- 174.30 UserNotification.SetIdentifier 8189

Created 18th August 2014, last changed 18th August 2014.

174.12 UserNotification.GetInformativeText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetInformativeText"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns text or error.

Description

See also UserNotification.SetInformativeText

See also

- 174.31 UserNotification.SetInformativeText

8190

Created 18th August 2014, last changed 18th August 2014.

174.13 UserNotification.GetOtherButtonTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetOtherButtonTitle"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns the other button's caption.

Description

See also UserNotification.SetOtherButtonTitle

See also

- 174.5 UserNotification.GetActionButtonTitle 8162
- 174.22 UserNotification.SetActionButtonTitle 8179
- 174.32 UserNotification.SetOtherButtonTitle 8191

Created 18th August 2014, last changed 18th August 2014.

174.14 UserNotification.GetResponse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.GetResponse"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns text or error.

Description

When a notification has been responded to, the didActivateNotification script will be called with the notification with the activationType set to Replied and the response set on the response property

Requires Mac OS X 10.9.

See also

- 174.11 UserNotification.GetIdentifier 8168
- 174.16 UserNotification.GetSoundName 8173
- 174.17 UserNotification.GetSubTitle 8174
- 174.18 UserNotification.GetTitle 8175
- 174.19 UserNotification.GetUserInfo 8176
- 174.41 UserNotification.isPresented 8200
- 174.42 UserNotification.isRemote 8201
- 174.21 UserNotification.Release 8178
- 174.35 UserNotification.SetSubTitle 8194
- 174.37 UserNotification.SetUserInfo 8196

Created 18th August 2014, last changed 18th August 2014.

174.15 UserNotification.GetResponsePlaceholder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.GetResponsePlaceholder"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns text or error.

Description

Requires Mac OS X 10.9.

See also

- 174.33 UserNotification.SetResponsePlaceholder

8192

Created 18th August 2014, last changed 18th August 2014.

174.16 UserNotification.GetSoundName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetSoundName"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns sound name.

Description

See also UserNotification.SetSoundName

See also

- 174.11 UserNotification.GetIdentifier 8168
- 174.14 UserNotification.GetResponse 8171
- 174.17 UserNotification.GetSubTitle 8174
- 174.34 UserNotification.SetSoundName 8193
- 174.35 UserNotification.SetSubTitle 8194

Created 18th August 2014, last changed 18th August 2014.

174.17 UserNotification.GetSubTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetSubTitle"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns sub title text.

Description

See also UserNotification.SetSubTitle

See also

- 170.41 UNNotification.SetSubTitle 8115
- 170.45 UNNotification.SubTitle 8121
- 174.11 UserNotification.GetIdentifier 8168
- 174.14 UserNotification.GetResponse 8171
- 174.16 UserNotification.GetSoundName 8173
- 174.18 UserNotification.GetTitle 8175
- 174.19 UserNotification.GetUserInfo 8176
- 174.34 UserNotification.SetSoundName 8193
- 174.35 UserNotification.SetSubTitle 8194
- 174.36 UserNotification.SetTitle 8195

Created 18th August 2014, last changed 18th August 2014.

174.18 UserNotification.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetTitle"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns title text.

Description

See also UserNotification.SetTitle

See also

- 170.41 UNNotification.SetSubTitle 8115
- 170.44 UNNotification.SetTitle 8119
- 170.45 UNNotification.SubTitle 8121
- 174.4 UserNotification.Create 8161
- 174.14 UserNotification.GetResponse 8171
- 174.17 UserNotification.GetSubTitle 8174
- 174.42 UserNotification.isRemote 8201
- 174.21 UserNotification.Release 8178
- 174.35 UserNotification.SetSubTitle 8194
- 174.36 UserNotification.SetTitle 8195

Example Databases

- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 18th August 2014.

174.19 UserNotification.GetUserInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.GetUserInfo"; UserNotificationReference; Key)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Key

The key for the entry.

"RecordID"

Result Returns value or error.

Description

Here you can query the data you included in the notification using SetUserInfo.

See also UserNotification.SetUserInfo

See also

- 170.2 UNNotification.AddUserInfo 8067
- 174.10 UserNotification.GetDescription 8167
- 174.11 UserNotification.GetIdentifier 8168
- 174.14 UserNotification.GetResponse 8171
- 174.17 UserNotification.GetSubTitle 8174
- 174.26 UserNotification.SetDidActivateNotificationScript 8183
- 174.27 UserNotification.SetDidDeliverNotificationScript 8185
- 174.37 UserNotification.SetUserInfo 8196

Created 18th August 2014, last changed 18th August 2014.

174.20 UserNotification.HasReplyButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.HasReplyButton"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns value or error.

Description

The default value is false. If both this and hasActionButton are true, the reply button will be shown.

Requires Mac OS X 10.9.

Returns 1 if reply button exists or 0 if not.

See also

- 174.40 UserNotification.hasActionButton 8199
- 174.28 UserNotification.SetHasActionButton 8187
- 174.29 UserNotification.SetHasReplyButton 8188

Created 18th August 2014, last changed 18th August 2014.

174.21 UserNotification.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.Release"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns "OK" on success.

Description

It is recommended that you release references which you do no longer need to reduce memory usage.

See also

- 170.20 UNNotification.Release 8088
- 170.21 UNNotification.ReleaseAll 8089
- 170.28 UNNotification.Repeats 8096
- 174.4 UserNotification.Create 8161
- 174.14 UserNotification.GetResponse 8171
- 174.18 UserNotification.GetTitle 8175
- 174.42 UserNotification.isRemote 8201
- 174.36 UserNotification.SetTitle 8195
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722

174.21.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr4](#)
- [Mac OS X 10.8 User Notifications with Filemaker and Real Studio](#)

Created 18th August 2014, last changed 18th August 2014.

174.22 UserNotification.SetActionButtonTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetActionButtonTitle"; UserNotificationReference; Text)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Text

The new button title.

"Click me"

Result Returns "OK" on success.

Description

Must be localized as it will be presented to the user. String will be truncated to a length appropriate for display.

See also UserNotification.GetActionButtonTitle

See also

- 174.5 UserNotification.GetActionButtonTitle 8162
- 174.6 UserNotification.GetActivationType 8163
- 174.13 UserNotification.GetOtherButtonTitle 8170
- 174.40 UserNotification.hasActionButton 8199
- 174.28 UserNotification.SetHasActionButton 8187
- 174.32 UserNotification.SetOtherButtonTitle 8191

Example Databases

- [Mac and iOS/UNNotification](#)
- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 18th August 2014.

174.23 UserNotification.SetContentImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.SetContentImage"; UserNotificationReference; Image)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Image

the new image as container value. Can be JPEG, PNG or other formats supported by Mac OS X.

\$image

Result Returns OK or error.

Description

Requires Mac OS X 10.9.

See also

- 174.3 UserNotification.ContentImage 8160
- 174.34 UserNotification.SetSoundName 8193

Created 18th August 2014, last changed 18th August 2014.

174.24 UserNotification.SetDeliveryDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetDeliveryDate"; UserNotificationReference; TimeStamp)

Parameters

UserNotificationReference

An user notification reference.

\$ref

TimeStamp

The time stamp for the date and time to use for delivery.

Description

Specifies when (in an absolute time) the notification should be delivered. After a notification is delivered, it may be presented to the user.

See also UserNotification.GetDeliveryDate

See also

- 174.7 UserNotification.GetActualDeliveryDate 8164
- 174.8 UserNotification.GetDeliveryDate 8165
- 174.9 UserNotification.GetDeliveryTimeZone 8166
- 174.25 UserNotification.SetDeliveryTimeZone 8182

Example Databases

- [Mac only/User Notifications/UserNotification](#)

174.24.1 Blog Entries

- [Mac OS X 10.8 User Notifications with Filemaker and Real Studio](#)

Created 18th August 2014, last changed 6th September 2019.

174.25 UserNotification.SetDeliveryTimeZone

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetDeliveryTimeZone"; UserNotificationReference; Name)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Name

The name of the time zone.

"Central Standard Time"

Result Returns "OK" on success.

Description

If this value is nil and the user switches time zones, the notification center will adjust the time of presentation to account for the time zone change. If a notification should be delivered at a time in a specific time zone (regardless if the user switches time zones), set this value to that time zone. One common value may be the current time zone.

See also UserNotification.GetDeliveryTimeZone

See also

- 174.8 UserNotification.GetDeliveryDate 8165
- 174.9 UserNotification.GetDeliveryTimeZone 8166
- 174.24 UserNotification.SetDeliveryDate 8181

Created 18th August 2014, last changed 18th August 2014.

174.26 UserNotification.SetDidActivateNotificationScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetDidActivateNotificationScript"; FileName; ScriptName)

Parameters**FileName**

The name of the FileMaker File that contains the script.

Get (FileName)

ScriptName

The name of the script to run

"NotificationActivatedScript"

Result Returns "OK" on success.

Description

Specify a filename and script name to have this script being called when a notification has been activated. This gives you the possibility to react to the notification activation.

The script parameter will be the notification reference.

See also UserNotification.ClearDidActivateNotificationScript

You can use UserNotification.SetUserInfo to pass individual data like record IDs with notification and later query it with UserNotification.GetUserInfo function.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers drag action handler:

MBS("UserNotification.SetDidActivateNotificationScript"; Get (FileName); "NotificationActivatedScript")

See also

- 174.1 UserNotification.ClearDidActivateNotificationScript 8157
- 174.2 UserNotification.ClearDidDeliverNotificationScript 8159
- 174.19 UserNotification.GetUserInfo 8176
- 174.27 UserNotification.SetDidDeliverNotificationScript 8185
- 174.37 UserNotification.SetUserInfo 8196

Example Databases

- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 6th September 2019.

174.27 UserNotification.SetDidDeliverNotificationScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetDidDeliverNotificationScript"; FileName; ScriptName)

Parameters**FileName**

The name of the FileMaker File that contains the script.

Get (FileName)

ScriptName

The name of the script to run

"NotificationDeliveredScript"

Result Returns "OK" on success.

Description

Specify a filename and script name to have this script being called when a notification has been delivered.

This gives you the possibility to react to the notification delivery.

The script parameter will be the notification reference.

See also UserNotification.ClearDidDeliverNotificationScript

You can use UserNotification.SetUserInfo to pass individual data like record IDs with notification and later query it with UserNotification.GetUserInfo function.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers drag action handler:

MBS("UserNotification.SetDidDeliverNotificationScript"; Get (FileName) ; "NotificationDeliveredScript")

See also

- 174.1 UserNotification.ClearDidActivateNotificationScript 8157
- 174.2 UserNotification.ClearDidDeliverNotificationScript 8159
- 174.19 UserNotification.GetUserInfo 8176
- 174.45 UserNotification.removeDeliveredNotification 8204
- 174.26 UserNotification.SetDidActivateNotificationScript 8183
- 174.37 UserNotification.SetUserInfo 8196

Example Databases

- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 6th September 2019.

174.28 UserNotification.SetHasActionButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetHasActionButton"; UserNotificationReference; Value)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Value

The new action button state.

1

Result Returns "OK" on success.

Description

Set to 0 if the notification has no action button. This will be the case for notifications that are purely for informational purposes and have no user action. The default value is 1.

See also

- 174.5 UserNotification.GetActionButtonTitle 8162
- 174.40 UserNotification.hasActionButton 8199
- 174.20 UserNotification.HasReplyButton 8177
- 174.22 UserNotification.SetActionButtonTitle 8179
- 174.29 UserNotification.SetHasReplyButton 8188

Example Databases

- [Mac and iOS/UNNotification](#)
- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 18th August 2014.

174.29 UserNotification.SetHasReplyButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.SetHasReplyButton"; UserNotificationReference; value)

Parameters

UserNotificationReference

An user notification reference.

\$ref

value

The new setting. Can be 0 to disable or 1 to enable.

1

Result Returns OK or error.

Description

The default value is false. If both this and hasActionButton are true, the reply button will be shown. Requires Mac OS X 10.9.

See also

- 174.20 UserNotification.HasReplyButton 8177
- 174.28 UserNotification.SetHasActionButton 8187

Created 18th August 2014, last changed 18th August 2014.

174.30 UserNotification.SetIdentifier

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.SetIdentifier"; UserNotificationReference; Identifier)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Identifier

The new identifier.

"id1234"

Result Returns OK or error.

Description

A notification delivered with the same identifier as an existing notification will replace that notification, rather than display a new one.

Requires Mac OS X 10.9.

See also

- 170.12 UNNotification.Identifier 8077
- 170.46 UNNotification.ThreadIdentifier 8122
- 174.11 UserNotification.GetIdentifier 8168
- 174.34 UserNotification.SetSoundName 8193
- 174.35 UserNotification.SetSubTitle 8194
- 174.37 UserNotification.SetUserInfo 8196

Created 18th August 2014, last changed 18th August 2014.

174.31 UserNotification.SetInformativeText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetInformativeText"; UserNotificationReference; Text)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Text

The new notification body text.

\$text

Result Returns "OK" on success.

Description

Must be localized as it will be presented to the user. String will be truncated to a length appropriate for display.

See also UserNotification.GetInformativeText

See also

- [174.12 UserNotification.GetInformativeText](#) 8169

Example Databases

- [Mac only/User Notifications/UserNotification](#)

174.31.1 Blog Entries

- [Mac OS X 10.8 User Notifications with Filemaker and Real Studio](#)

Created 18th August 2014, last changed 18th August 2014.

174.32 UserNotification.SetOtherButtonTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetOtherButtonTitle"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns "OK" on success.

Description

An empty string will cause the default localized text to be used.

See also UserNotification.GetOtherButtonTitle

See also

- 174.5 UserNotification.GetActionButtonTitle 8162
- 174.13 UserNotification.GetOtherButtonTitle 8170
- 174.22 UserNotification.SetActionButtonTitle 8179

Created 18th August 2014, last changed 18th August 2014.

174.33 UserNotification.SetResponsePlaceholder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	3.5	Yes	No	No	No	No

MBS("UserNotification.SetResponsePlaceholder"; UserNotificationReference; Text)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Text

The new placeholder text.

"Type here"

Result Returns OK or error.

Description

Requires Mac OS X 10.9.

See also

- 174.15 UserNotification.GetResponsePlaceholder

8172

Created 18th August 2014, last changed 18th August 2014.

174.34 UserNotification.SetSoundName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetSoundName"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns "OK" on success.

Description

The name of the sound file in the resources of the application bundle to play when the notification is delivered. "DefaultSoundName" can be used to play the default Notification Center sound. A value of "" means no sound.

See also UserNotification.GetSoundName

See also

- 174.16 UserNotification.GetSoundName 8173
- 174.17 UserNotification.GetSubTitle 8174
- 174.23 UserNotification.SetContentImage 8180
- 174.30 UserNotification.SetIdentifier 8189
- 174.35 UserNotification.SetSubTitle 8194

Created 18th August 2014, last changed 18th August 2014.

174.35 UserNotification.SetSubTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetSubTitle"; UserNotificationReference; Text)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Text

The new subtitle for the notification.

"Hello World"

Description

Must be localized as it will be presented to the user. String will be truncated to a length appropriate for display.

See also UserNotification.GetSubTitle

See also

- 170.41 UNNotification.SetSubTitle 8115
- 170.45 UNNotification.SubTitle 8121
- 174.14 UserNotification.GetResponse 8171
- 174.16 UserNotification.GetSoundName 8173
- 174.17 UserNotification.GetSubTitle 8174
- 174.18 UserNotification.GetTitle 8175
- 174.30 UserNotification.SetIdentifier 8189
- 174.34 UserNotification.SetSoundName 8193
- 174.36 UserNotification.SetTitle 8195
- 174.37 UserNotification.SetUserInfo 8196

Example Databases

- [Mac only/User Notifications/UserNotification](#)

174.35.1 Blog Entries

- [Mac OS X 10.8 User Notifications with Filemaker and Real Studio](#)

Created 18th August 2014, last changed 18th August 2014.

174.36 UserNotification.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetTitle"; UserNotificationReference; Text)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Text

The new title for the notification.

"Hello World"

Result Returns "OK" on success.

Description

Must be localized as it will be presented to the user. String will be truncated to a length appropriate for display.

See also [UserNotification.GetTitle](#)

See also

- [170.41 UNNotification.SetSubTitle](#) 8115
- [170.44 UNNotification.SetTitle](#) 8119
- [170.45 UNNotification.SubTitle](#) 8121
- [174.4 UserNotification.Create](#) 8161
- [174.17 UserNotification.GetSubTitle](#) 8174
- [174.18 UserNotification.GetTitle](#) 8175
- [174.42 UserNotification.isRemote](#) 8201
- [174.21 UserNotification.Release](#) 8178
- [174.35 UserNotification.SetSubTitle](#) 8194

Example Databases

- [Mac only/User Notifications/UserNotification](#)

174.36.1 Blog Entries

- [Mac OS X 10.8 User Notifications with Filemaker and Real Studio](#)

Created 18th August 2014, last changed 18th August 2014.

174.37 UserNotification.SetUserInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.SetUserInfo"; UserNotificationReference; Key; Value)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Key

The key for the new entry.

"RecordID"

Value

The value for the new entry.

\$RecordID

Result Returns "OK" on success.

Description

You can store several text values with different keys.

The userInfo should be of reasonable serialized size (less than 1k) or an exception will be thrown.

This way you can pass details to the activation/deliver scripts.

See also UserNotification.GetUserInfo

See also

- 170.2 UNNotification.AddUserInfo 8067
- 174.14 UserNotification.GetResponse 8171
- 174.19 UserNotification.GetUserInfo 8176
- 174.26 UserNotification.SetDidActivateNotificationScript 8183
- 174.27 UserNotification.SetDidDeliverNotificationScript 8185
- 174.30 UserNotification.SetIdentifier 8189
- 174.35 UserNotification.SetSubTitle 8194

Example Databases

- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 18th August 2014.

174.38 UserNotification.deliverNotification

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.deliverNotification"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns "OK" on success.

Description

It will be presented to the user (subject to user preferences). UserNotification.isPresented will always return 1 if a notification is delivered using this method.

If notification is not showing, please check system preferences to see whether FileMaker is allowed to post notifications and what types are allowed. e.g. with action or not. Notification by default do not show while a keynote presentation is running as OS X delays them.

See also

- 170.10 UNNotification.DeliveredNotifications 8075
- 174.39 UserNotification.deliveredNotifications 8198
- 174.7 UserNotification.GetActualDeliveryDate 8164
- 174.41 UserNotification.isPresented 8200
- 174.45 UserNotification.removeDeliveredNotification 8204
- 174.48 UserNotification.scheduledNotifications 8207
- 174.47 UserNotification.scheduleNotification 8206

Example Databases

- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 21st December 2015.

174.39 UserNotification.deliveredNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.deliveredNotifications")

Result Returns reference values.

Description

Get a list of notification references that have been delivered to the Notification Center. The number of notifications the user actually sees in the user interface may be less than the size of this array. Note that these may or may not have been actually presented to the user (see UserNotification.isPresented).

See also

- 170.10 UNNotification.DeliveredNotifications 8075
- 174.38 UserNotification.deliverNotification 8197
- 174.41 UserNotification.isPresented 8200
- 174.43 UserNotification.removeAllDeliveredNotifications 8202
- 174.45 UserNotification.removeDeliveredNotification 8204
- 174.46 UserNotification.removeScheduledNotification 8205
- 174.48 UserNotification.scheduledNotifications 8207
- 174.47 UserNotification.scheduleNotification 8206

Example Databases

- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 18th August 2014.

174.40 **UserNotification.hasActionButton**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.hasActionButton"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns 0 or 1.

Description

See also

- 174.5 UserNotification.GetActionButtonTitle 8162
- 174.20 UserNotification.HasReplyButton 8177
- 174.22 UserNotification.SetActionButtonTitle 8179
- 174.28 UserNotification.SetHasActionButton 8187

Created 18th August 2014, last changed 18th August 2014.

174.41 UserNotification.isPresented

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.isPresented"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns 0 or 1 or error.

Description

In some cases, e.g. when your application is frontmost, the notification center may decide not to actually present a delivered notification. In that case, the value of this property will be 0. It will be set to 1 if the notification was presented according to user preferences (note: this can mean no dialog, animation, or sound, if the user has turned off notifications completely for your application).

See also

- 174.39 UserNotification.deliveredNotifications 8198
- 174.38 UserNotification.deliverNotification 8197
- 174.14 UserNotification.GetResponse 8171
- 174.42 UserNotification.isRemote 8201

Created 18th August 2014, last changed 18th August 2014.

174.42 UserNotification.isRemote

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.isRemote"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns 1 if the user notification is from a remote (push) notification.

Description

With FileMaker 11 or newer there is no way to receive push notifications as FileMaker is not in the app store.

See also

- 174.4 UserNotification.Create 8161
- 174.14 UserNotification.GetResponse 8171
- 174.18 UserNotification.GetTitle 8175
- 174.41 UserNotification.isPresented 8200
- 174.21 UserNotification.Release 8178
- 174.36 UserNotification.SetTitle 8195

Created 18th August 2014, last changed 28th April 2016.

174.43 UserNotification.removeAllDeliveredNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.removeAllDeliveredNotifications")

Result Returns "OK" on success.

Description**See also**

- 170.24 UNNotification.RemoveAllDeliveredNotifications 8092
- 174.39 UserNotification.deliveredNotifications 8198
- 174.44 UserNotification.removeAllScheduledNotifications 8203
- 174.45 UserNotification.removeDeliveredNotification 8204
- 174.46 UserNotification.removeScheduledNotification 8205

Created 18th August 2014, last changed 18th August 2014.

174.44 UserNotification.removeAllScheduledNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	9.2	Yes	No	No	No	No

MBS("UserNotification.removeAllScheduledNotifications")

Result Returns OK or error.

Description**See also**

- 170.24 UNNotification.RemoveAllDeliveredNotifications 8092
- 174.43 UserNotification.removeAllDeliveredNotifications 8202
- 174.45 UserNotification.removeDeliveredNotification 8204
- 174.46 UserNotification.removeScheduledNotification 8205
- 174.48 UserNotification.scheduledNotifications 8207

174.44.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr3](#)

Created 16th April 2019, last changed 16th April 2019.

174.45 UserNotification.removeDeliveredNotification

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.removeDeliveredNotification"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns "OK" on success.

Description

If the notification is not in the delivered list, nothing happens.

See also

- 170.10 UNNotification.DeliveredNotifications 8075
- 170.24 UNNotification.RemoveAllDeliveredNotifications 8092
- 174.39 UserNotification.deliveredNotifications 8198
- 174.38 UserNotification.deliverNotification 8197
- 174.43 UserNotification.removeAllDeliveredNotifications 8202
- 174.44 UserNotification.removeAllScheduledNotifications 8203
- 174.46 UserNotification.removeScheduledNotification 8205
- 174.27 UserNotification.SetDidDeliverNotificationScript 8185

Created 18th August 2014, last changed 18th August 2014.

174.46 UserNotification.removeScheduledNotification

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.removeScheduledNotification"; UserNotificationReference)

Parameters**UserNotificationReference**

An user notification reference.

\$ref

Result Returns "OK" on success.

Description

If the deliveryDate occurs before the cancellation finishes, the notification may still be delivered. If the notification is not in the scheduled list, nothing happens.

See also

- 174.39 UserNotification.deliveredNotifications 8198
- 174.43 UserNotification.removeAllDeliveredNotifications 8202
- 174.44 UserNotification.removeAllScheduledNotifications 8203
- 174.45 UserNotification.removeDeliveredNotification 8204
- 174.48 UserNotification.scheduledNotifications 8207
- 174.47 UserNotification.scheduleNotification 8206

Created 18th August 2014, last changed 18th August 2014.

174.47 UserNotification.scheduleNotification

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.scheduleNotification"; UserNotificationReference)

Parameters

UserNotificationReference

An user notification reference.

\$ref

Result Returns "OK" on success.

Description

If notification is not showing, please check system preferences to see whether FileMaker is allowed to post notifications and what types are allowed. e.g. with action or not. Notification by default do not show while a keynote presentation is running as OS X delays them.

See also

- 174.39 UserNotification.deliveredNotifications 8198
- 174.38 UserNotification.deliverNotification 8197
- 174.46 UserNotification.removeScheduledNotification 8205
- 174.48 UserNotification.scheduledNotifications 8207

Example Databases

- [Mac only/User Notifications/UserNotification](#)

174.47.1 Blog Entries

- [Mac OS X 10.8 User Notifications with Filemaker and Real Studio](#)

Created 18th August 2014, last changed 21st December 2015.

174.48 UserNotification.scheduledNotifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
174 UserNotification	2.8	Yes	No	No	No	No

MBS("UserNotification.scheduledNotifications")

Result Returns reference values.

Description

Get a list of notifications that are scheduled but have not yet been presented. Newly scheduled notifications are added to the end of the array.

See also

- 170.10 UNNotification.DeliveredNotifications 8075
- 174.39 UserNotification.deliveredNotifications 8198
- 174.38 UserNotification.deliverNotification 8197
- 174.44 UserNotification.removeAllScheduledNotifications 8203
- 174.46 UserNotification.removeScheduledNotification 8205
- 174.47 UserNotification.scheduleNotification 8206

Example Databases

- [Mac only/User Notifications/UserNotification](#)

Created 18th August 2014, last changed 18th August 2014.

174.49 WindowsUserNotification.Available

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.Available")

Result Returns 1 or 0.

Description

Returns 1 on Windows 8.1 and Windows 10 if all functions are available to show notifications.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728
- 184.17 WindowsUserNotification.XMLUsed 8731

Created 2nd April 2017, last changed 24th May 2017.

174.50 WindowsUserNotification.GetFileName

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.GetFileName"; Notification)

Parameters**Notification**

The reference number for the Windows User Notification.
\$Notification

Result Returns text or error.

Description**See also**

- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Created 2nd April 2017, last changed 24th May 2017.

174.51 WindowsUserNotification.GetImagePath

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification	174 UserNotification	7.2	No	Yes	No	No

MBS("WindowsUserNotification.GetImagePath"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns OK or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Created 2nd April 2017, last changed 24th May 2017.

174.52 WindowsUserNotification.GetScriptName

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.GetScriptName"; Notification)

Parameters**Notification**

The reference number for the Windows User Notification.
\$Notification

Result Returns text or error.

Description**See also**

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.5 WindowsUserNotification.GetText 8715
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726

Created 2nd April 2017, last changed 24th May 2017.

174.53 WindowsUserNotification.GetText

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.GetText"; Notification; Index)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Index

The index of the text. Range 0 to 3.
0

Result Returns text or error.

Description

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.7 WindowsUserNotification.Initialize 8717
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728
- 184.17 WindowsUserNotification.XMLUsed 8731

Created 2nd April 2017, last changed 24th May 2017.

174.54 WindowsUserNotification.HideNotification

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.HideNotification"; Notification)

Parameters**Notification**

The reference number for the Windows User Notification.
\$Notification

Result Returns OK or error.

Description**Examples**

Hide notification:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.HideNotification"; Windows User Notifications::ID)
]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
End If
```

See also

- [124.6 IsError](#) 6266
- [184.9 WindowsUserNotification.NewNotification](#) 8720
- [184.16 WindowsUserNotification.ShowNotification](#) 8730

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

174.55 WindowsUserNotification.Initialize

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174	UserNotification 7.2	No	Yes	No	No	

MBS("WindowsUserNotification.Initialize"; AppName; Company; Name; Surname; VersionInfo)

Parameters

AppName

The application name.

"FileMaker Pro"

Company

The company name. Used to build unique app id.

"Test"

Name

The name. Used to build unique app id.

Surname

The surname. Used to build unique app id.

VersionInfo

The version info. Used to build unique app id.

"1.0"

Result Returns OK or error.

Description

Must be called once on startup of solution.

Examples

Initialize:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.Initialize"; "FileMaker"; "Test"; "test"; "test"; "1.0" ) ]
```

```
Show Custom Dialog [ "Initialize"; $r ]
```

See also

- 184.1 WindowsUserNotification.Available 8711
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.5 WindowsUserNotification.GetText 8715
- 184.8 WindowsUserNotification.Isinitialized 8719
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724

174.55. <i>WINDOWSUSERNOTIFICATION.INITIALIZE</i>	8215
• 184.14 WindowsUserNotification.SetText	8727
• 184.15 WindowsUserNotification.Setting	8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

174.56 WindowsUserNotification.Isinitialized

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.Isinitialized")

Result Returns 1, 0 or error.

Description

Returns 1 if initialization was done successfully.

See also

- 184.7 WindowsUserNotification.Initialize

8717

Created 3th April 2017, last changed 24th May 2017.

174.57 WindowsUserNotification.NewNotification

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.NewNotification")

Result Returns OK or error.

Description

Returns an identifier which must be passed to other functions and later to WindowsUserNotification.Release.

Examples

Create new notification:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.NewNotification" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
Else
Set Field [ Windows User Notifications::ID; $r ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetImagePath"; Windows User Notifications::ID;
Windows User Notifications::ImagePath) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetText"; Windows User Notifications::ID; 0; Win-
dows User Notifications::Text1) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetText"; Windows User Notifications::ID; 1; Win-
dows User Notifications::Text2) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetText"; Windows User Notifications::ID; 2; Win-
dows User Notifications::Text3) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetText"; Windows User Notifications::ID; 3; Win-
dows User Notifications::Text4) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetScriptName"; Windows User Notifications::ID;
"Trigger") ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetFileName"; Windows User Notifications::ID;
Get(FileName)) ]
End If
```

See also

- 124.6 IsError 6266
- 174.21 UserNotification.Release 8178
- 184.6 WindowsUserNotification.HideNotification 8716
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725

- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.16 WindowsUserNotification.ShowNotification 8730

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

174.58 WindowsUserNotification.Release

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.Release"; Notification)

Parameters**Notification**

The reference number for the Windows User Notification.
\$Notification

Result Returns OK or error.

Description

This frees up memory used.

Examples

Free notification:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.Release"; Windows User Notifications::ID) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
End If
Set Field [ Windows User Notifications::ID; "" ]
```

See also

- 124.6 IsError 6266
- 174.21 UserNotification.Release 8178
- 184.1 WindowsUserNotification.Available 8711
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.5 WindowsUserNotification.GetText 8715
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728
- 184.17 WindowsUserNotification.XMLUsed 8731

Example Databases

- Win Only/Windows User Notifications

Created 2nd April 2017, last changed 24th May 2017.

174.59 WindowsUserNotification.SetFileName

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.SetFileName"; Notification; Filename)

Parameters**Notification**

The reference number for the Windows User Notification.
\$Notification

Filename

The database file name where the script is located.
"test.fmp12"

Result Returns OK or error.

Description

The parameter to the script includes a list of values. First entry in the list is the notification reference number. Second entry is the reason to call which can be Activated, Dismissed or Failed. Third value is reason for demission or error code for failure.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

174.60 WindowsUserNotification.SetImagePath

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification	174 UserNotification	7.2	No	Yes	No	No

MBS("WindowsUserNotification.SetImagePath"; Notification; Path)

Parameters

Notification

The reference number for the Windows User Notification.

\$Notification

Path

Native file path for the image.

"C:\MyApp\test.png"

Result Returns OK or error.

Description

May not be a network path as system needs to load it independent of your permissions.

Maybe better use image coming with application or put one in temp folder.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 17th August 2017.

174.61 WindowsUserNotification.SetScriptName

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.SetScriptName"; Notification; ScriptName)

Parameters**Notification**

The reference number for the Windows User Notification.

\$Notification

ScriptName

The script name.

"MyScript"

Result Returns OK or error.

Description

The parameter to the script includes a list of values. First entry in the list is the notification reference number. Second entry is the reason to call which can be Activated, Dismissed or Failed. Third value is reason for demission or error code for failure.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

174.62 WindowsUserNotification.SetText

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker	
184	WindowsUserNotification	174	UserNotification	7.2	No	Yes	No	No

MBS("WindowsUserNotification.SetText"; Notification; Index; Text)

Parameters

Notification

The reference number for the Windows User Notification.

\$Notification

Index

The index of the text. Range 0 to 3.

0

Text

The text to use.

"Hello World"

Result Returns OK or error.

Description

We can show up to three texts.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 3th January 2018.

174.63 WindowsUserNotification.Setting

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	8.3	No	Yes	No	No	

MBS("WindowsUserNotification.Setting")

Result Returns value or error.

Description

Gets a value that tells you whether there is an app, user, or system block that prevents the display of a notification.

If allowed, you get back "Enabled" as setting.

When notifications have been disabled at more than one level, this property value reflects the setting with the largest scope. Precedence is as follows, from largest scope to smallest:

DisabledByManifest
 DisabledByGroupPolicy
 DisabledForUser
 DisabledForApplication

If toast notifications have been disabled both by the user and by group policy, this property returns DisabledByGroupPolicy.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.17 WindowsUserNotification.XMLUsed 8731

174.63.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)

Created 22nd May 2018, last changed 8th July 2018.

174.64 WindowsUserNotification.ShowNotification

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.ShowNotification"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns OK or error.

Description

Examples

Show notification:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.ShowNotification"; Windows User Notifications::ID) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
End If
```

See also

- [124.6 IsError](#) 6266
- [184.6 WindowsUserNotification.HideNotification](#) 8716
- [184.9 WindowsUserNotification.NewNotification](#) 8720

Example Databases

- [Win Only/Windows User Notifications](#)

174.64.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr7](#)

Created 2nd April 2017, last changed 24th May 2017.

174.65 WindowsUserNotification.XMLUsed

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.XMLUsed"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns xml text or error.

Description

For debugging only.

See also

- 184.1 WindowsUserNotification.Available 8711
- 184.5 WindowsUserNotification.GetText 8715
- 184.10 WindowsUserNotification.Release 8722
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Created 23th April 2017, last changed 24th May 2017.

Chapter 175

Utility

Various utility functions which do not fit in other categories.

175.1 CGPSCConverter.Convert

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	2.4	Yes	No	Yes, macOS only	No	No

```
MBS( "CGPSCConverter.Convert"; PSContainer { ; DontRenderPreview } )
```

Parameters

PSContainer

A container value with a postscript file data.

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result A container value with PDF data.

Description

Example Databases

- [Mac only/Convert Postscript to PDF](#)

175.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr4](#)

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 2.6pr2](#)
- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr10](#)

175.1.2 FileMaker Magazin

- [Ausgabe 5/2011, Seite 55](#)

Created 18th August 2014, last changed 5th July 2015.

175.2 Email.Verify

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	3.3	Yes	Yes	Yes	Yes	Yes

MBS("Email.Verify"; emailAddress; network)

Parameters

emailAddress

The email address to check.

"hello@macsw.de"

network

Whether to check via DNS if domain is valid for email. Default is 0 for no check. Pass 1 to enable check.

0

Result Returns OK or error message.

Description

Check syntax of email and optionally verifies if domain is registered for email delivery.

The network check may take a few seconds. While the function returns normally after a few milliseconds, the DNS server may not always be reachable and then the DNS query is sent several times.

You can send or receive emails with our CURL functions. For sending the SendMail functions help to build an email and send it, while EmailParser functions help to parse an email.

If you have a DNS server, which will redirect all mistyped domain names to a search website, this won't really work well and detect too many valid domain names.

Examples

Checks an Email:

```
MBS("Email.Verify"; "Hello@macsw.de"; 1)
```

175.2.1 Blog Entries

- [MBS FileMaker Plugin 3.3 for OS X/Windows - More than 1600 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 3.3pr3](#)

Created 18th August 2014, last changed 20th June 2018.

175.3 LCMS.ProfileInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	4.0	Yes	Yes	Yes	Yes	Yes

MBS("LCMS.ProfileInfo"; ProfileData; selector)

Parameters

ProfileData

The container containing the ICC profile as file.

MyTable::ICCProfile

selector

Currently can be Name, Description, Copyright, Model, Manufacturer.

"Name"

Result Returns info or error.

Description

The name field is dynamically build from Model, Manufacturer and/or Description.

Examples

Shows various informations:

Show Custom Dialog ["Info";

"Name: " & MBS("LCMS.PProfileInfo"; Drawing::ICCProfile; "Name") & \$&

"Model: " & MBS("LCMS.PProfileInfo"; Drawing::ICCProfile; "Model") & \$&

"Manufacturer: " & MBS("LCMS.PProfileInfo"; Drawing::ICCProfile; "Manufacturer") & \$&

"Description: " & MBS("LCMS.PProfileInfo"; Drawing::ICCProfile; "Description") & \$&

"Copyright: " & MBS("LCMS.PProfileInfo"; Drawing::ICCProfile; "Copyright")]

175.3.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 18th August 2014.

175.4 Log

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	2.2	Yes	Yes	Yes	Yes	Yes

MBS("Log"; Params)

Parameters

Params

Several parameters which are concated.

"Test: ";\$test

Description

On Mac use Console.app in the Application Utilities folder. On Windows use DebugView application from Microsoft.

On Windows with a FileMaker Server, you can see debug messages in DebugView if you run DebugView application as admin and enable global Win32 listening.

For FileMaker Server on Mac OS X you can see messages in /Library/FileMaker Server/Logs/stderr file.

Examples

Log a message:

MBS("Log"; "Test: "; \$test)

See also

- [79.43 FM.MouseWheelScriptTrigger](#)

3973

175.4.1 Blog Entries

- [Logging in FileMaker](#)

Created 18th August 2014, last changed 4th June 2015.

175.5 Modbus.CalculateRTUMessageCRC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Modbus.CalculateRTUMessageCRC"; message)

Parameters

message

The modbus message.

"010600000021"

Result Returns the CRC as hex string.

Description

Examples

Calculate the CRC for two texts:

```
MBS("Modbus.CalculateRTUMessageCRC"; "010600000021")
```

```
MBS("Modbus.CalculateRTUMessageCRC"; "010400010001")
```

175.5.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr6](#)

Created 18th August 2014, last changed 18th August 2014.

175.6 MouseCursor.Hide

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	7.5	Yes	Yes	No	No	No

MBS("MouseCursor.Hide")

Result Returns OK or error.

Description

As FileMaker may reset the cursor to be visible when scripts end, you may not see the mouse actually hide.

See also

- 175.7 MouseCursor.HideUntilMouseMoves 8236
- 175.8 MouseCursor.Set 8237
- 175.9 MouseCursor.Show 8240

Created 14th October 2017, last changed 14th October 2017.

175.7 MouseCursor.HideUntilMouseMoves

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	7.5	Yes	Yes	No	No	No

MBS("MouseCursor.HideUntilMouseMoves")

Result Returns OK or error.

Description

Good for forms where mouse cursor is not needed and text input required.

Examples

Hide mouse until it moves:

Set Variable [\$r; Value: MBS("MouseCursor.HideUntilMouseMoves")]

See also

- 175.6 MouseCursor.Hide

8235

175.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr2](#)

Created 14th October 2017, last changed 14th October 2017.

175.8 MouseCursor.Set

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	2.6	Yes	Yes	Yes	No	No

MBS("MouseCursor.Set"; CursorName)

Parameters

CursorName

The name of cursor you'd like to set.

"openHand"

Result Returns "OK" or error message.

Description

As FileMaker loves to reset the cursor, you can't use it only in places where FileMaker does not reset it. Like in a script without pauses.

Cursor names allowed on Mac OS X:

- arrow
- IBeam
- pointingHand
- closedHand
- openHand
- resizeLeft
- resizeRight
- resizeLeftRight
- resizeUp
- resizeDown
- resizeUpDown
- crosshair
- disappearingItem

With Mac OS X 10.6 and newer you can also use this cursors:

- operationNotAllowed

- dragLink
- dragCopy
- contextualMenu

Cursor names allowed on Windows:

- AppStarting
- Arrow
- IBeam
- Hand
- OpenHand
- resizeLeftRight
- resizeUpDown
- crosshair
- operationNotAllowed
- Help
- SizeNESW
- SizeNS
- SizeNWSE
- SizeWE
- SizeAll
- UpArrow
- Wait

Examples

Set hand cursor:

```
MBS( "MouseCursor.Set"; "openHand" )
```

Set crosshair cursor:

```
MBS( "MouseCursor.Set"; "crosshair" )
```

See also

175.8. <i>MOUSECURSOR.SET</i>	8239
• 175.6 MouseCursor.Hide	8235
• 175.9 MouseCursor.Show	8240

Example Databases

- [Utility functions/MouseCursors](#)

175.8.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr3](#)

Created 18th August 2014, last changed 12nd August 2016.

175.9 MouseCursor.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	7.5	Yes	Yes	No	No	No

MBS("MouseCursor.Show")

Result Returns OK or error.

Description

See also

- 175.6 MouseCursor.Hide 8235
- 175.8 MouseCursor.Set 8237

Created 14th October 2017, last changed 14th October 2017.

175.10 MsgBox

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	2.2	Yes	Yes	Yes	Yes	Yes

MBS("Msgbox"; Values)

Parameters

Values

The values to show. You can put several values there
"Hello World"

Result Returns OK.

Description

Examples

Shows a message box:

```
MBS("Msgbox"; "The client "; $ClientName; " needs project "; $project; " done.")
```

175.10.1 Blog Entries

- [Trigger FileMaker Scripts from JavaScript in FileMaker 16](#)

Created 18th August 2014, last changed 18th August 2014.

175.11 SendCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	2.0	Yes	Yes	Yes	Yes	Yes

MBS("SendCommand"; Host; Port; Parameters)

Parameters

Host

IP or domain name of the target computer.

127.0.0.1

Port

Port number to use.

9999

Parameters

Parameters to send.

"RunScript"

Result Returns function result or an error message.

Description

The result is parsed and a string returned as function result. Note that all plugin error messages start with " [MBS] ".

See the examples for a sample project and a detailed Readme on the data format.

Version 6.3 now supports passing IPv4, IPv6, or a host name.

Examples

Sends a SQL select command:

```
MBS("SendCommand"; "127.0.0.1"; 9999; "SQLSelect"; "SELECT * FROM testTable")
```

175.11.1 Blog Entries

- [The annoyance of Non-public API usage message from App Store](#)
- [MBS FileMaker Plugin, version 8.3pr3](#)
- [MBS FileMaker Plugin, version 7.3pr1](#)
- [MBS FileMaker Plugin, version 6.3pr4](#)

Created 18th August 2014, last changed 22nd June 2016.

175.12 ShowURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	2.4	Yes	Yes	Yes	No	Yes

MBS("ShowURL"; URL)

Parameters

URL

The URL to open.

"http://www.filemaker.com/"

Result Returns "OK" on success.

Description

Depending on URL the matching client will be launched and passed the URL. Similar to FileMaker's Open URL script step, but passes through all schema.

Examples

Open MBS Website:

MBS("ShowURL"; "http://www.monkeybreadsoftware.com/filemaker/")

Open Mail client for sending email:

MBS("ShowURL"; "mailto:support@monkeybreadsoftware.de")

Trigger FaceTime call on MacOS using tel URL scheme::

MBS("ShowURL"; "tel:+0123456789")

Open Skype and call someone:

MBS("ShowURL"; "skype:UserName")

175.12.1 Blog Entries

- [New functions of the MBS Plugin Version 9.5](#)
- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr8](#)
- [Tipp of the day: showurl](#)

Created 18th August 2014, last changed 5th February 2020.

175.13 Time.Sleep

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	4.1	Yes	Yes	Yes	Yes	Yes

MBS("Time.Sleep"; duration)

Parameters

duration

Number of milliseconds to wait.

10

Result Returns OK or error.

Description

You can use this to delay something on purpose. The while FileMaker Pro app is locked for the given time. Pass 1000 for a one second delay.

This pauses execution of evaluation or a script.

Created 18th August 2014, last changed 15th March 2016.

175.14 Time.UnixTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
175 Utility	3.1	Yes	Yes	Yes	Yes	Yes

MBS("Time.UnixTimeStamp" { ; timestamp })

Parameters

timestamp

Optional

Optional, a FileMaker timestamp to convert.

Get(SystemTimeStamp)

Result Returns time stamp as number.

Description

If called with no parameters, returns current time stamp (GMT).

If you pass a timestamp, this timestamp is converted. Be aware that the system timezone is used.

Convert back to FileMaker with Time.UnixTimeStampToFileMaker function.

Examples

Calc current time:

MBS("Time.UnixTimeStamp"; Get(CurrentTimeStamp))

Example result: 1481452626

See also

- 61.387 [CURL.SetupOAuth](#) 2324
- 166.5 [Time.UnixTimeStampToFileMaker](#) 7935

Example Databases

- [CURL/WebServices/Twitter OAuth](#)

175.14.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr2](#)
- [MBS Filemaker Plugin, version 3.2pr7](#)

Created 18th August 2014, last changed 31st May 2018.

Chapter 176

UUID

UUID functions.

176.1 UUID.Formatted

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
176 UUID	2.3	Yes	Yes	Yes	Yes	Yes

MBS("UUID.Formatted" { ; WithBrackets })

Parameters

WithBrackets

Optional

Default is 1 to include curly brackets.

1

Result The UUID. e.g. " { 7B374233-3734-3233-332D-333733342D33 } "

Description

Please use 2.6 plugins, if you need this functions. We fixed important bug in 2.6pr1.

Examples

Creates formatted UUID:

```
MBS( "UUID.Formatted" )
```

UUID without curly brackets:

```
MBS( "UUID.Formatted" ; 0)
```

176.1.1 Blog Entries

- [MBS Filemaker Plugin, version 2.3pr4](#)

Created 18th August 2014, last changed 14th March 2015.

176.2 UUID.FromNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
176 UUID	8.2	Yes	Yes	Yes	Yes	Yes

MBS("UUID.FromNumber"; UUID Number)

Parameters

UUID Number

The UUID number to convert.

"113621887307998538083879161464090829483"

Result Returns OK or error.

Description

Examples

Convert UUID:

MBS("UUID.FromNumber"; "274265811883194525999390578526946467087")

Example result: CE55AC8A-2236-4E05-A654-C2B092E61D0F

Convert from one to other direction:

```
Let ( [
u = Get(UUID) ;
n = MBS( "UUID.ToNumber"; u );
b = MBS( "UUID.FromNumber"; n ) ] ;
u & §& n & §& b )
```

Example result: 819AD32B-23D3-4CA7-ACAB-F2BE48B6200F

172274308178793290359797804461655990287

819AD32B-23D3-4CA7-ACAB-F2BE48B6200F

See also

- [176.4 UUID.Number](#) 8252
- [176.6 UUID.ToNumber](#) 8254

176.2.1 Blog Entries

- [MBS FileMaker Plugin 8.2 - More than 5200 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.2 - 5200 Funktionen in einem Plugin](#)
- [UUID Numbers](#)
- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 15th May 2018, last changed 15th May 2018.

176.3 UUID.Hex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
176 UUID	2.3	Yes	Yes	Yes	Yes	Yes

MBS("UUID.Hex")

Result The UUID, e.g. 0190323C667611E09DD27C6D628C4C29

Description

same as MBS("Text.EncodeToHex"; MBS("UUID.Raw")).

Please use 2.6 plugins, if you need this functions. We fixed important bug in 2.6pr1.

Examples

Creates hex encoded UUID:

MBS("UUID.Hex")

See also

- 164.32 Text.EncodeToHex 7819
- 176.5 UUID.Raw 8253

176.3.1 Blog Entries

- [MBS Filemaker Plugin, version 2.3pr4](#)

Created 18th August 2014, last changed 18th October 2014.

176.4 UUID.Number

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
176 UUID	8.2	Yes	Yes	Yes	Yes	Yes

MBS("UUID.Number")

Result Returns UUID as number or error.

Description

Same as Get(UUIDNumber) in FileMaker 17, but works for older FileMaker versions, too.

Examples

Create new number:

```
MBS( "UUID.Number" )
```

Convert from one to other direction:

```
Let ( [
u = MBS( "UUID.Number" ) ;
n = MBS( "UUID.FromNumber"; u );
b = MBS( "UUID.ToNumber"; n ) ] ;
u & §& n & §& b )
```

See also

- [176.2 UUID.FromNumber](#) 8249
- [176.6 UUID.ToNumber](#) 8254

176.4.1 Blog Entries

- [MBS FileMaker Plugin 8.2 - More than 5200 Functions In One Plugin](#)
- [UUID Numbers](#)
- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 16th May 2018, last changed 16th May 2018.

176.5 UUID.Raw

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
176 UUID	2.3	Yes	Yes	Yes	Yes	Yes

MBS("UUID.Raw")

Result The raw UUID value, e.g. 4°\$Dfv§ª | mb\$L)

Description

Please use 2.6 plugins, if you need this functions. We fixed important bug in 2.6pr1.

Examples

Creates raw UUID:

MBS("UUID.Raw")

See also

- 176.3 UUID.Hex

8251

176.5.1 Blog Entries

- [MBS Filemaker Plugin, version 2.3pr4](#)

Created 18th August 2014, last changed 6th October 2015.

176.6 UUID.ToNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
176 UUID	8.2	Yes	Yes	Yes	Yes	Yes

MBS("UUID.ToNumber"; UUID)

Parameters

UUID

The UUID to convert.

"CE55AC8A-2236-4E05-A654-C2B092E61D0F"

Result Returns OK or error.

Description

Examples

Convert UUID:

```
MBS( "UUID.ToNumber"; "CE55AC8A-2236-4E05-A654-C2B092E61D0F" )
```

Example result: 274265811883194525999390578526946467087

Convert from one to other direction:

```
Let ( [
u = Get(UUID) ;
n = MBS( "UUID.ToNumber"; u );
b = MBS( "UUID.FromNumber"; n ) ] ;
u & §& n & §& b )
```

See also

- [176.2 UUID.FromNumber](#) 8249
- [176.4 UUID.Number](#) 8252

176.6.1 Blog Entries

- [MBS FileMaker Plugin 8.2 - More than 5200 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.2 - 5200 Funktionen in einem Plugin](#)
- [UUID Numbers](#)
- [MBS FileMaker Plugin, version 8.2pr8](#)

Created 15th May 2018, last changed 15th May 2018.

Chapter 177

Validate

Validation of App store receipt for Apple Mac App Store.

177.1 Validate.CheckReceipt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
177 Validate	2.2	Yes	No	Yes, macOS only	No	No

MBS("Validate.CheckReceipt"; ReceiptPath; BundleVersion; BundleID)

Parameters

ReceiptPath

The path to your application.
MBS("Validate.FindReceipt")

BundleVersion

The bundle Version of your application.
"1.0"

BundleID

The bundle ID for your application.
"de.monkeybreadsoftware.test"

Result Returns OK or error code 173.

Description

If you upload your application the Mac App Store, Apple will deliver it with a receipt file included. It is your job to validate this receipt file to avoid unlimited copies of your application. You can pass the path to Apples sample receipt and bundle version "1.0.2" and bundle identifier "com.example.SampleApp" to test with the sample receipt.

Examples

Exist if the receipt is not valid:

```
MBS( "Validate.Exit"; MBS( "Validate.CheckReceipt"; MBS( "Validate.FindReceipt" ); "1.0"; "de.monkey-breadsoftware.test" ) )
```

See also

- 177.2 Validate.Exit 8257
- 177.3 Validate.FindReceipt 8258

Example Databases

- [Mac only/Receipt Check for Mac App Store/Receipt Check](#)

Created 18th August 2014, last changed 18th August 2014.

177.2 Validate.Exit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
177 Validate	2.2	Yes	No	Yes, macOS only	No	No

MBS("Validate.Exit")

Result Returns OK or exists FileMaker.

Description

Normally you pass 173 to quit with error code 173, so the Finder shows an error message about it. You can of course use this function to exit with other error codes. Any value between 0 and 255 is okay. If you pass not a number (e.g. a string), the function returns OK. This allows the function to be chained with other Validate functions.

Examples

Exists if checking failed:

```
MBS( "Validate.Exit"; MBS( "Validate.CheckReceipt"; MBS( "Validate.FindReceipt" ); "1.0"; "de.monkey-breadsoftware.test" ) )
```

See also

- [177.1 Validate.CheckReceipt](#) 8255
- [177.3 Validate.FindReceipt](#) 8258

Example Databases

- [Mac only/Receipt Check for Mac App Store/Receipt Check](#)

Created 18th August 2014, last changed 18th August 2014.

177.3 Validate.FindReceipt

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
177 Validate	2.2	Yes	No	Yes, macOS only	No	No

MBS("Validate.FindReceipt")

Result Returns the path to the receipt. e.g. `"/Applications/MyApp.app/Contents/receipt"`

Description

Examples

Searches receipt:

MBS("Validate.FindReceipt")

See also

- [177.1 Validate.CheckReceipt](#) 8255
- [177.2 Validate.Exit](#) 8257

Example Databases

- [Mac only/Receipt Check for Mac App Store/Receipt Check](#)

Created 18th August 2014, last changed 18th August 2014.

Chapter 178

Variables

Plugin managed global variables preserving data type.

178.1 FM.VariableAdd

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	8.3	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableAdd"; Name; Value)

Parameters

Name

the name of the variable
"test"

Value

the value to add to the variable
5

Result Returns new value or error.

Description

Internally does similar to FM.VariableGet to read value, then adds given parameter and stores like FM.VariableSet, all in one operation, so no other script or calculation can get between. Creates variable, if it's not existing yet.

Examples

Sets \$ID and counts up with each call:

```
Set Variable [ $ID ; Value: MBS( "FM.VariableAdd"; "ID"; 1 ) ]
```

See also

- 178.2 FM.VariableAppend 8261
- 178.6 FM.VariableGet 8265
- 178.7 FM.VariableList 8267
- 178.10 FM.VariableSet 8270

178.1.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 8th June 2018, last changed 13th January 2020.

178.2 FM.VariableAppend

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	9.5	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableAppend"; Name; Value)

Parameters

Name

the name of the variable

"test"

Value

the value to add to the variable

5

Result Returns new value or error.

Description

Internally does similar to FM.VariableGet to read value, then adds given parameter and stores like FM.VariableSet, all in one operation, so no other script or calculation can get between.

Creates variable, if it's not existing yet.

Examples

Test append function:

Let ([

```
r1 = MBS( "FM.VariableAppend"; "hello"; "Line 1" & $);
```

```
r2 = MBS( "FM.VariableAppend"; "hello"; "Line 2" & $);
```

```
r3 = MBS( "FM.VariableAppend"; "hello"; "Line 3" & $)
```

```
]; MBS( "FM.VariableGet"; "hello" ) )
```

See also

- [178.1 FM.VariableAdd](#) 8259
- [178.6 FM.VariableGet](#) 8265
- [178.10 FM.VariableSet](#) 8270

178.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)

Created 28th October 2019, last changed 28th October 2019.

178.3 FM.VariableClear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableClear"; Name)

Parameters

Name

The name of the variable to destroy

Result Returns OK.

Description

Examples

Destroy a variable

```
MBS( "FM.VariableClear" ; "MyVar" )
```

See also

- [178.4 FM.VariableClearAll](#) 8263
- [178.6 FM.VariableGet](#) 8265
- [178.8 FM.VariableNames](#) 8268
- [178.9 FM.VariableReset](#) 8269
- [178.10 FM.VariableSet](#) 8270

Example Databases

- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Global Variables](#)

178.3.1 Blog Entries

- [The power of global variables](#)

178.3.2 FileMaker Magazin

- [Ausgabe 2/2014, Seite 31](#)

Created 18th August 2014, last changed 21st June 2017.

178.4 FM.VariableClearAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	5.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableClearAll")

Result Returns OK or error.

Description

See also

- [178.3 FM.VariableClear](#) 8262
- [178.8 FM.VariableNames](#) 8268
- [178.10 FM.VariableSet](#) 8270

178.4.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr2](#)

Created 3th June 2015, last changed 8th June 2015.

178.5 FM.VariableExists

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	4.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableExists"; Name)

Parameters

Name

The name of the variable.

"x"

Result Returns 1 if variable exists, else 0.

Description

See also

- 178.6 FM.VariableGet 8265
- 178.7 FM.VariableList 8267

178.5.1 Blog Entries

- [The power of global variables](#)

178.5.2 FileMaker Magazin

- Ausgabe 2/2014, Seite 31

Created 18th August 2014, last changed 21st June 2017.

178.6 FM.VariableGet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableGet"; Name)

Parameters

Name

The Name of the variable

Description

Unlike the variables that were introduced in FileMaker 8 these variables are not limited to the File or Script. In other words they can be retrieved from any file in the system regardless of where they were declared.

You can check with FM.VariableExists whether a variable exists.

Examples

Retrieve a variable

MBS("FM.VariableGet" ; "myVar")

See also

- [178.1 FM.VariableAdd](#) 8259
- [178.2 FM.VariableAppend](#) 8261
- [178.3 FM.VariableClear](#) 8262
- [178.5 FM.VariableExists](#) 8264
- [178.7 FM.VariableList](#) 8267
- [178.8 FM.VariableNames](#) 8268
- [178.9 FM.VariableReset](#) 8269
- [178.10 FM.VariableSet](#) 8270

Example Databases

- [CURL/WebViewer Download Images with CURL](#)
- [Drag and Drop/for Mac/Image drag from one database to other/Image drop](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drop](#)
- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Global Variables](#)

178.6.1 Blog Entries

- [Data structures in FileMaker with MBS Plugins](#)
- [The power of global variables](#)

178.6.2 FileMaker Magazin

- Ausgabe 6/2019, Seite 34
- Ausgabe 6/2019, Seite 33
- Ausgabe 2/2014, Seite 32
- Ausgabe 2/2014, Seite 31

Created 18th August 2014, last changed 21st June 2017.

178.7 FM.VariableList

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	4.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableList" { ; Delimiter })

Parameters

Delimiter

Optional

Optionally, the delimiter to use. Default is tab character.

”.”

Result Returns list.

Description

Container values or multiline texts will probably not be handled correctly for the result. So works best if you have just single line values.

See also

- [178.1 FM.VariableAdd](#) 8259
- [178.5 FM.VariableExists](#) 8264
- [178.6 FM.VariableGet](#) 8265
- [178.8 FM.VariableNames](#) 8268
- [178.9 FM.VariableReset](#) 8269
- [178.10 FM.VariableSet](#) 8270

Example Databases

- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Global Variables](#)

178.7.1 Blog Entries

- [The power of global variables](#)
- [MBS Filemaker Plugin, version 4.0pr1](#)

178.7.2 FileMaker Magazin

- [Ausgabe 2/2014, Seite 31](#)

Created 18th August 2014, last changed 21st June 2017.

178.8 FM.VariableNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	8.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableNames")

Result Returns list or error.

Description

Examples

Test functions:

```
MBS( "FM.VariableClearAll" ) &
MBS( "FM.VariableSet"; "Hello"; "World" ) &
MBS( "FM.VariableSet"; "other"; "value" ) &
§&
MBS( "FM.VariableList" ) &
§&
MBS( "FM.VariableNames" )
```

Example result: OKOKOK

other value

Hello World

other

Hello

See also

- [178.3 FM.VariableClear](#) 8262
- [178.4 FM.VariableClearAll](#) 8263
- [178.6 FM.VariableGet](#) 8265
- [178.7 FM.VariableList](#) 8267
- [178.9 FM.VariableReset](#) 8269
- [178.10 FM.VariableSet](#) 8270

178.8.1 Blog Entries

- [MBS FileMaker Plugin, version 7.6pr3](#)

Created 13th December 2017, last changed 8th July 2018.

178.9 FM.VariableReset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	4.0	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableReset")

Result Returns OK.

Description

You can fill again with FM.VariableSet or remove individual variables with FM.VariableClear.

See also

- [178.3 FM.VariableClear](#) 8262
- [178.6 FM.VariableGet](#) 8265
- [178.7 FM.VariableList](#) 8267
- [178.8 FM.VariableNames](#) 8268
- [178.10 FM.VariableSet](#) 8270

178.9.1 Blog Entries

- [MBS Filemaker Plugin, version 4.0pr1](#)

Created 18th August 2014, last changed 21st June 2017.

178.10 FM.VariableSet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
79 FM 178 Variables	1.2	Yes	Yes	Yes	Yes	Yes

MBS("FM.VariableSet"; Name; Value)

Parameters

Name

the name of the variable

Value

the value to assign to the variable

Description

Unlike the variables that were introduced in FileMaker 8 these variables are not limited to the File or Script. In other words they can be retrieved from any file in the system regardless of where they were declared. All values are stored in their native data types (up to version 4.4 only text).

Use FM.VariableClear to clear the variables or FM.VariableClearAll to clear them all. FM.VariableList returns list of all defined variables.

On server, the variables are shared by all users connected to the server. So e.g. on Web Direct all users have the same set of global variables via plugin. You can prefix variables with user ID/Name to make them per use unique.

Examples

Set a variable

```
MBS( "FM.VariableSet" ; "myVar"; "Hello" )
```

See also

- 178.1 FM.VariableAdd 8259
- 178.2 FM.VariableAppend 8261
- 178.3 FM.VariableClear 8262
- 178.4 FM.VariableClearAll 8263
- 178.6 FM.VariableGet 8265
- 178.7 FM.VariableList 8267
- 178.8 FM.VariableNames 8268
- 178.9 FM.VariableReset 8269

Example Databases

- [CURL/WebView Download Images with CURL](#)
- [Drag and Drop/for Mac/Image drag from one database to other/Image drag](#)
- [Drag and Drop/for Mac/Text drag from one database to other/Text drag](#)
- [Third Party/FileMaker Snippet Storage](#)
- [Utility functions/Global Variables](#)

178.10.1 Blog Entries

- [Data structures in FileMaker with MBS Plugins](#)
- [The power of global variables](#)

178.10.2 FileMaker Magazin

- [Ausgabe 6/2019, Seite 33](#)
- [Ausgabe 2/2014, Seite 31](#)

Created 18th August 2014, last changed 24th July 2018.

Chapter 179

Vision

Functions for the Vision framework from Apple

179.1 Vision.ClassifyImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
179 Vision	9.4	Yes	No	Yes, macOS only	No	Yes

```
MBS( "Vision.ClassifyImage"; Image { ; Best } )
```

Parameters

Image

The image to analyze. Can be container value with JPEG, PNG or other image formats supported by Vision framework.

\$image

Best

Optional

Whether to return only identifier of best. Default is 1. If you pass 0, you get back JSON with all classifications and their confidence.

1

Result Returns text or error.

Description

Requires MacOS 10.15 or iOS 13.0 or newer.

If you like to use your own CoreML model, please try our own CoreML functions.

Examples

Classify image in container:

Set Field [Vision::Result ; MBS("Vision.ClassifyImage"; Vision::Image)]

See also

- [57.1 CoreImage.Detect](#) 1667
- [59.12 CoreML.OpenModel](#) 1725
- [59.13 CoreML.PredictionFromFeatures](#) 1727

Example Databases

- [Mac and iOS/Vision](#)

179.1.1 Blog Entries

- [Vision Framework for FileMaker](#)

Created 18th August 2019, last changed 19th August 2019.

179.2 Vision.DetectBarcode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
179 Vision	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("Vision.DetectBarcode"; Image)

Parameters

Image

The image to analyze. Can be container value with JPEG, PNG or other image formats supported by Vision framework.

\$image

Result Returns JSON or error.

Description

Returns JSON array with all recognized barcodes.

If you need cross platform barcode detection, please use Barcode.Detect function.

Examples

Detect barcode:

```
Set Field [ Vision::Result ; MBS( "Vision.DetectBarcode"; Vision::Image) ]
```

See also

- [43.1 Barcode.Detect](#) 1137
- [57.1 CoreImage.Detect](#) 1667

Example Databases

- [Mac and iOS/Vision Barcodes](#)
- [Mac and iOS/Vision](#)

179.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr1](#)
- [Vision Framework for FileMaker](#)

Created 18th August 2019, last changed 19th August 2019.

179.3 Vision.KnownClassifications

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
179 Vision	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("Vision.KnownClassifications")

Result Returns list or error.

Description

Obtain the collection of classifications currently recognized by the Vision framework.
Requires MacOS 10.15 or iOS 13.0 or newer.

Examples

Query classifications:

```
Set Field [ Vision::Result ; MBS( "Vision.KnownClassifications" ) ]
```

Example Databases

- [Mac and iOS/Vision](#)

Created 18th August 2019, last changed 19th August 2019.

179.4 Vision.RecognizeText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
179 Vision	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("Vision.RecognizeText"; Image { ; Recognition Levels; Languages; CustomWords })

Parameters

Image

The image to analyze. Can be container value with JPEG, PNG or other image formats supported by Vision framework.

\$image

Recognition Levels

Optional

Can be "Fast" or "Accurate".

"Accurate"

Languages

Optional

Specify the languages used for the detection. The order of the languages in the array defines the order in which languages will be used during the language processing. The languages are specified as ISO language codes.

"en_US"

CustomWords

Optional

An array of strings that will be used at the word recognition stage in addition to the recognition languages. The customWords list takes precedence over the standard lexicon.

"FileMaker\$Claris"

Result Returns list or error.

Description

Requires MacOS 10.15 or iOS 13.0 or newer.

If you need cross platform text recognition, please check our OCR functions.

Examples

Recognize text:

```
Set Field [ Vision::Result ; MBS( "Vision.RecognizeText"; Vision::Image; "Accurate" ) ]
```

See also

- 57.1 CoreImage.Detect

Example Databases

- [Mac and iOS/Vision](#)

179.4.1 Blog Entries

- [Vision Framework for FileMaker](#)

Created 18th August 2019, last changed 19th August 2019.

179.5 Vision.SupportedRecognitionLanguages

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
179 Vision	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("Vision.SupportedRecognitionLanguages" { ; Recognition Levels })

Parameters

Recognition Levels

Optional

Can be "Fast" or "Accurate".

"Accurate"

Result Returns list or error.

Description

Requires MacOS 10.15 or iOS 13.0 or newer.

Examples

Queries language list for accurate mode:

```
Set Field [ Vision::Result ; MBS( "Vision.SupportedRecognitionLanguages"; "Accurate" ) ]
```

Example result: "en-US"

Queries language list for fast mode:

```
MBS( "Vision.SupportedRecognitionLanguages"; "Fast" )
```

Example Databases

- [Mac and iOS/Vision](#)

Created 18th August 2019, last changed 19th August 2019.

179.6 Vision.SupportedSymbologies

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
179 Vision	9.4	Yes	No	Yes, macOS only	No	Yes

MBS("Vision.SupportedSymbologies")

Result Returns list or error.

Description

The vision framework from Apple supports 17 types in MacOS 10.14.

Examples

Queries supported symbologies:

```
Set Field [ Vision::Result ; MBS( "Vision.SupportedSymbologies" ) ]
```

Example result: VNBarcodeSymbologyAztec

VNBarcodeSymbologyCode128

VNBarcodeSymbologyCode39

VNBarcodeSymbologyCode39Checksum

VNBarcodeSymbologyCode39FullASCII

VNBarcodeSymbologyCode39FullASCIIChecksum

VNBarcodeSymbologyCode93

VNBarcodeSymbologyCode93i

VNBarcodeSymbologyDataMatrix

VNBarcodeSymbologyEAN13

VNBarcodeSymbologyEAN8

VNBarcodeSymbologyI2of5

VNBarcodeSymbologyI2of5Checksum

VNBarcodeSymbologyITF14

VNBarcodeSymbologyPDF417

VNBarcodeSymbologyQR

VNBarcodeSymbologyUPCE

Example Databases

- [Mac and iOS/Vision Barcodes](#)
- [Mac and iOS/Vision](#)

Created 18th August 2019, last changed 19th August 2019.

Chapter 180

WebView

Control webviewer.

Fill form fields, run javascript or copy content of webviewer.

Only for local webviewer on Mac, Windows and iOS. Does not work in WebDirect.

180.1 WebDownloadDelegate.Cancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.Cancel")

Result Returns OK on success or error.

Description

Make sure you cleanup your stuff like a progress dialog.

See also

- [180.10 WebDownloadDelegate.Install](#) 8290
- [180.12 WebDownloadDelegate.Path](#) 8292
- [180.18 WebDownloadDelegate.URL](#) 8301

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 18th August 2014.

180.2 WebDownloadDelegate.ClearBeginDownloadHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.ClearBeginDownloadHandler")

Result Returns OK.

Description

See also

- 180.3 WebDownloadDelegate.ClearDidDownloadHandler 8283
- 180.13 WebDownloadDelegate.SetBeginDownloadHandler 8293
- 180.14 WebDownloadDelegate.SetDidDownloadHandler 8294

Created 18th August 2014, last changed 18th August 2014.

180.3 WebDownloadDelegate.ClearDidDownloadHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.ClearDidDownloadHandler")

Result Returns OK.

Description**See also**

- 180.2 WebDownloadDelegate.ClearBeginDownloadHandler 8282
- 180.4 WebDownloadDelegate.ClearFailHandler 8284
- 180.6 WebDownloadDelegate.ClearProgressHandler 8286
- 180.13 WebDownloadDelegate.SetBeginDownloadHandler 8293
- 180.14 WebDownloadDelegate.SetDidDownloadHandler 8294

Created 18th August 2014, last changed 18th August 2014.

180.4 WebDownloadDelegate.ClearFailHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.ClearFailHandler")

Result Returns OK.

Description

See also

- 180.3 WebDownloadDelegate.ClearDidDownloadHandler 8283
- 180.5 WebDownloadDelegate.ClearFolder 8285
- 180.6 WebDownloadDelegate.ClearProgressHandler 8286
- 180.15 WebDownloadDelegate.SetFailHandler 8296
- 180.17 WebDownloadDelegate.SetProgressHandler 8299

Created 18th August 2014, last changed 18th August 2014.

180.5 WebDownloadDelegate.ClearFolder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.8	Yes	No	No	No	No

MBS("WebDownloadDelegate.ClearFolder")

Result Returns OK on success.

Description

Next download will go to temporary folder (which is default).

See also

- [180.4 WebDownloadDelegate.ClearFailHandler](#) 8284
- [180.9 WebDownloadDelegate.GetFolder](#) 8289
- [180.16 WebDownloadDelegate.SetFolder](#) 8297

180.5.1 Blog Entries

- [MBS Filemaker Plugin, version 2.8pr8](#)

Created 18th August 2014, last changed 18th August 2014.

180.6 WebDownloadDelegate.ClearProgressHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.ClearProgressHandler")

Result Returns OK.

Description

See also

- 180.3 WebDownloadDelegate.ClearDidDownloadHandler 8283
- 180.4 WebDownloadDelegate.ClearFailHandler 8284
- 180.17 WebDownloadDelegate.SetProgressHandler 8299

Created 18th August 2014, last changed 18th August 2014.

180.7 WebDownloadDelegate.DownloadedLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.DownloadedLength")

Result Returns downloaded bytes count.

Description

Useful to show progress together with WebDownloadDelegate.expectedContentLength.

See also

- 180.19 WebDownloadDelegate.expectedContentLength 8302
- 180.13 WebDownloadDelegate.SetBeginDownloadHandler 8293
- 180.17 WebDownloadDelegate.SetProgressHandler 8299

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 18th August 2014.

180.8 WebDownloadDelegate.ErrorMessage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.ErrorMessage")

Result Returns the localized error message.

Description

Typically you read this in your registered download fail script.

See also

- 180.15 WebDownloadDelegate.SetFailHandler 8296

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 18th August 2014.

180.9 WebDownloadDelegate.GetFolder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.8	Yes	No	No	No	No

MBS("WebDownloadDelegate.GetFolder")

Result Returns path setting.

Description

Returns empty text if default folder is used from system (temp folder).

See also

- 180.5 WebDownloadDelegate.ClearFolder 8285
- 180.10 WebDownloadDelegate.Install 8290
- 180.11 WebDownloadDelegate.MIMEType 8291
- 180.15 WebDownloadDelegate.SetFailHandler 8296
- 180.16 WebDownloadDelegate.SetFolder 8297

180.9.1 Blog Entries

- [MBS Filemaker Plugin, version 2.8pr8](#)

Created 18th August 2014, last changed 18th August 2014.

180.10 WebDownloadDelegate.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.Install"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK on success or error.

Description

This needs to be made whenever you want to receive download script calls for a webviewer.

If webviewer is part of a data record in FileMaker, you may need to set it for each record whenever a record is loaded.

Not supported for WebKit 2.x (FileMaker 16 Mac).

Examples

Makes sure all PDF files are downloaded:

```
MBS( "WebDownloadDelegate.Install" ; "web" )
MBS( "WebPolicyDelegate.AddMimeType"; "application/pdf"; "download" )
```

See also

- 180.1 WebDownloadDelegate.Cancel 8281
- 180.9 WebDownloadDelegate.GetFolder 8289
- 180.11 WebDownloadDelegate.MIMEType 8291
- 180.12 WebDownloadDelegate.Path 8292
- 180.16 WebDownloadDelegate.SetFolder 8297
- 180.22 WebPolicyDelegate.AddMimeType 8305
- 180.23 WebPolicyDelegate.Install 8306
- 180.46 WebView.FindByName 8339

Example Databases

- [WebViewer/WebViewer Download Delegate for Mac with Custom Webviewer](#)
- [WebViewer/WebViewer Download Delegate for Mac](#)

Created 18th August 2014, last changed 19th February 2017.

180.11 WebDownloadDelegate.MIMETYPE

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.MIMETYPE")

Result Returns the MIME type.

Description

The MIME type is often provided by the response's originating source. However, that value may be changed or corrected by a protocol implementation if it can be determined that the response's source reported the information incorrectly.

If the response's originating source does not provide a MIME type, an attempt to guess the MIME type may be made.

See also

- 180.9 WebDownloadDelegate.GetFolder 8289
- 180.10 WebDownloadDelegate.Install 8290
- 180.16 WebDownloadDelegate.SetFolder 8297

Created 18th August 2014, last changed 18th August 2014.

180.12 WebDownloadDelegate.Path

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.Path")

Result Returns file path.

Description

This is a temporary file and you should import, move, rename or copy it. If you don't delete this file, it will be on the next restart of the Mac.

You may need to use Files.MoveFile later to move the file to the place you like.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 78.43 Files.MoveFile 3840
- 121.2 Path.FileMakerPathToNativePath 6139
- 180.1 WebDownloadDelegate.Cancel 8281
- 180.10 WebDownloadDelegate.Install 8290
- 180.14 WebDownloadDelegate.SetDidDownloadHandler 8294
- 180.17 WebDownloadDelegate.SetProgressHandler 8299
- 180.18 WebDownloadDelegate.URL 8301

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 28th October 2019.

180.13 WebDownloadDelegate.SetBeginDownloadHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.SetBeginDownloadHandler"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script
"MyDatabase.fp7"

ScriptName

The name of the script to run
"DownloadBegin"

Result Returns OK or error.

Description

You can show progress dialog if you like. Properties are not yet set, so you can only show that download started and wait for other script calls.

The plugin only supports one download at a time. Still you could have several, but functions like WebDownloadDelegate.DownloadedLength will not work correct.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers fail handler:

```
MBS( "WebDownloadDelegate.SetBeginDownloadHandler"; Get ( FileName ); "DownloadBegin")
```

See also

- 180.2 WebDownloadDelegate.ClearBeginDownloadHandler 8282
- 180.3 WebDownloadDelegate.ClearDidDownloadHandler 8283
- 180.7 WebDownloadDelegate.DownloadedLength 8287
- 180.14 WebDownloadDelegate.SetDidDownloadHandler 8294

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 27th January 2016.

180.14 WebDownloadDelegate.SetDidDownloadHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.SetDidDownloadHandler"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script
"MyDatabase.fp7"

ScriptName

The name of the script to run
"DownloadFinished"

Result Returns OK or error.

Description

Use WebDownloadDelegate.URL to learn which URL has been loaded.
Use WebDownloadDelegate.Path to learn where file has been created.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers fail handler:

```
MBS( "WebDownloadDelegate.SetDidDownloadHandler"; Get ( FileName ); "DownloadFinished"
```

See also

- 180.2 WebDownloadDelegate.ClearBeginDownloadHandler 8282
- 180.3 WebDownloadDelegate.ClearDidDownloadHandler 8283
- 180.12 WebDownloadDelegate.Path 8292
- 180.13 WebDownloadDelegate.SetBeginDownloadHandler 8293
- 180.15 WebDownloadDelegate.SetFailHandler 8296
- 180.17 WebDownloadDelegate.SetProgressHandler 8299
- 180.18 WebDownloadDelegate.URL 8301

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 27th January 2016.

180.15 WebDownloadDelegate.SetFailHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.SetFailHandler"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script
"MyDatabase.fp7"

ScriptName

The name of the script to run
"DownloadFailed"

Result Returns OK or error.

Description

Use WebDownloadDelegate.ErrorMessage to get a localized error message.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers fail handler:

```
MBS( "WebDownloadDelegate.SetFailHandler"; Get ( FileName ); "DownloadFailed")
```

See also

- 180.4 WebDownloadDelegate.ClearFailHandler 8284
- 180.8 WebDownloadDelegate.ErrorMessage 8288
- 180.9 WebDownloadDelegate.GetFolder 8289
- 180.14 WebDownloadDelegate.SetDidDownloadHandler 8294
- 180.16 WebDownloadDelegate.SetFolder 8297
- 180.17 WebDownloadDelegate.SetProgressHandler 8299

Example Databases

- [WebViewer/WebViewer Download Delegate for Mac with Custom Webviewer](#)
- [WebViewer/WebViewer Download Delegate for Mac](#)

Created 18th August 2014, last changed 27th January 2016.

180.16 WebDownloadDelegate.SetFolder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.8	Yes	No	No	No	No

MBS("WebDownloadDelegate.SetFolder"; Path)

Parameters

Path

The native path to the download folder.

\$path

Result Returns OK on success.

Description

Make sure the folder is empty as with duplicate file name you get an error.

If you do not set download folder, it goes to default temporary folder.

Version 9.5 or newer check if folder is valid before setting it.

Sadly macOS Catalina may ignore this folder setting and still use temporary folder, so you may need to use Files.MoveFile later to move the file to the place you like.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Download to desktop:

```
Set Variable [ $result ; Value: MBS("WebDownloadDelegate.SetFolder"; MBS( "Folders.UserDesktop" )) ]
```

See also

- 78.43 Files.MoveFile 3840
- 81.8 Folders.UserDesktop 4177
- 121.2 Path.FileMakerPathToNativePath 6139
- 180.5 WebDownloadDelegate.ClearFolder 8285
- 180.9 WebDownloadDelegate.GetFolder 8289
- 180.10 WebDownloadDelegate.Install 8290
- 180.11 WebDownloadDelegate.MIMEType 8291
- 180.15 WebDownloadDelegate.SetFailHandler 8296

180.16.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)
- [MBS Filemaker Plugin, version 2.8pr8](#)

Created 18th August 2014, last changed 28th October 2019.

180.17 WebDownloadDelegate.SetProgressHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.SetProgressHandler"; FileName; ScriptName)

Parameters

FileName

The name of the FileMaker File that contains the script
"MyDatabase.fp7"

ScriptName

The name of the script to run
"DownloadFailed"

Result Returns OK or error.

Description

This event is called at maximum once a second.

Use WebDownloadDelegate.URL to learn which URL is loading.

Use WebDownloadDelegate.Path to learn where file has been created.

Use WebDownloadDelegate.expectedContentLength to learn how much data is expected and WebDownloadDelegate.DownloadedLength how much data has already been loaded.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Registers fail handler:

```
MBS( "WebDownloadDelegate.SetProgressHandler"; Get ( FileName ); "DownloadFailed"
```

See also

- 180.4 WebDownloadDelegate.ClearFailHandler 8284
- 180.6 WebDownloadDelegate.ClearProgressHandler 8286
- 180.7 WebDownloadDelegate.DownloadedLength 8287
- 180.19 WebDownloadDelegate.expectedContentLength 8302
- 180.12 WebDownloadDelegate.Path 8292
- 180.14 WebDownloadDelegate.SetDidDownloadHandler 8294
- 180.15 WebDownloadDelegate.SetFailHandler 8296

- 180.18 WebDownloadDelegate.URL

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 27th January 2016.

180.18 WebDownloadDelegate.URL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.URL")

Result Returns URL of download.

Description

This is first the requested URL, but can later be the URL where we got redirected to.

See also

- [180.1 WebDownloadDelegate.Cancel](#) 8281
- [180.12 WebDownloadDelegate.Path](#) 8292
- [180.14 WebDownloadDelegate.SetDidDownloadHandler](#) 8294
- [180.17 WebDownloadDelegate.SetProgressHandler](#) 8299

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 18th August 2014.

180.19 WebDownloadDelegate.expectedContentLength

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.expectedContentLength")

Result Returns the expected content length, or -1 if the length can't be determined.

Description

Some protocol implementations report the content length as part of the response, but not all protocols guarantee to deliver that amount of data. Clients should be prepared to deal with more or less data.

See also

- 180.7 WebDownloadDelegate.DownloadedLength 8287
- 180.17 WebDownloadDelegate.SetProgressHandler 8299

Example Databases

- [WebViewer/WebViewer Download Delegate for Mac with Custom Webviewer](#)
- [WebViewer/WebViewer Download Delegate for Mac](#)

Created 18th August 2014, last changed 18th August 2014.

180.20 WebDownloadDelegate.suggestedFilename

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.suggestedFilename")

Result Returns a suggested filename.

Description

The method tries to create a filename using the following, in order:

- A filename specified using the content disposition header.
- The last path component of the URL.
- The host of the URL.

If the host of URL can't be converted to a valid filename, the filename "unknown" is used.

In most cases, this method appends the proper file extension based on the MIME type. This method will always return a valid filename regardless of whether or not the resource is saved to disk.

Example Databases

- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView Download Delegate for Mac](#)

Created 18th August 2014, last changed 18th August 2014.

180.21 WebDownloadDelegate.textEncodingName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebDownloadDelegate.textEncodingName")

Result The name of the receiver's text encoding provided by the response's originating source, or empty text if no text encoding was provided by the protocol.

Description

Created 18th August 2014, last changed 18th August 2014.

180.22 WebPolicyDelegate.AddMimeType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebPolicyDelegate.AddMimeType"; type; action)

Parameters

type

MIME Type as text.

"application/pdf"

action

The action you want to be made. This can be "use" when file should be viewed, "download" if file should be downloaded and "ignore" if file should be ignored.

"download"

Result Returns OK or error.

Description

Examples

Makes sure all PDF files are downloaded:

```
MBS( "WebDownloadDelegate.Install" ; "web" )
```

```
MBS( "WebPolicyDelegate.AddMimeType"; "application/pdf"; "download" )
```

Add a type to download:

```
MBS( "WebPolicyDelegate.AddMimeType"; "unknown/exe"; "download" )
```

See also

- 180.10 WebDownloadDelegate.Install 8290
- 180.23 WebPolicyDelegate.Install 8306
- 180.24 WebPolicyDelegate.RemoveMimeType 8307

Created 18th August 2014, last changed 11st August 2018.

180.23 WebPolicyDelegate.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebPolicyDelegate.Install"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK on success or error.

Description

When using our WebDownloadDelegate, you may see that it prefers to show a PDF with the build in PDF Viewer rather than downloading it. This set of functions serves to fix on problem: Getting the webviewer to download files instead of showing them.

So you can for example register that PDF files (mime type "application/pdf") are downloaded instead of viewed.

All other policy things are forwarded to normal FileMaker policy delegate. And the plugin makes sure you don't install the policy delegate twice.

Not supported for WebKit 2.x (FileMaker 16 Mac), but may work with plugin made web viewers (see WebView.Create).

Examples

Makes sure all PDF files are downloaded:

```
MBS( "WebDownloadDelegate.Install" ; "web" )
```

```
MBS( "WebPolicyDelegate.AddMimeType"; "application/pdf"; "download" )
```

See also

- 180.10 WebDownloadDelegate.Install 8290
- 180.22 WebPolicyDelegate.AddMimeType 8305
- 180.39 WebView.Create 8326
- 180.46 WebView.FindByName 8339

Created 18th August 2014, last changed 1st March 2019.

180.24 WebPolicyDelegate.RemoveMimeType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.7	Yes	No	No	No	No

MBS("WebPolicyDelegate.RemoveMimeType"; type)

Parameters

type

MIME Type as text.

"application/pdf"

Result Returns OK or error.

Description

When you remove all types you have the FileMaker default behavior. You can use type parameter "all" to remove all mime types.

See also

- 180.22 WebPolicyDelegate.AddMimeType

8305

Created 18th August 2014, last changed 11st August 2018.

180.25 WebView.AddScriptMessageHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	8.0	Yes	No	No	No	Yes

MBS("WebView.AddScriptMessageHandler"; Name)

Parameters

Name

The name of the message handler.

"test"

Result Returns OK or error.

Description

Adding a script message handler with name name causes the JavaScript function window.webkit.messageHandlers.name.postMessage(messageBody) to be defined in all frames in all web views that use the user content controller.

Only for FileMaker 16 and newer.

Trigger script in FileMaker from JavaScript:

```
window.webkit.messageHandlers.test.postMessage( { 'filename':'WebView Message Handler.fmp12', 'parameter':'Hello World from JavaScript', 'scriptName':'test' } );
```

Evaluate expression in JavaScript:

```
window.webkit.messageHandlers.test.postMessage( { 'evaluate':'MBS( & quot;Msgbox& quot;; & quot;Hello from Evaluate in JavaScript& quot; )' } );
```

Added iOS for version 9.5.

Examples

Add script handler:

```
Set Variable [ $r ; Value: MBS( "Webview.AddScriptMessageHandler"; "test" ) ]
```

See also

- 180.85 WebView.InstallCallback 8389
- 180.106 WebView.RemoveScriptMessageHandler 8418

180.25.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.5](#)
- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.5pr8](#)
- [FileMaker and WebViewer communication](#)
- [Trigger FileMaker Scripts from JavaScript in FileMaker 16](#)

Created 15th December 2017, last changed 5th January 2020.

180.26 WebView.AddUserScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.5	Yes	No	No	No	Yes

MBS("WebView.AddUserScript"; WebViewerRef; Source; injectionTime; forMainFrameOnly)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Source

The source code.

injectionTime

The time when the script should be injected into the webpage. AtDocumentStart: Inject the script after the document element is created, but before any other content is loaded. AtDocumentEnd: Inject the script after the document finishes loading, but before other subresources finish loading.

"AtDocumentEnd"

forMainFrameOnly

A Boolean value indicating whether the script should be injected only into the main frame (true) or into all frames (false).

1

Result Returns OK or error.

Description

Only for FileMaker 16 and newer in WebKit 2.x web viewer on Mac and iOS.

Examples

Add a test script:

```
MBS( "Webview.AddUserScript"; "web"; "alert('Hello');"; "AtDocumentEnd"; 1 )
```

See also

- [180.46 WebView.FindByName](#) 8339
- [180.140 WebView.UserScripts](#) 8480

180.26.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr3](#)
- [Neues MBS FileMaker Plugin 9.5](#)
- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)

- [MBS FileMaker Plugin, version 9.5pr8](#)

Created 8th November 2019, last changed 5th January 2020.

180.27 WebView.AllCookies

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	8.4	Yes	No	No	No	Yes

MBS("WebView.AllCookies"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

For WebKit 1.x, this returns global list of cookies.

For WebKit 2.x, this returns list of cookies associated to the web viewer, which may be a persistent list. For WebKit 2.x we need MacOS 10.13 or iOS 11.0 to work.

Examples

Get all cookies:

```
Set Field [ WebView SelectedText::Cookies ; MBS("Webview.AllCookies"; "web") ]
```

Example result: [

```
{
"domain" : "www.filemaker.com",
"secure" : false,
"HTTPOnly" : false,
"commentURL" : null,
"portList" : [

],
"expiresDate" : "2027-11-03 21:43:00 +0000",
"value" : "192.123.25.13.123456789",
"path" : "\/",
"comment" : null,
"name" : "fmi_cookie",
"sessionOnly" : false
}
]
```

See also

- 180.46 WebView.FindByName

8339

180.27.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr3](#)

180.27. *WEBVIEW.ALLCOOKIES*

8313

Created 11st August 2018, last changed 5th January 2020.

180.28 WebView.AllowsAnyHTTSPCertificateForHost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.2	Yes	No	Yes, macOS only	No	No

MBS("WebView.AllowsAnyHTTSPCertificateForHost"; Hostname)

Parameters

Hostname

The hostname to allow.

"www.macs.w.de"

Result Returns OK or error.

Description

Sometimes you have to load a website where the SSL Zertifikate ist not for the given domain. With putting a domain on the exception list, we can allow loading the given site.

Supported for WebKit 2.x (FileMaker 16 Mac) with MBS Plugin 9.3 or newer.

Examples

Allow some domains and load website:

```
Set Variable [ $r; Value:MBS("Webview.AllowsAnyHTTSPCertificateForHost"; "macsw.de") ]
Set Variable [ $r; Value:MBS("Webview.AllowsAnyHTTSPCertificateForHost"; "www.macs.w.de") ]
Set Web Viewer [ Object Name: "web"; URL: "https://www.macs.w.de/plugin/Prerelease/" ]
```

180.28.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr5](#)
- [Webviewer certificate overwrite](#)
- [MBS FileMaker Plugin, version 6.2pr10](#)

Created 19th May 2016, last changed 28th June 2019.

180.29 **WebView.CallFunction**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	10.0	No	Yes	No	No	No

MBS("WebView.CallFunction"; WebViewRef; FunctionName { ; Parameters... })

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FunctionName

The function name.

"test"

Parameters...

Optional

Pass as many parameters as needed.

"Hello"

Result Returns OK or error.

Description

Returns result as text or number.

You can pass as many parameters as needed.

Examples

Call with 2 parameters:

```
MBS( "Webview.CallFunction"; "web"; "test"; "Hello"; "World")
```

See also

- [180.46 WebView.FindByName](#)

8339

180.29.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 10.0pr6](#)

Created 4th January 2020, last changed 5th January 2020.

180.30 WebView.ClearBrowserSession

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	8.5	No	Yes	No	No	No

MBS("WebView.ClearBrowserSession")

Result Returns OK or error.

Description

Flushes entries not in use from the password cache on the hard disk drive. Also resets the cache time used when the synchronization mode is once-per-session.

This should clear current session cookies.

For web viewer using Internet Explorer engine. If you close one by closing the window with web viewer control, this method should end session and a new window would start fresh again.

180.30.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.5 - Über 5500 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.5 - More than 5500 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.5pr7](#)

Created 13th November 2018, last changed 5th January 2020.

180.31 **WebView.ClearSelection**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.4	Yes	Yes	No	No	No

MBS("WebView.ClearSelection"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

Not supported for FileMaker 16 on Mac, but works in FileMaker 9 to 15.

See also

- 180.46 [WebView.FindByName](#)

8339

180.31.1 **Blog Entries**

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 11st August 2017, last changed 25th August 2017.

180.32 WebView.ClickInput

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.ClickInput"; WebViewerRef; FormNameOrIndex; InputNameOrIndex { ; OnlyVisible })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

InputNameOrIndex

Either the Name of the Button or the Index starting at 0

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

Examples

Load a website with login if needed:

```
# Load website
Set Web Viewer [ Object Name: "web" ; URL: "https://somedomain/search" ]
# Wait for it
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS("webview.isloading"; "web") = 1 ]
End Loop
#
# Set login name
Set Variable [ $r ; Value: MBS( "WebView.SetFormInputValue"; "web"; "login_form"; "__ac_name";
"xxx" ) ]
If [ MBS("iserror") ]
# No form, so we are already logged in?
If [ Position ( $r ; "failed to find form" ; 1 ; 1 ) = 0 ]
Show Custom Dialog [ "Fehler" ; $r ]
End If
Exit Script [ Text Result: ]
End If
# Set password
Set Variable [ $r ; Value: MBS( "WebView.SetFormInputValue"; "web"; "login_form"; "__ac_password";
"yyy" ) ]
If [ MBS("iserror") ]
```

```

Show Custom Dialog [ "Fehler" ; $r ]
End If
# Wait
Pause/Resume Script [ Duration (seconds): ,1 ]
# Click login button
Set Variable [ $r ; Value: MBS( "WebView.ClickInput"; "web"; "login_form"; "submit" ) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Fehler" ; $r ]
End If
# or submit form
// Set Variable [ $r ; Value: MBS( "WebView.formsubmit"; "web"; "login_form" ) ]
// If [ MBS("iserror") ]
// Show Custom Dialog [ "Fehler" ; $r ]
// End If
#
# Wait for page loading after login
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS("webview.isloading"; "web") = 1 ]
End Loop
# Go to search page where we want to be after login
Set Web Viewer [ Object Name: "web" ; URL: "https://somedomain/search" ]

```

See also

- [124.6 IsError](#) 6266
- [180.46 WebView.FindByName](#) 8339
- [180.50 WebView.FormSubmit](#) 8345
- [180.87 WebView.IsLoading](#) 8392
- [180.128 WebView.SetFormInputValue](#) 8459

180.32.1 Blog Entries

- [Automate web viewer in FileMaker](#)
- [Login in FileMaker web viewer if needed](#)

180.32.2 FileMaker Magazin

- [Ausgabe 5/2013, Seite 24](#)

180.33 WebView.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.4	Yes	No	No	No	No

MBS("WebView.Close"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

Only for web viewer created with Webview.Create.

Examples

Close webview:

```
If [ Length($$web) >0 ]
Set Variable [ $r ; Value: MBS("Webview.Close"; $$web) ]
Set Variable [ $$web ; Value: "" ]
End If
```

See also

- [180.37 WebView.Copy](#) 8324
- [180.39 WebView.Create](#) 8326
- [180.46 WebView.FindByName](#) 8339

180.33.1 Blog Entries

- [WebViewer on Popover with MBS Plugin](#)
- [Print WebViewer on macOS in FileMaker](#)
- [MBS FileMaker Plugin, version 7.4pr5](#)

Created 6th September 2017, last changed 16th February 2018.

180.34 WebView.Cookies.ClearForURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.Cookies.ClearForURL"; URL)

Parameters**URL**

The target URL of the website to use.

"http://www.mbsplugins.de"

Result Returns count or error.

Description

Returns number of deleted cookies.

For WebKit 1.x, so only for web viewers created in FileMaker 15 or older or web viewers created with WebView.Create function.

See also

- 180.39 WebView.Create

8326

180.34.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 19th November 2014, last changed 11st August 2018.

180.35 WebView.Cookies.Count

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.Cookies.Count" { ; URL })

Parameters

URL

Optional

The target URL of the website to use.

"http://www.mbsplugins.de"

Result Returns OK or error.

Description

Can search global cookies (no URL parameter) or for a given URL.

For WebKit 1.x, so only for web viewers created in FileMaker 15 or older or web viewers created with WebView.Create function.

See also

- 180.36 WebView.Cookies.Query 8323
- 180.39 WebView.Create 8326

180.35.1 Blog Entries

- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 19th November 2014, last changed 11st August 2018.

180.36 **WebView.Cookies.Query**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.Cookies.Query"; Index; Selector; URL)

Parameters

Index

The index of the cookie from 0 to WebView.Cookies.Count-1.

Selector

Which value to query. Can be path, name, value, expiresDate, SessionOnly, domain, Secure, HTTPOnly, comment, commentURL, version or portList.

"Name"

URL

The target URL of the website to use.

"http://www.mbsplugins.de"

Result Returns OK or error.

Description

For WebKit 1.x, so only for web viewers created in FileMaker 15 or older or web viewers created with WebView.Create function.

URL should have https:// prefix if this is for SSL.

Examples

Get a cookie for a domain:

MBS("WebView.Cookies.Query"; \$index; "Name"; "https://xing.com")

See also

- 180.35 [WebView.Cookies.Count](#) 8322
- 180.39 [WebView.Create](#) 8326

180.36.1 **Blog Entries**

- [MBS Filemaker Plugin, version 4.5pr1](#)

Created 19th November 2014, last changed 27th February 2020.

180.37 WebView.Copy

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.4	Yes	Yes	No	No	Yes

MBS("WebView.Copy"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

This is like choosing the menu command to copy, but without using the menu.
See also Clipboard.GetStyledText.

As webviewer functions often run asynchronously, you need to make a short script pause to let the webviewer do the job.

Examples

Select all and copy:

```
MBS( "Webview.SelectAll"; "web" ) & MBS( "Webview.Copy"; "web" )
```

See also

- 51.8 Clipboard.GetStyledText 1444
- 165.2 TextView.Copy 7878
- 180.33 WebView.Close 8320
- 180.41 WebView.Cut 8330
- 180.46 WebView.FindByName 8339
- 180.118 WebView.SelectAll 8444

Example Databases

- [WebView/WebView Copy and Paste](#)

180.37.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 11st August 2017, last changed 25th August 2017.

180.38 **WebView.CopyFormattedText**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	3.1	Yes	Yes	No	No	Yes

MBS("WebView.CopyFormattedText"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

You can insert it with the insert script step.

Works well in FileMaker 12. In FileMaker 11 there are bugs so FileMaker doesn't import styles right from clipboard.

Works for WebKit 2.x with plugin version 9.0.

On windows, we do select all, copy and unselect to get all text to clipboard.

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.64 [WebView.GetFormattedText](#) 8363

180.38.1 **Blog Entries**

- [MBS FileMaker Plugin, version 8.2pr7](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)

Created 18th August 2014, last changed 4th January 2019.

180.39 WebView.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.4	Yes	No	No	No	No

MBS("WebView.Create"; WindowRef; x; y; w; h)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

x

The left coordinate in the window.

0

y

The top coordinate in the window.

0

w

The width of the drop area in the window.

600

h

The height of the drop area in the window.

400

Result Returns webviewer reference number or error.

Description

This is WebKit 1.x view, so all the PDF/Image rendering functions, download delegate and callback should work.

The view is released automatically when window closes.

Webviewers created via `WebView.Create` or `WebView.CreateOnPopover` are independent of FileMaker, so they don't reload with a record change. They also don't print with the layout and stay if you change the layout.

Examples

Create WebView:

```
Set Variable [ $x ; Value: 40 ]
```

```
Set Variable [ $y ; Value: 80 ]
```

```
Set Variable [ $w ; Value: 970 ]
```

```
Set Variable [ $h ; Value: 440 ]
```

```
Set Variable [ $$web ; Value: MBS("WebView.Create"; 0; $x; $y; $w; $h) ]
```

180.39. *WEBVIEW.CREATE* 8327
Set Variable [\$r ; Value: MBS("WebView.LoadURL"; \$\$web; "http://www.mbs-plugins.com")]

See also

- 180.34 *WebView.Cookies.ClearForURL* 8321
- 180.35 *WebView.Cookies.Count* 8322
- 180.36 *WebView.Cookies.Query* 8323
- 180.64 *WebView.GetFormattedText* 8363
- 180.85 *WebView.InstallCallback* 8389
- 180.90 *WebView.LoadURL* 8396
- 180.102 *WebView.PrintToFile* 8413
- 180.108 *WebView.RenderPDF* 8421
- 180.109 *WebView.RunJavaScript* 8423
- 180.117 *WebView.SearchText* 8442

Example Databases

- [WebViewer/Custom WebView](#)
- [WebViewer/Javascript calls Filemaker Script/Callbacks with Custom Webviewer](#)
- [WebViewer/WebViewer Download Delegate for Mac with Custom Webviewer](#)

180.39.1 Blog Entries

- [Web viewer exists only with URL loaded](#)
- [MBS FileMaker Plugin, version 9.1pr6](#)
- [Trigger FileMaker Scripts from JavaScript in FileMaker 16](#)
- [Print WebViewer on macOS in FileMaker](#)
- [MBS FileMaker Plugin, version 7.5pr2](#)
- [MBS FileMaker Plugin 7.4 - More than 4900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 7.4pr4](#)
- [Custom WebView in FileMaker 16](#)

Created 26th August 2017, last changed 16th October 2018.

180.40 WebView.CreateOnPopover

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	8.1	Yes	No	No	No	No

MBS("WebView.CreateOnPopover"; WindowRef; Popover Name; x; y; w; h)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Popover Name

The name of the popover to look for on the window.

"MyPopover"

x

The left coordinate in the popover.

0

y

The top coordinate in the popover.

0

w

The width of the drop area in the popover.

600

h

The height of the drop area in the popover.

400

Result Returns webviewer reference number or error.

Description

This is WebKit 1.x view, so all the PDF/Image rendering functions, download delegate and callback should work.

The view is released automatically when window closes.

Webview created via WebView.Create or WebView.CreateOnPopover are independent of FileMaker, so they don't reload with a record change. They also don't print with the layout and stay if you change the layout.

Examples

Create WebView:

```
Set Variable [ $x ; Value: 10 ]
```

```
Set Variable [ $y ; Value: 55 ]
```

```
Set Variable [ $w ; Value: 837 - 10 - $x ]
```

180.40. WEBVIEW.CREATEONPOPOVER

8329

```
Set Variable [ $h ; Value: 522 - 10 - $y ]
#
Set Variable [ $w ; Value: MBS("WebView.CreateOnPopover"; 0; "MyPopover"; $x; $y; $w; $h) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $$web ; Value: $w ]
Set Field [ WebViewer on Popover::URL ; "http://www.mbs-plugins.com" ]
Set Variable [ $r ; Value: MBS( "WebView.LoadURL"; $$web; WebViewer on Popover::URL) ]
End If
```

See also

- [124.6 IsError](#) 6266
- [180.39 WebView.Create](#) 8326
- [180.90 WebView.LoadURL](#) 8396
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

Example Databases

- [WebViewer/WebViewer on Popover](#)

180.40.1 Blog Entries

- [Web viewer exists only with URL loaded](#)
- [MBS FileMaker Plugin v8.1 with 5100 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.1](#)
- [MBS FileMaker Plugin, version 8.1pr4](#)
- [WebViewer on Popover with MBS Plugin](#)

Created 16th February 2018, last changed 16th October 2018.

180.41 WebView.Cut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.4	Yes	Yes	No	No	Yes

MBS("WebView.Cut"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

This is like choosing the menu command to cut, but without using the menu.

Examples

Cut in web viewer:

```
Set Variable [ $r ; Value: MBS("WebView.Cut"; "web") ]
```

See also

- [165.8 TextView.Cut](#) 7886
- [180.37 WebView.Copy](#) 8324
- [180.46 WebView.FindByName](#) 8339

Example Databases

- [WebView/WebView Copy and Paste](#)

180.41.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 11st August 2017, last changed 26th December 2019.

180.42 WebView.DisableJavascriptAlerts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.5	Yes	No	No	No	No

MBS("WebView.DisableJavascriptAlerts")

Result Returns "OK" on success.

Description

Call this once on your FileMaker solution in the startup script.

Added support for FileMaker 16 in plugin version 7.1

Examples

Disable alerts:

```
$error = MBS( "WebView.DisableJavascriptAlerts" )
```

Example Databases

- [WebViewer/Disable Javascript alerts on Webviewer Mac](#)

180.42.1 Blog Entries

- [MBS Filemaker Plugin, version 2.5pr5](#)

Created 18th August 2014, last changed 26th February 2017.

180.43 WebView.EstimatedProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.EstimatedProgress"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns progress as value between 0.0 and 1.0.

Description

Examples

Check loading progress for webviewer named web

```
$progress = MBS( "WebView.EstimatedProgress"; "web")
```

See also

- [180.46 WebView.FindByName](#)

8339

180.43.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr2](#)
- [MBS Filemaker Plugin, version 2.7fc](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr9](#)

Created 18th August 2014, last changed 18th August 2014.

180.44 **WebView.Evaluate**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Webview	10.0	Yes	Yes	No	No	Yes

MBS("WebView.Evaluate"; WebViewerRef; Expression)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Expression

The JavaScript expression to evaluate.

"1+"

Result Returns value or error.

Description

In contrast to `WebView.RunJavaScript` this function returns the result on Windows, but needs IE 9 or newer. Use `WebView.SetInternetExplorerVersion` to configure the IE version used in web viewer.

For MacOS and iOS this passes through to `WebView.RunJavaScript` function.

Returns result on MacOS/iOS if possible in original data type, so numbers and booleans are returned as number and not as text. We try to return array or objects as JSON.

On Windows booleans and numbers are returned as numbers.

Examples

Evaluate an expression:

```
MBS( "WebView.Evaluate"; "web"; "1+2" )
```

Build some JavaScript object and return as JSON:

```
MBS("WebView.Evaluate"; "web"; "var obj = { name: \"John\", age: 30, city: \"New York\" } ;
JSON.stringify(obj);")
```

Defines and runs a function in JavaScript in the web viewer:

```
MBS("WebView.Evaluate"; "web";
"function makeCRCTable() {
var c;
var crcTable = [ ] ;
for(var n =0; n <256; n++) {
c = n;
for(var k =0; k <8; k++) {
c = ((c& 1) ? (0xEDB88320 ^ (c »>1)) : (c »>1));
```

```

}
crcTable [ n ] = c;
}
return crcTable;
}

function crc32(str) {
var crcTable = crcTable || (crcTable = makeCRCTable());
var crc = 0 ^(-1);

for (var i = 0; i <str.length; i++) {
crc = (crc »>8) ^crcTable [ (crc ^str.charCodeAt(i) & 0xFF ) ];
}

return (crc ^(-1)) »>0;
};

crc32('Hello World');")

```

Fill a search form, submit and query result:

```

# load website with search field:
Set Web Viewer [ Object Name: "web" ; URL: "https://something.com/searchpage" ]
#
# wait for website to finish loading
Pause/Resume Script [ Duration (seconds): ,5 ]
Loop
Exit Loop If [ MBS("WebView.IsLoading"; "web") 1 ]
Pause/Resume Script [ Duration (seconds): ,1 ]
End Loop
Pause/Resume Script [ Duration (seconds): ,5 ]
#
# fill in search term and send change event, so this website sees it:
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "document.getElementById('search-Field').value = '" & Substitute ( Web::SearchTerm ; "" ; "" ) & """) ]
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "var o = document.getElementById('search-Field'); var evt = document.createEvent('Events'); evt.initEvent('change', true, true); o.dispatchEvent(evt); } ") ]
#
# wait a bit
Pause/Resume Script [ Duration (seconds): ,5 ]
#
# send click event to search button
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "var o = document.getElementById('search-Button'); var evt = document.createEvent('Events'); evt.initEvent('click', true, true); o.dispatchEvent(evt); } ") ]
#
# wait for website to finish loading

```

```

Pause/Resume Script [ Duration (seconds): ,5 ]
Loop
Exit Loop If [ MBS("WebView.IsLoading"; "web") 1 ]
Pause/Resume Script [ Duration (seconds): ,1 ]
End Loop
Pause/Resume Script [ Duration (seconds): ,5 ]
#
# query values from website
Set Field [ Web::articleId ; MBS("WebView.Evaluate"; "web"; "document.getElementById('articleId').innerHTML;") ]
Set Field [ Web::price ; MBS("WebView.Evaluate"; "web"; "document.getElementById('price').innerHTML;")
]

```

Wait for field named Remember to show up on website:

```

Pause/Resume Script [ Duration (seconds): 1 ]
Set Variable [ $count ; Value: 0 ]
Loop
Set Variable [ $r ; Value: MBS("WebView.Evaluate"; "web"; "(null == document.getElementById('Remember'))") ]
Exit Loop If [ $r = 0 ]
Pause/Resume Script [ Duration (seconds): 1 ]
Set Variable [ $count ; Value: $count + 1 ]
If [ $count = 20 ]
Show Custom Dialog [ "Timeout" ; "Failed to load website and get the remember checkbox." ]
Exit Script [ Text Result: ]
End If
End Loop
Pause/Resume Script [ Duration (seconds): 1 ]
# now you can set/query it

```

See also

- [99.2 JavaScript.EvaluateScript](#) 5217
- [180.46 WebView.FindByName](#) 8339
- [180.87 WebView.IsLoading](#) 8392
- [180.109 WebView.RunJavaScript](#) 8423
- [180.110 WebView.RunJavaScriptReturnTitle](#) 8433
- [180.133 WebView.SetInternetExplorerVersion](#) 8469

Example Databases

- [List/Sort Benchmark](#)
- [WebViewer/JavaScript Evaluate](#)

180.44.1 Blog Entries

- [FileMaker and JavaScript - the perfect combination](#)
- [Automate web viewer in FileMaker](#)
- [CRC function in FileMaker using JavaScript](#)
- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 10.0pr6](#)

Created 4th January 2020, last changed 14th February 2020.

180.45 **WebView.ExecCommand**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.3	No	Yes	No	No	No

MBS("WebView.ExecCommand"; WebViewerRef; Command; ShowUI { ; Parameter })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Command

The command to pass.

"Print"

ShowUI

Whether to show user interface. Pass 1 to enable user interface or 0 to disable.

1

Parameter

Optional

The parameter to pass. Number, text or boolean are currently passed.

Result Returns OK, Failed or error.

Description

Returns OK if command was sent successfully. Returns Failed if command was not sent. Returns other windows errors, e.g. if WebViewer was not found.

Examples

Print webviewer:

```
MBS( "Webview.ExecCommand"; "web"; "Print"; 1)
```

Select all text:

```
MBS( "Webview.ExecCommand"; "web"; "SelectAll"; 1)
```

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.120 [WebView.SendCommand](#) 8447

Example Databases

- [WebViewer/Windows only/WebViewer Commands on Windows](#)

180.45.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 31st May 2017, last changed 25th August 2017.

180.46 **WebView.FindByName**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.3	Yes	Yes	No	No	Yes

```
MBS( "WebView.FindByName"; WindowRef; WebViewerObjectName )
```

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the `Window.FindByTitle` or `Window.FindByIndex` functions. Pass zero to access the frontmost window.

0

WebViewerObjectName

The name of the Web Viewer as set in the object info palette.

"web"

Description

This function is used by all the other functions to target the correct web viewer. This function requires the `WindowRef` that is returned by the `WebView.FindWindowByTitle` function. **Known Issues:** In FileMaker 9, the `WebView` control must have the `Display Progress Bar` and `Display Status Messages` check boxes set to "unchecked" FileMaker 8, Windows PC only. The `WebView` Control can not be set to have "zero" line width on it's border. With the release of 1.4 this function became optional. You can now access a `WebViewer` by its name. But this is still useful in some scenarios. If you are trying to get a handle on `WebViewer` that is displayed in List mode, you must use this method.

The `Webviewer` reference is only valid until FileMaker destroys the `Webviewer`. So better search again when you move to a new record or change the window.

The `webviewer` must have content to be found. If you don't load a page, you should still put an "about:blank" URL there.

Examples

Find the Web View ID

```
Let(
[
WebViewerName = "web";
WindowRef = MBS("Window.FindByTitle"; Get(WindowName))
];
MBS("WebView.FindByName"; WindowRef; WebViewerName)
)
```

Find `Webviewer` in current window:

```
MBS("WebView.FindByName"; Get(WindowName); "web")
```

See also

- 180.48 `WebView.FindWindowByTitle` 8342
- 180.63 `WebView.GetFormValue` 8361
- 180.109 `WebView.RunJavaScript` 8423
- 180.131 `WebView.SetFormValue` 8466
- 180.147 `WebView.setMediaVolume` 8487
- 180.138 `WebView.SetTitle` 8478
- 180.140 `WebView.UserScripts` 8480
- 180.150 `WebView.zoomPageIn` 8490
- 180.151 `WebView.zoomPageOut` 8491
- 182.15 `Window.FindByIndex` 8550

Example Databases

- [WebViewer/Disable Javascript alerts on Webviewer Mac](#)
- [WebViewer/Form Fields/Benchmark](#)
- [WebViewer/Form Fields/Forms Sample 2](#)
- [WebViewer/Form Fields/Forms Sample](#)
- [WebViewer/Form Fields/WebViewer Forms](#)
- [WebViewer/Javascript calls Filemaker Script/Callbacks with Custom Webviewer](#)
- [WebViewer/Javascript calls Filemaker Script/callbacks](#)

180.46.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr7](#)
- [Web viewer exists only with URL loaded](#)
- [MBS FileMaker Plugin, version 9.1pr4](#)
- [MBS FileMaker Plugin, version 9.1pr1](#)

180.46.2 FileMaker Magazin

- Ausgabe 1/2008, Seite 32

Created 18th August 2014, last changed 8th February 2016.

180.47 WebView.FindWindowByIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.3	Yes	Yes	No	No	Yes

MBS("WebView.FindWindowByIndex"; Index)

Parameters**Index**

any number starting with 0

Description

The Window Reference is a unique ID handed out by the operating system. It is used by the rest of the WebView Functions Caution: Passing 0 for Index will grab the front most window which should be your FileMaker window, but it could be any window including dialogs. This is a particular problem with the "Data Viewer" which is always in the front. Window.FindByTitle was added to version 1.1 as a more reliable way of getting the Window.Ref.

The window reference is only valid until the window is closed.

See also

- 180.48 [WebView.FindWindowByTitle](#) 8342
- 182.16 [Window.FindByTitle](#) 8552

Created 18th August 2014, last changed 18th August 2014.

180.48 WebView.FindWindowByTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.3	Yes	Yes	No	No	Yes

MBS("WebView.FindWindowByTitle"; Title)

Parameters

Title

The title of the widow

"Hello"

Result Returns window reference number or error.

Description

The Window Reference is a unique ID.

The window reference is only valid until the window is closed.

On normal FileMaker on desktop you can use Get(WindowName), but on FileMaker Server the name includes the server name, so you need to use: Get(WindowName) & " (" & Get(HostName) & ")"

If 0 is returned, no window was found.

Examples

Get the Window Reference of the current window

MBS("WebView.FindWindowByTitle" ; Get(WindowName))

Find window reference on FileMaker Server where FileMaker includes server name in window name:

MBS("WebView.FindWindowByTitle"; Get(WindowName) & " (" & Get(HostName) & ")")

See also

- [180.46 WebView.FindByName](#) 8339
- [180.47 WebView.FindWindowByIndex](#) 8341

Example Databases

- [WebViewer/Disable Javascript alerts on Webviewer Mac](#)
- [WebViewer/Form Fields/Benchmark](#)
- [WebViewer/Form Fields/WebViewer Forms](#)
- [WebViewer/Javascript calls Filemaker Script/Callbacks with Custom Webviewer](#)
- [WebViewer/Javascript calls Filemaker Script/callbacks](#)

- [Window/Window Fade](#)

Created 18th August 2014, last changed 18th August 2014.

180.49 WebView.FormReset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.FormReset"; WebViewerRef; FormNameOrIndex)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

Description

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.50 [WebView.FormSubmit](#) 8345

180.49.1 Blog Entries

- [MBS FileMaker Plugin, version 10.0pr8](#)

Created 18th August 2014, last changed 18th August 2014.

180.50 **WebView.FormSubmit**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.FormSubmit"; WebViewerRef; FormNameOrIndex)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

Description

Examples

Submit form f:

MBS("WebView.FormSubmit"; "web"; "f")

See also

- 180.32 [WebView.ClickInput](#) 8318
- 180.46 [WebView.FindByName](#) 8339
- 180.49 [WebView.FormReset](#) 8344
- 180.128 [WebView.SetFormInputValue](#) 8459

Example Databases

- [WebViewer/Paypal Create-Invoice-Demo](#)
- [WebViewer/Paypal Login](#)
- [WebViewer/Post on Facebook](#)

180.50.1 **Blog Entries**

- [Automate web viewer in FileMaker](#)
- [Login in FileMaker web viewer if needed](#)

Created 18th August 2014, last changed 31st August 2017.

180.51 WebView.GetAllowsLinkPreview

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.3	Yes	No	No	No	Yes

MBS("WebView.GetAllowsLinkPreview"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns 1, 0 or error.

Description

A boolean value indicating whether link preview is allowed for any links inside this webview. The default value is true on Mac and iOS.

Returns 1 if allowed or 0 if disallowed.

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.121 [WebView.SetAllowsLinkPreview](#) 8448

180.51.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 16th July 2019, last changed 5th January 2020.

180.52 **WebView.GetAutoResizingMask**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Webview	7.5	Yes	No	No	No	No

MBS("WebView.GetAutoResizingMask"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns number or error.

Description

This defines whether view changes its size based on the surrounding window.

Name	Value	Description
NotSizable	0	The view cannot be resized.
MinXMargin	1	The left margin between the view and its superview is flexible.
WidthSizable	2	The view's width is flexible.
MaxXMargin	4	The right margin between the view and its superview is flexible.
MinYMargin	8	The bottom margin between the view and its superview is flexible.
HeightSizable	16	The view's height is flexible.
MaxYMargin	32	The top margin between the view and its superview is flexible.

e.g. the value 18 means the view can resize both horizontally and vertically with the parent view (window).

See also

- 69.9 [DragDrop.GetAutoResizingMask](#) 2493
- 106.15 [MapView.GetAutoResizingMask](#) 5659
- 106.65 [MapView.SetAutoResizingMask](#) 5712
- 165.10 [TextView.GetAutoResizingMask](#) 7888
- 165.30 [TextView.SetAutoResizingMask](#) 7908
- 180.46 [WebView.FindByName](#) 8339
- 180.122 [WebView.SetAutoResizingMask](#) 8449

180.52.1 **Blog Entries**

- [MBS FileMaker Plugin, version 7.5pr8](#)

Created 14th November 2017, last changed 20th February 2019.

180.53 WebView.GetCustomUserAgent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.9	Yes	No	No	No	Yes

MBS("WebView.GetCustomUserAgent"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result Returns current user agent text or error.

Description

Use WebView.SetCustomUserAgent to set it.

Add iOS with version 9.3.

See also

- 180.46 WebView.FindByName 8339
- 180.123 WebView.SetCustomUserAgent 8451

180.53.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr7](#)

Created 18th August 2014, last changed 15th July 2019.

180.54 **WebView.GetEditable**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	3.0	Yes	Yes	No	No	Yes

MBS("WebView.GetEditable"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns 1 if editable and 0 if not editable.

Description

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.80 [WebView.GetTitle](#) 8384
- 180.124 [WebView.SetEditable](#) 8453

180.54.1 **Blog Entries**

- [MBS Filemaker Plugin, version 3.0pr8](#)

Created 18th August 2014, last changed 18th August 2014.

180.55 `WebView.GetForm`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.6	Yes	Yes	No	No	Yes

MBS("`WebView.GetForm`"; `WebViewerRef`; Index)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "`WebView.FindByName`" function.

Index

The index of the form to query. From 0 to `WebView.GetFormCount-1`.

0

Result The name of the form or an empty string.

Description

See also

- 180.64 `WebView.GetFormattedText` 8363
- 180.57 `WebView.GetFormCount` 8352
- 180.63 `WebView.GetFormValue` 8361
- 180.67 `WebView.GetIcon` 8368
- 180.71 `WebView.GetLink` 8373
- 180.73 `WebView.GetPlainText` 8375
- 180.81 `WebView.GetURL` 8385
- 180.119 `WebView.SelectedText` 8445
- 180.125 `WebView.SetFocus` 8454
- 180.149 `WebView.setZoom` 8489

Created 18th August 2014, last changed 23th February 2018.

180.56 WebView.GetFormButtonValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.GetFormButtonValue"; WebViewerRef; FormNameOrIndex; ButtonNameOrIndex { ; OnlyVisible })

Parameters**WebViewerRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

ButtonNameOrIndex

The name of the button or the index

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description**See also**

- 180.46 [WebView.FindByName](#) 8339
- 180.59 [WebView.GetFormInputValue](#) 8354
- 180.61 [WebView.GetFormSelectValue](#) 8357
- 180.62 [WebView.GetFormTextAreaValue](#) 8359
- 180.126 [WebView.SetFormButtonValue](#) 8455
- 180.128 [WebView.SetFormInputValue](#) 8459
- 180.129 [WebView.SetFormSelectValue](#) 8462

Created 18th August 2014, last changed 19th January 2015.

180.57 WebView.GetFormCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.6	Yes	Yes	No	No	Yes

MBS("WebView.GetFormCount"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result The number of forms found on the website.

Description

May not work for websites with frames.

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.55 [WebView.GetForm](#) 8350
- 180.63 [WebView.GetFormValue](#) 8361
- 180.69 [WebView.GetImageCount](#) 8371
- 180.72 [WebView.GetLinkCount](#) 8374

Created 18th August 2014, last changed 18th August 2014.

180.58 **WebView.GetFormInputChecked**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.GetFormInputChecked"; WebViewerRef; FormNameOrIndex; FieldNameOrIndex { ; OnlyVisible })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.59 [WebView.GetFormInputValue](#) 8354
- 180.127 [WebView.SetFormInputChecked](#) 8457
- 180.128 [WebView.SetFormInputValue](#) 8459

Example Databases

- [WebViewer/Form Fields/Formfield sample](#)
- [WebViewer/Form Fields/Forms Sample 2](#)

Created 18th August 2014, last changed 18th August 2014.

180.59 WebView.GetFormInputValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.GetFormInputValue"; WebViewerRef; FormNameOrIndex; FieldNameOrIndex { ; OnlyVisible })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.56 [WebView.GetFormButtonValue](#) 8351
- 180.58 [WebView.GetFormInputChecked](#) 8353
- 180.61 [WebView.GetFormSelectValue](#) 8357
- 180.63 [WebView.GetFormValue](#) 8361
- 180.126 [WebView.SetFormButtonValue](#) 8455
- 180.127 [WebView.SetFormInputChecked](#) 8457
- 180.128 [WebView.SetFormInputValue](#) 8459
- 180.129 [WebView.SetFormSelectValue](#) 8462

Example Databases

- [WebViewer/Form Fields/Formfield sample](#)
- [WebViewer/Form Fields/Forms Sample 2](#)
- [WebViewer/Form Fields/Hidden Fields](#)
- [WebViewer/Form Fields/Try fields](#)

180.59.1 Blog Entries

- [FileMaker and WebView communication](#)

Created 18th August 2014, last changed 18th August 2014.

180.60 WebView.GetFormSelectOptions

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	3.1	Yes	Yes	No	No	Yes

MBS("WebView.GetFormSelectOptions"; WebViewRef; FormNameOrIndex; FieldNameOrIndex { ; OnlyVisible })

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Result Returns list of values or error.

Description

Returns the values of all options attached to this select control with the value string.

Each line in the result is one option.

See also

- 180.46 WebView.FindByName 8339
- 180.61 WebView.GetFormSelectValue 8357

180.60.1 Blog Entries

- [MBS Filemaker Plugin, version 3.1pr9](#)

Created 18th August 2014, last changed 18th August 2014.

180.61 **WebView.GetFormSelectValue**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.GetFormSelectValue"; WebViewerRef; FormNameOrIndex; FieldNameOrIndex { ; OnlyVisible })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

In HTML the Options of a Select tag can include a "value" attribute. If they do then this function gets the value of that attribute.

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.56 [WebView.GetFormButtonValue](#) 8351
- 180.59 [WebView.GetFormInputValue](#) 8354
- 180.60 [WebView.GetFormSelectOptions](#) 8356
- 180.62 [WebView.GetFormTextAreaValue](#) 8359
- 180.126 [WebView.SetFormButtonValue](#) 8455
- 180.128 [WebView.SetFormInputValue](#) 8459
- 180.129 [WebView.SetFormSelectValue](#) 8462

Example Databases

- [WebViewer/Form Fields/Formfield sample](#)

180.61.1 Blog Entries

- [MBS Filemaker Plugin 2.1 prerelease 2](#)

Created 18th August 2014, last changed 18th August 2014.

180.62 **WebView.GetFormTextAreaValue**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.GetFormTextAreaValue"; WebViewerRef; FormNameOrIndex; FieldNameOrIndex { ; OnlyVisible })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.56 [WebView.GetFormButtonValue](#) 8351
- 180.61 [WebView.GetFormSelectValue](#) 8357
- 180.130 [WebView.SetFormTextAreaValue](#) 8464

Example Databases

- [WebViewer/Form Fields/Formfield sample](#)
- [WebViewer/Form Fields/Forms Sample 2](#)
- [WebViewer/MethodDraw SVG Editor/MethodDraw](#)
- [WebViewer/Signature Field](#)
- [WebViewer/TinyMCE/TinyMCE](#)
- [WebViewer/WebViewer Markdown/WebViewer Markdown](#)

180.62.1 Blog Entries

- [Signature Field in FileMaker](#)
- [Using Markdown Javascript converter in FileMaker](#)
- [MBS FileMaker Plugin, version 5.1pr5](#)

Created 18th August 2014, last changed 18th August 2014.

180.63 **WebView.GetFormValue**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.3	Yes	Yes	No	No	Yes

MBS("WebView.GetFormValue"; WebViewerRef; FormName; FieldName { ; OnlyVisible })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormName

The Form containing the field to read, case sensitive

FieldName

The field to read, case sensitive

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

The forms and fields must be have valid "name" attributes in the html. These are case sensitive. So a field with the name="Test" is not the same as a field with the name="test". replaced by `WebView.GetInputValue`

Examples

Read a Field

```
Let(
[
Field = "name";
Form = "myForm";
WebViewerName = "MyWebViewer";

WindowRef = MBS("Window.FindByTitle"; Get(WindowName));
WebViewerID = MBS("WebView.FindByName"; WindowRef; WebViewerName)

];
```

```
MBS("WebView.GetFormValue"; WebViewerID; Form; Field)
```

```
)
```

See also

- 180.46 WebView.FindByName 8339
- 180.55 WebView.GetForm 8350
- 180.57 WebView.GetFormCount 8352
- 180.59 WebView.GetFormInputValue 8354
- 180.131 WebView.SetFormValue 8466
- 182.16 Window.FindByTitle 8552

Example Databases

- [WebView/Form Fields/WebView Forms](#)

Created 18th August 2014, last changed 18th August 2014.

180.64 **WebView.GetFormattedText**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	Yes

MBS("WebView.GetFormattedText"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns text or error.

Description

If possible with formatting, but only the text. This may show more/less text than you see.

See also `WebView.GetPlainText`, `WebView.GetHTMLText` and `WebView.SelectedText`.

Not supported for WebKit 2.x (FileMaker 16 Mac), but works in FileMaker 16, when using a Web Viewer created using `WebView.Create`.

Examples

Query plain text from webviewer:

```
MBS("WebView.GetPlainText"; "web")
```

Query html text from webviewer:

```
MBS("WebView.GetHTMLText"; "web")
```

Query formatted text from webviewer:

```
MBS("WebView.GetFormattedText"; "web")
```

Query selected text:

```
MBS("WebView.SelectedText"; "web")
```

See also

- 180.38 `WebView.CopyFormattedText` 8325
- 180.39 `WebView.Create` 8326
- 180.46 `WebView.FindByName` 8339
- 180.55 `WebView.GetForm` 8350

- 180.65 `WebView.GetHTMLText` 8365
- 180.73 `WebView.GetPlainText` 8375
- 180.119 `WebView.SelectedText` 8445

Example Databases

- [WebView/Custom WebView](#)
- [WebView/WebView SelectedText](#)

180.64.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [MBS FileMaker Plugin, version 8.2pr7](#)
- [MBS FileMaker Plugin, version 5.0pr11](#)

Created 12nd February 2015, last changed 25th February 2020.

180.65 WebView.GetHTMLText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.8	Yes	Yes	No	No	Yes

MBS("WebView.GetHTMLText"; WebViewerRef)

Parameters**WebViewerRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns html code as text or error.

Description

This is not the HTML code loaded from the server, but the current state.

Typically the website is modified with Javascript to add widgets or hide/show things at runtime.

See also `WebView.GetPlainText`, `WebView.GetFormattedText` and `Webview.SelectedText`.

Examples

Query plain text from webviewer:

```
MBS("WebView.GetPlainText"; "web")
```

Query html text from webviewer:

```
MBS("WebView.GetHTMLText"; "web")
```

Query formatted text from webviewer:

```
MBS("WebView.GetFormattedText"; "web")
```

Query selected text:

```
MBS("WebView.SelectedText"; "web")
```

See also

- 165.11 `TextView.GetHTMLText` 7889
- 165.34 `TextView.SetHTMLText` 7913
- 180.46 `WebView.FindByName` 8339
- 180.55 `WebView.GetForm` 8350
- 180.64 `WebView.GetFormattedText` 8363

- 180.73 `WebView.GetPlainText` 8375
- 180.78 `WebView.GetSource` 8382
- 180.119 `WebView.SelectedText` 8445

Example Databases

- [WebView/Custom WebView](#)
- [WebView/Editable Webview](#)
- [WebView/Google Translation](#)
- [WebView/WebView SelectedText](#)

180.65.1 Blog Entries

- [Zooming video containers on Windows](#)
- [FileMaker and WebView communication](#)
- [Interactive FileMaker Containers are Webviewers](#)

Created 18th August 2014, last changed 26th February 2017.

180.66 **WebView.GetHidden**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.1	Yes	No	No	No	No

MBS("WebView.GetHidden"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns 0, 1 or error.

Description

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.77 [WebView.GetSilent](#) 8381
- 180.80 [WebView.GetTitle](#) 8384
- 180.132 [WebView.SetHidden](#) 8468
- 180.137 [WebView.SetSilent](#) 8477

180.66.1 **Blog Entries**

- [MBS FileMaker Plugin, version 7.1pr4](#)

Created 24th February 2017, last changed 25th August 2017.

180.67 WebView.GetIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.GetIcon"; WebViewRef { ; ImageType; Filename })

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns OK or error.

Description

Not supported for WebKit 2.x (FileMaker 16 Mac), but works in FileMaker 16, when using a Web Viewer created using WebView.Create.

See also

- 180.39 WebView.Create 8326
- 180.46 WebView.FindByName 8339
- 180.55 WebView.GetForm 8350
- 180.68 WebView.GetImage 8369
- 180.71 WebView.GetLink 8373
- 180.81 WebView.GetURL 8385
- 180.149 WebView.setZoom 8489

180.67.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr8](#)

Created 19th January 2015, last changed 8th October 2017.

180.68 **WebView.GetImage**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.2	Yes	Yes	No	No	Yes

MBS("WebView.GetImage"; WebViewRef; ImageIndex; PropertyName)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

ImageIndex

The index of the image. From 0 to ImageCount-1.

5

PropertyName

The name of the property you want to query: Mac and Windows: name, src, align, usemap, lowsrc, alt, title, complete, lang, border, height, ismap, longdesc, vspace, hspace, width, innerhtml, innertext. Only Mac OS X: altdisplaystring, absoluteimageurl, naturalheight, naturalwidth, x, y. Only Windows: href, vml, start, readystate, protocol, nameprop, mimetype, filecreateddate, fileupdateddate, filemodifieddate, filesize, dynsrc, loop.

"src"

Description

Examples

Queries source of 6th image:

MBS("WebView.GetImage"; "web"; 5; "src")

See also

- [180.46 WebView.FindByName](#) 8339
- [180.67 WebView.GetIcon](#) 8368
- [180.69 WebView.GetImageCount](#) 8371
- [180.80 WebView.GetTitle](#) 8384

Example Databases

- [CURL/WebViewer Download Images with CURL](#)
- [WebViewer/WebViewer Images](#)

180.68.1 Blog Entries

- [MBS Filemaker Plugin, version 2.2pr6](#)

Created 18th August 2014, last changed 18th August 2014.

180.69 **WebView.GetImageCount**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.2	Yes	Yes	No	No	Yes

MBS("WebView.GetImageCount"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

Examples

Queries image count:

MBS("WebView.GetImageCount"; "web")

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.57 [WebView.GetFormCount](#) 8352
- 180.68 [WebView.GetImage](#) 8369
- 180.72 [WebView.GetLinkCount](#) 8374

Example Databases

- [CURL/WebViewer Download Images with CURL](#)
- [WebViewer/WebViewer Images](#)

180.69.1 **Blog Entries**

- [MBS Filemaker Plugin, version 2.2pr6](#)

Created 18th August 2014, last changed 18th August 2014.

180.70 WebView.GetInternetExplorerVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.4	No	Yes	No	No	No

MBS("WebView.GetInternetExplorerVersion")

Result Returns number or error.

Description

Examples

Query value, set it and query again:

```
Set Variable [ $R; Value:MBS( "Webview.GetInternetExplorerVersion" ) ]
Set Variable [ $R; Value:MBS( "Webview.SetInternetExplorerVersion"; 11000 ) ]
Set Variable [ $R; Value:MBS( "Webview.GetInternetExplorerVersion" ) ]
```

See also

- 180.133 WebView.SetInternetExplorerVersion

8469

180.70.1 Blog Entries

- [MBS FileMaker Plugin, version 6.4pr9](#)

Created 20th September 2016, last changed 25th August 2017.

180.71 **WebView.GetLink**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.8	Yes	Yes	No	No	Yes

MBS("WebView.GetLink"; WebViewerRef; LinkIndex; PropertyName)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

LinkIndex

The index of the link. From 0 to LinkCount-1.

5

PropertyName

The name of the property you want to query: href, rev, name, rel, accessKey, target, coords, hrefLang, type, charset, title lang, innerHTML, innerText
"href"

Description

Examples

Queries 6th link:

MBS("WebView.GetLink"; "web"; 5; "href")

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.55 [WebView.GetForm](#) 8350
- 180.67 [WebView.GetIcon](#) 8368
- 180.72 [WebView.GetLinkCount](#) 8374
- 180.77 [WebView.GetSilent](#) 8381
- 180.80 [WebView.GetTitle](#) 8384
- 180.81 [WebView.GetURL](#) 8385

Example Databases

- [WebViewer/WebViewer Links](#)

Created 18th August 2014, last changed 18th August 2014.

180.72 WebView.GetLinkCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.8	Yes	Yes	No	No	Yes

MBS("WebView.GetLinkCount"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

Examples

Queries number of links:

MBS("WebView.GetLinkCount"; "web")

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.57 [WebView.GetFormCount](#) 8352
- 180.69 [WebView.GetImageCount](#) 8371
- 180.71 [WebView.GetLink](#) 8373

Example Databases

- [WebViewer/WebViewer Links](#)

Created 18th August 2014, last changed 18th August 2014.

180.73 WebView.GetPlainText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	3.1	Yes	Yes	No	No	Yes

MBS("WebView.GetPlainText"; WebViewRef)

Parameters**WebViewRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns text or error.

Description

No formatting, but only the text. This may show more/less text than you see.

See also `WebView.GetHTMLText`, `WebView.GetFormattedText` and `Webview.SelectedText`.

Due to a bug in IE on Windows, you may see CSS in the text returned.

Examples

Query plain text from webviewer:

```
MBS("WebView.GetPlainText"; "web")
```

Query html text from webviewer:

```
MBS("WebView.GetHTMLText"; "web")
```

Query formatted text from webviewer:

```
MBS("WebView.GetFormattedText"; "web")
```

Query selected text:

```
MBS("WebView.SelectedText"; "web")
```

Wait for some text to show up on website:

```
Pause/Resume Script [ Duration (seconds): 1 ]
```

```
Set Variable [ $count ; Value: 0 ]
```

```
Loop
```

```
Set Variable [ $text ; Value: MBS("WebView.GetPlainText"; "web") ]
```

```
Exit Loop If [ Position ( $text; "following quotes"; 1; 1 ) >1 ]
```

```
Pause/Resume Script [ Duration (seconds): 1 ]
```

```
Set Variable [ $count ; Value: $count + 1 ]
```

```
If [ $count = 60 ]
```

```
Show Custom Dialog [ "Timeout" ; "Failed to load website and get the quotes text." ]
```

```
Exit Script [ Text Result: ]  
End If  
End Loop  
Pause/Resume Script [ Duration (seconds): 1 ]
```

See also

- 165.14 [TextView.GetPlainText](#) 7892
- 165.35 [TextView.SetPlainText](#) 7914
- 180.46 [WebView.FindByName](#) 8339
- 180.55 [WebView.GetForm](#) 8350
- 180.64 [WebView.GetFormattedText](#) 8363
- 180.65 [WebView.GetHTMLText](#) 8365
- 180.119 [WebView.SelectedText](#) 8445

Example Databases

- [CURL/WebServices/AdobeSign Webservice](#)
- [CURL/WebServices/ebay webservice/ebay Webservice](#)
- [WebViewer/WebView SelectedText](#)

180.73.1 Blog Entries

- [FileMaker and WebViewer communication](#)
- [MBS Filemaker Plugin, version 3.2pr2](#)

Created 18th August 2014, last changed 14th February 2020.

180.74 **WebView.GetPreferences**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.2	Yes	No	No	No	Yes

MBS("WebView.GetPreferences"; WebViewerRef; ParameterName)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

ParameterName

The name of the parameter.

isJavaEnabled

Result Returns a boolean value for allowsAnimatedImageLooping, allowsAnimatedImages, javaEnabled, javaScriptCanOpenWindowsAutomatically, javaScriptEnabled, loadsImagesAutomatically, plugInsEnabled, privateBrowsingEnabled, shouldPrintBackgrounds, tabsToLinks, userStyleSheetEnabled and usesPageCache; a number for cacheModel, defaultFixedFontSize, defaultFontSize, minimumFontSize or minimumLogicalFontSize; a string for cursiveFontFamily, defaultTextEncodingName, fantasyFontFamily, fixedFontFamily, sansSerifFontFamily, serifFontFamily or standardFontFamily.

Description

For WebKit 1.x you can pass empty WebViewerRef to access global preferences.

Available keys for WebKit 1.x: allowsAnimatedImageLooping, allowsAnimatedImages, cacheModel, cursiveFontFamily, defaultFixedFontSize, defaultFontSize, defaultTextEncodingName, fantasyFontFamily, fixedFontFamily, javaEnabled, javaScriptCanOpenWindowsAutomatically, javaScriptEnabled, loadsImagesAutomatically, minimumFontSize, minimumLogicalFontSize, plugInsEnabled, privateBrowsingEnabled, sansSerifFontFamily, serifFontFamily, shouldPrintBackgrounds, standardFontFamily, tabsToLinks, userStyleSheetEnabled or usesPageCache.

Available keys for WebKit 2.x (FileMaker 16): developerExtrasEnabled, logsPageMessagesToSystemConsoleEnabled, minimumFontSize, javaScriptEnabled, javaScriptCanOpenWindowsAutomatically, allowFileAccessFromFileURLs, allowUniversalAccessFromFileURLs, telephoneNumberDetectionIsEnabled, javaEnabled and plugInsEnabled.

Please check WebKit documentation for details.

Examples

Queries setting for background printing:

```
MBS("WebView.GetPreferences"; "shouldPrintBackgrounds")
```

Query developer extras enabled state for webviewer:

Set Variable [\$r; Value:MBS("Webview.GetPreferences"; "web"; "developerExtrasEnabled")]

Set developer extras enabled state for webviewer:

Set Variable [\$r; Value:MBS("Webview.SetPreferences"; "web"; "developerExtrasEnabled"; 1)]

See also

- 180.46 WebView.FindByName 8339
- 180.134 WebView.SetPreferences 8472

180.74.1 Blog Entries

- [MBS Filemaker Plugin, version 2.2pr3](#)

Created 18th August 2014, last changed 20th December 2017.

180.75 **WebView.GetPrintParameter**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.1	Yes	No	No	No	No

MBS("WebView.GetPrintParameter"; ParameterName)

Parameters

ParameterName

The name of the parameter. Can be horizontallyCentered, verticallyCentered, showPrintPanel, orientation, printer, bottomMargin, topMargin, leftMargin or rightMargin.
orientation

Result Returns a boolean value for horizontallyCentered, verticallyCentered and showPrintPanel. Returns "portrait" or "landscape" for orientation. Returns name for printer. Returns a number for bottomMargin, topMargin, leftMargin or rightMargin.

Description

Examples

Queries bottom margin:

MBS("WebView.GetPrintParameter"; "bottomMargin")

See also

- 180.100 [WebView.Print](#) 8410
- 180.102 [WebView.PrintToFile](#) 8413
- 180.135 [WebView.SetPrintParameter](#) 8474

180.75.1 **Blog Entries**

- [MBS Filemaker Plugin, version 2.1 final candidate](#)

Created 18th August 2014, last changed 18th August 2014.

180.76 WebView.GetPrivateBrowsing

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.5	Yes	No	No	No	Yes

MBS("WebView.GetPrivateBrowsing"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result Returns 1, 0 or error.

Description

Returns 1 if enabled or 0 if not.

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.136 [WebView.SetPrivateBrowsing](#) 8476

180.76.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)

Created 27th October 2019, last changed 5th January 2020.

180.77 WebView.GetSilent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.5	No	Yes	No	No	No

MBS("WebView.GetSilent"; WebViewRef)

Parameters**WebViewRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns 0, 1 or error.

Description**See also**

- 180.46 [WebView.FindByName](#) 8339
- 180.66 [WebView.GetHidden](#) 8367
- 180.71 [WebView.GetLink](#) 8373
- 180.78 [WebView.GetSource](#) 8382
- 180.80 [WebView.GetTitle](#) 8384
- 180.132 [WebView.SetHidden](#) 8468
- 180.137 [WebView.SetSilent](#) 8477

180.77.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 24th November 2016, last changed 25th August 2017.

180.78 WebView.GetSource

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.5	Yes	Yes	No	No	Yes

MBS("WebView.GetSource"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result The HTML text.

Description

This is the original downloaded source. If you want the source of what is visible, please use `WebView.GetHTMLText` function.

Text is considered either being valid UTF-8 or ISO Latin1 text encoded.

See also

- 180.46 `WebView.FindByName` 8339
- 180.55 `WebView.GetForm` 8350
- 180.65 `WebView.GetHTMLText` 8365
- 180.77 `WebView.GetSilent` 8381
- 180.79 `WebView.GetSourceData` 8383

Created 18th August 2014, last changed 25th February 2017.

180.79 **WebView.GetSourceData**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.1	Yes	No	No	No	Yes

MBS("WebView.GetSourceData"; WebViewRef { ; Filename })

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Filename

Optional

The filename to use for the container.

"test.pdf"

Result The data in the webviewer as a container value. For example for a PDF document, the PDF document is returned.

Description

If you provide a filename, we'll use this name for the container value. But if you provide a name, your name will be used.

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.78 [WebView.GetSource](#) 8382

Example Databases

- [WebView/Data from URL](#)
- [WebView/WebView Save PDF \(Mac\)](#)

180.79.1 **Blog Entries**

- [MBS Filemaker Plugin, version 4.2pr4](#)
- [MBS Filemaker Plugin, version 2.2pr4](#)

Created 18th August 2014, last changed 18th August 2014.

180.80 WebView.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.GetTitle"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Description

Examples

Queries title:

```
$title = MBS( "WebView.GetTitle" ; "web" )
```

See also

- 180.46 WebView.FindByName 8339
- 180.54 WebView.GetEditable 8349
- 180.66 WebView.GetHidden 8367
- 180.68 WebView.GetImage 8369
- 180.71 WebView.GetLink 8373
- 180.77 WebView.GetSilent 8381
- 180.138 WebView.SetTitle 8478

Created 18th August 2014, last changed 18th August 2014.

180.81 **WebView.GetURL**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.2	Yes	Yes	No	No	Yes

MBS("WebView.GetURL"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result The URL of the webviewer.

Description

Examples

Queries current URL:

```
$URL = MBS( "WebView.GetURL" ; "web" )
```

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.55 [WebView.GetForm](#) 8350
- 180.67 [WebView.GetIcon](#) 8368
- 180.71 [WebView.GetLink](#) 8373
- 180.90 [WebView.LoadURL](#) 8396
- 180.98 [WebView.PostURL](#) 8407

Example Databases

- [WebViewer/WebViewer GetURL](#)

180.81.1 **Blog Entries**

- [MBS Releases the MBS Filemaker plug-in in version 2.2](#)
- [MBS Filemaker Plugin, version 2.2pr2](#)

Created 18th August 2014, last changed 18th August 2014.

180.82 WebView.GoBack

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.4	Yes	Yes	No	No	Yes

MBS("WebView.GoBack"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

Examples

Go back in a webviewer:

```
MBS( "WebView.GoBack"; "web" )
```

Go forward in a webviewer:

```
MBS( "WebView.GoForward"; "web" )
```

See also

- 180.46 WebView.FindByName 8339
- 180.83 WebView.GoForward 8387

Example Databases

- [WebViewer/Forward and Back](#)

Created 18th August 2014, last changed 31st August 2017.

180.83 WebView.GoForward

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.4	Yes	Yes	No	No	Yes

MBS("WebView.GoForward"; WebViewerRef)

Parameters**WebViewerRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description**Examples**

Go forward in a webviewer:

```
MBS( "WebView.GoForward"; "web" )
```

Go back in a webviewer:

```
MBS( "WebView.GoBack"; "web" )
```

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.82 [WebView.GoBack](#) 8386

Example Databases

- [WebViewer/Forward and Back](#)

Created 18th August 2014, last changed 31st August 2017.

180.84 WebView.HasOnlySecureContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.3	Yes	Yes	No	No	Yes

MBS("WebView.HasOnlySecureContent"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns 1, 0 or error.

Description

Returns a boolean value indicating whether all resources on the page have been loaded over securely encrypted connections.

On Windows and older WebKit 1.x, just returns whether URL is https.

See also

- 180.46 [WebView.FindByName](#)

8339

180.84.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 16th July 2019, last changed 16th July 2019.

180.85 **WebView.InstallCallback**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.3	Yes	Yes	No	No	No

MBS("WebView.InstallCallback")

Description

This function needs to be called one time to enable JavaScript to reach out from the web viewer to run a FileMaker Script.

One strategy is to call this function on start-up before any WebViews have been displayed.

To call back from Javascript to FileMaker, you assign a string to the window.status property:

```
window.status="Filename:Scriptname"
```

or

```
window.status="Filename:Scriptname:Parameter"
```

The Parameter part can contain ":". Filename must include file extensions so FileMaker finds the database file.

You can also call it within a link with "javascript>window.status='Filename:Scriptname:Parameter'". Like this: href="javascript>window.status='callbacks.fp7:Another Script:Hello World'".

Does not work currently with Internet Explorer 10 on Windows.

Not supported for WebKit 2.x (FileMaker 16 Mac), but works in FileMaker 16, when using a Web Viewer created using `WebView.Create`.

For FileMaker 16, please check `Webview.AddScriptMessageHandler` function as a replacement.

Examples

Install Callbacks

```
MBS("WebView.InstallCallback")
```

See also

- 180.25 `WebView.AddScriptMessageHandler` 8308
- 180.39 `WebView.Create` 8326

Example Databases

- [WebViewer/Controls](#)

- [WebView/Javascript calls Filemaker Script/Callbacks with Custom Webviewer](#)
- [WebView/Javascript calls Filemaker Script/callbacks](#)
- [WebView/Switch Control/Switch](#)
- [Window/Window Scrollbar Position](#)

180.85.1 Blog Entries

- [FileMaker and WebView communication](#)
- [Trigger FileMaker Scripts from JavaScript in FileMaker 16](#)
- [MBS FileMaker Plugin, version 7.5pr2](#)
- [The Internet Explorer 10 Problem](#)

Created 18th August 2014, last changed 31st July 2019.

180.86 WebView.InstallMultiFileOpenDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.1	Yes	No	No	No	No

MBS("WebView.InstallMultiFileOpenDialog")

Result Returns OK or error.

Description

Call once when solution opens to have all webviewer allow multiple selections on webpages which support that.

Added support for FileMaker 16 in plugin version 7.1

Example Databases

- [WebViewer/Form with Multiple Files](#)

180.86.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr4](#)
- [Multiple file selection for WebViewer/HTMLViewer](#)

Created 7th April 2015, last changed 26th February 2017.

180.87 WebView.IsLoading

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.IsLoading"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

This useful if you need to delay making a javascript call to WebViewer until it is done loading.

If you use this in a loop to wait for webviewer, please exit loop when this function doesn't return a 1. So you exit also when an error occurs.

For websites which load more data (e.g. pictures) while you surf the page, the plugin will not notice that.

Examples

Check loading state for webviewer named web

```
MBS( "WebView.IsLoading"; "web")
```

Wait for WebViewer to finish loading

Loop

```
Exit Loop If [ MBS("WebView.IsLoading"; "web") = 1 ]
```

```
Pause/Resume Script [ Duration (seconds): ,1 ]
```

End Loop

See also

- 180.32 [WebView.ClickInput](#) 8318
- 180.44 [WebView.Evaluate](#) 8333
- 180.46 [WebView.FindByName](#) 8339
- 180.109 [WebView.RunJavaScript](#) 8423
- 180.128 [WebView.SetFormInputValue](#) 8459
- 180.139 [WebView.StopLoading](#) 8479

Example Databases

- [CURL/WebServices/Twitter OAuth](#)
- [WebViewer/WebView Icons](#)

- [WebView/WebView Copy Text](#)
- [WebView/WebView IsLoading](#)

180.87.1 Blog Entries

- [Login in FileMaker web viewer if needed](#)
- [Print WebView on macOS in FileMaker](#)

Created 18th August 2014, last changed 16th February 2017.

180.88 WebView.LoadHTML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	3.0	Yes	Yes	No	No	Yes

MBS("WebView.LoadHTML"; WebViewerRef; HTMLString { ; URL })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

HTMLString

The HTML String.

"<P>Hello World</P>"

URL

Optional

The base URL for finding relative resources like images. (mac only)

"http://www.mbsplugins.de"

Result Returns OK or error.

Description

Added Windows support with version 5.1.

On Windows you may need to reset webviewer before or load "about:blank" to initialize the webviewer by FileMaker.

See also

- 180.46 WebView.FindByName 8339
- 180.90 WebView.LoadURL 8396

Example Databases

- [Mac only/RichText/Write Document](#)
- [Markdown](#)
- [WebViewer/Editable Webview](#)

180.88.1 Blog Entries

- [FileMaker and WebViewer communication](#)
- [MBS FileMaker Plugin, version 5.4pr1](#)
- [MBS FileMaker Plugin, version 5.1pr5](#)
- [MBS Filemaker Plugin, version 3.0pr8](#)

Created 18th August 2014, last changed 13th April 2015.

180.89 WebView.LoadJavascriptURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.1	Yes	Yes	No	No	Yes

MBS("WebView.LoadJavascriptURL"; WebViewerRef; URL)

Parameters**WebViewerRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

URL

The URL to load. URL Escapes are expected to be in UTF-8.

Description

This method is for URLs starting with "javascript:".

See also

- 180.46 [WebView.FindByName](#)

8339

Example Databases

- [WebViewer/WebViewer LoadURL](#)

Created 18th August 2014, last changed 18th August 2014.

180.90 WebView.LoadURL

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.1	Yes	Yes	No	No	Yes

MBS("WebView.LoadURL"; WebViewRef; URL { ; cachePolicy; timeoutInterval })

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

URL

The URL to load.

"http://www.mbsplugins.eu/"

cachePolicy

Optional

The cache policy. Can be 0 for default, 1 for ignoring local cache, 2 return cache data else load, 3 to return cache data and don't load. (Mac only)

1

timeoutInterval

Optional

The timeout interval. (Mac only)

120.0

Result Returns "OK" on success.

Description

In FileMaker 10 (or newer) you can only use LoadURL with a webviewer where FileMaker loaded an URL before. This can be "about:blank".

On Mac and iOS you can specify optionally the timeout and cache policy.

Examples

Load website from cache only with 2 minutes timeout:

```
MBS("WebView.LoadURL"; "web"; "http://www.monkeybreadsoftware.de/"; 3; 120)
```

Load data URL:

```
MBS( "Webview.LoadURL"; "web"; "data:image/svg+xml;charset=utf-8," & MBS( "Text.EncodeURLComponent"; $svgData); "utf8"))
```

See also

- 164.36 Text.EncodeURLComponent 7826
- 180.39 WebView.Create 8326

180.90. <i>WEBVIEW.LOADURL</i>	8397
• 180.40 <i>WebView.CreateOnPopover</i>	8328
• 180.46 <i>WebView.FindByName</i>	8339
• 180.81 <i>WebView.GetURL</i>	8385
• 180.88 <i>WebView.LoadHTML</i>	8394
• 180.98 <i>WebView.PostURL</i>	8407

Example Databases

- [WebView/Custom WebView](#)
- [WebView/Javascript calls Filemaker Script/Callbacks with Custom Webviewer](#)
- [WebView/Paypal Create-Invoice-Demo](#)
- [WebView/WebView Download Delegate for Mac with Custom Webviewer](#)
- [WebView/WebView LoadURL](#)
- [WebView/WebView on Popover](#)

180.90.1 Blog Entries

- [FileMaker and WebView communication](#)
- [Print WebView on macOS in FileMaker](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr7](#)

Created 18th August 2014, last changed 15th August 2018.

180.91 WebView.MakeTextLarger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.MakeTextLarger"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

Examples

Increase text size:

```
MBS("Webview.MakeTextLarger"; "web")
```

See also

- 180.46 WebView.FindByName 8339
- 180.92 WebView.MakeTextSmaller 8399

Created 18th August 2014, last changed 25th August 2017.

180.92 **WebView.MakeTextSmaller**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.MakeTextSmaller"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

Examples

Decreases text size:

```
MBS("Webview.MakeTextSmaller"; "web")
```

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.91 [WebView.MakeTextLarger](#) 8398

Created 18th August 2014, last changed 25th August 2017.

180.93 WebView.MakeTextStandardSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.MakeTextStandardSize"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

See also

- 180.46 WebView.FindByName

8339

Created 18th August 2014, last changed 25th August 2017.

180.94 **WebView.Passwords.Clear**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.3	Yes	No	No	No	No

MBS("WebView.Passwords.Clear")

Result Returns OK or error.

Description

See also

- 180.95 [WebView.Passwords.Install](#) 8402
- 180.96 [WebView.Passwords.Set](#) 8404

180.94.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.3pr4](#)

Created 24th June 2016, last changed 24th June 2016.

180.95 WebView.Passwords.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.3	Yes	No	No	No	No

MBS("WebView.Passwords.Install"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result Returns OK or error.

Description

The plugin keeps a list of passwords and provides them to webviewer on request.

The standard password dialog may not show up. So on use this for automated website loading. Our password feature is for HTTP Authentication, not for login forms.

Supported for WebKit 2.x (FileMaker 16 Mac) with plugin version 7.3.

Examples

Set password and open webpage asking for it:

```
Set Variable [ $r; Value:MBS("WebView.Passwords.Install"; "web") ]
Set Variable [ $r; Value:MBS("WebView.Passwords.Set"; "192.168.2.103"; "admin"; "webcam123") ]
Set Web Viewer [ Object Name: "web"; URL: "http://192.168.2.103/main.htm" ]
```

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.94 [WebView.Passwords.Clear](#) 8401
- 180.96 [WebView.Passwords.Set](#) 8404

Example Databases

- [WebViewer/Web Password](#)

180.95.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr1](#)
- [MBS FileMaker Plugin, version 6.3pr4](#)

180.95. *WEBVIEW.PASSWORDS.INSTALL*

8403

Created 24th June 2016, last changed 10th August 2018.

180.96 WebView.Passwords.Set

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.3	Yes	No	No	No	No

MBS("WebView.Passwords.Set"; Host; Name; Password { ; Persistence })

Parameters

Host

The host name.

"monkeybreadsoftware.de"

Name

The user name.

"admin"

Password

The password to use.

"890245456"

Persistence

Optional

Defines the persistance of the password. Can be Permanent, ForSession, Synchronizable or None. Default is none.

"None"

Result Returns OK or error.

Description

The password is saved and when a website with right host name asks for it, the plugin will tell the webviewer about it.

Examples

Set password and open webpage asking for it:

```
Set Variable [ $r; Value:MBS("WebView.Passwords.Install"; "web") ]
```

```
Set Variable [ $r; Value:MBS("WebView.Passwords.Set"; "192.168.2.103"; "admin"; "webcam123") ]
```

```
Set Web Viewer [ Object Name: "web"; URL: "http://192.168.2.103/main.htm" ]
```

See also

- 180.94 WebView.Passwords.Clear 8401
- 180.95 WebView.Passwords.Install 8402

Example Databases

- [WebViewer/Web Password](#)

180.96.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr4](#)

Created 24th June 2016, last changed 27th June 2016.

180.97 WebView.Paste

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.4	Yes	Yes	No	No	Yes

MBS("WebView.Paste"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

This is like choosing the menu command to paste, but without using the menu.

Examples

Paste content of clipboard to web viewer:

```
Set Variable [ $r ; Value: MBS("WebView.Paste"; "web") ]
```

See also

- [165.26 TextView.Paste](#) 7904
- [180.46 WebView.FindByName](#) 8339

Example Databases

- [WebViewer/WebView Copy and Paste](#)

180.97.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 11st August 2017, last changed 26th December 2019.

180.98 **WebView.PostURL**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	10.1	Yes	Yes	No	No	Yes

```
MBS( "WebView.PostURL"; WebViewerRef; URL { ; PostData; Headers } )
```

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

URL

The URL, full path, or Universal Naming Convention (UNC) location and name of the resource to display. "http://monkeybreadsoftware.com/filemaker/echo.cgi"

PostData

Optional

The data to post. The post data that is sent to the server as part of a HTTP POST transaction. A POST transaction is typically used to send data gathered by an HTML form. If this parameter does not specify any post data, this method issues an HTTP GET transaction. This parameter is ignored if the URL is not an HTTP URL.

```
"<test>Hello World</test>"
```

Headers

Optional

The text list that contains additional HTTP headers to send to the server. These headers are added to the default headers. For example, headers can specify the action required of the server, the type of data being passed to the server, or a status code. This parameter is ignored if the URL is not an HTTP URL.

```
"Test: MyHeader 123 User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/13.0.4 Safari/605.1.15"
```

Result Returns OK or error.

Description

This function is similar to `WebView.LoadURL`, but can pass additional headers or POST data. For MacOS and iOS, please use `WebView.SetCustomUserAgent` to overwrite user agent.

Examples

Load URL in webviewer by doing a POST with custom header to overwrite user agent:

```
MBS( "WebView.PostURL"; "web";
// URL
"https://www.monkeybreadsoftware.com/filemaker/echo.cgi";
// some POST data
"Hello World";
// and our custom headers
"Test: MyHeader 123§User-Agent: Mozilla/5.0 (FileMaker; Macintosh; Intel Mac OS X 10_14_6) AppleWeb-
bKit/605.1.15 (KHTML, like Gecko) Version/13.0.4 Safari/605.1.15 )" )
```

See also

- 180.46 `WebView.FindByName` 8339
- 180.81 `WebView.GetURL` 8385
- 180.90 `WebView.LoadURL` 8396
- 180.123 `WebView.SetCustomUserAgent` 8451

180.98.1 Blog Entries

- [WebView.PostURL function](#)
- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 29th January 2020, last changed 29th January 2020.

180.99 **WebView.PressKey**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.2	No	Yes	No	No	No

MBS("WebView.PressKey"; WebViewerRef; Key)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Key

The key to press. Can be text or number.

"@"

Result Returns OK or error.

Description

Useful for entering @ key in Windows where webviewer does not react on AltGr key which is required in some languages to enter @.

Examples

Press @:

MBS("Webview.PressKey"; "web"; "@")

See also

- 180.46 [WebView.FindByName](#)

8339

180.99.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.2pr9](#)
- [FileMaker Webviewer and @ key](#)

Created 12nd May 2016, last changed 25th August 2017.

180.100 WebView.Print

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.8	Yes	Yes	No	No	Yes

MBS("WebView.Print"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

You can get/set some parameters on Mac OS X using the WebView.GetPrintParameter/WebView.SetPrintParameter functions.

Not supported for WebKit 2.x (FileMaker 16 Mac). We tried it, but as of macOS 10.12.4 we only get white pages. Works in FileMaker 16, when using a Web Viewer created using WebView.Create.

Examples

Print web viewer:

```
Set Variable [ $r; Value:MBS( "WebView.Print"; "web" ) ]
```

See also

- 180.39 WebView.Create 8326
- 180.46 WebView.FindByName 8339
- 180.75 WebView.GetPrintParameter 8379
- 180.101 WebView.PrintPreview 8412
- 180.102 WebView.PrintToFile 8413
- 180.108 WebView.RenderPDF 8421
- 180.135 WebView.SetPrintParameter 8474

Example Databases

- [WebViewer/WebViewer Print](#)

180.100.1 Blog Entries

- [MBS Filemaker Plugin, version 2.1 final candidate](#)

- [MBS Filemaker Plugin 1.8pr4](#)

Created 18th August 2014, last changed 25th November 2019.

180.101 WebView.PrintPreview

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.6	No	Yes	No	No	No

MBS("WebView.PrintPreview"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result Returns "OK" if dialog runs or error if not.

Description

The function returns right away and does not wait for the user to finish the dialog.

Examples

Shows print preview:

```
Set Variable [ $r; Value:MBS( "WebView.PrintPreview"; "web" ) ]
```

See also

- 180.46 WebView.FindByName 8339
- 180.100 WebView.Print 8410

180.101.1 Blog Entries

- [MBS Filemaker Plugin, version 2.6pr5](#)

Created 18th August 2014, last changed 25th November 2019.

180.102 **WebView.PrintToFile**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.0	Yes	No	No	No	No

MBS("WebView.PrintToFile"; WebViewRef; Path)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Path

Native file path where to save PDF.

"/tmp/test.pdf"

Result Returns OK or error.

Description

You can get/set some parameters on Mac OS X using the `WebView.GetPrintParameter/WebView.SetPrintParameter` functions.

Especially you can control whether to print background or not.

If needed you can import this PDF file with `Files.ReadPDF` into a container file.

See also `WebView.RenderPDF`.

Not supported for WebKit 2.x (FileMaker 16 Mac). We tried it, but as of macOS 10.12.4 we only get damaged files, crashes or white pages. Works in FileMaker 16 or later, when using a Web Viewer created using `WebView.Create`.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions.

Examples

Create PDF and import it:

```
Set Variable [ $path ; Value: MBS( "Folders.UserDesktop" ) ]
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; $path; "test.pdf" ) ]
Set Variable [ $r ; Value: MBS( "WebView.PrintToFile"; $$web; $path ) ]
Set Field [ Own WebView::Container ; MBS( "Files.ReadPDF"; $path ) ]
```

See also

- 78.47 `Files.ReadPDF` 3849
- 81.8 `Folders.UserDesktop` 4177
- 121.1 `Path.AddPathComponent` 6135

- 121.2 Path.FileMakerPathToNativePath 6139
- 180.39 WebView.Create 8326
- 180.46 WebView.FindByName 8339
- 180.75 WebView.GetPrintParameter 8379
- 180.100 WebView.Print 8410
- 180.108 WebView.RenderPDF 8421
- 180.135 WebView.SetPrintParameter 8474

Example Databases

- [WebViewer/Custom WebView](#)
- [WebViewer/WebViewer Print](#)

180.102.1 Blog Entries

- [Print WebViewer on macOS in FileMaker](#)
- [Custom WebView in FileMaker 16](#)
- [MBS Filemaker Plugin, version 4.0pr4](#)

Created 18th August 2014, last changed 26th June 2018.

180.103 WebView.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.Release"; WebViewRef)

Parameters**WebViewRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description**See also**

- 106.53 MapView.Release 5699
- 165.27 TextView.Release 7905
- 180.39 WebView.Create 8326
- 180.46 WebView.FindByName 8339
- 180.104 WebView.Reload 8416

Created 18th August 2014, last changed 18th August 2014.

180.104 WebView.Reload

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.Reload"; WebViewRef { ; Force })

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Force

Optional

Whether to ignore cache and reload from website. Default is 0 for normal reloading which may use cached content.

0

Result Returns OK on success.

Description

Similar to the built in reload script step.

Examples

Reload web viewer:

```
Set Variable [ $r; Value:MBS( "WebView.Reload"; "web" ) ]
```

See also

- [180.46 WebView.FindByName](#) 8339
- [180.103 WebView.Release](#) 8415

Example Databases

- [WebView/Reload Test](#)

180.104.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr7](#)

Created 18th August 2014, last changed 25th November 2019.

180.105 **WebView.RemoveAllUserScripts**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.5	Yes	No	No	No	Yes

MBS("WebView.RemoveAllUserScripts"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

See also

- 180.46 [WebView.FindByName](#)

8339

180.105.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.5pr8](#)

Created 8th November 2019, last changed 5th January 2020.

180.106 WebView.RemoveScriptMessageHandler

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	8.0	Yes	No	No	No	Yes

MBS("WebView.RemoveScriptMessageHandler"; Name)

Parameters

Name

The name of the message handler to remove.
"test"

Result Returns OK or error.

Description

Only for FileMaker 16 and newer.
Added iOS for version 9.5.

See also

- 180.25 [WebView.AddScriptMessageHandler](#)

8308

180.106.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr8](#)

Created 15th December 2017, last changed 5th January 2020.

180.107 WebView.RenderImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.1	Yes	Yes	No	No	Yes

MBS("WebView.RenderImage"; WebViewerRef { ; ImageType; Filename })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns a container with a JPEG picture of the webpage. You can store it in a media field.

Description

Added Windows support in version 3.0. Due the way we capture image on Windows (we ask webviewer to print to image), some things do not show up in the image. In that case, please use `WebView.Screenshot` function.

On Mac you can use `WebView.RenderPDF` to get a PDF of the website.

For Mac OS X the image size is the size of the full website. On Windows we only capture the area of the webviewer, so you may see scrollbars.

For OS X please use `WebView.SetPreferences` to set whether to include background images.

Added support for macOS 10.13 in FileMaker 16 or newer to render webpage in v7.4.

Works in FileMaker 15 and older in all MacOS versions.

Works in all FileMaker Mac versions, when using a Web Viewer with WebKit 1.x created using `WebView.Create`.

Fixed for iOS for 8.2 release.

On Windows seems not to work well in latest IE versions. so you may better use `WebView.Screenshot`.

Examples

Render Image:

```
Set Field [ Own WebView::Container ; MBS( "WebView.RenderImage"; $$web; "PNG"; "webview.png" ) ]
```

See also

- 180.39 `WebView.Create` 8326
- 180.46 `WebView.FindByName` 8339
- 180.108 `WebView.RenderPDF` 8421
- 180.111 `WebView.Screenshot` 8435
- 180.134 `WebView.SetPreferences` 8472

Example Databases

- [WebView/Custom WebView](#)
- [WebView/WebView Render Image \(Mac\)](#)
- [WebView/WebView Render PDF \(Mac\)](#)

180.107.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr5](#)
- [MBS FileMaker Plugin, version 7.4pr7](#)
- [MBS FileMaker Plugin, version 7.1pr4](#)
- [MBS Filemaker Plugin, version 3.0pr2](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr11](#)
- [MBS Filemaker Plugin, version 2.4pr2](#)
- [MBS Filemaker Plugin, version 2.4pr1](#)
- [MBS Filemaker Plugin, version 2.1pr5](#)

Created 18th August 2014, last changed 26th November 2019.

180.108 WebView.RenderPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	3.0	Yes	No	No	No	No

MBS("WebView.RenderPDF"; WebViewerRef { ; Filename; DontRenderPreview })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.
"test.jpg"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Result Returns a container with a PDF of the webpage (and a JPEG preview). You can store it in a media field.

Description

For OS X please use `WebView.SetPreferences` to set whether to include background images.

If you need a multi page PDF file, please use `WebView.PrintToFile` function.

Not supported for WebKit 2.x (FileMaker 16 Mac), but works in FileMaker 16, when using a Web Viewer created using `WebView.Create`.

Examples

Render PDF:

```
Set Field [ Own WebView::Container ; MBS( "WebView.RenderPDF"; $$web; "webview.pdf" ) ]
```

See also

- 180.39 `WebView.Create` 8326
- 180.46 `WebView.FindByName` 8339
- 180.100 `WebView.Print` 8410
- 180.102 `WebView.PrintToFile` 8413
- 180.107 `WebView.RenderImage` 8419
- 180.111 `WebView.Screenshot` 8435

- 180.134 WebView.SetPreferences

Example Databases

- [WebView/Custom WebView](#)
- [WebView/WebView Render PDF \(Mac\)](#)

180.108.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin, version 3.0pr2](#)

Created 18th August 2014, last changed 8th October 2017.

180.109 WebView.RunJavaScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.3	Yes	Yes	No	No	Yes

MBS("WebView.RunJavaScript"; WebViewerRef; Javascript { ; Async })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Javascript

The Javascript to be executed

Async

Optional

Available in MBS FileMaker Plugin 10.0 or newer.

Whether to run asynchronously. On MacOS and iOS you can choose between running sync and waiting for result (and returns result) or running asynchronously and returning just OK.

For older WebKit 1.x in FileMaker 15 or older or web viewers created with WebView.Create function, we always use synchronous mode.

Windows is always synchronously.

Default is 0 for synchronous mode.

0

Description

Allows you to call any Javascript function that is in loaded in the WebViewer OR you can just run arbitrary JavaScript on an empty web page. The results of the JavaScript are returned on Macintosh only. There is another function called WebView.RunJavaScriptReturnTitle which can be used to return the value of a Javascript function on both platforms. Use "\n" in javascript strings for a newline character.

Does not work on WebDirect!

See newer WebView.Evaluate function which works better on Windows and returns results.

Check JS Functions for JavaScript engine for cross platform code to run without web viewer.

Version 10.0 or newer return result on MacOS/iOS if possible in original data type, so numbers are returned as number and not as text. We try to return array or objects as JSON.

Examples

Set the htmlcode of a field as string:

```
MBS( "WebView.RunJavaScript"; "browser"; "document.getElementById('td_ProcName_v').innerHTML='hello';"
)
```

Run JavaScript

```
Let(
[

// very simple javascript

javascript = "alert('OK');";

webViewName = "myWebViewer";
windowRef = MBS("Window.FindByTitle"; Get ( WindowName ));
webViewerID = MBS("WebView.FindByName"; windowRef; webViewName)

];
Case(
webViewerID = 0; "Web Viewer \" & webViewName & "\" Not Found: " & windowRef ;

MBS("WebView.RunJavaScript"; webViewerID; javascript)

)

)
```

Start a video inside an interactive container on Mac:

```
MBS( "WebView.RunJavaScript" ; "movie"; "document.getElementsByTagName('video') [ 0 ] .play();" )
```

Send change event to send to a field with ID \$FieldID so javascript code on webpage knows we changed something:

```
MBS( "WebView.RunJavaScript" ; "web"; "var o = document.getElementById('\" & $FieldID & "')
if (document.createEvent) {
var evt = document.createEvent('Events');
evt.initEvent('change', true, true);
o.dispatchEvent(evt); } "
```

Clear onBeforeLoad event handler:

```
MBS( "WebView.RunJavaScript" ; "HTMLEditor"; "window.onbeforeunload = null;" )
```

Send click event:

```
MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0 ] .loginButton;
if (document.createEvent)
{
var evt = document.createEvent('Events');
evt.initEvent('click', true, true);
```

```
o.dispatchEvent(evt);
} ")
```

Filling a complex form of a web app with help of Javascript:

```
# go to Vouchers
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.getEle-
mentsByClassName('appGlobalSideNav') [ 0 ] .getElementsByTagName('a') [ 2 ] ; if (document.createEvent)
{ var evt = document.createEvent('Events'); evt.initEvent('click', tr... ]
Pausa/continua lo script [ Durata (secondi): ,3 ]
# open popup
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "document.getElementsBy-
ClassName('appMainButton') [ 0 ] .click();") ]
Pausa/continua lo script [ Durata (secondi): ,3 ]
# Set Values in various fields and trigger change/click events
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormInputValue" ; "browser"; "vouchersCreateC-
trl.form"; "number"; "1") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [
0 ] .number; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('change',
true, true); o.dispatchEvent(evt); } ") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormSelectValue" ; "browser"; "vouchersCreateC-
trl.form"; "quota"; "0") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormSelectValue" ; "browser"; "vouchersCreateC-
trl.form"; "expire"; "custom") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [
0 ] .expire; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('change',
true, true); o.dispatchEvent(evt); } ") ]
Pausa/continua lo script [ Durata (secondi): ,3 ]
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormInputValue" ; "browser"; "vouchersCreateC-
trl.form"; "expire_number"; "2") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormSelectValue" ; "browser"; "vouchersCreateC-
trl.form"; "expire_unit"; "1440") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0 ]
.expire_number; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('change',
true, true); o.dispatchEvent(evt); } ") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "document.forms [ 0 ] .limit-
Download.checked = true;") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0 ]
.limitDownload; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('click',
true, true); o.dispatchEvent(evt); } ") ]
Pausa/continua lo script [ Durata (secondi): ,1 ]
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormInputValue" ; "browser"; "vouchersCreateC-
trl.form"; "down"; "512") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0 ]
.down; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('change', true,
true); o.dispatchEvent(evt); } ") ]
Pausa/continua lo script [ Durata (secondi): ,1 ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "document.forms [ 0 ] .limi-
```

```

tUpload.checked = true;") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0
] .limitUpload; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('click',
true, true); o.dispatchEvent(evt); } ") ]
Pausa/continua lo script [ Durata (secondi): ,1 ]
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormInputValue" ; "browser"; "vouchersCreateC-
trl.form"; "up"; "512") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0
] .up; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('change', true,
true); o.dispatchEvent(evt); } ") ]
Pausa/continua lo script [ Durata (secondi): ,1 ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "document.forms [ 0 ] .byte-
Quota [ 0 ] .checked = true;") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0 ]
.byteQuota [ 0 ] ; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('click',
true, true); o.dispatchEvent(evt); } ") ]
Pausa/continua lo script [ Durata (secondi): ,1 ]
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormInputValue" ; "browser"; "vouchersCreateC-
trl.form"; "byteQuota"; "123") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0 ]
.byteQuota [ 1 ] ; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('change',
true, true); o.dispatchEvent(evt); } ") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.SetFormInputValue" ; "browser"; "vouchersCreateC-
trl.form"; 8; "CLIENTE") ]
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0 ]
.elements [ 11 ] ; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('change',
true, true); o.dispatchEvent(evt); } ") ]
Pausa/continua lo script [ Durata (secondi): ,3 ]
# press save button
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "var o = document.forms [ 0 ]
.elements [ 13 ] ; if (document.createEvent) { var evt = document.createEvent('Events'); evt.initEvent('click',
true, true); o.dispatchEvent(evt); } ") ]
Pausa/continua lo script [ Durata (secondi): ,3 ]
# find the voucher ID and save it to field.
Imposta variabile [ $r ; Valore: MBS( "WebView.RunJavaScript" ; "browser"; "document.getElement-
ById('vouchersTable').getElementsByClassName('voucherCode') [ 1 ] .innerText") ]
Imposta campo [ Browser Web::VAR txt ; $r ]

```

Start a video inside an interactive container on Win:

```
MBS( "WebView.RunJavaScript" ; "player"; "document.getElementById('Player').controls.play();" )
```

```
# see https://msdn.microsoft.com/en-us/library/windows/desktop/dd562656\(v=vs.85\).aspx
```

Redirect Window.Open to trigger a FileMaker Script:

```
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "window.open = function(url, name,
```

```
features, replace) { location.href='fmp://$/MyDatabase.fmp12?script=NewWindow& param='+url; } ") ]
// may not work for all platforms!
```

Query text of an element found by it's CSS class name:

```
MBS( "WebView.RunJavaScript"; WebViewRef; "document.getElementsByClassName('topteaaser__master') [ 0 ] .innerText")
```

Query duration of video in interactive container on Mac:

```
MBS( "WebView.RunJavaScript" ; "web"; "document.getElementsByTagName('video') [ 0 ] .duration;" )
```

Query current time of video in interactive container on Mac:

```
MBS( "WebView.RunJavaScript" ; "web"; "document.getElementsByTagName('video') [ 0 ] .currentTime;" )
```

Login for realtytrac website:

```
Set Web Viewer [ Object Name: "web" ; URL: "https://www.realtytrac.com/login" ]
#
# wait for website loading
#
Loop
Pause/Resume Script [ Duration (seconds): .1 ]
Exit Loop If [ MBS("WebView.IsLoading"; "web") 1 ]
End Loop
Pause/Resume Script [ Duration (seconds): .1 ]
#
# fill in form values with login:
Set Variable [ $r ; Value: MBS( "WebView.SetFormInputValue" ; "web"; 0; "userName"; "xxx" ) ]
Set Variable [ $r ; Value: MBS( "WebView.SetFormInputValue" ; "web"; 0; "password"; "yyy" ) ]
#
# send change events to let the javascript framework know we changed them
#
Set Variable [ $r ; Value: MBS( "WebView.RunJavaScript" ; "web"; "var o = document.getElementById('loginFormPagePassword'); if (document.createEvent)
{
var evt = document.createEvent('Events');
evt.initEvent('change', true, true);
o.dispatchEvent(evt);
} ") ]
Set Variable [ $r ; Value: MBS( "WebView.RunJavaScript" ; "web"; "var o = document.forms [ 0 ] .userName.value;
if (document.createEvent)
{
var evt = document.createEvent('Events');
evt.initEvent('change', true, true);
```

```

o.dispatchEvent(evt);
} ") ]
#
Pause/Resume Script [ Duration (seconds): .1 ]
#
# Send click event to submit button
#
Set Variable [ $r ; Value: MBS( "WebView.RunJavaScript" ; "web"; "var o = document.getElement-
ById('btnLoginPageSubmit'); if (document.createEvent)
{
var evt = document.createEvent('Events');
evt.initEvent('click', true, true);
o.dispatchEvent(evt);
} ") ]

```

Go to record, wait and then jump to position to play video from there: (Mac)

```

# Go to record with video
Go to Record/Request/Page [ Next ; Exit after last: Off ]
# give time to load movie
Pause/Resume Script [ Duration (seconds): .5 ]
# jump to position
Set Variable [ $r ; Value: MBS( "WebView.RunJavaScript"; "MovieView"; "document.getElementById('fm-
player').currentTime = 30;" ) ]
# play
Set Variable [ $r ; Value: MBS( "WebView.RunJavaScript"; "MovieView"; "document.getElementById('fm-
player').play();" ) ]

```

Work with form fields via JavaScript:

// Query number of forms on website:

```
MBS( "WebView.RunJavaScript" ; "web"; "document.forms.length;" )
```

Query name of form number 0:

```
MBS( "WebView.RunJavaScript" ; "web"; "document.forms [ 0 ] .name;" )
```

Query number of elements on first form:

```
MBS( "WebView.RunJavaScript" ; "web"; "document.forms [ 0 ] .elements.length" )
```

Query name of first element in first form:

```
MBS( "WebView.RunJavaScript" ; "web"; "document.forms [ 0 ] .elements [ 0 ] .name" )
```

Query value of first element in first form:


```
MBS( "WebView.RunJavaScript" ; "web"; "document.forms [ 0 ] .elements [ 0 ] .value")
```

Query value of element by name in form by name:

```
MBS( "WebView.RunJavaScript" ; "web"; "document.forms [ 'RegisterForm' ] .elements [ 'path' ] .value")
```

You can mix index or field/form names as needed.

Call doSave with try/catch to show error messages:

```
MBS( "WebView.RunJavaScript"; WebViewerRef; "try { doSave(); } catch(error) { alert(error); } " )
```

Switch windows media player for a container to fill the field:

```
MBS( "WebView.RunJavaScript";
"MovieField"; // name of layout element for container
document.getElementById('Player').uiMode='none';
document.body.style.transform="";
document.getElementById('Player').stretchToFit=true; " )
```

Fill a search form, submit and query result:

```
# load website with search field:
Set Web Viewer [ Object Name: "web" ; URL: "https://something.com/searchpage" ]
#
# wait for website to finish loading
Pause/Resume Script [ Duration (seconds): ,5 ]
Loop
Exit Loop If [ MBS("WebView.IsLoading"; "web") 1 ]
Pause/Resume Script [ Duration (seconds): ,1 ]
End Loop
Pause/Resume Script [ Duration (seconds): ,5 ]
#
# fill in search term and send change event, so this website sees it:
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "document.getElementById('search-Field').value = '" & Substitute ( Web::SearchTerm ; "" ; "" ) & "'" ) ]
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "var o = document.getElementById('search-Field'); var evt = document.createEvent('Events'); evt.initEvent('change', true, true); o.dispatchEvent(evt); } ") ]
#
# wait a bit
Pause/Resume Script [ Duration (seconds): ,5 ]
#
# send click event to search button
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "var o = document.getElementById('search-Button'); var evt = document.createEvent('Events'); evt.initEvent('click', true, true); o.dispatchEvent(evt);
```

```

") ]
#
# wait for website to finish loading
Pause/Resume Script [ Duration (seconds): ,5 ]
Loop
Exit Loop If [ MBS("WebView.IsLoading"; "web") 1 ]
Pause/Resume Script [ Duration (seconds): ,1 ]
End Loop
Pause/Resume Script [ Duration (seconds): ,5 ]
#
# query values from website
Set Field [ Web::articleId ; MBS("WebView.Evaluate"; "web"; "document.getElementById('articleId').innerHTML;") ]
Set Field [ Web::price ; MBS("WebView.Evaluate"; "web"; "document.getElementById('price').innerHTML;") ]
]

```

Send change, input and blur events to text field:

```

# define sendChangeEvent function
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; " function sendChangeEvent(ID) { var o = document.getElementById(ID); var evt = document.createEvent('Events'); evt.initEvent('change', true, true); o.dispatchEvent(evt); } "" ]
#
# define sendInputEvent function
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; " function sendInputEvent(ID) { var o = document.getElementById(ID); var evt = document.createEvent('Events'); evt.initEvent('input', true, true); o.dispatchEvent(evt); } "" ]
#
# define sendBlurEvent function
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; " function sendBlurEvent(ID) { var o = document.getElementById(ID); var evt = document.createEvent('Events'); evt.initEvent('blur', true, true); o.dispatchEvent(evt); } "" ]
#
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "document.getElementById('name').value = "" & Substitute ( $Name ; "" ; "" ) & "" ) ]
#
# send three events as we often don't know which one is used on the website to recognize the change
#
# send input event, so JavaScript code notices we put something in
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "sendInputEvent('name');") ]
# send change event, so JavaScript code notices we changed text
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "sendChangeEvent('name');") ]
# send blur event, so JavaScript code notices the user left the field
Set Variable [ $r ; Value: MBS("WebView.RunJavaScript"; "web"; "sendBlurEvent('name');") ]
# give time for web viewer to run all the events
Pause/Resume Script [ Duration (seconds): ,5 ]

```

180.109. *WEBVIEW.RUNJAVASCRIPT* 8431

See also

- 164.55 *Text.RemoveNewLine* 7852
- 180.39 *WebView.Create* 8326
- 180.46 *WebView.FindByName* 8339
- 180.87 *WebView.IsLoading* 8392
- 180.110 *WebView.RunJavaScriptReturnTitle* 8433
- 180.126 *WebView.SetFormButtonValue* 8455
- 180.128 *WebView.SetFormInputValue* 8459
- 180.129 *WebView.SetFormSelectValue* 8462
- 180.131 *WebView.SetFormValue* 8466
- 182.16 *Window.FindByTitle* 8552

Example Databases

- [Mac only/Movies/Control Interactive Container Movie](#)
- [WebViewer/Admin Console Login](#)
- [WebViewer/Calendar/Calendar](#)
- [WebViewer/Disable Javascript alerts on Webviewer Mac](#)
- [WebViewer/Form Fields/Forms Sample](#)
- [WebViewer/Javascript calls Filemaker Script/callbacks](#)
- [WebViewer/Latitude Longitude Lookup](#)
- [WebViewer/Paypal Create-Invoice-Demo](#)
- [WebViewer/Slider/Slider](#)
- [WebViewer/WebViewer link targets](#)

180.109.1 Blog Entries

- [Automate login to FileMaker Admin Console in web viewer](#)
- [FileMaker and JavaScript - the perfect combination](#)
- [Automate web viewer in FileMaker](#)
- [CRC function in FileMaker using JavaScript](#)

- [MBS FileMaker Plugin, version 10.0pr8](#)
- [MBS FileMaker Plugin, version 10.0pr5](#)
- [Zooming video containers on Windows](#)
- [Signature Field in FileMaker](#)
- [Login in FileMaker web viewer if needed](#)
- [FileMaker Roadmap for 2019](#)

180.109.2 FileMaker Magazin

- [Ausgabe 1/2008, Seite 32](#)

Created 18th August 2014, last changed 14th February 2020.

180.110 WebView.RunJavaScriptReturnTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.RunJavaScriptReturnTitle"; WebViewerRef; Javascript)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Javascript

the text source of the javascript

Description

To return a result of the JavaScript to FileMaker, simply set "document.title" to the return value. Why did we do this? Because it was the way we could get the result back from the web view on windows. Use "\n" in javascript strings for a newline character.

See newer WebView.Evaluate function which works better on Windows and returns results.
Check JS Functions for JavaScript engine for cross platform code to run without web viewer.

Examples

Return the htmlcode of a field as string:

```
MBS( "WebView.RunJavaScriptReturnTitle"; "browser"; "document.title=document.getElementById('td_Proc-Name_v').innerHTML;" )
```

Return the text of a html item referenced by id as string:

```
MBS( "WebView.RunJavaScriptReturnTitle"; "browser"; "document.title=document.getElementById('Result').innerText;" )
```

See also

- 164.55 Text.RemoveNewLine 7852
- 180.44 WebView.Evaluate 8333
- 180.46 WebView.FindByName 8339
- 180.109 WebView.RunJavaScript 8423

Example Databases

- [WebViewer/Copy text from nicedit.com website](#)
- [WebViewer/Form Fields/Forms Sample 2](#)

- [WebView/Form Fields/Forms Sample](#)
- [WebView/Google Translation](#)
- [WebView/Latitude Longitude Lookup](#)

180.110.1 Blog Entries

- [FileMaker and WebView communication](#)
- [Mapping addresses to geo coordinates](#)

Created 18th August 2014, last changed 5th January 2020.

180.111 **WebView.Screenshot**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	3.0	Yes	Yes	No	No	Yes

MBS("WebView.Screenshot"; WebViewRef { ; ImageType; Filename })

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type.

"test.jpg"

Result Returns image for storing in container.

Description

The plugin offers several methods. `WebView.RenderImage` works fine on Mac, but not always on Windows. `WebView.RenderPDF` is Mac only. So especially for websites with flash or other content which can't be printed, the screenshot method is the best one.

(older versions before 5.2 would have an unused extra parameter before ImageType)

Windows only supports JPEG as type.

Added iOS support for version 8.5.

On Windows may get wrong rectangle if Windows runs desktop with 200% resolution, but you have a 100% resolution screen.

Examples

Store screenshot in container:

```
Set Variable [ $image; Value:MBS("WebView.Screenshot"; "web") ]
```

```
Set Field [ Anlagen::My Container; $image ]
```

See also

- 106.59 `MapView.Screenshot` 5705
- 180.46 `WebView.FindByName` 8339
- 180.107 `WebView.RenderImage` 8419

- 180.108 WebView.RenderPDF 8421
- 182.66 Window.Screenshot 8613

Example Databases

- [WebView/Custom WebView](#)
- [WebView/MethodDraw SVG Editor/MethodDraw](#)
- [WebView/WebView Screenshot](#)

180.111.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr5](#)
- [Neues MBS FileMaker Plugin 8.5 - Über 5500 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.5 - More than 5500 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.5pr5](#)
- [MBS FileMaker Plugin, version 7.2pr4](#)
- [MBS FileMaker Plugin, version 5.3pr5](#)
- [MBS FileMaker Plugin, version 5.2pr4](#)

Created 18th August 2014, last changed 2nd December 2019.

180.112 WebView.Scrollbar.getHorizontalMaximum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.Scrollbar.getHorizontalMaximum"; WebViewRef)

Parameters**WebViewRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result Returns value or error.

Description

Not supported for WebKit 2.x (FileMaker 16 Mac).

Examples

Query current and maximum:

MBS("Webview.Scrollbar.getHorizontalPosition"; "web") & " of " & MBS("Webview.Scrollbar.getHorizontalMaximum"; "web")

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.113 [WebView.Scrollbar.getHorizontalPosition](#) 8438
- 180.114 [WebView.Scrollbar.getVerticalMaximum](#) 8439
- 182.69 [Window.Scrollbar.getHorizontalMaximum](#) 8618

180.112.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 22nd December 2014, last changed 25th August 2017.

180.113 `WebView.Scrollbar.getHorizontalPosition`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.Scrollbar.getHorizontalPosition"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result Returns value or error.

Description

Not supported for WebKit 2.x (FileMaker 16 Mac).

Examples

Query current and maximum:

```
MBS( "Webview.Scrollbar.getHorizontalPosition"; "web" ) & " of " & MBS( "Webview.Scrollbar.getHorizontalMaximum"; "web" )
```

See also

- 180.46 `WebView.FindByName` 8339
- 180.112 `WebView.Scrollbar.getHorizontalMaximum` 8437
- 180.115 `WebView.Scrollbar.getVerticalPosition` 8440
- 180.116 `WebView.Scrollbar.set` 8441
- 182.70 `Window.Scrollbar.getHorizontalPosition` 8619

180.113.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 22nd December 2014, last changed 25th August 2017.

180.114 WebView.Scrollbar.getVerticalMaximum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.Scrollbar.getVerticalMaximum"; WebViewRef)

Parameters**WebViewRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result Returns value or error.

Description

Not supported for WebKit 2.x (FileMaker 16 Mac).

Examples

Query current and maximum:

MBS("Webview.Scrollbar.getVerticalPosition"; "web") & " of " & MBS("Webview.Scrollbar.getVerticalMaximum"; "web")

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.112 [WebView.Scrollbar.getHorizontalMaximum](#) 8437
- 180.115 [WebView.Scrollbar.getVerticalPosition](#) 8440
- 182.71 [Window.Scrollbar.getVerticalMaximum](#) 8620

180.114.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 22nd December 2014, last changed 25th August 2017.

180.115 WebView.Scrollbar.getVerticalPosition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.Scrollbar.getVerticalPosition"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Result Returns value or error.

Description

Not supported for WebKit 2.x (FileMaker 16 Mac).

Examples

Query current and maximum:

MBS("Webview.Scrollbar.getVerticalPosition"; "web") & " of " & MBS("Webview.Scrollbar.getVertical-Maximum"; "web")

See also

- 180.46 WebView.FindByName 8339
- 180.113 WebView.Scrollbar.getHorizontalPosition 8438
- 180.114 WebView.Scrollbar.getVerticalMaximum 8439
- 180.116 WebView.Scrollbar.set 8441
- 182.72 Window.Scrollbar.getVerticalPosition 8621

180.115.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 22nd December 2014, last changed 25th August 2017.

180.116 WebView.Scrollbar.set

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	No	No	No	No

MBS("WebView.Scrollbar.set"; WebViewRef; X; Y)

Parameters**WebViewRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

X

The new X position.

100

Y

The new Y position.

100

Result Returns OK or error.

Description

You can query the position using `Webview.Scrollbar.getHorizontalPosition` and `Webview.Scrollbar.getVerticalPosition` and than adjust if needed with this function to scroll to the right position in your web viewer.

Not supported for WebKit 2.x (FileMaker 16 Mac).

See also

- 180.46 `WebView.FindByName` 8339
- 180.113 `WebView.Scrollbar.getHorizontalPosition` 8438
- 180.115 `WebView.Scrollbar.getVerticalPosition` 8440
- 182.73 `Window.Scrollbar.set` 8622

180.116.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)
- [MBS Filemaker Plugin, version 5.0pr5](#)

Created 22nd December 2014, last changed 25th August 2017.

180.117 WebView.SearchText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.3	Yes	Yes	No	No	No

MBS("WebView.SearchText"; WebViewerRef; Text { ; Backward; CaseSensitive; Wrap })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Text

The text to search for.

"Hello"

Backward

Optional

A boolean value to determinate direction. Pass 0 for forward and 1 for backward. Default is 0. (This option has problems on Windows currently.)

0

CaseSensitive

Optional

Whether to search case sensitive. Pass 1 for case sensitive and 0 for case insensitive. Default is 0.

0

Wrap

Optional

A boolean value to decide whether to wrap around. If text is not found, we start search on the top again.

0

Result Returns 1 if the text was found and 0 if not.

Description

This is like the search field in Safari. Please note that this feature works fine in FileMaker 10, but has problems in FileMaker 11.

Not supported for WebKit 2.x (FileMaker 16 Mac), but works in FileMaker 16, when using a Web Viewer created using WebView.Create.

Examples

Searches for text in webviewer:

```
MBS("WebView.SearchText"; "web"; "Hello")
```

See also

- 180.39 WebView.Create

180.117. <i>WEBVIEW.SEARCHTEXT</i>	8443
• 180.46 <i>WebView.FindByName</i>	8339
• 180.119 <i>WebView.SelectedText</i>	8445

Example Databases

- [WebViewer/Search in WebView](#)

180.117.1 Blog Entries

- [MBS Filemaker Plugin, version 2.3pr4](#)

Created 18th August 2014, last changed 8th October 2017.

180.118 WebView.SelectAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.4	Yes	Yes	No	No	Yes

MBS("WebView.SelectAll"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

This is like choosing the menu command to select all, but without using the menu.

As webviewer functions often run asynchronously, you need to make a short script pause to let the webviewer do the job.

Examples

Select all and copy:

```
MBS( "Webview.SelectAll"; "web" ) & MBS( "Webview.Copy"; "web" )
```

See also

- [180.37 WebView.Copy](#) 8324
- [180.46 WebView.FindByName](#) 8339

Example Databases

- [WebViewer/WebView Copy and Paste](#)

180.118.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr2](#)

Created 11st August 2017, last changed 25th August 2017.

180.119 WebView.SelectedText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	5.0	Yes	Yes	No	No	Yes

MBS("WebView.SelectedText"; WebViewerRef { ; Formatted })

Parameters**WebViewerRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Formatted

Optional

Optional for Mac. If 1, tries to get text with formatting.

1

Result Returns text or error.

Description

If you put this in a button, the focus may leave WebViewer and selection is lost. In a menu it works better.

See also [WebView.GetPlainText](#), [WebView.GetHTMLText](#) and [WebView.GetFormattedText](#).

Examples

Query plain text from webviewer:

```
MBS("WebView.GetPlainText"; "web")
```

Query html text from webviewer:

```
MBS("WebView.GetHTMLText"; "web")
```

Query formatted text from webviewer:

```
MBS("WebView.GetFormattedText"; "web")
```

Query selected text:

```
MBS("WebView.SelectedText"; "web")
```

See also

- [180.46 WebView.FindByName](#) 8339
- [180.55 WebView.GetForm](#) 8350
- [180.64 WebView.GetFormattedText](#) 8363

- 180.65 `WebView.GetHTMLText` 8365
- 180.73 `WebView.GetPlainText` 8375
- 180.117 `WebView.SearchText` 8442

Example Databases

- [WebView/WebView SelectedText](#)

180.119.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr11](#)
- [MBS FileMaker Plugin, version 5.0pr9](#)

Created 28th January 2015, last changed 25th August 2017.

180.120 **WebView.SendCommand**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.3	No	Yes	Yes, Windows only	No	No

MBS("WebView.SendCommand"; WebViewRef; CommandID)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

CommandID

The command ID to send.

93

Result Returns OK or error.

Description

This is to send command message to webbrowser control.

See identifiers here:

[https://msdn.microsoft.com/en-us/library/aa741315\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/aa741315(v=vs.85).aspx)

Examples

Print:

MBS("Webview.SendCommand"; "web"; 93)

View source code:

MBS("Webview.SendCommand"; "web"; 2139)

See also

- 180.45 [WebView.ExecCommand](#) 8337
- 180.46 [WebView.FindByName](#) 8339

Example Databases

- [WebView/Windows only/WebView Messages on Windows](#)

180.120.1 **Blog Entries**

- [MBS FileMaker Plugin, version 7.3pr1](#)

Created 31st May 2017, last changed 25th August 2017.

180.121 WebView.SetAllowsLinkPreview

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.3	Yes	No	No	No	Yes

MBS("WebView.SetAllowsLinkPreview"; WebViewerRef; Value)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Value

The new value.

1

Result Returns OK or error.

Description

A boolean value indicating whether link preview is allowed for any links inside this webview. The default value is true on Mac and iOS.

Pass 1 to allow or 0 to disallow.

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.51 [WebView.GetAllowsLinkPreview](#) 8346

180.121.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 16th July 2019, last changed 5th January 2020.

180.122 **WebView.SetAutoresizingMask**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
?? Webview	7.5	Yes	No	No	No	No

MBS("WebView.SetAutoresizingMask"; WebViewerRef; Value)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Value

The new setting.

4+8

Result Returns OK or error.

Description

This defines whether web viewer changes its size based on the surrounding window.

Name	Value	Description
NotSizable	0	The view cannot be resized.
MinXMargin	1	The left margin between the view and its superview is flexible.
WidthSizable	2	The view's width is flexible.
MaxXMargin	4	The right margin between the view and its superview is flexible.
MinYMargin	8	The bottom margin between the view and its superview is flexible.
HeightSizable	16	The view's height is flexible.
MaxYMargin	32	The top margin between the view and its superview is flexible.

e.g. the value 18 means the view can resize both horizontally and vertically with the parent view (window).

Examples

Make the webviewer stay on position in window:

```
MBS( "WebView.SetAutoresizingMask"; "web"; 4+8 )
```

Resize with window growing:

```
MBS( "WebView.SetAutoresizingMask"; $$web; 4+2+8+16 )
```

See also

- 69.38 DragDrop.SetAutoresizingMask 2530
- 106.15 MapView.GetAutoresizingMask 5659
- 106.65 MapView.SetAutoresizingMask 5712

- 165.10 `TextView.GetAutoResizingMask` 7888
- 165.30 `TextView.SetAutoResizingMask` 7908
- 180.46 `WebView.FindByName` 8339
- 180.52 `WebView.GetAutoResizingMask` 8347

180.122.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr8](#)

Created 14th November 2017, last changed 16th January 2019.

180.123 **WebView.SetCustomUserAgent**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.9	Yes	No	No	No	No

MBS("WebView.SetCustomUserAgent"; WebViewerRef; UserAgent)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

UserAgent

The new useragent.
"FileMaker Browser"

Result Returns OK or error.

Description

This user agent is reported to websites. By using a different user agent string you can tell a website that FileMaker is using Firefox, Chrome or Internet Explorer instead of Safari (WebKit).

Add iOS with version 9.3.

Examples

Set custom user agent to be Internet Explorer 7:

```
MBS( "WebView.SetCustomUserAgent"; "web"; "Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 6.0)" )
```

Set custom user agent to be Firefox 15:

```
MBS( "WebView.SetCustomUserAgent"; "web"; "Mozilla/5.0 (Macintosh; Intel Mac OS X 10.6; rv:15.0) Gecko/20100101 Firefox/15.0.1" )
```

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.53 [WebView.GetCustomUserAgent](#) 8348
- 180.98 [WebView.PostURL](#) 8407

Example Databases

- [WebViewer/Custom User Agent \(Mac\)](#)

180.123.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.3 - Über 5900 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 9.3 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.3pr6](#)
- [MBS Filemaker Plugin, version 2.9pr7](#)

Created 18th August 2014, last changed 15th July 2019.

180.124 **WebView.SetEditable**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	3.0	Yes	Yes	No	No	Yes

MBS("WebView.SetEditable"; WebViewRef; Editable)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Editable

Whether to make the webviewer editable or not. Pass 1 to make editable or 0 to make it not editable.

1

Result Returns OK or error.

Description

You can change the receiver's document programmatically regardless of this setting. By default a WebView object is not editable.

Normally, an HTML document is not editable unless the elements within the document are editable. This method provides a low-level way to make the contents of a WebView object editable without altering the document or DOM structure.

Examples

Turn editing on for a webviewer:

```
Set Variable [ $r ; Value: MBS( "WebView.SetEditable"; "web"; 1 ) ]
```

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.54 [WebView.GetEditable](#) 8349
- 180.138 [WebView.SetTitle](#) 8478

180.124.1 **Blog Entries**

- [MBS Filemaker Plugin, version 3.0pr8](#)

Created 18th August 2014, last changed 31st August 2017.

180.125 WebView.SetFocus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.4	Yes	Yes	No	No	Yes

MBS("WebView.SetFocus"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

Usually you use Go To Object, but this sets via OS function directly.
FileMaker may overwrite the focus quickly!

See also

- 165.31 [TextView.SetFocus](#) 7910
- 180.46 [WebView.FindByName](#) 8339
- 180.55 [WebView.GetForm](#) 8350

180.125.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr7](#)

Created 11st September 2019, last changed 11st September 2019.

180.126 WebView.SetFormButtonValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.SetFormButtonValue"; WebViewerRef; FormNameOrIndex; FieldNameOrIndex; Value { ; OnlyVisible })

Parameters**WebViewerRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

Value

The new value for the button.

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

To learn about forms and fields on a website, you can use the Form Utility application included with our plugin.

Some websites use a lot of JavaScript, so you may need to send change event to control via `WebView.RunJavaScript` so the javascript is notified about the changes.

See also

- 180.46 `WebView.FindByName` 8339
- 180.56 `WebView.GetFormButtonValue` 8351
- 180.59 `WebView.GetFormInputValue` 8354
- 180.61 `WebView.GetFormSelectValue` 8357
- 180.109 `WebView.RunJavaScript` 8423
- 180.128 `WebView.SetFormInputValue` 8459
- 180.129 `WebView.SetFormSelectValue` 8462
- 180.130 `WebView.SetFormTextAreaValue` 8464

180.126.1 Blog Entries

- [Automate web viewer in FileMaker](#)

Created 18th August 2014, last changed 3th September 2017.

180.127 **WebView.SetFormInputChecked**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.SetFormInputChecked"; WebViewRef; FormNameOrIndex; FieldNameOrIndex; Value { ; OnlyVisible })

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

Value

The value to set the input to.

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

To learn about forms and fields on a website, you can use the Form Utility application included with our plugin.

Some websites use a lot of JavaScript, so you may need to send change event to control via `WebView.RunJavaScript` so the javascript is notified about the changes.

Examples

Set a field checked:

```
MBS( "WebView.SetFormInputChecked"; "web"; "myForm"; "isValid"; 1)
```

See also

- 180.46 `WebView.FindByName` 8339
- 180.58 `WebView.GetFormInputChecked` 8353
- 180.59 `WebView.GetFormInputValue` 8354
- 180.109 `WebView.RunJavaScript` 8423
- 180.128 `WebView.SetFormInputValue` 8459

Example Databases

- [WebView/Form Fields/Formfield sample](#)
- [WebView/Form Fields/Forms Sample 2](#)
- [WebView/Form Fields/Forms Sample](#)

180.127.1 Blog Entries

- [Automate web viewer in FileMaker](#)

Created 18th August 2014, last changed 3th September 2017.

180.128 **WebView.SetFormInputValue**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

```
MBS( "WebView.SetFormInputValue"; WebViewerRef; FormNameOrIndex; FieldNameOrIndex; Value { ; OnlyVisible } )
```

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

Value

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

To learn about forms and fields on a website, you can use the Form Utility application included with our plugin.

Some websites use a lot of JavaScript, so you may need to send change event to control via `WebView.RunJavaScript` so the javascript is notified about the changes.

Examples

Fill field q on form f on a webpage:

```
MBS( "WebView.SetFormInputValue"; $WebViewerRef; "f"; "q"; "Hello" )
```

Load a website with login if needed:

```
# Load website
Set Web Viewer [ Object Name: "web" ; URL: "https://somedomain/search" ]
# Wait for it
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS("webview.isloading"; "web") = 1 ]
End Loop
#
# Set login name
```

```

Set Variable [ $r ; Value: MBS( "WebView.SetFormInputValue"; "web"; "login_form"; "__ac_name";
"xxx" ) ]
If [ MBS("iserror") ]
# No form, so we are already logged in?
If [ Position ( $r ; "failed to find form" ; 1 ; 1 ) = 0 ]
Show Custom Dialog [ "Fehler" ; $r ]
End If
Exit Script [ Text Result: ]
End If
# Set password
Set Variable [ $r ; Value: MBS( "WebView.SetFormInputValue"; "web"; "login_form"; "__ac_password";
"yyy" ) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Fehler" ; $r ]
End If
# Wait
Pause/Resume Script [ Duration (seconds): ,1 ]
# Click login button
Set Variable [ $r ; Value: MBS( "WebView.ClickInput"; "web"; "login_form"; "submit" ) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Fehler" ; $r ]
End If
# or submit form
// Set Variable [ $r ; Value: MBS( "WebView.formsubmit"; "web"; "login_form" ) ]
// If [ MBS("iserror") ]
// Show Custom Dialog [ "Fehler" ; $r ]
// End If
#
# Wait for page loading after login
Loop
Pause/Resume Script [ Duration (seconds): ,1 ]
Exit Loop If [ MBS("webview.isloading"; "web") = 1 ]
End Loop
# Go to search page where we want to be after login
Set Web Viewer [ Object Name: "web" ; URL: "https://somedomain/search" ]

```

See also

- 124.6 IsError 6266
- 180.32 WebView.ClickInput 8318
- 180.50 WebView.FormSubmit 8345
- 180.59 WebView.GetFormInputValue 8354
- 180.61 WebView.GetFormSelectValue 8357
- 180.87 WebView.IsLoading 8392

180.128. <i>WEBVIEW.SETFORMINPUTVALUE</i>	8461
• 180.126 <i>WebView.SetFormButtonValue</i>	8455
• 180.127 <i>WebView.SetFormInputChecked</i>	8457
• 180.129 <i>WebView.SetFormSelect Value</i>	8462
• 180.131 <i>WebView.SetFormValue</i>	8466

Example Databases

- [WebView/Form Fields/Formfield sample](#)
- [WebView/Form Fields/Forms Sample 2](#)
- [WebView/Latitude Longitude Lookup](#)
- [WebView/Paypal Create-Invoice-Demo](#)
- [WebView/Paypal Login](#)
- [WebView/Post on Facebook](#)

180.128.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)
- [Automate web viewer in FileMaker](#)
- [Login in FileMaker web viewer if needed](#)
- [FileMaker and WebViewer communication](#)
- [Mapping addresses to geo coordinates](#)

180.128.2 FileMaker Magazin

- [Ausgabe 5/2013, Seite 24](#)
- [Ausgabe 5/2013, Seite 23](#)

Created 18th August 2014, last changed 11st March 2019.

180.129 `WebView.SetFormSelectValue`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.SetFormSelectValue"; WebViewerRef; FormNameOrIndex; FieldNameOrIndex; Value { ; OnlyVisible })

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

Value

The value to set the input to.

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

Note: In HTML the Options of a Select tag can include a "value" attribute. If they do then this function sets the selection based on the value of the "value" attribute.

To learn about forms and fields on a website, you can use the Form Utility application included with our plugin.

Some websites use a lot of JavaScript, so you may need to send change event to control via `WebView.RunJavaScript` so the javascript is notified about the changes.

Examples

Fill a select input item:

```
MBS( "WebView.SetFormSelectValue" ; "web"; "search"; "borough"; "BROOKLYN" )
```

See also

- 180.46 `WebView.FindByName` 8339
- 180.56 `WebView.GetFormButtonValue` 8351
- 180.59 `WebView.GetFormInputValue` 8354
- 180.61 `WebView.GetFormSelectValue` 8357

<i>180.129. WEBVIEW.SETFORMSELECTVALUE</i>	8463
• 180.109 WebView.RunJavaScript	8423
• 180.126 WebView.SetFormButtonValue	8455
• 180.128 WebView.SetFormInputValue	8459
• 180.130 WebView.SetFormTextAreaValue	8464

Example Databases

- [WebView/Form Fields/Formfield sample](#)
- [WebView/Form Fields/Forms Sample 2](#)

180.129.1 Blog Entries

- [Automate web viewer in FileMaker](#)
- [MBS FileMaker Plugin, version 5.1pr5](#)
- [MBS Filemaker Plugin 2.1 prerelease 2](#)

Created 18th August 2014, last changed 9th July 2019.

180.130 `WebView.SetFormTextAreaValue`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

```
MBS( "WebView.SetFormTextAreaValue"; WebViewRef; FormNameOrIndex; FieldNameOrIndex; Value
{ ; OnlyVisible } )
```

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

FieldNameOrIndex

You can either pass the field name of the field index. 0 is the first item

Value

the value you want to set

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Result Returns "OK" or error message.

Description

Please note that this method does not work for other field types.

To learn about forms and fields on a website, you can use the Form Utility application included with our plugin.

Some websites use a lot of JavaScript, so you may need to send change event to control via `WebView.RunJavaScript` so the javascript is notified about the changes.

Examples

set field named "InputText" for form named "form1" in webview named "web" to "Hello World":

```
MBS("WebView.SetFormTextAreaValue"; "web"; "form1"; "InputText"; "Hello World")
```

See also

- 180.46 `WebView.FindByName` 8339
- 180.62 `WebView.GetFormTextAreaValue` 8359
- 180.109 `WebView.RunJavaScript` 8423
- 180.126 `WebView.SetFormButtonValue` 8455

180.130. *WEBVIEW.SETFORMTEXTAREAValue*

8465

- 180.129 *WebView.SetFormSelectValue*

8462

Example Databases

- [WebView/Form Fields/Formfield sample](#)
- [WebView/Form Fields/Forms Sample 2](#)
- [WebView/Google Translation](#)
- [WebView/MethodDraw SVG Editor/MethodDraw](#)
- [WebView/Paypal Create-Invoice-Demo](#)
- [WebView/TinyMCE/TinyMCE](#)
- [WebView/WebView MarkDown/WebView MarkDown](#)

180.130.1 Blog Entries

- [Automate web viewer in FileMaker](#)
- [Signature Field in FileMaker](#)
- [FileMaker and WebView communication](#)
- [Using Markdown Javascript converter in FileMaker](#)

Created 18th August 2014, last changed 3th September 2017.

180.131 `WebView.SetFormValue`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.3	Yes	Yes	No	No	Yes

```
MBS( "WebView.SetFormValue"; WebViewerRef; FormNameOrIndex; Field; NewValue { ; OnlyVisible } )
```

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

FormNameOrIndex

Either the Name of the Form or the Index starting at 0

Field

the name of the field, case sensitive

NewValue

the value to set

OnlyVisible

Optional

Whether to look for all fields or only the visible ones. Default is false.

0

Description

To learn about forms and fields on a website, you can use the Form Utility application included with our plugin.

Some websites use a lot of JavaScript, so you may need to send change event to control via `WebView.RunJavaScript` so the javascript is notified about the changes.

Examples

Set A form value

```
Let(
[
Field = "name";
NewValue = "Clark Kent";
Form = "myForm";
WebViewerName = "MyWebViewer";

WindowRef = MBS("Window.FindByTitle"; Get(WindowName));
WebViewerID = MBS("WebView.FindByName"; WindowRef; WebViewerName)

];
```

180.131. *WEBVIEW.SETFORMVALUE*

8467

```
MBS("WebView.SetFormValue"; WebViewID; Form; Field; NewValue)  
)
```

Fill a form:

```
MBS( "WebView.SetFormValue" ; "web"; "search"; "street_name"; "test2" )
```

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.63 [WebView.GetFormValue](#) 8361
- 180.109 [WebView.RunJavaScript](#) 8423
- 180.128 [WebView.SetFormInputValue](#) 8459
- 182.16 [Window.FindByTitle](#) 8552

Example Databases

- [WebView/Disable Javascript alerts on Webviewer Mac](#)
- [WebView/Form Fields/Benchmark](#)
- [WebView/Form Fields/Forms Sample 2](#)
- [WebView/Form Fields/Forms Sample](#)
- [WebView/Form Fields/WebView Forms](#)
- [WebView/Javascript calls Filemaker Script/Callbacks with Custom Webviewer](#)
- [WebView/Javascript calls Filemaker Script/callbacks](#)

180.131.1 Blog Entries

- [Automate web viewer in FileMaker](#)

Created 18th August 2014, last changed 3th September 2017.

180.132 WebView.SetHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	7.1	Yes	No	No	No	No

MBS("WebView.SetHidden"; WebViewerRef; Value)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Value

The new value. Pass 1 to hide or 0 to show.

1

Result Returns OK or error.

Description

On Mac we can turn a web viewer invisible without FileMaker noticing and so you can do things without the user seeing it.

Examples

Hide a webviewer:

```
MBS( "Webview.SetHidden"; "web"; 1 )
```

See also

- 180.46 WebView.FindByName 8339
- 180.66 WebView.GetHidden 8367
- 180.77 WebView.GetSilent 8381
- 180.137 WebView.SetSilent 8477
- 180.138 WebView.SetTitle 8478

180.132.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr4](#)

Created 24th February 2017, last changed 25th August 2017.

180.133 **WebView.SetInternetExplorerVersion**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.4	No	Yes	No	No	No

MBS("WebView.SetInternetExplorerVersion"; Version)

Parameters

Version

The version to use. Set to zero to go back to default.

11000

Result Returns OK or error.

Description

By default FileMaker uses IE7 for the webviewer, even if you have version 11 enabled.

In a test on Windows 10, we get by default this browser version:

Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 6.2; Win64; x64; Trident/7.0; .NET4.0C; .NET4.0E; Tablet PC 2.0; .NET CLR 2.0.50727; .NET CLR 3.0.30729; .NET CLR 3.5.30729)

and with setting it to 11000, we get this:

Mozilla/5.0 (Windows NT 6.2; Win64; x64; Trident/7.0; rv:11.0) like Gecko

FileMaker 16 defaults to Internet Explorer 11.

Examples

Set version to IE 11:

MBS("Webview.SetInternetExplorerVersion"; 11000)

See also

- 180.44 [WebView.Evaluate](#) 8333
- 180.70 [WebView.GetInternetExplorerVersion](#) 8372

180.133.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.4pr9](#)
- [Select Internet Explorer version for FileMaker](#)

Value	Description
11001	Internet Explorer 11. Webpages are displayed in IE11 edge mode, regardless of the declared <code>!DOCTYPE</code> directive. Failing to declare a <code>!DOCTYPE</code> directive causes the page to load in Quirks.
11000	IE11. Webpages containing standards-based <code>!DOCTYPE</code> directives are displayed in IE11 edge mode. Default value for IE11.
10001	Internet Explorer 10. Webpages are displayed in IE10 Standards mode, regardless of the <code>!DOCTYPE</code> directive.
10000	Internet Explorer 10. Webpages containing standards-based <code>!DOCTYPE</code> directives are displayed in IE10 Standards mode. Default value for Internet Explorer 10.
9999	Windows Internet Explorer 9. Webpages are displayed in IE9 Standards mode, regardless of the declared <code>!DOCTYPE</code> directive. Failing to declare a <code>!DOCTYPE</code> directive causes the page to load in Quirks.
9000	Internet Explorer 9. Webpages containing standards-based <code>!DOCTYPE</code> directives are displayed in IE9 mode. Default value for Internet Explorer 9. In Internet Explorer 10, Webpages containing standards-based <code>!DOCTYPE</code> directives are displayed in IE10 Standards mode.
8888	Webpages are displayed in IE8 Standards mode, regardless of the declared <code>!DOCTYPE</code> directive. Failing to declare a <code>!DOCTYPE</code> directive causes the page to load in Quirks.
8000	Webpages containing standards-based <code>!DOCTYPE</code> directives are displayed in IE8 mode. Default value for Internet Explorer 8. In Internet Explorer 10, Webpages containing standards-based <code>!DOCTYPE</code> directives are displayed in IE10 Standards mode.
7000	Webpages containing standards-based <code>!DOCTYPE</code> directives are displayed in IE7 Standards mode. Default value for applications hosting the WebBrowser Control.

180.134 WebView.SetPreferences

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.2	Yes	No	No	No	Yes

MBS("WebView.SetPreferences"; WebViewerRef; ParameterName; ParameterValue)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

ParameterName

The name of the parameter.
isJavaEnabled

ParameterValue

The value for the given parameter: A boolean value for allowsAnimatedImageLooping, allowsAnimatedImages, javaEnabled, javaScriptCanOpenWindowsAutomatically, javaScriptEnabled, loadsImagesAutomatically, plugInsEnabled, privateBrowsingEnabled, shouldPrintBackgrounds, tabsToLinks, userStyleSheetEnabled and usesPageCache. A number for cacheModel, defaultFixedFontSize, defaultFontSize, minimumFontSize or minimumLogicalFontSize. A string for cursiveFontFamily, defaultTextEncodingName, fantasyFontFamily, fixedFontFamily, sansSerifFontFamily, serifFontFamily or standardFontFamily.

0

Result Returns OK or an error message.

Description

For WebKit 1.x you can pass empty WebViewerRef to access global preferences.

Available keys for WebKit 1.x (FileMaker till version 15 and WebView.Create): allowsAnimatedImageLooping, allowsAnimatedImages, cacheModel, cursiveFontFamily, defaultFixedFontSize, defaultFontSize, defaultTextEncodingName, fantasyFontFamily, fixedFontFamily, javaEnabled, javaScriptCanOpenWindowsAutomatically, javaScriptEnabled, loadsImagesAutomatically, minimumFontSize, minimumLogicalFontSize, plugInsEnabled, privateBrowsingEnabled, sansSerifFontFamily, serifFontFamily, shouldPrintBackgrounds, standardFontFamily, tabsToLinks, userStyleSheetEnabled or usesPageCache.

Available keys for WebKit 2.x (FileMaker 16): developerExtrasEnabled, logsPageMessagesToSystemConsoleEnabled, minimumFontSize, javaScriptEnabled, javaScriptCanOpenWindowsAutomatically, allowFileAccessFromFileURLs, allowUniversalAccessFromFileURLs, telephoneNumberDetectionIsEnabled, javaEnabled and plugInsEnabled.

Please check WebKit documentation for details.

Examples

set print background option:

```
MBS("WebView.SetPreferences"; $WebViewerRef; "shouldPrintBackgrounds", 1)
```

Disables image loading:

```
MBS("WebView.SetPreferences"; $WebViewerRef; "loadsImagesAutomatically", 1)
```

Disable Java:

```
MBS("WebView.SetPreferences"; $WebViewerRef; "javaEnabled"; 0)
```

Disable Plugins:

```
MBS("WebView.SetPreferences"; $WebViewerRef; "plugInsEnabled"; 0)
```

Set developer extras enabled state for webviewer to show inspector:

```
Set Variable [ $r; Value:MBS("Webview.SetPreferences"; "web"; "developerExtrasEnabled"; 1) ]
```

Enable file URLs:

```
Set Variable [ $r; Value:MBS("Webview.SetPreferences"; "web"; "allowFileAccessFromFileURLs"; 1) ]
```

See also

- [180.39 WebView.Create](#) 8326
- [180.46 WebView.FindByName](#) 8339
- [180.74 WebView.GetPreferences](#) 8377
- [180.107 WebView.RenderImage](#) 8419
- [180.108 WebView.RenderPDF](#) 8421

Example Databases

- [WebViewer/Web Preferences \(Mac\)](#)

180.134.1 Blog Entries

- [Automate web viewer in FileMaker](#)
- [MBS FileMaker Plugin, version 7.6pr5](#)
- [Enable Web Inspector for WebViewer](#)
- [MBS Filemaker Plugin, version 2.2pr3](#)

Created 18th August 2014, last changed 4th May 2019.

180.135 WebView.SetPrintParameter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	2.1	Yes	No	No	No	No

MBS("WebView.SetPrintParameter"; ParameterName; ParameterValue)

Parameters

ParameterName

The name of the parameter. Can be horizontallyCentered, verticallyCentered, showPrintPanel, orientation, printer, bottomMargin, topMargin, leftMargin or rightMargin.
orientation

ParameterValue

The value for the given parameter: A boolean value for horizontallyCentered, verticallyCentered and showPrintPanel. "portrait" or "landscape" for orientation. The printer name for printer. A number for bottomMargin, topMargin, leftMargin or rightMargin.
portrait

Result Returns OK or an error message.

Description

If showPrintPanel (Default 1) if set to 0, then no print window is shown. verticallyCentered and horizontallyCentered define if content is centered. If printer name is not valid, it will be ignored.

Version 5.2 adds PaperName, PaperWidth and PaperHeight.

Examples

Sets bottom margin to 5 points:

```
MBS("WebView.SetPrintParameter"; "bottomMargin"; 5)
```

Use square paper size:

```
Set Variable [ $r; Value:MBS("WebView.SetPrintParameter"; "paperWidth"; 800) ]
Set Variable [ $r; Value:MBS("WebView.SetPrintParameter"; "paperHeight"; 800) ]
```

Use A4 paper:

```
MBS("WebView.SetPrintParameter"; "paperName"; "iso-a4")
```

Set landscape:

```
MBS("WebView.SetPrintParameter"; "orientation"; "landscape")
```

See also

<i>180.135. WEBVIEW.SETPRINTPARAMETER</i>	8475
• 180.75 WebView.GetPrintParameter	8379
• 180.100 WebView.Print	8410
• 180.102 WebView.PrintToFile	8413

Example Databases

- [WebView/WebView Print](#)

180.135.1 Blog Entries

- [Print WebView on macOS in FileMaker](#)
- [MBS FileMaker Plugin, version 5.2pr8](#)
- [MBS Filemaker Plugin, version 4.0pr4](#)
- [MBS Filemaker Plugin, version 2.1 final candidate](#)

Created 18th August 2014, last changed 5th April 2017.

180.136 `WebView.SetPrivateBrowsing`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.5	Yes	No	No	No	Yes

MBS("WebView.SetPrivateBrowsing"; WebViewRef; Value)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function. "web"

Value

The new mode. Pass 1 to enable private browsing. Pass 0 to disable.

1

Result Returns OK or error.

Description

If enabled, no data should be stored for cookies or cache on disk, so it's cleared when web viewer is destroyed. Default is non-private mode for the web viewer.

For WebKit 2.x, it looks like you can't change mode after web viewer was created.

Examples

Enable private browsing:

```
Set Variable [ $r ; Value: MBS( "Webview.SetPrivateBrowsing"; "web"; 1 ) ]
```

See also

- [180.46 WebView.FindByName](#) 8339
- [180.76 WebView.GetPrivateBrowsing](#) 8380

180.136.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.5](#)
- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.5pr5](#)

Created 27th October 2019, last changed 5th January 2020.

180.137 **WebView.SetSilent**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	6.5	No	Yes	No	No	No

MBS("WebView.SetSilent"; WebViewRef; Value)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Value

The new setting. Pass 1 to make silent or 0 to allow errors.

1

Result Returns OK or error.

Description

Default is 0 to enable errors to show.

Examples

Disable errors:

```
Set Variable [ $r; Value:MBS( "Webview.SetSilent"; "web"; 1 ) ]
```

Enable errors:

```
MBS( "Webview.SetSilent"; "web"; 0 )
```

See also

- [180.46 WebView.FindByName](#) 8339
- [180.66 WebView.GetHidden](#) 8367
- [180.77 WebView.GetSilent](#) 8381
- [180.132 WebView.SetHidden](#) 8468
- [180.138 WebView.SetTitle](#) 8478

180.137.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.5pr9](#)
- [Silent WebViewer on Windows](#)

Created 24th November 2016, last changed 25th August 2017.

180.138 WebView.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	1.4	Yes	Yes	No	No	Yes

MBS("WebView.SetTitle"; WebViewerRef; Value)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Value

The value to set

Description

The same as document.write = "Something"

See also

- 180.46 WebView.FindByName 8339
- 180.80 WebView.GetTitle 8384
- 180.124 WebView.SetEditable 8453
- 180.132 WebView.SetHidden 8468
- 180.137 WebView.SetSilent 8477

180.138.1 Blog Entries

- [FileMaker and WebViewer communication](#)

Created 18th August 2014, last changed 18th August 2014.

180.139 **WebView.StopLoading**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.3	Yes	No	No	No	Yes

MBS("WebView.StopLoading"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK or error.

Description

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.87 [WebView.IsLoading](#) 8392

180.139.1 **Blog Entries**

- [MBS FileMaker Plugin, version 9.3pr6](#)

Created 16th July 2019, last changed 16th July 2019.

180.140 WebView.UserScripts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	9.5	Yes	No	No	No	Yes

MBS("WebView.UserScripts"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns JSON or error.

Description

Returns JSON array of objects with three fields for each script: source, injectionTime and forMainFrameOnly. injectionTime is either AtDocumentStart or AtDocumentEnd. forMainFrameOnly is a boolean value.

Examples

Query user scripts:

```
MBS( "Webview.UserScripts"; "web" )
```

Example result: [

```
{
  "forMainFrameOnly" : true,
  "source" : "alert('Hello');",
  "injectionTime" : "AtDocumentEnd"
}
```

See also

- 180.26 [WebView.AddUserScript](#) 8310
- 180.46 [WebView.FindByName](#) 8339

180.140.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr8](#)

Created 8th November 2019, last changed 5th January 2020.

180.141 **WebView.canResetPageZoom**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.canResetPageZoom"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.146 [WebView.resetPageZoom](#) 8486

Created 18th August 2014, last changed 25th August 2017.

180.142 WebView.canZoomPageIn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.canZoomPageIn"; WebViewerRef)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

See also `WebView.GetPageSizeMultiplier` and `WebView.SetPageSizeMultiplier` functions.

See also

- 180.143 `WebView.canZoomPageOut` 8483
- 180.46 `WebView.FindByName` 8339
- 180.145 `WebView.getPageSizeMultiplier` 8485
- 180.148 `WebView.setPageSizeMultiplier` 8488
- 180.150 `WebView.zoomPageIn` 8490

Created 18th August 2014, last changed 10th September 2018.

180.143 WebView.canZoomPageOut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.canZoomPageOut"; WebViewerRef)

Parameters**WebViewerRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

See also `WebView.GetPageSizeMultiplier` and `WebView.SetPageSizeMultiplier` functions.

See also

- 180.142 `WebView.canZoomPageIn` 8482
- 180.46 `WebView.FindByName` 8339
- 180.145 `WebView.getPageSizeMultiplier` 8485
- 180.148 `WebView.setPageSizeMultiplier` 8488
- 180.151 `WebView.zoomPageOut` 8491

Created 18th August 2014, last changed 10th September 2018.

180.144 `WebView.getMediaVolume`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	No

MBS("WebView.getMediaVolume"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

See also

- 180.46 `WebView.FindByName` 8339
- 180.147 `WebView.setMediaVolume` 8487

Created 18th August 2014, last changed 25th August 2017.

180.145 **WebView.getPageSizeMultiplier**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.getPageSizeMultiplier"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Description

See also

- 180.142 [WebView.canZoomPageIn](#) 8482
- 180.143 [WebView.canZoomPageOut](#) 8483
- 180.46 [WebView.FindByName](#) 8339
- 180.148 [WebView.setPageSizeMultiplier](#) 8488

Created 18th August 2014, last changed 25th August 2017.

180.146 `WebView.resetPageZoom`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("`WebView.resetPageZoom`"; `WebViewRef`)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "`WebView.FindByName`" function.

Description

See also

- 180.141 `WebView.canResetPageZoom` 8481
- 180.46 `WebView.FindByName` 8339

Created 18th August 2014, last changed 25th August 2017.

180.147 **WebView.setMediaVolume**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	No

MBS("WebView.setMediaVolume"; WebViewRef; Value)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Value

The new volume.

0.5

Description

Sets a master volume control for all media elements in the WebView. Valid values are 0..1.

See also

- 180.46 [WebView.FindByName](#) 8339
- 180.144 [WebView.getMediaVolume](#) 8484

Created 18th August 2014, last changed 25th August 2017.

180.148 `WebView.setPageSizeMultiplier`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.setPageSizeMultiplier"; WebViewRef; value)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

value

A fractional percentage value, 1.0 is 100% .

0.5

Result Returns OK on success or error message on failure.

Description

Change the zoom factor of the page in views managed by this webView.

This function is only for MacOS and iOS. Please use Webview.setZoom for Windows.

See also

- 180.142 `WebView.canZoomPageIn` 8482
- 180.143 `WebView.canZoomPageOut` 8483
- 180.46 `WebView.FindByName` 8339
- 180.145 `WebView.getPageSizeMultiplier` 8485
- 180.149 `WebView.setZoom` 8489

Created 18th August 2014, last changed 15th July 2019.

180.149 WebView.setZoom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.2	No	Yes	No	No	No

MBS("WebView.setZoom"; WebViewerRef; factor)

Parameters

WebViewerRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

factor

The scaling factor. Range is 10 to 1000.

50

Result Returns OK on success or error.

Description

This is the function for Windows. Please use Webview.setPageSizeMultiplier, Webview.zoomPageIn or Webview.zoomPageOut for Mac OS X.

Examples

Zooms page out:

```
Set Variable [ $r; MBS("Webview.setZoom"; "web"; 50) ]
```

See also

- 180.46 WebView.FindByName 8339
- 180.55 WebView.GetForm 8350
- 180.67 WebView.GetIcon 8368
- 180.148 WebView.setPageSizeMultiplier 8488
- 180.150 WebView.zoomPageIn 8490
- 180.151 WebView.zoomPageOut 8491

180.149.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr1](#)

Created 18th August 2014, last changed 16th May 2019.

180.150 `WebView.zoomPageIn`

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.zoomPageIn"; WebViewRef)

Parameters

WebViewRef

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK on success or error message on failure.

Description

This function is only for Mac OS X. Please use `Webview.setZoom` for Windows.

Examples

Zooms page in:

```
Set Variable [ $r; MBS("Webview.ZoomPageIn"; "web") ]
```

See also

- 180.142 `WebView.canZoomPageIn` 8482
- 180.46 `WebView.FindByName` 8339
- 180.149 `WebView.setZoom` 8489
- 180.151 `WebView.zoomPageOut` 8491

Created 18th August 2014, last changed 16th May 2019.

180.151 WebView.zoomPageOut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
180 WebView	4.1	Yes	No	No	No	Yes

MBS("WebView.zoomPageOut"; WebViewerRef)

Parameters**WebViewerRef**

Either the Web Viewer Object Name or the Web Viewer ID as returned by "WebView.FindByName" function.

Result Returns OK on success or error message on failure.

Description

This function is only for Mac OS X. Please use Webview.setZoom for Windows.

Examples

Zooms page out:

```
Set Variable [ $r; MBS("Webview.zoomPageOut"; "web") ]
```

See also

- 180.143 WebView.canZoomPageOut 8483
- 180.46 WebView.FindByName 8339
- 180.149 WebView.setZoom 8489
- 180.150 WebView.zoomPageIn 8490

Created 18th August 2014, last changed 16th May 2019.

Chapter 181

WIA

Scan images from flatbet scanners on Windows.

181.1 WIA.ClearCurrentDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.ClearCurrentDevice")

Result Returns OK or error.

Description

See also

- 181.6 WIA.GetCurrentDevice 8503
- 181.19 WIA.SetCurrentDevice 8524

Created 6th November 2016, last changed 6th November 2016.

181.2 WIA.DeviceCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.DeviceCount")

Result Returns number or error.

Description

Examples

Walk over list of devices and query properties:

```
Go to Layout [ "WIA Scan" (WIA Scan) ]
Delete All Records [ No dialog ]
Set Variable [ $c; Value:MBS("WIA.DeviceCount") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $c ]
Else
If [ $c >0 ]
Set Variable [ $i; Value:0 ]
Loop
Perform Script [ "List Properties"; Parameter: $i ]
# Next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i >= $c ]
End Loop
End If
End If
```

See also

- [124.6 IsError](#)

6266

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 6th November 2016.

181.3 WIA.DeviceProperties

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	8.3	No	Yes	No	No	No

MBS("WIA.DeviceProperties"; Device)

Parameters

Device

You can pass index of device to check them in a row. Or pass name or unique ID of device. Pass empty string for current device.

\$index

Result Returns JSON or error.

Description

Use WIA.DevicePropertyKeys is you only need the keys.

Examples

Queries properties of first device:

MBS("WIA.DeviceProperties"; 0)

Example result: {

```
"Unique Device ID": " { 6BDD1FC6-810F-11D0-BEC7-08002BE2092F } \\0000",
"Manufacturer": "Brother",
"Description": "Brother DCP-8085DN LAN",
"Type": 65537,
"Port": "BRNET",
"Name": "Brother DCP-8085DN LAN",
"Server": "local",
"Remote Device ID": "",
"UI Class ID": " { 4B29E704-7E5A-466c-A5FD-8BAEC62DC2BA } ",
"Hardware Configuration": 0,
"BaudRate": "",
"STI Generic Capabilities": 57,
"WIA Version": "2.0",
"Driver Version": "3.10.6.13",
"PnP ID String": "\\?*\root# image# 0000# { 6bdd1fc6-810f-11d0-bec7-08002be2092f } ",
"STI Driver Version": 3
}
```

Query current device properties:

MBS("WIA.DeviceProperties"; MBS("WIA.GetCurrentDevice"))

See also

- 181.4 WIA.DevicePropertyKeys 8497
- 181.6 WIA.GetCurrentDevice 8503
- 181.20 WIA.SetDevicePropertyValue 8525

181.3.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 17th June 2018, last changed 15th November 2019.

181.4 WIA.DevicePropertyKeys

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.DevicePropertyKeys"; Device)

Parameters

Device

You can pass index of device to check them in a row. Or pass name or unique ID of device. Pass empty string for current device.

\$index

Result Returns OK or error.

Description

The current device (connected) may show more device properties than just the information from the registry, which you get without connection.

Use WIA.DeviceProperties to query all values with keys as JSON.

Examples

Query properties of current device:

MBS("WIA.DevicePropertyKeys"; "")

Example result: Item Name

Full Item Name

Item Flags

Unique Device ID

Manufacturer

Description

Type

Port

Name

Server

Remote Device ID

UI Class ID

Hardware Configuration

BaudRate

STI Generic Capabilities

WIA Version

Driver Version

PnP ID String

STI Driver Version

User Name

Item Category

Document Handling Capabilities

Document Handling Status

Max Scan Time
Access Rights
Horizontal Optical Resolution
Vertical Optical Resolution
Preview
Show preview control
Maximum Horizontal Scan Size
Maximum Vertical Scan Size
Minimum Vertical Scan Size
Minimum Horizontal Scan Size
Horizontal Bed Registration
Vertical Bed Registration
Page Size
Current Intent
Firmware Version
Horizontal Resolution
Vertical Resolution
Horizontal Start Position
Vertical Start Position
Horizontal Extent
Vertical Extent
Rotation
Orientation
DeskewX
DeskewY
Brightness
Contrast
Item Size
Data Type
Bits Per Pixel
Preferred Format
Format
Compression
Photometric Interpretation
Lamp Warm up Time
Media Type
Channels Per Pixel
Bits Per Channel
Planar
Pixels Per Line
Number of Lines
Bytes Per Line
Threshold
Buffer Size
Filename extension
Sheet Feeder Registration
Pages
Document Handling Select

Page Width

Page Height

List properties:

```

Set Variable [ $device; Value:Get(ScriptParameter) ]
Set Variable [ $list; Value:MBS("WIA.DevicePropertyKeys"; $device) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $list ]
Else
Set Variable [ $count; Value:ValueCount ( $list ) ]
If [ $count >0 ]
Set Variable [ $i; Value:1 ]
Loop
Set Variable [ $key; Value:GetValue ( $list; $i ) ]
Set Variable [ $value; Value:MBS("WIA.DevicePropertyValue"; $device; $key) ]
New Record/Request
Set Field [ WIA Scan::Device; $device ]
Set Field [ WIA Scan::Key; $key ]
Set Field [ WIA Scan::Value; $value ]
Commit Records/Requests [ No dialog ]
# Next
Set Variable [ $i; Value:$i+1 ]
Exit Loop If [ $i >$count ]
End Loop
End If
End If

```

See also

- [124.6 IsError](#) 6266
- [181.3 WIA.DeviceProperties](#) 8495
- [181.5 WIA.DevicePropertyValue](#) 8500
- [181.20 WIA.SetDevicePropertyValue](#) 8525

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 15th November 2019.

181.5 WIA.DevicePropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.DevicePropertyValue"; Device; Key)

Parameters

Device

You can pass index of device to check them in a row. Or pass name or unique ID of device. Pass empty string for current device.

\$index

Key

The property key. Can be a text with the name of the property or the corresponding ID.

"Name"

Result Returns value or error.

Description

You can use WIA.DevicePropertyKeys to learn about available keys.

Values are returned as numbers, booleans or converted to text.

Document Handling Status values:

FEED_READY	1	The document feeder has a page loaded and is ready for use.
FLAT_READY	2	The flatbed is ready for use.
DUP_READY	4	The duplexer is enabled and ready to use.
FLAT_COVER_UP	8	The flatbed cover is up.
PATH_COVER_UP	16	The paper path is covered and is preventing proper operation.
PAPER_JAM	32	A document is stuck in the document feeder.
FILM_TPA_READY	64	A transparency adapter is installed and ready for use.
STORAGE_READY	128	A storage device is installed and ready for use.
STORAGE_FULL	256	The storage is full; no upload operations are possible.
MULTIPLE_FEED	512	A multiple feed occurred; this type of feed usually occurs with a PAPER_JAM value.
DEVICE_ATTENTION	1024	There is an error that requires user intervention on the scanner.
LAMP_ERR	2048	The scanner has a problem with the lamp and is not ready.
IMPRINTER_READY	4096	The imprinter capabilities of an imprinter/endorser are enabled and ready for use.
ENDORSER_READY	8192	The endorser capabilities of an imprinter/endorser are enabled and ready for use.
BARCODE_READER_READY	16384	The barcode reader is enabled and ready for use.
PATCH_CODE_READER_READY	32768	The patch code reader is enabled and ready for use.
MICR_READER_READY	65536	The MICR reader is enabled and ready for use.

e.g. if you get back 5, this is feed and duplex ready.

Document Handling Capabilities:

FEED	1	The scanner has a document feeder installed.
FLAT	2	The scanner has a flatbed platen.
DUP	4	The scanner has a duplexer.
DETECT_FLAT	8	The scanner can detect a document on the flatbed platen.
DETECT_SCAN	16	The scanner can detect a document in the feeder only by scanning.
DETECT_FEED	32	The scanner can detect a document in the feeder.
DETECT_DUP	64	The scanner can detect a duplex scan request from a user.
DETECT_FEED_AVAIL	128	The scanner can detect when a document feeder is installed.
DETECT_DUP_AVAIL	256	The scanner can detect when a duplexer is installed.
FILM_TPA	512	The scanner has a transparency or film scanning adapter.
DETECT_FILM_TPA	1024	The scanner can detect when the transparency or film scanning adapter is ready to scan.
STOR	2048	The scanner is equipped with an internal storage device.
DETECT_STOR	4096	The scanner can detect when there is a document in the internal storage.
ADVANCED_DUP	8192	The device supports advanced duplex scan configuration, independently on each document size.
AUTO_SOURCE	16384	The device supports auto-configured scanning.
IMPRINTER	65536	Imprinter
ENDORSER	131072	Endorser
BARCODE_READER	262144	Barcode Reader
PATCH_CODE_READER	524288	Patch Code Reader
MICR_READER	1048576	MICR Reader

e.g. if you get back 21, this is detect scan, duplex and feeder.

Examples

Query name of current device:

```
MBS( "WIA.DevicePropertyValue"; "" ; "Name" )
```

List properties:

```
Set Variable [ $device; Value:Get(ScriptParameter) ]
Set Variable [ $list; Value:MBS("WIA.DevicePropertyKeys"; $device) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $list ]
Else
Set Variable [ $count; Value:ValueCount ( $list ) ]
If [ $count >0 ]
Set Variable [ $i; Value:1 ]
Loop
Set Variable [ $key; Value:GetValue ( $list; $i ) ]
Set Variable [ $value; Value:MBS("WIA.DevicePropertyValue"; $device; $key) ]
New Record/Request
Set Field [ WIA Scan::Device; $device ]
Set Field [ WIA Scan::Key; $key ]
Set Field [ WIA Scan::Value; $value ]
Commit Records/Requests [ No dialog ]
```

```
# Next
Set Variable [ $i; Value:$i+1 ]
Exit Loop If [ $i >$count ]
End Loop
End If
End If
```

Query maximum vertical optical resolution:

```
// via name
MBS("Wia.DevicePropertyValue"; ""; "Vertical Optical Resolution")
// via ID
MBS("Wia.DevicePropertyValue"; ""; 3091)
```

Query Manufacturer of first device:

```
MBS( "WIA.DevicePropertyValue"; 0; "Manufacturer")
```

Example result: "Brother"

Query Document Handling Status:

```
MBS( "WIA.DevicePropertyValue"; ""; "Document Handling Status" )
```

See also

- [124.6 IsError](#) 6266
- [181.4 WIA.DevicePropertyKeys](#) 8497
- [181.15 WIA.ItemPropertyValue](#) 8517
- [181.18 WIA.SelectDeviceDialog](#) 8523
- [181.19 WIA.SetCurrentDevice](#) 8524
- [181.20 WIA.SetDevicePropertyValue](#) 8525
- [181.21 WIA.SetItemPropertyValue](#) 8527

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

181.5.1 Blog Entries

- [Scanning Options](#)

Created 6th November 2016, last changed 16th November 2019.

181.6 WIA.GetCurrentDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.GetCurrentDevice")

Result Returns text or error.

Description

See also

- [181.1 WIA.ClearCurrentDevice](#) 8493
- [181.3 WIA.DeviceProperties](#) 8495
- [181.18 WIA.SelectDeviceDialog](#) 8523
- [181.19 WIA.SetCurrentDevice](#) 8524

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 6th November 2016.

181.7 WIA.GetCurrentItem

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	8.3	No	Yes	No	No	No

MBS("WIA.GetCurrentItem")

Result Returns text or error.

Description

All items where you can pass item, you can pass this ID or empty string to use current item.

181.7.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 18th June 2018, last changed 18th June 2018.

181.8 WIA.Image

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.Image"; Index)

Parameters

Index

The index of the image from 0 to WIA.ImageCount-1.

0

Result Returns text or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Import Images Script:

```
Set Variable [ $count; Value:MBS( "WIA.ImageCount" ) ]
If [ $count >0 ]
Set Variable [ $i; Value:0 ]
Go to Layout [ "Images" (Images) ]
Loop
Set Variable [ $ImagePath; Value:MBS( "WIA.Image"; $i ) ]
If [ MBS( "Files.FileExists"; $ImagePath ) ]
Set Variable [ $image; Value:MBS( "Container.ReadFile"; $ImagePath ) ]
New Record/Request
Set Field [ Images::Name; MBS( "Path.LastPathComponent"; $ImagePath ) ]
Set Field [ Images::Image; $image ]
Commit Records/Requests [ No dialog ]
End If
# Next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i >= $count ]
End Loop
End If
```

See also

- 55.28 Container.ReadFile 1645
- 78.19 Files.FileExists 3801
- 121.2 Path.FileMakerPathToNativePath 6139
- 121.5 Path.LastPathComponent 6144

- 181.9 WIA.ImageCount 8507
- 181.10 WIA.ImageDialog 8508
- 181.11 WIA.Images 8510
- 181.17 WIA.Scan 8521

Example Databases

- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 25th November 2019.

181.9 WIA.ImageCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.ImageCount")

Result Returns number or error.

Description

Examples

Import Images Script:

```
Set Variable [ $count; Value:MBS( "WIA.ImageCount" ) ]
If [ $count >0 ]
Set Variable [ $i; Value:0 ]
Go to Layout [ "Images" (Images) ]
Loop
Set Variable [ $ImagePath; Value:MBS( "WIA.Image"; $i ) ]
If [ MBS( "Files.FileExists"; $ImagePath ) ]
Set Variable [ $image; Value:MBS( "Container.ReadFile"; $ImagePath ) ]
New Record/Request
Set Field [ Images::Name; MBS( "Path.LastPathComponent"; $ImagePath ) ]
Set Field [ Images::Image; $image ]
Commit Records/Requests [ No dialog ]
End If
# Next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i >= $count ]
End Loop
End If
```

See also

- 55.28 Container.ReadFile 1645
- 78.19 Files.FileExists 3801
- 121.5 Path.LastPathComponent 6144
- 181.8 WIA.Image 8505
- 181.10 WIA.ImageDialog 8508

Example Databases

- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 25th November 2019.

181.10 WIA.ImageDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.ImageDialog"; Flags; FolderPath { ; FileName })

Parameters

Flags

Specifies dialog box behavior. Currently only UseCommonUI is available. Use this flag to use the system UI instead of the vendor-supplied UI.

"UseCommonUI"

FolderPath

The native path to the folder where images are stored. Your application must have write permissions for this folder.

"C:\Scans\"

FileName

Optional

The file name to use. Extensions and/or numbers are added if needed.

"Scan"

Result Returns Cancel, OK or error.

Description

This may ask the user for the device to use.

If a current device is selected, this one will be used.

When the function returns, you can use WIA.ImageCount to query how many images got scanned. Even if the user cancels, there may be some images already available.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

Examples

Show image dialog:

```
Set Variable [ $folder; Value:MBS( "Folders.UserTemporary" ) ]
Set Variable [ $path; Value:MBS( "Path.AddPathComponent"; $folder; "FileMakerScans" ) ]
Set Variable [ $r; Value:MBS( "Files.CreateDirectory"; $path ) ]
# Scan...
Set Variable [ $r; Value:MBS("WIA.ImageDialog"; "Default"; $path; "scan" ) ]
Set Variable [ $count; Value:MBS( "WIA.ImageCount" ) ]
# Result can be OK or Cancel and in both cases some images may be there
If [ $r = "OK" ]
Show Custom Dialog [ "Scan Result"; $r ]
End If
```



```

If [ $count >0 ]
Set Variable [ $i; Value:0 ]
Go to Layout [ "Images" (Images) ]
Loop
Set Variable [ $ImagePath; Value:MBS( "WIA.Image"; $i) ]
Set Variable [ $image; Value:MBS( "Container.ReadFile"; $ImagePath) ]
New Record/Request
Set Field [ Images::Name; MBS( "Path.LastPathComponent"; $ImagePath ) ]
Set Field [ Images::Image; $image ]
Commit Records/Requests [ No dialog ]
# Next
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $i >= $count ]
End Loop
End If

```

See also

- 55.28 Container.ReadFile 1645
- 78.10 Files.CreateDirectory 3785
- 81.16 Folders.UserTemporary 4187
- 121.1 Path.AddPathComponent 6135
- 121.2 Path.FileMakerPathToNativePath 6139
- 121.5 Path.LastPathComponent 6144
- 181.8 WIA.Image 8505
- 181.9 WIA.ImageCount 8507

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 6th November 2016.

181.11 WIA.Images

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	9.1	No	Yes	No	No	No

MBS("WIA.Images")

Result Returns path list or error.

Description

You can path list of image file paths to DynaPDF.AppendImagePages function to add them to a PDF file.

Examples

Query path list:

```
Set Variable [ $paths; Value:MBS( "WIA.Images" ) ]
```

See also

- [70.13 DynaPDF.AppendImagePage](#) 2571
- [70.14 DynaPDF.AppendImagePages](#) 2573
- [181.8 WIA.Image](#) 8505

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)

181.11.1 Blog Entries

- [Create PDF from scanned images and skip blank pages](#)
- [Neues MBS FileMaker Plugin 9.1](#)
- [MBS FileMaker Plugin 9.1 - More than 5700 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.1pr2](#)

Created 11st February 2019, last changed 25th November 2019.

181.12 WIA.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.Initialize")

Result Returns OK or error.

Description

This is done automatically if needed, but you can explicit call it in solution startup if you like. Calls FM.InitMessageFilter automatically.

Examples

Initialize:

```
Set Variable [ $r; Value:MBS("WIA.Initialize") ]
Show Custom Dialog [ "WIA Initialize"; $r ]
```

See also

- [79.29 FM.InitMessageFilter](#) 3936
- [97.6 Java.Initialize](#) 5166
- [120.9 OCR.Initialize](#) 6119
- [131.2 Proj.Initialize](#) 6546
- [163.21 TAPI.Initialize](#) 7748
- [190.115 XL.Initialize](#) 9005

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 18th June 2018.

181.13 WIA.ItemProperties

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	8.3	No	Yes	No	No	No

MBS("WIA.ItemProperties"; Item)

Parameters

Item

The item of current device to query. For a scanner this is typical Flatbed or Feeder. see WIA.ListItems
"Flatbed"

Result Returns JSON or error.

Description

Examples

Query feeder properties:

MBS("WIA.ItemProperties"; "Feeder")

```
Example result: {
  "Item Name": "Feeder",
  "Full Item Name": "0000\\Root\\Feeder",
  "Item Flags": 532483,
  "Color Profile Name": "sRGB Color Space Profile.icm",
  "Access Rights": 1,
  "Horizontal Optical Resolution": 1200,
  "Vertical Optical Resolution": 2400,
  "Preview": 0,
  "Show preview control": 1,
  "Maximum Horizontal Scan Size": 8500,
  "Maximum Vertical Scan Size": 14000,
  "Sheet Feeder Registration": 1,
  "Minimum Vertical Scan Size": 1,
  "Minimum Horizontal Scan Size": 0,
  "Document Handling Select": 32,
  "Pages": 0,
  "Page Size": 0,
  "Current Intent": 0,
  "Item Category": " { FE131934-F84C-42AD-8DA4-6129CDDD7288 } ",
  "Horizontal Resolution": 200,
  "Vertical Resolution": 200,
  "Horizontal Start Position": 0,
  "Vertical Start Position": 0,
  "Horizontal Extent": 1700,
  "Page Width": 850,
  "Vertical Extent": 2800,
```

```

"Page Height": 1400,
"Rotation": 0,
"Orientation": 0,
"DeskewX": 0,
"DeskewY": 0,
"Brightness": 0,
"Contrast": 0,
"Item Size": 0,
"Data Type": 3,
"Bits Per Pixel": 24,
"Preferred Format": " { B96B3CAB-0728-11D3-9D7B-0000F81EF32E } ",
"Format": " { B96B3CAB-0728-11D3-9D7B-0000F81EF32E } ",
"Compression": 0,
"Photometric Interpretation": 0,
"Lamp Warm up Time": 10000,
"Media Type": 2,
"Channels Per Pixel": 3,
"Bits Per Channel": 8,
"Planar": 0,
"Pixels Per Line": 1700,
"Number of Lines": 2800,
"Bytes Per Line": 0,
"Threshold": 128,
"Buffer Size": 131072,
"Filename extension": "BMP"
}

```

See also

- 181.14 WIA.ItemPropertyKeys 8514
- 181.15 WIA.ItemPropertyValue 8517
- 181.16 WIA.ListItems 8520
- 181.21 WIA.SetItemPropertyValue 8527

181.13.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 17th June 2018, last changed 19th February 2019.

181.14 WIA.ItemPropertyKeys

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.ItemPropertyKeys"; Item)

Parameters

Item

The item of current device to query. For a scanner this is typical Flatbed or Feeder. see WIA.ListItems "Flatbed"

Result Returns list or error.

Description

Use WIA.ItemProperties to query all values with keys as JSON.

Examples

List properties of Flatbed unit:

MBS("WIA.ItemPropertyKeys"; "Flatbed")

Example result: Item Name

Full Item Name

Item Flags

Color Profile Name

Access Rights

Horizontal Optical Resolution

Vertical Optical Resolution

Preview

Show preview control

Maximum Horizontal Scan Size

Maximum Vertical Scan Size

Minimum Vertical Scan Size

Minimum Horizontal Scan Size

Horizontal Bed Registration

Vertical Bed Registration

Page Size

Current Intent

Item Category

Horizontal Resolution

Vertical Resolution

Horizontal Start Position

Vertical Start Position

Horizontal Extent

Vertical Extent

Rotation

Orientation

DeskewX
 DeskewY
 Brightness
 Contrast
 Item Size
 Data Type
 Bits Per Pixel
 Preferred Format
 Format
 Compression
 Photometric Interpretation
 Lamp Warm up Time
 Media Type
 Channels Per Pixel
 Bits Per Channel
 Planar
 Pixels Per Line
 Number of Lines
 Bytes Per Line
 Threshold
 Buffer Size
 Filename extension

List properties of feeder:

```

Set Variable [ $item ; Value: "Feeder" ]
Set Variable [ $list ; Value: MBS("WIA.ItemPropertyKeys"; $item) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error" ; $list ]
Else
Set Variable [ $count ; Value: ValueCount ( $list ) ]
If [ $count >0 ]
Set Variable [ $i ; Value: 1 ]
Loop
Set Variable [ $key ; Value: GetValue ( $list; $i ) ]
Set Variable [ $value ; Value: MBS("WIA.ItemPropertyValue"; $item; $key) ]
New Record/Request
Set Field [ WIA Scan::Device ; $item ]
Set Field [ WIA Scan::Key ; $key ]
Set Field [ WIA Scan::Value ; $value ]
Commit Records/Requests [ With dialog: Off ]
# Next
Set Variable [ $i ; Value: $i+1 ]
Exit Loop If [ $i >$count ]
End Loop
End If
End If
  
```

See also

- 124.6 IsError 6266
- 181.13 WIA.ItemProperties 8512
- 181.15 WIA.ItemPropertyValue 8517
- 181.16 WIA.ListItems 8520

181.14.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 28th November 2016, last changed 15th November 2019.

181.15 WIA.ItemPropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.ItemPropertyValue"; Item; Key)

Parameters

Item

The item of current device to query. For a scanner this is typical Flatbed or Feeder. see WIA.ListItems "Flatbed"

Key

The property key. Can be a text with the name of the property or the corresponding ID. "Name"

Result Returns value or error.

Description

File formats UUIDs:

BMP	B96B3CAB-0728-11D3-9D7B0000F81EF32E
JPEG	B96B3CAE-0728-11D3-9D7B0000F81EF32E
PNG	B96B3CAF-0728-11D3-9D7B0000F81EF32E
GIF	B96B3CB0-0728-11D3-9D7B0000F81EF32E
TIFF	B96B3CB1-0728-11D3-9D7B0000F81EF32E

Document Handling Flags:

Name	Value	Description
FEEDER 1	Scan by using the document feeder.	
FLATBED 1	Scan by using the flatbed.	
FEEDER 2	Scan by using duplex operation.	
FRONT FEED 1	Scan the front of the document first. This value is valid only when DUPLEX is set.	
BACK FEED 1	Scan the back of the document first. This value is valid only when DUPLEX is set.	
FRONT FEED 2	Scan the front side.	
BACK FEED 2	Scan the back side. This value is valid only when DUPLEX is set.	
FEED 1	Scan the front page of the document.	
FEED 2	Enable per-feed mode. Priorities the front document while scanning.	
ADVANCED DUPLEX 101	Enable advanced feeding of the next document after a scan.	
ADVANCED DUPLEX 102	Scan by using individual configuration settings for each side feeds from (WIA_CATEGORY_FEEDER, FRONT and WIA_CATEGORY_FEEDER, BACK). This flag cannot be set together with DUPLEX. A device that supports different scan settings for the front and back feeds should implement the optional ADF front and back feeds and it should support both DUPLEX and ADVANCED_DUPLEX.	

Use WIA.ItemProperties to query all values with keys as JSON.

Use WIA.SetItemPropertyValue to set a value.

Examples

Queries resolution:

MBS("WIA.ItemPropertyValue"; "Flatbed"; "Horizontal Resolution")

Queries file extension:

MBS("WIA.ItemPropertyValue"; "Flatbed"; "Filename extension")

Queries media type:

```
MBS( "WIA.ItemPropertyValue"; "Flatbed"; "Media Type" )
```

Queries orientation:

```
MBS( "WIA.ItemPropertyValue"; "Flatbed"; "Orientation" )
// 0 = Portrait, 1 = Landscape, 2 = Rotate 180, 3 = Rotate 270
```

List properties of feeder:

```
Set Variable [ $item ; Value: "Feeder" ]
Set Variable [ $list ; Value: MBS("WIA.ItemPropertyKeys"; $item) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error" ; $list ]
Else
Set Variable [ $count ; Value: ValueCount ( $list ) ]
If [ $count >0 ]
Set Variable [ $i ; Value: 1 ]
Loop
Set Variable [ $key ; Value: GetValue ( $list; $i ) ]
Set Variable [ $value ; Value: MBS("WIA.ItemPropertyValue"; $item; $key) ]
New Record/Request
Set Field [ WIA Scan::Device ; $item ]
Set Field [ WIA Scan::Key ; $key ]
Set Field [ WIA Scan::Value ; $value ]
Commit Records/Requests [ With dialog: Off ]
# Next
Set Variable [ $i ; Value: $i+1 ]
Exit Loop If [ $i >$count ]
End Loop
End If
End If
```

Query document handling select:

```
MBS( "WIA.ItemPropertyValue"; "feeder"; "Document Handling Select")
```

See also

- 124.6 IsError 6266
- 181.5 WIA.DevicePropertyValue 8500
- 181.13 WIA.ItemProperties 8512
- 181.14 WIA.ItemPropertyKeys 8514
- 181.16 WIA.ListItems 8520

181.15. *WIA.ITEMPROPERTYVALUE*

8519

- 181.21 *WIA.SetItemPropertyValue*

8527

181.15.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 28th November 2016, last changed 21st November 2019.

181.16 WIA.ListItems

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.ListItems")

Result Returns list or error.

Description

Returns a list with items, e.g. Flatbed and Feeder for a scanner.

Examples

List items:

MBS("WIA.ListItems")

See also

- [181.13 WIA.ItemProperties](#) 8512
- [181.14 WIA.ItemPropertyKeys](#) 8514
- [181.15 WIA.ItemPropertyValue](#) 8517
- [181.17 WIA.Scan](#) 8521
- [181.21 WIA.SetItemPropertyValue](#) 8527

181.16.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 28th November 2016, last changed 28th November 2016.

181.17 WIA.Scan

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.Scan"; Item)

Parameters**Item**

The item of current device to query. For a scanner this is typical Flatbed or Feeder. see WIA.ListItems "Flatbed"

Result Returns OK or error.

Description

We normally put the files on successful transfer into temp file and you get paths back from WIA.Image function.

If the document feeder fails to supply an image, the returned path to image file will be empty.

Examples

Scan via flatbed:

```
MBS( "WIA.Scan"; "Flatbed" )
```

Scan via feeder:

```
MBS( "WIA.Scan"; "Feeder" )
```

Scan duplex from document feeder:

```
# switch on duplex mode
Set Variable [ $r ; Value: MBS( "WIA.SetItemPropertyValue"; "Feeder"; "Document Handling Select"; 4 )
/* 1 = feeder 2 = flatbed 4 = duplex 8 = front first 16 = back first 32 = front only 64 = back only 128 =
next page 256 = preferred 512 = auto advance see https://docs.microsoft.... ]
#
# Scan via document Feeder
Set Variable [ $r ; Value: MBS( "WIA.Scan"; "Feeder" ) ]
#
# Result can be OK or Cancel and in both cases some images may be there
If [ $r "OK" ]
Show Custom Dialog [ "Scan Result" ; $r ]
Else
Perform Script [ Specified: From list ; "Import Images" ; Parameter: ]
End If
```

See also

- 181.8 WIA.Image 8505
- 181.16 WIA.ListItems 8520
- 181.21 WIA.SetItemPropertyValue 8527

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

181.17.1 Blog Entries

- [Create PDF from scanned images and skip blank pages](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)
- [Scanning Options](#)
- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 28th November 2016, last changed 11st February 2019.

181.18 WIA.SelectDeviceDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.SelectDeviceDialog"; DeviceType)

Parameters

DeviceType

Which type of device to be selected. Can be Default, Scanner or DigitalCamera.
"Default"

Result Returns OK or error.

Description

Examples

Select a device:

```
Set Variable [ $r; Value:MBS("WIA.SelectDeviceDialog"; "Scanner") ]
If [ $r = "OK" ]
Show Custom Dialog [ "Select Device Dialog Result"; "DeviceID: " & MBS("WIA.GetCurrentDevice") &
$& "Name: " & MBS("WIA.DevicePropertyValue"; ""); "Nam... ]
Else
Show Custom Dialog [ "Select Device Dialog Result"; $r ]
End If
```

See also

- [181.5 WIA.DevicePropertyValue](#) 8500
- [181.6 WIA.GetCurrentDevice](#) 8503

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 6th November 2016.

181.19 WIA.SetCurrentDevice

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.SetCurrentDevice"; DeviceID)

Parameters

DeviceID

Pass name or unique ID for device.
"Brother DCP-8085DN LAN"

Result Returns OK or error.

Description

Examples

Select a device:

```
Set Variable [ $r; Value:MBS("WIA.SetCurrentDevice"; WIA Scan::Value) ]
If [ $r = "OK" ]
Show Custom Dialog [ "Select Device Dialog Result"; "DeviceID: " & MBS("WIA.GetCurrentDevice") &
$& "Name: " & MBS("WIA.DevicePropertyValue"; ""); "Nam... ]
Else
Show Custom Dialog [ "Select Device Dialog Result"; $r ]
End If
```

See also

- [181.1 WIA.ClearCurrentDevice](#) 8493
- [181.5 WIA.DevicePropertyValue](#) 8500
- [181.6 WIA.GetCurrentDevice](#) 8503

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

Created 6th November 2016, last changed 6th November 2016.

181.20 WIA.SetDevicePropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.SetDevicePropertyValue"; Device; Key; Value { ; Type })

Parameters

Device

You can pass index of device to check them in a row. Or pass name or unique ID of device. Pass empty string for current device.

""

Key

The property key.

"Horizontal Resolution"

Value

The value to use.

300

Type

Optional

The data type to use. By default if empty or auto, we detect it based on the type of the existing property. Can be Boolean, Int16, Int32, Int64, UInt16, UInt32, UInt64, String or Double.

"Int32"

Result Returns OK or error.

Description

You can use WIA.DevicePropertyKeys to learn about available keys.

To learn about properties you may need to visit Microsoft websites and figure out the options and the values for the listed constants:

[https://msdn.microsoft.com/en-us/library/windows/desktop/ms630196\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/ms630196(v=vs.85).aspx)

Page sizes are listed here:

[https://msdn.microsoft.com/en-us/library/aa360096\(v=VS.85\).aspx](https://msdn.microsoft.com/en-us/library/aa360096(v=VS.85).aspx)

Please query with WIA.DeviceProperties to see what keys and values are possible. You may want to query before and after setting the value via dialog.

Examples

Set to scan all pages:

MBS("WIA.SetDevicePropertyValue"; ""; 3096; 0)

Set media type to file:

```
MBS( "WIA.SetDevicePropertyValue"; ""; "Media Type"; 2)
```

Set page size to A4:

```
MBS( "WIA.SetDevicePropertyValue"; ""; "Page Size"; 0)
```

Request feeder with duplex:

```
MBS( "WIA.SetDevicePropertyValue"; ""; "Device Handling Document"; 5 ) // 1 for feeder + 4 for duplex
```

Request to keep one page in memory:

```
MBS( "WIA.SetDevicePropertyValue"; ""; "Pages"; 1 ) // keep one page in memory
```

See also

- 181.3 WIA.DeviceProperties 8495
- 181.4 WIA.DevicePropertyKeys 8497
- 181.5 WIA.DevicePropertyValue 8500
- 181.21 WIA.SetItemPropertyValue 8527

Created 10th November 2016, last changed 15th November 2019.

181.21 WIA.SetItemPropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
181 WIA	6.5	No	Yes	No	No	No

MBS("WIA.SetItemPropertyValue"; Item; Key; Value)

Parameters

Item

The item of current device to query. For a scanner this is typical Flatbed or Feeder. see WIA.ListItems "Flatbed"

Key

The property key. Can be a text with the name of the property or the corresponding ID. "Name"

Value

The new value for this property.

Result Returns OK or error.

Description

Please query with WIA.ItemProperties to see what keys and values are possible. You may want to query before and after setting the value via dialog.

Examples

Set resolution:

```
MBS( "WIA.SetItemPropertyValue"; "Flatbed"; "Horizontal Resolution"; 300 ) &
MBS( "WIA.SetItemPropertyValue"; "Flatbed"; "Vertical Resolution"; 300 )
```

Set rotation:

```
MBS( "WIA.SetItemPropertyValue"; "Flatbed"; "Rotation"; 2 )
// 0 = Portrait, 1 = Landscape, 2 = Rotate 180, 3 = Rotate 270
```

Set gray or color:

```
MBS( "WIA.SetItemPropertyValue"; "Feeder"; "Current Intent"; 2)
// 1 = color
// 2 = gray
```

Set duplex:

```
Set Variable [ $r ; Value: MBS( "WIA.SetItemPropertyValue"; "Feeder"; "Document Handling Select"; 4 )
/*
1 = feeder
2 = flatbed
```

4 = duplex
 8 = front first
 16 = back first
 32 = front only
 64 = back only
 128 = next page
 256 = preferred
 512 = auto advance

see

<https://docs.microsoft.com/en-us/windows-hardware/drivers/image/wia-dps-document-handling-select>

```
/ ]
Show Custom Dialog [ "Set duplex" ; $r ]
```

Set to ignore blank pages:

```
Set Variable [ $r ; Value: MBS( "WIA.SetItemPropertyValue"; "Feeder"; "Blank Pages"; 1 )
```

```
/*
```

0 = Blank page detection is disabled. This is the required default value if the property is supported.

1 = The device detects blank pages and automatically skips scanning them (discards scanned data if any) and continues scanning.

2 = The device detects blank pages and acts as configured through the Job Separators property. This value is valid only when the Feeder item supports the Job Separators property.

see

<https://docs.microsoft.com/en-us/windows-hardware/drivers/image/wia-ips-blank-pages>

```
/ ]
Show Custom Dialog [ "Set blank pages" ; $r ]
```

Set to scan only front page:

```
Set Variable [ $r ; Value: MBS( "WIA.SetItemPropertyValue"; "Feeder"; "Document Handling Select"; 32 )
```

Set image format to JPEG:

```
MBS( "WIA.SetItemPropertyValue"; "Flatbed"; "Format"; "B96B3CAE-0728-11D3-9D7B0000F81EF32E"
)
```

See also

- 181.5 WIA.DevicePropertyValue 8500
- 181.13 WIA.ItemProperties 8512
- 181.15 WIA.ItemPropertyValue 8517

<i>181.21. WIA.SETITEMPROPERTYVALUE</i>	8529
• 181.16 WIA.ListItems	8520
• 181.17 WIA.Scan	8521
• 181.20 WIA.SetDevicePropertyValue	8525

Example Databases

- [DynaPDF/Scan with WIA to PDF](#)
- [Win Only/WIA Scan](#)

181.21.1 Blog Entries

- [Scanning Options](#)
- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 28th November 2016, last changed 15th November 2019.

Chapter 182

Window

Control windows.

Move window, fade in/out, change title or disable close button.

182.1 Toolbar.Install

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Toolbar.Install")

Result Returns OK or error.

Description

You call this functions once at startup. You can use `Toolbar.Register` after or before to introduce new identifiers. Use `Window.SetToolbarConfiguration` to install a new configuration including your custom identifiers or use customize toolbar palette.

See also

- 182.3 `Toolbar.Register` 8534
- 167.4 `Toolbar.SetImage` 7942
- 167.5 `Toolbar.SetLabel` 7944
- 167.6 `Toolbar.SetPaletteLabel` 7946
- 167.7 `Toolbar.SetTooltip` 7947
- 182.99 `Window.SetToolbarConfiguration` 8656

Example Databases

- [Mac only/Toolbar/Custom Toolbar Items](#)

182.1.1 Blog Entries

- [Toolbar functions for FileMaker on Mac](#)

Created 20th August 2014, last changed 20th August 2014.

182.2 Toolbar.InstallBackground

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Toolbar.InstallBackground"; Image { ; Mode; DisableTitle })

Parameters

Image

The image to you. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$img

Mode

Optional

Can be 0 to stretch (default) or 1 to left align image.

0

DisableTitle

Optional

If 1, we do not draw the window title on top of the image.

0

Result Returns OK or error.

Description

There is currently only one style for all FileMaker windows on Mac OS X.

We draw an image below the toolbar buttons. Either we stretch it to full width we align it to left and fill the space on the right with last pixel colors.

There are little redraw issues, especially when resizing window.

Currently doesn't work in FileMaker 14 and newer. If you need that to work, please contact us.

Example Databases

- [Mac only/Toolbar/Custom Toolbar Background](#)

182.2.1 Blog Entries

- [MBS FileMaker Plugin 4.3 for OS X/Windows - More than 2700 Functions In One Plugin](#)
- [Toolbar functions for FileMaker on Mac](#)

Created 25th August 2014, last changed 28th August 2016.

182.3 Toolbar.Register

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Toolbar.Register"; Identifier; FileName; ScriptName; Parameter; Label; PaletteLabel; Tooltip; Image)

Parameters

Identifier

The toolbar identifier. Must be an unique string.

"Test"

FileName

The file name of the FileMaker database where the script is located.

"Toolbar.fmp12"

ScriptName

The name of the script to call when toolbar item is pressed.

"ToolbarScript"

Parameter

The parameter to pass to the script. This can be same as identifier. Using different parameters allows you to use one script for all toolbar items.

"SwitchToMainLayout"

Label

The label, which normally appears in the toolbar and in the overflow menu.

"Hello"

PaletteLabel

The label that appears when it is in the customization palette. Can be same as label or different.

"Hello World"

Tooltip

The tooltip for the label!

"click me"

Image

The image to use for the toolbar item. Pass a container value with JPEG, TIFF, PNG or other image formats.

\$image

Result Returns OK or error.

Description

Please use an identifier with your own prefix/suffix to make sure you have no conflict with existing identifiers.

Once your item is registered, the next time the toolbar updates itself it will use it.

You can use Window.SetToolbarConfiguration or the customize palette to add your toolbar item.

You need to call `Toolbar.Install` at least once before using this command to have it take effect.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

See also

- 182.1 `Toolbar.Install` 8531
- 182.4 `Toolbar.Unregister` 8536
- 182.99 `Window.SetToolbarConfiguration` 8656

Example Databases

- [Mac only/Toolbar/Custom Toolbar Items](#)

182.3.1 Blog Entries

- [Replace toolbar images and labels](#)
- [Toolbar functions for FileMaker on Mac](#)

Created 20th August 2014, last changed 12nd September 2016.

182.4 Toolbar.Unregister

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Toolbar.Unregister"; Identifier)

Parameters

Identifier

The toolbar item identifier.

"Test"

Result Returns OK or error.

Description

The changes apply as soon as the toolbar updates itself.

See also

- 182.3 Toolbar.Register

8534

Created 20th August 2014, last changed 20th August 2014.

182.5 Window.Activate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.8	Yes	Yes	No	No	No

MBS("Window.Activate"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK on success.

Description

This function does more than just show. if the window has been minimized, it will restore it. Also the window is moved to front and made the current window for keyboard input.

Sadly windows limits which windows can go to front, so some windows may not come to front unless they are clicked on.

As activation can be asynchronously, the window may activate later, e.g. in a script pause or at the end of the script.

Use MBS("Process.SetFrontMost") to move the whole app to the front.

See also

- [129.10 Process.SetFrontMost](#) 6486
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

Example Databases

- [RemoteControl/Control Windows Calculator](#)

182.5.1 Blog Entries

- [SetFrontMost for Windows](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS Filemaker Plugin, version 2.8pr4](#)

Created 18th August 2014, last changed 29th March 2019.

182.6 Window.AddBottomOverlay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	5.3	Yes	No	No	No	No

```
MBS( "Window.AddBottomOverlay" { ; WindowRef; Color } )
```

Parameters

WindowRef

Optional

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Color

Optional

The color to use. Can be a color name or hex notation like in HTML. Default is OS X window color. "red"

Result Returns OK or error.

Description

Deprecated as it should no longer be needed.

Examples

Add red bottom control:

```
MBS( "Window.AddBottomOverlay"; 0; "# FF0000" )
```

Add gray bottom control:

```
MBS( "Window.AddBottomOverlay"; 0; "# ECECEC" )
```

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

Example Databases

- [Mac only/Hide Bottom Controls](#)

182.6.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr7](#)

- [MBS FileMaker Plugin, version 5.3pr1](#)

Created 11st August 2015, last changed 3th March 2020.

182.7 Window.AsPDF

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.3	Yes	No	No	No	No

MBS("Window.AsPDF"; WindowRef { ; Filename; DontRenderPreview })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Filename

Optional

The filename for the PDF file. Default is "window.pdf".

"mywindow.pdf"

DontRenderPreview

Optional

Pass 1 to not create a JPEG with preview of first page as part of the container.

0

Description

Examples

Queries PDF of current window:

```
MBS( "Window.AsPDF"
```

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

Example Databases

- [Window/PDF from Window \(Mac\)](#)

182.7.1 Blog Entries

- [MBS FileMaker Plugin, version 5.1pr1](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr3](#)

- [MBS Filemaker Plugin, version 2.3pr4](#)

Created 18th August 2014, last changed 9th March 2015.

182.8 Window.ClearFocus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.1	Yes	Yes	No	No	No

MBS("Window.ClearFocus"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

The focus goes back to the window with no control having focus.

Works only for OS controls like Webviewer, not for FileMaker's custom controls.

See also Window.SetFocus.

Examples

Clears focus of window:

```
MBS( "Window.ClearFocus"; Get(WindowName) )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.80 Window.SetFocus 8633

182.8.1 Blog Entries

- [MBS FileMaker Plugin, version 6.1pr3](#)
- [Render Image from a HTMLViewer](#)

Created 19th February 2016, last changed 5th October 2018.

182.9 Window.ClearTouchBar

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window 168 TouchBar	8.4	Yes	No	No	No	No

MBS("Window.ClearTouchBar"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

You assign the TouchBar with TouchBar.AssignToWindow function.

Examples

Clear touch bar for front window:

```
MBS( "Window.ClearTouchBar"; 0 )
```

See also

- 168.4 TouchBar.AssignToWindow 7965
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

182.9.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr2](#)

Created 8th August 2018, last changed 25th November 2019.

182.10 Window.ConfigureToolbarMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	8.3	Yes	No	No	No	No

MBS("Window.ConfigureToolbarMenu"; Mode)

Parameters

Mode

Pass 1 to disable menu completely. Pass 2 to remove the show/hide command. Pass 4 to remove the configuration command. Pass 6 to remove both commands.

1

Result Returns OK or error.

Description

The plugin can watch what menu is about to show up for the toolbar. We can remove menu or remove some entries.

Examples

Disable toolbar menus:

Set Variable [\$r; Value: MBS("Window.ConfigureToolbarMenu"; 1)]

182.10.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)
- [Configure Toolbar Menu with MBS FileMaker Plugin](#)

182.10.2 FileMaker Magazin

- [Ausgabe 4/2018, Seite 38](#)

Created 9th June 2018, last changed 27th August 2019.

182.11 Window.Current

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	5.2	Yes	Yes	No	No	No

MBS("Window.Current")

Result Returns number or error.

Description

This is same window the plugin would pick if you pass reference number 0 or empty to a window function. It can be that the plugin does reference here the data viewer, debugger or some calculation dialog, if one is open.

The number returned is a number starting 15001 and counting up for each window the plugin sees.

Examples

Query current window:

```
MBS("Window.Current")
```

Show title of current window:

```
MBS( "Window.GetTitle" ; MBS( "Window.Current" ) )
```

See also

- 182.28 Window.GetTitle 8568
- 182.94 Window.SetTag 8651

182.11.1 Blog Entries

- [MBS FileMaker Plugin, version 5.2pr2](#)

Created 6th June 2015, last changed 8th June 2015.

182.12 Window.DisableScrollbars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.9	Yes	Yes	No	No	No

MBS("Window.DisableScrollbars"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns "OK" on success.

Description

This can stop users from scrolling.

FileMaker may reset this whenever it thinks it needs to reset it. Like with moving to other window or selecting another record.

Examples

Looks up window reference for the window named test and disables scrollbars there:

```
MBS("Window.DisableScrollbars"; MBS("Window.FindByTitle"; "test"))
```

Disables scrollbars on front window:

```
MBS("Window.DisableScrollbars")
```

See also

- 182.13 Window.EnableScrollbars 8547
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.44 Window.HideScrollbars 8585

182.12.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr5](#)

Created 18th August 2014, last changed 28th April 2016.

182.13 Window.EnableScrollbars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.9	Yes	Yes	No	No	No

MBS("Window.EnableScrollbars"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns "OK" on success.

Description

It is possible that the scrollbar does not redraw until something happens.

Examples

Looks up window reference for the window named test and disables scrollbars there:

```
MBS("Window.EnableScrollbars"; MBS("Window.FindByTitle"; "test"))
```

Enables scrollbars on front window:

```
MBS("Window.DisableScrollbars")
```

See also

- [182.12 Window.DisableScrollbars](#) 8546
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.44 Window.HideScrollbars](#) 8585
- [182.108 Window.ShowScrollbars](#) 8668

182.13.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr5](#)

Created 18th August 2014, last changed 28th April 2016.

182.14 Window.Fade

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	5.4	Yes	Yes	No	No	No

MBS("Window.Fade"; WindowRef; fadeIn { ; NoAnimation; Duration })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

fadeIn

Pass 1 to fade in or 0 for fade out.

NoAnimation

Optional

Whether to avoid animation. Pass 1 to disable animation. Default is 0 to allow animation.

0

Duration

Optional

The duration in seconds. Can be a value between 0.1 and 5.0.

0.5

Result Returns OK or error.

Description

On Windows fading child windows does not work currently.

Examples

Fade out:

```
Set Variable [ $r ; Value: MBS( "Window.Fade"; 0 /* current window */; 0 /* fade out */; 0; 1 ) ]
```

Fade in:

```
Set Variable [ $r ; Value: MBS( "Window.Fade"; 0 /* current window */; 1 /* fade in */; 0; 1 ) ]
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.41 Window.Hide 8581
- 182.58 Window.Move 8600

Example Databases

- [Window/Window Fade](#)

182.14.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr6](#)

Created 17th November 2015, last changed 27th August 2017.

182.15 Window.FindByIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.0	Yes	Yes	No	No	No

MBS("Window.FindByIndex"; Index)

Parameters

Index

0 based index of the current windows open in FileMaker. If no value is entered then 0 is assumed. Using 0 will give the window reference for the current window. See caution in description

Result Returns window reference number or error.

Description

The Window Reference is a unique ID handed out by the operating system. It is used by the rest of the Window Functions. Caution: Passing 0 for Index will grab the front most window which should be your FileMaker window, but it could be any window including dialogs. This is a particular problem with the "Data Viewer" which is always in the front. Window.FindByTitle was added to version 1.1 as a more reliable way of getting the Window.Ref

The window reference is only valid until the window is closed.

On normal FileMaker on desktop you can use Get(WindowName), but on FileMaker Server the name includes the server name, so you need to use: Get(WindowName) & " (" & Get(HostName) & ")"

Window reference numbers are starting at 15000 and counting up for each new window.

Examples

Find the window ref

```
MBS( "Window.FindByIndex" ; 0 )
```

Find window reference on FileMaker Server where FileMaker includes server name in window name:

```
MBS( "Window.FindByTitle"; Get(WindowName) & " (" & Get(HostName) & ")" )
```

See also

- 182.28 Window.GetTitle 8568
- 182.95 Window.SetTitle 8652
- 182.98 Window.SetTitlebarAppearsTransparent 8655
- 182.96 Window.SetTitleIcon 8653
- 182.99 Window.SetToolbarConfiguration 8656

<i>182.15. WINDOW.FINDBYINDEX</i>	8551
• 182.100 Window.SetToolBarVisible	8657
• 182.101 Window.SetTopMost	8658
• 182.105 Window.ShowContent	8664
• 182.110 Window.ShowsToolBarButton	8671
• 182.111 Window.ToggleFullScreen	8672

Created 18th August 2014, last changed 9th January 2015.

182.16 Window.FindByTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	Yes	No	No	No

MBS("Window.FindByTitle"; WindowName)

Parameters

WindowName

The Name of the window to find

MBS_DevTool

Result Returns window reference number or error.

Description

The reference is the Operating System's unique ID for the the window. Many of the other functions use the WindowReference to target the window.

The window reference is only valid until the window is closed.

If 0 is returned, no window was found.

Window reference numbers are starting at 15000 and counting up for each new window.

Examples

Application Window Window Ref

```
Let(
[
/*-----PARAMETERS-----*/
WindowName =
Case(
Position(Get ( ApplicationVersion ); "Advanced"; 1; 1);"FileMaker Pro Advanced";
"FileMaker Pro"
)
];
/*-----FUNCTION-----*/
MBS(
"Window.FindByTitle";
WindowName
)
)
```

Set the Transparency of a window by name

```
Let(
[
/*-----PARAMETERS-----*/
FileMakerApplicationWindowName =
```

```
Case(
Position(Get ( ApplicationVersion ); "Advanced"; 1; 1);"FileMaker Pro Advanced";
"FileMaker Pro"
);
```

```
WindowRef =
```

```
MBS(
"Window.FindByTitle";
FileMakerApplicationWindowName
);
```

```
Alpha = .5
```

```
];
/*-----FUNCTION-----*/
```

```
MBS(
"Window.SetAlpha";
WindowRef;
Alpha
)
)
```

State of the Window Close Button

```
Let(
[
windowRef = MBS("Window.FindByTitle"; Get(WindowName))
];
```

```
GetAsBoolean(
MBS(
"Window.HasCloseButton";
WindowRef
) = "true"
)
```

```
)
```

Hide a window by name

```
Let(
[
/*-----PARAMETERS-----*/
```

```

WindowRef = MBS( "Window.FindByTitle" ; "My Window")
];
/*-----FUNCTION-----*/
MBS(
" Window.Hide ";
WindowRef
)
)

```

Find window:

```
MBS( "Window.FindByTitle" ; Get(WindowName))
```

See also

- 182.13 Window.EnableScrollbars 8547
- 182.15 Window.FindByIndex 8550
- 182.28 Window.GetTitle 8568
- 182.44 Window.HideScrollbars 8585
- 182.52 Window.IsVisible 8594
- 182.60 Window.RemoveMenu 8604
- 182.77 Window.SetCloseButton 8628
- 182.88 Window.SetMiniaturizeButton 8641
- 182.95 Window.SetTitle 8652
- 182.109 Window.ShowTableViewDialog 8670

Example Databases

- [WebView/Disable Javascript alerts on Webviewer Mac](#)
- [WebView/Form Fields/Forms Sample](#)
- [WebView/Form Fields/WebView Forms](#)
- [WebView/Javascript calls Filemaker Script/Callbacks with Custom Webviewer](#)
- [Win Only/Window Icon](#)
- [Window/Dialog from Filemaker Form](#)
- [Window/Flash Window and Jump Dock](#)
- [Window/Hide Scrollbars](#)
- [Window/Window Position and Size](#)
- [Window/WindowEffects](#)

182.16.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr5](#)

182.16.2 FileMaker Magazin

- Ausgabe 1/2019, Seite 16
- Ausgabe 1/2008, Seite 32

Created 18th August 2014, last changed 10th May 2015.

182.17 Window.FlashWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.1	No	Yes	No	No	No

```
MBS( "Window.FlashWindow"; WindowRef { ; Invert } )
```

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Invert

Optional

If this parameter is 1, the window is flashed from one state to the other. If it is 0, the window is returned to its original state (either active or inactive). When an application is minimized and this parameter is 1, the taskbar window button flashes active/inactive. If it is 0, the taskbar window button flashes inactive, meaning that it does not change colors. It flashes, as if it were being redrawn, but it does not provide the visual invert clue to the user.

1

Result Returns 1, 0 or error.

Description

It does not change the active state of the window.

The return value specifies the window's state before the call to the FlashWindow function. If the window caption was drawn as active before the call, the return value is nonzero. Otherwise, the return value is zero.

Flashing a window means changing the appearance of its caption bar as if the window were changing from inactive to active status, or vice versa. (An inactive caption bar changes to an active caption bar; an active caption bar changes to an inactive caption bar.)

Typically, a window is flashed to inform the user that the window requires attention but that it does not currently have the keyboard focus.

The FlashWindow function flashes the window only once; for repeated flashing, the application should create a system timer.

Please use the main window from FileMaker, not the window of solution.

Examples

Flash Window:

```
MBS( "Window.FlashWindow"; "FileMaker Pro Advanced"; 1)
```

See also

182.17. <i>WINDOW.FLASHWINDOW</i>	8557
• 182.15 Window.FindByIndex	8550
• 182.16 Window.FindByTitle	8552

Example Databases

- [Window/Flash Window and Jump Dock](#)

182.17.1 Blog Entries

- [MBS FileMaker Plugin 6.1 für OS X/Windows](#)
- [MBS FileMaker Plug-in 6.1 for OS X/Windows](#)
- [MBS FileMaker Plugin, version 6.1pr4](#)

Created 2nd March 2016, last changed 2nd March 2016.

182.18 Window.GetAlpha

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.7	Yes	Yes	No	No	No

MBS("Window.GetAlpha"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Return alpha value.

Description

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.75 Window.SetAlpha](#) 8624

182.18.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr5](#)

Created 18th August 2014, last changed 18th August 2014.

182.19 Window.GetClassName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.8	Yes	Yes	No	No	No

MBS("Window.GetClassName"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns class name as text.

Description

Sometimes it's easier to identify a window by the class name than the title. The title may change or be localized, but the class name typically stays the same.

Added Mac support in Plugin version 3.3.

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

Example Databases

- [RemoteControl/Windows List](#)
- [Window/Window List](#)

182.19.1 Blog Entries

- [MBS Filemaker Plugin, version 3.3pr6](#)
- [MBS Filemaker Plugin, version 2.8pr5](#)

Created 18th August 2014, last changed 18th August 2014.

182.20 Window.GetCurrentTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.3	Yes	Yes	No	No	No

MBS("Window.GetCurrentTag")

Result Returns text or error.

Description

The MBS Plugin manages a list of open windows, so you can query tag value for current window.

See also

- 182.78 Window.SetCurrentTag

8630

182.20.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 10th June 2016, last changed 10th June 2016.

182.21 Window.GetHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.8	Yes	Yes	No	No	No

MBS("Window.GetHeight"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Return height of window.

Description

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.22 Window.GetLeft](#) 8562
- [182.23 Window.GetMaxHeight](#) 8563
- [182.25 Window.GetMinHeight](#) 8565
- [182.34 Window.GetTop](#) 8574
- [182.36 Window.GetWidth](#) 8576
- [182.84 Window.SetMaxHeight](#) 8637
- [182.86 Window.SetMinHeight](#) 8639
- [182.112 Window.TopHeight](#) 8673

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [RemoteControl/Windows List](#)
- [Window/Window List](#)
- [Window/Window Position and Size](#)
- [Window/Window Scrollbar Position](#)

Created 18th August 2014, last changed 18th August 2014.

182.22 Window.GetLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.8	Yes	Yes	No	No	No

MBS("Window.GetLeft"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Return left of window.

Description

See also Window.GetTop, Window.GetWidth and Window.GetHeight.

Examples

Get position of front window:

```
MBS( "Window.GetLeft"; 0 ) & "/" & MBS( "Window.GetTop"; 0 )
```

See also

- [63.13 Dialog.GetLeft](#) 2352
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.21 Window.GetHeight](#) 8561
- [182.34 Window.GetTop](#) 8574
- [182.36 Window.GetWidth](#) 8576

Example Databases

- [RemoteControl/Windows List](#)
- [Window/Window Position and Size](#)

Created 18th August 2014, last changed 26th December 2019.

182.23 Window.GetMaxHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.GetMaxHeight"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

The maximum/minimum window sizes define how much a window can be resized by the user.

Examples

Query maximum height for current window:

```
MBS( "Window.GetMaxHeight"; Get(WindowName) )
```

Example result: 10000000000057

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.21 Window.GetHeight 8561
- 182.24 Window.GetMaxWidth 8564
- 182.25 Window.GetMinHeight 8565
- 182.84 Window.SetMaxHeight 8637
- 182.85 Window.SetMaxWidth 8638
- 182.86 Window.SetMinHeight 8639

Created 11st December 2016, last changed 11st December 2016.

182.24 Window.GetMaxWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.GetMaxWidth"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

The maximum/minimum window sizes define how much a window can be resized by the user.

Examples

Query maximum width for current window:

MBS("Window.GetMaxWidth"; Get(WindowName))

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.23 Window.GetMaxHeight 8563
- 182.26 Window.GetMinWidth 8566
- 182.36 Window.GetWidth 8576
- 182.84 Window.SetMaxHeight 8637
- 182.85 Window.SetMaxWidth 8638
- 182.87 Window.SetMinWidth 8640

Created 11st December 2016, last changed 11st December 2016.

182.25 Window.GetMinHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.GetMinHeight"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

The maximum/minimum window sizes define how much a window can be resized by the user.

Examples

Query minimum width for current window:

```
MBS( "Window.GetMinHeight"; Get(WindowName) )
```

Example result: 439

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.21 Window.GetHeight 8561
- 182.23 Window.GetMaxHeight 8563
- 182.26 Window.GetMinWidth 8566
- 182.84 Window.SetMaxHeight 8637
- 182.86 Window.SetMinHeight 8639
- 182.87 Window.SetMinWidth 8640

Created 11st December 2016, last changed 11st December 2016.

182.26 Window.GetMinWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.GetMinWidth"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

The maximum/minimum window sizes define how much a window can be resized by the user.

Examples

Query minimum width for current window:

```
MBS( "Window.GetMinWidth"; Get(WindowName) )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.24 Window.GetMaxWidth 8564
- 182.25 Window.GetMinHeight 8565
- 182.36 Window.GetWidth 8576
- 182.85 Window.SetMaxWidth 8638
- 182.86 Window.SetMinHeight 8639
- 182.87 Window.SetMinWidth 8640

Created 11st December 2016, last changed 11st December 2016.

182.27 Window.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.3	Yes	Yes	No	No	No

MBS("Window.GetTag"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns text or error.

Description

The MBS Plugin manages a list of open windows, so you can query tag value for a window.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.34 Window.GetTop 8574
- 182.94 Window.SetTag 8651

182.27.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 10th June 2016, last changed 10th June 2016.

182.28 Window.GetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.2	Yes	Yes	No	No	No

MBS("Window.GetTitle"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

The WindowRef is returned by either Window.FindByTitle or Window.FindByIndex. Although it works on both platforms it was added specifically for Windows, where it can be used to get the the Name of the Application Window.

Examples

Query title of front window:

MBS("Window.GetTitle"; 0)

See also

- [182.11 Window.Current](#) 8545
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.36 Window.GetWidth](#) 8576
- [182.95 Window.SetTitle](#) 8652

Example Databases

- [RemoteControl/Windows List](#)
- [Window/Window List](#)

Created 18th August 2014, last changed 26th December 2019.

182.29 Window.GetTitleVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.0	Yes	No	No	No	No

MBS("Window.GetTitleVisible"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

Returns 1 if visible and 0 if hidden.

Requires OS X 10.10 or newer.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.33 Window.GetToolbarVisible 8573
- 182.97 Window.SetTitleVisible 8654
- 182.100 Window.SetToolbarVisible 8657

182.29.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)

Created 16th January 2016, last changed 16th January 2016.

182.30 Window.GetTitlebarAppearsTransparent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.0	Yes	No	No	No	No

MBS("Window.GetTitlebarAppearsTransparent"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

Returns 1 if transparent or 0 if opaque.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.98 Window.SetTitlebarAppearsTransparent 8655

182.30.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)

Created 16th January 2016, last changed 16th January 2016.

182.31 Window.GetToolBarConfiguration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.GetToolBarConfiguration"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns configuration xml or error.

Description

Contains displayMode, visible, and a list of the item identifiers currently in the toolbar.

Do not depend on any details of the normal contents of a configuration dictionary. This may change with an update to Mac OS X or FileMaker.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.99 Window.SetToolBarConfiguration 8656

Example Databases

- [Mac only/ToolBar/Window Toolbar](#)

182.31.1 Blog Entries

- [ToolBar functions for FileMaker on Mac](#)

Created 19th August 2014, last changed 20th August 2014.

182.32 Window.GetToolBarCustomizationPaletteIsRunning

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.GetToolBarCustomizationPaletteIsRunning"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns state or error.

Description

Returns 1 if palette is visible or 0 if not.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.65 Window.RunToolBarCustomizationPalette 8612

Created 19th August 2014, last changed 20th August 2014.

182.33 Window.GetToolBarVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.GetToolBarVisible"; WindowRef)

Parameters**WindowRef**

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns state or error.

Description

Value is 0 if invisible or 1 if visible.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.29 Window.GetTitleVisible 8569
- 182.74 Window.ScrollbarsVisible 8623
- 182.97 Window.SetTitleVisible 8654
- 182.100 Window.SetToolBarVisible 8657

Example Databases

- [Mac only/Toolbar/Window Toolbar](#)

Created 19th August 2014, last changed 20th August 2014.

182.34 Window.GetTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.8	Yes	Yes	No	No	No

MBS("Window.GetTop"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns top of window.

Description

See also Window.GetLeft, Window.GetWidth and Window.GetHeight.

Examples

Get position of front window:

```
MBS( "Window.GetLeft"; 0 ) & "/" & MBS( "Window.GetTop"; 0 )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.21 Window.GetHeight 8561
- 182.22 Window.GetLeft 8562
- 182.27 Window.GetTag 8567
- 182.36 Window.GetWidth 8576
- 182.94 Window.SetTag 8651

Example Databases

- [RemoteControl/Windows List](#)
- [Window/Window Position and Size](#)

Created 18th August 2014, last changed 26th December 2019.

182.35 Window.GetTopMost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	4.2	Yes	Yes	No	No	No

MBS("Window.GetTopMost"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 1 or 0 or error.

Description

If window is topmost, it floats over all other windows.

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.101 Window.SetTopMost](#) 8658

Example Databases

- [Window/Window TopMost](#)

182.35.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

182.36 Window.GetWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.8	Yes	Yes	No	No	No

MBS("Window.GetWidth"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns width of window.

Description

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.21 Window.GetHeight](#) 8561
- [182.22 Window.GetLeft](#) 8562
- [182.24 Window.GetMaxWidth](#) 8564
- [182.26 Window.GetMinWidth](#) 8566
- [182.28 Window.GetTitle](#) 8568
- [182.34 Window.GetTop](#) 8574
- [182.85 Window.SetMaxWidth](#) 8638
- [182.87 Window.SetMinWidth](#) 8640

Example Databases

- [Mac and iOS/Machine Learning/Core ML Photos](#)
- [RemoteControl/Windows List](#)
- [Window/Window List](#)
- [Window/Window Position and Size](#)
- [Window/Window Scrollbar Position](#)

Created 18th August 2014, last changed 18th August 2014.

182.37 Window.HasCloseButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	Yes	No	No	No

MBS("Window.HasCloseButton"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

This function returns the current state of the window's close button.

Examples

State of the Window Close Button

```
Let(
[
windowRef = MBS("Window.FindByTitle"; Get(WindowName))
];
```

```
GetAsBoolean(
MBS(
"Window.HasCloseButton";
WindowRef
) = "true"
)
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.40 Window.HasZoomButton 8580
- 182.77 Window.SetCloseButton 8628

Example Databases

- [Window/WindowEffects](#)

Created 18th August 2014, last changed 28th November 2019.

182.38 Window.HasMiniaturizeButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	Yes	No	No	No

MBS("Window.HasMiniaturizeButton"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

On Mac OS X, Miniaturize minimizes the window to the Dock. On Windows the window is minimized to a "brick" at the bottom of the Application Window.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.88 Window.SetMiniaturizeButton 8641

Example Databases

- [Window/WindowEffects](#)

Created 18th August 2014, last changed 18th August 2014.

182.39 Window.HasShadow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	No	No	No	No

MBS("Window.HasShadow"; WindowRef)

Parameters**WindowRef**

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 0 or 1.

Description**See also**

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.92 Window.SetShadow 8648

Created 18th August 2014, last changed 18th August 2014.

182.40 Window.HasZoomButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	Yes	No	No	No

MBS("Window.HasZoomButton"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

This function returns the current state of the window's close button.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.37 Window.HasCloseButton 8577
- 182.102 Window.SetZoomButton 8659

Example Databases

- [Window/WindowEffects](#)

Created 18th August 2014, last changed 28th November 2019.

182.41 Window.Hide

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.0	Yes	Yes	No	No	No

MBS("Window.Hide"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

Examples

Hide a window by name

```
Let(
[
/*-----PARAMETERS-----*/
WindowRef = MBS( "Window.FindByTitle" ; "My Window" )
];
/*-----FUNCTION-----*/
MBS(
" Window.Hide ";
WindowRef
)
)
```

See also

- [62.6 Debugger.Window](#) 2338
- [142.26 ScriptWorkspace.Window](#) 6874
- [182.14 Window.Fade](#) 8548
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.42 Window.HideContent](#) 8583
- [182.43 Window.HideOverlay](#) 8584
- [182.44 Window.HideScrollbars](#) 8585
- [182.53 Window.List](#) 8595

- 182.58 Window.Move

Example Databases

- [Window/giSnapShot](#)

Created 18th August 2014, last changed 18th August 2014.

182.42 Window.HideContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.2	Yes	No	No	No	No

MBS("Window.HideContent"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

Warning: Evaluating the MBS("Window.HideContent"; Get(WindowName)) function from the data viewer causes the data viewer to hide its content, including locking up the data viewer so that it cannot be exited. The only way to get out is to force quit the application.

Deprecated.

Examples

Hides content:

```
MBS( "Window.HideContent"; Get(WindowName) )
```

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.41 Window.Hide](#) 8581
- [182.105 Window.ShowContent](#) 8664

182.42.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr7](#)
- [MBS Filemaker Plugin, version 2.2pr5](#)

Created 18th August 2014, last changed 3th March 2020.

182.43 Window.HideOverlay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.3	Yes	No	No	No	No

MBS("Window.HideOverlay"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns "OK" on success.

Description

Deprecated.

Examples

Hides overlay:

MBS("Window.HideOverlay"; Get(WindowName))

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.41 Window.Hide](#) 8581
- [182.107 Window.ShowOverlay](#) 8666

Example Databases

- [Mac only/Kiosk functions/Dark Window with Overlay](#)

182.43.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr7](#)
- [MBS Filemaker Plugin, version 2.3pr4](#)

Created 18th August 2014, last changed 3th March 2020.

182.44 Window.HideScrollbars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.4	Yes	Yes	No	No	No

MBS("Window.HideScrollbars"; WindowRef { ; NoResizeHandler })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

NoResizeHandler

Optional

Optionally, whether to not watch for window resizing to keep scrollbars hidden even if FileMaker normally shows them. Default is 0. You can pass 1 to disable the default behavior.

0

Result Returns "OK" on success.

Description

Please also use Window.SetResizable to disable resize.

Works fine with FileMaker 11/12 on Mac and Windows. Also works with FileMaker 10 on Windows (but not on Mac).

Please update plugins to latest 2.7 release to have this function work in FileMaker 12.

FileMaker may decide to show scrollbars when resizing, so please disable resizing, too.

The plugin installs a resize handler for Mac, so we can keep scrollbars hidden in FileMaker 12 for now while resizing.

Disabled for FileMaker 16, so it returns only an error.

Deprecated.

Examples

Looks up window reference for the window named test and hides scrollbars there:

```
MBS("Window.HideScrollbars"; MBS("Window.FindByTitle"; "test"))
```

See also

- 182.12 Window.DisableScrollbars 8546
- 182.13 Window.EnableScrollbars 8547
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.41 Window.Hide 8581

- [182.91 Window.SetResizable](#) 8646
- [182.108 Window.ShowScrollbars](#) 8668

Example Databases

- [Window/Dialog from Filemaker Form](#)
- [Window/Hide Scrollbars](#)

182.44.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr6](#)
- [MBS Filemaker Plugin, version 2.8pr2](#)
- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr9](#)

182.44.2 FileMaker Magazin

- [Ausgabe 5/2011, Seite 55](#)

Created 18th August 2014, last changed 3th March 2020.

182.45 Window.IgnoresMouseEvents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	No	No	No	No

MBS("Window.IgnoresMouseEvents"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

On Mac OS X you can disable mouse events for a given window. All Mouse Events will fall to the window behind.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.83 Window.SetIgnoresMouseEvents 8636

Created 18th August 2014, last changed 18th August 2014.

182.46 Window.IsFullScreen

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.0	Yes	No	No	No	No

MBS("Window.IsFullScreen"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 0 or 1.

Description

Indicates that a window has fullscreen appearance.

A fullscreen window does not draw its titlebar, and may have special handling for its toolbar.

Available in Mac OS X v10.7 and later.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Created 18th August 2014, last changed 18th August 2014.

182.47 Window.IsFullScreenAuxiliary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.0	Yes	No	No	No	No

MBS("Window.IsFullScreenAuxiliary"; WindowRef)

Parameters**WindowRef**

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 0 or 1.

Description**See also**

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.48 Window.IsFullScreenPrimary 8590
- 182.81 Window.SetFullScreenAuxiliary 8634
- 182.82 Window.SetFullScreenPrimary 8635

Created 18th August 2014, last changed 18th August 2014.

182.48 Window.IsFullScreenPrimary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.0	Yes	No	No	No	No

MBS("Window.IsFullScreenPrimary"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 0 or 1.

Description

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.47 Window.IsFullScreenAuxiliary 8589
- 182.82 Window.SetFullScreenPrimary 8635

Created 18th August 2014, last changed 18th August 2014.

182.49 Window.IsMaximized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	9.0	Yes	Yes	No	No	No

MBS("Window.IsMaximized"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 1, 0 or error.

Description

See Window.Maximize and Window.Minimize.

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.50 Window.IsMinimized](#) 8592
- [182.51 Window.IsModified](#) 8593
- [182.55 Window.Maximize](#) 8597
- [182.56 Window.Minimize](#) 8598

182.49.1 Blog Entries

- [New MBS FileMaker Plugin 9.0](#)
- [Neues MBS FileMaker Plugin 9.0](#)
- [MBS FileMaker Plugin, version 8.6pr3](#)

Created 11st December 2018, last changed 11st December 2018.

182.50 Window.IsMinimized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	9.0	Yes	Yes	No	No	No

MBS("Window.IsMinimized"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 1, 0 or error.

Description

See Window.Maximize and Window.Minimize.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.49 Window.IsMaximized 8591
- 182.51 Window.IsModified 8593
- 182.55 Window.Maximize 8597
- 182.56 Window.Minimize 8598

182.50.1 Blog Entries

- [New MBS FileMaker Plugin 9.0](#)
- [Neues MBS FileMaker Plugin 9.0](#)
- [MBS FileMaker Plugin, version 8.6pr3](#)

Created 11st December 2018, last changed 11st December 2018.

182.51 Window.IsModified

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	No	No	No	No

MBS("Window.IsModified"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

In many OS X applications OS a little dark red dot inside the Red Close button signifies that a window has been modified. FileMaker normally doesn't use this.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.49 Window.IsMaximized 8591
- 182.50 Window.IsMinimized 8592
- 182.89 Window.SetModified 8643

Created 18th August 2014, last changed 17th June 2018.

182.52 Window.IsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.0	Yes	Yes	No	No	No

MBS("Window.IsVisible"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

The WindowRef can be obtained by using either Window.FindByTitle or Window.FindByIndex.

Examples

Check if window in invisible

```
Let(
[
/*-----PARAMETERS-----*/
WindowRef = MBS( "Window.FindByTitle" ; "Contacts" )
];
/*-----FUNCTION-----*/
MBS(
"Window.IsVisible";
WindowRef
)
)
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [RemoteControl/Windows List](#)

Created 18th August 2014, last changed 18th August 2014.

182.53 Window.List

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.3	Yes	Yes	No	No	No

MBS("Window.List")

Result Returns the list of window references.

Description

See also RemoteControl.GetWindowsList function on Windows.

We filter this list to have no windows of zero size and avoid having controls listed here on Windows.

See also

- [137.3 RemoteControl.GetWindowsList](#) 6696
- [182.41 Window.Hide](#) 8581
- [182.54 Window.ListCommands](#) 8596
- [182.64 Window.RunCommand](#) 8610

Example Databases

- [Window/Window List](#)

182.53.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr1](#)
- [MBS Filemaker Plugin, version 3.3pr6](#)

Created 18th August 2014, last changed 17th June 2018.

182.54 Window.ListCommands

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.ListCommands"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns list or error.

Description

This allows you to see what commands are available for Window.RunCommand.

Examples

Shows list of commands for a window:

```
Show Custom Dialog [ "list"; MBS("Window.ListCommands"; 0) ]
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.53 Window.List 8595
- 182.64 Window.RunCommand 8610

182.54.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 27th November 2016, last changed 27th November 2016.

182.55 Window.Maximize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.0	Yes	Yes	No	No	No

MBS("Window.Maximize"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

On Windows the window maximizes.

On Mac the window zooms to fit content.

Examples

Maximize front window:

```
MBS( "Window.Maximize"; 0)
```

Maximize database window:

```
MBS( "Window.Maximize"; Get(WindowName))
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.49 Window.IsMaximized 8591
- 182.50 Window.IsMinimized 8592
- 182.56 Window.Minimize 8598

182.55.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr8](#)

Created 22nd January 2016, last changed 22nd January 2016.

182.56 Window.Minimize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.0	Yes	Yes	No	No	No

MBS("Window.Minimize"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

On Mac the window is moved to the dock.

On Windows it goes to the task bar.

Examples

Minimize front window:

```
MBS( "Window.Minimize"; 0)
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.49 Window.IsMaximized 8591
- 182.50 Window.IsMinimized 8592
- 182.55 Window.Maximize 8597

182.56.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr8](#)

Created 22nd January 2016, last changed 22nd January 2016.

182.57 Window.ModalDialogFront

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	5.4	Yes	Yes	No	No	No

MBS("Window.ModalDialogFront")

Result Returns 1, 0 or error.

Description

This allows you to know in a trigger if a dialog window is currently open and maybe you better wait?
Created 29th October 2015, last changed 22nd November 2015.

182.58 Window.Move

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.2	Yes	Yes	No	No	No

MBS("Window.Move"; WindowRef; X; Y { ; NoAnimation; Duration })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

X

The new X position of the window.

300

Y

The new Y position of the window.

200

NoAnimation

Optional

Whether to avoid animation. Pass 1 to disable animation. Default is 0 to allow animation.

0

Duration

Optional

The duration in seconds. Can be a value between 0.1 and 5.0.

0.5

Result Returns OK on success.

Description

On Mac OS X we use Apples functions for animated move. On Windows we have our own code.

Examples

Moves a window:

```
MBS("Window.Move"; $WindowRef; 300; 200)
```

See also

- 182.14 Window.Fade 8548
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.41 Window.Hide 8581

Example Databases

- [Window/Resize Window Animated](#)

182.58.1 Blog Entries

- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS FileMaker Plugin, version 5.4pr6](#)
- [MBS Filemaker Plugin, version 2.7fc](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.2pr5](#)

Created 18th August 2014, last changed 17th November 2015.

182.59 Window.PositionNextDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	10.0	Yes	Yes	No	No	No

MBS("Window.PositionNextDialog"; X; Y { ; Width; Height; Center })

Parameters

X

The X position in points to use for the dialog. Can be empty.

300

Y

The Y position in points to use for the dialog. Can be empty.

200

Width

Optional

The width in points to use for the dialog. Can be empty. We check against min/max size for dialog.

500

Height

Optional

The height in points to use for the dialog. Can be empty. We check against min/max size for dialog.

400

Center

Optional

Whether to center dialog. Pass 1 to center on screen or 0 to not center. Pass 2 to center in front of the frontmost FileMaker document window.

1

Result Returns OK or error.

Description

MBS Plugin watches for new windows to show and resize/move the next dialog.

The dialog may briefly show before we can move it.

There is the possibility you position a dialog outside visible screen area, so please check screen size yourself.

To clear the settings, you can call function without parameters or with empty values.

Examples

Shows dialog at specific location:

```
Set Variable [ $r ; Value: MBS("Window.PositionNextDialog"; 300; 300; 500; 400) ]
Show Custom Dialog [ "Test" ; "Hello World" ]
```

Center next dialog:

```
Set Variable [ $r ; Value: MBS("Window.PositionNextDialog"; "" ; "" ; "" ; "" ; 1) ]  
Show Custom Dialog [ "Test" ; "Hello World" ]
```

Clear settings:

```
MBS("Window.PositionNextDialog")
```

182.59.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 10.0pr5](#)
- [Position and resize FileMaker's dialogs](#)

Created 27th December 2019, last changed 29th December 2019.

182.60 Window.RemoveMenu

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.3	No	Yes	No	No	No

MBS("Window.RemoveMenu"; WindowRef; Mode)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Mode

Can be 1 to remove menu entries instead of whole menu. That may be more permanent and allows you to get back invisible menu when you switch to layout mode and back. Default value 0 unassigns menu from Window.

1

Result Returns OK on success.

Description

You can use this function to remove the FileMaker menu bar.

Examples

Remove menu:

```
$h = MBS("Window.FindByTitle"; "FileMaker Pro Advanced")
$r = MBS("Window.RemoveMenu"; $h)
```

Clear menu entries:

```
$h = MBS("Window.FindByTitle"; "FileMaker Pro Advanced")
$r = MBS("Window.RemoveMenu"; $h; 1)
```

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

182.60.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)
- [MBS Filemaker Plugin, version 3.3pr3](#)

Created 18th August 2014, last changed 14th May 2016.

182.61 Window.Resizable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.4	Yes	Yes	No	No	No

MBS("Window.Resizable"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 1 if window is resizable, else 0.

Description

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.62 Window.Resize](#) 8606
- [182.91 Window.SetResizable](#) 8646

182.61.1 Blog Entries

- [MBS Filemaker Plugin, version 2.9pr4](#)
- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr8](#)

182.61.2 FileMaker Magazin

- [Ausgabe 5/2011, Seite 55](#)

Created 18th August 2014, last changed 18th August 2014.

182.62 Window.Resize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.2	Yes	Yes	No	No	No

MBS("Window.Resize"; WindowRef; width; height { ; NoAnimation; Duration })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

width

The new width of the window.

300

height

The new height of the window.

200

NoAnimation

Optional

Whether to avoid animation. Pass 1 to disable animation. Default is 0 to allow animation.

0

Duration

Optional

The duration in seconds. Can be a value between 0.1 and 5.0.

0.5

Result Returns OK on success.

Description

On Mac OS X we use Apples functions for animated resizing. On Windows we have our own code. Please make sure on Windows that the window is not maximized as resizing a maximized window puts it in a mode where you can't manual resize it.

Examples

Resizes a window:

```
MBS("Window.Resize"; $WindowRef; 300; 200)
```

Resize main window on windows:

```
MBS("Window.Resize"; "FileMaker Pro Advanced"; 800; 600)
```

See also

182.62. WINDOW.RESIZE	8607
• 182.15 Window.FindByIndex	8550
• 182.16 Window.FindByTitle	8552
• 182.61 Window.Resizable	8605
• 182.63 Window.ResizeContentView	8608
• 182.84 Window.SetMaxHeight	8637
• 182.85 Window.SetMaxWidth	8638
• 182.86 Window.SetMinHeight	8639
• 182.87 Window.SetMinWidth	8640
• 182.98 Window.SetTitlebarAppearsTransparent	8655

Example Databases

- [Window/Resize Window Animated](#)

182.62.1 Blog Entries

- [MBS Filemaker Plugin, version 2.7fc](#)
- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.5pr3](#)
- [MBS Filemaker Plugin, version 2.2pr4](#)

Created 18th August 2014, last changed 11st March 2016.

182.63 Window.ResizeContentView

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.0	Yes	No	No	No	No

MBS("Window.ResizeContentView"; WindowRef { ; X; Y; W; H })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

X

Optional

Delta for x position of content view. Use positive value to move to right or negative to move to left.

0

Y

Optional

Delta for y position of content view. Use positive value to move to top or negative to move to bottom.

-5

W

Optional

Delta for width of content view. Use positive value to make wider or negative value to make narrower.

0

H

Optional

Delta for height of content view. Use positive value to make heigher or negative value to make smaller.

0

Result Returns OK or error.

Description

This allows you to move the content view within any window.

e.g. on a FileMaker window to stretch content to move scrollbars out of sight.

Examples

Resizes to hide scrollbar partial:

```
MBS("Window.ResizeContentView"; 0; 0; -5; 0; 5)
```

Reset content view:

```
MBS("Window.ResizeContentView"; $window; 0; 0; 0; 0)
```

Resizes to hide scrollbar:

182.63. *WINDOW.RESIZECONTENTVIEW*

8609

MBS("Window.ResizeContentView"; 0; 0; -16; 0; 16)

Hide bottom area with controls:

MBS("Window.ResizeContentView"; 0; 0; -16; 0; 16)

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.62 Window.Resize 8606
- 182.98 Window.SetTitlebarAppearsTransparent 8655

182.63.1 Blog Entries

- [MBS FileMaker Plugin, version 5.5pr3](#)

Created 13th December 2015, last changed 15th January 2016.

182.64 Window.RunCommand

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.RunCommand"; WindowRef; Command)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Command

The name of the command.

Result Returns OK or error.

Description

Please use Window.ListCommands to find available commands.

Please run as last command in script, so the function can do the job properly.

Be aware that this is not supported by FileMaker. Some commands work correctly, but others do nothing or can crash FileMaker.

Examples

Shows dialog to customize table fields:

```
Set Variable [ $r; Value:MBS("Window.RunCommand"; 0; "onModifyTableView") ]
```

Zooms window:

```
Set Variable [ $r; Value:MBS("Window.RunCommand"; 0; "zoom") ]
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.53 Window.List 8595
- 182.54 Window.ListCommands 8596

182.64.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 27th November 2016, last changed 27th November 2016.

182.65 Window.RunToolbarCustomizationPalette

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.RunToolbarCustomizationPalette"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

You can use Window.GetToolbarCustomizationPaletteIsRunning to query if customization sheet is open.

Examples

Run toolbar customization for current window:

MBS("Window.RunToolbarCustomizationPalette"; 0)

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.32 Window.GetToolbarCustomizationPaletteIsRunning 8572

Example Databases

- [Mac only/Toolbar/Custom Toolbar Items](#)
- [Mac only/Toolbar/Window Toolbar](#)

182.65.1 Blog Entries

- [Toolbar functions for FileMaker on Mac](#)

Created 19th August 2014, last changed 20th August 2014.

182.66 Window.Screenshot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	5.4	Yes	Yes	No	No	Yes

MBS("Window.Screenshot"; WindowRef { ; MarginLeft; MarginTop; MarginRight; MarginBottom; ImageType; Filename })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

MarginLeft

Optional

The margin from left to cut away border.

0

MarginTop

Optional

The margin from top to cut away border.

0

MarginRight

Optional

The margin from right to cut away border.

0

MarginBottom

Optional

The margin from bottom to cut away border.

0

ImageType

Optional

The type of image to return. Either JPEG, PNG, GIF or BMP. Default is JPEG.

"JPEG"

Filename

Optional

The filename to use for the picture. Default is "image" with the extension matching the image type. The image is not written to disk. This file name is just added to the container for later export.

"test.jpg"

Result Returns image or error.

Description

Returns the image as container value, so you can assign it to a container field or save to disk with Container.WriteFile function.

Margins are different for Mac and Windows.

Added iOS support in version 8.5, but margins are not supported there, so we always take full screen.

On Windows may get wrong rectangle if Windows runs desktop with 200% resolution, but you have a 100% resolution screen.

Examples

Creates screenshot:

```
MBS("Window.Screenshot"; Get(WindowName); Window Screenshot::Margin Left; Window Screenshot::Margin Top; Window Screenshot::Margin Right; Window Screenshot::Margin Bottom)
```

Screenshot of current window as JPEG:

```
MBS( "Window.Screenshot"; 0)
```

See also

- [55.35 Container.WriteFile](#) 1658
- [180.111 WebView.Screenshot](#) 8435
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552

Example Databases

- [Window/Window Screenshot](#)

182.66.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr5](#)
- [Neues MBS FileMaker Plugin 8.5 - Über 5500 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.5 - More than 5500 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.5pr5](#)
- [MBS FileMaker Plugin, version 5.4pr4](#)

Created 27th October 2015, last changed 2nd December 2019.

182.67 Window.Scrollbar.GetScrollElasticity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.Scrollbar.GetScrollElasticity"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

Value can be none, auto or allowed.

Returns ? if something goes wrong or empty result if no scrollbar is found.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.68 Window.Scrollbar.SetScrollElasticity 8616

182.67.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr3](#)
- [Scrollbar Elasticity in FileMaker](#)

Created 15th October 2016, last changed 15th October 2016.

182.68 Window.Scrollbar.SetScrollElasticity

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.Scrollbar.SetScrollElasticity"; WindowRef; Mode)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Mode

The new mode to use. Can be auto, none or allowed.

"none"

Result Returns OK or error.

Description

Since FileMaker 14 windows bounce on the scrolling edge and this function can change behavior.

Examples

Sets the mode to none for front window:

```
MBS("Window.Scrollbar.SetScrollElasticity"; 0; "none")
```

Set scrollbar elasticity after delay of 0.1 seconds:

```
Set Variable [ $r ; Value: MBS( "Schedule.EvaluateAfterDelay"; 0.1; "MBS(\\"Window.Scrollbar.SetScrollElasticity\\"; 0; \\"none\\")" ) ]
```

See also

- 140.4 Schedule.EvaluateAfterDelay 6788
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.67 Window.Scrollbar.GetScrollElasticity 8615
- 182.73 Window.Scrollbar.set 8622

182.68.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr3](#)
- [MBS FileMaker Plugin, version 6.5pr3](#)

- [Scrollbar Elasticity in FileMaker](#)

Created 15th October 2016, last changed 16th October 2019.

182.69 Window.Scrollbar.getHorizontalMaximum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.2	Yes	Yes	No	No	Yes

MBS("Window.Scrollbar.getHorizontalMaximum"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

Added Windows and iOS support for version 8.5.

Looks like the maximum on Windows is always 65535.

Examples

Query maximum value:

MBS("Window.Scrollbar.getHorizontalMaximum"; 0)

See also

- 180.112 [WebView.Scrollbar.getHorizontalMaximum](#) 8437
- 182.15 [Window.FindByIndex](#) 8550
- 182.16 [Window.FindByTitle](#) 8552
- 182.70 [Window.Scrollbar.getHorizontalPosition](#) 8619
- 182.71 [Window.Scrollbar.getVerticalMaximum](#) 8620

Example Databases

- [Window/Window Scrollbar Position](#)

182.69.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 26th April 2016, last changed 13th November 2018.

182.70 Window.Scrollbar.getHorizontalPosition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.2	Yes	Yes	No	No	Yes

MBS("Window.Scrollbar.getHorizontalPosition"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

Added Windows and iOS support for version 8.5.

Examples

Query horizontal position:

MBS("Window.Scrollbar.getHorizontalPosition"; 0)

See also

- 180.113 WebView.Scrollbar.getHorizontalPosition 8438
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.69 Window.Scrollbar.getHorizontalMaximum 8618
- 182.72 Window.Scrollbar.getVerticalPosition 8621

Example Databases

- [Window/Window Scrollbar Position](#)

182.70.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 26th April 2016, last changed 13th November 2018.

182.71 Window.Scrollbar.getVerticalMaximum

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.2	Yes	Yes	No	No	Yes

MBS("Window.Scrollbar.getVerticalMaximum"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

Added Windows and iOS support for version 8.5.

Looks like the maximum on Windows is always 65535.

See also

- [180.114 WebView.Scrollbar.getVerticalMaximum](#) 8439
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.69 Window.Scrollbar.getHorizontalMaximum](#) 8618
- [182.72 Window.Scrollbar.getVerticalPosition](#) 8621

Example Databases

- [Window/Window Scrollbar Position](#)

182.71.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 26th April 2016, last changed 13th November 2018.

182.72 Window.Scrollbar.getVerticalPosition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.2	Yes	Yes	No	No	Yes

MBS("Window.Scrollbar.getVerticalPosition"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns value or error.

Description

Added Windows and iOS support for version 8.5.

See also

- 180.115 [WebView.Scrollbar.getVerticalPosition](#) 8440
- 182.15 [Window.FindByIndex](#) 8550
- 182.16 [Window.FindByTitle](#) 8552
- 182.70 [Window.Scrollbar.getHorizontalPosition](#) 8619
- 182.71 [Window.Scrollbar.getVerticalMaximum](#) 8620

Example Databases

- [Window/Window Scrollbar Position](#)

182.72.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 26th April 2016, last changed 13th November 2018.

182.73 Window.Scrollbar.set

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.2	Yes	Yes	No	No	Yes

MBS("Window.Scrollbar.set"; WindowRef; X; Y)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

X

The new X position.

100

Y

The new Y position.

100

Result Returns OK or error.

Description

Added Windows and iOS support for version 8.5.

See also

- [140.4 Schedule.EvaluateAfterDelay](#) 6788
- [180.116 WebView.Scrollbar.set](#) 8441
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.68 Window.Scrollbar.SetScrollElasticity](#) 8616

Example Databases

- [Window/Window Scrollbar Position](#)

182.73.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr6](#)

Created 26th April 2016, last changed 13th November 2018.

182.74 Window.ScrollbarsVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.7	Yes	Yes	No	No	No

MBS("Window.ScrollbarsVisible"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 1 if scrollbars are visible or 0 if not.

Description

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.33 Window.GetToolbarVisible 8573
- 182.100 Window.SetToolbarVisible 8657

182.74.1 Blog Entries

- [MBS Filemaker Plugin 2.7 Release notes](#)
- [MBS Filemaker Plugin, version 2.7pr6](#)

Created 18th August 2014, last changed 18th August 2014.

182.75 Window.SetAlpha

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.0	Yes	Yes	No	No	No

MBS("Window.SetAlpha"; WindowRef; Alpha)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Alpha

The new alpha value as a float value between 0.0 (invisible) to 1.0 (opaque).

0.5

Result Returns OK or error.

Description

NOTE: If you set the Alpha of a window too low it will not accept mouse clicks. Windows limitation: Currently the plug-in can only set the transparency of Application Window, not the individual database windows.

Seems not to work for FileMaker 11 on Windows with document windows. So please test if it works on your version.

Examples

Set the Transparency of a window by name

```
Let(
[
/*-----PARAMETERS-----*/
```

```
FileMakerApplicationWindowName =
```

```
Case(
```

```
Position(Get ( ApplicationVersion ); "Advanced"; 1; 1); "FileMaker Pro Advanced";
```

```
"FileMaker Pro"
```

```
);
```

```
WindowRef =
```

```
MBS(
```

```
"Window.FindByTitle";
```

```
FileMakerApplicationWindowName
```

```
);
```

```
Alpha = .5
```

```
];
```

182.75. WINDOW.SETALPHA

8625

```
/*-----FUNCTION-----*/
```

```
MBS(  
"Window.SetAlpha";  
WindowRef;  
Alpha  
)  
)
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.18 Window.GetAlpha 8558

Example Databases

- [Window/giSnapShot](#)
- [Window/WindowEffects](#)

182.75.1 Blog Entries

- [MBS Filemaker Plugin, version 2.8pr2](#)

Created 18th August 2014, last changed 18th August 2014.

182.76 Window.SetBounds

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.0	Yes	Yes	No	No	No

MBS("Window.SetBounds"; WindowRef; Left; Top; Right; Bottom)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Left

the LEFT bound of the window

100

Top

the TOP bound of the window

100

Right

the RIGHT bound of the window

500

Bottom

the BOTTOM bound of the window

500

Description

This is another way of resizing the window. On Windows this function can be used to adjust the size of the application window as well.

Examples

Set Window Bounds

```
Let(
[
/*-----PARAMETERS-----*/
WindowRef = 0;
Left = 100;
Top = 100;
Right = 500;
Bottom = 500
];
/*-----FUNCTION-----*/
MBS(
"Window.SetBounds";
WindowRef;
```

182.76. *WINDOW.SETBOUNDS*

8627

```
Left;  
Top;  
Right;  
Bottom  
)  
)
```

See also

- 182.15 *Window.FindByIndex* 8550
- 182.16 *Window.FindByTitle* 8552
- 182.80 *Window.SetFocus* 8633

Created 18th August 2014, last changed 18th August 2014.

182.77 Window.SetCloseButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	Yes	No	No	No

```
MBS( "Window.SetCloseButton"; WindowRef; State { ; AddMenu; DatabaseFilename; ScriptName; Parameter } )
```

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

State

The new state of the close button.

1

AddMenu

Optional

Whether to add a close menu if needed. Default is false here.

0

DatabaseFilename

Optional

The name of the filename database where the script can be found.

"test.fp7"

ScriptName

Optional

The name of the script.

"WindowClose"

Parameter

Optional

Parameter for the script call.

""

Result Returns OK on success.

Description

Please note! On Windows that SetCloseButton removes all buttons from the title bar and not just the close button.

For runtime solution a special handling is needed. First on Mac you can simply use this function as normal to enable the close button and the window will close.

On Windows simply enabling will not work as the close button is linked to a close menu entry in the system menu for this window. So if AddMenu is true, the plugin will check the menu. If there is no close entry, it will install a default window menu. This way we can enable the close button. To actually close the window,

we also install a callback to catch the clicks on this close button. We call your script so you can use the close window script step. This way we can have a close button on the runtimes.

Enjoy and use at your own risk. This function may not work with every FileMaker version, so please test carefully before you deliver. Tested with FileMaker 11.

With plugin version 6.0 or newer the script name can be a script ID number. In that case the plugin queries the script name for the given script ID. This allows to call scripts by ID and avoid problems if scripts are later renamed.

Examples

Disable the Window Close button

```
MBS( "Window.SetCloseButton" ; 0; 0)
```

Enable the Window Close button

```
MBS( "Window.SetCloseButton" ; 0; 1)
```

Disable the Window Close button in a runtime on Windows:

```
MBS( "Window.SetCloseButton" ; MBS( "Window.FindByTitle" ; "window title" ); 1; 1; "mydatabase.usr"; "CloseWindow" )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.37 Window.HasCloseButton 8577
- 182.102 Window.SetZoomButton 8659

Example Databases

- [Window/Dialog from Filemaker Form](#)
- [Window/WindowEffects](#)

182.77.1 Blog Entries

- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr10](#)

Created 18th August 2014, last changed 27th January 2016.

182.78 Window.SetCurrentTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.3	Yes	Yes	No	No	No

MBS("Window.SetCurrentTag"; Tag)

Parameters

Tag

The new tag value.

Result Returns OK or error.

Description

The MBS Plugin manages a list of open windows, so you can set tag value for current window. Be aware that current window could be debugger window or data viewer window!

See also

- 182.20 Window.GetCurrentTag 8560
- 182.94 Window.SetTag 8651

182.78.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 10th June 2016, last changed 10th June 2016.

182.79 Window.SetDockImage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	7.5	Yes	No	No	No	No

```
MBS( "Window.SetDockImage"; WindowRef { ; Image } )
```

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Image

Optional

The image to use. Can be container in various formats, e.g. PNG. If empty, clears existing picture.

\$MyImage

Result Returns OK or error.

Description

The miniaturized window image is the image displayed in the Dock when the window is minimized. If you did not assign a custom image to the window, the value of this property is empty.

When the user minimizes the window, the Dock displays this image in the corresponding Dock tile, scaling it as needed to fit in the tile. If you do not specify a custom image using this property, the Dock creates one for you automatically.

You can also set this property as needed to change the minimized window image. Typically, you would specify a custom image immediately prior to a window being minimized. You can set this image while the window is minimized to update the current image in the Dock. However, you should not use this property to create complex animations in the Dock.

Support for custom images is disabled by default. To enable support the plugin automatically sets the AppleDockIconEnabled key to true when updating the image. Due to this enable process, the function may only work the second time you call it after restarting FileMaker.

Examples

Set image for current window:

```
Set Variable [ $r ; Value: MBS( "Window.SetDockImage"; 0; Assets::Image) ]
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

182.79.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr7](#)

Created 10th November 2017, last changed 10th November 2017.

182.80 Window.SetFocus

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	8.5	Yes	Yes	No	No	No

MBS("Window.SetFocus"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK or error.

Description

The focus goes back to the window.

Works only for OS controls like Webviewer, not for FileMaker's custom controls.

This can be used to move away focus from Webviewer and back to a FileMaker text field.

See also

- 182.8 Window.ClearFocus 8542
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.76 Window.SetBounds 8626

182.80.1 Blog Entries

- [MBS FileMaker Plugin, version 8.5pr2](#)

Created 5th October 2018, last changed 5th October 2018.

182.81 Window.SetFullScreenAuxiliary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.0	Yes	No	No	No	No

MBS("Window.SetFullScreenAuxiliary"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

Pass 1 or 0 to indicate new status.

1

Result Returns OK on success.

Description

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.47 Window.IsFullScreenAuxiliary 8589
- 182.82 Window.SetFullScreenPrimary 8635

Created 18th August 2014, last changed 18th August 2014.

182.82 Window.SetFullScreenPrimary

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.0	Yes	No	No	No	No

MBS("Window.SetFullScreenPrimary"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

Pass 1 or 0 to indicate new status.

1

Result Returns OK on success.

Description

If true, the window receives the fullscreen widget in the title bar.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.47 Window.IsFullScreenAuxiliary 8589
- 182.48 Window.IsFullScreenPrimary 8590
- 182.81 Window.SetFullScreenAuxiliary 8634

Example Databases

- [Window/Fullscreen](#)

Created 18th August 2014, last changed 18th August 2014.

182.83 Window.SetIgnoresMouseEvents

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	No	No	No	No

MBS("Window.SetIgnoresMouseEvents"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

Whether to ignore mouse events or not. Pass 1 to ignore mouse events or 0 to not ignore mouse events.

1

Description

On Mac OS X you can disable mouse events for a given window. All Mouse Events will fall to the window behind.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.45 Window.IgnoresMouseEvents 8587

Created 18th August 2014, last changed 18th August 2014.

182.84 Window.SetMaxHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.SetMaxHeight"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

The new value.

500

Result Returns OK or error.

Description

The maximum/minimum window sizes define how much a window can be resized by the user. Those limits may have no impact on what Window.Resize can do.

Examples

Set maximum height to 800 point:

```
MBS( "Window.SetMaxHeight"; Get(WindowName); 800 )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.21 Window.GetHeight 8561
- 182.23 Window.GetMaxHeight 8563
- 182.24 Window.GetMaxWidth 8564
- 182.25 Window.GetMinHeight 8565
- 182.62 Window.Resize 8606
- 182.85 Window.SetMaxWidth 8638
- 182.86 Window.SetMinHeight 8639

Created 11st December 2016, last changed 11st December 2016.

182.85 Window.SetMaxWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.SetMaxWidth"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

The new value.

500

Result Returns OK or error.

Description

The maximum/minimum window sizes define how much a window can be resized by the user. Those limits may have no impact on what Window.Resize can do.

Examples

Set maximum width to 800 point:

```
MBS( "Window.SetMaxWidth"; Get(WindowName); 800 )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.23 Window.GetMaxHeight 8563
- 182.24 Window.GetMaxWidth 8564
- 182.26 Window.GetMinWidth 8566
- 182.36 Window.GetWidth 8576
- 182.62 Window.Resize 8606
- 182.84 Window.SetMaxHeight 8637
- 182.87 Window.SetMinWidth 8640

Created 11st December 2016, last changed 11st December 2016.

182.86 Window.SetMinHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.SetMinHeight"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

The new value.

500

Result Returns OK or error.

Description

The maximum/minimum window sizes define how much a window can be resized by the user. Those limits may have no impact on what Window.Resize can do.

Examples

Set minimum height to only 200:

```
MBS( "Window.SetMinHeight"; Get(WindowName); 200 )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.21 Window.GetHeight 8561
- 182.23 Window.GetMaxHeight 8563
- 182.25 Window.GetMinHeight 8565
- 182.26 Window.GetMinWidth 8566
- 182.62 Window.Resize 8606
- 182.84 Window.SetMaxHeight 8637
- 182.87 Window.SetMinWidth 8640

Created 11st December 2016, last changed 11st December 2016.

182.87 Window.SetMinWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.SetMinWidth"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

The new value.

500

Result Returns OK or error.

Description

The maximum/minimum window sizes define how much a window can be resized by the user. Those limits may have no impact on what Window.Resize can do.

Examples

Set minimum width to 200 point:

```
MBS( "Window.SetMinWidth"; Get(WindowName); 200 )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.24 Window.GetMaxWidth 8564
- 182.25 Window.GetMinHeight 8565
- 182.26 Window.GetMinWidth 8566
- 182.36 Window.GetWidth 8576
- 182.62 Window.Resize 8606
- 182.85 Window.SetMaxWidth 8638
- 182.86 Window.SetMinHeight 8639

Created 11st December 2016, last changed 11st December 2016.

182.88 Window.SetMiniaturizeButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	Yes	No	No	No

MBS("Window.SetMiniaturizeButton"; WindowRef; On or Off)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

On or Off

1

Description

Examples

Set the Miniturize buton off

```
Let(
[
windowRef = MBS("Window.FindByTitle"; Get(WindowName))
];
```

```
MBS(
"Window.SetMiniaturizeButton";
windowRef;
0
)
)
```

Set the Miniturize buton On

```
Let(
[
windowRef = MBS("Window.FindByTitle"; Get(WindowName))
];
```

```
MBS(
"Window.SetMiniaturizeButton";
windowRef;
1
)
)
```

)

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.38 Window.HasMiniaturizeButton 8578

Example Databases

- [Window/Dialog from Filemaker Form](#)
- [Window/WindowEffects](#)

Created 18th August 2014, last changed 18th August 2014.

182.89 Window.SetModified

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	No	No	No	No

MBS("Window.SetModified"; WindowRef; On or Off)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

On or Off

0

Description

On Mac OS, a window has a "Modified" State. If the content's of a window have been modified the Red Close button shows this by displaying a dark center. This function gives you control over that setting. Normally FileMaker window's do not display the modified state of a the window.

Examples

Clear modified flag for front window:

```
MBS( "Window.SetModified"; 0; 1 )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.51 Window.IsModified 8593

Created 18th August 2014, last changed 25th November 2019.

182.90 Window.SetProgress

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	7.3	No	Yes	No	No	No

MBS("Window.SetProgress"; WindowRef; State { ; Value; Maximum })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

State

The state to set. Can be NoProgress, Indeterminate, normal, error or paused.

"Normal"

Value

Optional

Current progress value.

50

Maximum

Optional

The maximum value for progress.

100

Result Returns OK or error.

Description

You can show progress on the task bar icon of your window.

Usually start with setting to indeterminate, than could up in a script with normal state and finally disable progress indication with setting no progress.

Requires Windows 7.

Examples

Sets progress to 50% :

```
MBS( "Window.SetProgress"; Get(FensterName); "normal"; 50; 100)
```

Set progress to indeterminate:

```
MBS( "Window.SetProgress"; Get(FensterName); "indeterminate"
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [Progress Dialog](#)

182.90.1 Blog Entries

- [Show progress in task bar on Windows](#)

Created 29th May 2017, last changed 29th May 2017.

182.91 Window.SetResizable

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.4	Yes	Yes	No	No	No

MBS("Window.SetResizable"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

Whether window should be resizable: 0 for non resizable or 1 for resizable.

1

Result Returns "OK" on success.

Description

Examples

Disable resize for frontmost window:

```
MBS("Window.SetResizable"; 0; 0)
```

Enable resize for window:

```
MBS("Window.SetResizable"; $WindowRef; 1)
```

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.44 Window.HideScrollbars](#) 8585
- [182.61 Window.Resizable](#) 8605

Example Databases

- [Window/Dialog from Filemaker Form](#)
- [Window/Hide Scrollbars](#)

182.91.1 Blog Entries

- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)

- [MBS Filemaker Plugin 2.4 release notes](#)
- [Dialogs with Filemaker](#)
- [MBS Filemaker Plugin, version 2.4pr8](#)

Created 18th August 2014, last changed 18th August 2014.

182.92 Window.SetShadow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	No	No	No	No

MBS("Window.SetShadow"; WindowRef; On or Off)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

On or Off

1

Description

On Mac OS X window's normally have a shadow, this function lets you turn the shadow on and off

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.39 Window.HasShadow 8579

Created 18th August 2014, last changed 18th August 2014.

182.93 Window.SetShowsToolBarButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	2.4	Yes	No	No	No	No

MBS("Window.SetShowsToolBarButton"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

Whether to ignore mouse events or not. Pass 1 to ignore mouse events or 0 to not ignore mouse events.

1

Result Returns "OK" on success.

Description

Examples

Hide toolbar button for frontmost window:

```
MBS("Window.SetShowsToolBarButton"; 0; 0)
```

Show toolbar button for window:

```
MBS("Window.SetShowsToolBarButton"; $WindowRef; 1)
```

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.110 Window.ShowsToolBarButton](#) 8671

Example Databases

- [Window/Dialog from Filemaker Form](#)

182.93.1 Blog Entries

- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)

- [Dialogs with Filemaker](#)
- [MBS Filemaker Plugin, version 2.4pr8](#)

182.93.2 FileMaker Magazin

- Ausgabe 5/2011, Seite 55

Created 18th August 2014, last changed 20th August 2014.

182.94 Window.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.3	Yes	Yes	No	No	No

MBS("Window.SetTag"; WindowRef; Tag)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Tag

The new tag value.

Result Returns OK or error.

Description

The MBS Plugin manages a list of open windows, so you can set tag value for a window.

Please be aware that referencing windows just by name is not good as window names may not be unique.

Use Window.Current to get ID for current window. Or use function Window.SetCurrentTag to set tag of current window.

See also

- 182.11 Window.Current 8545
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.27 Window.GetTag 8567
- 182.34 Window.GetTop 8574
- 182.78 Window.SetCurrentTag 8630

182.94.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr3](#)

Created 10th June 2016, last changed 10th June 2016.

182.95 Window.SetTitle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.2	Yes	Yes	No	No	No

MBS("Window.SetTitle"; WindowRef; Title)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Title

The title

"Hello World"

Description

The WindowRef is returned by either Window.FindByTitle or Window.FindByIndex. Although it works on both platforms it was added specifically for Windows, where it can be used to Change the Name of the Application Window.

Examples

Set the Title of the Application Window

```
MBS( "Window.SetTitle" ; $$WindowRef; "New Title")
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.28 Window.GetTitle 8568
- 182.98 Window.SetTitlebarAppearsTransparent 8655
- 182.96 Window.SetTitleIcon 8653
- 182.97 Window.SetTitleVisible 8654

Created 18th August 2014, last changed 18th August 2014.

182.96 Window.SetTitleIcon

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.2	No	Yes	No	No	No

MBS("Window.SetTitleIcon"; WindowRef; ImageRef { ; bigIcon })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

ImageRef

The image reference for the picture image, a number returned from the GImage.New functions

1

bigIcon

Optional

Optional flag. Pass 1 to set big icon (for app switcher) or 0 for small icon (icon in title bar). Default is 0.

1

Result Returns OK or error status.

Description

Version 6.2 no longer takes a mask image like previous versions, so you now pass a picture with transparency like a PNG file for example.

See also

- 85.191 GImage.New 4580
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.95 Window.SetTitle 8652

Example Databases

- [Win Only/Window Icon](#)

182.96.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr2](#)
- [MBS Filemaker Plugin, version 3.2pr9](#)

Created 18th August 2014, last changed 26th March 2016.

182.97 Window.SetTitleVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.0	Yes	No	No	No	No

MBS("Window.SetTitleVisible"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

The new visible setting.

1

Result Returns OK or error.

Description

Set to 1 to make it visible and 0 to hide it.

Requires OS X 10.10 or newer.

Examples

Hide titlebar

Set Variable [\$r; Value:MBS("Window.SetTitleVisible"; 0; 1)]

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.29 Window.GetTitleVisible 8569
- 182.33 Window.GetToolbarVisible 8573
- 182.95 Window.SetTitle 8652
- 182.100 Window.SetToolbarVisible 8657

182.97.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)

Created 16th January 2016, last changed 16th January 2016.

182.98 Window.SetTitlebarAppearsTransparent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.0	Yes	No	No	No	No

MBS("Window.SetTitlebarAppearsTransparent"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

The new visible setting. Pass 1 to make transparent. Pass 0 to make opaque.

1

Result Returns OK or error.

Description

When 1, the titlebar doesn't draw its background, allowing all buttons to show through, and "click through" to happen. In general, this is only useful when being full screen.

Examples

Set titlebar invisible and resize content to fill space:

```
Set Variable [ $r; Value:MBS("Window.SetTitlebarAppearsTransparent"; 0; 1) ]
```

```
Set Variable [ $r; Value:MBS("Window.ResizeContentView"; 0; 0; 0; 0; 22) ]
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.30 Window.GetTitlebarAppearsTransparent 8570
- 182.62 Window.Resize 8606
- 182.63 Window.ResizeContentView 8608
- 182.95 Window.SetTitle 8652

182.98.1 Blog Entries

- [MBS FileMaker Plugin, version 6.0pr7](#)

Created 16th January 2016, last changed 16th January 2016.

182.99 Window.SetToolbarConfiguration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.SetToolbarConfiguration"; WindowRef; ConfigurationXML)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

ConfigurationXML

The configuration XML. Should be the one returned by Window.GetToolbarConfiguration.

\$ConfigurationXML

Result Returns OK or error.

Description

Pass a xml with the toolbar's configuration information. If you want to provide a custom xml, you should first get the receiver's current configuration xml, then create a modified copy, rather than trying to construct one yourself.

Do not depend on any details of the normal contents of a configuration dictionary. This may change with an update to Mac OS X or FileMaker.

See also

- [182.1 Toolbar.Install](#) 8531
- [182.3 Toolbar.Register](#) 8534
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.31 Window.GetToolbarConfiguration](#) 8571

Example Databases

- [Mac only/Toolbar/Window Toolbar](#)

182.99.1 Blog Entries

- [Toolbar functions for FileMaker on Mac](#)

Created 19th August 2014, last changed 20th August 2014.

182.100 Window.SetToolbarVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	4.3	Yes	No	No	No	No

MBS("Window.SetToolbarVisible"; WindowRef; State)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

State

The new state. Pass 0 to hide or 1 to show toolbar.

1

Result Returns OK or error.

Description

Examples

Show toolbar in current window:

```
MBS( "Window.SetToolbarVisible"; 0; 1 )
```

Hide toolbar in current window:

```
MBS( "Window.SetToolbarVisible"; 0; 0 )
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.29 Window.GetTitleVisible 8569
- 182.33 Window.GetToolbarVisible 8573
- 182.74 Window.ScrollbarsVisible 8623
- 182.97 Window.SetTitleVisible 8654

Example Databases

- [Mac only/Toolbar/Window Toolbar](#)

Created 19th August 2014, last changed 20th August 2014.

182.101 Window.SetTopMost

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	4.2	Yes	Yes	No	No	No

MBS("Window.SetTopMost"; WindowRef; Value)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Value

The new topmost setting. Can be 0 or 1.

1

Result Returns OK or error.

Description

If window is topmost, it floats over all other windows.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.35 Window.GetTopMost 8575

Example Databases

- [Window/Window TopMost](#)

182.101.1 Blog Entries

- [MBS Filemaker Plugin, version 4.2pr5](#)

Created 18th August 2014, last changed 18th August 2014.

182.102 Window.SetZoomButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.1	Yes	Yes	No	No	No

MBS("Window.SetZoomButton"; WindowRef; On or Off)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

On or Off

The new setting.

1

Description

Examples

Set The Zoom button

```
Let(
[
windowRef = MBS("Window.FindByTitle"; Get(WindowName))
];
```

```
MBS(
"Window.SetZoomButton";
windowRef;
0
)
)
```

Set The Zoom button

```
Let(
[
windowRef = MBS("Window.FindByTitle"; Get(WindowName))
];
```

```
MBS(
"Window.SetZoomButton";
windowRef;
1
)
)
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.40 Window.HasZoomButton 8580
- 182.77 Window.SetCloseButton 8628

Example Databases

- [Window/Dialog from Filemaker Form](#)
- [Window/WindowEffects](#)

Created 18th August 2014, last changed 22nd January 2016.

182.103 Window.Show

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	1.0	Yes	Yes	No	No	No

MBS("Window.Show"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK on success.

Description

This can be used to show a window without bringing the window to the front.

Examples

Show a Window without bringing it the front

```
Let(
[
/*-----PARAMETERS-----*/
WindowRef = MBS( "Window.FindByTitle" ; "My Window" )
];
/*-----FUNCTION-----*/
MBS(
"Window.Show";
WindowRef
)
)
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.104 Window.ShowCharacterPalette 8663
- 182.105 Window.ShowContent 8664
- 182.106 Window.ShowKeyboard 8665
- 182.107 Window.ShowOverlay 8666
- 182.108 Window.ShowScrollbars 8668
- 182.109 Window.ShowTableViewDialog 8670

182.104 Window.ShowCharacterPalette

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	7.2	Yes	Yes	No	No	No

MBS("Window.ShowCharacterPalette")

Result Returns OK or error.

Description

Allows you to enter Emoji and other symbols.

Examples

Show keyboard:

```
Set Variable [ $r ; Value: MBS("Window.ShowKeyboard") ]
```

Show character palette:

```
Set Variable [ $r ; Value: MBS("Window.ShowCharacterPalette") ]
```

See also

- 182.103 Window.Show 8661
- 182.106 Window.ShowKeyboard 8665

182.104.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr1](#)

Created 26th March 2017, last changed 26th September 2019.

182.105 Window.ShowContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.2	Yes	No	No	No	No

MBS("Window.ShowContent"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Description

Deprecated.

Examples

Shows content:

MBS("Window.ShowContent"; Get(WindowName))

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.42 Window.HideContent 8583
- 182.103 Window.Show 8661

182.105.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr7](#)
- [MBS Filemaker Plugin, version 2.2pr5](#)

Created 18th August 2014, last changed 3th March 2020.

182.106 Window.ShowKeyboard

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	9.5	Yes	Yes	No	No	No

MBS("Window.ShowKeyboard")

Result Returns OK or error.

Description

Examples

Show keyboard:

```
Set Variable [ $r ; Value: MBS("Window.ShowKeyboard") ]
```

Show character palette:

```
Set Variable [ $r ; Value: MBS("Window.ShowCharacterPalette") ]
```

See also

- [182.103 Window.Show](#) 8661
- [182.104 Window.ShowCharacterPalette](#) 8663

182.106.1 Blog Entries

- [Neues MBS FileMaker Plugin 9.5](#)
- [MBS FileMaker Plugin 9.5 - More than 5900 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.5pr1](#)

Created 26th September 2019, last changed 26th September 2019.

182.107 Window.ShowOverlay

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.3	Yes	No	No	No	No

MBS("Window.ShowOverlay"; WindowRef; alpha; red; green; blue)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

alpha

The alpha value to use. Range 0.0 (invisible) to 1.0 (full visible). Default 0.5.

0.5

red

The red color value. Default 0.0.

0.0

green

The green color value. Default 0.0.

0.0

blue

The blue color value. Default 0.0.

0.0

Result Returns "OK" on success.

Description

This way you can have the user focus on a dialog in front of the main window.

Does not work in FileMaker 18.

Deprecated.

Examples

Show an overlay:

MBS("Window.ShowOverlay"; Get(WindowName); 0.5; 0.0; 0.0; 0.0)

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.43 Window.HideOverlay 8584

182.107. WINDOW.SHOWOVERLAY

8667

- 182.103 Window.Show

8661

Example Databases

- [Mac only/Kiosk functions/Dark Window with Overlay](#)

182.107.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr7](#)
- [MBS Filemaker Plugin, version 4.0pr1](#)
- [MBS Filemaker Plugin, version 2.3pr2](#)
- [MBS Filemaker Plugin, version 2.3pr4](#)

Created 18th August 2014, last changed 3th March 2020.

182.108 Window.ShowScrollbars

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.4	Yes	Yes	No	No	No

MBS("Window.ShowScrollbars"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns "OK" on success.

Description

Tries to reverse HideScrollbars call.

Works fine with FileMaker 11/12 on Mac and Windows. Also works with FileMaker 10 on Windows (but not on Mac).

Disabled for FileMaker 16, so it returns only an error.

Examples

Looks up window reference for the window named test and shows scrollbars there:

```
MBS("Window.ShowScrollbars"; MBS("Window.FindByTitle"; "test"))
```

See also

- [182.13 Window.EnableScrollbars](#) 8547
- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.44 Window.HideScrollbars](#) 8585
- [182.103 Window.Show](#) 8661

Example Databases

- [Window/Dialog from Filemaker Form](#)

182.108.1 Blog Entries

- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)

182.108. WINDOW.SHOWSCROLLBARS

8669

- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr9](#)

182.108.2 FileMaker Magazin

- Ausgabe 5/2011, Seite 55

Created 18th August 2014, last changed 11st May 2017.

182.109 Window.ShowTableViewDialog

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	6.5	Yes	No	No	No	No

MBS("Window.ShowTableViewDialog"; WindowRef { ; Force })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Force

Optional

Pass 1 to avoid checks whether button can be clicked. Normally plugin wants to avoid that you click there when not appropriate. But to toggle the button for a card window, you may want to force it as FileMaker does not support that.

0

Result Returns OK or error.

Description

Please run as last command in script, so the function can do the job properly.

On Windows you can try similar by simulating a mouse click on the right coordinate.

Examples

Show table view dialog command:

```
Set Variable [ $r; Value:MBS("Window.ShowTableViewDialog"; 0) ]
```

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 182.103 Window.Show 8661

Example Databases

- [Window/Card Window Test](#)

182.109.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr9](#)

Created 27th November 2016, last changed 1st June 2017.

182.110 Window.ShowsToolBarButton

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
167 Toolbar 182 Window	2.4	Yes	No	No	No	No

MBS("Window.ShowsToolBarButton"; WindowRef)

Parameters**WindowRef**

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns 0 if toolbar button is hidden or 1 if toolbar button is visible.

Description**See also**

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.93 Window.SetShowsToolBarButton](#) 8649

182.110.1 Blog Entries

- [MonkeyBread Software Releases the MBS Filemaker plug-in in version 2.4](#)
- [MBS Filemaker Plugin 2.4 release notes](#)
- [MBS Filemaker Plugin, version 2.4pr8](#)

182.110.2 FileMaker Magazin

- Ausgabe 5/2011, Seite 55

Created 18th August 2014, last changed 20th August 2014.

182.111 Window.ToggleFullScreen

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	3.0	Yes	No	No	No	No

MBS("Window.ToggleFullScreen"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK on success.

Description

If an application supports fullscreen, it should add a menu item to the View menu with toggleFullScreen as the action.

Available in Mac OS X v10.7 and later.

This method does not much if you don't mark a window to be the primary fullscreen window.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

Example Databases

- [Window/Fullscreen](#)

182.111.1 FileMaker Magazin

- Ausgabe 1/2019, Seite 16

Created 18th August 2014, last changed 18th August 2014.

182.112 Window.TopHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	8.3	Yes	Yes	No	No	No

MBS("Window.TopHeight"; WindowRef { ; WithFrame })

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

WithFrame

Optional

Whether to include frame on Mac. Pass 1 to include frame. Default is 1 to include it.

0

Result Returns number or error.

Description

This is the height for any toolbars between content and the window top border.

On MacOS without frame, the top height is for example about 50 pixels for two toolbars in the window. With Frame, you include 81 pixels for toolbar and window title. So top height can be 131 as an example.

Ruler is not included in that height, as it's part of FileMaker's content.

See also

- [182.15 Window.FindByIndex](#) 8550
- [182.16 Window.FindByTitle](#) 8552
- [182.21 Window.GetHeight](#) 8561

182.112.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [MBS FileMaker Plugin, version 8.3pr7](#)
- [MBS FileMaker Plugin, version 8.3pr6](#)
- [MBS FileMaker Plugin, version 8.3pr2](#)

Created 5th June 2018, last changed 14th July 2018.

182.113 Window.Update

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
182 Window	2.8	Yes	Yes	No	No	No

MBS("Window.Update"; WindowRef)

Parameters

WindowRef

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

Result Returns OK on success.

Description

This does not cause a FileMaker window to load new or modified records. It simply asks the window to redraw all controls.

See also

- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552

182.113.1 Blog Entries

- [MBS Filemaker Plugin, version 2.8pr7](#)

Created 18th August 2014, last changed 28th April 2016.

Chapter 183

WindowsScript

Run Windows Scripts.

Microsoft did not port the ScriptControl to 64-bit, so the official control coming with Windows, is only for 32-bit.

Alternative, you can install Tablacus Script Control 64 to get it working in 64-bit. http://www.eonet.ne.jp/~gakana/tablacus/scriptcontrol_en.html

183.1 WindowsScript.AddCode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.AddCode"; ScriptID; Code)

Parameters

ScriptID

The ID of a WindowsScript in memory.

Code

the code to add to the script

Description

Used to build a script in memory. You can use this function more then once on the same script. If you add code that overlaps with code that is already in the script then the last one added takes precedence. For Ex. IF you add FUNCTION HelloWorld() HelloWorld = "HELLO WORLD" END FUNCTION To a VBScript that already has the function "HelloWorld()" in it, it is replaced by your new version. If the code can't be added to the script one of the following is returned - "MBS: Missing ScriptID." - "MBS: Failed to create Windows Script object." - description of exception

If you use VBScript, you don't need "dim" keyword for defining variables.

Examples

Trigger a FileMaker Script Using OS Scripting

```

Let(
[
// — the name of the script to run —————

ScriptName = "Triggered Script";
FileName = Get(FileName);

//—————

//— don't need to edit anything below this line ——

Applescript = "do script " & Quote(ScriptName);

VBScriptText =
"FUNCTION DoFMScript(FileName, ScriptName)" & "§" &
"Set fmApp = CreateObject(\"FMPro.Application\")" & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
"For Each fmDoc In fmDocs" & "§" &
"If InStr(LCase(fmDoc.fullname), LCase(FileName)) >0 Then" & "§" &
" fmDoc.dofmscript (ScriptName)" & "§" &
"End If" & "§" &
"Next" & "§" &

"END FUNCTION";

ScriptID = MBS("WindowsScript.Create");
lang= MBS("WindowsScript.SetLanguage"; ScriptID; "VBScript");
addcode = MBS("WindowsScript.AddCode"; ScriptID; VBScriptText)

];
Case(
Get ( SystemPlatform ) = 1;

// Mac OSX Case
MBS(
"Applescript.Run";
Applescript
);

// Windows Case
MBS("WindowsScript.ExecuteFunction";ScriptID; "DoFMScript";FileName; ScriptName) &
MBS("WindowsScript.Close"; ScriptID)

```



```

Case(
Get ( SystemPlatform ) = 1;

// Mac OSX Case
MBS(
"Applescript.Run";
Applescript
);

// Windows Case
MBS("WindowsScript.ExecuteFunction";ScriptID; "DoFMScript";theFileName; theScriptName) &
MBS("WindowsScript.Close"; ScriptID)

)
)

```

Use JScript to Get System Date

```

Let(
[
JScriptText = "function TestDate() { var d =new Date();
return d.toGMTString(); } ";
scriptID = MBS("WindowsScript.Create");
SetLang = MBS("WindowsScript.SetLanguage";1;"JScript");
addcode = MBS("WindowsScript.AddCode";1;JScriptText);
theDate = MBS("WindowsScript.ExecuteFunction";1;"TestDate");
closeScript = MBS("WindowsScript.Close";1)

];

theDate

)

```

See also

- 35.9 AppleScript.Run 935
- 183.2 WindowsScript.Close 8680
- 183.3 WindowsScript.Create 8684
- 183.12 WindowsScript.ExecuteFunction 8696
- 183.19 WindowsScript.SetLanguage 8706

Example Databases

- [OS Scripting/Trigger Scripts Using OS Scripting](#)

- [OS Scripting/VBScript Example](#)
- [Window/WindowEffects](#)

Created 18th August 2014, last changed 18th August 2014.

183.2 WindowsScript.Close

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.Close"; Script ID)

Parameters

Script ID

The ID of a WindowsScript in memory

Description

Examples

Trigger a FileMaker Script Using OS Scripting

```
Let(
[
// — the name of the script to run —————

ScriptName = "Triggered Script";
FileName = Get(FileName);

//—————

//— don't need to edit anything below this line ——

Applescript = "do script " & Quote(ScriptName);

VBScriptText =
"FUNCTION DoFMScipt(FileName, ScriptName)" & "§" &
"Set fmApp = CreateObject(\"FMPro.Application\")" & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
"For Each fmDoc In fmDocs" & "§" &
"If InStr(LCase(fmDoc.fullname), LCase(FileName)) >0 Then" & "§" &
" fmDoc.dofmscript (ScriptName)" & "§" &
"End If" & "§" &
"Next" & "§" &

"END FUNCTION";

ScriptID = MBS("WindowsScript.Create");
lang= MBS("WindowsScript.SetLanguage"; ScriptID; "VBScript");
addcode = MBS("WindowsScript.AddCode"; ScriptID; VBScriptText)
```

```
];
Case(
Get ( SystemPlatform ) = 1;

// Mac OSX Case
MBS(
"Applescript.Run";
Applescript
);

// Windows Case
MBS("WindowsScript.ExecuteFunction";ScriptID; "DoFMScript";FileName; ScriptName) &
MBS("WindowsScript.Close"; ScriptID)

)
)
```

Trigger A FileMaker Script (Custom Function)

```
MBS_TriggerScript ( "Triggered Script" ; Get ( FileName ) )
```

Custom Function Definition

```
/*#####
#####
#####*/
```

```
MBS_TriggerScript
created 10/26/06, by Todd Geist, todd@geistinteractive.com
```

Parameters: theScriptName, theFileName

Dependencies: MBS FileMaker Plug-in.

Notes: Uses VBScript and Applescript to run a script

```
#####
#####*/
Let(
[

Applescript = "do script " & Quote(theScriptName);

VBScriptText =
"FUNCTION DoFMScrupt(FileName, ScriptName)" & "§" &
"Set fmApp = CreateObject(\"FMPro.Application\")" & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
```

```

"For Each fmDoc In fmDocs" & "§" &
"If InStr(LCase(fmDoc.fullname), LCase(FileName)) >0 Then" & "§" &
" fmDoc.dofmscript (ScriptName)" & "§" &
"End If" & "§" &
"Next" & "§" &

```

```

"END FUNCTION";

```

```

ScriptID = MBS("WindowsScript.Create");
lang= MBS("WindowsScript.SetLanguage"; ScriptID; "VBScript");
addcode = MBS("WindowsScript.AddCode"; ScriptID; VBScriptText)

```

```

];
Case(
Get ( SystemPlatform ) = 1;

```

```

// Mac OSX Case
MBS(
"Applescript.Run";
Applescript
);

```

```

// Windows Case
MBS("WindowsScript.ExecuteFunction";ScriptID; "DoFMScript";theFileName; theScriptName) &
MBS("WindowsScript.Close"; ScriptID)

```

```

)
)

```

Use JScript to Get System Date

```

Let(
[
JScriptText = "function TestDate() { var d =new Date();
return d.toGMTString(); } ";
scriptID = MBS("WindowsScript.Create");
SetLang = MBS("WindowsScript.SetLanguage";1;"JScript");
addcode = MBS("WindowsScript.AddCode";1;JScriptText);
theDate = MBS("WindowsScript.ExecuteFunction";1;"TestDate");
closeScript = MBS("WindowsScript.Close";1)

```

```

];

```

```

theDate

```

```

)

```

See also

- 35.9 [AppleScript.Run](#) 935
- 183.1 [WindowsScript.AddCode](#) 8675
- 183.3 [WindowsScript.Create](#) 8684
- 183.11 [WindowsScript.Eval](#) 8695
- 183.12 [WindowsScript.ExecuteFunction](#) 8696
- 183.19 [WindowsScript.SetLanguage](#) 8706

Example Databases

- [OS Scripting/Trigger Scripts Using OS Scripting](#)
- [OS Scripting/VBScript Example](#)
- [Window/WindowEffects](#)

Created 18th August 2014, last changed 18th August 2014.

183.3 WindowsScript.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

```
MBS( "WindowsScript.Create" )
```

Description

Once the script is created you can add script code to by using the `WindowsScript.AddCode` function. The script is then executed using `WindowScript.Run`. The default language of a new script is `Jscript`. This can be changed by using the `WindowsScript.SetLanguage` function.

ScriptControl from Microsoft is 32-bit only. If you need 64-bit, please install a 64-bit alternative `MSScript.ocx` file.

Examples

Trigger a FileMaker Script Using OS Scripting

```
Let(
[
// — the name of the script to run —————

ScriptName = "Triggered Script";
FileName = Get(FileName);

//—————

//— don't need to edit anything below this line ——

Applescript = "do script " & Quote(ScriptName);

VBScriptText =
"FUNCTION DoFMSCript(FileName, ScriptName)" & "§" &
"Set fmApp = CreateObject(\"FMPro.Application\")" & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
"For Each fmDoc In fmDocs" & "§" &
"If InStr(LCase(fmDoc.fullname), LCase(FileName)) >0 Then" & "§" &
" fmDoc.dofmscript (ScriptName)" & "§" &
"End If" & "§" &
"Next" & "§" &

"END FUNCTION";

ScriptID = MBS("WindowsScript.Create");
```



```

"Set fmApp = CreateObject(\ "FMPro.Application\ ") & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
"For Each fmDoc In fmDocs" & "§" &
"If InStr(LCase(fmDoc.fullname), LCase(FileName)) >0 Then" & "§" &
" fmDoc.dofmscript (ScriptName)" & "§" &
"End If" & "§" &
"Next" & "§" &

```

```

"END FUNCTION";

```

```

ScriptID = MBS("WindowsScript.Create");
lang= MBS("WindowsScript.SetLanguage"; ScriptID; "VBScript");
addcode = MBS("WindowsScript.AddCode"; ScriptID; VBScriptText)

```

```

];
Case(
Get ( SystemPlatform ) = 1;

```

```

// Mac OSX Case
MBS(
"Applescript.Run";
Applescript
);

```

```

// Windows Case
MBS("WindowsScript.ExecuteFunction";ScriptID; "DoFMScript";theFileName; theScriptName) &
MBS("WindowsScript.Close"; ScriptID)

```

```

)
)

```

Use JScript to Get System Date

```

Let(
[
JScriptText = "function TestDate() { var d =new Date();
return d.toGMTString(); } ";
scriptID = MBS("WindowsScript.Create");
SetLang = MBS("WindowsScript.SetLanguage";1;"JScript");
addcode = MBS("WindowsScript.AddCode";1;JScriptText);
theDate = MBS("WindowsScript.ExecuteFunction";1;"TestDate");
closeScript = MBS("WindowsScript.Close";1)

```

```

];

```

```

theDate

```

183.3. *WINDOWSSCRIPT.CREATE* 8687
)

See also

- 35.9 *AppleScript.Run* 935
- 183.1 *WindowsScript.AddCode* 8675
- 183.2 *WindowsScript.Close* 8680
- 183.11 *WindowsScript.Eval* 8695
- 183.12 *WindowsScript.ExecuteFunction* 8696
- 183.19 *WindowsScript.SetLanguage* 8706

Example Databases

- [OS Scripting/Trigger Scripts Using OS Scripting](#)
- [OS Scripting/VBScript Example](#)
- [Window/WindowEffects](#)

Created 18th August 2014, last changed 24th August 2016.

183.4 WindowsScript.ErrorClear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ErrorClear")

Description

See also

- 183.5 WindowsScript.ErrorColumn 8689
- 183.7 WindowsScript.ErrorLine 8691
- 183.8 WindowsScript.ErrorNumber 8692
- 183.9 WindowsScript.ErrorSource 8693
- 183.10 WindowsScript.ErrorText 8694

Created 18th August 2014, last changed 18th August 2014.

183.5 WindowsScript.ErrorColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ErrorColumn"; ScriptID)

Parameters

ScriptID

The ID of a WindowsScript in memory.

0

Description

For example: If the script encountered an Error at column 16 of the line indicated by the ErrorLine function, "16" would be returned.

See also

- 183.4 WindowsScript.ErrorClear 8688
- 183.7 WindowsScript.ErrorLine 8691
- 183.8 WindowsScript.ErrorNumber 8692
- 183.9 WindowsScript.ErrorSource 8693
- 183.10 WindowsScript.ErrorText 8694

Created 18th August 2014, last changed 18th August 2014.

183.6 WindowsScript.ErrorDescription

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ErrorDescription")

Description

Created 18th August 2014, last changed 18th August 2014.

183.7 WindowsScript.ErrorLine

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ErrorLine"; ScriptID)

Parameters

ScriptID

The ID of a WindowsScript in memory.

Description

For example: "1" would be returned if the script encountered an error on the first line.

See also

- 183.4 WindowsScript.ErrorClear 8688
- 183.5 WindowsScript.ErrorColumn 8689
- 183.8 WindowsScript.ErrorNumber 8692
- 183.9 WindowsScript.ErrorSource 8693
- 183.10 WindowsScript.ErrorText 8694

Created 18th August 2014, last changed 18th August 2014.

183.8 WindowsScript.ErrorNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ErrorNumber")

Description

See also

- 183.4 WindowsScript.ErrorClear 8688
- 183.5 WindowsScript.ErrorColumn 8689
- 183.7 WindowsScript.ErrorLine 8691
- 183.9 WindowsScript.ErrorSource 8693
- 183.10 WindowsScript.ErrorText 8694

Created 18th August 2014, last changed 18th August 2014.

183.9 WindowsScript.ErrorSource

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ErrorSource")

Description

For example: "Runtime error in Microsoft.JScript"

See also

- 183.4 WindowsScript.ErrorClear 8688
- 183.5 WindowsScript.ErrorColumn 8689
- 183.7 WindowsScript.ErrorLine 8691
- 183.8 WindowsScript.ErrorNumber 8692
- 183.10 WindowsScript.ErrorText 8694

Created 18th August 2014, last changed 18th August 2014.

183.10 WindowsScript.ErrorText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ErrorText"; ScriptID)

Parameters

ScriptID

The ID of a WindowsScript in memory.

2

Description

For ex. "FUNCTION myFunction(string" This line of a script is missing a ")" at the end of the line.

See also

- 183.4 WindowsScript.ErrorClear 8688
- 183.5 WindowsScript.ErrorColumn 8689
- 183.7 WindowsScript.ErrorLine 8691
- 183.8 WindowsScript.ErrorNumber 8692
- 183.9 WindowsScript.ErrorSource 8693

Created 18th August 2014, last changed 18th August 2014.

183.11 WindowsScript.Eval

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.Eval"; ScriptID; Text)

Parameters**ScriptID**

The ID of a WindowsScript in memory.

\$\$scriptID

Text

The text to evaluate

1

Description**See also**

- 183.2 WindowsScript.Close 8680
- 183.3 WindowsScript.Create 8684

Created 18th August 2014, last changed 18th August 2014.

183.12 WindowsScript.ExecuteFunction

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ExecuteFunction"; ScriptID; FunctionName { ; Function Parameter; Function Parameters })

Parameters

ScriptID

The ID of a WindowsScript in memory.

0

FunctionName

The name of the function you are using in the script

Function Parameter

Optional

The first function parameter

Function Parameters

Optional

any other function parameters that are needed

Description

Examples

Trigger a FileMaker Script Using OS Scripting

```
Let(
[
// — the name of the script to run —————

ScriptName = "Triggered Script";
FileName = Get(FileName);

//—————

//— don't need to edit anything below this line ———

Applescript = "do script " & Quote(ScriptName);

VBScriptText =
"FUNCTION DoFMSCript(FileName, ScriptName)" & "§" &
"Set fmApp = CreateObject(\"FMPro.Application\")" & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
```



```

# # # # # # # # # # # # # # */
Let(
[

Applescript = "do script " & Quote(theScriptName);

VBScriptText =
"FUNCTION DoFMSCript(FileName, ScriptName)" & "§" &

"Set fmApp = CreateObject(\"FMPro.Application\")" & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
"For Each fmDoc In fmDocs" & "§" &
"If InStr(LCase(fmDoc.fullname), LCase(FileName)) >0 Then" & "§" &
" fmDoc.dofmscript (ScriptName)" & "§" &
"End If" & "§" &
"Next" & "§" &

"END FUNCTION";

ScriptID = MBS("WindowsScript.Create");
lang= MBS("WindowsScript.SetLanguage"; ScriptID; "VBScript");
addcode = MBS("WindowsScript.AddCode"; ScriptID; VBScriptText)

];
Case(
Get ( SystemPlatform ) = 1;

// Mac OSX Case
MBS(
"Applescript.Run";
Applescript
);

// Windows Case
MBS("WindowsScript.ExecuteFunction";ScriptID; "DoFMSCript";theFileName; theScriptName) &
MBS("WindowsScript.Close"; ScriptID)

)
)

```

Use JScript to Get System Date

```

Let(
[
JScriptText = "function TestDate() { var d =new Date();
return d.toGMTString(); } ";
scriptID = MBS("WindowsScript.Create");

```

183.12. WINDOWSSCRIPT.EXECUTEFUNCTION

8699

```
SetLang = MBS("WindowsScript.SetLanguage";1;"JScript");
addcode = MBS("WindowsScript.AddCode";1;JScriptText);
theDate = MBS("WindowsScript.ExecuteFunction";1;"TestDate");
closeScript = MBS("WindowsScript.Close";1)

];

theDate

)
```

See also

- [35.9 AppleScript.Run](#) 935
- [183.1 WindowsScript.AddCode](#) 8675
- [183.2 WindowsScript.Close](#) 8680
- [183.3 WindowsScript.Create](#) 8684
- [183.13 WindowsScript.ExecuteStatement](#) 8700
- [183.19 WindowsScript.SetLanguage](#) 8706

Example Databases

- [OS Scripting/Trigger Scripts Using OS Scripting](#)
- [OS Scripting/VBScript Example](#)
- [Window/WindowEffects](#)

Created 18th August 2014, last changed 27th January 2016.

183.13 WindowsScript.ExecuteStatement

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.ExecuteStatement"; Script)

Parameters

Script

The script command.

Description

See also

- 183.12 WindowsScript.ExecuteFunction

8696

Created 18th August 2014, last changed 18th August 2014.

183.14 WindowsScript.GetAllowUI

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.GetAllowUI"; ScriptID)

Parameters

ScriptID

The ID of a WindowsScript in memory.

Description

Scripts can either allow user interaction or not.

See also

- 183.16 WindowsScript.GetTimeout 8703
- 183.18 WindowsScript.SetAllowUI 8705

Created 18th August 2014, last changed 18th August 2014.

183.15 WindowsScript.GetLanguage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.GetLanguage"; ScriptID)

Parameters

ScriptID

The ID of a WindowsScript in memory.

Description

The Windows Scripting Host can run scripts that are written in any of several languages. This function returns the current language setting, for example "JScript" or "VBScript"

See also

- 183.19 WindowsScript.SetLanguage

8706

Created 18th August 2014, last changed 18th August 2014.

183.16 WindowsScript.GetTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.GetTimeout"; ScriptID)

Parameters

ScriptID

The ID of a WindowsScript in memory.

Description

This function returns that setting.

See also

- 183.14 WindowsScript.GetAllowUI 8701
- 183.20 WindowsScript.SetTimeout 8709

Created 18th August 2014, last changed 18th August 2014.

183.17 WindowsScript.GetUseSafeSubset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.GetUseSafeSubset"; ScriptID)

Parameters

ScriptID

The ID of a WindowsScript in memory.

Description

If Use Safe Subset is enabled then subset of the normal functions are allowed.

See also

- 183.21 WindowsScript.SetUseSafeSubset

8710

Created 18th August 2014, last changed 18th August 2014.

183.18 WindowsScript.SetAllowUI

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.SetAllowUI"; ScriptID; On or Off)

Parameters**ScriptID**

The ID of a WindowsScript in memory.

\$ScriptID

On or Off**Description**

Scripts can either allow user interaction or not.

See also

- 183.14 WindowsScript.GetAllowUI 8701
- 183.20 WindowsScript.SetTimeout 8709

Example Databases

- [OS Scripting/VBScript Example](#)

Created 18th August 2014, last changed 18th August 2014.

183.19 WindowsScript.SetLanguage

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.SetLanguage"; ScriptID; Language)

Parameters

ScriptID

The ID of a WindowsScript in memory.

Language

The scripting language you want to use
"VBScript"

Description

For ex. "FUNCTION myFunction(string" This line of a script is missing a ")" at the end of the line.

Examples

Trigger a FileMaker Script Using OS Scripting

```
Let(
[
// — the name of the script to run —————

ScriptName = "Triggered Script";
FileName = Get(FileName);

//—————

//— don't need to edit anything below this line ——

Applescript = "do script " & Quote(ScriptName);

VBScriptText =
"FUNCTION DoFMSCript(FileName, ScriptName)" & "§" &
"Set fmApp = CreateObject(\"FMPro.Application\")" & "§" &
"fmApp.Visible = True" & "§" &
"Set fmDocs = fmApp.Documents" & "§" &
"For Each fmDoc In fmDocs" & "§" &
"If InStr(LCase(fmDoc.fullname), LCase(FileName)) >0 Then" & "§" &
" fmDoc.dofmscript (ScriptName)" & "§" &
"End If" & "§" &
"Next" & "§" &
"END FUNCTION";
```

```

ScriptID = MBS("WindowsScript.Create");
lang= MBS("WindowsScript.SetLanguage"; ScriptID; "VBScript");
addcode = MBS("WindowsScript.AddCode"; ScriptID; VBScriptText)

];
Case(
Get ( SystemPlatform ) = 1;

// Mac OSX Case
MBS(
"Applescript.Run";
Applescript
);

// Windows Case
MBS("WindowsScript.ExecuteFunction";ScriptID; "DoFMScript";FileName; ScriptName) &
MBS("WindowsScript.Close"; ScriptID)

)
)

```

Use JScript to Get System Date

```

Let(
[
JScriptText = "function TestDate() { var d =new Date();
return d.toGMTString(); } ";
scriptID = MBS("WindowsScript.Create");
SetLang = MBS("WindowsScript.SetLanguage";1;"JScript");
addcode = MBS("WindowsScript.AddCode";1;JScriptText);
theDate = MBS("WindowsScript.ExecuteFunction";1;"TestDate");
closeScript = MBS("WindowsScript.Close";1)

];

theDate

)

```

See also

- 35.9 AppleScript.Run 935
- 183.1 WindowsScript.AddCode 8675
- 183.2 WindowsScript.Close 8680
- 183.3 WindowsScript.Create 8684

- 183.12 WindowsScript.ExecuteFunction 8696
- 183.15 WindowsScript.GetLanguage 8702

Example Databases

- [OS Scripting/Trigger Scripts Using OS Scripting](#)
- [OS Scripting/VBScript Example](#)
- [Window/WindowEffects](#)

Created 18th August 2014, last changed 18th August 2014.

183.20 WindowsScript.SetTimeout

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.SetTimeout"; ScriptID; TimeOut)

Parameters**ScriptID**

The ID of a WindowsScript in memory.

1

TimeOut

Seconds, default is 10000

2

Description

This function allows you to change to change that setting. The units are seconds.

See also

- 183.16 WindowsScript.GetTimeout 8703
- 183.18 WindowsScript.SetAllowUI 8705

Created 18th August 2014, last changed 18th August 2014.

183.21 WindowsScript.SetUseSafeSubset

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
183 WindowsScript	1.1	No	Yes	Yes, Windows only	No	No

MBS("WindowsScript.SetUseSafeSubset"; ScriptID)

Parameters

ScriptID

The ID of a WindowsScript in memory.

Description

If Use Safe Subset is enabled then subset of the normal functions are allowed.

See also

- 183.17 WindowsScript.GetUseSafeSubset

8704

Created 18th August 2014, last changed 18th August 2014.

Chapter 184

WindowsUserNotification

Show user notifications on Windows 8 or newer.

184.1 WindowsUserNotification.Available

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.Available")

Result Returns 1 or 0.

Description

Returns 1 on Windows 8.1 and Windows 10 if all functions are available to show notifications.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728
- 184.17 WindowsUserNotification.XMLUsed 8731

Created 2nd April 2017, last changed 24th May 2017.

184.2 WindowsUserNotification.GetFileName

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.GetFileName"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns text or error.

Description

See also

- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Created 2nd April 2017, last changed 24th May 2017.

184.3 WindowsUserNotification.GetImagePath

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.GetImagePath"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns OK or error.

Description

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Created 2nd April 2017, last changed 24th May 2017.

184.4 WindowsUserNotification.GetScriptName

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.GetScriptName"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns text or error.

Description

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.5 WindowsUserNotification.GetText 8715
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726

Created 2nd April 2017, last changed 24th May 2017.

184.5 WindowsUserNotification.GetText

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.GetText"; Notification; Index)

Parameters**Notification**

The reference number for the Windows User Notification.
\$Notification

Index

The index of the text. Range 0 to 3.
0

Result Returns text or error.

Description**See also**

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.7 WindowsUserNotification.Initialize 8717
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728
- 184.17 WindowsUserNotification.XMLUsed 8731

Created 2nd April 2017, last changed 24th May 2017.

184.6 WindowsUserNotification.HideNotification

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.HideNotification"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns OK or error.

Description

Examples

Hide notification:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.HideNotification"; Windows User Notifications::ID)
]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
End If
```

See also

- [124.6 IsError](#) 6266
- [184.9 WindowsUserNotification.NewNotification](#) 8720
- [184.16 WindowsUserNotification.ShowNotification](#) 8730

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

184.7 WindowsUserNotification.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184 WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.Initialize"; AppName; Company; Name; Surname; VersionInfo)

Parameters

AppName

The application name.

"FileMaker Pro"

Company

The company name. Used to build unique app id.

"Test"

Name

The name. Used to build unique app id.

Surname

The surname. Used to build unique app id.

VersionInfo

The version info. Used to build unique app id.

"1.0"

Result Returns OK or error.

Description

Must be called once on startup of solution.

Examples

Initialize:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.Initialize"; "FileMaker"; "Test"; "test"; "test"; "1.0" ) ]
```

```
Show Custom Dialog [ "Initialize"; $r ]
```

See also

- 184.1 WindowsUserNotification.Available 8711
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.5 WindowsUserNotification.GetText 8715
- 184.8 WindowsUserNotification.Isinitialized 8719
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724

- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

184.8 WindowsUserNotification.Isinitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184 WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.Isinitialized")

Result Returns 1, 0 or error.

Description

Returns 1 if initialization was done successfully.

See also

- 184.7 WindowsUserNotification.Initialize

Created 3th April 2017, last changed 24th May 2017.

184.9 WindowsUserNotification.NewNotification

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.NewNotification")

Result Returns OK or error.

Description

Returns an identifier which must be passed to other functions and later to WindowsUserNotification.Release.

Examples

Create new notification:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.NewNotification" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
Else
Set Field [ Windows User Notifications::ID; $r ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetImagePath"; Windows User Notifications::ID;
Windows User Notifications::ImagePath) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetText"; Windows User Notifications::ID; 0; Win-
dows User Notifications::Text1) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetText"; Windows User Notifications::ID; 1; Win-
dows User Notifications::Text2) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetText"; Windows User Notifications::ID; 2; Win-
dows User Notifications::Text3) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetText"; Windows User Notifications::ID; 3; Win-
dows User Notifications::Text4) ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetScriptName"; Windows User Notifications::ID;
"Trigger") ]
Set Variable [ $r; Value:MBS( "WindowsUserNotification.SetFileName"; Windows User Notifications::ID;
Get(FileName)) ]
End If
```

See also

- 124.6 IsError 6266
- 174.21 UserNotification.Release 8178
- 184.6 WindowsUserNotification.HideNotification 8716
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725

<i>184.9. WINDOWSUSERNOTIFICATION.NEWNOTIFICATION</i>	8721
• 184.13 WindowsUserNotification.SetScriptName	8726
• 184.14 WindowsUserNotification.SetText	8727
• 184.16 WindowsUserNotification.ShowNotification	8730

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

184.10 WindowsUserNotification.Release

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.Release"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns OK or error.

Description

This frees up memory used.

Examples

Free notification:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.Release"; Windows User Notifications::ID) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
End If
Set Field [ Windows User Notifications::ID; "" ]
```

See also

- 124.6 IsError 6266
- 174.21 UserNotification.Release 8178
- 184.1 WindowsUserNotification.Available 8711
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.5 WindowsUserNotification.GetText 8715
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728
- 184.17 WindowsUserNotification.XMLUsed 8731

Example Databases

- Win Only/Windows User Notifications

Created 2nd April 2017, last changed 24th May 2017.

184.11 WindowsUserNotification.SetFileName

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174	UserNotification	7.2	No	Yes	No	No

MBS("WindowsUserNotification.SetFileName"; Notification; Filename)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Filename

The database file name where the script is located.
"test.fmp12"

Result Returns OK or error.

Description

The parameter to the script includes a list of values. First entry in the list is the notification reference number. Second entry is the reason to call which can be Activated, Dismissed or Failed. Third value is reason for demission or error code for failure.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

184.12 WindowsUserNotification.SetImagePath

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.SetImagePath"; Notification; Path)

Parameters

Notification

The reference number for the Windows User Notification.

\$Notification

Path

Native file path for the image.

"C:\MyApp\test.png"

Result Returns OK or error.

Description

May not be a network path as system needs to load it independent of your permissions.

Maybe better use image coming with application or put one in temp folder.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.5 WindowsUserNotification.GetText 8715
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 17th August 2017.

184.13 WindowsUserNotification.SetScriptName

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.SetScriptName"; Notification; ScriptName)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

ScriptName

The script name.
"MyScript"

Result Returns OK or error.

Description

The parameter to the script includes a list of values. First entry in the list is the notification reference number. Second entry is the reason to call which can be Activated, Dismissed or Failed. Third value is reason for demission or error code for failure.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.4 WindowsUserNotification.GetScriptName 8714
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 24th May 2017.

184.14 WindowsUserNotification.SetText

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.SetText"; Notification; Index; Text)

Parameters**Notification**

The reference number for the Windows User Notification.

\$Notification

Index

The index of the text. Range 0 to 3.

0

Text

The text to use.

"Hello World"

Result Returns OK or error.

Description

We can show up to three texts.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.9 WindowsUserNotification.NewNotification 8720
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.15 WindowsUserNotification.Setting 8728

Example Databases

- [Win Only/Windows User Notifications](#)

Created 2nd April 2017, last changed 3th January 2018.

184.15 WindowsUserNotification.Setting

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	8.3	No	Yes	No	No	

MBS("WindowsUserNotification.Setting")

Result Returns value or error.

Description

Gets a value that tells you whether there is an app, user, or system block that prevents the display of a notification.

If allowed, you get back "Enabled" as setting.

When notifications have been disabled at more than one level, this property value reflects the setting with the largest scope. Precedence is as follows, from largest scope to smallest:

DisabledByManifest
 DisabledByGroupPolicy
 DisabledForUser
 DisabledForApplication

If toast notifications have been disabled both by the user and by group policy, this property returns DisabledByGroupPolicy.

See also

- 184.2 WindowsUserNotification.GetFileName 8712
- 184.3 WindowsUserNotification.GetImagePath 8713
- 184.5 WindowsUserNotification.GetText 8715
- 184.7 WindowsUserNotification.Initialize 8717
- 184.10 WindowsUserNotification.Release 8722
- 184.11 WindowsUserNotification.SetFileName 8724
- 184.12 WindowsUserNotification.SetImagePath 8725
- 184.13 WindowsUserNotification.SetScriptName 8726
- 184.14 WindowsUserNotification.SetText 8727
- 184.17 WindowsUserNotification.XMLUsed 8731

184.15.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr1](#)

Created 22nd May 2018, last changed 8th July 2018.

184.16 WindowsUserNotification.ShowNotification

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.ShowNotification"; Notification)

Parameters

Notification

The reference number for the Windows User Notification.
\$Notification

Result Returns OK or error.

Description

Examples

Show notification:

```
Set Variable [ $r; Value:MBS( "WindowsUserNotification.ShowNotification"; Windows User Notifications::ID) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $r ]
End If
```

See also

- [124.6 IsError](#) 6266
- [184.6 WindowsUserNotification.HideNotification](#) 8716
- [184.9 WindowsUserNotification.NewNotification](#) 8720

Example Databases

- [Win Only/Windows User Notifications](#)

184.16.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr7](#)

Created 2nd April 2017, last changed 24th May 2017.

184.17 WindowsUserNotification.XMLUsed

	Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker
184	WindowsUserNotification 174 UserNotification	7.2	No	Yes	No	No	

MBS("WindowsUserNotification.XMLUsed"; Notification)

Parameters**Notification**

The reference number for the Windows User Notification.
\$Notification

Result Returns xml text or error.

Description

For debugging only.

See also

- 184.1 WindowsUserNotification.Available 8711
- 184.5 WindowsUserNotification.GetText 8715
- 184.10 WindowsUserNotification.Release 8722
- 184.14 WindowsUserNotification.SetText 8727
- 184.15 WindowsUserNotification.Setting 8728

Created 23th April 2017, last changed 24th May 2017.

Chapter 185

WindowTransition

Perform window effects like a cube rotation on Mac.

185.1 WindowTransition.Perform

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
185 WindowTransition	1.5	Yes	No	No	No	No

MBS("WindowTransition.Perform"; Duration)

Parameters

Duration

the number of seconds for the transition to complete

Description

You first call WindowTransition.Prepare or WindowTransition.PrepareWindow to let the OS take screenshot of window or screen. Than you switch layout or window and make a script pause of maybe 0.1 seconds to have FileMaker redraw everything. Also you can call refresh window script step. Than you call WindowTransition.Perform to actually do the transition.

Not official supported by Apple and some effects don't work well on latest OS X versions!

See also

- 185.2 WindowTransition.Prepare 8734
- 185.3 WindowTransition.PrepareWindow 8736

Created 18th August 2014, last changed 4th February 2015.

185.2 WindowTransition.Prepare

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
185 WindowTransition	1.5	Yes	No	No	No	No

MBS("WindowTransition.Prepare"; TransitionType; TransitionOption; HasBackGround; HasBackColor; Red; Green; Blue)

Parameters

TransitionType

The transition type (see description above)

TransitionOption

Options for each transition (see description)

HasBackGround

If HasBackGround is true, a background is drawn behind the transition which may have a background color.

HasBackColor

Whether the background on the transition has a color.

Red

The RED value of the back ground

Green

The GREEN value of the back ground

Blue

The BLUE value of the back ground

Description

You select which transition you would like to use by setting the Parameter "TransitionType" to one of the numbers listed here.

- 0 - No transition effect.
- 1 - Cross-fade
- 2 - Zoom/fade towards us.
- 3 - Reveal new desktop under old.
- 4 - Slide old out and new in.
- 5 - Warp old and fade out revealing new.
- 6 - Swap desktops over graphically.
- 7 - The well-known cube effect.
- 8 - Warp old, switch and un-warp.
- 9 - The flip effect known from Dashboard

You can set the direction of the transition by Setting the TransitionOption parameter as follows:

- 0 - Old window moves down.

- 1 - Old window moves left.
- 2 - Old window moves right.
- 3 - Swap: Old window moves into screen, new comes from right.
- 5 - Swap: Old window moves to bottom left, new comes from top right.
- 6 - Old window to bottom right, New from top left.
- 7 - Swap: Old window moves down, new from top right.
- 8 - Old window moves up.
- 9 - Old window moves top left.
- 10 - Swap: old to top right. new from bottom left.
- 11 - Swap: old desktop up, new from bottom right.
- 12 - Swap: old in, new from bottom.
- 13 - Swap: old one moves left, new from bottom right.
- 14 - Swap: old one moves right, new from bottom left.
- 15 - Swap: onl one in, new from bottom right.
- 16 - Swap: old in, new out.

The options Begininning with "Swap:" Apply only to the Swap transition.

NOTE! In order to have the transition correctly swap the old view for the new view you will need to arrange you FileMaker Script to do perform the following commands in this order:

Change window contents (ie go to layout, go to record) PrepareTransition Pause script (.01 seconds) PerformTransition

The pause script step is important. It allows FileMaker to draw the new contents.

See also

- 185.1 WindowTransition.Perform 8733
- 185.3 WindowTransition.PrepareWindow 8736

Created 18th August 2014, last changed 18th August 2014.

185.3 WindowTransition.PrepareWindow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
185 WindowTransition	1.5	Yes	No	No	No	No

MBS("WindowTransition.PrepareWindow"; TransitionType; TransitionOption; HasBackGround; HasBackColor; Red; Green; Blue)

Parameters

TransitionType

The transition type (see description)

TransitionOption

Options for each transition (see description)

HasBackGround

If HasBackGround is true, a background is drawn behind the transition which may have a background color.

HasBackColor

Whether the background on the transition has a color.

Red

The RED value of the back ground

Green

The GREEN value of the back ground

Blue

The BLUE value of the back ground

Description

You select which transition you would like to use by setting the Parameter "TransitionType" to one of the numbers listed here.

- 0 - No transition effect.
 - 1 - Cross-fade
 - 2 - Zoom/fade towards us.
 - 3 - Reveal new desktop under old.
 - 4 - Slide old out and new in.
 - 5 - Warp old and fade out revealing new.
 - 6 - Swap desktops over graphically.
 - 7 - The well-known cube effect.
 - 8 - Warp old, switch and un-warp.
 - 9 - The flip effect known from Dashboard
- Add 128 for transparent background.

You can set the direction of the transition by Setting the TransitionOption parameter as follows:

- 0 - Old window moves down.
- 1 - Old window moves left.
- 2 - Old window moves right.
- 3 - Swap: Old window moves into screen, new comes from right.
- 5 - Swap: Old window moves to bottom left, new comes from top right.
- 6 - Old window to bottom right, New from top left.
- 7 - Swap: Old window moves down, new from top right.
- 8 - Old window moves up.
- 9 - Old window moves top left.
- 10 - Swap: old to top right. new from bottom left.
- 11 - Swap: old desktop up, new from bottom right.
- 12 - Swap: old in, new from bottom.
- 13 - Swap: old one moves left, new from bottom right.
- 14 - Swap: old one moves right, new from bottom left.
- 15 - Swap: onl one in, new from bottom right.
- 16 - Swap: old in, new out.

The options Beginning with "Swap:" Apply only to the Swap transition.

NOTE! In order to have the transition correctly swap the old view for the new view you will need to arrange you FileMaker Script to do perform the following commands in this order:

Change window contents (ie go to layout, go to record) PrepareTransition Pause script (.01 seconds) PerformTransition

The pause script step is important. It allows FileMaker to draw the new contents.

See also

- 185.1 WindowTransition.Perform 8733
- 185.2 WindowTransition.Prepare 8734

Created 18th August 2014, last changed 18th August 2014.

Chapter 186

WinSendMail

Send emails via mail client on Windows.

This can use Outlook or Thunderbird on Windows to send email with or without GUI. Using Messaging Application Programming Interface (MAPI)

186.1 WinSendMail.AddAttachmentContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.AddAttachmentContainer"; WinSendMailRef; Container { ; Name })

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Container

The container to attach to email.
Attachment::Container

Name

Optional
The name for the attachment. If empty, we use file name from container.
"sample.pdf"

Result Returns OK or error.

Description

You can use AddAttachment several times to add several attachments.

For Outlook testing shows only one attachment works, while Thunderbird works with several attachments. Outlook also allows to pass no text and a html file as attachment to build a html email.

Examples

Adds an image as attachment:

```
MBS( "WinSendMail.AddAttachmentFile"; $mail; myTable::myImage; "birthday.jpg" )
```

See also

- 143.1 SendMail.AddAttachmentContainer 6875
- 143.2 SendMail.AddAttachmentFile 6878
- 186.2 WinSendMail.AddAttachmentFile 8741
- 186.3 WinSendMail.AddAttachmentText 8743

Example Databases

- [Win Only/Send Email via Email Application](#)

Created 28th February 2017, last changed 25th November 2017.

186.2 WinSendMail.AddAttachmentFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.AddAttachmentFile"; WinSendMailRef; Path { ; Name })

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.

\$Email

Path

The native file path to the file to include as attachment.

"c:\sample.pdf"

Name

Optional

The name for the attachment. If empty, we use file name from file path.

"sample.pdf"

Result Returns OK or error.

Description

You can use AddAttachment several times to add several attachments.

For Outlook testing shows only one attachment works, while Thunderbird works with several attachments.

Outlook also allows to pass no text and a html file as attachment to build a html email.

Examples

Adds an image as attachment:

```
MBS( "WinSendMail.AddAttachmentFile"; $mail; "c:\temp\test.jpg"; "birthday.jpg" )
```

See also

- 143.2 SendMail.AddAttachmentFile 6878
- 143.3 SendMail.AddAttachmentText 6881
- 186.1 WinSendMail.AddAttachmentContainer 8739
- 186.3 WinSendMail.AddAttachmentText 8743
- 186.8 WinSendMail.AttachmentCount 8752

Example Databases

- [Win Only/Send Email via Email Application](#)

8742

CHAPTER 186. WINSENDMAIL

Created 28th February 2017, last changed 25th November 2017.

186.3 WinSendMail.AddAttachmentText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.AddAttachmentText"; WinSendMailRef; Value { ; Encoding })

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.

\$Email

Value

The text to use for the attachment.

"Hello World"

Encoding

Optional

The text encoding for text parameter. Default is UTF-8.

"UTF8"

Result Returns OK or error.

Description

You can use AddAttachment several times to add several attachments.

For Outlook testing shows only one attachment works, while Thunderbird works with several attachments. Outlook also allows to pass no text and a html file as attachment to build a html email.

Examples

Adds an attachment with text field:

MBS("WinSendMail.AddAttachmentText"; \$Mail; MyTable::MyTextField; "UTF-8")

See also

- 143.2 SendMail.AddAttachmentFile 6878
- 143.3 SendMail.AddAttachmentText 6881
- 186.1 WinSendMail.AddAttachmentContainer 8739
- 186.2 WinSendMail.AddAttachmentFile 8741
- 186.8 WinSendMail.AttachmentCount 8752

Created 28th February 2017, last changed 25th November 2017.

186.4 WinSendMail.AddBCC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.AddBCC"; WinSendMailRef; Email { ; Name })

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.

\$Email

Email

The email address of the recipient.

"SMTP:test@mbsplugins.de"

Name

Optional

Optional the name of the recipient.

"John Miller"

Result Returns OK or error.

Description

See also WinSendMail.AddRecipient.

You can call this method several times to add several recipients.

Email addresses need to be prefixed with "SMTP:".

Examples

Add BCC recipient:

```
MBS( "WinSendMail.AddBCC"; $Mail; "test@test.test"; "Test Tester" )
```

See also

- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.7 SendMail.AddRecipient 6889
- 186.5 WinSendMail.AddCC 8746
- 186.6 WinSendMail.AddRecipient 8748
- 186.7 WinSendMail.AddTo 8750

Example Databases

- Win Only/Send Email via Email Application

Created 28th February 2017, last changed 21st September 2018.

186.5 WinSendMail.AddCC

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.AddCC"; WinSendMailRef; Email { ; Name })

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Email

The email address of the recipient.
"SMTP:test@mbsplugins.de"

Name

Optional
Optional the name of the recipient.
"John Miller"

Result Returns OK or error.

Description

See also WinSendMail.AddRecipient.
You can call this method several times to add several recipients.

Email addresses need to be prefixed with "SMTP:".

Examples

Add CC recipient:

MBS("WinSendMail.AddCC"; \$Mail; "test@test.test"; "Test Tester")

See also

- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.7 SendMail.AddRecipient 6889
- 186.4 WinSendMail.AddBCC 8744
- 186.6 WinSendMail.AddRecipient 8748
- 186.7 WinSendMail.AddTo 8750
- 186.11 WinSendMail.CreateEmail 8755

Example Databases

- [Win Only/Send Email via Email Application](#)

Created 28th February 2017, last changed 21st September 2018.

186.6 WinSendMail.AddRecipient

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.AddRecipient"; WinSendMailRef; Type; Email { ; Name })

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Type

The type of recipient. Can be TO, BCC, CC or ReplyTo.
"CC"

Email

The email address of the recipient.
"SMTP:test@mbsplugins.de"

Name

Optional
Optional the name of the recipient.
"John Miller"

Result Returns OK or error.

Description

This function can be used easily if the type is also a field in your database.

As an alternative you can of course also use WinSendMail.AddTo, WinSendMail.AddReplyTo, WinSendMail.AddCC or WinSendMail.AddBCC.

You can call this method several times to add several recipients.

Email addresses need to be prefixed with "SMTP:".

See also

- 143.4 SendMail.AddBCC 6883
- 143.5 SendMail.AddCC 6885
- 143.7 SendMail.AddRecipient 6889
- 143.8 SendMail.AddReplyTo 6891
- 143.9 SendMail.AddTo 6892
- 186.4 WinSendMail.AddBCC 8744
- 186.5 WinSendMail.AddCC 8746

186.6. *WINSENDMAIL.ADDRECIPIENT*

8749

- 186.7 WinSendMail.AddTo

8750

- 186.10 WinSendMail.ClearRecipients

8754

Created 28th February 2017, last changed 21st September 2018.

186.7 WinSendMail.AddTo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.AddTo"; WinSendMailRef; Email { ; Name })

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Email

The email address of the recipient.
"SMTP:test@mbsplugins.de"

Name

Optional
Optional the name of the recipient.
"John Miller"

Result Returns OK or error.

Description

See also WinSendMail.AddRecipient.
You can call this method several times to add several recipients.

Some mail clients (Outlook) may fail if name is missing.

This address is provider-specific message delivery data. Generally, the messaging system provides such addresses for inbound messages. For outbound messages, the Address member can point to an address entered by the user for a recipient not in an address book (that is, a custom recipient). The format of an address pointed to by the Address member is [address type] [e-mail address] . Examples of valid addresses are FAX:206-555-1212 and SMTP:M@X.COM.

Examples

Add To recipient:

MBS("WinSendMail.AddTo"; \$Mail; "test@test.test"; "Test Tester")

See also

- 143.7 SendMail.AddRecipient 6889
- 143.9 SendMail.AddTo 6892
- 186.4 WinSendMail.AddBCC 8744

186.7. <i>WINSENDMAIL.ADDTO</i>	8751
• 186.5 WinSendMail.AddCC	8746
• 186.6 WinSendMail.AddRecipient	8748
• 186.11 WinSendMail.CreateEmail	8755

Example Databases

- [Win Only/Send Email via Email Application](#)

Created 28th February 2017, last changed 21st September 2018.

186.8 WinSendMail.AttachmentCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.AttachmentCount"; WinSendMailRef)

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Result Returns number or error.

Description

See also

- 143.10 SendMail.AttachmentCount 6894
- 186.2 WinSendMail.AddAttachmentFile 8741
- 186.3 WinSendMail.AddAttachmentText 8743

Created 28th February 2017, last changed 5th March 2017.

186.9 WinSendMail.ClearAttachments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.ClearAttachments"; WinSendMailRef)

Parameters**WinSendMailRef**

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Result Returns OK or error.

Description**See also**

- 143.11 SendMail.ClearAttachments 6895
- 186.10 WinSendMail.ClearRecipients 8754

Created 28th February 2017, last changed 5th March 2017.

186.10 WinSendMail.ClearRecipients

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.ClearRecipients"; WinSendMailRef)

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Result Returns OK or error.

Description

Removes all TO, CC, BCC and ReplyTO entries.

See also

- 143.13 SendMail.ClearRecipients 6897
- 186.6 WinSendMail.AddRecipient 8748
- 186.9 WinSendMail.ClearAttachments 8753

Created 28th February 2017, last changed 5th March 2017.

186.11 WinSendMail.CreateEmail

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.CreateEmail")

Result Returns email number or error.

Description

The reference number returned by this function can be passed to other plugin functions for setting up the email.

Later use WinSendMail.Release to free memory.

SendMail reference numbers are starting at 67000 and counting up for each new email.

Examples

Send an email with values from field:

```
Set Variable [ $email; Value:MBS( "WinSendMail.CreateEmail" ) ]
Set Variable [ $r; Value:MBS( "WinSendMail.AddTo"; $email; Send::To Email ; Send::To Name ) ]
Set Variable [ $r; Value:MBS( "WinSendMail.AddCC"; $email; Send::CC Email ; Send::CC Name ) ]
Set Variable [ $r; Value:MBS( "WinSendMail.SetFrom"; $email; Send::From Email ; Send::From Name ) ]
Set Variable [ $r; Value:MBS( "WinSendMail.SetSubject"; $email; Send::Subject ) ]
Set Variable [ $r; Value:MBS( "WinSendMail.SetText"; $email; Send::Text ) ]
Set Variable [ $r; Value:MBS( "WinSendMail.Send"; $email ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ Title: "Failed to send email"; Message: $r; Default Button: "OK", Commit: "Yes";
Commit: "No" ]
Else
Pause/Resume Script [ Duration (seconds): 2 ]
End If
Set Variable [ $r; Value:MBS( "WinSendMail.Release"; $email ) ]
```

See also

- 124.6 IsError 6266
- 143.5 SendMail.AddCC 6885
- 143.9 SendMail.AddTo 6892
- 143.14 SendMail.CreateEmail 6898
- 186.7 WinSendMail.AddTo 8750
- 186.14 WinSendMail.Release 8759
- 186.15 WinSendMail.Send 8760
- 186.18 WinSendMail.SetFrom 8763

- 186.19 WinSendMail.SetSubject 8764
- 186.20 WinSendMail.SetText 8765

Example Databases

- [Win Only/Send Email via Email Application](#)

Created 28th February 2017, last changed 25th November 2019.

186.12 WinSendMail.GetSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.GetSubject"; WinSendMailRef)

Parameters**WinSendMailRef**

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Result Returns text or error.

Description**See also**

- 143.24 SendMail.GetSubject 6909
- 143.36 SendMail.SetSubject 6929
- 186.13 WinSendMail.GetText 8758
- 186.19 WinSendMail.SetSubject 8764

Created 28th February 2017, last changed 5th March 2017.

186.13 WinSendMail.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.GetText"; WinSendMailRef)

Parameters**WinSendMailRef**

The email reference number obtained using WinSendMai.CreateEmail function.
\$Email

Result Returns text or error.

Description**See also**

- 186.12 WinSendMail.GetSubject 8757
- 186.18 WinSendMail.SetFrom 8763
- 186.20 WinSendMail.SetText 8765

Created 28th February 2017, last changed 5th March 2017.

186.14 WinSendMail.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.Release"; WinSendMailRef)

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Result Returns OK or error.

Description

See also

- [143.26 SendMail.Release](#) 6912
- [186.11 WinSendMail.CreateEmail](#) 8755

Example Databases

- [Win Only/Send Email via Email Application](#)

Created 28th February 2017, last changed 5th March 2017.

186.15 WinSendMail.Send

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.Send"; WinSendMailRef; Flags)

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.

\$Email

Flags

The flags. Add 1 to show no dialog. Add 2 to disable logon user interface. Add 4 to disable parent window.

Result Returns OK or error.

Description

The email is sent using the locally installed mail client.
Some email clients seem not to like more than one attachment.

With outlook you can keep text empty and attach a html file. Then Outlook will use the html file as content of the email and allows you to send html email.

Falls back to WinSendMail.SendAnsi if Unicode support is missing in older Windows versions.

Outlook loves to return failed, if you pass in email address for To/BCC/CC and no name.
See WinSendMail.SendAsync for having a function which does not wait.

See also

- 186.11 WinSendMail.CreateEmail 8755
- 186.16 WinSendMail.SendAnsi 8761
- 186.17 WinSendMail.SendAsync 8762

Example Databases

- [Win Only/Send Email via Email Application](#)

186.15.1 Blog Entries

- [MBS FileMaker Plugin, version 8.3pr6](#)

Created 28th February 2017, last changed 28th February 2019.

186.16 WinSendMail.SendAnsi

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.SendAnsi"; WinSendMailRef; Flags)

Parameters**WinSendMailRef**

The email reference number obtained using WinSendMail.CreateEmail function.

\$Email

Flags

The flags. Add 1 to show no dialog. Add 2 to disable logon user interface. Add 4 to disable parent window.

Result Returns OK or error.

Description

Same as WinSendMail.Send, but limited to Windows ANSI text encoding.

Use this only if unicode MAPI interface is not supported by an older email client.

See also

- 186.15 WinSendMail.Send 8760
- 186.17 WinSendMail.SendAsync 8762

Created 28th February 2017, last changed 15th April 2017.

186.17 WinSendMail.SendAsync

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	9.1	No	Yes	No	No	No

MBS("WinSendMail.SendAsync"; WinSendMailRef; Flags)

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.

\$Email

Flags

The flags. Add 1 to show no dialog. Add 2 to disable logon user interface. Add 4 to disable parent window.

Result Returns OK or error.

Description

The email is sent using the locally installed mail client. But this function does not wait for the result. Some email clients seem not to like more than one attachment.

With outlook you can keep text empty and attach a html file. Than Outlook will use the html file as content of the email and allows you to send html email.

Falls back to WinSendMail.SendAnsi if Unicode support is missing in older Windows versions.

Outlook loves to return failed, if you pass in email address for To/BCC/CC and no name.

See also

- 186.15 WinSendMail.Send 8760
- 186.16 WinSendMail.SendAnsi 8761

186.17.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr5](#)

Created 28th February 2019, last changed 28th February 2019.

186.18 WinSendMail.SetFrom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.SetFrom"; WinSendMailRef; Email { ; Name })

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.

\$Email

Email

The email address of the from field.

"test@mbsplugins.de"

Name

Optional

Optional the name of the from field. If this name contains special characters, it will be automatically encoded with UTF-8. Do not put an email address here!

"John Miller"

Result Returns OK or error.

Description

Examples

Sets the from address:

```
Set Variable [ $r; Value:MBS( "WinSendMail.SetFrom"; $email; Send::From Email ; Send::From Name ) ]
```

See also

- 143.27 SendMail.SetFrom 6913
- 186.11 WinSendMail.CreateEmail 8755
- 186.13 WinSendMail.GetText 8758
- 186.20 WinSendMail.SetText 8765

Example Databases

- [Win Only/Send Email via Email Application](#)

Created 28th February 2017, last changed 25th November 2019.

186.19 WinSendMail.SetSubject

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.SetSubject"; WinSendMailRef; Text)

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.
\$Email

Text

The new subject line.
"Hello World"

Result Returns OK or error.

Description

Examples

Set subject:

Set Variable [\$r; Value:MBS("WinSendMail.SetSubject"; \$email; Send::Subject)]

See also

- 143.24 SendMail.GetSubject 6909
- 143.36 SendMail.SetSubject 6929
- 186.11 WinSendMail.CreateEmail 8755
- 186.12 WinSendMail.GetSubject 8757
- 186.20 WinSendMail.SetText 8765

Example Databases

- [Win Only/Send Email via Email Application](#)

Created 28th February 2017, last changed 25th November 2019.

186.20 WinSendMail.SetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
186 WinSendMail	7.1	No	Yes	No	No	No

MBS("WinSendMail.SetText"; WinSendMailRef; Text)

Parameters

WinSendMailRef

The email reference number obtained using WinSendMail.CreateEmail function.

\$Email

Text

The new text.

"Hello World"

Result Returns OK or error.

Description

You can use Text.MergeFields to replace placeholders with values from variables, fields and expressions.

Examples

Set text:

Set Variable [\$r; Value:MBS("WinSendMail.SetText"; \$email; Send::Text)]

See also

- 164.46 Text.MergeFields 7839
- 186.11 WinSendMail.CreateEmail 8755
- 186.13 WinSendMail.GetText 8758
- 186.18 WinSendMail.SetFrom 8763
- 186.19 WinSendMail.SetSubject 8764

Example Databases

- [Win Only/Send Email via Email Application](#)

Created 28th February 2017, last changed 25th November 2019.

Chapter 187

WMFP

The Windows Media Foundation Player can play audio and video independent of a container field.

Instead of using an interactive container field, you can play audio in background or video on your layout without putting a container field there.

See also AVPlayer functions for MacOS.

187.1 WMFP.Create

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.Create"; URL { ; WindowRef; ControlName })

Parameters

URL

The URL for the video. See Path.FilePathToFileURL function to convert file path.

"file://C:/Users/Christian/Desktop/test.MOV"

WindowRef

Optional

Window Reference is the unique OS level window ID. You can obtain this by using the Window.FindByTitle or Window.FindByIndex functions. Pass zero to access the frontmost window.

0

ControlName

Optional

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a rectangle.

"mymedia"

Result Returns reference number or error.

Description

The player can be audio only without showing in the layout or reference a layout object to play with video. The file is loaded asynchronously, so please wait a few milliseconds or check state later.

Use WMFP.Release later to destroy the video player.

Pass no window reference and no control name to create an audio player for background playback.

Examples

Load video into new player:

```
# Create new player and load video
Set Variable [ $URL ; Value: MBS( "Path.FilePathToFileURL"; Windows Player::Path) ]
# Player is a rectangle on the layout
Set Variable [ $$player ; Value: MBS("WMFP.Create"; $URL; 0; "Player") ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Failed to load video" ; $$player ]
Set Variable [ $$player ; Value: "" ]
Else
# Little pause to let loading happen in background
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $r ; Value: MBS("WMFP.SetPlaybackEndedScriptTrigger"; $$player; Get(FileName); "Play-
back Done") ]
Set Variable [ $r ; Value: MBS("WMFP.Play"; $$player) ]
End If
```

See also

- 124.6 IsError 6266
- 121.3 Path.FilePathToFileURL 6141
- 182.15 Window.FindByIndex 8550
- 182.16 Window.FindByTitle 8552
- 187.16 WMFP.Play 8784
- 187.17 WMFP.Release 8785
- 187.24 WMFP.SetPlaybackEndedScriptTrigger 8792

Example Databases

- [Win Only/Windows Player](#)

187.1.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 25th December 2019.

187.2 WMFP.FrameStep

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.FrameStep"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description

The player object does not support frame stepping during reverse playback (that is, while the playback rate is negative).

Examples

Play one frame forward:

Set Variable [\$r; Value: MBS("WMFP.FrameStep"; \$\$Player)]

Created 25th December 2019, last changed 26th December 2019.

187.3 WMFP.GetBalance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetBalance"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns number or error.

Description

Value is between -1 (left only) to +1 (right only)

See also

- 187.19 WMFP.SetBalance

8787

Created 25th December 2019, last changed 25th December 2019.

187.4 WMFP.GetDuration

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetDuration"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns number or error.

Description

Returns duration of the video in seconds.

Examples

Show position, duration and state:

```
Show Custom Dialog [ "Position" ; Round(MBS("WMFP.GetPosition"; $$player);1) &
" of " &
Round(MBS("WMFP.GetDuration"; $$player);1) &
"&
MBS("WMFP.GetState"; $$player) ]
```

See also

- 187.9 WMFP.GetPosition 8777
- 187.11 WMFP.GetState 8779

Example Databases

- [Win Only/Windows Player](#)

Created 25th December 2019, last changed 25th December 2019.

187.5 WMFP.GetIdealVideoSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetIdealVideoSize"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns list or error.

Description

The sizes where the video can be displayed without significantly degrading performance or image quality. Returns a list of values with minimum width, minimum height, maximum width and maximum height

Examples

Query size:

MBS("WMFP.GetIdealVideoSize"; \$\$Player)

Example result: 1

1

2826

1978

See also

- 187.8 WMFP.GetNativeVideoSize

187.6 WMFP.GetLoop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.1	No	Yes	No	No	No

MBS("WMFP.GetLoop"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns 0, 1 or error.

Description

Returns 1 if looping or 0 if not.

See also

- [187.22 WMFP.SetLoop](#)

8790

187.6.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 23th February 2020, last changed 23th February 2020.

187.7 WMFP.GetMute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetMute"; Player)

Parameters**Player**

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns 1, 0 or error.

Description

Returns 1 if muted and 0 otherwise.

See also

- 187.10 WMFP.GetRate 8778
- 187.11 WMFP.GetState 8779
- 187.23 WMFP.SetMute 8791
- 187.26 WMFP.SetRate 8794

Created 25th December 2019, last changed 25th December 2019.

187.8 WMFP.GetNativeVideoSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetNativeVideoSize"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns list or error.

Description

Returns a list with width and height in pixels, aspect ratio x & y.

Examples

Query ideal size:

MBS("WMFP.GetNativeVideoSize"; \$\$Player)

Example result: 568

320

71

40

See also

- 187.5 WMFP.GetIdealVideoSize

8773

Created 25th December 2019, last changed 25th December 2019.

187.9 WMFP.GetPosition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetPosition"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns number or error.

Description

Returns value in seconds.

Examples

Show position, duration and state:

```
Show Custom Dialog [ "Position" ; Round(MBS("WMFP.GetPosition"; $$player);1) &
" of " &
```

```
Round(MBS("WMFP.GetDuration"; $$player);1) &
$&
```

```
MBS("WMFP.GetState"; $$player) ]
```

See also

- [187.4 WMFP.GetDuration](#) 8772
- [187.11 WMFP.GetState](#) 8779
- [187.25 WMFP.SetPosition](#) 8793

Example Databases

- [Win Only/Windows Player](#)

Created 25th December 2019, last changed 25th December 2019.

187.10 WMFP.GetRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetRate"; Player)

Parameters**Player**

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description**Examples**

Query rate:

Set Variable [\$rate ; Value: MBS("WMFP.GetRate"; \$Player)]

See also

- 187.7 WMFP.GetMute 8775
- 187.11 WMFP.GetState 8779
- 187.12 WMFP.GetTag 8780
- 187.23 WMFP.SetMute 8791
- 187.26 WMFP.SetRate 8794

Created 25th December 2019, last changed 26th December 2019.

187.11 WMFP.GetState

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetState"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns text or error.

Description

State is Empty, Paused, Playing, Stopped or Shutdown.

Examples

Show position, duration and state:

```
Show Custom Dialog [ "Position" ; Round(MBS("WMFP.GetPosition"; $$player);1) &
" of " &
Round(MBS("WMFP.GetDuration"; $$player);1) &
$&
MBS("WMFP.GetState"; $$player) ]
```

See also

- [187.4 WMFP.GetDuration](#) 8772
- [187.7 WMFP.GetMute](#) 8775
- [187.9 WMFP.GetPosition](#) 8777
- [187.10 WMFP.GetRate](#) 8778
- [187.26 WMFP.SetRate](#) 8794

Example Databases

- [Win Only/Windows Player](#)

187.11.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 25th December 2019.

187.12 WMFP.GetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetTag"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns the stored tag value or an error.

Description

See also

- 187.10 WMFP.GetRate 8778
- 187.27 WMFP.SetTag 8795

Created 25th December 2019, last changed 25th December 2019.

187.13 WMFP.GetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	No	No	No

MBS("WMFP.GetVisible"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns 1, 0 or error.

Description

Returns 1 if visible and 0 if hidden.

See also

- 187.28 WMFP.SetVisible

8796

Created 25th December 2019, last changed 25th December 2019.

187.14 WMFP.GetVolume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.GetVolume"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description

Volume is expressed as an attenuation level, where 0.0 indicates silence and 1.0 indicates full volume (no attenuation).

Examples

Query volume:

Set Variable [\$volume ; Value: MBS("WMFP.GetVolume"; \$Player)]

See also

- 187.29 WMFP.SetVolume

8797

Created 25th December 2019, last changed 26th December 2019.

187.15 WMFP.Pause

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.Pause"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description

While playback is paused, the most recent video frame is displayed, and audio is silent.

Examples

Pause playback:

Set Variable [\$r ; Value: MBS("WMFP.Pause"; \$\$player)]

Example Databases

- [Win Only/Windows Player](#)

187.15.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 25th December 2019.

187.16 WMFP.Play

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.Play"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description

Examples

Play video:

Set Variable [\$r ; Value: MBS("WMFP.Play"; \$\$player)]

See also

- [187.1 WMFP.Create](#) 8767
- [187.30 WMFP.Stop](#) 8798

Example Databases

- [Win Only/Windows Player](#)

187.16.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 25th December 2019.

187.17 WMFP.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.Release"; Player)

Parameters**Player**

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description

Will close the playing window and release all memory used by player.

Examples

Release old player:

```
If [ Length($$Player) >0 ]
Set Variable [ $r ; Value: MBS("WMFP.Release"; $$player) ]
Set Variable [ $$player ; Value: "" ]
End If
```

See also

- 102.16 LDAP.Release 5393
- 187.1 WMFP.Create 8767
- 191.29 XML.Release 9299

Example Databases

- [Win Only/Windows Player](#)

Created 25th December 2019, last changed 25th December 2019.

187.18 WMFP.Screenshot

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.1	No	Yes	No	No	No

MBS("WMFP.Screenshot")

Result Returns container value or error.

Description

Currently just takes screenshot from current playing video.
You can store image in container.

187.18.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr1](#)

Created 16th January 2020, last changed 16th January 2020.

187.19 WMFP.SetBalance

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.SetBalance"; Player; Value)

Parameters**Player**

The reference number for the Windows Media Foundation Player object.

\$\$Player

Value

The new value.

0

Result Returns OK or error.

Description

The value can be any number in the following range (inclusive).

Value	Meaning
-1.0	The left channel is at full volume; the right channel is silent.
+1.0	The right channel is at full volume; the left channel is silent.

If the value is zero, the left and right channels are at equal volumes. The default value is zero.

Examples

Set balance to play only right speaker:

MBS("WMFP.SetBalance"; \$\$Player; 1.0)

See also

- 187.3 WMFP.GetBalance

8771

187.19.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 13th January 2020.

187.20 WMFP.SetBorder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	No	No	No

MBS("WMFP.SetBorder"; Player; Color)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Color

A color value. This can be a string in the following format "HSL h s l a", "YUV y u v a", "RGB r g b a", "MONO m a", "GRAY g a" or "COLOR R G B a". Alpha value a is optional. Range of values is 0 to 1.0 except if you use COLOR where RGB values are 0 to 65535. Can use hex notation. # followed by 2 digits for red, green, blue and optional alpha, e.g. # FF0000 for full red.

"# FF0000"

Result Returns OK or error.

Description

The border color is used to letterbox the video.

Examples

Set border color:

```
MBS( "WMFP.SetBorder"; $$Player; "black")
```

Set border color to red:

```
MBS( "WMFP.SetBorder"; $$Player; "# FF0000")
```

187.20.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 26th December 2019.

187.21 WMFP.SetFrame

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.SetFrame"; Player; ControlName { ; DX; DY })

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

ControlName

The name of the control on your FileMaker form. For example "mymedia" if you assign this name to a media field. This is not the name of the field in the database!

"mymedia"

DX

Optional

A delta to move player more to left or right.

0

DY

Optional

A delta to move player more to top or bottom.

0

Result Returns OK or error.

Description

If you moved control in layout mode, this can move the text view back to the new position.

Also useful to switch between different locations on the layout.

See also

- 187.26 WMFP.SetRate

8794

187.21.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 25th December 2019.

187.22 WMFP.SetLoop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.1	No	Yes	No	No	No

MBS("WMFP.SetLoop"; Player { ; Loop })

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Loop

Optional

The new setting. Pass 1 to enable looping or 0 to disable. Default is 0.

1

Result Returns OK or error.

Description

You can enable looping to automatically restart playback when file reached the end.

See also

- 187.6 WMFP.GetLoop

8774

187.22.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr5](#)

Created 23th February 2020, last changed 23th February 2020.

187.23 WMFP.SetMute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.SetMute"; Player; Value)

Parameters**Player**

The reference number for the Windows Media Foundation Player object.

\$\$Player

Value

The new setting. Pass 1 to mute or 0 to unmute.

1

Result Returns OK or error.

Description

Pass 1 to mute.

Examples

Disable sound:

```
Set Variable [ $r; Value: MBS( "WMFP.SetMute"; $$Player; 1 ) ]
```

Enable sound:

```
Set Variable [ $r; Value: MBS( "WMFP.SetMute"; $$Player; 0 ) ]
```

See also

- [187.7 WMFP.GetMute](#) 8775
- [187.10 WMFP.GetRate](#) 8778
- [187.26 WMFP.SetRate](#) 8794

187.23.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 26th December 2019.

187.24 WMFP.SetPlaybackEndedScriptTrigger

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.SetPlaybackEndedScriptTrigger"; Player; FileName; ScriptName)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

FileName

The name of the FileMaker File that contains the script.

"test.fmp12"

ScriptName

The name of the script to run.

"MyScript"

Result Returns OK or error.

Description

The given script is triggered when player reaches the end of the video.

Pass empty file and script name to clear.

See also

- [187.1 WMFP.Create](#)

8767

Example Databases

- [Win Only/Windows Player](#)

187.24.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 25th December 2019.

187.25 WMFP.SetPosition

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.SetPosition"; Player; Value)

Parameters**Player**

The reference number for the Windows Media Foundation Player object.

\$\$Player

Value

The new position.

\$pos

Result Returns OK or error.

Description

Pass new position in seconds.

Examples

Jump 10 seconds forward:

```
Set Variable [ $r ; Value: MBS("WMFP.SetPosition"; $$player; 10 + MBS("WMFP.GetPosition"; $$player)) ]
```

Jump back to start:

```
Set Variable [ $r ; Value: MBS("WMFP.SetPosition"; $$player; 0) ]
```

See also

- [187.9 WMFP.GetPosition](#)

8777

Example Databases

- [Win Only/Windows Player](#)

Created 25th December 2019, last changed 25th December 2019.

187.26 WMFP.SetRate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.SetRate"; Player; Value)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Value

The new rate.

1.0

Result Returns OK or error.

Description

The playback rate is expressed as a ratio of the current rate to the normal rate. For example, 1.0 indicates normal playback, 0.5 indicates half speed, and 2.0 indicates twice speed. Positive values indicate forward playback, and negative values indicate reverse playback.

Examples

Set to double speed:

```
Set Variable [ $r; Value: MBS( "WMFP.SetRate"; $$Player; 2 ) ]
```

See also

- 187.7 WMFP.GetMute 8775
- 187.10 WMFP.GetRate 8778
- 187.11 WMFP.GetState 8779
- 187.21 WMFP.SetFrame 8789
- 187.23 WMFP.SetMute 8791
- 187.27 WMFP.SetTag 8795

187.26.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 26th December 2019.

187.27 WMFP.SetTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.SetTag"; Player; Value)

Parameters**Player**

The reference number for the Windows Media Foundation Player object.

\$\$Player

Value

The new value.

Get(RecordNumber)

Result Returns OK or error.

Description

Use the tag to store whatever value you want to associate with the text view. You can later query it using WMFP.GetTag.

Examples

Set tag:

MBS("WMFP.SetTag"; \$\$Player; "Hello")

See also

- 187.12 WMFP.GetTag 8780
- 187.26 WMFP.SetRate 8794

Created 25th December 2019, last changed 25th December 2019.

187.28 WMFP.SetVisible

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	No	No	No

MBS("WMFP.SetVisible"; Player; Visible)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Visible

The new visible state. Pass 0 to hide or 1 to show.

1

Result Returns OK or error.

Description

By default we create it visible, but you can hide it if it's on a register and the user clicked to other tab.

Examples

Hide player, e.g. when switching layouts or registers:

```
Set Variable [ $r ; Value: MBS("WMFP.SetVisible"; $$player; 0) ]
```

Show player:

```
Set Variable [ $r ; Value: MBS("WMFP.SetVisible"; $$player; 1) ]
```

See also

- [187.13 WMFP.GetVisible](#)

8781

Example Databases

- [Win Only/Windows Player](#)

187.28.1 Blog Entries

- [Windows Media Foundation Player for FileMaker](#)

Created 25th December 2019, last changed 25th December 2019.

187.29 WMFP.SetVolume

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.SetVolume"; Player)

Parameters**Player**

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description

Volume is expressed as an attenuation level, where 0.0 indicates silence and 1.0 indicates full volume (no attenuation).

If you call this method before playback starts, the setting is applied after playback starts.

Examples

Set to volume to 50% :

Set Variable [\$r; Value: MBS("WMFP.SetVolume"; \$\$Player; 0.5)]

See also

- 187.14 WMFP.GetVolume

8782

Created 25th December 2019, last changed 26th December 2019.

187.30 WMFP.Stop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	Yes, Windows only	No	No

MBS("WMFP.Stop"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description

Examples

Stop video:

```
Set Variable [ $r; Value: MBS( "WMFP.Stop"; $$Player ) ]
```

Play video:

```
Set Variable [ $r; Value: MBS( "WMFP.Play"; $$Player ) ]
```

See also

- 187.16 WMFP.Play

8784

Created 25th December 2019, last changed 26th December 2019.

187.31 WMFP.UpdateVideo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
187 WMFP	10.0	No	Yes	No	No	No

MBS("WMFP.UpdateVideo"; Player)

Parameters

Player

The reference number for the Windows Media Foundation Player object.

\$\$Player

Result Returns OK or error.

Description

This function makes sure the video is updated now, not later.

Examples

Update video now:

Set Variable [\$r; Value: MBS("WMFP.UpdateVideo"; \$\$Player)]

Created 25th December 2019, last changed 26th December 2019.

Chapter 188

WMIQuery

Query Windows Management Interface to learn about hardware and system configuration.

188.1 WMIQuery.Connect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
188 WMIQuery	5.2	No	Yes	Yes, Windows only	No	No

```
MBS( "WMIQuery.Connect"; WMIQueryRef; NetworkResource { ; UserName; Password; Locale; Authority } )
```

Parameters

WMIQueryRef

The reference to the query. Create it with `WMIQuery.New` and destroy them with `WMIQuery.Release`.
\$ref

NetworkResource

The path of the correct WMI namespace to connect to. For local access to the default namespace, use a simple object path: `"root\default"` or `"\\.\\.\root\default"`. For access to the default namespace on a remote computer using COM or Microsoft-compatible networking, include the computer name: `"\\myserver\root\default"`. The computer name also can be a DNS name or IP address. Starting with Windows Vista, Connect can connect with computers running IPv6 using an IPv6 address.

`"ROOT\CimV2"`

UserName

Optional

The user name you need for a connection. An empty value indicates the current security context. If the user name is from a domain different from the current domain, the string may contain the domain name and user name separated by a backslash.

Password

Optional

The password you need for a connection. An empty value indicates the current security context. A blank string "" specifies a valid zero-length password.

Locale**Optional**

If empty, the current locale is used. If not empty, this parameter indicates the correct locale for information retrieval. For Microsoft locale identifiers, the format of the string is "MS_XXX", where XXX is a string in hexadecimal form that indicates the Local Identification (LCID), for example, American English would appear as "MS_409". If an invalid locale is specified, then the method returns "Invalid Parameter". Windows 7: If an invalid locale is specified, then the default locale of the server is used unless there is a server-supported locale provided by the user application.

Authority**Optional**

This parameter contains the name of the domain of the user to authenticate. Authority can have the following values: Empty: If you leave this parameter blank, NTLM authentication is used and the NTLM domain of the current user is used. If the domain is specified in strUser, which is the recommended location, then it must not be specified here. Specifying the domain in both parameters results in an invalid parameter error. Kerberos:<principal name>Kerberos authentication is used and this parameter should contain a Kerberos principal name. NTLMDOMAIN:<domain name>NT LAN Manager authentication is used and this parameter should contain an NTLM domain name.

Result Returns OK or error.

Description

Connects through DCOM to a WMI namespace on the computer specified in the strNetworkResource parameter.

Examples

Connect locally:

```
MBS( "WMIQuery.Connect"; "ROOT\CimV2" )
```

Connect and Query:

```
Set Variable [ $q; Value:MBS("WMIQuery.New") ]
If [ MBS("IsError") = 0 ]
Set Field [ WMI Query::QueryID; $q ]
# connect to server
Set Variable [ $r; Value:MBS("WMIQuery.Connect"; $q; WMI Query::NetworkResource; WMI Query::User;
WMI Query::Password; WMI Query::Locale; WMI Query::Authority) ]
If [ MBS("IsError") = 0 ]
# run query
Set Variable [ $r; Value:MBS("WMIQuery.Query"; $q; WMI Query::Query) ]
If [ MBS("IsError") = 0 ]
# show result
Go to Related Record [ Show only related records; From table: "Result"; Using layout: "Result" (Result) ]
Go to Layout [ "Result" (Result) ]
```

```

Delete All Records [ No dialog ]
Loop
Set Variable [ $r; Value:MBS("WMIQuery.Next"; $q) ]
Exit Loop If [ $r "OK" ]
# show properties
Set Variable [ $Names; Value:MBS("WMIQuery.PropertyNames"; $q) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Query Error"; $r ]
Exit Script [ ]
Else
# loop properties
Set Variable [ $count; Value:ValueCount ( $Names ) ]
Set Variable [ $index; Value:1 ]
Loop
# property name, type and value
Set Variable [ $name; Value:GetValue($Names; $index) ]
Set Variable [ $type; Value:MBS("WMIQuery.PropertyType"; $q; $name) ]
Set Variable [ $value; Value:MBS("WMIQuery.PropertyValue"; $q; $name) ]
New Record/Request
Set Field [ Result::Name; $name ]
Set Field [ Result::Type; $type ]
Set Field [ Result::Text; $value ]
Set Field [ Result::QueryID; $q ]
Commit Records/Requests [ No dialog ]
# next
Set Variable [ $index; Value:$index +1 ]
Exit Loop If [ $index >$count ]
End Loop
End If
End Loop
Else
Show Custom Dialog [ "Query Error"; $r ]
End If
Else
Show Custom Dialog [ "Connect Error"; $r ]
End If
# cleanup
Set Variable [ $r; Value:MBS("WMIQuery.Release"; $q) ]
End If

```

See also

- 124.6 IsError 6266
- 188.2 WMIQuery.New 8805
- 188.3 WMIQuery.Next 8806
- 188.4 WMIQuery.PropertyNames 8807

- 188.5 WMIQuery.PropertyType 8808
- 188.6 WMIQuery.PropertyValue 8809
- 188.7 WMIQuery.Query 8810
- 188.8 WMIQuery.Release 8812

Example Databases

- [Win Only/WMI Query](#)

Created 22nd June 2015, last changed 29th February 2016.

188.2 WMIQuery.New

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
188 WMIQuery	5.2	No	Yes	Yes, Windows only	No	No

MBS("WMIQuery.New")

Result Returns reference number or error.

Description**See also**

- 188.1 WMIQuery.Connect 8801
- 188.3 WMIQuery.Next 8806
- 188.4 WMIQuery.PropertyNames 8807
- 188.5 WMIQuery.PropertyType 8808
- 188.6 WMIQuery.PropertyValue 8809
- 188.7 WMIQuery.Query 8810
- 188.8 WMIQuery.Release 8812

Example Databases

- [Win Only/WMI Query](#)

Created 22nd June 2015, last changed 22nd June 2015.

188.3 WMIQuery.Next

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
188 WMIQuery	5.2	No	Yes	Yes, Windows only	No	No

MBS("WMIQuery.Next"; WMIQueryRef)

Parameters

WMIQueryRef

The reference to the query. Create it with WMIQuery.New and destroy them with WMIQuery.Release.
\$ref

Result Returns OK, End of list or error.

Description

Returns OK if we have a next one or "End of list" in case of end.

See also

- 188.1 WMIQuery.Connect 8801
- 188.2 WMIQuery.New 8805
- 188.8 WMIQuery.Release 8812

Example Databases

- [Win Only/WMI Query](#)

Created 22nd June 2015, last changed 22nd June 2015.

188.4 WMIQuery.PropertyNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
188 WMIQuery	5.2	No	Yes	Yes, Windows only	No	No

MBS("WMIQuery.PropertyNames"; WMIQueryRef)

Parameters

WMIQueryRef

The reference to the query. Create it with WMIQuery.New and destroy them with WMIQuery.Release.
\$ref

Result Returns list or error.

Description

You can than use those names to query property types and values.

See also

- 188.1 WMIQuery.Connect 8801
- 188.2 WMIQuery.New 8805
- 188.5 WMIQuery.PropertyType 8808
- 188.6 WMIQuery.PropertyValue 8809
- 188.8 WMIQuery.Release 8812

Example Databases

- [Win Only/WMI Query](#)

Created 22nd June 2015, last changed 22nd June 2015.

188.5 WMIQuery.PropertyType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
188 WMIQuery	5.2	No	Yes	Yes, Windows only	No	No

MBS("WMIQuery.PropertyType"; WMIQueryRef; Name)

Parameters

WMIQueryRef

The reference to the query. Create it with WMIQuery.New and destroy them with WMIQuery.Release.
\$ref

Name

The name of the property to query.
"test"

Result Returns OK or error.

Description

The type can be prefixed with "Array" for arrays.
Common types include Null, Empty, Int32, Float64, Text and Boolean.

See also

- 188.1 WMIQuery.Connect 8801
- 188.2 WMIQuery.New 8805
- 188.4 WMIQuery.PropertyNames 8807
- 188.6 WMIQuery.PropertyValue 8809
- 188.8 WMIQuery.Release 8812

Example Databases

- [Win Only/WMI Query](#)

Created 22nd June 2015, last changed 22nd June 2015.

188.6 WMIQuery.PropertyValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
188 WMIQuery	5.2	No	Yes	Yes, Windows only	No	No

MBS("WMIQuery.PropertyValue"; WMIQueryRef; Name)

Parameters

WMIQueryRef

The reference to the query. Create it with WMIQuery.New and destroy them with WMIQuery.Release.
\$ref

Name

The name of the property to query.
"test"

Result Returns OK or error.

Description

The plugin returns text and number types as text or numbers.

Other data types are tried to convert to text.

A special handling is added for Arrays of Int32 and Text to return them as lists.

If you find an unsupported property type, please tell us, so we can add it here.

See also

- 188.1 WMIQuery.Connect 8801
- 188.2 WMIQuery.New 8805
- 188.4 WMIQuery.PropertyNames 8807
- 188.5 WMIQuery.PropertyType 8808
- 188.8 WMIQuery.Release 8812

Example Databases

- [Win Only/WMI Query](#)

Created 22nd June 2015, last changed 22nd June 2015.

188.7 WMIQuery.Query

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
188 WMIQuery	5.2	No	Yes	Yes, Windows only	No	No

MBS("WMIQuery.Query"; WMIQueryRef; Query)

Parameters

WMIQueryRef

The reference to the query. Create it with WMIQuery.New and destroy them with WMIQuery.Release.
\$ref

Query

The query to run.

"SELECT * FROM Win32_Processor"

Result Returns OK or error.

Description

Works in FileMaker 14, but fails in FileMaker 15/16 as MBS Plugin can't upgrade security to administrator and most system queries need permissions.

see also

[https://msdn.microsoft.com/en-us/library/aa392902\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/aa392902(v=vs.85).aspx)

Examples

Query network adapters:

MBS("WMIQuery.Query"; \$WMIQueryRef; "Select * from Win32_NetworkAdapter")

Query details about operation system:

MBS("WMIQuery.Query"; \$WMIQueryRef; "Select * from Win32_OperatingSystem")

Query event log:

MBS("WMIQuery.Query"; \$WMIQueryRef; "Select * from Win32_NTEventLogFile")

See also

- 188.1 WMIQuery.Connect 8801
- 188.2 WMIQuery.New 8805
- 188.8 WMIQuery.Release 8812

Example Databases

188.7. *WMIQUERY.QUERY*

8811

- Win Only/WMI Query

Created 22nd June 2015, last changed 19th October 2017.

188.8 WMIQuery.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
188 WMIQuery	5.2	No	Yes	Yes, Windows only	No	No

MBS("WMIQuery.Release"; WMIQueryRef)

Parameters

WMIQueryRef

The reference to the query. Create it with WMIQuery.New.
\$ref

Result Returns OK or error.

Description

See also

- 188.1 WMIQuery.Connect 8801
- 188.2 WMIQuery.New 8805
- 188.3 WMIQuery.Next 8806
- 188.4 WMIQuery.PropertyNames 8807
- 188.5 WMIQuery.PropertyType 8808
- 188.6 WMIQuery.PropertyValue 8809
- 188.7 WMIQuery.Query 8810

Example Databases

- [Win Only/WMI Query](#)

Created 22nd June 2015, last changed 22nd June 2015.

Chapter 189

WordFile

Modify Word files.

Load a word file, replace tags with real values and save file.

189.1 WordFile.AddMediaFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	9.1	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.AddMediaFile"; WordFile; Name; Image)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Name

The name of the item to add.

"image1.jpeg"

Image

The container value with the image.

Test::MyImage

Result Returns OK or error.

Description

You can use this function to add a new image.

You need to add the reference in XML yourself to let the image appear somewhere in the document.

See also

- 189.8 WordFile.GetMediaFile 8822
- 189.11 WordFile.MediaFiles 8825
- 189.22 WordFile.SetMediaFile 8841

189.1.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr6](#)

Created 6th March 2019, last changed 6th March 2019.

189.2 WordFile.Append

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.5	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.Append"; WordFile; Other WordFile { ; AddPageBreak })

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Other WordFile

The reference number of the second word file.

\$wordFile2

AddPageBreak

Optional

Available in MBS FileMaker Plugin 9.2 or newer.

Whether to add a page break.

1

Result Returns OK or error.

Description

This function takes document part from other word file and copies it's xml nodes to the current document. Please only copy from one document to other if they both are made from same template, so internal IDs for styles match.

See also

- [189.3 WordFile.AppendTableRow](#) 8816
- [189.4 WordFile.DuplicateTableRow](#) 8818

189.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr4](#)
- [MBS FileMaker Plugin, version 7.5pr9](#)

Created 22nd November 2017, last changed 19th April 2019.

189.3 WordFile.AppendTableRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.1	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.AppendTableRow"; WordFile; Placeholder)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Placeholder

The name of the placeholder.

"City"

Result Returns OK or error.

Description

If you have tables in your template word file and you like to duplicate rows and add them to the end of the table, just call this function with a placeholder field in that row. The place holder in the document must start with « and end with » characters.

Use WordFile.AppendTableRow to add new row to the end or WordFile.DuplicateTableRow to add it after the referenced one.

Examples

Add two lines and remove template line:

```
# load from container
Set Variable [ $wordfile ; Value: MBS( "WordFile.OpenContainer"; WordFile::Input ) ]
If [ MBS("ISError") ]
Show Custom Dialog [ "Error" ; $wordFile ]
Exit Script [ Text Result: ]
End If
#
# add table row and fill in data
Set Variable [ $r ; Value: MBS( "WordFile.AppendTableRow"; $WordFile; "TName" ) ]
Set Variable [ $r ; Value: MBS( "WordFile.ReplaceTag"; $WordFile; "TName"; "Brochure 123" ) ]
Set Variable [ $r ; Value: MBS( "WordFile.ReplaceTag"; $WordFile; "TDescription"; "Restaurant Recommendations" ) ]
#
# add table row and fill in data
Set Variable [ $r ; Value: MBS( "WordFile.AppendTableRow"; $WordFile; "TName" ) ]
Set Variable [ $r ; Value: MBS( "WordFile.ReplaceTag"; $WordFile; "TName"; "Brochure 456" ) ]
Set Variable [ $r ; Value: MBS( "WordFile.ReplaceTag"; $WordFile; "TDescription"; "Hotel Recommendations" ) ]
#
```

```

# remove last row left
Set Variable [ $r ; Value: MBS( "WordFile.RemoveTableRow"; $WordFile; "TName" ) ]
#
# write to desktop
Set Variable [ $DesktopPath ; Value: MBS("Folders.UserDesktop") ]
Set Variable [ $FilePath ; Value: MBS( "Path.AddPathComponent"; $DesktopPath; "test output.docx" ) ]
Set Variable [ $r ; Value: MBS( "WordFile.WriteFile"; $WordFile; $FilePath ) ]
Set Variable [ $r ; Value: MBS( "Files.LaunchFile"; $FilePath ) ]
# clean up
Set Variable [ $r ; Value: MBS("WordFile.Release"; $WordFile) ]

```

See also

- [78.35 Files.Launch](#) 3823
- [78.36 Files.LaunchFile](#) 3826
- [81.8 Folders.UserDesktop](#) 4177
- [124.6 IsError](#) 6266
- [121.1 Path.AddPathComponent](#) 6135
- [189.2 WordFile.Append](#) 8815
- [189.4 WordFile.DuplicateTableRow](#) 8818
- [189.12 WordFile.OpenContainer](#) 8826
- [189.17 WordFile.RemoveTableRow](#) 8833
- [189.25 WordFile.WriteFile](#) 8846

Example Databases

- [WordFile/WordFile](#)

189.3.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

189.4 WordFile.DuplicateTableRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.1	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.DuplicateTableRow"; WordFile; Placeholder)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Placeholder

The name of the placeholder.

"City"

Result Returns OK or error.

Description

If you have tables in your template word file and you like to duplicate rows in place, just call this function with a placeholder field in that row.

Use WordFile.AppendTableRow to add new row to the end or WordFile.DuplicateTableRow to add it after the referenced one.

See also

- 189.2 WordFile.Append 8815
- 189.3 WordFile.AppendTableRow 8816

189.4.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

Created 26th January 2017, last changed 26th January 2017.

189.5 WordFile.FieldNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.5	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.FieldNames"; WordFile)

Parameters

WordFile

The reference number of the open word file.
\$wordFile

Result Returns list or error.

Description

This looks for form fields in a word file.

Example Databases

- [WordFile/WordFile Fields](#)

189.5.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr8](#)

Created 15th November 2017, last changed 15th November 2017.

189.6 WordFile.GetCaseless

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.GetCaseless"; WordFile)

Parameters

WordFile

The reference number of the open word file.
\$wordFile

Result Returns 1, 0 or error.

Description

See also

- 189.19 WordFile.SetCaseless

8838

189.6.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)

Created 18th August 2017, last changed 18th August 2017.

189.7 WordFile.GetFieldText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.5	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.GetFieldText"; WordFile; FieldName)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

FieldName

The name of the field.

"Name"

Result Returns text or error.

Description

The plugin looks for the field with given name and queries it's text.

Returns true if field was found.

See also

- 189.20 WordFile.SetFieldText

8839

Example Databases

- [WordFile/WordFile Fields](#)

189.7.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr8](#)

Created 15th November 2017, last changed 15th November 2017.

189.8 WordFile.GetMediaFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	6.3	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.GetMediaFile"; WordFile; Name)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Name

The name of the item to query.

"image1.jpeg"

Result Returns container value or error.

Description

Returns the images, so you can put them into a container.

Examples

Extract image from word file:

```
Set Variable [ $w; Value:MBS( "WordFile.OpenContainer"; WordTest::wordfile ) ]
Set Variable [ $r; Value:MBS( "WordFile.GetMediaFile"; $w; "image1.jpeg" ) ]
Set Field [ WordTest::image; $r ]
Set Variable [ $r; Value:MBS( "WordFile.Release"; $w ) ]
```

See also

- 189.1 WordFile.AddMediaFile 8813
- 189.11 WordFile.MediaFiles 8825
- 189.12 WordFile.OpenContainer 8826
- 189.16 WordFile.Release 8832
- 189.22 WordFile.SetMediaFile 8841

189.8.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr6](#)

Created 6th July 2016, last changed 6th July 2016.

189.9 WordFile.GetXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	6.2	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.GetXML"; WordFile { ; Part })

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Part

Optional

The name of the part to query. See WordFile.Parts for a list of parts. if no part is given, we use the document.

"document"

Result Returns xml text or error.

Description

Getting the raw xml allows you to make modification yourself like adding paragraphs or a table.

Examples

Query XML of first footer:

```
MBS( "WordFile.GetXML"; $wordFile; "footer1" )
```

Query document relations:

```
MBS( "WordFile.GetXML"; $WordFile; "document.xml.rels")
```

See also

- 189.15 WordFile.Parts 8831
- 189.18 WordFile.ReplaceTag 8835
- 189.23 WordFile.SetXML 8843

189.9.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr7](#)
- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 15th March 2016, last changed 6th November 2019.

189.10 WordFile.HasTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	5.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.HasTag"; WordFile; Placeholder)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Placeholder

The name of the placeholder.

"City"

Result Returns 1 or 0 or error.

Description

The place holder in the document must start with « and end with » characters. The place holder you pass here, should not have those quotes.

If you change font or style of the text within the marker, it will not be recognized. So please keep all text between and including the « and » markers (or whatever is configured) within the same font style.

Examples

Checks for a tag city:

```
Set Variable [ $r; Value:MBS("WordFile.HasTag"; $WordFile; "City") ]
```

Created 5th November 2015, last changed 2nd May 2018.

189.11 WordFile.MediaFiles

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	6.3	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.MediaFiles"; WordFile)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Result Returns list or error.

Description

This may include jpeg and png files.

Examples

Check what media files exist in a word file:

```
Set Variable [ $w; Value:MBS( "WordFile.OpenContainer"; WordTest::wordfile ) ]
```

```
Set Variable [ $r; Value:MBS( "WordFile.MediaFiles"; $w ) ]
```

```
Set Variable [ $r; Value:MBS( "WordFile.Release"; $w ) ]
```

See also

- 189.1 WordFile.AddMediaFile 8813
- 189.8 WordFile.GetMediaFile 8822
- 189.12 WordFile.OpenContainer 8826
- 189.16 WordFile.Release 8832
- 189.22 WordFile.SetMediaFile 8841

189.11.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr6](#)

Created 6th July 2016, last changed 6th July 2016.

189.12 WordFile.OpenContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	5.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.OpenContainer"; Container)

Parameters

Container

The container value containing the word file.

MyTable::MyContainerField

Result Returns reference number or error.

Description

Can be a docx or a xml file.

Reference numbers for WordFiles start at 46000.

Does not work for old .doc files!

May break if newer versions of Microsoft Word or Office change the docx file format.

Examples

Open from container:

```
# load from container
Set Variable [ $wordfile; Value:MBS( "WordFile.OpenContainer"; WordFile::Input ) ]
# later clean up
Set Variable [ $r; Value:MBS("WordFile.Release"; $WordFile) ]
```

Open word file and extract text:

```
Set Variable [ $w; Value:MBS( "WordFile.OpenContainer"; Extract text from Word file::WordFile ) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed to read word file"; $w ]
Exit Script [ ]
End If
Set Field [ Extract text from Word file::Text; MBS( "WordFile.Texts"; $w ) ]
Set Variable [ $r; Value:MBS( "WordFile.Release"; $w ) ]
```

See also

- 124.6 IsError 6266
- 133.18 QTMovie.OpenContainer 6595
- 53.23 UnZipFile.OpenContainer 1498
- 189.3 WordFile.AppendTableRow 8816

<i>189.12. WORDFILE.OPENCONTAINER</i>	8827
• 189.8 WordFile.GetMediaFile	8822
• 189.11 WordFile.MediaFiles	8825
• 189.16 WordFile.Release	8832
• 189.18 WordFile.ReplaceTag	8835
• 189.22 WordFile.SetMediaFile	8841
• 189.24 WordFile.Texts	8844

Example Databases

- [WordFile/Extract text from Word file](#)
- [WordFile/WordFile Fields](#)
- [WordFile/WordFile](#)

189.12.1 FileMaker Magazin

- Ausgabe 6/2016, Seite 38

Created 5th November 2015, last changed 16th November 2019.

189.13 WordFile.OpenFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	5.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.OpenFile"; Path)

Parameters

Path

The file path for the word file.

"C:\test\test.docx"

Result Returns reference number or error.

Description

Can be a docx or a xml file.

Reference numbers for WordFiles start at 46000.

Does not work for old .doc files!

May break if newer versions of Microsoft Word or Office change the docx file format.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Opens file:

```
Set Variable [ $WordFile; Value:MBS("WordFile.OpenFile"; "/Users/cs/Desktop/Test1.xml") ]
```

Opens a docx file:

```
Set Variable [ $WordFile; Value:MBS("WordFile.OpenFile"; "/Users/cs/Desktop/Test.docx") ]
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 53.24 UnZipFile.OpenFile 1499
- 189.14 WordFile.OpenText 8830
- 189.25 WordFile.WriteFile 8846

189.13.1 FileMaker Magazin

- Ausgabe 6/2016, Seite 38

Created 5th November 2015, last changed 16th November 2019.

189.14 WordFile.OpenText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	5.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.OpenText"; XML)

Parameters

XML

The xml text.

Result Returns reference number or error.

Description

Can be a xml file stored in a text.

Reference numbers for WordFiles start at 46000.

May break if newer versions of Microsoft Word or Office change the docx file format.

See also

- 189.13 WordFile.OpenFile

8828

Created 5th November 2015, last changed 16th November 2019.

189.15 WordFile.Parts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	6.2	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.Parts"; WordFile)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Result Returns list or error.

Description

This may tell you how many headers/footers we found in a docx file.

Examples

Query parts of document:

MBS("WordFile.Parts"; \$wordFile)

See also

- 189.9 WordFile.GetXML 8823
- 189.23 WordFile.SetXML 8843
- 189.24 WordFile.Texts 8844

189.15.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr4](#)

Created 6th April 2016, last changed 6th April 2016.

189.16 WordFile.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	5.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.Release"; WordFile)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Result Returns OK or error.

Description

Examples

Releases a word file:

```
Set Variable [ $r; Value:MBS("WordFile.Release"; $WordFile) ]
```

See also

- 189.3 WordFile.AppendTableRow 8816
- 189.8 WordFile.GetMediaFile 8822
- 189.11 WordFile.MediaFiles 8825
- 189.12 WordFile.OpenContainer 8826
- 189.18 WordFile.ReplaceTag 8835
- 189.22 WordFile.SetMediaFile 8841
- 189.24 WordFile.Texts 8844

Example Databases

- [WordFile/Extract text from Word file](#)
- [WordFile/WordFile Fields](#)
- [WordFile/WordFile](#)

189.16.1 FileMaker Magazin

- Ausgabe 6/2016, Seite 39

Created 5th November 2015, last changed 5th November 2015.

189.17 WordFile.RemoveTableRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.0	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.RemoveTableRow"; WordFile; Placeholder)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Placeholder

The name of the placeholder.

"City"

Result Returns OK or error.

Description

If you have tables in your template word file and you only fill some rows, you can remove superfluous rows using this function.

Examples

Remove extra rows

```
Set Variable [ $index; Value:5 ]
```

```
Loop
```

```
Set Variable [ $r; Value:MBS( "WordFile.RemoveTableRow"; $WordFile; "Bst_Menge_" & If($index <10; "0"; "") & $index) ]
```

```
Set Variable [ $r; Value:MBS( "WordFile.RemoveTableRow"; $WordFile; "Bst_Bemerkung_" & If($index <10; "0"; "") & $index) ]
```

```
Set Variable [ $index; Value:$index + 1 ]
```

```
Exit Loop If [ $index >20 ]
```

```
End Loop
```

See also

- [189.3 WordFile.AppendTableRow](#)

8816

Example Databases

- [WordFile/WordFile](#)

189.17.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

189.18 WordFile.ReplaceTag

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	5.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.ReplaceTag"; WordFile; Placeholder { ; Text; All })

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Placeholder

The name of the placeholder.

In plugin version 7.4 and newer case insensitive for ASCII characters.

"City"

Text

Optional

The new text. Should not contain newline characters.

"New York"

All

Optional

Pass 1 to replace all placeholders with same text.

1

Result Returns OK or error.

Description

The place holder in the document must start with « and end with » characters. The place holder you pass here, should not have those quotes.

If you need to replace multi line text like addresses, please use several placeholders, at least one per line. Or for newer plugin pass text with new lines, but that will only work for main text and not headers.

If you need to insert multiple entries, you can do this:

Ask the plugin for the XML of the document via WordFile.GetXML. Split the XML into the part before your template line, the template and the xml after. Your line probably is wrapped between a <p>and </p>. Now you can build a new XML with your content and repeat the template part with new text as often as needed. Than pass back the XML to the plugin via WordFile.SetXML.

Version 7.0 and newer can handle multi line text better for normal paragraphs. It creates for you new paragraphs for each line in the new text.

If you change font or style of the text within the marker, it will not be recognized. So please keep all text between and including the « and » markers (or whatever is configured) within the same font style.

Examples

Replaces placeholder with text:

```
Set Variable [ $r; Value:MBS("WordFile.ReplaceTag"; $WordFile; "City"; "Nickenich") ]
```

Replaces all placeholder with text:

```
Set Variable [ $r; Value:MBS("WordFile.ReplaceTag"; $WordFile; "City"; "Nickenich"; 1) ]
```

Replace some tags:

```
# load from container
Set Variable [ $wordfile ; Value: MBS( "WordFile.OpenContainer"; WordFile::Input ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error" ; $wordFile ]
Exit Current Script [ Result: ]
End If
# replace placeholders from one record
Set Variable [ $r ; Value: MBS( "WordFile.ReplaceTag"; $WordFile; "FG_Nr"; WordFile::FG_Nr.) ]
Set Variable [ $r ; Value: MBS( "WordFile.ReplaceTag"; $WordFile; "P_Name"; WordFile::P_Name) ]
Set Variable [ $r ; Value: MBS( "WordFile.ReplaceTag"; $WordFile; "P_Vorname"; WordFile::P_Vorname) ]
]
# write to desktop
Set Variable [ $DesktopPath ; Value: MBS("Folders.UserDesktop") ]
Set Variable [ $FilePath ; Value: MBS( "Path.AddPathComponent"; $DesktopPath; "test output.docx" ) ]
Set Variable [ $r ; Value: MBS( "WordFile.WriteFile"; $WordFile; $FilePath ) ]
Set Variable [ $r ; Value: MBS( "Files.LaunchFile"; $FilePath ) ]
# clean up
Set Variable [ $r ; Value: MBS("WordFile.Release"; $WordFile) ]
```

See also

- 78.35 Files.Launch 3823
- 78.36 Files.LaunchFile 3826
- 81.8 Folders.UserDesktop 4177
- 124.6 IsError 6266
- 121.1 Path.AddPathComponent 6135
- 189.3 WordFile.AppendTableRow 8816
- 189.9 WordFile.GetXML 8823
- 189.12 WordFile.OpenContainer 8826
- 189.16 WordFile.Release 8832

189.18. *WORDFILE.REPLACETAG*

8837

- 189.23 WordFile.SetXML

8843

Example Databases

- [WordFile/WordFile](#)

189.18.1 Blog Entries

- [MBS FileMaker Plugin, version 9.4pr5](#)
- [MBS FileMaker Plugin, version 9.2pr2](#)
- [MBS FileMaker Plugin, version 7.4pr3](#)
- [MBS FileMaker Plugin, version 7.2pr1](#)
- [MBS FileMaker Plugin, version 7.0pr1](#)

189.18.2 FileMaker Magazin

- [Ausgabe 6/2016, Seite 39](#)

Created 5th November 2015, last changed 6th September 2019.

189.19 WordFile.SetCaseless

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.SetCaseless"; WordFile; Mode)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Mode

The new mode. Pass 1 to compare caseless. Pass 0 to compare case insensitive. (Default)

1

Result Returns OK or error.

Description

This enables you to make the text comparison case insensitive for comparing ASCII characters.

Examples

Set case insensitive:

MBS("WordFile.SetCaseless"; \$WordFile; 1)

See also

- [189.6 WordFile.GetCaseless](#) 8820
- [189.21 WordFile.SetMarkers](#) 8840

189.19.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr3](#)

Created 18th August 2017, last changed 18th August 2017.

189.20 WordFile.SetFieldText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	7.5	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.SetFieldText"; WordFile; FieldName; FieldText)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

FieldName

The name of the field.

"Name"

FieldText

The new field text.

"Hello"

Result Returns OK or error.

Description

The plugin looks for the field with given name and sets it's text.

Returns true if field was found.

Examples

Set a field value:

```
Set Variable [ $r; Value: MBS( "WordFile.SetFieldText"; $WordFile; "subject"; "Hello World" ) ]
```

See also

- [189.7 WordFile.GetFieldText](#)

8821

Example Databases

- [WordFile/WordFile Fields](#)

189.20.1 Blog Entries

- [MBS FileMaker Plugin, version 7.5pr8](#)

Created 15th November 2017, last changed 25th November 2019.

189.21 WordFile.SetMarkers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	6.3	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.SetMarkers"; WordFile; OpenMarker; CloseMarker)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

OpenMarker

The new marker to search before tag.

"«"

CloseMarker

The new end marker.

"»"

Result Returns 1, 0 or error.

Description

Default are « and ».

Should be different and not empty.

Returns 1 on success or 0 on failure.

Please don't use < or > for markers as those conflict with XML structure.

See also

- 189.19 WordFile.SetCaseless

8838

189.21.1 Blog Entries

- [MBS FileMaker Plugin, version 9.2pr1](#)

Created 23th June 2016, last changed 31st December 2016.

189.22 WordFile.SetMediaFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	6.3	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.SetMediaFile"; WordFile; Name; Image)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Name

The name of the item to change.

"image1.jpeg"

Image

The container value with the image.

Test::MyImage

Result Returns OK or error.

Description

You can use this function to replace a placeholder image with a new image.

Please make sure the new image has same dimensions and same file type as the original one.

Examples

Replace image:

```
Set Variable [ $w; Value:MBS( "WordFile.OpenContainer"; WordTest::wordfile ) ]
Set Variable [ $r; Value:MBS( "WordFile.SetMediaFile"; $w; "image1.jpeg"; WordTest::image ) ]
Set Variable [ $r; Value:MBS( "WordFile.WriteFile"; $w; "/Users/cs/Desktop/output.docx" ) ]
Set Variable [ $r; Value:MBS( "WordFile.Release"; $w ) ]
```

See also

- 189.1 WordFile.AddMediaFile 8813
- 189.8 WordFile.GetMediaFile 8822
- 189.11 WordFile.MediaFiles 8825
- 189.12 WordFile.OpenContainer 8826
- 189.16 WordFile.Release 8832
- 189.25 WordFile.WriteFile 8846

189.22.1 Blog Entries

- [MBS FileMaker Plugin, version 6.3pr6](#)

Created 6th July 2016, last changed 6th March 2019.

189.23 WordFile.SetXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	6.2	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.SetXML"; WordFile; XML { ; Part })

Parameters

WordFile

The reference number of the open word file.

\$wordFile

XML

The XML content for the word file.

Part

Optional

The name of the part to query. See WordFile.Parts for a list of parts. if no part is given, we use the document.

"document"

Result Returns OK or error.

Description

See also

- 189.9 WordFile.GetXML 8823
- 189.15 WordFile.Parts 8831
- 189.18 WordFile.ReplaceTag 8835

189.23.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr1](#)

Created 15th March 2016, last changed 6th April 2016.

189.24 WordFile.Texts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	5.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.Texts"; WordFile)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Result Returns text or error.

Description

Plugin inserts a few newline characters for detected line ends.

May not give all text. If you miss something, please send us test files.

Examples

Extracts text:

```
Set Field [ WordFiles::Texts; MBS("WordFile.Texts"; $WordFile) ]
```

Open word file and extract text:

```
Set Variable [ $w; Value:MBS( "WordFile.OpenContainer"; Extract text from Word file::WordFile ) ]
If [ MBS("iserror") ]
Show Custom Dialog [ "Failed to read word file"; $w ]
Exit Script [ ]
End If
Set Field [ Extract text from Word file::Text; MBS( "WordFile.Texts"; $w ) ]
Set Variable [ $r; Value:MBS( "WordFile.Release"; $w ) ]
```

See also

- 124.6 IsError 6266
- 138.22 RichText.Text 6741
- 189.12 WordFile.OpenContainer 8826
- 189.15 WordFile.Parts 8831
- 189.16 WordFile.Release 8832

Example Databases

- [WordFile/Extract text from Word file](#)

189.24.1 FileMaker Magazin

- Ausgabe 6/2016, Seite 38

Created 5th November 2015, last changed 19th January 2018.

189.25 WordFile.WriteFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
189 WordFile	5.4	Yes	Yes	Yes	Yes	Yes

MBS("WordFile.WriteFile"; WordFile; Path)

Parameters

WordFile

The reference number of the open word file.

\$wordFile

Path

The native file path.

"C:\Test\test.docx"

Result Returns OK or error.

Description

File extension should be correct, either docx or xml depending on what you loaded.

May break if newer versions of Microsoft Word or Office change the docx file format.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Writes a DocX file:

```
Set Variable [ $r; Value:MBS("WordFile.WriteFile"; $WordFile; "/Users/cs/Desktop/TestOutput.docx") ]
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 189.3 WordFile.AppendTableRow 8816
- 189.13 WordFile.OpenFile 8828
- 189.18 WordFile.ReplaceTag 8835
- 189.22 WordFile.SetMediaFile 8841
- 53.41 ZipFile.WriteFile 1521

Example Databases

- [WordFile/WordFile Fields](#)
- [WordFile/WordFile](#)

189.25.1 FileMaker Magazin

- Ausgabe 6/2016, Seite 39

Created 5th November 2015, last changed 16th November 2019.

Chapter 190

XL

Read and Write Excel files.

You can import or export data from/to XML files in old (xls) or new format (xlsx). Requires LibXL License (not included in MBS Plugin license)

190.1 XL.Book.AddCustomNumFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.AddCustomNumFormat"; bookRef; format)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

format

The format string.
"# .000"

Result Returns number or error.

Description

The format string customNumFormat indicates how to format and render the numeric value of a cell. Returns the custom format identifier. It's used in XL_Format_setNumFormat.

Read website for details:

<http://www.libxl.com/custom-format.html>

Examples

Create Excel file with some date value:

```

# create new xls file
Set Variable [ $book; Value:MBS( "XL.NewBook"; 0 ) ]
# create date format
Set Variable [ $dateFormat; Value:MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $dateFormatID; Value:MBS( "XL.Book.AddCustomNumFormat"; $book; "mmmm\d\,yyyy" ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $book; $dateFormat; $dateFormatID ) ]
# create sheet
Set Variable [ $sheet; Value:MBS( "XL.Book.AddSheet"; $book; "Sales Receipt" ) ]
# Write date
Set Variable [ $d; Value:MBS( "XL.Date.Pack"; $book; 2013; 10; 21 ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 4; 4; $d; $dateFormat ) ]
#
Set Field [ Writing data::Output; MBS("XL.Book.Save"; $book; "test.xls") ]
Set Variable [ $r; Value:MBS("XL.Book.Release"; $book) ]

```

Add american phone number formatting:

```

Set Variable [ $f; Value:MBS( "XL.Book.AddCustomNumFormat"; $book; " [ <=9999999 ] # # # \-# # # # ;\(# # # \)\# # # \-# # # # " ) ]

```

Add dollar amount formatting:

```

Set Variable [ $f; Value:MBS( "XL.Book.AddCustomNumFormat"; $book; "_($ # # # 0.00_);_($ (# # # 0.00);_($* -??_);_(@)" ) ]

```

Add a custom format with condition:

```

# define custom number format
#
Set Variable [ $customFormat ; Value: MBS( "XL.Book.AddCustomNumFormat"; $book; " [ Red ] # [ <=100 ] ; [ Blue ] # [ >100 ] " ) ]
#
# make format
#
Set Variable [ $textFormat ; Value: MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetNumFormat"; $book; $textFormat; $customFormat ) ]
#
# add sheet and use format:
#
Set Variable [ $sheet ; Value: MBS( "XL.book.AddSheet"; $book; "" ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 8; 1; 90; $textFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 8; 1; 110; $textFormat ) ]

```

Format dollar with CAD before:

```

MBS( "XL.Book.AddCustomNumFormat"; $book; "\"CAD\"$# ,## 0.00;\\"CAD-$\"# ,## 0.00;\\"CAD

```

190.1. *XL.BOOK.ADDCUSTOMNUMFORMAT* 8851
\$\"0.00;@")

See also

- 190.3 *XL.Book.AddFormat* 8854
- 190.6 *XL.Book.AddSheet* 8860
- 190.8 *XL.Book.CustomNumFormat* 8863
- 190.26 *XL.Book.Release* 8883
- 190.28 *XL.Book.Save* 8886
- 190.46 *XL.Date.Pack* 8911
- 190.109 *XL.Format.SetNumFormat* 8993
- 190.117 *XL.LoadBook* 9010
- 190.119 *XL.NewBook* 9015
- 190.170 *XL.Sheet.CellWriteNumber* 9097

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 12nd June 2018.

190.2 XL.Book.AddFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.AddFont"; bookRef { ; initFont })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

initFont

Optional

The index of an existing font which you want to use as a template.

0

Result Returns new font index or error.

Description

Examples

Create a font:

```
Set Variable [ $textFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetSize"; $book; $textfont; 8) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetName"; $book; $textfont; "Century Gothic") ]
```

See also

- 190.3 XL.Book.AddFormat 8854
- 190.6 XL.Book.AddSheet 8860
- 190.40 XL.Color.Pack 8900
- 190.57 XL.Font.SetBold 8923
- 190.58 XL.Font.SetColor 8925
- 190.60 XL.Font.SetName 8929
- 190.89 XL.Format.SetAlignH 8960
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106

Example Databases

- *XL/Sheet with colored text*
- *XL/Writing data*

Created 18th August 2014, last changed 5th May 2016.

190.3 XL.Book.AddFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

```
MBS( "XL.Book.AddFormat"; bookRef { ; initFormat } )
```

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

initFormat

Optional

The index of an existing format which you want to use as a template.

0

Result Returns index of new format or error.

Description

Examples

Writes sheet with red font:

```
# create new xls file
Set Variable [ $book; Value:MBS( "XL.NewBook"; 0 ) ]
# create fonts
Set Variable [ $redColor; Value:MBS( "XL.Color.Pack"; $book; 255; 0; 0 ) ]
Set Variable [ $redFont; Value:MBS( "XL.Book.AddFont"; $book ) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetColor"; $book; $redFont; $redColor ) ]
#
# create formats
Set Variable [ $redFormat; Value:MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $redFormat; $redFont ) ]
#
# create sheet
Set Variable [ $sheet; Value:MBS( "XL.Book.AddSheet"; $book; "Sales Receipt" ) ]
#
# add number in red
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 5; 3; 123; $redFormat ) ]
#
Set Field [ Writing data::Output; MBS("XL.Book.Save"; $book; "test.xls") ]
Set Variable [ $r; Value:MBS("XL.Book.Release"; $book) ]
```

Use a number format:

```
# create new format
Set Variable [ $format; Value:MBS( "XL.Book.AddFormat"; $book ) ]
```

```
# use existing number format
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $book; $format; 7) ]
# and use format
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 5; 3; 123; $format) ]
```

Apply a new format to a column:

```
# create new format
Set Variable [ $format; Value:MBS( "XL.Book.AddFormat"; $BookRef ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $BookRef; $format; 7) ]
# set as format for column
Set Variable [ $r; Value:MBS( "XL.Sheet.SetColumn"; $BookRef; 0; 6; 6; 50 ; $format; 0 ) ]
# loop over all rows
Set Variable [ $lastRow; Value:MBS( "XL.Sheet.GetLastRow"; $BookRef; $sheet ) ]
Set Variable [ $row; Value:1 ]
Loop
Set Variable [ $r; Value:MBS( "XL.Sheet.SetCellFormat"; $BookRef; $sheet; $row; 6; $format ) ]
# next
Set Variable [ $row; Value:$row + 1 ]
Exit Loop If [ $row >$lastRow ]
End Loop
```

Create header row:

```
#
# define a font:
#
Set Variable [ $headerFont ; Value: MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetSize"; $book; $headerFont; 12) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetName"; $book; $headerFont; "Century Gothic") ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetBold"; $book; $headerFont; 1) ]
#
# define a format:
#
Set Variable [ $headerFormat ; Value: MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFont"; $book; $headerFormat; $headerFont) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFillPattern"; $book; $headerFormat; 1) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $headerFormat; MBS(
"XL.Color.Pack"; $book; 200; 200; 200) ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetAlignH"; $book; $headerFormat; 2 /* center */ ) ]
#
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetRow"; $book; $sheet; $row ; 20 ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 0; "Account" ; $headerFor-
mat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 1; "Account Group" ;
$headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 2; "Report Name" ; $head-
```

```

erFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 3; "Date TS" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 4; "Text" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 5; "Text2" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 6; "Text3" ; $headerFormat ) ]

```

See also

- 190.108 XL.Format.SetLocked 8991
- 190.109 XL.Format.SetNumFormat 8993
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.114 XL.Format.SetWrap 9002
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.203 XL.Sheet.GetLastRow 9139
- 190.248 XL.Sheet.SetCellFormat 9190
- 190.281 XL.Sheet.SetRow 9237

Example Databases

- [XL/Sheet with colored text](#)
- [XL/Writing data](#)

Created 18th August 2014, last changed 7th February 2020.

190.4 XL.Book.AddPictureContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.AddPictureContainer"; bookRef; container)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

container

The container value with the image inside.

\$container

Result Returns image number or error.

Description

Returns a picture identifier. Supports BMP, DIB, PNG, JPG and WMF picture formats.

Use picture identifier with XL_Sheet_setPicture function.

Examples

Add a picture to excel sheet:

```
# add picture to file
Set Variable [ $logoID; Value:MBS( "XL.Book.AddPictureContainer"; $book; Writing data::Logo) ]
# position with size:
Set Variable [ $r; Value:MBS( "XL.Sheet.SetPictureWithSize"; $book; $sheet; 2; 1; $logoID; 100; 100) ]
# or with factor:
Set Variable [ $r; Value:MBS( "XL.Sheet.SetPictureWithScale"; $book; $sheet; 2; 1; $logoID; .2) ]
```

Adds picture with proportional scaled image:

```
Set Variable [ $image ; Value: MBS( "GMImage.NewFromContainer"; Writing data::Logo ) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $destWidth ; Value: 120 ]
Set Variable [ $destHeight ; Value: 120 ]
Set Variable [ $width ; Value: MBS( "GMImage.GetWidth"; $image ) ]
Set Variable [ $height ; Value: MBS( "GMImage.GetHeight"; $image ) ]
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $image ) ]
Set Variable [ $factor ; Value: Min ( $destheight / $height; $destwidth / $width ) ]
Set Variable [ $dwidth ; Value: $width * $factor ]
Set Variable [ $dheight ; Value: $height * $factor ]
#
Set Variable [ $logoID ; Value: MBS( "XL.Book.AddPictureContainer"; $book; Writing data::Logo) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetPictureWithSize"; $book; $sheet; 2; 1; $logoID; $dwidth;
```

```
$dheight) ]  
End If  
End If
```

See also

- 85.123 GImage.GetHeight 4501
- 85.169 GImage.GetWidth 4550
- 85.191 GImage.New 4580
- 85.193 GImage.NewFromContainer 4584
- 85.214 GImage.Release 4612
- 124.6 IsError 6266
- 190.114 XL.Format.SetWrap 9002
- 190.117 XL.LoadBook 9010
- 190.250 XL.Sheet.SetCol 9194
- 190.270 XL.Sheet.SetPictureWithSize 9222

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 25th July 2019.

190.5 XL.Book.AddPictureFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.AddPictureFile"; bookRef; filepath)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

filepath

The native file path to the image file to include.

"c:\test.jpg"

Result Returns image number or error.

Description

Returns a picture identifier. Supports BMP, DIB, PNG, JPG and WMF picture formats.

Use picture identifier with XL_Sheet_setPicture function.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 190.17 XL.Book.GetPictureType 8874
- 190.117 XL.LoadBook 9010
- 190.269 XL.Sheet.SetPictureWithScale 9220
- 190.270 XL.Sheet.SetPictureWithSize 9222

190.5.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr2](#)

Created 18th August 2014, last changed 5th September 2014.

190.6 XL.Book.AddSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.AddSheet"; bookRef; Name { ; InitSheet })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Name

The name for the new sheet.

"Taxsheet"

InitSheet

Optional

The index of an existing sheet to use as template.

0

Result Returns new sheet index or error message.

Description

Use initSheet parameter if you wish to copy an existing sheet.

Note initSheet must be only from this book.

Examples

Writes sheet with red font:

```
# create new xls file
Set Variable [ $book; Value:MBS( "XL.NewBook"; 0 ) ]
# create fonts
Set Variable [ $redColor; Value:MBS( "XL.Color.Pack"; $book; 255; 0; 0 ) ]
Set Variable [ $redFont; Value:MBS( "XL.Book.AddFont"; $book ) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetColor"; $book; $redFont; $redColor ) ]
#
# create formats
Set Variable [ $redFormat; Value:MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $redFormat; $redFont ) ]
#
# create sheet
Set Variable [ $sheet; Value:MBS( "XL.Book.AddSheet"; $book; "Sales Receipt" ) ]
#
# add number in red
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 5; 3; 123; $redFormat ) ]
#
Set Field [ Writing data::Output; MBS("XL.Book.Save"; $book; "test.xls") ]
Set Variable [ $r; Value:MBS("XL.Book.Release"; $book ) ]
```


See also

- 190.1 *XL.Book.AddCustomNumFormat* 8849
- 190.3 *XL.Book.AddFormat* 8854
- 190.28 *XL.Book.Save* 8886
- 190.38 *XL.Book.Sheets* 8898
- 190.46 *XL.Date.Pack* 8911
- 190.58 *XL.Font.SetColor* 8925
- 190.114 *XL.Format.SetWrap* 9002
- 190.117 *XL.LoadBook* 9010
- 190.119 *XL.NewBook* 9015
- 190.170 *XL.Sheet.CellWriteNumber* 9097

Example Databases

- [XL/AutoFilter](#)
- [XL/Export records](#)
- [XL/Sheet with colored text](#)
- [XL/Writing data](#)

190.6.1 Blog Entries

- [How to use XL functions with MBS FileMaker Plugin](#)

Created 18th August 2014, last changed 9th July 2015.

190.7 XL.Book.BiffVersion

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.BiffVersion"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Result Returns version or error.

Description

Used for xls format only.

See also

- 190.39 XL.Book.Version 8899
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.8 XL.Book.CustomNumFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.CustomNumFormat"; bookRef)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns format string or error.

Description

Read website for details:
<http://www.libxl.com/custom-format.html>

See also

- 190.1 XL.Book.AddCustomNumFormat 8849
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.9 XL.Book.DeleteSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.DeleteSheet"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet to delete. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns OK on success.

Description

If the sheet to delete is referenced by other sheets, this may cause problems.

Examples

Remove all sheets but the second one:

```
# Find libXL and load it
If [ MBS("XL.IsInitialized") = 1 ]
Perform Script [ "InitXL" ]
End If
# Load template excel file
Set Variable [ $bookRef; Value:MBS( "XL.LoadBook"; "/Users/cs/Desktop/Test.xlsx" ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error"; $bookRef ]
Exit Script [ ]
End If
# remove all but second sheet
Set Variable [ $c; Value:MBS( "XL.Book.SheetCount"; $bookRef ) ]
If [ $c >= 2 ]
If [ $c > 2 ]
Set Variable [ $i; Value:2 ]
Loop
Set Variable [ $r; Value:MBS( "XL.Book.DeleteSheet"; $bookRef; $i ) ]
Set Variable [ $i; Value:$i + 1 ]
Exit Loop If [ $c = $i ]
End Loop
End If
Set Variable [ $r; Value:MBS( "XL.Book.DeleteSheet"; $bookRef; 0 ) ]
End If
# Save to container and cleanup
Set Variable [ $r; Value:MBS("XL.Book.SaveToFile"; $bookRef; "/Users/cs/Desktop/output.xlsx" ) ]
```

Set Variable [\$r; Value:MBS("XL.Book.Release"; \$bookRef)]

Preprocess file before import in FileMaker by removing a row and a sheet:

```
# Find libXL and load it
If [ MBS("XL.IsInitialized") 1 ]
Perform Script [ Specified: From list ; "InitXL" ; Parameter: ]
End If
#
# path to xls or xlsx file
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ); "test.xls"
) ]
#
# Load template excel file
Set Variable [ $bookRef ; Value: MBS( "XL.LoadBook"; $path) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error" ; $bookRef ]
Exit Script [ Text Result: ]
End If
#
# Remove first row of first sheet
Set Variable [ $r ; Value: MBS( "XL.Sheet.RemoveRow"; $BookRef; 0 /* sheet index */; 0 /* row index */ )
]
#
# Remove second sheet
Set Variable [ $r ; Value: MBS( "XL.Book.DeleteSheet"; $bookRef; 1 /* sheet index */ ) ]
#
# Save to file and cleanup
Set Field [ XL::OutputFile ; MBS("XL.Book.SaveToFile"; $bookRef; $path) ]
Set Variable [ $r ; Value: MBS( "XL.Book.Release"; $bookRef) ]
#
# now let FileMaker import file
```

See also

- 121.1 Path.AddPathComponent 6135
- 190.10 XL.Book.DeleteSheetsExcept 8867
- 190.24 XL.Book.MoveSheet 8881
- 190.26 XL.Book.Release 8883
- 190.28 XL.Book.Save 8886
- 190.29 XL.Book.SaveToFile 8888
- 190.36 XL.Book.SheetCount 8896
- 190.116 XL.IsInitialized 9008

8866

CHAPTER 190. XL

- 190.117 XL.LoadBook 9010
- 190.244 XL.Sheet.RemoveRow 9184

Created 18th August 2014, last changed 13th February 2020.

190.10 XL.Book.DeleteSheetsExcept

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.4	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.DeleteSheetsExcept"; bookRef; Name)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Name

The name of the sheet to keep.

"People"

Result Returns OK or error.

Description

Returns error if sheet name is not found.

On success, the book has only one sheet left.

If the sheet to delete is referenced by other sheets, this may cause problems.

Examples

Delete all sheets except one:

```
Set Variable [ $r; Value:MBS("XL.Book.DeleteSheetsExcept"; $bookRef; "Reiter 2") ]
```

See also

- 190.9 XL.Book.DeleteSheet 8864
- 190.117 XL.LoadBook 9010

190.10.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 4th November 2015, last changed 4th November 2015.

190.11 XL.Book.FontCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.FontCount"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Result Returns number or error.

Description

See also

- 190.12 XL.Book.FormatCount 8869
- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.12 XL.Book.FormatCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.FormatCount"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns number or error.

Description

See also

- 190.11 XL.Book.FontCount 8868
- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.13 XL.Book.GetActiveSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.GetActiveSheet"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns index or error.

Description

See also

- 190.30 XL.Book.SetActiveSheet 8890
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.14 XL.Book.GetDefaultFontName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.GetDefaultFontName"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns font name.

Description

May return empty string in case of error.

See also

- 190.15 XL.Book.GetDefaultFontSize 8872
- 190.32 XL.Book.SetDefaultFont 8892
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.15 XL.Book.GetDefaultFontSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.GetDefaultFontSize"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns size or error.

Description

May return zero in case of error.

See also

- 190.14 XL.Book.GetDefaultFontName 8871
- 190.32 XL.Book.SetDefaultFont 8892
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.16 XL.Book.GetPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.GetPicture"; bookRef; index)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

index

The index of the picture from 0 to XL.Book.PictureCount-1.

0

Result Returns image or error.

Description

Returns container value with file, jpeg, tiff or png.

Please use XL.Book.GetPictureType to know the picture type before or Container.GetName and Container.GetTypes after.

See also

- 55.17 Container.GetName 1628
- 55.22 Container.GetType 1636
- 55.24 Container.GetTypes 1640
- 190.17 XL.Book.GetPictureType 8874
- 190.25 XL.Book.PictureCount 8882
- 190.117 XL.LoadBook 9010
- 190.212 XL.Sheet.GetPicture 9150

Created 18th August 2014, last changed 18th August 2014.

190.17 XL.Book.GetPictureType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.GetPictureType"; bookRef; index)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

index

The index of the picture from 0 to XL.Book.PictureCount-1.
0

Result Returns picture type or error.

Description

Types are: PNG, JPEG, WMF, DIB, EMF and TIFF.

See also

- 190.5 XL.Book.AddPictureFile 8859
- 190.16 XL.Book.GetPicture 8873
- 190.25 XL.Book.PictureCount 8882
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.18 XL.Book.GetRGBMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.GetRGBMode"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Result Returns 0 for index mode or 1 for RGB mode or error.

Description

Examples

Sets the fore color to red:

```

If [ MBS( "XL.Book.GetRGBMode"; $book ) = 0 ]
Set Variable [ $r; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $format; 10 ) ]
Else
Set Variable [ $c; Value: MBS( "XL.Color.Pack"; $book; 255; 0; 0 ) ]
Set Variable [ $r; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $format; $c ) ]
End If
Set Variable [ $r; Value: MBS( "XL.Format.SetFillPattern"; $book; $format; 1 ) ]

```

See also

- 190.33 XL.Book.SetRGBMode 8893
- 190.40 XL.Color.Pack 8900
- 190.104 XL.Format.SetFillPattern 8985
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.19 XL.Book.GetRefR1C1

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.GetRefR1C1"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns value or error.

Description

See also

- 190.34 XL.Book.SetRefR1C1 8894
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.20 XL.Book.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.GetText"; bookRef { ; formulas })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

formulas

Optional

Whether to return formulas as text. If you pass 1 here, the formulas will be returned instead of their result.

0

Result Returns text of workbook.

Description

Numbers are formatted as floating point numbers with dot as decimal separator.

Boolean values are returned as FALSE or TRUE.

This function will not calculate formulas.

See also

- 190.117 XL.LoadBook

9010

Example Databases

- [XL/XL](#)

Created 18th August 2014, last changed 19th April 2016.

190.21 XL.Book.InsertSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.InsertSheet"; bookRef; Index; Name { ; InitSheet })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Index

The index where to insert the sheet.
0

Name

The name for the new sheet.
"Taxsheet"

InitSheet

Optional
The index of an existing sheet to use as template.
0

Result Returns new sheet index or error message.

Description

Use initSheet parameter if you wish to copy an existing sheet.
Note initSheet must be only from this book.

See also

- 190.9 XL.Book.DeleteSheet 8864
- 190.24 XL.Book.MoveSheet 8881
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 9th July 2015.

190.22 XL.Book.IsDate1904

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.IsDate1904"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns boolean or error.

Description

See also

- 190.31 XL.Book.SetDate1904 8891
- 190.117 XL.LoadBook 9010

Created 22nd April 2017, last changed 22nd April 2017.

190.23 XL.Book.IsTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.IsTemplate"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Result Returns OK or error.

Description

See also

- 190.35 XL.Book.SetTemplate 8895
- 190.117 XL.LoadBook 9010

Created 22nd April 2017, last changed 22nd April 2017.

190.24 XL.Book.MoveSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.MoveSheet"; bookRef; SourceIndex; DestIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

SourceIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

DestIndex

The destination index of the sheet.

0

Result Returns OK or error.

Description

Takes a sheet with SourceIndex and insert it in front of a sheet with DestIndex.

Returns OK on success and error on failure.

See also

- 190.6 XL.Book.AddSheet 8860
- 190.9 XL.Book.DeleteSheet 8864
- 190.21 XL.Book.InsertSheet 8878
- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

190.24.1 Blog Entries

- [MBS FileMaker Plugin, version 7.2pr5](#)

Created 27th April 2017, last changed 27th April 2017.

190.25 XL.Book.PictureCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.PictureCount"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Result Returns number or error.

Description

See also

- 190.16 XL.Book.GetPicture 8873
- 190.17 XL.Book.GetPictureType 8874
- 190.117 XL.LoadBook 9010
- 190.239 XL.Sheet.PictureCount 9178

Created 18th August 2014, last changed 18th August 2014.

190.26 XL.Book.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.Release"; BookRef)

Parameters

BookRef

The reference to the Workbook you want to release.

\$ref

Result Returns OK on success.

Description

You need to call this method when you are done with a workbook in order to prevent out of memory situations.

See also

- 190.40 XL.Color.Pack 8900
- 190.43 XL.CopyRow 8906
- 190.46 XL.Date.Pack 8911
- 190.58 XL.Font.SetColor 8925
- 190.114 XL.Format.SetWrap 9002
- 190.119 XL.NewBook 9015
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.172 XL.Sheet.CellWriteText 9102
- 190.244 XL.Sheet.RemoveRow 9184
- 190.250 XL.Sheet.SetCol 9194

Example Databases

- [XL/AutoFilter](#)
- [XL/Change Column Names](#)
- [XL/Converter](#)
- [XL/Edit Sheet](#)
- [XL/Export records](#)
- [XL/Sheet with colored text](#)
- [XL/Writing data](#)
- [XL/XL](#)

190.26.1 Blog Entries

- [How to use XL functions with MBS FileMaker Plugin](#)

Created 18th August 2014, last changed 19th April 2016.

190.27 **XL.Book.ReleaseAll**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	10.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.ReleaseAll")

Result Returns OK or error.

Description

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

See also

- 190.26 XL.Book.Release

8883

190.27.1 **Blog Entries**

- [MBS FileMaker Plugin, version 10.0pr8](#)

Created 9th January 2020, last changed 9th January 2020.

190.28 XL.Book.Save

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.Save"; bookRef { ; filename })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

filename

Optional

The new file name for the container value.
"sheet.xls"

Result Returns container value or error message.

Description

See also

- 190.1 XL.Book.AddCustomNumFormat 8849
- 190.6 XL.Book.AddSheet 8860
- 190.9 XL.Book.DeleteSheet 8864
- 190.29 XL.Book.SaveToFile 8888
- 190.40 XL.Color.Pack 8900
- 190.46 XL.Date.Pack 8911
- 190.58 XL.Font.SetColor 8925
- 190.114 XL.Format.SetWrap 9002
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.244 XL.Sheet.RemoveRow 9184

Example Databases

- [XL/AutoFilter](#)
- [XL/Change Column Names](#)
- [XL/Converter](#)
- [XL/Export records](#)
- [XL/Sheet with colored text](#)
- [XL/Writing data](#)

190.28.1 **Blog Entries**

- [How to use XL functions with MBS FileMaker Plugin](#)

Created 18th August 2014, last changed 9th July 2015.

190.29 XL.Book.SaveToFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SaveToFile"; bookRef; path)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

path

The native path to write the file to.

"C:\test.xls"

Result Returns OK or error message.

Description

Returns error on failure or OK on result.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Preprocess file before import in FileMaker by removing a row and a sheet:

```
# Find libXL and load it
If [ MBS("XL.IsInitialized") 1 ]
Perform Script [ Specified: From list ; "InitXL" ; Parameter: ]
End If
#
# path to xls or xlsx file
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ); "test.xls"
) ]
#
# Load template excel file
Set Variable [ $bookRef ; Value: MBS( "XL.LoadBook"; $path ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error" ; $bookRef ]
Exit Script [ Text Result: ]
End If
#
# Remove first row of first sheet
Set Variable [ $r ; Value: MBS( "XL.Sheet.RemoveRow"; $BookRef; 0 /* sheet index */; 0 /* row index */ ) ]
#
```

190.29. *XL.BOOK.SAVETOFILE*

8889

```
# Remove second sheet
Set Variable [ $r ; Value: MBS( "XL.Book.DeleteSheet"; $bookRef; 1 /* sheet index */ ) ]
#
# Save to file and cleanup
Set Field [ XL::OutputFile ; MBS("XL.Book.SaveToFile"; $bookRef; $path) ]
Set Variable [ $r ; Value: MBS( "XL.Book.Release"; $bookRef) ]
#
# now let FileMaker import file
```

See also

- 81.8 Folders.UserDesktop 4177
- 124.6 IsError 6266
- 121.1 Path.AddPathComponent 6135
- 121.2 Path.FileMakerPathToNativePath 6139
- 190.9 XL.Book.DeleteSheet 8864
- 190.26 XL.Book.Release 8883
- 190.28 XL.Book.Save 8886
- 190.116 XL.IsInitialized 9008
- 190.117 XL.LoadBook 9010
- 190.244 XL.Sheet.RemoveRow 9184

Created 18th August 2014, last changed 13th February 2020.

190.30 XL.Book.SetActiveSheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SetActiveSheet"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet to activate. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns OK or error.

Description

See also

- 190.13 XL.Book.GetActiveSheet 8870
- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 4th November 2014.

190.31 XL.Book.SetDate1904

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SetDate1904"; bookRef)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Result Returns OK or error.

Description

Pass 1 for 1904 date system, 0 for 1900 date system (default).In the 1900 date base system, the lower limit is January 1, 1900, which has serial value 1.In the 1904 date base system, the lower limit is January 1, 1904, which has serial value 0.

See also

- 190.22 XL.Book.IsDate1904 8879
- 190.117 XL.LoadBook 9010

Created 22nd April 2017, last changed 22nd April 2017.

190.32 XL.Book.SetDefaultFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SetDefaultFont"; bookRef; name; size)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

name

The font name.

"Arial"

size

The font size.

12

Result Returns OK or error.

Description

See also

- 190.14 XL.Book.GetDefaultFontName 8871
- 190.15 XL.Book.GetDefaultFontSize 8872
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.33 XL.Book.SetRGBMode

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SetRGBMode"; bookRef; value)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

value

The new setting. Pass 0 or 1.

0

Result Returns OK or error.

Description

1: RGB mode, 0: Index mode (default).

In RGB mode use XL.ColorPack and XL.ColorUnpack methods for getting/setting colors.

See also

- 190.18 XL.Book.GetRGBMode 8875
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.34 XL.Book.SetRefR1C1

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SetRefR1C1"; bookRef; Value)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Value

The new setting.

0

Result Returns OK or error.

Description

See also

- 190.19 XL.Book.GetRefR1C1 8876
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.35 XL.Book.SetTemplate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SetTemplate"; bookRef)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Result Returns OK or error.

Description

Pass 1 for workbook is template, 0 for workbook is not template (default).It allows to change type of file from a template file (xlt and xltx) to a regular file (xls and xlsx) and vice versa.

See also

- 190.23 XL.Book.IsTemplate 8880
- 190.117 XL.LoadBook 9010

Created 22nd April 2017, last changed 22nd April 2017.

190.36 XL.Book.SheetCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SheetCount"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns number of sheets.

Description

See also

- 190.9 XL.Book.DeleteSheet 8864
- 190.11 XL.Book.FontCount 8868
- 190.282 XL.Sheet.SetRowHidden 9239
- 190.283 XL.Sheet.SetTabColor 9240
- 190.285 XL.Sheet.SetTopLeftView 9242
- 190.288 XL.Sheet.SetZoom 9245
- 190.289 XL.Sheet.Split 9246
- 190.290 XL.Sheet.SplitInfo 9247
- 190.292 XL.Sheet.TableSize 9249
- 190.293 XL.Sheet.Type 9250

Created 18th August 2014, last changed 19th April 2016.

190.37 XL.Book.SheetIndexForName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.4	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.SheetIndexForName"; bookRef; Name)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Name

The name of the sheet to keep.

"People"

Result Returns number or error.

Description

Returns empty result if not found.

Examples

Shows index for a sheet:

Show Custom Dialog ["Sheets"; MBS("XL.Book.SheetIndexForName"; \$bookRef; "Reiter 2")]

See also

- 190.117 XL.LoadBook

9010

190.37.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 4th November 2015, last changed 4th November 2015.

190.38 XL.Book.Sheets

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.4	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.Sheets"; bookRef)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns list or error.

Description

Examples

Shows list of sheets:

```
Show Custom Dialog [ "Sheets"; MBS("XL.Book.Sheets"; $bookRef) ]
```

See also

- 190.6 XL.Book.AddSheet 8860
- 190.117 XL.LoadBook 9010

190.38.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 4th November 2015, last changed 4th November 2015.

190.39 XL.Book.Version

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Book.Version"; bookRef)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Result Returns number or error.

Description**Examples**

Query version of LibXL:

```
Set Variable [ $book ; Value: MBS( "XL.NewBook" ) ]
Set Variable [ $version ; Value: MBS( "XL.Book.Version"; $book ) ]
Set Variable [ $r ; Value: MBS( "XL.Book.Release"; $book ) ]
Show Custom Dialog [ "Version" ; $version ]
```

See also

- 124.62 Version 6338
- 190.7 XL.Book.BiffVersion 8862
- 190.26 XL.Book.Release 8883
- 190.117 XL.LoadBook 9010
- 190.119 XL.NewBook 9015

190.39.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 22nd April 2017, last changed 25th June 2019.

190.40 XL.Color.Pack

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Color.Pack"; bookRef; red; green; blue)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

red

The red color value from 0 to 255.

255

green

The green color value from 0 to 255.

255

blue

The blue color value from 0 to 255.

255

Result Returns color value.

Description

Examples

Checks what color value to use for 100% red:

```
MBS( "XL.Color.Pack"; $$book; 255; 0; 0)
// shows 10 in indexed color mode
// shows 16711680 in RGB mode
```

Writes sheet with red font:

```
# create new xls file
Set Variable [ $book; Value:MBS( "XL.NewBook"; 0 ) ]
# create fonts
Set Variable [ $redColor; Value:MBS( "XL.Color.Pack"; $book; 255; 0; 0) ]
Set Variable [ $redFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetColor"; $book; $redFont; $redColor) ]
#
# create formats
Set Variable [ $redFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $redFormat; $redFont) ]
#
# create sheet
```


190.40. XL.COLOR.PACK

8901

```
Set Variable [ $sheet; Value:MBS( "XL.Book.AddSheet"; $book; "Sales Receipt" ) ]
#
# add number in red
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 5; 3; 123; $redFormat) ]
#
Set Field [ Writing data::Output; MBS("XL.Book.Save"; $book; "test.xls") ]
Set Variable [ $r; Value:MBS("XL.Book.Release"; $book) ]
```

See also

- 190.6 XL.Book.AddSheet 8860
- 190.18 XL.Book.GetRGBMode 8875
- 190.28 XL.Book.Save 8886
- 190.89 XL.Format.SetAlignH 8960
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.117 XL.LoadBook 9010
- 190.119 XL.NewBook 9015
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.172 XL.Sheet.CellWriteText 9102

Example Databases

- [XL/Sheet with colored text](#)

Created 18th August 2014, last changed 23th June 2015.

190.41 XL.Color.UnPack

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Color.UnPack"; bookRef; value; selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

value

The packed color value.

255

selector

The selector on what to return. Can be red, green or blue.

"red"

Result Returns color component value or error.

Description

Examples

Extracts color in RGB mode:

```
$r = MBS( "XL.Color.UnPack"; $$book; 16711680; "red")
$g = MBS( "XL.Color.UnPack"; $$book; 16711680; "green")
$b = MBS( "XL.Color.UnPack"; $$book; 16711680; "blue")
```

See also

- 190.40 XL.Color.Pack 8900
- 190.50 XL.Font.GetColor 8916
- 190.68 XL.Format.GetBorderBottomColor 8939
- 190.70 XL.Format.GetBorderDiagonalColor 8941
- 190.73 XL.Format.GetBorderLeftColor 8944
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.84 XL.Format.GetPatternBackgroundColor 8955
- 190.85 XL.Format.GetPatternForegroundColor 8956

190.41. *XL.COLOR.UNPACK*

8903

- 190.117 XL.LoadBook

9010

Created 18th August 2014, last changed 18th August 2014.

190.42 XL.CopyContent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("XL.CopyContent"; bookRef; otherBookRef { ; Options })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

otherBookRef

The reference to the second workbook. Please use XL.NewBook to create a file.

\$ref2

Options

Optional

Which items to skip when copying content.

””

Result Returns OK or error.

Description

The plugin loops through all sheets and creates matching sheets on new book. Formats and fonts are created on the fly.

This allows you to convert from XLS to XLSX or back.

Please report if something is not copied. Of course plugin can only copy what libXL supports, so things like movies or diagrams are not copied. And if you use demo mode, only a small part is copied with values. Rest will be blank.

Option	Description.
SkipPictures	Don't copy pictures.
SkipMerges	Don't copy merged cells.
SkipNamedRanges	Don't copy named ranges.
SkipPrintArea	Don't copy print area.
SkipPrintRepeat	Don'T copy print repeat
SkipPrintFit	Don't copy print fit.
SkipHorPageBreak	Don't copy horizontal page breaks.
SkipComments	Don't copy cell comments.
SkipFormats	Don't copy formats.
SkipRowHidden	Don't copy hidden rows.
SkipColHidden	Don't copy hidden columns.

190.42. *XL.COPYCONTENT*

8905

See also

- 190.117 *XL.LoadBook* 9010
- 190.119 *XL.NewBook* 9015

Example Databases

- [XL/Converter](#)

190.42.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr7](#)
- [MBS FileMaker Plugin, version 9.0pr6](#)
- [MBS FileMaker Plugin, version 5.1pr1](#)

Created 11st March 2015, last changed 2nd January 2019.

190.43 XL.CopyRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	6.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.CopyRow"; bookRef1; bookRef2; sheetIndex1; sheetIndex2; SourceRow; DestRow { ; Options })

Parameters

bookRef1

The reference to the source workbook. Please use XL.LoadBook to load a file.

\$ref

bookRef2

The reference to the destination workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex1

The source index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

sheetIndex2

The destination index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

SourceRow

The source row index.

\$srow

DestRow

The destination row index.

\$drow

Options

Optional

Which items to skip when copying content.

””

Result Returns OK or error.

Description

Source and destination can be in different sheets/books.

This copies most properties and all cells.

If something is missing, please let us know.

Examples

Copy row:

```
# load one from container
```

Option	Description.
SkipPictures	Don't copy pictures.
SkipMerges	Don't copy merged cells.
SkipNamedRanges	Don't copy named ranges.
SkipPrintArea	Don't copy print area.
SkipPrintRepeat	Don'T copy print repeat
SkipPrintFit	Don't copy print fit.
SkipHorPageBreak	Don't copy horizontal page breaks.
SkipComments	Don't copy cell comments.
SkipFormats	Don't copy formats.
SkipRowHidden	Don't copy hidden rows.
SkipColHidden	Don't copy hidden columns.

```

Set Variable [ $bookRef; Value:MBS( "XL.LoadBook"; XL::ExcelFile ) ]
# load one from file
Set Variable [ $bookRef2; Value:MBS( "XL.LoadBook"; "/Users/cs/Desktop/Format2.xls" ) ]
# copy a row from first sheet. Source row 2 to dest row 10.
Set Variable [ $r; Value:MBS( "XL.CopyRow"; $bookRef2; $bookRef; 0; 0; 2; 10 ) ]
# Save to container and cleanup
Set Field [ XL::OutputFile; MBS("XL.Save"; $bookRef; "test.xls" ) ]
Set Variable [ $r; Value:MBS( "XL.Book.Release"; $bookRef ) ]
Set Variable [ $r; Value:MBS( "XL.Book.Release"; $bookRef2 ) ]
Set Field [ XL::Result; $r ]

```

See also

- 190.26 XL.Book.Release 8883
- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

190.43.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr7](#)
- [MBS FileMaker Plugin, version 9.0pr6](#)
- [MBS FileMaker Plugin, version 6.5pr10](#)

Created 7th December 2016, last changed 31st December 2018.

190.44 XL.CopySheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	6.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.CopySheet"; bookRef1; bookRef2; sheetIndex { ; Options })

Parameters

bookRef1

The reference to the source workbook. Please use XL.LoadBook to load a file.

\$ref

bookRef2

The reference to the destination workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Options

Optional

Which items to skip when copying content.

””

Result Returns OK or error.

Description

This copies most properties and all cells.

If something is missing, please let us know.

Option	Description.
SkipPictures	Don't copy pictures.
SkipMerges	Don't copy merged cells.
SkipNamedRanges	Don't copy named ranges.
SkipPrintArea	Don't copy print area.
SkipPrintRepeat	Don'T copy print repeat
SkipPrintFit	Don't copy print fit.
SkipHorPageBreak	Don't copy horizontal page breaks.
SkipComments	Don't copy cell comments.
SkipFormats	Don't copy formats.
SkipRowHidden	Don't copy hidden rows.
SkipColHidden	Don't copy hidden columns.

See also

<i>190.44. XL.COPYSHEET</i>	8909
• 190.36 XL.Book.SheetCount	8896
• 190.117 XL.LoadBook	9010

190.44.1 Blog Entries

- [MBS FileMaker Plugin, version 9.0pr7](#)
- [MBS FileMaker Plugin, version 9.0pr6](#)
- [MBS FileMaker Plugin, version 6.5pr10](#)

Created 7th December 2016, last changed 31st December 2018.

190.45 XL.Date.DoubleToTimeStamp

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Date.DoubleToTimeStamp"; bookRef; timeStamp)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

timeStamp

The time, date or time stamp to convert.
40579.413796

Result Returns value or error.

Description

This uses current time zone.

Examples

Convert a timestamp number:

```
MBS( "XL.Date.DoubleToTimeStamp"; $bookRef; 40579.413796)
```

See also

- 190.117 XL.LoadBook

9010

190.45.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 6th February 2015, last changed 6th February 2015.

190.46 XL.Date.Pack

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Date.Pack"; bookRef; year; month; day { ; hour; minute; second; msec })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

year

The year value.

2013

month

The month value from 1 to 12.

10

day

The day value.

18

hour

Optional

The hour value from 0 to 23.

11

minute

Optional

The minute value from 0 to 59.

1

second

Optional

The second value from 0 to 59.

5

msec

Optional

The millisecond value from 0 to 999.

0

Result Returns timestamp number or error.

Description**Examples**

Build a date:

```
MBS( "XL.Date.Pack"; $$book; 2013; 10; 21; 19; 55; 13)
// shows 41568.83001157407125
```

Build a date without time:

```
MBS( "XL.Date.Pack"; $$book; 2013; 10; 21)
```

Create Excel file with some date value:

```
# create new xls file
Set Variable [ $book; Value:MBS( "XL.NewBook"; 0 ) ]
# create date format
Set Variable [ $dateFormat; Value:MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $dateFormatID; Value:MBS( "XL.Book.AddCustomNumFormat"; $book; "mmmm\d\, \yyyy" ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $book; $dateFormat; $dateFormatID ) ]
# create sheet
Set Variable [ $sheet; Value:MBS( "XL.Book.AddSheet"; $book; "Sales Receipt" ) ]
# Write date
Set Variable [ $d; Value:MBS( "XL.Date.Pack"; $book; 2013; 10; 21 ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 4; 4; $d; $dateFormat ) ]
#
Set Field [ Writing data::Output; MBS("XL.Book.Save"; $book; "test.xls") ]
Set Variable [ $r; Value:MBS("XL.Book.Release"; $book) ]
```

See also

- 190.1 XL.Book.AddCustomNumFormat 8849
- 190.3 XL.Book.AddFormat 8854
- 190.6 XL.Book.AddSheet 8860
- 190.26 XL.Book.Release 8883
- 190.28 XL.Book.Save 8886
- 190.48 XL.Date.UnPack 8914
- 190.109 XL.Format.SetNumFormat 8993
- 190.117 XL.LoadBook 9010
- 190.119 XL.NewBook 9015
- 190.170 XL.Sheet.CellWriteNumber 9097

Created 18th August 2014, last changed 9th July 2015.

190.47 XL.Date.TimeStampToDouble

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Date.TimeStampToDouble"; bookRef; timeStamp)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

timeStamp

The time, date or time stamp to convert.
Get (CurrentTimeStamp)

Result Returns value or error.

Description

This uses current time zone.

Examples

Convert current timestamp:

MBS("XL.Date.TimeStampToDouble"; \$bookRef; Get (CurrentTimeStamp))

See also

- 190.117 XL.LoadBook

9010

190.47.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 6th February 2015, last changed 6th February 2015.

190.48 XL.Date.UnPack

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Date.UnPack"; bookRef; value; selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

value

The timestamp number.

\$t

selector

Which component to return. Can be year, month, day, hour, minute, second or millisecond.

"year"

Result Returns number or error.

Description

Examples

Unpacks a date:

```
$year = MBS( "XL.Date.UnPack"; $$book; 41568,83001157407125; "year")
$month = MBS( "XL.Date.UnPack"; $$book; 41568,83001157407125; "month")
$day = MBS( "XL.Date.UnPack"; $$book; 41568,83001157407125; "day")
$hour = MBS( "XL.Date.UnPack"; $$book; 41568,83001157407125; "hour")
$minute = MBS( "XL.Date.UnPack"; $$book; 41568,83001157407125; "minute")
$second = MBS( "XL.Date.UnPack"; $$book; 41568,83001157407125; "second")
```

See also

- 190.46 XL.Date.Pack 8911
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.49 XL.Font.GetBold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.GetBold"; book; Font)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.50 XL.Font.GetColor 8916
- 190.52 XL.Font.GetName 8918
- 190.54 XL.Font.GetSize 8920
- 190.57 XL.Font.SetBold 8923
- 190.58 XL.Font.SetColor 8925
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.50 XL.Font.GetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.GetColor"; book; Font)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Result Returns value or error.

Description

If book is in RGB mode, you need to use XL.Color.Unpack to get red, green and blue color components. If book is not in RGB mode, you receive a color number (see XL.Font.SetColor).

See also

- 190.41 XL.Color.UnPack 8902
- 190.49 XL.Font.GetBold 8915
- 190.57 XL.Font.SetBold 8923
- 190.58 XL.Font.SetColor 8925
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.51 XL.Font.GetItalic

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.GetItalic"; book; Font)

Parameters

book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Result Returns value or error.

Description

See also

- 190.59 XL.Font.SetItalic 8928
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.52 XL.Font.GetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.GetName"; book; Font)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.49 XL.Font.GetBold 8915
- 190.54 XL.Font.GetSize 8920
- 190.60 XL.Font.SetName 8929
- 190.62 XL.Font.SetSize 8932
- 190.117 XL.LoadBook 9010
- 190.209 XL.Sheet.GetName 9146

Created 18th August 2014, last changed 18th August 2014.

190.53 XL.Font.GetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.GetScript"; book; Font)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Result Returns value or error.

Description

Value is 0 for normal, 1 for Superscript and 2 for Subscript.

See also

- 190.54 XL.Font.GetSize 8920
- 190.55 XL.Font.GetStrikeOut 8921
- 190.61 XL.Font.SetScript 8931
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.54 XL.Font.GetSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.GetSize"; book; Font)

Parameters

book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Result Returns value or error.

Description

See also

- 190.49 XL.Font.GetBold 8915
- 190.52 XL.Font.GetName 8918
- 190.53 XL.Font.GetScript 8919
- 190.60 XL.Font.SetName 8929
- 190.62 XL.Font.SetSize 8932
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.55 **XL.Font.GetStrikeOut**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.GetStrikeOut"; book; Font)

Parameters

book

The reference to the workbook. Please use `XL.LoadBook` to load a file.

\$ref

Font

The index of the font in the book to target.

0

Result Returns value or error.

Description

See also

- 190.53 `XL.Font.GetScript` 8919
- 190.63 `XL.Font.SetStrikeOut` 8934
- 190.117 `XL.LoadBook` 9010

Created 18th August 2014, last changed 18th August 2014.

190.56 XL.Font.GetUnderline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.GetUnderline"; book; Font)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Result Returns value or error.

Description

Values:

- 0 No underline
- 1 Single underline
- 2 Double underline
- 33 Single ACC
- 34 Double ACC

See also

- 190.64 XL.Font.SetUnderline 8935
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.57 XL.Font.SetBold

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.SetBold"; book; Font; Value)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Font

The index of the font in the book to target.
0

Value

The new setting. Pass 1 for bold and 0 for normal.
0

Result Returns OK or error.

Description**Examples**

Make a font bold:

```
MBS( "XL.Font.SetBold"; $book; $font10; 1 )
```

Create a format for bold font:

```
# create a font
Set Variable [ $textFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetBold"; $book; $textfont; 1) ]
# create format
Set Variable [ $textFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $textFormat; $textFont) ]
```

Writes a formula with bold font format:

```
# add a bold font based on another font
Set Variable [ $textFontBold ; Value: MBS( "XL.Book.AddFont"; $book; $textFont) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetBold"; $book; $textFontBold; 1) ]
# add format based on other format
Set Variable [ $dollarFormatBold ; Value: MBS( "XL.Book.AddFormat"; $book; $dollarFormat) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFont"; $book; $dollarFormatBold; $textFontBold) ]
# use format
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteFormula"; $book; $sheet; 38; 4; "SUM(E16:E38)";
$dollarFormatBold) ]
```

See also

- 190.2 XL.Book.AddFont 8852
- 190.49 XL.Font.GetBold 8915
- 190.60 XL.Font.SetName 8929
- 190.62 XL.Font.SetSize 8932
- 190.105 XL.Format.SetFont 8987
- 190.117 XL.LoadBook 9010
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.249 XL.Sheet.SetCellFormats 9192

Created 18th August 2014, last changed 12nd November 2018.

190.58 XL.Font.SetColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.SetColor"; book; Font; Value)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Font

The index of the font in the book to target.
0

Value

The new font color.
255

Result Returns OK or error.

Description

If you set value and book is in RGB mode you can use XL.ColorPack function to get a numeric value for color components. If the book is not in RGB mode, you can use color values as described below.

Color values if not in RGB Mode:

Examples

Make a font blue in non RGB mode:

```
MBS( "XL.Font.SetColor"; $book; $font10; 12 )
```

Writes sheet with red font:

```
# create new xls file
Set Variable [ $book; Value:MBS( "XL.NewBook"; 0 ) ]
# create fonts
Set Variable [ $redColor; Value:MBS( "XL.Color.Pack"; $book; 255; 0; 0 ) ]
Set Variable [ $redFont; Value:MBS( "XL.Book.AddFont"; $book ) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetColor"; $book; $redFont; $redColor ) ]
#
# create formats
Set Variable [ $redFormat; Value:MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $redFormat; $redFont ) ]
#
# create sheet
```

```

Set Variable [ $sheet; Value:MBS( "XL.Book.AddSheet"; $book; "Sales Receipt" ) ]
#
# add number in red
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 5; 3; 123; $redFormat) ]
#
Set Field [ Writing data::Output; MBS("XL.Book.Save"; $book; "test.xls") ]
Set Variable [ $r; Value:MBS("XL.Book.Release"; $book) ]

```

Create font with color 22:

```

Set Variable [ $titleFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetColor"; $book; $titlefont; 22) ]

```

See also

- 190.49 XL.Font.GetBold 8915
- 190.57 XL.Font.SetBold 8923
- 190.85 XL.Format.GetPatternForegroundColor 8956
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.105 XL.Format.SetFont 8987
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.117 XL.LoadBook 9010

Example Databases

- [XL/Sheet with colored text](#)
- [XL/Writing data](#)

Created 18th August 2014, last changed 5th May 2016.

Black	8
White	9
Red	10
Brightgreen	11
Blue	12
Yellow	13
Pink	14
Turquoise	15
Darkred	16
Green	17
Darkblue	18
Darkyellow	19
Violet	20
Teal	21
Gray25	22
Gray50	23
Periwinkle Cf	24
Plum Cf	25
Ivory Cf	26
Lightturquoise Cf	27
Darkpurple Cf	28
Coral Cf	29
Oceanblue Cf	30
Iceblue Cf	31
Darkblue Cl	32
Pink Cl	33
Yellow Cl	34
Turquoise Cl	35
Violet Cl	36
Darkred Cl	37
Teal Cl	38
Blue Cl	39
Skyblue	40
Lightturquoise	41
Lightgreen	42
Lightyellow	43
Paleblue	44
Rose	45
Lavender	46
Tan	47
Lightblue	48
Aqua	49
Lime	50
Gold	51
Lightorange	52
Orange	53
Bluegray	54
Gray40	55
Darkteal	56
Seagreen	57
Darkgreen	58
Olivegreen	59
Brown	60
Plum	61
Indigo	62
Gray80	63
Default Foreground	64
Default Background	65

190.59 XL.Font.SetItalic

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.SetItalic"; book; Font; Value)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Font

The index of the font in the book to target.
0

Value

The new font italic setting. Pass 1 for italic and 0 for normal.
0

Result Returns OK or error.

Description**Examples**

Make a font italic:

MBS("XL.Font.SetItalic"; \$book; \$font10; 1)

See also

- 190.51 XL.Font.GetItalic 8917
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 23th January 2015.

190.60 XL.Font.SetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.SetName"; book; Font; Value)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Value

The new font name.

"Arial"

Result Returns OK or error.

Description

Default name is "Arial".

Examples

Create a font:

```
Set Variable [ $textFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetSize"; $book; $textfont; 8) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetName"; $book; $textfont; "Century Gothic") ]
```

See also

- 190.2 XL.Book.AddFont 8852
- 190.52 XL.Font.GetName 8918
- 190.54 XL.Font.GetSize 8920
- 190.57 XL.Font.SetBold 8923
- 190.62 XL.Font.SetSize 8932
- 190.89 XL.Format.SetAlignH 8960
- 190.105 XL.Format.SetFont 8987
- 190.117 XL.LoadBook 9010
- 190.172 XL.Sheet.CellWriteText 9102

- 190.266 XL.Sheet.SetName

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 5th May 2016.

190.61 XL.Font.SetScript

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.SetScript"; book; Font; Value)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Font

The index of the font in the book to target.
0

Value

The new font script.
0

Result Returns OK or error.

Description

Value is 0 for normal, 1 for Superscript and 2 for Subscript.

See also

- 190.53 XL.Font.GetScript 8919
- 190.62 XL.Font.SetSize 8932
- 190.63 XL.Font.SetStrikeOut 8934
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.62 XL.Font.SetSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.SetSize"; book; Font; Value)

Parameters

book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Value

The new font size.

12

Result Returns OK or error.

Description

Examples

Create a font:

```
Set Variable [ $textFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetSize"; $book; $textfont; 8) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetName"; $book; $textfont; "Century Gothic") ]
```

See also

- 190.2 XL.Book.AddFont 8852
- 190.3 XL.Book.AddFormat 8854
- 190.52 XL.Font.GetName 8918
- 190.57 XL.Font.SetBold 8923
- 190.60 XL.Font.SetName 8929
- 190.61 XL.Font.SetScript 8931
- 190.89 XL.Format.SetAlignH 8960
- 190.90 XL.Format.SetAlignV 8963
- 190.117 XL.LoadBook 9010

190.62. *XL.FONT.SETSIZE*

8933

- 190.172 XL.Sheet.CellWriteText

9102

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 5th May 2016.

190.63 XL.Font.SetStrikeOut

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.SetStrikeOut"; book; Font; Value)

Parameters

book

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Font

The index of the font in the book to target.
0

Value

The new font setting for strikethrough. Pass 1 or 0.
0

Result Returns OK or error.

Description

See also

- 190.55 XL.Font.GetStrikeOut 8921
- 190.61 XL.Font.SetScript 8931
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.64 XL.Font.SetUnderline

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Font.SetUnderline"; book; Font; Value)

Parameters**book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Font

The index of the font in the book to target.

0

Value

The new font underline setting.

0

Result Returns OK or error.

Description

Values:

0	No underline
1	Single underline
2	Double underline
33	Single ACC
34	Double ACC

Examples

Make a font underlined:

MBS("XL.Font.SetUnderline"; \$book; \$font10; 1)

See also

- 190.56 XL.Font.GetUnderline 8922
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 23th January 2015.

190.65 XL.Format.GetAlignH

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetAlignH"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

Possible values:

- 0 general
- 1 left
- 2 center
- 3 right
- 4 full
- 5 justify
- 6 merge
- 7 distributed

See also

- 190.66 XL.Format.GetAlignV 8937
- 190.79 XL.Format.GetFont 8950
- 190.81 XL.Format.GetIndent 8952
- 190.89 XL.Format.SetAlignH 8960
- 190.90 XL.Format.SetAlignV 8963
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.66 XL.Format.GetAlignV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetAlignV"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use `XL.LoadBook` to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

Possible values:

- 0 Top
- 1 Center
- 2 Bottom
- 3 Jusity
- 4 Distributed

See also

- 190.65 `XL.Format.GetAlignH` 8936
- 190.79 `XL.Format.GetFont` 8950
- 190.81 `XL.Format.GetIndent` 8952
- 190.89 `XL.Format.SetAlignH` 8960
- 190.90 `XL.Format.SetAlignV` 8963
- 190.117 `XL.LoadBook` 9010

Created 18th August 2014, last changed 18th August 2014.

190.67 XL.Format.GetBorderBottom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderBottom"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

See also

- 190.74 XL.Format.GetBorderRight 8945
- 190.76 XL.Format.GetBorderTop 8947
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.92 XL.Format.SetBorderBottom 8967
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.94 XL.Format.SetBorderColor 8970
- 190.98 XL.Format.SetBorderLeft 8976
- 190.100 XL.Format.SetBorderRight 8979
- 190.102 XL.Format.SetBorderTop 8982
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.68 XL.Format.GetBorderBottomColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderBottomColor"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use `XL.LoadBook` to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

If book is in RGB mode, you need to use `XL.Color.Unpack` to get red, green and blue color components from the returned number. If book is not in RGB mode, you receive a color number (see `XL.Font.SetColor`).

See also

- 190.41 `XL.Color.UnPack` 8902
- 190.58 `XL.Font.SetColor` 8925
- 190.73 `XL.Format.GetBorderLeftColor` 8944
- 190.75 `XL.Format.GetBorderRightColor` 8946
- 190.77 `XL.Format.GetBorderTopColor` 8948
- 190.93 `XL.Format.SetBorderBottomColor` 8969
- 190.94 `XL.Format.SetBorderColor` 8970
- 190.96 `XL.Format.SetBorderDiagonalColor` 8974
- 190.99 `XL.Format.SetBorderLeftColor` 8978
- 190.103 `XL.Format.SetBorderTopColor` 8984

Created 18th August 2014, last changed 18th August 2014.

190.69 XL.Format.GetBorderDiagonal

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderDiagonal"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Format

The index of the format in the book to target.
0

Result Returns value or error.

Description

Possible values:

- 0 No digital border
- 1 Down
- 2 Up
- 3 Both

See also

- 190.70 XL.Format.GetBorderDiagonalColor 8941
- 190.71 XL.Format.GetBorderDiagonalStyle 8942
- 190.74 XL.Format.GetBorderRight 8945
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.97 XL.Format.SetBorderDiagonalStyle 8975
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.70 XL.Format.GetBorderDiagonalColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderDiagonalColor"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

If book is in RGB mode, you need to use XL.Color.Unpack to get red, green and blue color components from the returned number. If book is not in RGB mode, you receive a color number (see XL.Font.SetColor).

See also

- 190.41 XL.Color.UnPack 8902
- 190.58 XL.Font.SetColor 8925
- 190.71 XL.Format.GetBorderDiagonalStyle 8942
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.97 XL.Format.SetBorderDiagonalStyle 8975
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.71 XL.Format.GetBorderDiagonalStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderDiagonalStyle"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Format

The index of the format in the book to target.
0

Result Returns value or error.

Description

See also

- 190.69 XL.Format.GetBorderDiagonal 8940
- 190.70 XL.Format.GetBorderDiagonalColor 8941
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.97 XL.Format.SetBorderDiagonalStyle 8975
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.72 XL.Format.GetBorderLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderLeft"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.73 XL.Format.GetBorderLeftColor 8944
- 190.74 XL.Format.GetBorderRight 8945
- 190.76 XL.Format.GetBorderTop 8947
- 190.91 XL.Format.SetBorder 8965
- 190.92 XL.Format.SetBorderBottom 8967
- 190.94 XL.Format.SetBorderColor 8970
- 190.98 XL.Format.SetBorderLeft 8976
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.100 XL.Format.SetBorderRight 8979
- 190.102 XL.Format.SetBorderTop 8982

Created 18th August 2014, last changed 18th August 2014.

190.73 XL.Format.GetBorderLeftColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderLeftColor"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

If book is in RGB mode, you need to use XL.Color.Unpack to get red, green and blue color components from the returned number. If book is not in RGB mode, you receive a color number (see XL.Font.SetColor).

See also

- 190.41 XL.Color.UnPack 8902
- 190.58 XL.Font.SetColor 8925
- 190.68 XL.Format.GetBorderBottomColor 8939
- 190.72 XL.Format.GetBorderLeft 8943
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.94 XL.Format.SetBorderColor 8970
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.74 XL.Format.GetBorderRight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderRight"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.72 XL.Format.GetBorderLeft 8943
- 190.76 XL.Format.GetBorderTop 8947
- 190.92 XL.Format.SetBorderBottom 8967
- 190.94 XL.Format.SetBorderColor 8970
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.98 XL.Format.SetBorderLeft 8976
- 190.100 XL.Format.SetBorderRight 8979
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.102 XL.Format.SetBorderTop 8982
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.75 XL.Format.GetBorderRightColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderRightColor"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

If book is in RGB mode, you need to use XL.Color.Unpack to get red, green and blue color components from the returned number. If book is not in RGB mode, you receive a color number (see XL.Font.SetColor).

See also

- 190.41 XL.Color.UnPack 8902
- 190.58 XL.Font.SetColor 8925
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.100 XL.Format.SetBorderRight 8979
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.76 XL.Format.GetBorderTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderTop"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use `XL.LoadBook` to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.72 `XL.Format.GetBorderLeft` 8943
- 190.74 `XL.Format.GetBorderRight` 8945
- 190.77 `XL.Format.GetBorderTopColor` 8948
- 190.91 `XL.Format.SetBorder` 8965
- 190.92 `XL.Format.SetBorderBottom` 8967
- 190.94 `XL.Format.SetBorderColor` 8970
- 190.98 `XL.Format.SetBorderLeft` 8976
- 190.100 `XL.Format.SetBorderRight` 8979
- 190.102 `XL.Format.SetBorderTop` 8982
- 190.117 `XL.LoadBook` 9010

Created 18th August 2014, last changed 18th August 2014.

190.77 XL.Format.GetBorderTopColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetBorderTopColor"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

If book is in RGB mode, you need to use XL.Color.Unpack to get red, green and blue color components from the returned number. If book is not in RGB mode, you receive a color number (see XL.Font.SetColor).

See also

- 190.41 XL.Color.UnPack 8902
- 190.58 XL.Font.SetColor 8925
- 190.68 XL.Format.GetBorderBottomColor 8939
- 190.73 XL.Format.GetBorderLeftColor 8944
- 190.94 XL.Format.SetBorderColor 8970
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.103 XL.Format.SetBorderTopColor 8984

Created 18th August 2014, last changed 18th August 2014.

190.78 **XL.Format.GetFillPattern**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetFillPattern"; Book; Format)

Parameters

Book

The reference to the workbook. Please use `XL.LoadBook` to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

See also

- 190.104 `XL.Format.SetFillPattern` 8985
- 190.117 `XL.LoadBook` 9010

Created 18th August 2014, last changed 18th August 2014.

190.79 XL.Format.GetFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetFont"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

If no font is defined, the result is empty.

See also

- 190.65 XL.Format.GetAlignH 8936
- 190.66 XL.Format.GetAlignV 8937
- 190.81 XL.Format.GetIndent 8952
- 190.82 XL.Format.GetLocked 8953
- 190.88 XL.Format.GetWrap 8959
- 190.105 XL.Format.SetFont 8987
- 190.107 XL.Format.SetIndent 8990
- 190.114 XL.Format.SetWrap 9002
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.80 XL.Format.GetHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetHidden"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.81 XL.Format.GetIndent 8952
- 190.82 XL.Format.GetLocked 8953
- 190.91 XL.Format.SetBorder 8965
- 190.106 XL.Format.SetHidden 8989
- 190.107 XL.Format.SetIndent 8990
- 190.117 XL.LoadBook 9010
- 190.198 XL.Sheet.GetHidden 9134

Created 18th August 2014, last changed 18th August 2014.

190.81 XL.Format.GetIndent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetIndent"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

See also

- 190.65 XL.Format.GetAlignH 8936
- 190.66 XL.Format.GetAlignV 8937
- 190.79 XL.Format.GetFont 8950
- 190.80 XL.Format.GetHidden 8951
- 190.105 XL.Format.SetFont 8987
- 190.106 XL.Format.SetHidden 8989
- 190.107 XL.Format.SetIndent 8990
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.82 XL.Format.GetLocked

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetLocked"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.79 XL.Format.GetFont 8950
- 190.80 XL.Format.GetHidden 8951
- 190.91 XL.Format.SetBorder 8965
- 190.108 XL.Format.SetLocked 8991
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.83 XL.Format.GetNumFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetNumFormat"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.109 XL.Format.SetNumFormat 8993
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.84 XL.Format.GetPatternBackgroundColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetPatternBackgroundColor"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

If book is in RGB mode, you need to use XL.Color.Unpack to get red, green and blue color components from the returned number. If book is not in RGB mode, you receive a color number (see XL.Font.SetColor).

See also

- 190.41 XL.Color.UnPack 8902
- 190.58 XL.Font.SetColor 8925
- 190.85 XL.Format.GetPatternForegroundColor 8956
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.85 XL.Format.GetPatternForegroundColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetPatternForegroundColor"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

If book is in RGB mode, you need to use XL.Color.Unpack to get red, green and blue color components from the returned number. If book is not in RGB mode, you receive a color number (see XL.Font.SetColor).

See also

- 190.41 XL.Color.UnPack 8902
- 190.58 XL.Font.SetColor 8925
- 190.84 XL.Format.GetPatternBackgroundColor 8955
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.86 **XL.Format.GetRotation**

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetRotation"; Book; Format)

Parameters

Book

The reference to the workbook. Please use `XL.LoadBook` to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

See also

- 190.112 `XL.Format.SetRotation` 9000
- 190.117 `XL.LoadBook` 9010

Created 18th August 2014, last changed 18th August 2014.

190.87 XL.Format.GetShrinkToFit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetShrinkToFit"; Book; Format)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description

See also

- 190.113 XL.Format.SetShrinkToFit 9001
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.88 XL.Format.GetWrap

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.GetWrap"; Book; Format)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Result Returns value or error.

Description**See also**

- 190.79 XL.Format.GetFont 8950
- 190.105 XL.Format.SetFont 8987
- 190.114 XL.Format.SetWrap 9002
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.89 XL.Format.SetAlignH

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetAlignH"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Possible values:

- 0 general
- 1 left
- 2 center
- 3 right
- 4 full
- 5 justify
- 6 merge
- 7 distributed

Examples

Create left aligned format with specific font:

```
# create a font
Set Variable [ $textFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetSize"; $book; $textfont; 8) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetName"; $book; $textfont; "Century Gothic") ]
# create format
Set Variable [ $textFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $textFormat; $textFont) ]
```

```
Set Variable [ $r; Value:MBS( "XL.Format.SetAlignH"; $book; $textFormat; 1) // left ]
```

Create header row:

```
#
# define a font:
#
Set Variable [ $headerFont ; Value: MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetSize"; $book; $headerFont; 12) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetName"; $book; $headerFont; "Century Gothic") ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetBold"; $book; $headerFont; 1) ]
#
# define a format:
#
Set Variable [ $headerFormat ; Value: MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFont"; $book; $headerFormat; $headerFont) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFillPattern"; $book; $headerFormat; 1) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $headerFormat; MBS(
"XL.Color.Pack"; $book; 200; 200; 200) ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetAlignH"; $book; $headerFormat; 2 /* center */ ) ]
#
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetRow"; $book; $sheet; $row ; 20 ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 0; "Account" ; $headerFor-
mat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 1; "Account Group" ;
$headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 2; "Report Name" ; $head-
erFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 3; "Date TS" ; $headerFor-
mat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 4; "Text" ; $headerFormat
) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 5; "Text2" ; $headerFormat
) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 6; "Text3" ; $headerFormat
) ]
```

See also

- 190.60 XL.Font.SetName 8929
- 190.62 XL.Font.SetSize 8932
- 190.66 XL.Format.GetAlignV 8937
- 190.90 XL.Format.SetAlignV 8963
- 190.104 XL.Format.SetFillPattern 8985

8962

CHAPTER 190. XL

- 190.105 XL.Format.SetFont 8987
- 190.107 XL.Format.SetIndent 8990
- 190.172 XL.Sheet.CellWriteText 9102
- 190.250 XL.Sheet.SetCol 9194
- 190.281 XL.Sheet.SetRow 9237

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 7th February 2020.

190.90 XL.Format.SetAlignV

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetAlignV"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Possible values:

- 0 Top
- 1 Center
- 2 Bottom
- 3 Jusity
- 4 Distributed

Examples

Create left aligned format with specific font:

```
# create a font
Set Variable [ $textFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetSize"; $book; $textfont; 8) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetName"; $book; $textfont; "Century Gothic") ]
# create format
Set Variable [ $textFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $textFormat; $textFont) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetAlignH"; $book; $textFormat; 1) // left ]
Set Variable [ $r; Value:MBS( "XL.Format.SetAlignV"; $book; $textFormat; 0) // top ]
```

See also

- 190.2 XL.Book.AddFont 8852
- 190.3 XL.Book.AddFormat 8854
- 190.60 XL.Font.SetName 8929
- 190.62 XL.Font.SetSize 8932
- 190.65 XL.Format.GetAlignH 8936
- 190.66 XL.Format.GetAlignV 8937
- 190.89 XL.Format.SetAlignH 8960
- 190.105 XL.Format.SetFont 8987
- 190.107 XL.Format.SetIndent 8990
- 190.117 XL.LoadBook 9010

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 27th November 2017.

190.91 XL.Format.SetBorder

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorder"; Book; Format { ; Value })

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

Optional

The new border style. Default value is 1.

\$value

Result Returns OK or error.

Description

Available styles:

- 0 None
- 1 Thin
- 2 Medium
- 3 Dashed
- 4 Dotted
- 5 Thick,
- 6 Double
- 7 Hair
- 8 Medium dashed
- 9 Dash dot
- 10 Medium dash dot
- 11 Dash Dot Dot
- 12 Medium dash dot dot
- 13 Slant dash dot

Examples

Create border format:

```
Set Variable [ $textFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
```

```
Set Variable [ $r; Value:MBS( "XL.Format.SetBorder"; $book; $textFormat; 1) // thin ]
```

See also

- 190.3 XL.Book.AddFormat 8854
- 190.82 XL.Format.GetLocked 8953
- 190.98 XL.Format.SetBorderLeft 8976
- 190.100 XL.Format.SetBorderRight 8979
- 190.102 XL.Format.SetBorderTop 8982
- 190.105 XL.Format.SetFont 8987
- 190.107 XL.Format.SetIndent 8990
- 190.108 XL.Format.SetLocked 8991
- 190.114 XL.Format.SetWrap 9002
- 190.117 XL.LoadBook 9010

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 27th November 2017.

190.92 XL.Format.SetBorderBottom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderBottom"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Available styles:

0 None

1 Thin

2 Medium

3 Dashed

4 Dotted

5 Thick,

6 Double

7 Hair

8 Medium dashed

9 Dash dot

10 Medium dash dot

11 Dash Dot Dot

12 Medium dash dot dot

13 Slant dash dot

See also

- 190.67 XL.Format.GetBorderBottom 8938
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.94 XL.Format.SetBorderColor 8970
- 190.95 XL.Format.SetBorderDiagonal 8972

- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.100 XL.Format.SetBorderRight 8979
- 190.102 XL.Format.SetBorderTop 8982
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.93 XL.Format.SetBorderBottomColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderBottomColor"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

If you set value and book is in RGB mode you can use XL.ColorPack function to get a numeric value for color components. If the book is not in RGB mode, you can use color values as described in XL.Font.SetColor.

See also

- 190.58 XL.Font.SetColor 8925
- 190.68 XL.Format.GetBorderBottomColor 8939
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.92 XL.Format.SetBorderBottom 8967
- 190.94 XL.Format.SetBorderColor 8970
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.94 XL.Format.SetBorderColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderColor"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Format

The index of the format in the book to target.
0

Value

The new setting.
\$value

Result Returns OK or error.

Description

Color values if not in RGB Mode:

See also

- 190.77 XL.Format.GetBorderTopColor 8948
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.98 XL.Format.SetBorderLeft 8976
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.100 XL.Format.SetBorderRight 8979
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.102 XL.Format.SetBorderTop 8982
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.117 XL.LoadBook 9010

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 18th August 2014.

Black	8
White	9
Red	10
Brightgreen	11
Blue	12
Yellow	13
Pink	14
Turquoise	15
Darkred	16
Green	17
Darkblue	18
Darkyellow	19
Violet	20
Teal	21
Gray25	22
Gray50	23
Periwinkle Cf	24
Plum Cf	25
Ivory Cf	26
Lightturquoise Cf	27
Darkpurple Cf	28
Coral Cf	29
Oceanblue Cf	30
Iceblue Cf	31
Darkblue Cl	32
Pink Cl	33
Yellow Cl	34
Turquoise Cl	35
Violet Cl	36
Darkred Cl	37
Teal Cl	38
Blue Cl	39
Skyblue	40
Lightturquoise	41
Lightgreen	42
Lightyellow	43
Paleblue	44
Rose	45
Lavender	46
Tan	47
Lightblue	48
Aqua	49
Lime	50
Gold	51
Lightorange	52
Orange	53
Bluegray	54
Gray40	55
Darkteal	56
Seagreen	57
Darkgreen	58
Olivegreen	59
Brown	60
Plum	61
Indigo	62
Gray80	63
Default Foreground	64
Default Background	65

190.95 XL.Format.SetBorderDiagonal

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderDiagonal"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Possible values:

- 0 No digital border
- 1 Down
- 2 Up
- 3 Both

See also

- 190.69 XL.Format.GetBorderDiagonal 8940
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.92 XL.Format.SetBorderBottom 8967
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.97 XL.Format.SetBorderDiagonalStyle 8975
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.100 XL.Format.SetBorderRight 8979
- 190.101 XL.Format.SetBorderRightColor 8981

<i>190.95. XL.FORMAT.SETBORDERDIAGONAL</i>	8973
• 190.103 XL.Format.SetBorderTopColor	8984
• 190.117 XL.LoadBook	9010

Created 18th August 2014, last changed 18th August 2014.

190.96 XL.Format.SetBorderDiagonalColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderDiagonalColor"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

If you set value and book is in RGB mode you can use XL.ColorPack function to get a numeric value for color components. If the book is not in RGB mode, you can use color values as described in XL.Font.SetColor.

See also

- 190.58 XL.Font.SetColor 8925
- 190.70 XL.Format.GetBorderDiagonalColor 8941
- 190.71 XL.Format.GetBorderDiagonalStyle 8942
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.97 XL.Format.SetBorderDiagonalStyle 8975
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.97 XL.Format.SetBorderDiagonalStyle

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderDiagonalStyle"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description**See also**

- 190.69 XL.Format.GetBorderDiagonal 8940
- 190.70 XL.Format.GetBorderDiagonalColor 8941
- 190.71 XL.Format.GetBorderDiagonalStyle 8942
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.98 XL.Format.SetBorderLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderLeft"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Available styles:

- 0 None
- 1 Thin
- 2 Medium
- 3 Dashed
- 4 Dotted
- 5 Thick,
- 6 Double
- 7 Hair
- 8 Medium dashed
- 9 Dash dot
- 10 Medium dash dot
- 11 Dash Dot Dot
- 12 Medium dash dot dot
- 13 Slant dash dot

See also

- 190.72 XL.Format.GetBorderLeft 8943
- 190.73 XL.Format.GetBorderLeftColor 8944
- 190.74 XL.Format.GetBorderRight 8945
- 190.76 XL.Format.GetBorderTop 8947
- 190.91 XL.Format.SetBorder 8965

<i>190.98. XL.FORMAT.SETBORDERLEFT</i>	8977
• 190.92 XL.Format.SetBorderBottom	8967
• 190.99 XL.Format.SetBorderLeftColor	8978
• 190.100 XL.Format.SetBorderRight	8979
• 190.102 XL.Format.SetBorderTop	8982
• 190.117 XL.LoadBook	9010

Created 18th August 2014, last changed 18th August 2014.

190.99 XL.Format.SetBorderLeftColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderLeftColor"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

If you set value and book is in RGB mode you can use XL.ColorPack function to get a numeric value for color components. If the book is not in RGB mode, you can use color values as described in XL.Font.SetColor.

See also

- 190.58 XL.Font.SetColor 8925
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.94 XL.Format.SetBorderColor 8970
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.98 XL.Format.SetBorderLeft 8976
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.100 XL.Format.SetBorderRight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderRight"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Format

The index of the format in the book to target.
0

Value

The new setting.
\$value

Result Returns OK or error.

Description

Available styles:

- 0 None
- 1 Thin
- 2 Medium
- 3 Dashed
- 4 Dotted
- 5 Thick,
- 6 Double
- 7 Hair
- 8 Medium dashed
- 9 Dash dot
- 10 Medium dash dot
- 11 Dash Dot Dot
- 12 Medium dash dot dot
- 13 Slant dash dot

See also

- 190.74 XL.Format.GetBorderRight 8945
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.76 XL.Format.GetBorderTop 8947
- 190.91 XL.Format.SetBorder 8965
- 190.92 XL.Format.SetBorderBottom 8967

8980

CHAPTER 190. XL

- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.98 XL.Format.SetBorderLeft 8976
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.102 XL.Format.SetBorderTop 8982
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.101 XL.Format.SetBorderRightColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderRightColor"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

If you set value and book is in RGB mode you can use XL.ColorPack function to get a numeric value for color components. If the book is not in RGB mode, you can use color values as described in XL.Font.SetColor.

See also

- 190.73 XL.Format.GetBorderLeftColor 8944
- 190.75 XL.Format.GetBorderRightColor 8946
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.96 XL.Format.SetBorderDiagonalColor 8974
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.100 XL.Format.SetBorderRight 8979
- 190.103 XL.Format.SetBorderTopColor 8984
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.102 XL.Format.SetBorderTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderTop"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Available styles:

- 0 None
- 1 Thin
- 2 Medium
- 3 Dashed
- 4 Dotted
- 5 Thick,
- 6 Double
- 7 Hair
- 8 Medium dashed
- 9 Dash dot
- 10 Medium dash dot
- 11 Dash Dot Dot
- 12 Medium dash dot dot
- 13 Slant dash dot

See also

- 190.72 XL.Format.GetBorderLeft 8943
- 190.74 XL.Format.GetBorderRight 8945
- 190.76 XL.Format.GetBorderTop 8947
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.92 XL.Format.SetBorderBottom 8967

<i>190.102. XL.FORMAT.SETBORDERTOP</i>	8983
• 190.94 XL.Format.SetBorderColor	8970
• 190.98 XL.Format.SetBorderLeft	8976
• 190.100 XL.Format.SetBorderRight	8979
• 190.103 XL.Format.SetBorderTopColor	8984
• 190.117 XL.LoadBook	9010

Created 18th August 2014, last changed 18th August 2014.

190.103 XL.Format.SetBorderTopColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetBorderTopColor"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

If you set value and book is in RGB mode you can use XL.ColorPack function to get a numeric value for color components. If the book is not in RGB mode, you can use color values as described in XL.Font.SetColor.

See also

- 190.58 XL.Font.SetColor 8925
- 190.73 XL.Format.GetBorderLeftColor 8944
- 190.77 XL.Format.GetBorderTopColor 8948
- 190.93 XL.Format.SetBorderBottomColor 8969
- 190.94 XL.Format.SetBorderColor 8970
- 190.95 XL.Format.SetBorderDiagonal 8972
- 190.99 XL.Format.SetBorderLeftColor 8978
- 190.101 XL.Format.SetBorderRightColor 8981
- 190.102 XL.Format.SetBorderTop 8982
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.104 XL.Format.SetFillPattern

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetFillPattern"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

Format

The index of the format in the book to target.
0

Value

The new setting.
\$value

Result Returns OK or error.

Description

None	0
Solid	1
50% Gray	2
75% Gray	3
25% Gray	4
Horizontal Stripes	5
Vertical Stripes	6
Reverse Diagonal Stripes	7
Diagonal Stripes	8
Diagonal Cross Hatch	9
Thick Diagonal Stripe	9
Thin Horizontal Stripe	11
Thin Vertical Stripe	12
Thin Reverse Diagonal Stripe	13
Thin Diagonal Stripe	14
Thin Horizontal Cross Hatch	15
Thin Diagonal Cross Hatch	16
Gray 12P5	17
Gray 6P25	18

see table of fill patterns here:

<http://www.libxl.com/format.html#borderStyleTable#setFillPattern>

Examples

Sets the fore color to red:

```
If [ MBS( "XL.Book.GetRGBMode"; $book) = 0 ]  
Set Variable [ $r; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $format; 10) ]  
Else  
Set Variable [ $c; Value: MBS( "XL.Color.Pack"; $book; 255; 0; 0) ]  
Set Variable [ $r; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $format; $c) ]  
End If  
Set Variable [ $r; Value: MBS( "XL.Format.SetFillPattern"; $book; $format; 1 ) ]
```

See also

- 190.3 XL.Book.AddFormat 8854
- 190.18 XL.Book.GetRGBMode 8875
- 190.40 XL.Color.Pack 8900
- 190.78 XL.Format.GetFillPattern 8949
- 190.89 XL.Format.SetAlignH 8960
- 190.110 XL.Format.SetPatternBackgroundColor 8996
- 190.111 XL.Format.SetPatternForegroundColor 8998
- 190.117 XL.LoadBook 9010
- 190.172 XL.Sheet.CellWriteText 9102

Created 18th August 2014, last changed 17th February 2015.

190.105 XL.Format.SetFont

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetFont"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new font index.

\$value

Result Returns OK or error.

Description

You can use XL.Book.AddFont to create a new font.

Examples

Create left aligned format with specific font:

```
# create a font
Set Variable [ $textFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetSize"; $book; $textfont; 8) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetName"; $book; $textfont; "Century Gothic") ]
# create format
Set Variable [ $textFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $textFormat; $textFont) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetAlignH"; $book; $textFormat; 1) // left ]
```

See also

- 190.62 XL.Font.SetSize 8932
- 190.79 XL.Format.GetFont 8950
- 190.81 XL.Format.GetIndent 8952
- 190.89 XL.Format.SetAlignH 8960
- 190.114 XL.Format.SetWrap 9002
- 190.117 XL.LoadBook 9010

- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.249 XL.Sheet.SetCellFormats 9192

Example Databases

- [XL/Sheet with colored text](#)
- [XL/Writing data](#)

Created 18th August 2014, last changed 5th May 2016.

190.106 XL.Format.SetHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetHidden"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description**Examples**

Create hidden format:

```
Set Variable [ $textFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
```

```
Set Variable [ $r; Value:MBS( "XL.Format.SetHidden"; $book; $textFormat; 1) // hidden ]
```

See also

- 190.3 XL.Book.AddFormat 8854
- 190.80 XL.Format.GetHidden 8951
- 190.81 XL.Format.GetIndent 8952
- 190.91 XL.Format.SetBorder 8965
- 190.107 XL.Format.SetIndent 8990
- 190.108 XL.Format.SetLocked 8991
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 27th November 2017.

190.107 XL.Format.SetIndent

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetIndent"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Must be less than or equal to 15.

See also

- 190.79 XL.Format.GetFont 8950
- 190.80 XL.Format.GetHidden 8951
- 190.81 XL.Format.GetIndent 8952
- 190.89 XL.Format.SetAlignH 8960
- 190.90 XL.Format.SetAlignV 8963
- 190.91 XL.Format.SetBorder 8965
- 190.105 XL.Format.SetFont 8987
- 190.106 XL.Format.SetHidden 8989
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.108 XL.Format.SetLocked

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetLocked"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Needs to be used together with XL.Sheet.SetProtect or XL.Sheet.SetProtectEx function to prevent editing in locked cells.

Examples

Create locked format:

```
Set Variable [ $textFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
```

```
Set Variable [ $r; Value:MBS( "XL.Format.SetLocked"; $book; $textFormat; 1) // locked ]
```

See also

- 190.3 XL.Book.AddFormat 8854
- 190.82 XL.Format.GetLocked 8953
- 190.91 XL.Format.SetBorder 8965
- 190.105 XL.Format.SetFont 8987
- 190.106 XL.Format.SetHidden 8989
- 190.114 XL.Format.SetWrap 9002
- 190.117 XL.LoadBook 9010
- 190.250 XL.Sheet.SetCol 9194
- 190.278 XL.Sheet.SetProtect 9233

- 190.279 XL.Sheet.SetProtectEx

Created 18th August 2014, last changed 11st February 2020.

190.109 XL.Format.SetNumFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetNumFormat"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

The identifier must be a valid built-in number format identifier or the identifier of a custom number format.

To create a custom format use Xl.Book.addCustomNumFormat.

See built-in values in the table on this page:

<http://www.libxl.com/format.html>

Constant	Value	Description	Example
NUMFORMAT_GENERAL	0	general format	
NUMFORMAT_NUMBER	1	general number	1000
NUMFORMAT_NUMBER_D2	2	number with decimal point	1000.00
NUMFORMAT_NUMBER_SEP	3	number with thousands separator	100,000
NUMFORMAT_NUMBER_SEP_D2	4	number with decimal point and thousands separator	100,000.00
NUMFORMAT_CURRENCY_NEGBRA	5	monetary value, negative in brackets	(1000\$)
NUMFORMAT_CURRENCY_NEGBRAED	6	monetary value, negative is red in brackets	(1000\$)
NUMFORMAT_CURRENCY_D2_NEGBRA	7	monetary value with decimal point, negative in brackets	(\$1000.00)
NUMFORMAT_CURRENCY_D2_NEGBRAED	8	monetary value with decimal point, negative is red in brackets	(\$1000.00)
NUMFORMAT_PERCENT	9	percent value, multiply the cell value by 100	75%
NUMFORMAT_PERCENT_D2	10	percent value with decimal point, multiply the cell value by 100	75.00%
NUMFORMAT_SCIENTIFIC_D2	11	scientific value with E character and decimal point	10.00E+1
NUMFORMAT_FRACTION_ONEDIG	12	fraction value, one digit	10 1/2
NUMFORMAT_FRACTION_TWODIG	13	fraction value, two digits	10 23/95
NUMFORMAT_DATE	14	date value, depends on OS settings	3/11/2009
NUMFORMAT_CUSTOM_D_MON_YY	15	custom date value	11-Mar-09
NUMFORMAT_CUSTOM_D_MON	16	custom date value	11-Mar
NUMFORMAT_CUSTOM_MON_YY	17	custom date value	Mar-09
NUMFORMAT_CUSTOM_HMM_AM	18	custom date value	8:30 AM
NUMFORMAT_CUSTOM_HMSS_AM	19	custom date value	8:30:00 AM
NUMFORMAT_CUSTOM_HMM	20	custom date value	8:30
NUMFORMAT_CUSTOM_HMSS	21	custom date value	8:30:00
NUMFORMAT_CUSTOM_MDYYYY_HMM	22	custom datetime value	3/11/2009 8:30
NUMFORMAT_NUMBER_SEP_NEGBRA	37	number with thousands separator, negative in brackets	(4,000)
NUMFORMAT_NUMBER_SEP_NEGBRAED	38	number with thousands separator, negative is red in brackets	(4,000)
NUMFORMAT_NUMBER_D2_SEP_NEGBRA	39	number with thousands separator and decimal point, negative in brackets	(4,000.00)
NUMFORMAT_NUMBER_D2_SEP_NEGBRAED	40	number with thousands separator and decimal point, negative is red in brackets	(4,000.00)
NUMFORMAT_ACCOUNT	41	account value	5,000
NUMFORMAT_ACCOUNTCUR	42	account value with currency symbol	\$5,000
NUMFORMAT_ACCOUNT_D2	43	account value with decimal point	5,000.00
NUMFORMAT_ACCOUNT_D2_CUR	44	account value with currency symbol and decimal point	\$5,000.00
NUMFORMAT_CUSTOM_MMSS	45	custom time value	30:55
NUMFORMAT_CUSTOM_H0MSS	46	custom time value	20:30:55
NUMFORMAT_CUSTOM_MMSS0	47	custom time value	30:55.0
NUMFORMAT_CUSTOM_000P0E_PLUS0	48	custom value	15.2E+3
NUMFORMAT_TEXT	49	text value	any text

Examples

Use a number format:

```
# create new format
Set Variable [ $format; Value:MBS( "XL.Book.AddFormat"; $book) ]
# use existing number format
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $book; $format; 7) ]
# and use format
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 5; 3; 123; $format) ]
```

Apply a new format to a column:

```
# create new format
Set Variable [ $format; Value:MBS( "XL.Book.AddFormat"; $BookRef ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $BookRef; $format; 7) ]
# set as format for column
Set Variable [ $r; Value:MBS( "XL.Sheet.SetColumn"; $BookRef; 0; 6; 6; 50 ; $format; 0 ) ]
# loop over all rows
Set Variable [ $lastRow; Value:MBS( "XL.Sheet.GetLastRow"; $BookRef; $sheet ) ]
Set Variable [ $row; Value:1 ]
Loop
Set Variable [ $r; Value:MBS( "XL.Sheet.SetCellFormat"; $BookRef; $sheet; $row; 6; $format ) ]
# next
Set Variable [ $row; Value:$row + 1 ]
Exit Loop If [ $row >$lastRow ]
End Loop
```

See also

- 190.1 XL.Book.AddCustomNumFormat 8849
- 190.3 XL.Book.AddFormat 8854
- 190.46 XL.Date.Pack 8911
- 190.83 XL.Format.GetNumFormat 8954
- 190.117 XL.LoadBook 9010
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.203 XL.Sheet.GetLastRow 9139
- 190.248 XL.Sheet.SetCellFormat 9190
- 190.250 XL.Sheet.SetCol 9194
- 190.252 XL.Sheet.SetColumn 9198

Example Databases

- [XL/Writing data](#)

190.109. *XL.FORMAT.SETNUMFORMAT*

8995

Created 18th August 2014, last changed 19th March 2018.

190.110 XL.Format.SetPatternBackgroundColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetPatternBackgroundColor"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

If you set value and book is in RGB mode you can use XL.ColorPack function to get a numeric value for color components. If the book is not in RGB mode, you can use color values as described in XL.Font.SetColor.

This is the background color for the pattern, you can put in the background of a cell. If your pattern is stripes, the one color is the foreground one and the other the background one.

Examples

Sets the fore color to red:

```
If [ MBS( "XL.Book.GetRGBMode"; $book) = 0 ]
Set Variable [ $r; Value: MBS( "XL.Format.SetPatternBackgroundColor"; $book; $format; 10) ]
Else
Set Variable [ $c; Value: MBS( "XL.Color.Pack"; $book; 255; 0; 0) ]
Set Variable [ $r; Value: MBS( "XL.Format.SetPatternBackgroundColor"; $book; $format; $c) ]
End If
Set Variable [ $r; Value: MBS( "XL.Format.SetFillPattern"; $book; $format; 1 ) ]
```

See also

- 190.18 XL.Book.GetRGBMode 8875
- 190.40 XL.Color.Pack 8900
- 190.58 XL.Font.SetColor 8925
- 190.84 XL.Format.GetPatternBackgroundColor 8955

<i>190.110. XL.FORMAT.SETPATTERNBACKGROUND</i>	8997
• 190.85 XL.Format.GetPatternForegroundColor	8956
• 190.104 XL.Format.SetFillPattern	8985
• 190.111 XL.Format.SetPatternForegroundColor	8998
• 190.117 XL.LoadBook	9010

Created 18th August 2014, last changed 14th June 2017.

190.111 XL.Format.SetPatternForegroundColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetPatternForegroundColor"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

If you set value and book is in RGB mode you can use XL.ColorPack function to get a numeric value for color components. If the book is not in RGB mode, you can use color values as described in XL.Font.SetColor.

This is the foreground color for the pattern, you can put in the background of a cell. If your pattern is stripes, the one color is the foreground one and the other the background one. Setting no foreground color and using a pattern, can lead to use of the default color (black).

Examples

Sets the fore color to red:

```
If [ MBS( "XL.Book.GetRGBMode"; $book ) = 0 ]
Set Variable [ $r; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $format; 10) ]
Else
Set Variable [ $c; Value: MBS( "XL.Color.Pack"; $book; 255; 0; 0) ]
Set Variable [ $r; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $format; $c) ]
End If
Set Variable [ $r; Value: MBS( "XL.Format.SetFillPattern"; $book; $format; 1 ) ]
```

See also

- 190.3 XL.Book.AddFormat 8854
- 190.18 XL.Book.GetRGBMode 8875
- 190.40 XL.Color.Pack 8900

<i>190.111. XL.FORMAT.SETPATTERNFOREGROUNDCOLOR</i>	8999
• 190.58 XL.Font.SetColor	8925
• 190.84 XL.Format.GetPatternBackgroundColor	8955
• 190.85 XL.Format.GetPatternForegroundColor	8956
• 190.104 XL.Format.SetFillPattern	8985
• 190.110 XL.Format.SetPatternBackgroundColor	8996
• 190.117 XL.LoadBook	9010
• 190.172 XL.Sheet.CellWriteText	9102

Created 18th August 2014, last changed 14th June 2017.

190.112 XL.Format.SetRotation

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetRotation"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

Must be a value from the following table:

Value	Meaning
0 - 90	Text rotated counterclockwise 0 to 90 degrees
91 - 180	Text rotated clockwise 1 to 90 degrees
255	Vertical text

See also

- 190.86 XL.Format.GetRotation 8957
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.113 XL.Format.SetShrinkToFit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetShrinkToFit"; Book; Format; Value)

Parameters

Book

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting.

\$value

Result Returns OK or error.

Description

See also

- 190.87 XL.Format.GetShrinkToFit 8958
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.114 XL.Format.SetWrap

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Format.SetWrap"; Book; Format; Value)

Parameters**Book**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Format

The index of the format in the book to target.

0

Value

The new setting. Pass 1 to enable wrap and 0 to disable.

\$value

Result Returns OK or error.

Description**Examples**

Create wrapping format:

```
Set Variable [ $textFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetWrap"; $book; $textFormat; 1) ]
```

Write two lines with adjusting the row height:

```
# create format with wrap
#
Set Variable [ $textFormat ; Value: MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetWrap"; $book; $textFormat; 1) ]
#
# put in text with Char(10) for new line
#
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 1; "First line" & Char(10)
& "Second line"; $textFormat) ]
#
# make line higher
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetRow"; $book; $sheet; $row; 20 ) ]
```

Create sheet with column format:

```
# create new xls file
Set Variable [ $book ; Value: MBS( "XL.NewBook"; 1 ) ]
```

```

# load logo picture
Set Variable [ $logoID ; Value: MBS( "XL.Book.AddPictureContainer"; $book; Writing data::Logo) ]
# create fonts
# create format for column
Set Variable [ $colFormat ; Value: MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetWrap"; $book; $colFormat; 1) // enable wrap ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetAlignH"; $book; $colFormat; 1) // left ]
#
# create specialized format for one cell with lock
Set Variable [ $lockFormat ; Value: MBS( "XL.Book.AddFormat"; $book; $colFormat) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetLocked"; $book; $lockFormat; 1) // on ]
#
# create sheet
Set Variable [ $sheet ; Value: MBS( "XL.Book.AddSheet"; $book; "Sales Receipt") ]
# set default format for whole column
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetCol"; $book; $sheet; 1; 1; 12; $colFormat ) ]
#
# put some text in using column format
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; 2; 1; "Long text wraps due to
column format") ]
#
# and locked format
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; 3; 1; "And this is locked"; $lock-
Format) ]
#
# save and export
Set Field [ Writing data::Output ; MBS("XL.Book.Save"; $book; "test.xlsx") ]
Set Variable [ $r ; Value: MBS("XL.Book.Release"; $book) ]
#
Export Field Contents [ Writing data::Output ; Create folders: On ]

```

See also

- 190.4 XL.Book.AddPictureContainer 8857
- 190.6 XL.Book.AddSheet 8860
- 190.26 XL.Book.Release 8883
- 190.28 XL.Book.Save 8886
- 190.79 XL.Format.GetFont 8950
- 190.105 XL.Format.SetFont 8987
- 190.108 XL.Format.SetLocked 8991
- 190.117 XL.LoadBook 9010
- 190.119 XL.NewBook 9015

9004

- 190.281 XL.Sheet.SetRow

CHAPTER 190. XL

9237

Created 18th August 2014, last changed 11st February 2020.

190.115 XL.Initialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	2.9	Yes	Yes	Yes	Yes	Yes

MBS("XL.Initialize"; LibPath; LicenseName; LicenseKey)

Parameters**LibPath**

Native path to the DLL on Windows or Dylib file on MacOS. Can be empty for default file name with file in same folder as plugin.

"C:\libxl\libxl.dll"

LicenseName

The name of your libXL license.

""

LicenseKey

The license key of your libXL license.

""

Result Returns OK on success.

Description

You can keep the library in a database field and export it at runtime to a known location and load it from there.

If you have no license yet, you can test this function by passing empty strings for name and key.

For getting a license key, please visit the libXL website:

<https://www.monkeybreadsoftware.com/filemaker/libxl.shtml>

Starting with version 4.4, you can pass just the filename of library and the plugin finds it in the Extensions folder or in FileMaker's application folder.

Windows error 193 means that 64-bit FileMaker tried to load 32-bit library or 32-bit FileMaker tried to load 64-bit library. The bit level must match between app and library. For Mac OS X the error message will tell you about wrong architecture.

Starting version 9.5, the plugin will look into the same folder for the DLL as the plugin resides. And we still look for 32/64 suffixes to DLL name. If no name is provided, we look for libxl.dll/dylib/so files.

If you get a crash here on MacOS, please check if crash report says Code Signature Invalid. Then you may need to code sign the dylib yourself to match the code signature of your runtime application. The dylib from MBS is normally code signed already and should work as is.

This function requires a native path. Use `Path.FileMakerPathToNativePath` to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use `FileDialog` functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Initialize XL:

```
MBS( "XL.Initialize"; "/Library/FileMaker Server/Extensions/libxl.dylib"; "Test User"; "mac-43567890..." )
```

Initialize when needed:

```
# Initialize XL
If [ MBS( "XL.IsInitialized" ) = 1 ]
If [ Get ( SystemPlatform ) = -3 ]
# iOS
Exit Script [ ]
Else If [ Get ( SystemPlatform ) = -2 ]
# Windows
Set Variable [ $path; Value: "libxl.dll" ]
Set Variable [ $key; Value: "win-32213..." ]
Else
# Mac
Set Variable [ $path; Value: "libxl.dylib" ]
Set Variable [ $key; Value: "mac-32213..." ]
End If
Set Variable [ $r; Value: MBS( "XL.Initialize"; $path; "test"; $key ) ]
If [ $r = "OK" ]
Show Custom Dialog [ "LibXL failed to initialize"; $r ]
End If
End If
```

Initialize with license key on Windows with Server:

```
MBS( "XL.Initialize"; "C:\Program Files\FileMaker\FileMaker Server\Database Server\Extensions\libxl.dll";
"Test User"; "win-43567890..." )
```

Initialize automatically and look in same folder as plugin for the DLL/dylib/so file:

```
MBS("XL.Initialize"; "" ; $LicenseName; $LicenseKey)
```

See also

- 120.9 `OCR.Initialize` 6119
- 121.2 `Path.FileMakerPathToNativePath` 6139
- 181.12 `WIA.Initialize` 8511
- 190.116 `XL.IsInitialized` 9008

190.115. *XL.INITIALIZE*

9007

- 190.294 *XL.Uninitialize*

9251

Example Databases

- [XL/AutoFilter](#)
- [XL/Change Column Names](#)
- [XL/Converter](#)
- [XL/Edit Sheet](#)
- [XL/Export records](#)
- [XL/Sheet with colored text](#)
- [XL/Writing data](#)
- [XL/XL](#)

190.115.1 Blog Entries

- [MBS FileMaker Plugin, version 9.5pr6](#)
- [How to use XL functions with MBS FileMaker Plugin](#)

Created 18th August 2014, last changed 29th November 2019.

190.116 XL.IsInitialized

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.IsInitialized")

Result Returns 1 or 0.

Description

If value is 1, everything is okay.

If value is zero, the library is not initialized and you need to call XL.Initialize function.

On a hosted database this function is better than using a global variable, as the variable can't see if initialization was made on server or client side.

Examples

Initialize when needed:

```
# Initialize XL
If [ MBS( "XL.IsInitialized" ) = 1 ]
If [ Get ( SystemPlatform ) = -3 ]
# iOS
Exit Script [ ]
Else If [ Get ( SystemPlatform ) = -2 ]
# Windows
Set Variable [ $path; Value: "libxl.dll" ]
Set Variable [ $key; Value: "win-32213..." ]
Else
# Mac
Set Variable [ $path; Value: "libxl.dylib" ]
Set Variable [ $key; Value: "mac-32213..." ]
End If
Set Variable [ $r; Value: MBS( "XL.Initialize"; $path; "test"; $key ) ]
If [ $r = "OK" ]
Show Custom Dialog [ "LibXL failed to initialize"; $r ]
End If
End If
```

See also

- 120.10 OCR.IsInitialized 6121
- 123.7 PHP.IsInitialized 6255
- 131.3 Proj.IsInitialized 6547
- 163.22 TAPI.IsInitialized 7749
- 190.9 XL.Book.DeleteSheet 8864

<i>190.116. XL.ISINITIALIZED</i>	9009
• 190.29 XL.Book.SaveToFile	8888
• 190.115 XL.Initialize	9005
• 190.117 XL.LoadBook	9010
• 190.244 XL.Sheet.RemoveRow	9184
• 190.294 XL.Uninitialize	9251

Example Databases

- [XL/AutoFilter](#)
- [XL/Change Column Names](#)
- [XL/Converter](#)
- [XL/Edit Sheet](#)
- [XL/Export records](#)
- [XL/Sheet with colored text](#)
- [XL/Writing data](#)
- [XL/XL](#)

190.116.1 Blog Entries

- [How to use XL functions with MBS FileMaker Plugin](#)
- [MBS Filemaker Plugin, version 4.2pr6](#)

Created 18th August 2014, last changed 11st March 2016.

190.117 XL.LoadBook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	2.9	Yes	Yes	Yes	Yes	Yes

MBS("XL.LoadBook"; Data { ; Type })

Parameters

Data

Either text with file path or container value which contains the Excel file data.

"C:\test\test.xls"

Type

Optional

Which type of file this is. Pass 0 for unknown, 1 to try xml format (xlsx) and 2 to try binary format (xls).

0

Result Returns book reference number on success.

Description

Works with both XML based xlsx files and older xls files.

Book reference numbers are starting at 19000 and counting up for each new book.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Load file from container with auto detect:

```
Set Variable [ $book; Value: MBS( "XL.LoadBook"; MyTable::myFileContainer; 0 ) ]
```

Preprocess file before import in FileMaker by removing a row and a sheet:

```
# Find libXL and load it
If [ MBS("XL.IsInitialized") 1 ]
Perform Script [ Specified: From list ; "InitXL" ; Parameter: ]
End If
#
# path to xls or xlsx file
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ); "test.xls"
) ]
#
# Load template excel file
Set Variable [ $bookRef ; Value: MBS( "XL.LoadBook"; $path ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error" ; $bookRef ]
Exit Script [ Text Result: ]
```

```

End If
#
# Remove first row of first sheet
Set Variable [ $r ; Value: MBS( "XL.Sheet.RemoveRow"; $BookRef; 0 /* sheet index */; 0 /* row index */ ) ]
#
# Remove second sheet
Set Variable [ $r ; Value: MBS( "XL.Book.DeleteSheet"; $bookRef; 1 /* sheet index */ ) ]
#
# Save to file and cleanup
Set Field [ XL::OutputFile ; MBS("XL.Book.SaveToFile"; $bookRef; $path) ]
Set Variable [ $r ; Value: MBS( "XL.Book.Release"; $bookRef) ]
#
# now let FileMaker import file

```

See also

- 81.8 Folders.UserDesktop 4177
- 190.26 XL.Book.Release 8883
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.172 XL.Sheet.CellWriteText 9102
- 190.244 XL.Sheet.RemoveRow 9184
- 190.287 XL.Sheet.SetVerPageBreak 9244
- 190.288 XL.Sheet.SetZoom 9245
- 190.289 XL.Sheet.Split 9246
- 190.291 XL.Sheet.Table 9248
- 190.292 XL.Sheet.TableSize 9249

Example Databases

- [XL/Change Column Names](#)
- [XL/Converter](#)
- [XL/Edit Sheet](#)
- [XL/XL](#)

190.117.1 Blog Entries

- [MBS Filemaker Plugin, version 4.4pr8](#)
- [MBS Filemaker Plugin, version 4.4pr5](#)

Created 18th August 2014, last changed 13th February 2020.

190.118 XL.LoadBookPartially

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.LoadBookPartially"; Data; SheetIndex; FirstRow; LastRow { ; Type })

Parameters**Data**

Either text with file path or container value which contains the Excel file data.

"C:\test\test.xls"

SheetIndex

The index of the sheet to delete. This number ranges from 0 to XL.Book.SheetCount-1.

0

FirstRow

The first row index to load. Starts with 0 for first one.

0

LastRow

The last row index to load.

100

Type

Optional

Which type of file this is. Pass 0 for unknown, 1 to try xml format (xlsx) and 2 to try binary format (xls).

0

Result Returns book reference number on success.

Description

Loads a file only with specified sheet index and row range into memory.

Works with both XML based xlsx files and older xls files.

Book reference numbers are starting at 19000 and counting up for each new book.

Examples

Try partial loading:

```
# Load second sheet
Set Variable [ $bookRef ; Value: MBS( "XL.LoadBookPartially"; XL::ExcelFile; 1; 0; 100) ]
Set Field [ XL::Result ; $bookRef ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error" ; $bookRef ]
Exit Script [ Text Result: ]
End If
# First row
# Save to container and cleanup
Set Field [ XL::OutputFile ; MBS("XL.Save"; $bookRef; "test.xlsx") ]
Set Variable [ $r ; Value: MBS( "XL.Book.Release"; $bookRef) ]
```

9014

CHAPTER 190. XL

Set Field [XL::Result ; \$r]

See also

- 124.6 IsError 6266
- 190.26 XL.Book.Release 8883
- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

190.118.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr7](#)

Created 10th January 2018, last changed 20th March 2018.

190.119 XL.NewBook

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	2.9	Yes	Yes	Yes	Yes	Yes

MBS("XL.NewBook"; XML)

Parameters**XML**

Pass 1 to create a new XML bases Excel file (xlsx). Else pass 0 for an old style file (xls). Default is 0.
0

Result Returns book reference number.

Description

Please call XL.Book.Release later to free memory.

Book reference numbers are starting at 19000 and counting up for each new book.

Examples

Create a new book:

```
$book = MBS( "XL.NewBook"; 0 )
```

See also

- 190.1 XL.Book.AddCustomNumFormat 8849
- 190.3 XL.Book.AddFormat 8854
- 190.6 XL.Book.AddSheet 8860
- 190.26 XL.Book.Release 8883
- 190.39 XL.Book.Version 8899
- 190.40 XL.Color.Pack 8900
- 190.46 XL.Date.Pack 8911
- 190.58 XL.Font.SetColor 8925
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.250 XL.Sheet.SetCol 9194

Example Databases

- [XL/AutoFilter](#)
- [XL/Converter](#)

- [XL/Export records](#)
- [XL/Sheet with colored text](#)
- [XL/Writing data](#)

190.119.1 Blog Entries

- [How to use XL functions with MBS FileMaker Plugin](#)

Created 18th August 2014, last changed 5th March 2015.

190.120 XL.Sheet.AddHyperlink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AddHyperlink"; bookRef; sheetIndex; HyperLink; rowFirst; rowLast; colFirst; colLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

HyperLink

The text for the hyperlink.

"http://www.mbsplugins.de/"

rowFirst

The first row for the area. First row has index 0.

\$row

rowLast

The last row for the area. First row has index 0.

\$row

colFirst

The first column for the area. First column has index 0.

\$column

colLast

The last column for the area. First column has index 0.

\$column+1

Result Returns OK or error.

Description**Examples**

Add a link to cell B16:

MBS("XL.Sheet.AddHyperlink"; \$book; \$sheet; "http://www.heise.de/"; 15; 15; 1; 1)

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

9018

CHAPTER 190. XL

- 190.178 XL.Sheet.DelHyperlink 9112
- 190.231 XL.Sheet.Hyperlink 9170

Created 18th August 2014, last changed 19th November 2017.

190.121 XL.Sheet.AddIgnoredError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AddIgnoredError"; bookRef; sheetIndex; rowFirst; colFirst; rowLast; colLast; ignoreErrors)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

The first row for the area. First row has index 0.

\$row

colFirst

The first column for the area. First column has index 0.

\$column

rowLast

The last row for the area. First row has index 0.

\$row

colLast

The last column for the area. First column has index 0.

\$column

ignoreErrors

The combination of errors to ignore.

"InconsistRange\$EvalError"

Result Returns OK or error.

Description

It allows to hide green triangles on left sides of cells. For example, if a cell is formatted as text but contains a numeric value, this is considered to be a potential error because the number won't be treated as a number, for example, in calculations. It is possible to combine a few IgnoredError values as list.

Returns error message on failure.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

IgnoredError value	Description
NoError	No errors
EvalError	Ignore errors when cells contain formulas that result in an error.
EmptyCellRef	Ignore errors when formulas refer to empty cells.
NumberStoredAsText	Ignore errors when numbers are formatted as text or are preceded by an apostrophe.
InconsistRange	Ignore errors when formulas omit certain cells in a region.
InconsistFormula	Ignore errors when a formula in a region of your worksheet differs from other formulas in the same region.
TwoDigTextYear	Ignore errors when formulas contain text formatted cells with years represented as 2 digits.
UnlockFormula	Ignore errors when unlocked cells contain formulas.
DataValidation	Ignore errors when a cell's value in a Table does not comply with the Data Validation rules specified.

Created 22nd April 2017, last changed 22nd April 2017.

190.122 XL.Sheet.AddrToRowCol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AddrToRowCol"; bookRef; sheetIndex; Address; Selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Address

The address to convert.

"A1"

Selector

Which value to return: row, column, rowRelative, colRelative or address.

"row"

Result Returns value or error.

Description**Examples**

Query row number:

MBS("XL.Sheet.AddrToRowCol"; \$book; 0; "C10"; "row")

Example result: 9

Query column number:

MBS("XL.Sheet.AddrToRowCol"; \$book; 0; "C10"; "column")

Example result: 2

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 14th May 2019.

190.123 XL.Sheet.ApplyFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.ApplyFilter"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023

Example Databases

- [XL/AutoFilter](#)

Created 22nd April 2017, last changed 22nd April 2017.

190.124 XL.Sheet.AutoFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns OK or error.

Description

Creates it if it doesn't exist.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.130 XL.Sheet.AutoFilter.FilterType 9030
- 190.131 XL.Sheet.AutoFilter.GetCustomFilter 9032
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.136 XL.Sheet.AutoFilter.SetCustomFilter 9037
- 190.139 XL.Sheet.AutoFilter.SetTop10 9042
- 190.191 XL.Sheet.GetFooter 9127
- 190.243 XL.Sheet.RemoveFilter 9183

Example Databases

- [XL/AutoFilter](#)

190.124.1 Blog Entries

- [MBS FileMaker Plugin, version 8.6pr4](#)

Created 22nd April 2017, last changed 22nd April 2017.

190.125 XL.Sheet.AutoFilter.AddFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.AddFilter"; bookRef; sheetIndex; FilterColumnIndex; Filter)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

Filter

The filter value.

Result Returns OK or error.

Description

Examples

Add filters:

```
Set Variable [ $r ; Value: MBS( "XL.Sheet.AutoFilter.AddFilter"; $book; $sheet; 0; "Japan" ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.AutoFilter.AddFilter"; $book; $sheet; 0; "USA" ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.AutoFilter.AddFilter"; $book; $sheet; 0; "Switzerland" ) ]
```

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.126 XL.Sheet.AutoFilter.Clear 9026
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.130 XL.Sheet.AutoFilter.FilterType 9030

190.125. *XL.SHEET.AUTOFILTER.ADDFILTER*

9025

- 190.133 XL.Sheet.AutoFilter.GetSort

9034

- 190.138 XL.Sheet.AutoFilter.SetSort

9041

Created 1st July 2017, last changed 1st July 2017.

190.126 XL.Sheet.AutoFilter.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.Clear"; bookRef; sheetIndex; FilterColumnIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.137 XL.Sheet.AutoFilter.SetRef 9039
- 190.138 XL.Sheet.AutoFilter.SetSort 9041

Created 1st July 2017, last changed 1st July 2017.

190.127 XL.Sheet.AutoFilter.ColumnSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.ColumnSize"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns number or error.

Description**See also**

- 190.117 XL.LoadBook 9010
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.126 XL.Sheet.AutoFilter.Clear 9026
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.130 XL.Sheet.AutoFilter.FilterType 9030
- 190.131 XL.Sheet.AutoFilter.GetCustomFilter 9032
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.136 XL.Sheet.AutoFilter.SetCustomFilter 9037
- 190.139 XL.Sheet.AutoFilter.SetTop10 9042

Created 22nd April 2017, last changed 22nd April 2017.

190.128 XL.Sheet.AutoFilter.Filter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.Filter"; bookRef; sheetIndex; FilterColumnIndex; FilterIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

FilterIndex

The index of the filter. Range from 0 to XL.Sheet.AutoFilter.FilterSize-1.

\$FilterIndex

Result Returns text or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.130 XL.Sheet.AutoFilter.FilterType 9030
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.137 XL.Sheet.AutoFilter.SetRef 9039
- 190.138 XL.Sheet.AutoFilter.SetSort 9041

Created 1st July 2017, last changed 1st July 2017.

190.129 XL.Sheet.AutoFilter.FilterSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.FilterSize"; bookRef; sheetIndex; FilterColumnIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.130 XL.Sheet.AutoFilter.FilterType 9030
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.138 XL.Sheet.AutoFilter.SetSort 9041

Created 1st July 2017, last changed 1st July 2017.

190.130 XL.Sheet.AutoFilter.FilterType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.FilterType"; bookRef; sheetIndex; FilterColumnIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

Result Returns OK or error.

Description

Filter value	Description
Value	Filter by specified values.
Top10	The top N (percent or number of items) to filter by.
Custom	Custom filter with specified criteria.
Dynamic	Specifies dynamic filter criteria.
Color	Specifies the color to filter by.
Icon	Specifies the icon to filter by.
Ext	Defines flexible storage extensions.
Not set	No filter.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029

<i>190.130. XL.SHEET.AUTOFILTER.FILTERTYPE</i>	9031
• 190.135 XL.Sheet.AutoFilter.GetTop10	9036
• 190.139 XL.Sheet.AutoFilter.SetTop10	9042

Created 1st July 2017, last changed 1st July 2017.

190.131 XL.Sheet.AutoFilter.GetCustomFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190.XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.GetCustomFilter"; bookRef; sheetIndex; FilterColumnIndex; Selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

Selector

What value to return. Can be operator1, operator2, andOperator, value1 and value2.

"value1"

Result Returns value or error.

Description

Operator1: operator used by the filter comparison in the first filter criteria;Value1: value used in the first filter criteria;Operator2: operator used by the filter comparison in the second filter criteria;Value2: value used in the second filter criteria;AndOperator: Flag indicating whether the two criteria have an "and" relationship.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.136 XL.Sheet.AutoFilter.SetCustomFilter 9037

Created 1st July 2017, last changed 13th July 2017.

190.132 XL.Sheet.AutoFilter.GetRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.GetRef"; bookRef; sheetIndex; Selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Selector

Which value to return. Can be rowFirst, rowLast, colFirst or colLast.

"rowFirst"

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.126 XL.Sheet.AutoFilter.Clear 9026
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.137 XL.Sheet.AutoFilter.SetRef 9039
- 190.138 XL.Sheet.AutoFilter.SetSort 9041
- 190.139 XL.Sheet.AutoFilter.SetTop10 9042

Created 22nd April 2017, last changed 22nd April 2017.

190.133 XL.Sheet.AutoFilter.GetSort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.GetSort"; bookRef; sheetIndex; Selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Selector

Which value to return. Can be columnIndex or descending.
"columnIndex"

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.126 XL.Sheet.AutoFilter.Clear 9026
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.134 XL.Sheet.AutoFilter.GetSortRange 9035
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.137 XL.Sheet.AutoFilter.SetRef 9039
- 190.138 XL.Sheet.AutoFilter.SetSort 9041

Created 22nd April 2017, last changed 22nd April 2017.

190.134 XL.Sheet.AutoFilter.GetSortRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.GetSortRange"; bookRef; sheetIndex; Selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Selector

Which value to return. Can be rowFirst, rowLast, colFirst or colLast.

"rowFirst"

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.138 XL.Sheet.AutoFilter.SetSort 9041

Created 22nd April 2017, last changed 22nd April 2017.

190.135 XL.Sheet.AutoFilter.GetTop10

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.GetTop10"; bookRef; sheetIndex; FilterColumnIndex; Selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

Selector

Which value to return. Can be value for number of items; top to get top items if 1 otherwise bottom items if 0;percent for using percent instead of number items.

"Value"

Result Returns value or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.130 XL.Sheet.AutoFilter.FilterType 9030
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.137 XL.Sheet.AutoFilter.SetRef 9039
- 190.138 XL.Sheet.AutoFilter.SetSort 9041
- 190.139 XL.Sheet.AutoFilter.SetTop10 9042

Created 1st July 2017, last changed 1st July 2017.

190.136 XL.Sheet.AutoFilter.SetCustomFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.SetCustomFilter"; bookRef; sheetIndex; FilterColumnIndex; Operator1; Value1 { ; Operator2; Value2; AndOperator })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

Operator1

The operator used by the filter comparison in the first filter criteria. Can be =, , <, , >or

"="

Value1

value used in the first filter criteria

10

Operator2

Optional

The operator used by the filter comparison in the second filter criteria. Can be =, , <, , >or

"="

Value2

Optional

The value used in the second filter criteria.

"20"

AndOperator

Optional

Flag indicating whether the two criterias have an "and" relationship. Pass "And" or "Or".

"And"

Result Returns OK or error.

Description

Operator1: operator used by the filter comparison in the first filter criteria;Value1: value used in the first filter criteria;Operator2: operator used by the filter comparison in the second filter criteria;Value2: value used in the second filter criteria;AndOperator: Flag indicating whether the two criteria have an "and"

relationship.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.131 XL.Sheet.AutoFilter.GetCustomFilter 9032

Created 1st July 2017, last changed 1st July 2017.

190.137 XL.Sheet.AutoFilter.SetRef

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.SetRef"; bookRef; sheetIndex; rowFirst; rowLast; colFirst; colLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

The first row for the area. First row has index 0.

\$row

rowLast

The last row for the area. First row has index 0.

\$row

colFirst

The first column for the area. First column has index 0.

\$column

colLast

The last column for the area. First column has index 0.

\$column+1

Result Returns OK or error.

Description**Examples**

Set area:

Set Variable [\$r ; Value: MBS("XL.Sheet.AutoFilter.SetRef"; \$book; \$sheet; 2; 10; 1; 4)]

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.126 XL.Sheet.AutoFilter.Clear 9026

- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.138 XL.Sheet.AutoFilter.SetSort 9041
- 190.139 XL.Sheet.AutoFilter.SetTop10 9042

Created 22nd April 2017, last changed 1st July 2017.

190.138 XL.Sheet.AutoFilter.SetSort

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.SetSort"; bookRef; sheetIndex; columnIndex { ; descending })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

columnIndex

The zero based column index.

0

descending

Optional

Whether to sort descending. Pass 0 for ascending and 1 for descending. Default is descending.

0

Result Returns OK or error.

Description**See also**

- 190.117 XL.LoadBook 9010
- 190.125 XL.Sheet.AutoFilter.AddFilter 9024
- 190.126 XL.Sheet.AutoFilter.Clear 9026
- 190.128 XL.Sheet.AutoFilter.Filter 9028
- 190.129 XL.Sheet.AutoFilter.FilterSize 9029
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036
- 190.137 XL.Sheet.AutoFilter.SetRef 9039
- 190.139 XL.Sheet.AutoFilter.SetTop10 9042

Created 22nd April 2017, last changed 22nd April 2017.

190.139 XL.Sheet.AutoFilter.SetTop10

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.AutoFilter.SetTop10"; bookRef; sheetIndex; FilterColumnIndex; Value; Top; Percent)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

FilterColumnIndex

The column index of the filter. Range from 0 to XL.Sheet.AutoFilter.ColumnSize-1.

\$FilterColumn

Value

Number of items

Top

Pass 1 to get top items or 0 for bottom items.

1

Percent

Pass 1 for percent values.

1

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.127 XL.Sheet.AutoFilter.ColumnSize 9027
- 190.130 XL.Sheet.AutoFilter.FilterType 9030
- 190.132 XL.Sheet.AutoFilter.GetRef 9033
- 190.133 XL.Sheet.AutoFilter.GetSort 9034
- 190.135 XL.Sheet.AutoFilter.GetTop10 9036

190.139. *XL.SHEET.AUTOFILTER.SETTOP10*

9043

- 190.137 XL.Sheet.AutoFilter.SetRef

9039

- 190.138 XL.Sheet.AutoFilter.SetSort

9041

Created 1st July 2017, last changed 1st July 2017.

190.140 XL.Sheet.CellsDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellsDate"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns 1 if cell is a time or date, 0 if normal cell or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.147 XL.Sheet.CellReadDate 9053
- 190.148 XL.Sheet.CellReadDates 9055
- 190.155 XL.Sheet.CellType 9067
- 190.162 XL.Sheet.CellWriteDate 9080

Created 18th August 2014, last changed 18th August 2014.

190.141 XL.Sheet.CellsFormula

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellsFormula"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns 1 if a formula cell, 0 if normal cell or error message.

Description

See also XL.Sheet.CellReadFormula and XL.Sheet.CellWriteFormula.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.149 XL.Sheet.CellReadFormula 9057
- 190.150 XL.Sheet.CellReadFormulas 9058
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.169 XL.Sheet.CellWriteFormulas 9095

Created 18th August 2014, last changed 18th March 2015.

190.142 XL.Sheet.CellReadBlank

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadBlank"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns 0, 1 or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.143 XL.Sheet.CellReadBoolean 9047
- 190.144 XL.Sheet.CellReadBooleans 9048
- 190.145 XL.Sheet.CellReadComment 9050
- 190.147 XL.Sheet.CellReadDate 9053
- 190.148 XL.Sheet.CellReadDates 9055
- 190.153 XL.Sheet.CellReadText 9063
- 190.154 XL.Sheet.CellReadTexts 9065
- 190.156 XL.Sheet.CellWriteBlank 9068
- 190.157 XL.Sheet.CellWriteBlanks 9070

Created 18th August 2014, last changed 18th August 2014.

190.143 XL.Sheet.CellReadBoolean

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadBoolean"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns 0, 1 or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.142 XL.Sheet.CellReadBlank 9046
- 190.148 XL.Sheet.CellReadDates 9055
- 190.149 XL.Sheet.CellReadFormula 9057
- 190.150 XL.Sheet.CellReadFormulas 9058
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.152 XL.Sheet.CellReadNumbers 9061
- 190.153 XL.Sheet.CellReadText 9063
- 190.159 XL.Sheet.CellWriteBooleans 9074

Created 18th August 2014, last changed 18th August 2014.

190.144 XL.Sheet.CellReadBooleans

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadBooleans"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Row Delimiter; Column Delimiter })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns list of values or error.

Description

If one cell can't be read a boolean, the value in the result will be empty.

See also

- 190.36 XL.Book.SheetCount

<i>190.144. XL.SHEET.CELLREADBOOLEANS</i>	9049
• 190.117 XL.LoadBook	9010
• 190.142 XL.Sheet.CellReadBlank	9046
• 190.143 XL.Sheet.CellReadBoolean	9047
• 190.146 XL.Sheet.CellReadComments	9051
• 190.149 XL.Sheet.CellReadFormula	9057
• 190.150 XL.Sheet.CellReadFormulas	9058
• 190.152 XL.Sheet.CellReadNumbers	9061
• 190.158 XL.Sheet.CellWriteBoolean	9072
• 190.159 XL.Sheet.CellWriteBooleans	9074

190.144.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.145 XL.Sheet.CellReadComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadComment"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns comment text or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.149 XL.Sheet.CellReadFormula 9057
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.152 XL.Sheet.CellReadNumbers 9061
- 190.153 XL.Sheet.CellReadText 9063
- 190.154 XL.Sheet.CellReadTexts 9065
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.161 XL.Sheet.CellWriteComments 9078
- 190.241 XL.Sheet.RemoveComment 9180

Created 18th August 2014, last changed 18th August 2014.

190.146 XL.Sheet.CellReadComments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadComments"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns list of values or error.

Description

If one cell can't be read or has no comment, the value in the result will be empty.

See also

- 190.36 XL.Book.SheetCount

- 190.117 XL.LoadBook 9010
- 190.149 XL.Sheet.CellReadFormula 9057
- 190.150 XL.Sheet.CellReadFormulas 9058
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.153 XL.Sheet.CellReadText 9063
- 190.154 XL.Sheet.CellReadTexts 9065
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.161 XL.Sheet.CellWriteComments 9078
- 190.242 XL.Sheet.RemoveComments 9181

190.146.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.147 XL.Sheet.CellReadDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadDate"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns timestamp or error message.

Description**Examples**

Read cell as date:

MBS("XL.Sheet.CellReadDate"; \$bookRef; 0; \$row; 0)

See also

- 190.117 XL.LoadBook 9010
- 190.142 XL.Sheet.CellReadBlank 9046
- 190.143 XL.Sheet.CellReadBoolean 9047
- 190.145 XL.Sheet.CellReadComment 9050
- 190.148 XL.Sheet.CellReadDates 9055
- 190.152 XL.Sheet.CellReadNumbers 9061
- 190.153 XL.Sheet.CellReadText 9063
- 190.154 XL.Sheet.CellReadTexts 9065

9054

CHAPTER 190. XL

- 190.162 XL.Sheet.CellWriteDate 9080
- 190.163 XL.Sheet.CellWriteDates 9082

190.147.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 6th February 2015, last changed 6th February 2015.

190.148 XL.Sheet.CellReadDates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadDates"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns list of values or error.

Description

If one cell can't be read as date, the value in the result will be empty.

See also

- 190.36 XL.Book.SheetCount

- 190.117 XL.LoadBook 9010
- 190.144 XL.Sheet.CellReadBooleans 9048
- 190.145 XL.Sheet.CellReadComment 9050
- 190.146 XL.Sheet.CellReadComments 9051
- 190.147 XL.Sheet.CellReadDate 9053
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.154 XL.Sheet.CellReadTexts 9065
- 190.162 XL.Sheet.CellWriteDate 9080
- 190.163 XL.Sheet.CellWriteDates 9082

190.148.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.149 XL.Sheet.CellReadFormula

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadFormula"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns formula or error message.

Description

See also XL.Sheet.CellIsFormula and XL.Sheet.CellWriteFormula.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.143 XL.Sheet.CellReadBoolean 9047
- 190.145 XL.Sheet.CellReadComment 9050
- 190.146 XL.Sheet.CellReadComments 9051
- 190.150 XL.Sheet.CellReadFormulas 9058
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.152 XL.Sheet.CellReadNumbers 9061
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.169 XL.Sheet.CellWriteFormulas 9095

Created 18th August 2014, last changed 18th March 2015.

190.150 XL.Sheet.CellReadFormulas

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadFormulas"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns list of values or error.

Description

If one cell can't be read as formula, the value in the result will be empty.

See also

- 190.36 XL.Book.SheetCount

<i>190.150. XL.SHEET.CELLREADFORMULAS</i>	9059
• 190.117 XL.LoadBook	9010
• 190.141 XL.Sheet.CellIsFormula	9045
• 190.143 XL.Sheet.CellReadBoolean	9047
• 190.144 XL.Sheet.CellReadBooleans	9048
• 190.145 XL.Sheet.CellReadComment	9050
• 190.146 XL.Sheet.CellReadComments	9051
• 190.149 XL.Sheet.CellReadFormula	9057
• 190.152 XL.Sheet.CellReadNumbers	9061
• 190.165 XL.Sheet.CellWriteFormula	9086

190.150.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.151 XL.Sheet.CellReadNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadNumber"; bookRef; sheetIndex; Row; Column)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns number or error message.

Description

See also

- 190.117 XL.LoadBook 9010
- 190.145 XL.Sheet.CellReadComment 9050
- 190.146 XL.Sheet.CellReadComments 9051
- 190.148 XL.Sheet.CellReadDates 9055
- 190.149 XL.Sheet.CellReadFormula 9057
- 190.152 XL.Sheet.CellReadNumbers 9061
- 190.153 XL.Sheet.CellReadText 9063
- 190.154 XL.Sheet.CellReadTexts 9065
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100

Created 18th August 2014, last changed 18th August 2014.

190.152 XL.Sheet.CellReadNumbers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadNumbers"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns list of values or error.

Description

If one cell can't be read as number, the value in the result will be empty.

See also

- 190.36 XL.Book.SheetCount

- 190.146 XL.Sheet.CellReadComments 9051
- 190.147 XL.Sheet.CellReadDate 9053
- 190.149 XL.Sheet.CellReadFormula 9057
- 190.150 XL.Sheet.CellReadFormulas 9058
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.153 XL.Sheet.CellReadText 9063
- 190.154 XL.Sheet.CellReadTexts 9065
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100

190.152.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.153 XL.Sheet.CellReadText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadText"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns text or error message.

Description**Examples**

Reads text from first cell in first sheet:

MBS("XL.Sheet.CellReadText"; \$book; 0; 0; 0)

See also

- 190.117 XL.LoadBook 9010
- 190.143 XL.Sheet.CellReadBoolean 9047
- 190.145 XL.Sheet.CellReadComment 9050
- 190.147 XL.Sheet.CellReadDate 9053
- 190.148 XL.Sheet.CellReadDates 9055
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.152 XL.Sheet.CellReadNumbers 9061
- 190.154 XL.Sheet.CellReadTexts 9065

9064

CHAPTER 190. XL

- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106

Created 18th August 2014, last changed 23th August 2016.

190.154 XL.Sheet.CellReadTexts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellReadTexts"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns list of values or error.

Description

If one cell can't be read as text, the value in the result will be empty.

Examples

Read area of cells:

MBS("XL.Sheet.CellReadTexts"; \$bookRef; \$sheet; 0; 5; 0; 5)

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.144 XL.Sheet.CellReadBooleans 9048
- 190.145 XL.Sheet.CellReadComment 9050
- 190.146 XL.Sheet.CellReadComments 9051
- 190.147 XL.Sheet.CellReadDate 9053
- 190.148 XL.Sheet.CellReadDates 9055
- 190.151 XL.Sheet.CellReadNumber 9060
- 190.153 XL.Sheet.CellReadText 9063
- 190.172 XL.Sheet.CellWriteText 9102

190.154.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.155 XL.Sheet.CellType

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellType"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns type or error message.

Description

Types can be empty, number, text, boolean, blank or error.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.140 XL.Sheet.CellsIsDate 9044

Created 18th August 2014, last changed 19th April 2016.

190.156 XL.Sheet.CellWriteBlank

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteBlank"; bookRef; sheetIndex; Row; Column { ; Format })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error message.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.157 XL.Sheet.CellWriteBlanks 9070
- 190.158 XL.Sheet.CellWriteBoolean 9072
- 190.159 XL.Sheet.CellWriteBooleans 9074
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.162 XL.Sheet.CellWriteDate 9080
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.164 XL.Sheet.CellWriteError 9084
- 190.170 XL.Sheet.CellWriteNumber 9097

190.156. *XL.SHEET.CELLWRITEBLANK*

9069

- 190.172 *XL.Sheet.CellWriteText*

9102

Example Databases

- *XL/Writing data*

Created 18th August 2014, last changed 22nd April 2017.

190.157 XL.Sheet.CellWriteBlanks

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteBlanks"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns number of errors or error.

Description

Returns number of errors occurred, so on success you get back zero.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.156 XL.Sheet.CellWriteBlank 9068
- 190.159 XL.Sheet.CellWriteBooleans 9074
- 190.163 XL.Sheet.CellWriteDates 9082

<i>190.157. XL.SHEET.CELLWRITEBLANKS</i>	9071
• 190.165 XL.Sheet.CellWriteFormula	9086
• 190.169 XL.Sheet.CellWriteFormulas	9095
• 190.170 XL.Sheet.CellWriteNumber	9097
• 190.171 XL.Sheet.CellWriteNumbers	9100
• 190.172 XL.Sheet.CellWriteText	9102
• 190.173 XL.Sheet.CellWriteTexts	9106

190.157.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.158 XL.Sheet.CellWriteBoolean

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteBoolean"; bookRef; SheetIndex; Row; Column; Value { ; Format })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

SheetIndex

The index of the sheet to delete. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Value

The new boolean value.

1

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error message.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.159 XL.Sheet.CellWriteBooleans 9074
- 190.162 XL.Sheet.CellWriteDate 9080
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.166 XL.Sheet.CellWriteFormulaBoolean 9089

<i>190.158. XL.SHEET.CELLWRITEBOOLEAN</i>	9073
• 190.170 XL.Sheet.CellWriteNumber	9097
• 190.171 XL.Sheet.CellWriteNumbers	9100
• 190.172 XL.Sheet.CellWriteText	9102

Created 18th August 2014, last changed 22nd April 2017.

190.159 XL.Sheet.CellWriteBooleans

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteBooleans"; bookRef; sheetIndex; First row; Last row; First column; Last column; Values { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Values

The values to use. Can be separated with row and column delimiter to give each row and column a different value. But you can also use same value for all rows or for all columns.

"1"

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns number of errors or error.

Description

190.159. XL.SHEET.CELLWRITEBOOLEANS 9075

You can write one value or multiple values to a given range of cells.
Returns number of errors occurred, so on success you get back zero.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.156 XL.Sheet.CellWriteBlank 9068
- 190.157 XL.Sheet.CellWriteBlanks 9070
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.169 XL.Sheet.CellWriteFormulas 9095
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.173 XL.Sheet.CellWriteTexts 9106

190.159.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.160 XL.Sheet.CellWriteComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteComment"; bookRef; sheetIndex; Row; Column; Comment; Author; Width; Height)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Comment

The comment to write.

"Hello World"

Author

The author for the comment.

"Christian"

Width

Width of text box in pixels.

200

Height

Height of text box in pixels.

150

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.161 XL.Sheet.CellWriteComments 9078

<i>190.160. XL.SHEET.CELLWRITECOMMENT</i>	9077
• 190.162 XL.Sheet.CellWriteDate	9080
• 190.163 XL.Sheet.CellWriteDates	9082
• 190.165 XL.Sheet.CellWriteFormula	9086
• 190.169 XL.Sheet.CellWriteFormulas	9095
• 190.168 XL.Sheet.CellWriteFormulaText	9093
• 190.170 XL.Sheet.CellWriteNumber	9097
• 190.172 XL.Sheet.CellWriteText	9102

Created 18th August 2014, last changed 18th August 2014.

190.161 XL.Sheet.CellWriteComments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteComments"; bookRef; sheetIndex; First row; Last row; First column; Last column; Values { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Values

The values to use. Can be separated with row and column delimiter to give each row and column a different value. But you can also use same value for all rows or for all columns.

"Test"

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns number of errors or error.

Description

190.161. XL.SHEET.CELLWRITECOMMENTS 9079

You can write one value or multiple values to a given range of cells.
Returns number of errors occurred, so on success you get back zero.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.158 XL.Sheet.CellWriteBoolean 9072
- 190.159 XL.Sheet.CellWriteBooleans 9074
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106

190.161.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.162 XL.Sheet.CellWriteDate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteDate"; bookRef; sheetIndex; Row; Column; Value { ; Format })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Value

The new value to write.

Get(CurrentTimeStamp)

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error message.

Description**Examples**

Write date value:

MBS("XL.Sheet.CellWriteDate"; \$bookRef; 0; \$row; 0; Get (CurrentTimeStamp))

See also

- 190.117 XL.LoadBook 9010
- 190.156 XL.Sheet.CellWriteBlank 9068
- 190.157 XL.Sheet.CellWriteBlanks 9070
- 190.158 XL.Sheet.CellWriteBoolean 9072

<i>190.162. XL.SHEET.CELLWRITEDATE</i>	9081
• 190.160 XL.Sheet.CellWriteComment	9076
• 190.163 XL.Sheet.CellWriteDates	9082
• 190.170 XL.Sheet.CellWriteNumber	9097
• 190.171 XL.Sheet.CellWriteNumbers	9100
• 190.172 XL.Sheet.CellWriteText	9102
• 190.173 XL.Sheet.CellWriteTexts	9106

190.162.1 Blog Entries

- [MBS FileMaker Plugin, version 5.0pr10](#)

Created 6th February 2015, last changed 9th July 2015.

190.163 XL.Sheet.CellWriteDates

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteDates"; bookRef; sheetIndex; First row; Last row; First column; Last column; Values { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Values

The values to use. Can be separated with row and column delimiter to give each row and column a different value. But you can also use same value for all rows or for all columns.

\$Date

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns number of errors or error.

Description

190.163. *XL.SHEET.CELLWRITEDATES* 9083

You can write one value or multiple values to a given range of cells.
Returns number of errors occurred, so on success you get back zero.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.157 XL.Sheet.CellWriteBlanks 9070
- 190.159 XL.Sheet.CellWriteBooleans 9074
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.161 XL.Sheet.CellWriteComments 9078
- 190.164 XL.Sheet.CellWriteError 9084
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.173 XL.Sheet.CellWriteTexts 9106

190.163.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.164 XL.Sheet.CellWriteError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteError"; bookRef; SheetIndex; Row; Column; Value { ; Format })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

SheetIndex

The index of the sheet to delete. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Value

The new error number.

1

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error.

Description

If format is empty then format is ignored.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.157 XL.Sheet.CellWriteBlanks 9070
- 190.162 XL.Sheet.CellWriteDate 9080
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.165 XL.Sheet.CellWriteFormula 9086

<i>190.164. XL.SHEET.CELLWRITEERROR</i>	9085
• 190.170 XL.Sheet.CellWriteNumber	9097
• 190.171 XL.Sheet.CellWriteNumbers	9100
• 190.172 XL.Sheet.CellWriteText	9102
• 190.173 XL.Sheet.CellWriteTexts	9106

Created 22nd April 2017, last changed 22nd April 2017.

190.165 XL.Sheet.CellWriteFormula

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteFormula"; bookRef; sheetIndex; Row; Column; Formula { ; Format })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Formula

The new formula to write.

"1+2"

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error message.

Description

As LibXL does not calculate the result of the formula, it will not encode the result in the Excel file. It does only store the formula, so an app opening the file will have to do the calculation. But QuickLook on Mac OS X does not calculate, so results do not show there.

See also XL.Sheet.CellReadFormula and XL.Sheet.CellsIsFormula.

Examples for formulas are: "TODAY()", "IF(C1>0;ABS(C1*D1);"""")", "SUM(E16:E38)" or "E39+E39*E40".

Examples

Loads book, writes some cells and saves back to container field:

```
# Load template excel file
Set Variable [ $bookRef; Value:MBS( "XL.LoadBook"; XL::ExcelFile) ]
Set Variable [ $sheet; Value:0 ]
# First row
Set Variable [ $row; Value:4 ]
```

```

Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 0; 1 ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteText"; $BookRef; $sheet; $row; 1; "Cherries" ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 2; 5 ) ]
# Second row
Set Variable [ $row; Value:5 ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 0; 2 ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteText"; $BookRef; $sheet; $row; 1; "Banana" ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 2; 3,5 ) ]
# Third row
Set Variable [ $row; Value:6 ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 0; 3 ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteText"; $BookRef; $sheet; $row; 1; "Oranges" ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 2; 6,25 ) ]
# Last row
Set Variable [ $row; Value:13 ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteFormula"; $BookRef; $sheet; $row; 2; "SUM(C5:C13)" ) ]
]
# Save to container and cleanup
Set Field [ XL::OutputFile; MBS("XL.Save"; $bookRef; "test.xls" ) ]
Set Variable [ $r; Value:MBS( "XL.Book.Release"; $bookRef ) ]
Set Field [ XL::Result; $r ]

```

Writes a formula with bold font format:

```

# add a bold font based on another font
Set Variable [ $textFontBold ; Value: MBS( "XL.Book.AddFont"; $book; $textFont ) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetBold"; $book; $textFontBold; 1 ) ]
# add format based on other format
Set Variable [ $dollarFormatBold ; Value: MBS( "XL.Book.AddFormat"; $book; $dollarFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFont"; $book; $dollarFormatBold; $textFontBold ) ]
# use format
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteFormula"; $book; $sheet; 38; 4; "SUM(E16:E38)";
$dollarFormatBold ) ]

```

See also

- 190.36 XL.Book.SheetCount 8896
- 190.105 XL.Format.SetFont 8987
- 190.117 XL.LoadBook 9010
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.161 XL.Sheet.CellWriteComments 9078
- 190.167 XL.Sheet.CellWriteFormulaNumber 9091
- 190.168 XL.Sheet.CellWriteFormulaText 9093

9088

CHAPTER 190. XL

- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.172 XL.Sheet.CellWriteText 9102

Example Databases

- [XL/Edit Sheet](#)
- [XL/Writing data](#)

Created 18th August 2014, last changed 12nd November 2018.

190.166 XL.Sheet.CellWriteFormulaBoolean

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	6.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteFormulaBoolean"; bookRef; sheetIndex; Row; Column; Formula; Value { ; Format })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Formula

The new formula to write.

"1=2"

Value

The boolean value to put in cell.

0

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error.

Description

The value should be the current result, so there is something to display without calculating.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.158 XL.Sheet.CellWriteBoolean 9072
- 190.165 XL.Sheet.CellWriteFormula 9086

9090

CHAPTER 190. XL

- 190.167 XL.Sheet.CellWriteFormulaNumber 9091
- 190.169 XL.Sheet.CellWriteFormulas 9095
- 190.168 XL.Sheet.CellWriteFormulaText 9093

190.166.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr2](#)

Created 7th October 2016, last changed 22nd April 2017.

190.167 XL.Sheet.CellWriteFormulaNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	6.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteFormulaNumber"; bookRef; sheetIndex; Row; Column; Formula; Value { ; Format })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Formula

The new formula to write.

"1+2"

Value

The number value to put in cell.

3

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error.

Description

The value should be the current result, so there is something to display without calculating.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.166 XL.Sheet.CellWriteFormulaBoolean 9089

9092

CHAPTER 190. XL

- 190.169 XL.Sheet.CellWriteFormulas 9095
- 190.168 XL.Sheet.CellWriteFormulaText 9093
- 190.170 XL.Sheet.CellWriteNumber 9097

190.167.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr2](#)

Created 7th October 2016, last changed 22nd April 2017.

190.168 XL.Sheet.CellWriteFormulaText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	6.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteFormulaText"; bookRef; sheetIndex; Row; Column; Formula; Value { ; Format })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Formula

The new formula to write.

"1+2"

Value

The text value to put in cell.

"3"

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error.

Description

The value should be the current result, so there is something to display without calculating.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.165 XL.Sheet.CellWriteFormula 9086

9094

CHAPTER 190. XL

- 190.166 XL.Sheet.CellWriteFormulaBoolean 9089
- 190.167 XL.Sheet.CellWriteFormulaNumber 9091
- 190.169 XL.Sheet.CellWriteFormulas 9095

190.168.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr2](#)

Created 7th October 2016, last changed 22nd April 2017.

190.169 XL.Sheet.CellWriteFormulas

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteFormulas"; bookRef; sheetIndex; First row; Last row; First column; Last column; Values { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Values

The values to use. Can be separated with row and column delimiter to give each row and column a different value. But you can also use same value for all rows or for all columns.

"1+2"

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns number of errors or error.

Description

You can write one value or multiple values to a given range of cells. Returns number of errors occurred, so on success you get back zero.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.158 XL.Sheet.CellWriteBoolean 9072
- 190.159 XL.Sheet.CellWriteBooleans 9074
- 190.161 XL.Sheet.CellWriteComments 9078
- 190.166 XL.Sheet.CellWriteFormulaBoolean 9089
- 190.167 XL.Sheet.CellWriteFormulaNumber 9091
- 190.168 XL.Sheet.CellWriteFormulaText 9093
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100

190.169.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.170 XL.Sheet.CellWriteNumber

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteNumber"; bookRef; sheetIndex; Row; Column; Value { ; Format })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Value

The new value to write.

123

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error message.

Description**Examples**

Create Excel file with some date value:

```
# create new xls file
Set Variable [ $book; Value:MBS( "XL.NewBook"; 0 ) ]
# create date format
Set Variable [ $dateFormat; Value:MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $dateFormatID; Value:MBS( "XL.Book.AddCustomNumFormat"; $book; "mmm\ddd\,yy" ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $book; $dateFormat; $dateFormatID ) ]
# create sheet
Set Variable [ $sheet; Value:MBS( "XL.Book.AddSheet"; $book; "Sales Receipt" ) ]
# Write date
```

```

Set Variable [ $d; Value:MBS( "XL.Date.Pack"; $book; 2013; 10; 21) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 4; 4; $d; $dateFormat) ]
#
Set Field [ Writing data::Output; MBS("XL.Book.Save"; $book; "test.xls") ]
Set Variable [ $r; Value:MBS("XL.Book.Release"; $book) ]

```

Writes sheet with red font:

```

# create new xls file
Set Variable [ $book; Value:MBS( "XL.NewBook"; 0 ) ]
# create fonts
Set Variable [ $redColor; Value:MBS( "XL.Color.Pack"; $book; 255; 0; 0) ]
Set Variable [ $redFont; Value:MBS( "XL.Book.AddFont"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Font.SetColor"; $book; $redFont; $redColor) ]
#
# create formats
Set Variable [ $redFormat; Value:MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetFont"; $book; $redFormat; $redFont) ]
#
# create sheet
Set Variable [ $sheet; Value:MBS( "XL.Book.AddSheet"; $book; "Sales Receipt") ]
#
# add number in red
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 5; 3; 123; $redFormat) ]
#
Set Field [ Writing data::Output; MBS("XL.Book.Save"; $book; "test.xls") ]
Set Variable [ $r; Value:MBS("XL.Book.Release"; $book) ]

```

Use a number format:

```

# create new format
Set Variable [ $format; Value:MBS( "XL.Book.AddFormat"; $book) ]
# use existing number format
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $book; $format; 7) ]
# and use format
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $book; $sheet; 5; 3; 123; $format) ]

```

Write to a time formatted cell a time value:

```
MBS("XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; $col; GetAsNumber(ExcelTest::TimeField)/(24*60*60))
```

See also

- 190.46 XL.Date.Pack 8911
- 190.58 XL.Font.SetColor 8925
- 190.105 XL.Format.SetFont 8987

<i>190.170. XL.SHEET.CELLWRITENUMBER</i>	9099
• 190.117 XL.LoadBook	9010
• 190.119 XL.NewBook	9015
• 190.161 XL.Sheet.CellWriteComments	9078
• 190.162 XL.Sheet.CellWriteDate	9080
• 190.163 XL.Sheet.CellWriteDates	9082
• 190.169 XL.Sheet.CellWriteFormulas	9095
• 190.171 XL.Sheet.CellWriteNumbers	9100

Example Databases

- [XL/AutoFilter](#)
- [XL/Edit Sheet](#)
- [XL/Sheet with colored text](#)
- [XL/Writing data](#)

Created 18th August 2014, last changed 11st August 2017.

190.171 XL.Sheet.CellWriteNumbers

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteNumbers"; bookRef; sheetIndex; First row; Last row; First column; Last column; Values { ; Row Delimiter; Column Delimiter })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Values

The values to use. Can be separated with row and column delimiter to give each row and column a different value. But you can also use same value for all rows or for all columns.

"123"

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns number of errors or error.

Description

190.171. XL.SHEET.CELLWRITENUMBERS 9101

You can write one value or multiple values to a given range of cells.
Returns number of errors occurred, so on success you get back zero.

See also

- 190.117 XL.LoadBook 9010
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.161 XL.Sheet.CellWriteComments 9078
- 190.162 XL.Sheet.CellWriteDate 9080
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.164 XL.Sheet.CellWriteError 9084
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.169 XL.Sheet.CellWriteFormulas 9095
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.172 XL.Sheet.CellWriteText 9102

190.171.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.172 XL.Sheet.CellWriteText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteText"; bookRef; sheetIndex; Row; Column; Text { ; Format })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Text

The new text to write.

"hello"

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error message.

Description**Examples**

Loads book, writes some cells and saves back to container field:

```
# Load template excel file
Set Variable [ $bookRef; Value:MBS( "XL.LoadBook"; XL::ExcelFile) ]
Set Variable [ $sheet; Value:0 ]
# First row
Set Variable [ $row; Value:4 ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 0; 1 ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteText"; $BookRef; $sheet; $row; 1; "Cherries" ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 2; 5 ) ]
# Second row
Set Variable [ $row; Value:5 ]
```

```

Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 0; 2 ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteText"; $BookRef; $sheet; $row; 1; "Banana" ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 2; 3,5 ) ]
# Third row
Set Variable [ $row; Value:6 ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 0; 3 ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteText"; $BookRef; $sheet; $row; 1; "Oranges" ) ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteNumber"; $BookRef; $sheet; $row; 2; 6,25 ) ]
# Last row
Set Variable [ $row; Value:13 ]
Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteFormula"; $BookRef; $sheet; $row; 2; "SUM(C5:C13)" ) ]
]
# Save to container and cleanup
Set Field [ XL::OutputFile; MBS("XL.Save"; $bookRef; "test.xls") ]
Set Variable [ $r; Value:MBS( "XL.Book.Release"; $bookRef ) ]
Set Field [ XL::Result; $r ]

```

Write text with two lines in one cell:

```

Set Variable [ $r; Value:MBS( "XL.Sheet.CellWriteText"; $book; $sheet; 16; 1; "Bananas$Apple"; $myFormat ) ]

```

Write two lines with adjusting the row height:

```

# create format with wrap
#
Set Variable [ $textFormat ; Value: MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetWrap"; $book; $textFormat; 1 ) ]
#
# put in text with Char(10) for new line
#
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 1; "First line" & Char(10)
& "Second line"; $textFormat ) ]
#
# make line higher
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetRow"; $book; $sheet; $row; 20 ) ]

```

Create header row:

```

#
# define a font:
#
Set Variable [ $headerFont ; Value: MBS( "XL.Book.AddFont"; $book ) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetSize"; $book; $headerFont; 12 ) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetName"; $book; $headerFont; "Century Gothic" ) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetBold"; $book; $headerFont; 1 ) ]
#

```

```

# define a format:
#
Set Variable [ $headerFormat ; Value: MBS( "XL.Book.AddFormat"; $book ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFont"; $book; $headerFormat; $headerFont ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFillPattern"; $book; $headerFormat; 1 ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetPatternForegroundColor"; $book; $headerFormat; MBS(
"XL.Color.Pack"; $book; 200; 200; 200 ) ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetAlignH"; $book; $headerFormat; 2 /* center */ ) ]
#
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetRow"; $book; $sheet; $row ; 20 ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 0; "Account" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 1; "Account Group" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 2; "Report Name" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 3; "Date TS" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 4; "Text" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 5; "Text2" ; $headerFormat ) ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; $row; 6; "Text3" ; $headerFormat ) ]

```

See also

- 190.117 XL.LoadBook 9010
- 190.157 XL.Sheet.CellWriteBlanks 9070
- 190.158 XL.Sheet.CellWriteBoolean 9072
- 190.165 XL.Sheet.CellWriteFormula 9086
- 190.170 XL.Sheet.CellWriteNumber 9097
- 190.171 XL.Sheet.CellWriteNumbers 9100
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.249 XL.Sheet.SetCellFormats 9192
- 190.250 XL.Sheet.SetCol 9194
- 190.281 XL.Sheet.SetRow 9237

Example Databases

- [XL/AutoFilter](#)

- [XL/Change Column Names](#)
- [XL/Edit Sheet](#)
- [XL/Export records](#)
- [XL/Writing data](#)

190.172.1 Blog Entries

- [How to use XL functions with MBS FileMaker Plugin](#)

Created 18th August 2014, last changed 7th February 2020.

190.173 XL.Sheet.CellWriteTexts

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CellWriteTexts"; bookRef; sheetIndex; First row; Last row; First column; Last column; Values { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Values

The values to use. Can be separated with row and column delimiter to give each row and column a different value. But you can also use same value for all rows or for all columns.

"Test"

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns number of errors or error.

Description

You can write one value or multiple values to a given range of cells.
Returns number of errors occurred, so on success you get back zero.

Examples

Write 4 cells in one call

```
MBS( "XL.Sheet.CellWriteTexts"; $book; $sheet; 1; 1; 1; 4; "A,B,C,D"; §; ", " )
```

Write bold row and data rows:

```
# create bold font & format
Set Variable [ $boldFont ; Value: MBS( "XL.Book.AddFont"; $bookRef ) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetBold"; $bookRef; $boldFont; 1 ) ]
Set Variable [ $boldFormat ; Value: MBS( "XL.Book.AddFormat"; $bookRef ) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFont"; $bookRef; $boldFormat; $boldFont ) ]
# Write a title row
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteTexts"; $bookRef; $sheet; 1; 1; 1; 4; "A,B,C,D"; §; ", " ) ]
# Make it bold
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetCellFormats"; $bookRef; $sheet; 1; 1; 1; 4; $boldFormat ) ]
# and write data
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteTexts"; $bookRef; $sheet; 2; 5; 1; 4; $data; §; ", " ) ]
```

See also

- 190.36 XL.Book.SheetCount 8896
- 190.57 XL.Font.SetBold 8923
- 190.105 XL.Format.SetFont 8987
- 190.157 XL.Sheet.CellWriteBlanks 9070
- 190.159 XL.Sheet.CellWriteBooleans 9074
- 190.160 XL.Sheet.CellWriteComment 9076
- 190.163 XL.Sheet.CellWriteDates 9082
- 190.164 XL.Sheet.CellWriteError 9084
- 190.172 XL.Sheet.CellWriteText 9102
- 190.248 XL.Sheet.SetCellFormat 9190

190.173.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr3](#)
- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.174 XL.Sheet.Clear

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.Clear"; bookRef; sheetIndex { ; rowFirst; rowLast; colFirst; colLast })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

Optional

The first row for the area. Default is 0. First row has index 0.

\$row

rowLast

Optional

The last row for the area. Default is 65535.

\$row

colFirst

Optional

The first column for the area. Default is 0. First column has index 0.

\$column

colLast

Optional

The last column for the area. Default is 255.

\$column

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 9th July 2015.

190.175 XL.Sheet.ClearPrintArea

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.ClearPrintArea"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.176 XL.Sheet.ClearPrintRepeats 9110
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.271 XL.Sheet.SetPrintArea 9225

Created 18th August 2014, last changed 18th August 2014.

190.176 XL.Sheet.ClearPrintRepeats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.ClearPrintRepeats"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.175 XL.Sheet.ClearPrintArea 9109
- 190.216 XL.Sheet.GetPrintRepeatCols 9155
- 190.217 XL.Sheet.GetPrintRepeatRows 9156
- 190.274 XL.Sheet.SetPrintRepeatCols 9229
- 190.275 XL.Sheet.SetPrintRepeatRows 9230

Created 18th August 2014, last changed 18th August 2014.

190.177 XL.Sheet.CopyCell

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.CopyCell"; bookRef; sheetIndex; rowSource; ColumnSource; rowDest; ColumnDest)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowSource

The source row for the cell. First row has index 0.

1

ColumnSource

The source column for the cell. First column has index 0.

1

rowDest

The destination row for the cell.

2

ColumnDest

The destination column for the cell.

2

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 18th August 2014.

190.178 XL.Sheet.DelHyperlink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.DelHyperlink"; bookRef; sheetIndex; index)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

index

The index of the hyperlink. From 0 to XL.Sheet.HyperlinkSize-1.

0

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.120 XL.Sheet.AddHyperlink 9017
- 190.231 XL.Sheet.Hyperlink 9170
- 190.232 XL.Sheet.HyperlinkSize 9171

Created 18th August 2014, last changed 18th August 2014.

190.179 XL.Sheet.DelMergeByIndex

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.DelMergeByIndex"; bookRef; sheetIndex; index)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

index

The index of the hyperlink. From 0 to XL.Sheet.MergeSize-1.

0

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.235 XL.Sheet.Merge 9174
- 190.236 XL.Sheet.MergeSize 9175

Created 18th August 2014, last changed 18th August 2014.

190.180 XL.Sheet.DeleteMerge

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.DeleteMerge"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.208 XL.Sheet.GetMerge 9144
- 190.265 XL.Sheet.SetMerge 9214

Created 18th August 2014, last changed 18th August 2014.

190.181 XL.Sheet.DeleteNamedRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.DeleteNamedRange"; bookRef; sheetIndex; name)

(old name: XL.Sheet.DeleteNameRange)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

name

The name of the named range.

"test"

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.210 XL.Sheet.GetNamedRange 9147
- 190.267 XL.Sheet.SetNamedRange 9217

Created 18th August 2014, last changed 21st April 2018.

190.182 XL.Sheet.GetCellError

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetCellError"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns error code or error.

Description

Possible errors:

ErrorType value	Description
0	# NULL!
7	# DIV/0!
15	# VALUE!
23	# REF!
29	# NAME?
36	# NUM!
42	# N/A
255	no error

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.183 XL.Sheet.GetCellErrors 9117
- 190.184 XL.Sheet.GetCellFormat 9119
- 190.185 XL.Sheet.GetCellFormats 9120
- 190.248 XL.Sheet.SetCellFormat 9190

Created 18th August 2014, last changed 18th August 2014.

190.183 XL.Sheet.GetCellErrors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetCellErrors"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Row Delimiter; Column Delimiter })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns list of values or error.

Description

If one cell can't be read as error, the value in the result will be empty.

See also

- 190.36 XL.Book.SheetCount

9118

CHAPTER 190. XL

- 190.117 XL.LoadBook 9010
- 190.182 XL.Sheet.GetCellError 9116
- 190.184 XL.Sheet.GetCellFormat 9119
- 190.185 XL.Sheet.GetCellFormats 9120
- 190.248 XL.Sheet.SetCellFormat 9190
- 190.249 XL.Sheet.SetCellFormats 9192

190.183.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.184 XL.Sheet.GetCellFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetCellFormat"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns format index or error.

Description

It can be changed by user.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.182 XL.Sheet.GetCellError 9116
- 190.183 XL.Sheet.GetCellErrors 9117
- 190.185 XL.Sheet.GetCellFormats 9120
- 190.248 XL.Sheet.SetCellFormat 9190
- 190.249 XL.Sheet.SetCellFormats 9192

Created 18th August 2014, last changed 3th March 2015.

190.185 XL.Sheet.GetCellFormats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetCellFormats"; bookRef; sheetIndex; First row; Last row; First column; Last column { ; Row Delimiter; Column Delimiter })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

First row

The first row to process. First row has index 0.
3

Last row

The last row to process. First row has index 0.
6

First column

The first column to process. First column has index 0.
2

Last column

The last column to process. First column has index 0.
4

Row Delimiter

Optional
The row delimiter for the result. Default is new line character.
"§"

Column Delimiter

Optional
The column delimiter for the result. Default is tab character.
char(9)

Result Returns list of values or error.

Description

If one cell has no format defined, the value in the result will be empty.

See also

- 190.36 XL.Book.SheetCount

<i>190.185. XL.SHEET.GETCELLFORMATS</i>	9121
• 190.117 XL.LoadBook	9010
• 190.182 XL.Sheet.GetCellError	9116
• 190.183 XL.Sheet.GetCellErrors	9117
• 190.184 XL.Sheet.GetCellFormat	9119
• 190.248 XL.Sheet.SetCellFormat	9190
• 190.249 XL.Sheet.SetCellFormats	9192

190.185.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 15th January 2018.

190.186 XL.Sheet.GetColHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetColHidden"; bookRef; sheetIndex; Col)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Col

The column index to query.

0

Result Return 1 if column is hidden, 0 if column is visible or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.187 XL.Sheet.GetColWidth 9123
- 190.198 XL.Sheet.GetHidden 9134
- 190.222 XL.Sheet.GetRowHidden 9161
- 190.251 XL.Sheet.SetColHidden 9197
- 190.282 XL.Sheet.SetRowHidden 9239

Created 18th August 2014, last changed 18th August 2014.

190.187 XL.Sheet.GetColWidth

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetColWidth"; bookRef; sheetIndex; Col)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Col

The column index to query.

0

Result Returns column width.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.186 XL.Sheet.GetColHidden 9122
- 190.251 XL.Sheet.SetColHidden 9197

Created 18th August 2014, last changed 18th August 2014.

190.188 XL.Sheet.GetDisplayGridlines

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetDisplayGridlines"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Return 1 if gridlines are visible and 0 if they aren't.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.215 XL.Sheet.GetPrintGridlines 9154
- 190.253 XL.Sheet.SetDisplayGridlines 9200

Created 18th August 2014, last changed 18th August 2014.

190.189 XL.Sheet.GetFirstCol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetFirstCol"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns value.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.190 XL.Sheet.GetFirstRow 9126
- 190.202 XL.Sheet.GetLastCol 9138
- 190.203 XL.Sheet.GetLastRow 9139
- 190.218 XL.Sheet.GetPrintRow 9157

Created 18th August 2014, last changed 18th August 2014.

190.190 XL.Sheet.GetFirstRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetFirstRow"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns value.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.189 XL.Sheet.GetFirstCol 9125
- 190.202 XL.Sheet.GetLastCol 9138
- 190.203 XL.Sheet.GetLastRow 9139
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.276 XL.Sheet.SetPrintRow 9231

Created 18th August 2014, last changed 18th August 2014.

190.191 XL.Sheet.GetFooter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetFooter"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns text or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.212 XL.Sheet.GetPicture 9150
- 190.225 XL.Sheet.GetVCenter 9164
- 190.228 XL.Sheet.GetZoom 9167
- 190.254 XL.Sheet.SetFooter 9201
- 190.257 XL.Sheet.SetHCenter 9205
- 190.258 XL.Sheet.SetHeader 9206
- 190.268 XL.Sheet.SetPaper 9219
- 190.278 XL.Sheet.SetProtect 9233
- 190.286 XL.Sheet.SetVCenter 9243

Created 18th August 2014, last changed 18th August 2014.

190.192 XL.Sheet.GetFooterMargin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetFooterMargin"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns the margin value or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.197 XL.Sheet.GetHeaderMargin 9133

Created 18th August 2014, last changed 18th August 2014.

190.193 XL.Sheet.GetGroupSummaryBelow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetGroupSummaryBelow"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns value or error.

Description

Returns true if summary is below and false if isn't.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.194 XL.Sheet.GetGroupSummaryRight 9130
- 190.255 XL.Sheet.SetGroupSummaryBelow 9203
- 190.256 XL.Sheet.SetGroupSummaryRight 9204

Created 18th August 2014, last changed 18th August 2014.

190.194 XL.Sheet.GetGroupSummaryRight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetGroupSummaryRight"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns value or error.

Description

Returns true if summary is right and false if isn't.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.193 XL.Sheet.GetGroupSummaryBelow 9129
- 190.255 XL.Sheet.SetGroupSummaryBelow 9203
- 190.256 XL.Sheet.SetGroupSummaryRight 9204

Created 18th August 2014, last changed 18th August 2014.

190.195 XL.Sheet.GetHCenter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetHCenter"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns current setting, 1 for yes or 0 for no.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.191 XL.Sheet.GetFooter 9127
- 190.198 XL.Sheet.GetHidden 9134
- 190.208 XL.Sheet.GetMerge 9144
- 190.211 XL.Sheet.GetPaper 9148
- 190.225 XL.Sheet.GetVCenter 9164
- 190.257 XL.Sheet.SetHCenter 9205
- 190.258 XL.Sheet.SetHeader 9206
- 190.286 XL.Sheet.SetVCenter 9243

Created 18th August 2014, last changed 18th August 2014.

190.196 XL.Sheet.GetHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetHeader"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns text or error.

Description**See also**

- 190.117 XL.LoadBook 9010
- 190.195 XL.Sheet.GetHCenter 9131
- 190.198 XL.Sheet.GetHidden 9134
- 190.211 XL.Sheet.GetPaper 9148
- 190.225 XL.Sheet.GetVCenter 9164
- 190.257 XL.Sheet.SetHCenter 9205
- 190.258 XL.Sheet.SetHeader 9206
- 190.265 XL.Sheet.SetMerge 9214
- 190.268 XL.Sheet.SetPaper 9219
- 190.286 XL.Sheet.SetVCenter 9243

Created 18th August 2014, last changed 18th August 2014.

190.197 XL.Sheet.GetHeaderMargin

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetHeaderMargin"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns the margin value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.192 XL.Sheet.GetFooterMargin 9128

Created 18th August 2014, last changed 18th August 2014.

190.198 XL.Sheet.GetHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetHidden"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns boolean or error message.

Description

Value is 1 if sheet is hidden and 0 if sheet is visible.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.186 XL.Sheet.GetColHidden 9122
- 190.191 XL.Sheet.GetFooter 9127
- 190.195 XL.Sheet.GetHCenter 9131
- 190.208 XL.Sheet.GetMerge 9144
- 190.222 XL.Sheet.GetRowHidden 9161
- 190.251 XL.Sheet.SetColHidden 9197
- 190.258 XL.Sheet.SetHeader 9206
- 190.282 XL.Sheet.SetRowHidden 9239

Created 18th August 2014, last changed 18th August 2014.

190.199 XL.Sheet.GetHorPageBreak

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetHorPageBreak"; bookRef; sheetIndex; Index)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Index

The index of the page break from 0 to XL.Sheet.GetHorPageBreakCount-1.

0

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.200 XL.Sheet.GetHorPageBreakCount 9136
- 190.226 XL.Sheet.GetVerPageBreak 9165
- 190.227 XL.Sheet.GetVerPageBreakCount 9166
- 190.259 XL.Sheet.SetHorPageBreak 9208
- 190.287 XL.Sheet.SetVerPageBreak 9244

Created 18th August 2014, last changed 18th August 2014.

190.200 XL.Sheet.GetHorPageBreakCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetHorPageBreakCount"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Result Returns value or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.199 XL.Sheet.GetHorPageBreak 9135
- 190.226 XL.Sheet.GetVerPageBreak 9165
- 190.227 XL.Sheet.GetVerPageBreakCount 9166
- 190.259 XL.Sheet.SetHorPageBreak 9208

Created 18th August 2014, last changed 18th August 2014.

190.201 XL.Sheet.GetLandscape

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetLandscape"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns 1 for landscape mode, 0 for portrait mode or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.260 XL.Sheet.SetLandscape 9209

Created 18th August 2014, last changed 18th August 2014.

190.202 XL.Sheet.GetLastCol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetLastCol"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns value.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.189 XL.Sheet.GetFirstCol 9125
- 190.190 XL.Sheet.GetFirstRow 9126
- 190.203 XL.Sheet.GetLastRow 9139

Created 18th August 2014, last changed 18th August 2014.

190.203 XL.Sheet.GetLastRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetLastRow"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns value.

Description**See also**

- 190.3 XL.Book.AddFormat 8854
- 190.36 XL.Book.SheetCount 8896
- 190.109 XL.Format.SetNumFormat 8993
- 190.117 XL.LoadBook 9010
- 190.189 XL.Sheet.GetFirstCol 9125
- 190.190 XL.Sheet.GetFirstRow 9126
- 190.202 XL.Sheet.GetLastCol 9138
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.248 XL.Sheet.SetCellFormat 9190
- 190.276 XL.Sheet.SetPrintRow 9231

Created 18th August 2014, last changed 18th August 2014.

190.204 XL.Sheet.GetMarginBottom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetMarginBottom"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns current margin value or error message.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.205 XL.Sheet.GetMarginLeft 9141
- 190.206 XL.Sheet.GetMarginRight 9142
- 190.207 XL.Sheet.GetMarginTop 9143
- 190.261 XL.Sheet.SetMarginBottom 9210
- 190.262 XL.Sheet.SetMarginLeft 9211
- 190.264 XL.Sheet.SetMarginTop 9213

Created 18th August 2014, last changed 18th August 2014.

190.205 XL.Sheet.GetMarginLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetMarginLeft"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns current margin value or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.204 XL.Sheet.GetMarginBottom 9140
- 190.206 XL.Sheet.GetMarginRight 9142
- 190.207 XL.Sheet.GetMarginTop 9143
- 190.261 XL.Sheet.SetMarginBottom 9210
- 190.262 XL.Sheet.SetMarginLeft 9211
- 190.263 XL.Sheet.SetMarginRight 9212
- 190.264 XL.Sheet.SetMarginTop 9213

Created 18th August 2014, last changed 18th August 2014.

190.206 XL.Sheet.GetMarginRight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetMarginRight"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns current margin value or error message.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.204 XL.Sheet.GetMarginBottom 9140
- 190.205 XL.Sheet.GetMarginLeft 9141
- 190.207 XL.Sheet.GetMarginTop 9143
- 190.262 XL.Sheet.SetMarginLeft 9211
- 190.263 XL.Sheet.SetMarginRight 9212
- 190.264 XL.Sheet.SetMarginTop 9213

Created 18th August 2014, last changed 18th August 2014.

190.207 XL.Sheet.GetMarginTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetMarginTop"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns current margin value or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.204 XL.Sheet.GetMarginBottom 9140
- 190.205 XL.Sheet.GetMarginLeft 9141
- 190.206 XL.Sheet.GetMarginRight 9142
- 190.261 XL.Sheet.SetMarginBottom 9210
- 190.262 XL.Sheet.SetMarginLeft 9211
- 190.263 XL.Sheet.SetMarginRight 9212
- 190.264 XL.Sheet.SetMarginTop 9213

Created 18th August 2014, last changed 18th August 2014.

190.208 XL.Sheet.GetMerge

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190.XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetMerge"; bookRef; sheetIndex; Row; Column; selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

selector

Which value to return: rowFirst, rowLast, colFirst or colLast.

"colLast"

Result Returns value or error.

Description

Result is returned for selector values: rowFirst, rowLast, colFirst, colLast.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.195 XL.Sheet.GetHCenter 9131
- 190.196 XL.Sheet.GetHeader 9132
- 190.198 XL.Sheet.GetHidden 9134
- 190.209 XL.Sheet.GetName 9146
- 190.223 XL.Sheet.GetText 9162
- 190.235 XL.Sheet.Merge 9174
- 190.258 XL.Sheet.SetHeader 9206

190.208. *XL.SHEET.GETMERGE*

9145

- 190.265 XL.Sheet.SetMerge

9214

Created 18th August 2014, last changed 18th August 2014.

190.209 XL.Sheet.GetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetName"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns name or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.52 XL.Font.GetName 8918
- 190.117 XL.LoadBook 9010
- 190.196 XL.Sheet.GetHeader 9132
- 190.208 XL.Sheet.GetMerge 9144
- 190.211 XL.Sheet.GetPaper 9148
- 190.223 XL.Sheet.GetText 9162
- 190.228 XL.Sheet.GetZoom 9167
- 190.266 XL.Sheet.SetName 9216
- 190.268 XL.Sheet.SetPaper 9219

Created 18th August 2014, last changed 18th August 2014.

190.210 XL.Sheet.GetNamedRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetNamedRange"; bookRef; sheetIndex; name; selector { ; ScopeID })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

name

The name of the named range.

"test"

selector

Which value to return: rowFirst, rowLast, colFirst, colLast, name.

"rowFirst"

ScopeID

Optional

The scope ID to use for search. Can be -2 for undefined, -1 for workbook or positive number for other IDs. Default is undefined.

-1

Result Returns value or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.181 XL.Sheet.DeleteNamedRange 9115
- 190.237 XL.Sheet.NamedRange 9176
- 190.267 XL.Sheet.SetNamedRange 9217

190.210.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 18th August 2014, last changed 16th March 2018.

190.211 XL.Sheet.GetPaper

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPaper"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns paper format.

Description

See also

- 190.117 XL.LoadBook 9010
- 190.196 XL.Sheet.GetHeader 9132
- 190.208 XL.Sheet.GetMerge 9144
- 190.209 XL.Sheet.GetName 9146
- 190.220 XL.Sheet.GetProtect 9159
- 190.225 XL.Sheet.GetVCenter 9164
- 190.254 XL.Sheet.SetFooter 9201
- 190.258 XL.Sheet.SetHeader 9206
- 190.266 XL.Sheet.SetName 9216
- 190.268 XL.Sheet.SetPaper 9219

Created 18th August 2014, last changed 6th October 2015.

Paper	Value	Description
PAPER_DEFAULT	0	Default paper size
PAPER_LETTER	1	US Letter 8 1/2 x 11 in
PAPER_LETTERS <small>SMALL</small>	2	US Letter Small 8 1/2 x 11 in
PAPER_TABLOID	3	US Tabloid 11 x 17 in
PAPER_LEDGER	4	US Ledger 17 x 11 in
PAPER_LEGAL	5	US Legal 8 1/2 x 14 in
PAPER_STATEMENT	6	US Statement 5 1/2 x 8 1/2 in
PAPER_EXECUTIVE	7	US Executive 7 1/4 x 10 1/2 in
PAPER_A3	8	A3 297 x 420 mm
PAPER_A4	9	A4 210 x 297 mm
PAPER_A4 <small>SMALL</small>	10	A4 Small 210 x 297 mm
PAPER_A5	11	A5 148 x 210 mm
PAPER_B4	12	B4 (JIS) 250 x 354
PAPER_B5	13	B5 (JIS) 182 x 257 mm
PAPER_FOLIO	14	Folio 8 1/2 x 13 in
PAPER_QUATRO	15	Quarto 215 x 275 mm
PAPER_10x14	16	10 x 14 in
PAPER_10x17	17	11 x 17 in
PAPER_NOTE	18	US Note 8 1/2 x 11 in
PAPER_ENVELOPE_9	19	US Envelope # 9 3 7/8 x 8 7/8
PAPER_ENVELOPE_10	20	US Envelope # 10 4 1/8 x 9 1/2
PAPER_ENVELOPE_11	21	US Envelope # 11 4 1/2 x 10 3/8
PAPER_ENVELOPE_12	22	US Envelope # 12 4 3/4 x 11
PAPER_ENVELOPE_14	23	US Envelope # 14 5 x 11 1/2
PAPER_C_SIZE	24	C size sheet
PAPER_D_SIZE	25	D size sheet
PAPER_E_SIZE	26	E size sheet
PAPER_ENVELOPE_DL	27	Envelope DL 110 x 220mm
PAPER_ENVELOPE_C5	28	Envelope C5 162 x 229 mm
PAPER_ENVELOPE_C3	29	Envelope C3 324 x 458 mm
PAPER_ENVELOPE_C4	30	Envelope C4 229 x 324 mm
PAPER_ENVELOPE_C6	31	Envelope C6 114 x 162 mm
PAPER_ENVELOPE_C65	32	Envelope C65 114 x 229 mm
PAPER_ENVELOPE_B4	33	Envelope B4 250 x 353 mm
PAPER_ENVELOPE_B5	34	Envelope B5 176 x 250 mm
PAPER_ENVELOPE_B6	35	Envelope B6 176 x 125 mm
PAPER_ENVELOPE	36	Envelope 110 x 230 mm
PAPER_ENVELOPE_MONARCH	37	US Envelope Monarch 3.875 x 7.5 in
PAPER_US_ENVELOPE	38	US Envelope 3 5/8 x 6 1/2 in
PAPER_FANFOLD	39	US Std Fanfold 14 7/8 x 11 in
PAPER_GERMAN_STD_FANFOLD	40	German Std Fanfold 8 1/2 x 12 in
PAPER_GERMAN_LEGAL_FANFOLD	41	German Legal Fanfold 8 1/2 x 13 in

190.212 XL.Sheet.GetPicture

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPicture"; bookRef; sheetIndex; Index; Selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Index

The image index from 0 to XL.Sheet.PictureCount-1.

\$index

Selector

Which value to return. Can be id, rowTop, colLeft, rowBottom, colRight, width, height, offsetX or offsetY. "id"

Result Returns value or error.

Description

Output parameters:

(rowTop, colLeft) - top left position of picture;

(rowBottom, colRight) - bottom right position of picture;

width - width of picture in pixels;

height - height of picture in pixels;

offsetX - horizontal offset of picture in pixels;

offsetY - vertical offset of picture in pixels.

Use XL.Book.GetPicture for extracting binary data of picture by workbook picture index.

See also

- 190.16 XL.Book.GetPicture 8873
- 190.36 XL.Book.SheetCount 8896
- 190.191 XL.Sheet.GetFooter 9127
- 190.211 XL.Sheet.GetPaper 9148
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.218 XL.Sheet.GetPrintRow 9157

<i>190.212. XL.SHEET.GETPICTURE</i>	9151
• 190.220 XL.Sheet.GetProtect	9159
• 190.239 XL.Sheet.PictureCount	9178
• 190.271 XL.Sheet.SetPrintArea	9225

Created 18th August 2014, last changed 17th October 2017.

190.213 XL.Sheet.GetPrintArea

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPrintArea"; bookRef; sheetIndex; selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

selector

The value to query: rowFirst, rowLast, colFirst, colLast.

"rowFirst"

Result Returns OK or error.

Description

Returns error if print area isn't found.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.175 XL.Sheet.ClearPrintArea 9109
- 190.212 XL.Sheet.GetPicture 9150
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.219 XL.Sheet.GetPrintZoom 9158
- 190.271 XL.Sheet.SetPrintArea 9225
- 190.272 XL.Sheet.SetPrintFit 9227
- 190.276 XL.Sheet.SetPrintRow 9231
- 190.277 XL.Sheet.SetPrintZoom 9232

Created 6th May 2015, last changed 6th May 2015.

190.214 XL.Sheet.GetPrintFit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPrintFit"; bookRef; sheetIndex; selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

selector

Which value to return. Can be Enabled, hPages or vPages.

"Enabled"

Result Returns value or error.

Description

wPages: number of pages the sheet width is fit to;

hPages: number of pages the sheet height is fit to.

Enabled: 1 if enabled or 0 if disabled.

See also

- 190.117 XL.LoadBook 9010
- 190.212 XL.Sheet.GetPicture 9150
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.219 XL.Sheet.GetPrintZoom 9158
- 190.271 XL.Sheet.SetPrintArea 9225
- 190.272 XL.Sheet.SetPrintFit 9227
- 190.276 XL.Sheet.SetPrintRow 9231
- 190.277 XL.Sheet.SetPrintZoom 9232
- 190.278 XL.Sheet.SetProtect 9233

Created 18th August 2014, last changed 18th August 2014.

190.215 XL.Sheet.GetPrintGridlines

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPrintGridlines"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Return 1 if gridlines are printed and 0 if they aren't.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.188 XL.Sheet.GetDisplayGridlines 9124
- 190.273 XL.Sheet.SetPrintGridliens 9228

Created 18th August 2014, last changed 18th August 2014.

190.216 XL.Sheet.GetPrintRepeatCols

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPrintRepeatCols"; bookRef; sheetIndex; Selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Selector

Which value to return. Can be "colFirst" or "colLast".
"colFirst"

Result Returns value or error.

Description

Returns error if repeated columns aren't found.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.176 XL.Sheet.ClearPrintRepeats 9110
- 190.217 XL.Sheet.GetPrintRepeatRows 9156
- 190.274 XL.Sheet.SetPrintRepeatCols 9229
- 190.275 XL.Sheet.SetPrintRepeatRows 9230

Created 6th May 2015, last changed 6th May 2015.

190.217 XL.Sheet.GetPrintRepeatRows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPrintRepeatRows"; bookRef; sheetIndex; Selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Selector

Which value to return. Can be "rowFirst" or "rowLast".

"rowFirst"

Result Returns value or error.

Description

Returns error if repeated rows aren't found.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.176 XL.Sheet.ClearPrintRepeats 9110
- 190.216 XL.Sheet.GetPrintRepeatCols 9155
- 190.274 XL.Sheet.SetPrintRepeatCols 9229
- 190.275 XL.Sheet.SetPrintRepeatRows 9230

Created 6th May 2015, last changed 6th May 2015.

190.218 XL.Sheet.GetPrintRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPrintRow"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.212 XL.Sheet.GetPicture 9150
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.220 XL.Sheet.GetProtect 9159
- 190.271 XL.Sheet.SetPrintArea 9225
- 190.272 XL.Sheet.SetPrintFit 9227
- 190.276 XL.Sheet.SetPrintRow 9231
- 190.277 XL.Sheet.SetPrintZoom 9232

Created 18th August 2014, last changed 18th August 2014.

190.219 XL.Sheet.GetPrintZoom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetPrintZoom"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns zoom level.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.271 XL.Sheet.SetPrintArea 9225
- 190.272 XL.Sheet.SetPrintFit 9227
- 190.276 XL.Sheet.SetPrintRow 9231
- 190.277 XL.Sheet.SetPrintZoom 9232

Created 18th August 2014, last changed 18th August 2014.

190.220 XL.Sheet.GetProtect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetProtect"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns boolean or error message.

Description

Value is 1 if sheet is protected and 0 if sheet is not protected.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.191 XL.Sheet.GetFooter 9127
- 190.211 XL.Sheet.GetPaper 9148
- 190.212 XL.Sheet.GetPicture 9150
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.254 XL.Sheet.SetFooter 9201
- 190.272 XL.Sheet.SetPrintFit 9227
- 190.278 XL.Sheet.SetProtect 9233
- 190.279 XL.Sheet.SetProtectEx 9234

Created 18th August 2014, last changed 18th August 2014.

190.221 XL.Sheet.GetRowHeight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetRowHeight"; bookRef; sheetIndex; Row)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row index to query.

0

Result Returns row height.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.222 XL.Sheet.GetRowHidden 9161
- 190.282 XL.Sheet.SetRowHidden 9239

Created 18th August 2014, last changed 18th August 2014.

190.222 XL.Sheet.GetRowHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetRowHidden"; bookRef; sheetIndex; Row)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row index to query.

0

Result Return 1 if row is hidden, 0 if row is visible or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.186 XL.Sheet.GetColHidden 9122
- 190.198 XL.Sheet.GetHidden 9134
- 190.221 XL.Sheet.GetRowHeight 9160
- 190.251 XL.Sheet.SetColHidden 9197
- 190.282 XL.Sheet.SetRowHidden 9239

Created 18th August 2014, last changed 18th August 2014.

190.223 XL.Sheet.GetText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetText"; bookRef; Index { ; formulas })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

Index

The index of the sheet you want to query text. Value can be 0 to XL.Book.SheetCount-1.

\$index

formulas

Optional

Whether to return formulas as text. If you pass 1 here, the formulas will be returned instead of their result.

0

Result Returns text of sheet.

Description

Numbers are formatted as floating point numbers with dot as decimal separator.

Boolean values are returned as FALSE or TRUE.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.208 XL.Sheet.GetMerge 9144
- 190.209 XL.Sheet.GetName 9146
- 190.228 XL.Sheet.GetZoom 9167

Created 18th August 2014, last changed 19th April 2016.

190.224 XL.Sheet.GetTopLeftView

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetTopLeftView"; bookRef; sheetIndex; Selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Selector

Which value to return. Can be "row" or "column".

"row"

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.285 XL.Sheet.SetTopLeftView 9242

Created 18th August 2014, last changed 18th August 2014.

190.225 XL.Sheet.GetVCenter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetVCenter"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns current setting, 1 for yes or 0 for no.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.191 XL.Sheet.GetFooter 9127
- 190.196 XL.Sheet.GetHeader 9132
- 190.208 XL.Sheet.GetMerge 9144
- 190.211 XL.Sheet.GetPaper 9148
- 190.254 XL.Sheet.SetFooter 9201
- 190.257 XL.Sheet.SetHCenter 9205
- 190.258 XL.Sheet.SetHeader 9206
- 190.286 XL.Sheet.SetVCenter 9243

Created 18th August 2014, last changed 18th August 2014.

190.226 XL.Sheet.GetVerPageBreak

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetVerPageBreak"; bookRef; sheetIndex; Index)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Index

The index of the page break from 0 to XL.Sheet.GetVerPageBreakCount-1.

0

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.199 XL.Sheet.GetHorPageBreak 9135
- 190.200 XL.Sheet.GetHorPageBreakCount 9136
- 190.227 XL.Sheet.GetVerPageBreakCount 9166
- 190.259 XL.Sheet.SetHorPageBreak 9208
- 190.287 XL.Sheet.SetVerPageBreak 9244

Created 18th August 2014, last changed 18th August 2014.

190.227 XL.Sheet.GetVerPageBreakCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetVerPageBreakCount"; bookRef; sheetIndex)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Result Returns value or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.199 XL.Sheet.GetHorPageBreak 9135
- 190.200 XL.Sheet.GetHorPageBreakCount 9136
- 190.226 XL.Sheet.GetVerPageBreak 9165
- 190.287 XL.Sheet.SetVerPageBreak 9244

Created 18th August 2014, last changed 18th August 2014.

190.228 XL.Sheet.GetZoom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GetZoom"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns zoom level.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.191 XL.Sheet.GetFooter 9127
- 190.209 XL.Sheet.GetName 9146
- 190.223 XL.Sheet.GetText 9162
- 190.250 XL.Sheet.SetCol 9194
- 190.281 XL.Sheet.SetRow 9237
- 190.288 XL.Sheet.SetZoom 9245

Created 18th August 2014, last changed 18th August 2014.

190.229 XL.Sheet.GroupCols

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GroupCols"; bookRef; sheetIndex; colFirst; colLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

colFirst

The first column for the area. First column has index 0.

\$column

colLast

The last column for the area. First column has index 0.

\$column

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.230 XL.Sheet.GroupRows 9169

Created 18th August 2014, last changed 18th August 2014.

190.230 XL.Sheet.GroupRows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.GroupRows"; bookRef; sheetIndex; rowFirst; rowLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

The first row for the area. First row has index 0.

\$row

rowLast

The last row for the area. First row has index 0.

\$row

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.229 XL.Sheet.GroupCols 9168

Created 18th August 2014, last changed 18th August 2014.

190.231 XL.Sheet.Hyperlink

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.Hyperlink"; bookRef; sheetIndex; Index; selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Index

The index of the hyperlink from 0 to XL.Sheet.HyperlinkSize-1.

0

selector

The value to query: rowFirst, rowLast, colFirst, colLast or link.

"link"

Result Returns value.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.120 XL.Sheet.AddHyperlink 9017
- 190.178 XL.Sheet.DelHyperlink 9112
- 190.232 XL.Sheet.HyperlinkSize 9171

Created 18th August 2014, last changed 18th August 2014.

190.232 XL.Sheet.HyperlinkSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.HyperlinkSize"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns number or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.178 XL.Sheet.DelHyperlink 9112
- 190.231 XL.Sheet.Hyperlink 9170

Created 18th August 2014, last changed 18th August 2014.

190.233 XL.Sheet.InsertCol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.InsertCol"; bookRef; sheetIndex; colFirst; colLast)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

colFirst

The first column for the area. First column has index 0.

\$column

colLast

The last column for the area. First column has index 0.

\$column

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.234 XL.Sheet.InsertRow 9173
- 190.250 XL.Sheet.SetCol 9194

Created 18th August 2014, last changed 18th August 2014.

190.234 XL.Sheet.InsertRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.InsertRow"; bookRef; sheetIndex; rowFirst; rowLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

rowFirst

The first row for the area. First row has index 0.
\$row

rowLast

The last row for the area. First row has index 0.
\$row

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.233 XL.Sheet.InsertCol 9172
- 190.281 XL.Sheet.SetRow 9237

Created 18th August 2014, last changed 18th August 2014.

190.235 XL.Sheet.Merge

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.Merge"; bookRef; sheetIndex; Index; selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Index

The index of the hyperlink from 0 to XL.Sheet.MergeSize-1.

0

selector

The value to query: rowFirst, rowLast, colFirst, colLast.

"rowFirst"

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.179 XL.Sheet.DelMergeByIndex 9113
- 190.208 XL.Sheet.GetMerge 9144
- 190.236 XL.Sheet.MergeSize 9175
- 190.265 XL.Sheet.SetMerge 9214
- 190.291 XL.Sheet.Table 9248

Created 18th August 2014, last changed 18th August 2014.

190.236 XL.Sheet.MergeSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.MergeSize"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns number or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.179 XL.Sheet.DelMergeByIndex 9113
- 190.235 XL.Sheet.Merge 9174
- 190.292 XL.Sheet.TableSize 9249

Created 18th August 2014, last changed 18th August 2014.

190.237 XL.Sheet.NamedRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.NamedRange"; bookRef; sheetIndex; Index; selector { ; ScopeID })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Index

The index of the named range from 0 to XL.Sheet.NamedRangeCount.
0

selector

What information to return: rowFirst, rowLast, colFirst, colLast and name.
"name"

ScopeID

Optional

The scope ID to use for search. Can be -2 for undefined, -1 for workbook or positive number for other IDs.
Default is undefined.
-1

Result Returns value or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.210 XL.Sheet.GetNamedRange 9147
- 190.238 XL.Sheet.NamedRangeCount 9177
- 190.267 XL.Sheet.SetNamedRange 9217

190.237.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 18th August 2014, last changed 16th March 2018.

190.238 XL.Sheet.NamedRangeCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.NamedRangeCount"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.237 XL.Sheet.NamedRange 9176

Created 18th August 2014, last changed 18th August 2014.

190.239 XL.Sheet.PictureCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.PictureCount"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns number or error.

Description**See also**

- 190.25 XL.Book.PictureCount 8882
- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.212 XL.Sheet.GetPicture 9150

Created 18th August 2014, last changed 18th August 2014.

190.240 XL.Sheet.RemoveCol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.RemoveCol"; bookRef; sheetIndex; colFirst; colLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

colFirst

The first column for the area. First column has index 0.
\$column

colLast

The last column for the area. First column has index 0.
\$column

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.241 XL.Sheet.RemoveComment 9180
- 190.243 XL.Sheet.RemoveFilter 9183
- 190.244 XL.Sheet.RemoveRow 9184

Created 18th August 2014, last changed 18th August 2014.

190.241 XL.Sheet.RemoveComment

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	6.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.RemoveComment"; bookRef; sheetIndex; Row; Column)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.145 XL.Sheet.CellReadComment 9050
- 190.240 XL.Sheet.RemoveCol 9179
- 190.242 XL.Sheet.RemoveComments 9181
- 190.243 XL.Sheet.RemoveFilter 9183

190.241.1 Blog Entries

- [MBS FileMaker Plugin, version 6.5pr2](#)

Created 7th October 2016, last changed 7th October 2016.

190.242 XL.Sheet.RemoveComments

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.RemoveComments"; bookRef; sheetIndex; First row; Last row; First column; Last column)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.146 XL.Sheet.CellReadComments 9051
- 190.241 XL.Sheet.RemoveComment 9180

190.242.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

190.243 XL.Sheet.RemoveFilter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.RemoveFilter"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.124 XL.Sheet.AutoFilter 9023
- 190.240 XL.Sheet.RemoveCol 9179
- 190.241 XL.Sheet.RemoveComment 9180

Created 22nd April 2017, last changed 22nd April 2017.

190.244 XL.Sheet.RemoveRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.RemoveRow"; bookRef; sheetIndex; rowFirst; rowLast)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

The first row for the area. First row has index 0.

\$row

rowLast

The last row for the area.

\$row+1

Result Returns OK or error.

Description

Examples

Preprocess file before import in FileMaker by removing a row and a sheet:

```
# Find libXL and load it
If [ MBS("XL.IsInitialized") 1 ]
Perform Script [ Specified: From list ; "InitXL" ; Parameter: ]
End If
#
# path to xls or xlsx file
Set Variable [ $path ; Value: MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ); "test.xls"
) ]
#
# Load template excel file
Set Variable [ $bookRef ; Value: MBS( "XL.LoadBook"; $path ) ]
If [ MBS("IsError") ]
Show Custom Dialog [ "Error" ; $bookRef ]
Exit Script [ Text Result: ]
End If
#
# Remove first row of first sheet
Set Variable [ $r ; Value: MBS( "XL.Sheet.RemoveRow"; $BookRef; 0 /* sheet index */; 0 /* row index */)
```

```
]
#
# Remove second sheet
Set Variable [ $r ; Value: MBS( "XL.Book.DeleteSheet"; $bookRef; 1 /* sheet index */ ) ]
#
# Save to file and cleanup
Set Field [ XL::OutputFile ; MBS("XL.Book.SaveToFile"; $bookRef; $path) ]
Set Variable [ $r ; Value: MBS( "XL.Book.Release"; $bookRef) ]
#
# now let FileMaker import file
```

See also

- 81.8 Folders.UserDesktop 4177
- 124.6 IsError 6266
- 121.1 Path.AddPathComponent 6135
- 190.9 XL.Book.DeleteSheet 8864
- 190.26 XL.Book.Release 8883
- 190.28 XL.Book.Save 8886
- 190.29 XL.Book.SaveToFile 8888
- 190.36 XL.Book.SheetCount 8896
- 190.116 XL.IsInitialized 9008
- 190.117 XL.LoadBook 9010

Created 18th August 2014, last changed 13th February 2020.

190.245 XL.Sheet.RightToLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.RightToLeft"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns boolean or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.280 XL.Sheet.SetRightToLeft 9236

Created 22nd April 2017, last changed 22nd April 2017.

190.246 XL.Sheet.RowColToAddr

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.RowColToAddr"; bookRef; sheetIndex; Row; Column; rowRelative; colRelative)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

rowRelative

Whether to use relative row. Pass 1 for relative and 0 for absolute.

1

colRelative

Whether to use relative column. Pass 1 for relative and 0 for absolute.

1

Result Returns address value or error.

Description**Examples**

Calculates address and returns "\$D\$18":

```
MBS( "XL.Sheet.RowColToAddr"; $book; $sheet; 17; 3; 0; 0)
```

Calculates address and returns "D18":

```
MBS( "XL.Sheet.RowColToAddr"; $book; $sheet; 17; 3)
```

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

190.247 XL.Sheet.SetAutoFitArea

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	5.1	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetAutoFitArea"; bookRef; sheetIndex; rowFirst; colFirst; rowLast; colLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

The first row for the area. First row has index 0.

\$row

colFirst

The first column for the area. First column has index 0.

\$column

rowLast

The last row for the area. First row has index 0.

\$row

colLast

The last column for the area. First column has index 0.

\$column

Result Returns OK or error.

Description

The method XL.Sheet.SetCol with -1 width value will affect only to the specified limited area.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.250 XL.Sheet.SetCol 9194
- 190.271 XL.Sheet.SetPrintArea 9225

Created 6th May 2015, last changed 6th May 2015.

190.248 XL.Sheet.SetCellFormat

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetCellFormat"; bookRef; sheetIndex; Row; Column; Format)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Format

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Result Returns OK or error.

Description

Examples

Apply a new format to a column:

```
# create new format
Set Variable [ $format; Value:MBS( "XL.Book.AddFormat"; $BookRef ) ]
Set Variable [ $r; Value:MBS( "XL.Format.SetNumFormat"; $BookRef; $format; 7 ) ]
# set as format for column
Set Variable [ $r; Value:MBS( "XL.Sheet.SetColumn"; $BookRef; 0; 6; 6; 50 ; $format; 0 ) ]
# loop over all rows
Set Variable [ $lastRow; Value:MBS( "XL.Sheet.GetLastRow"; $BookRef; $sheet ) ]
Set Variable [ $row; Value:1 ]
Loop
Set Variable [ $r; Value:MBS( "XL.Sheet.SetCellFormat"; $BookRef; $sheet; $row; 6; $format ) ]
# next
Set Variable [ $row; Value:$row + 1 ]
Exit Loop If [ $row >$lastRow ]
End Loop
```

190.248. *XL.SHEET.SETCELLFORMAT*

9191

See also

- 190.109 *XL.Format.SetNumFormat* 8993
- 190.117 *XL.LoadBook* 9010
- 190.173 *XL.Sheet.CellWriteTexts* 9106
- 190.183 *XL.Sheet.GetCellErrors* 9117
- 190.184 *XL.Sheet.GetCellFormat* 9119
- 190.185 *XL.Sheet.GetCellFormats* 9120
- 190.203 *XL.Sheet.GetLastRow* 9139
- 190.249 *XL.Sheet.SetCellFormats* 9192
- 190.250 *XL.Sheet.SetCol* 9194
- 190.252 *XL.Sheet.SetColumn* 9198

Created 18th August 2014, last changed 24th March 2016.

190.249 XL.Sheet.SetCellFormats

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	8.0	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetCellFormats"; bookRef; sheetIndex; First row; Last row; First column; Last column; Formats { ; Row Delimiter; Column Delimiter })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

First row

The first row to process. First row has index 0.

3

Last row

The last row to process. First row has index 0.

6

First column

The first column to process. First column has index 0.

2

Last column

The last column to process. First column has index 0.

4

Formats

The format to use. Can be separated with row and column delimiter to give each row and column a different format. But you can also use same format for all rows or for all columns.

\$dollarFormat

Row Delimiter

Optional

The row delimiter for the result. Default is new line character.

"§"

Column Delimiter

Optional

The column delimiter for the result. Default is tab character.

char(9)

Result Returns number of errors or error.

Description

Examples

Write bold row and data rows:

```
# create bold font & format
Set Variable [ $boldFont ; Value: MBS( "XL.Book.AddFont"; $bookRef) ]
Set Variable [ $r ; Value: MBS( "XL.Font.SetBold"; $bookRef; $boldFont; 1) ]
Set Variable [ $boldFormat ; Value: MBS( "XL.Book.AddFormat"; $bookRef) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetFont"; $bookRef; $boldFormat; $boldFont) ]
# Write a title row
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteTexts"; $bookRef; $sheet; 1; 1; 1; 4; "A,B,C,D"; $; ", " ) ]
# Make it bold
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetCellFormats"; $bookRef; $sheet; 1; 1; 1; 4; $boldFormat ) ]
# and write data
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteTexts"; $bookRef; $sheet; 2; 5; 1; 4; $data; $; ", " ) ]
```

See also

- 190.2 XL.Book.AddFont 8852
- 190.3 XL.Book.AddFormat 8854
- 190.36 XL.Book.SheetCount 8896
- 190.57 XL.Font.SetBold 8923
- 190.105 XL.Format.SetFont 8987
- 190.117 XL.LoadBook 9010
- 190.172 XL.Sheet.CellWriteText 9102
- 190.173 XL.Sheet.CellWriteTexts 9106
- 190.184 XL.Sheet.GetCellFormat 9119
- 190.248 XL.Sheet.SetCellFormat 9190

190.249.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr8](#)

Created 15th January 2018, last changed 28th May 2018.

190.250 XL.Sheet.SetCol

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetCol"; bookRef; sheetIndex; ColFirst; ColLast; Width { ; Format; Hidden })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

ColFirst

The first column.

0

ColLast

The last column.

0

Width

The new column width measured as the number of characters of the maximum digit width of the numbers 0, 1, 2, ..., 9 as rendered in the normal style's font. Value -1 is used for autofit column widths.

10

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Hidden

Optional

Whether to hide columns.

0

Result Returns OK or error message.

Description

If format equals 0 then format is ignored. Columns may be hidden.

Examples

Create sheet with column format:

```
# create new xls file
Set Variable [ $book ; Value: MBS( "XL.NewBook"; 1 ) ]
# load logo picture
Set Variable [ $logoID ; Value: MBS( "XL.Book.AddPictureContainer"; $book; Writing data::Logo) ]
```

```

# create fonts
# create format for column
Set Variable [ $colFormat ; Value: MBS( "XL.Book.AddFormat"; $book) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetWrap"; $book; $colFormat; 1) // enable wrap ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetAlignH"; $book; $colFormat; 1) // left ]
#
# create specialized format for one cell with lock
Set Variable [ $lockFormat ; Value: MBS( "XL.Book.AddFormat"; $book; $colFormat) ]
Set Variable [ $r ; Value: MBS( "XL.Format.SetLocked"; $book; $lockFormat; 1) // on ]
#
# create sheet
Set Variable [ $sheet ; Value: MBS( "XL.Book.AddSheet"; $book; "Sales Receipt") ]
# set default format for whole column
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetCol"; $book; $sheet; 1; 1; 12; $colFormat ) ]
#
# put some text in using column format
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; 2; 1; "Long text wraps due to
column format") ]
#
# and locked format
Set Variable [ $r ; Value: MBS( "XL.Sheet.CellWriteText"; $book; $sheet; 3; 1; "And this is locked"; $lock-
Format) ]
#
# save and export
Set Field [ Writing data::Output ; MBS("XL.Book.Save"; $book; "test.xlsx") ]
Set Variable [ $r ; Value: MBS("XL.Book.Release"; $book) ]
#
Export Field Contents [ Writing data::Output ; Create folders: On ]

```

See also

- 190.28 XL.Book.Save 8886
- 190.36 XL.Book.SheetCount 8896
- 190.108 XL.Format.SetLocked 8991
- 190.109 XL.Format.SetNumFormat 8993
- 190.117 XL.LoadBook 9010
- 190.172 XL.Sheet.CellWriteText 9102
- 190.228 XL.Sheet.GetZoom 9167
- 190.247 XL.Sheet.SetAutoFitArea 9189
- 190.266 XL.Sheet.SetName 9216
- 190.288 XL.Sheet.SetZoom 9245

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 11st February 2020.

190.251 XL.Sheet.SetColHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetColHidden"; bookRef; sheetIndex; Col; Hidden)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Col

The column index to query.
0

Hidden

Pass 1 to hide row or 0 to show row.
1

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.186 XL.Sheet.GetColHidden 9122
- 190.187 XL.Sheet.GetColWidth 9123
- 190.198 XL.Sheet.GetHidden 9134
- 190.222 XL.Sheet.GetRowHidden 9161
- 190.252 XL.Sheet.SetColumn 9198
- 190.282 XL.Sheet.SetRowHidden 9239

Created 18th August 2014, last changed 18th August 2014.

190.252 XL.Sheet.SetColumn

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetColumn"; bookRef; sheetIndex; colFirst; colLast; width { ; format; hidden })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

colFirst

The first column. First column has index 0.

\$column

colLast

The last column.

\$column

width

The width of the column. Value -1 is used for autofit column widths.

5

format

Optional

The format index to use. You can use XL.Book.AddFormat to create new formats.

\$format

hidden

Optional

Whether to hide column. Default is 0.

0

Result Returns OK or error.

Description

Column width measured as the number of characters of the maximum digit width of the numbers 0, 1, 2, ..., 9 as rendered in the normal style's font. Columns may be hidden.

See also

- 190.3 XL.Book.AddFormat 8854
- 190.36 XL.Book.SheetCount 8896
- 190.109 XL.Format.SetNumFormat 8993

<i>190.252. XL.SHEET.SETCOLUMN</i>	9199
• 190.117 XL.LoadBook	9010
• 190.248 XL.Sheet.SetCellFormat	9190
• 190.250 XL.Sheet.SetCol	9194
• 190.251 XL.Sheet.SetColHidden	9197
• 190.254 XL.Sheet.SetFooter	9201
• 190.288 XL.Sheet.SetZoom	9245

Created 18th August 2014, last changed 26th July 2019.

190.253 XL.Sheet.SetDisplayGridlines

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetDisplayGridlines"; bookRef; sheetIndex; Value)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Value

The new setting. Pass 1 to have gridlines visible or 0 to hide gridlines.
1

Result Returns OK or error message.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.188 XL.Sheet.GetDisplayGridlines 9124

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 18th August 2014.

190.254 XL.Sheet.SetFooter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetFooter"; bookRef; sheetIndex; Text { ; Margin })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Text

The new footer text.

"test"

Margin

Optional

The margin to use.

0.5

Result Returns OK or error message.

Description

The footer text appears at the bottom of every page when printed. The length of the text must be less than or equal to 255. The footer text can contain special commands, for example a placeholder for the page number, current date or text formatting attributes. See XL.SetHeader for details. Margin is specified in inches.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.191 XL.Sheet.GetFooter 9127
- 190.225 XL.Sheet.GetVCenter 9164
- 190.252 XL.Sheet.SetColumn 9198
- 190.257 XL.Sheet.SetHCenter 9205
- 190.258 XL.Sheet.SetHeader 9206
- 190.265 XL.Sheet.SetMerge 9214
- 190.268 XL.Sheet.SetPaper 9219

- 190.278 XL.Sheet.SetProtect

Created 18th August 2014, last changed 11st July 2016.

190.255 XL.Sheet.SetGroupSummaryBelow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetGroupSummaryBelow"; bookRef; sheetIndex; below)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

below

The new setting.

0

Result Returns OK or error.

Description

Pass 1 for below, 0 for above.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.193 XL.Sheet.GetGroupSummaryBelow 9129
- 190.194 XL.Sheet.GetGroupSummaryRight 9130
- 190.256 XL.Sheet.SetGroupSummaryRight 9204

Created 18th August 2014, last changed 18th August 2014.

190.256 XL.Sheet.SetGroupSummaryRight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetGroupSummaryRight"; bookRef; sheetIndex; right)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

right

The new setting.

1

Result Returns OK or error.

Description

Pass 1 for right, false for left.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.193 XL.Sheet.GetGroupSummaryBelow 9129
- 190.194 XL.Sheet.GetGroupSummaryRight 9130
- 190.255 XL.Sheet.SetGroupSummaryBelow 9203

Created 18th August 2014, last changed 18th August 2014.

190.257 XL.Sheet.SetHCenter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetHCenter"; bookRef; sheetIndex; Value)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

The new setting. Pass 1 for yes, 0 for no.

0

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.191 XL.Sheet.GetFooter 9127
- 190.195 XL.Sheet.GetHCenter 9131
- 190.225 XL.Sheet.GetVCenter 9164
- 190.254 XL.Sheet.SetFooter 9201
- 190.258 XL.Sheet.SetHeader 9206
- 190.265 XL.Sheet.SetMerge 9214
- 190.268 XL.Sheet.SetPaper 9219
- 190.286 XL.Sheet.SetVCenter 9243

Created 18th August 2014, last changed 18th August 2014.

190.258 XL.Sheet.SetHeader

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetHeader"; bookRef; sheetIndex; Text { ; Margin })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Text

The new header text.
"test"

Margin

Optional
The margin to use.
0.5

Result Returns OK or error message.

Description

The text appears at the top of every page when printed. The length of the text must be less than or equal to 255. The header text can contain special commands, for example a placeholder for the page number, current date or text formatting attributes. Special commands are represented by single letter with a leading ampersand ("& "). Margin is specified in inches.

Examples

Set sheet name:

MBS("XL.Sheet.SetHeader"; \$book; 0; "My Report 2019")

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.196 XL.Sheet.GetHeader 9132
- 190.208 XL.Sheet.GetMerge 9144
- 190.211 XL.Sheet.GetPaper 9148

Code	Description
& L	specifies the beginning of the left section
& P	specifies the current page number
& N	specifies the total number of pages
& \d { 1,3 }	specifies the text font size, where font size is measured in points, for example: & 9 or & 36
& S	specifies whether the strikethrough text style is on or off
& X	specifies whether the superscript text style is on or off
& Y	specifies whether the subscript text style is on or off
& C	specifies the beginning of the center section
& D	specifies a date
& T	specifies a time
& G	specifies a picture
& U	specifies whether the single underline text style is on or off
& E	specifies whether the double underline text style is on or off
& R	specifies the beginning of the right section
& Z	specifies a workbook file path
& F	specifies a workbook file name
& A	specifies a sheet name
& "fontname"	specifies the text font, for example: & "Comic Sans MS"
& B	specifies whether the bold text style is on or off
& I	specifies whether the italic text style is on or off
& &	specifies an ampersand character (&)

- 190.225 XL.Sheet.GetVCenter 9164
- 190.254 XL.Sheet.SetFooter 9201
- 190.265 XL.Sheet.SetMerge 9214
- 190.266 XL.Sheet.SetName 9216
- 190.286 XL.Sheet.SetVCenter 9243

190.259 XL.Sheet.SetHorPageBreak

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetHorPageBreak"; bookRef; sheetIndex; Row { ; Pagebreak })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Pagebreak

Optional

Whether to break or not. Default is 1 for a break.

0

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.199 XL.Sheet.GetHorPageBreak 9135
- 190.200 XL.Sheet.GetHorPageBreakCount 9136
- 190.226 XL.Sheet.GetVerPageBreak 9165
- 190.287 XL.Sheet.SetVerPageBreak 9244

Created 18th August 2014, last changed 9th July 2015.

190.260 XL.Sheet.SetLandscape

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetLandscape"; bookRef; sheetIndex; Value)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

Pass 1 so pages are printed using landscape mode or 0 so pages are printed using portrait mode.

1

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.201 XL.Sheet.GetLandscape 9137

190.260.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr8](#)

Created 18th August 2014, last changed 18th August 2014.

190.261 XL.Sheet.SetMarginBottom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetMarginBottom"; bookRef; sheetIndex; Margin)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Margin

The new margin value.

0.1

Result Returns OK or error message.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.204 XL.Sheet.GetMarginBottom 9140
- 190.205 XL.Sheet.GetMarginLeft 9141
- 190.207 XL.Sheet.GetMarginTop 9143
- 190.262 XL.Sheet.SetMarginLeft 9211
- 190.263 XL.Sheet.SetMarginRight 9212
- 190.264 XL.Sheet.SetMarginTop 9213

Created 18th August 2014, last changed 18th August 2014.

190.262 XL.Sheet.SetMarginLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetMarginLeft"; bookRef; sheetIndex; Margin)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Margin

The new margin value.

0.1

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.204 XL.Sheet.GetMarginBottom 9140
- 190.205 XL.Sheet.GetMarginLeft 9141
- 190.206 XL.Sheet.GetMarginRight 9142
- 190.207 XL.Sheet.GetMarginTop 9143
- 190.261 XL.Sheet.SetMarginBottom 9210
- 190.263 XL.Sheet.SetMarginRight 9212
- 190.264 XL.Sheet.SetMarginTop 9213

Created 18th August 2014, last changed 18th August 2014.

190.263 XL.Sheet.SetMarginRight

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetMarginRight"; bookRef; sheetIndex; Margin)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Margin

The new margin value.

0.1

Result Returns OK or error message.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.205 XL.Sheet.GetMarginLeft 9141
- 190.206 XL.Sheet.GetMarginRight 9142
- 190.207 XL.Sheet.GetMarginTop 9143
- 190.261 XL.Sheet.SetMarginBottom 9210
- 190.262 XL.Sheet.SetMarginLeft 9211
- 190.264 XL.Sheet.SetMarginTop 9213

Created 18th August 2014, last changed 18th August 2014.

190.264 XL.Sheet.SetMarginTop

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetMarginTop"; bookRef; sheetIndex; Margin)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Margin

The new margin value.

0.1

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.204 XL.Sheet.GetMarginBottom 9140
- 190.205 XL.Sheet.GetMarginLeft 9141
- 190.206 XL.Sheet.GetMarginRight 9142
- 190.207 XL.Sheet.GetMarginTop 9143
- 190.261 XL.Sheet.SetMarginBottom 9210
- 190.262 XL.Sheet.SetMarginLeft 9211
- 190.263 XL.Sheet.SetMarginRight 9212

Created 18th August 2014, last changed 18th August 2014.

190.265 XL.Sheet.SetMerge

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetMerge"; bookRef; sheetIndex; rowFirst; rowLast; colFirst; colLast)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

The first row for the area. First row has index 0.

\$row

rowLast

The last row for the area. First row has index 0.

\$row

colFirst

The first column for the area. First column has index 0.

\$column

colLast

The last column for the area. First column has index 0.

\$column+1

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.196 XL.Sheet.GetHeader 9132
- 190.208 XL.Sheet.GetMerge 9144
- 190.235 XL.Sheet.Merge 9174
- 190.254 XL.Sheet.SetFooter 9201
- 190.258 XL.Sheet.SetHeader 9206
- 190.266 XL.Sheet.SetName 9216

190.265. <i>XL.SHEET.SETMERGE</i>	9215
• 190.268 XL.Sheet.SetPaper	9219
• 190.286 XL.Sheet.SetVCenter	9243

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 18th August 2014.

190.266 XL.Sheet.SetName

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetName"; bookRef; sheetIndex; Name)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Name

The new name for the sheet.

"First Sheet"

Result Returns OK or error message.

Description**Examples**

Set sheet name:

MBS("XL.Sheet.SetName"; \$book; 0; "MyReport")

See also

- 190.36 XL.Book.SheetCount 8896
- 190.60 XL.Font.SetName 8929
- 190.117 XL.LoadBook 9010
- 190.209 XL.Sheet.GetName 9146
- 190.211 XL.Sheet.GetPaper 9148
- 190.250 XL.Sheet.SetCol 9194
- 190.258 XL.Sheet.SetHeader 9206
- 190.265 XL.Sheet.SetMerge 9214
- 190.268 XL.Sheet.SetPaper 9219
- 190.281 XL.Sheet.SetRow 9237

Created 18th August 2014, last changed 16th May 2019.

190.267 XL.Sheet.SetNamedRange

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetNamedRange"; bookRef; sheetIndex; name; rowFirst; rowLast; colFirst; colLast { ; scopeId })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

name

The name to use for the named range.

"test"

rowFirst

The first row for the area. First row has index 0.

\$row

rowLast

The last row for the area. First row has index 0.

\$row+1

colFirst

The first column for the area. First column has index 0.

\$column

colLast

The last column for the area. First column has index 0.

\$column+1

scopeId

Optional

The scope ID to use. Can be -2 for undefined, -1 for workbook or positive number for other IDs. Default is undefined.

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010

9218

CHAPTER 190. XL

- 190.181 XL.Sheet.DeleteNamedRange 9115
- 190.210 XL.Sheet.GetNamedRange 9147
- 190.237 XL.Sheet.NamedRange 9176

190.267.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr4](#)

Created 18th August 2014, last changed 21st April 2018.

190.268 XL.Sheet.SetPaper

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPaper"; bookRef; sheetIndex; Value)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

The new paper format.

1

Result Returns OK or error message.

Description

See XL.GetPaper for a list of paper formats.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.196 XL.Sheet.GetHeader 9132
- 190.209 XL.Sheet.GetName 9146
- 190.211 XL.Sheet.GetPaper 9148
- 190.257 XL.Sheet.SetHCenter 9205
- 190.258 XL.Sheet.SetHeader 9206
- 190.265 XL.Sheet.SetMerge 9214
- 190.266 XL.Sheet.SetName 9216
- 190.278 XL.Sheet.SetProtect 9233

190.268.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr8](#)

Created 18th August 2014, last changed 18th August 2014.

190.269 XL.Sheet.SetPictureWithScale

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPictureWithScale"; bookRef; sheetIndex; Row; Column; pictureId; scale { ; X; Y; pos })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

pictureId

The picture identifier number.

\$pictureID

scale

The scale factor.

1.0

X

Optional

Relative offset.

0

Y

Optional

Relative offset.

0

pos

Optional

The positioning. 0 = Move and Size, 1 = Move, 2 = Absolute.

0

Result Returns OK or error.

Description

Use XL.Book.AddPictureFile or XL.Book.AddPictureContainer for getting picture identifier.

Examples

Add a picture to excel sheet:

```
# add picture to file
Set Variable [ $logoID; Value:MBS( "XL.Book.AddPictureContainer"; $book; Writing data::Logo) ]
# position with size:
Set Variable [ $r; Value:MBS( "XL.Sheet.SetPictureWithSize"; $book; $sheet; 2; 1; $logoID; 100; 100) ]
# or with factor:
Set Variable [ $r; Value:MBS( "XL.Sheet.SetPictureWithScale"; $book; $sheet; 2; 1; $logoID; .2) ]
```

See also

- 190.4 XL.Book.AddPictureContainer 8857
- 190.5 XL.Book.AddPictureFile 8859
- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.270 XL.Sheet.SetPictureWithSize 9222

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 27th July 2018.

190.270 XL.Sheet.SetPictureWithSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPictureWithSize"; bookRef; sheetIndex; Row; Column; pictureId; width; height { ; X; Y; pos })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

pictureId

The picture identifier number.

\$pictureID

width

The picture width to use. Can be -1 or empty for automatic size.

400

height

The picture height to use. Can be -1 or empty for automatic size.

300

X

Optional

Relative offset.

0

Y

Optional

Relative offset.

0

pos

Optional

The positioning. 0 = Move and Size, 1 = Move, 2 = Absolute.

0

Result Returns OK or error.

Description

Use XL.Book.AddPictureFile or XL.Book.AddPictureContainer for getting a picture identifier.

Width and height can be -1 (or empty) for default size of picture.

Examples

Add a picture to excel sheet:

```
# add picture to file
Set Variable [ $logoID; Value:MBS( "XL.Book.AddPictureContainer"; $book; Writing data::Logo) ]
# position with size:
Set Variable [ $r; Value:MBS( "XL.Sheet.SetPictureWithSize"; $book; $sheet; 2; 1; $logoID; 100; 100) ]
# or with factor:
Set Variable [ $r; Value:MBS( "XL.Sheet.SetPictureWithScale"; $book; $sheet; 2; 1; $logoID; .2) ]
```

Adds picture with proportional scaled image:

```
Set Variable [ $image ; Value: MBS( "GMImage.NewFromContainer"; Writing data::Logo ) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $destWidth ; Value: 120 ]
Set Variable [ $destHeight ; Value: 120 ]
Set Variable [ $width ; Value: MBS( "GMImage.GetWidth"; $image ) ]
Set Variable [ $height ; Value: MBS( "GMImage.GetHeight"; $image ) ]
Set Variable [ $r ; Value: MBS( "GMImage.Release"; $image ) ]
Set Variable [ $factor ; Value: Min ( $destheight / $height; $destwidth / $width ) ]
Set Variable [ $dwidth ; Value: $width * $factor ]
Set Variable [ $dheight ; Value: $height * $factor ]
#
Set Variable [ $logoID ; Value: MBS( "XL.Book.AddPictureContainer"; $book; Writing data::Logo) ]
If [ MBS("IsError") = 0 ]
Set Variable [ $r ; Value: MBS( "XL.Sheet.SetPictureWithSize"; $book; $sheet; 2; 1; $logoID; $dwidth; $dheight) ]
End If
End If
```

See also

- 85.123 GMImage.GetHeight 4501
- 85.169 GMImage.GetWidth 4550
- 85.191 GMImage.New 4580
- 85.193 GMImage.NewFromContainer 4584
- 85.214 GMImage.Release 4612

9224

CHAPTER 190. XL

- 124.6 IsError 6266
- 190.4 XL.Book.AddPictureContainer 8857
- 190.5 XL.Book.AddPictureFile 8859
- 190.117 XL.LoadBook 9010
- 190.269 XL.Sheet.SetPictureWithScale 9220

Example Databases

- [XL/Writing data](#)

Created 18th August 2014, last changed 29th July 2019.

190.271 XL.Sheet.SetPrintArea

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPrintArea"; bookRef; sheetIndex; rowFirst; rowLast; colFirst; colLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

The first row for the area. First row has index 0.

\$row

rowLast

The last row for the area. First row has index 0.

\$row

colFirst

The first column for the area. First column has index 0.

\$column

colLast

The last column for the area. First column has index 0.

\$column

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.175 XL.Sheet.ClearPrintArea 9109
- 190.212 XL.Sheet.GetPicture 9150
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.219 XL.Sheet.GetPrintZoom 9158
- 190.247 XL.Sheet.SetAutoFitArea 9189

9226

CHAPTER 190. XL

- 190.276 XL.Sheet.SetPrintRow

9231

- 190.277 XL.Sheet.SetPrintZoom

9232

Created 18th August 2014, last changed 18th August 2014.

190.272 XL.Sheet.SetPrintFit

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPrintFit"; bookRef; sheetIndex { ; wPages; hPages })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

wPages

Optional

The number of pages horizontally. Default is 1.

1

hPages

Optional

The number of pages vertically. Default is 1.

1

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.220 XL.Sheet.GetProtect 9159
- 190.271 XL.Sheet.SetPrintArea 9225
- 190.276 XL.Sheet.SetPrintRow 9231
- 190.277 XL.Sheet.SetPrintZoom 9232
- 190.278 XL.Sheet.SetProtect 9233

Created 18th August 2014, last changed 9th July 2015.

190.273 XL.Sheet.SetPrintGridliens

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPrintGridliens"; bookRef; sheetIndex; Value)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

The new setting. Pass 1 to have gridlines printed or 0 to hide gridlines on printing.

1

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.215 XL.Sheet.GetPrintGridlines 9154

Created 18th August 2014, last changed 18th August 2014.

190.274 XL.Sheet.SetPrintRepeatCols

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPrintRepeatCols"; bookRef; sheetIndex; colFirst; colLast)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

colFirst

The first column for the area. First column has index 0.

\$column

colLast

The last column for the area.

\$column

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.176 XL.Sheet.ClearPrintRepeats 9110
- 190.216 XL.Sheet.GetPrintRepeatCols 9155
- 190.217 XL.Sheet.GetPrintRepeatRows 9156
- 190.275 XL.Sheet.SetPrintRepeatRows 9230

Created 18th August 2014, last changed 18th August 2014.

190.275 XL.Sheet.SetPrintRepeatRows

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPrintRepeatRows"; bookRef; sheetIndex; rowFirst; rowLast)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rowFirst

The first row. First row has index 0.

\$row

rowLast

The last row.

\$row

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.176 XL.Sheet.ClearPrintRepeats 9110
- 190.216 XL.Sheet.GetPrintRepeatCols 9155
- 190.217 XL.Sheet.GetPrintRepeatRows 9156
- 190.274 XL.Sheet.SetPrintRepeatCols 9229

Created 18th August 2014, last changed 18th August 2014.

190.276 XL.Sheet.SetPrintRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPrintRow"; bookRef; sheetIndex; Value)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

The new setting.

0

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.190 XL.Sheet.GetFirstRow 9126
- 190.203 XL.Sheet.GetLastRow 9139
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.271 XL.Sheet.SetPrintArea 9225
- 190.277 XL.Sheet.SetPrintZoom 9232
- 190.278 XL.Sheet.SetProtect 9233

Created 18th August 2014, last changed 18th August 2014.

190.277 XL.Sheet.SetPrintZoom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetPrintZoom"; bookRef; sheetIndex; Value)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

The new zoom level.

150

Result Returns OK or error message.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.213 XL.Sheet.GetPrintArea 9152
- 190.214 XL.Sheet.GetPrintFit 9153
- 190.218 XL.Sheet.GetPrintRow 9157
- 190.219 XL.Sheet.GetPrintZoom 9158
- 190.271 XL.Sheet.SetPrintArea 9225
- 190.272 XL.Sheet.SetPrintFit 9227
- 190.276 XL.Sheet.SetPrintRow 9231

Created 18th August 2014, last changed 18th August 2014.

190.278 XL.Sheet.SetProtect

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetProtect"; bookRef; sheetIndex; Value)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

The new setting.

1

Result Returns OK or error message.

Description**Examples**

Protect the 3rd sheet:

MBS("XL.Sheet.SetProtect"; \$book; 2; 1)

See also

- 190.36 XL.Book.SheetCount 8896
- 190.108 XL.Format.SetLocked 8991
- 190.117 XL.LoadBook 9010
- 190.191 XL.Sheet.GetFooter 9127
- 190.220 XL.Sheet.GetProtect 9159
- 190.254 XL.Sheet.SetFooter 9201
- 190.268 XL.Sheet.SetPaper 9219
- 190.272 XL.Sheet.SetPrintFit 9227
- 190.276 XL.Sheet.SetPrintRow 9231
- 190.279 XL.Sheet.SetProtectEx 9234

Created 18th August 2014, last changed 18th August 2014.

190.279 XL.Sheet.SetProtectEx

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetProtectEx"; bookRef; sheetIndex; protect; Password; ProtectEx)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

protect

Whether to protect. Pass 1 to enable protection and 0 to disable.

1

Password

The password to use.

ProtectEx

The new protection setting. This can be a list of several options or a number.

"default"

Result Returns OK or error.

Description

It is possible to combine a few Enhanced Protection values.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.108 XL.Format.SetLocked 8991
- 190.117 XL.LoadBook 9010
- 190.220 XL.Sheet.GetProtect 9159
- 190.278 XL.Sheet.SetProtect 9233

Created 22nd April 2017, last changed 22nd April 2017.

Enhanced Protection value	Description
default	Default protection.
all	Nothing is allowed except cell selections.
Objects	Objects are locked when the sheet is protected.
Scenarios	Scenarios are locked when the sheet is protected.
FormatCells	Formatting cells is allowed when the sheet is protected.
FormatColumns	Formatting columns is allowed when the sheet is protected.
FormatRows	Formatting rows is allowed when the sheet is protected.
InsertColumns	Inserting columns is allowed when the sheet is protected.
InsertRows	Inserting rows is allowed when the sheet is protected.
InsertHyperlinks	Inserting hyperlinks is allowed when the sheet is protected.
DeleteColumns	Deleting columns is allowed when the sheet is protected.
DeleteRows	Deleting rows is allowed when the sheet is protected.
SelLockedCells	Selection of locked cells is locked when the sheet is protected.
Sort	Sorting is allowed when the sheet is protected.
AutoFilter	Autofilters are allowed when the sheet is protected.
PivotTables	Pivot tables are allowed when the sheet is protected.
SelUnlockedCells	Selection of unlocked cells is locked when the sheet is protected.

190.280 XL.Sheet.SetRightToLeft

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetRightToLeft"; bookRef; sheetIndex; rightToLeft)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

rightToLeft

The new value.

1

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.245 XL.Sheet.RightToLeft 9186

Created 22nd April 2017, last changed 22nd April 2017.

190.281 XL.Sheet.SetRow

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetRow"; bookRef; sheetIndex; Row; Height { ; Format; Hidden })

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row index to set.

0

Height

The new row height measured in point size.

20

Format

Optional

The format for the cell. This is index from 0 to XL.GetFormatCount-1 in the book's list of formats.

0

Hidden

Optional

Whether to hide columns.

0

Result Returns OK or error message.

Description

Row may be hidden.

Height is in points. If you want to convert from pixels to points you can use this calculation: points = pixels * 72 / 96. So for a height of 72 pixel, you pass 54 points.

See also

- 190.3 XL.Book.AddFormat 8854
- 190.36 XL.Book.SheetCount 8896
- 190.89 XL.Format.SetAlignH 8960
- 190.114 XL.Format.SetWrap 9002
- 190.117 XL.LoadBook 9010

9238

CHAPTER 190. XL

- 190.228 XL.Sheet.GetZoom 9167
- 190.234 XL.Sheet.InsertRow 9173
- 190.250 XL.Sheet.SetCol 9194
- 190.266 XL.Sheet.SetName 9216
- 190.288 XL.Sheet.SetZoom 9245

190.281.1 Blog Entries

- [MBS Filemaker Plugin, version 4.3pr11](#)

Created 18th August 2014, last changed 10th July 2016.

190.282 XL.Sheet.SetRowHidden

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetRowHidden"; bookRef; sheetIndex; Row; Hidden)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.
\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.
0

Row

The row index to set.
0

Hidden

Pass 1 to hide row or 0 to show row.
1

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.186 XL.Sheet.GetColHidden 9122
- 190.198 XL.Sheet.GetHidden 9134
- 190.221 XL.Sheet.GetRowHeight 9160
- 190.222 XL.Sheet.GetRowHidden 9161
- 190.251 XL.Sheet.SetColHidden 9197

Created 18th August 2014, last changed 18th August 2014.

190.283 XL.Sheet.SetTabColor

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetTabColor"; bookRef; sheetIndex; Color)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Color

The color value to use.

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.284 XL.Sheet.SetTabColorRGB 9241

Created 22nd April 2017, last changed 22nd April 2017.

190.284 XL.Sheet.SetTabColorRGB

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetTabColorRGB"; bookRef; sheetIndex; Red; Green; Blue)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Red

The red color value. Range 0 to 255.

0

Green

The green color value. Range 0 to 255.

0

Blue

The blue color value. Range 0 to 255.

0

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.283 XL.Sheet.SetTabColor 9240

190.284.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr3](#)

Created 22nd April 2017, last changed 22nd April 2017.

190.285 XL.Sheet.SetTopLeftView

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetTopLeftView"; bookRef; sheetIndex; Row; Column)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.224 XL.Sheet.GetTopLeftView 9163

Created 18th August 2014, last changed 18th August 2014.

190.286 XL.Sheet.SetVCenter

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetVCenter"; bookRef; sheetIndex; Value)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

The new setting. Pass 1 for yes, 0 for no.

0

Result Returns OK or error message.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.191 XL.Sheet.GetFooter 9127
- 190.195 XL.Sheet.GetHCenter 9131
- 190.196 XL.Sheet.GetHeader 9132
- 190.225 XL.Sheet.GetVCenter 9164
- 190.254 XL.Sheet.SetFooter 9201
- 190.257 XL.Sheet.SetHCenter 9205
- 190.258 XL.Sheet.SetHeader 9206
- 190.268 XL.Sheet.SetPaper 9219

Created 18th August 2014, last changed 18th August 2014.

190.287 XL.Sheet.SetVerPageBreak

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190.XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetVerPageBreak"; bookRef; sheetIndex; Column { ; Pagebreak })

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Column

The column for the cell. First column has index 0.

\$column

Pagebreak

Optional

Whether to break or not. Default is 1 for a break.

0

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.199 XL.Sheet.GetHorPageBreak 9135
- 190.226 XL.Sheet.GetVerPageBreak 9165
- 190.227 XL.Sheet.GetVerPageBreakCount 9166
- 190.259 XL.Sheet.SetHorPageBreak 9208

Created 18th August 2014, last changed 9th July 2015.

190.288 XL.Sheet.SetZoom

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SetZoom"; bookRef; sheetIndex; Value)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Value

The new zoom level.

150

Result Returns OK or error message.

Description

100 is a usual view.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.228 XL.Sheet.GetZoom 9167
- 190.250 XL.Sheet.SetCol 9194
- 190.252 XL.Sheet.SetColumn 9198
- 190.254 XL.Sheet.SetFooter 9201
- 190.266 XL.Sheet.SetName 9216
- 190.281 XL.Sheet.SetRow 9237

Created 18th August 2014, last changed 18th August 2014.

190.289 XL.Sheet.Split

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	3.5	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.Split"; bookRef; sheetIndex; Row; Column)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Row

The row for the cell. First row has index 0.

\$row

Column

The column for the cell. First column has index 0.

\$column

Result Returns OK or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.290 XL.Sheet.SplitInfo 9247

Created 18th August 2014, last changed 18th August 2014.

190.290 XL.Sheet.SplitInfo

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	4.3	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.SplitInfo"; bookRef; sheetIndex; selector)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

selector

Which value to query. Can be row or col.

"row"

Result Returns value or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.289 XL.Sheet.Split 9246

Created 18th August 2014, last changed 18th August 2014.

190.291 XL.Sheet.Table

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.Table"; bookRef; sheetIndex; Index; Selector)

Parameters

bookRef

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Index

The index of the table to query.

0

Selector

Which value to query. Can be rowFirst, rowLast, colFirst, colLast, headerRowCount (the number of header rows showing at the top of the table. 0 means that the header row is not shown), totalsRowCount (the number of totals rows that shall be shown at the bottom of the table. 0 means that the totals row is not shown) or name.

"rowFirst"

Result Returns OK or error.

Description

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.235 XL.Sheet.Merge 9174
- 190.292 XL.Sheet.TableSize 9249
- 190.293 XL.Sheet.Type 9250

Created 22nd April 2017, last changed 22nd April 2017.

190.292 XL.Sheet.TableSize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.TableSize"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns number or error.

Description**See also**

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.236 XL.Sheet.MergeSize 9175
- 190.291 XL.Sheet.Table 9248

Created 22nd April 2017, last changed 22nd April 2017.

190.293 XL.Sheet.Type

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	7.2	Yes	Yes	Yes	Yes	Yes

MBS("XL.Sheet.Type"; bookRef; sheetIndex)

Parameters**bookRef**

The reference to the workbook. Please use XL.LoadBook to load a file.

\$ref

sheetIndex

The index of the sheet. This number ranges from 0 to XL.Book.SheetCount-1.

0

Result Returns text or error.

Description

Type is Sheet, Chart or Unknown.

See also

- 190.36 XL.Book.SheetCount 8896
- 190.117 XL.LoadBook 9010
- 190.291 XL.Sheet.Table 9248

Created 22nd April 2017, last changed 22nd April 2017.

190.294 XL.Uninitialize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
190 XL	10.1	Yes	Yes	Yes	Yes	Yes

MBS("XL.Uninitialize")

Result Returns OK or error.

Description

This will clear all XLBook objects, clear all function pointers and free the library. You only need to call this if you like to replace the Library file and load another version. The library is automatically unloaded when FileMaker quits.

See also

- 190.115 XL.Initialize 9005
- 190.116 XL.IsInitialized 9008

190.294.1 Blog Entries

- [MBS FileMaker Plugin, version 10.1pr6](#)

Created 28th February 2020, last changed 28th February 2020.

Chapter 191

XML

Functions for working on XML text.

With XPath queries you can query values or lists from XML.

191.1 Dictionary.ToXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
65 Dictionary 191 XML	6.1	Yes	Yes	Yes	Yes	Yes

MBS("Dictionary.ToXML"; DictionaryRef { ; Format })

Parameters

DictionaryRef

The reference number to the dictionary as returned by Dictionary.Create function.
\$dic

Format

Optional

If 1, we format pretty. Pass 0 to get compact xml.

1

Result Returns OK or error.

Description

Examples

Test exporting dictionaries:

```
#  
#  
# Create new Dictionary
```

```

#
Set Variable [ $param; Value:MBS( "Dictionary.Create" ) ]
#
# Fill in values
#
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "text"; Pass Parameters with Dictionary::TextField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "number"; Pass Parameters with Dictionary::NumberField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "date"; Pass Parameters with Dictionary::DateField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "time"; Pass Parameters with Dictionary::TimeField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "timestamp"; Pass Parameters with Dictionary::TimeStampField ) ]
Set Variable [ $r; Value:MBS( "Dictionary.SetValueForKey"; $param; "container"; Pass Parameters with Dictionary::ContainerField ) ]
#
# Call save xml, json and text
#
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToXML"; $param; 1); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.xml"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToText"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.txt"); "UTF8" ) ]
Set Variable [ $r; Value:MBS( "Text.WriteTextFile"; MBS("Dictionary.ToJSON"; $param); MBS( "Path.AddPathComponent"; MBS( "Folders.UserDesktop" ) ; "dictionary.json.txt"); "UTF8" ) ]
#
# free memory
#
Set Variable [ $r; Value:MBS("Dictionary.Release"; $param) ]

```

See also

- 65.6 Dictionary.Count 2406
- 65.7 Dictionary.Create 2407
- 65.14 Dictionary.Release 2417
- 65.19 Dictionary.SetValueForKey 2423
- 100.1 Dictionary.ToJSON 5231
- 65.22 Dictionary.ToText 2429
- 81.8 Folders.UserDesktop 4177
- 121.1 Path.AddPathComponent 6135
- 164.68 Text.WriteTextFile 7871

191.1.1 **Blog Entries**

- [MBS FileMaker Plugin, version 6.1pr3](#)

Created 25th February 2016, last changed 20th February 2018.

191.2 XML.ApplyStylesheet

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	8.4	Yes	Yes	Yes	Yes	Yes

MBS("XML.ApplyStylesheet"; XML; StyleSheet { ; Parameters })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

```
"<test>Hello</test>"
```

StyleSheet

The XML of the style sheet. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

Parameters

Optional

The list of parameters to pass to the engine. Pass a list with key=value format.

```
"id=123&test=2"
```

Result Returns text or error.

Description

Performs a XSLT transformation on the input document.

The output may be a non-wellformed output XML wise!

Returns various errors if XML is not well formed or style sheet is invalid.

Based on LibXSLT, so it provides an implementation of XSLT 1.0, plus most of the EXSLT set of processor-portable extensions functions and some of Saxon's evaluate and expressions extensions.

Examples

Apply a stylesheet:

```
Set Variable [ $InputXML; Value:XSLT::InputXML ]
```

```
Set Variable [ $StyleSheet; Value:XSLT::StyleSheet ]
```

```
Set Variable [ $Output; Value:MBS("XML.ApplyStylesheet"; $InputXML; $StyleSheet) ]
```

```
Set Field [ XSLT::OutputXML; $Output ]
```

See also

- 191.25 XML.Parse

9291

Example Databases

- [XML/XSLT](#)

191.2.1 Blog Entries

- [MBS FileMaker Plugin, version 9.6pr2](#)
- [MBS FileMaker Plugin, version 9.5pr4](#)
- [Custom context menu commands for FileMaker ScriptWorkspace](#)
- [Neues MBS FileMaker Plugin 8.4 - Über 5400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.4 - More than 5400 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.4pr5](#)
- [Playing with LibXSLT](#)

Created 22nd August 2018, last changed 23th August 2019.

191.3 XML.Canonical

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	6.2	Yes	Yes	Yes	Yes	Yes

MBS("XML.Canonical"; XML { ; Flags; Mode })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 2 to include comments.

3

Mode

Optional

The output mode. Can be 0 for Original C14N 1.0 spec, 1 for Exclusive C14N 1.0 spec or 2 for C14N 1.1 spec.

0

Result Returns XML or error.

Description

Examples

Make canonical:

MBS("XML.Canonical"; Canonical XML::Input XML; 3)

See also

- 191.25 XML.Parse

9291

Example Databases

- [XML/Canonical XML](#)
- [XML/XML Test](#)

191.3.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr10](#)

191.4 XML.ClearVariables

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.ClearVariables"; VariableList)

Parameters

VariableList

The list of variables.

"test"

Result Returns OK or error.

Description

Pass the list returned from XML.SetVariables to clear the variables list.

See also

- 191.33 XML.SetVariables

9305

Example Databases

- [XML/XML Test](#)

191.4.1 Blog Entries

- [New XML Functions in MBS FileMaker Plugin](#)

191.4.2 FileMaker Magazin

- Ausgabe 3/2017, Seite 27

Created 26th December 2016, last changed 26th December 2016.

191.5 XML.Colorize

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	8.2	Yes	Yes	Yes	Yes	Yes

MBS("XML.Colorize"; XML)

Parameters

XML

The XML text to process.

"<test>Hello</test>"

Result Returns formatted text or error.

Description

This colorizes an existing XML text to show to user.

Keys get blue, text value black, attributes in purple.

Text is returned only with colors. You can apply text font and font size with normal FileMaker functions.

Processing time is linear to length, so should be faster than custom functions.

Examples

Colorize a field:

Set Field [Data::XML ; MBS("XML.Colorize"; Data::XML)]

Line numbers, color and format:

MBS("Text.AddLineNumbers"; MBS("XML.Colorize"; MBS("XML.Format"; Buckets::Listing)))

See also

- [164.1 Text.AddLineNumbers](#) 7767
- [191.8 XML.Format](#) 9267

Example Databases

- [CURL/Amazon S3 Buckets](#)
- [DynaPDF/List XFA Streams](#)
- [XML/XML Colored](#)
- [XML/XML to JSON](#)

191.5.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [Colorize JSON or XML in FileMaker with line numbers](#)
- [MBS FileMaker Plugin, version 8.2pr5](#)
- [MBS FileMaker Plugin, version 8.2pr2](#)
- [Colorize XML in FileMaker](#)

Created 8th April 2018, last changed 12nd November 2018.

191.6 XML.DeletePath

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.4	Yes	Yes	Yes	Yes	Yes

MBS("XML.DeletePath"; XML; Path { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

```
"<test>Hello</test>"
```

Path

The path to the node or attribute to query.

```
"name"
```

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 4 to format returned XML. Add 32 to return result as XML.

```
0
```

Result Returns OK or error.

Description

This function uses a path notation like the JSON functions in FileMaker to describe paths.

You can use name of a node followed by option index in square brackets. On the end you can use # followed by a name of an attribute to select only the attribute.

Delimiter between items can be dot like FileMaker or newline.

If you pass in a XML reference number and you do not pass Flag value 32 for returning as XML, we just modify the XML reference in memory. This avoids performance hit for outputting and parsing xml for each change.

Examples

Delete node:

```
MBS( "XML.DeletePath"; "<test><node>Hello</node></test>"; "test.node"; 0)
```

```
Example result: <?xml version="1.0" encoding="UTF-8"?>
<test/>
```

Delete attribute:

```
MBS( "XML.DeletePath"; "<test><node id=\"123\">Hello</node></test>"; "test.node# id"; 0)
```

```
Example result: <?xml version="1.0" encoding="UTF-8"?>
<test><node>Hello</node></test>
```

See also

- 191.25 XML.Parse

9291

191.6.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr6](#)

Created 16th September 2017, last changed 2nd February 2018.

191.7 XML.ExtractText

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.ExtractText"; XML { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read.

0

Result Returns text or error.

Description

Returns a list with texts from all sub nodes.

Examples

Extracts text:

```
MBS( "XML.ExtractText"; "<Person><FirstName>Markus</FirstName><LastName>Müller</LastName><City>New York</City></Person>" )
```

Example result: Markus

Müller

New York

Custom function to get xml value as text:

```
GetXMLValue(xml, name)
```

returns text of a xml node

```
Let ( [
part = MBS( "XML.SubTree"; xml; name);
result = If( MBS("IsError"); "" ; If(Length(part) = 0; "" ; MBS( "XML.ExtractText"; part)))
] ; Trim( result))
```

See also

- 124.6 IsError

- 191.25 XML.Parse 9291
- 191.34 XML.SubTree 9307

Example Databases

- [CURL/WebServices/magento older](#)
- [CURL/WebServices/Sales Force Test](#)
- [XML/XML Test](#)

191.7.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.4 - Über 5400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 8.4 - More than 5400 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 8.4pr1](#)
- [MBS FileMaker Plugin, version 7.0pr1](#)
- [New XML Functions in MBS FileMaker Plugin](#)

191.7.2 FileMaker Magazin

- [Ausgabe 3/2017, Seite 27](#)

Created 26th December 2016, last changed 2nd February 2018.

191.8 XML.Format

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	6.2	Yes	Yes	Yes	Yes	Yes

MBS("XML.Format"; XML { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 8 to remove all namespaces before query to have queries easier. (new in 6.3)

0

Result Returns XML or error.

Description

Examples

Format the document:

MBS("XML.Format"; Canonical XML::Input XML; 1)

Format removing namespace:

MBS("XML.Format"; "<cfdi:Invoice invoiceTotal=\"450.24\"></cfdi:Invoice>" ; 8)

Check if XML is valid:

MBS("XML.Format"; "<hello></Hello>";0)

Example result: [MBS] Failed to parse XML: Opening and ending tag mismatch: hello line 1 and Hello

See also

- 164.1 Text.AddLineNumbers 7767
- 191.5 XML.Colorize 9261
- 191.25 XML.Parse 9291

Example Databases

- [CURL/Amazon S3 Buckets](#)

- [DynaPDF/List XFA Streams](#)
- [XML/Canonical XML](#)
- [XML/XML Test](#)
- [XML/XML to JSON](#)

191.8.1 Blog Entries

- [Neues MBS FileMaker Plugin 8.3](#)
- [MBS FileMaker Plugin 8.3 released](#)
- [Colorize JSON or XML in FileMaker with line numbers](#)
- [MBS FileMaker Plugin, version 7.5pr8](#)
- [MBS FileMaker Plugin, version 6.2pr10](#)

191.8.2 FileMaker Magazin

- [Ausgabe 3/2017, Seite 27](#)

Created 20th May 2016, last changed 2nd February 2018.

191.9 XML.GetAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.GetAttribute"; XML; Name { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Name

The name of the attribute to query.

"name"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read.

0

Result Returns text or error.

Description

Examples

Query attribute value:

MBS("XML.GetAttribute"; "mbsplugins.de"; "href")

Example result: http://mbsplugins.de

See also

- 191.11 XML.HasAttribute 9272
- 191.22 XML.ListAttributes 9287
- 191.25 XML.Parse 9291

191.9.1 Blog Entries

- [New XML Functions in MBS FileMaker Plugin](#)

Created 27th December 2016, last changed 2nd February 2018.

191.10 XML.GetPathValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.4	Yes	Yes	Yes	Yes	Yes

MBS("XML.GetPathValue"; XML; Path { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times queries to the XML without parsing it each time.

```
"<test>Hello</test>"
```

Path

The path to the node or attribute to query.

```
"name"
```

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 2 to return empty text instead of errors. Add 4 to format returned XML. Add 32 to return result as XML, if it's more than just a text.

```
0
```

Result Returns text or error.

Description

This function uses a path notation like the JSON functions in FileMaker to describe paths.

You can use name of a node followed by option index in square brackets. On the end you can use # followed by a name of an attribute to select only the attribute.

Delimiter between items can be dot like FileMaker or newline.

Examples

Return test node value:

```
MBS( "XML.GetPathValue"; "<test>Hello</test>"; "test"; 0)
```

Example result: "Hello"

Query value of attribute:

```
MBS( "XML.GetPathValue"; "<test id=\"123\">Hello</test>"; "test# id")
```

Example result: "123"

Query value of node:

```
MBS( "XML.GetPathValue"; "<outer><inner>Hello</inner></outer>"; "outer.inner")
```

Example result: "Hello"

Query subtree as XML:

```
MBS( "XML.GetPathValue"; "<outer><middle><inner>Hello</inner></middle></outer>"; "outer.middle"; 32+4)
```

```
Example result: "<?xml version="1.0" encoding="UTF-8"?>
<middle>
<inner>Hello</inner>
</middle>"
```

Query items with index:

```
MBS( "XML.GetPathValue"; "<people><personid>123</personid><personid>456</personid><personid>789</personid></people>"; "people.personid [ 2 ] "; 0)
```

Example result: "789"

Query value from complex XML:

```
MBS("XML.GetPathValue"; XML::BKML_data; "bkml.form106AB.data.line1.realProperty.property [ 0 ] .citystatezip";0)
```

Query items with index in variable:

```
MBS( "XML.GetPathValue"; "<people><personid>123</personid><personid>456</personid><personid>789</personid></people>"; "people.personid [ " & $index & " ] "; 0)
```

See also

- [191.25 XML.Parse](#) 9291
- [191.31 XML.SetPathValue](#) 9301

Example Databases

- [CURL/Amazon S3 Upload File](#)

191.10.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr4](#)
- [MBS FileMaker Plugin, version 7.5pr7](#)
- [MBS FileMaker Plugin, version 7.5pr6](#)
- [MBS FileMaker Plugin, version 7.4pr6](#)

Created 15th September 2017, last changed 4th March 2020.

191.11 XML.HasAttribute

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.HasAttribute"; XML; Name { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Name

The name of the attribute to query.

"name"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read.

0

Result Returns 1, 0 or error.

Description

Examples

Queries whether attribute exists:

MBS("XML.HasAttribute"; "mbsplugins.de"; "href")

Example result: 1

See also

- 191.9 XML.GetAttribute 9269
- 191.22 XML.ListAttributes 9287
- 191.25 XML.Parse 9291

Created 27th December 2016, last changed 2nd February 2018.

191.12 XML.Import

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	5.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import"; XML; InsertFileName { ; TableNamePrefix; Flags })

Parameters

XML

The XML data to import.

InsertFileName

The file name of where the insert table is inside. Can be empty.

Get(FileName)

TableNamePrefix

Optional

The prefix to put in front of all tables.

"Import"

Flags

Optional

Sum of flags. Pass 1 to ignore errors in xml and continue parsing. Pass 2 to ignore outer XML wrapper nodes. Pass 4 to import flat, so no subtables for included nodes. Pass 8 to convert CDATA to text nodes. CDATA should contain ASCII or UTF-8 text! Pass 16 to trim values.

0

Result Returns number or error.

Description

This function can import any XML into FileMaker tables with all fields and attributes.

Returns number of records to be added. This function prefers the import and runs it later at idle time. In a script please call XML.Import and then loop and do script pauses. Then use XML.Import.Status to check regularly for updates. When you get back Finished as status, the script can continue with other work.

If you have a XML file you need to import regularly into FileMaker and you have no XSLT to transform it for FileMaker, you can use this plugin function. On the first run, it creates for a sample xml file the required tables and fields. Then you can define any layout or script to process values, e.g. copy into your tables. On further runs the plugin may add more fields (if newer xml file has more fields) and import newer records.

All tables have three default fields. `_RecordUUID` is an unique identifier for the record. `_ParentRecordUUID` provides a link to the record one level higher in the XML. This can be used to find child/parent records. The `_CreationTimeStamp` is the creation date, so you can distinguish different imports.

As a lot of records with a lot of data is imported and you may not need everything, you may want to put the imports in an extra FileMaker file. You decide if you clear tables before import or you want to keep history of all imports.

If the XML has errors like a missing < in the xml, you get an error. If you switch on IgnoreError parameter, the plugin reads everything until the error is reached which may give less records than possible.

This function works at idle time which is currently not supported on server. But you can use the function XML.Import.Work to perform the work instead of the idle handler. This enables importing of data, but not table/field creation.

Requires FileMaker 12 or newer.

See also XML.Import.SetBaseFields and XML.Import.SetExtraField.

Examples

Imports test.xml into FileMaker:

```
Set Variable [ $text; Value:MBS("Text.ReadTextFile"; "/Users/cs/Desktop/test.xml"; "UTF-8") ]
Set Variable [ $r; Value:MBS("XML.Import"; $text; ""; "") ]
Set Variable [ $text; Value:"" ]
If [ MBS("IsError") = 0 ]
Set Variable [ $total; Value:MBS("XML.Import.Total") ]
Loop
Set Variable [ $todo; Value:MBS("XML.Import.TODO") ]
Pause/Resume Script [ Duration (seconds): 1 ]
Set Variable [ $s; Value:MBS("XML.Import.Status") ]
Exit Loop If [ $s "Working" ]
End Loop
Show Custom Dialog [ "XML Import"; $r & " " & $s ]
End If
```

Import script with progress bar for importing XML with Windows ANSI encoding:

```
Go to Layout [ "XML Import" (Import2Row) ]
Delete All Records [ No dialog ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetBottomText"; "") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetTopText"; "Importiere XML") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetTitle"; "Import...") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetButtonCaption"; "Abbrechen") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetProgress"; -1) ]
Set Variable [ $r; Value:MBS("ProgressDialog.Show") ]
Pause/Resume Script [ Duration (seconds): ,1 ]
Set Variable [ $text; Value:MBS("Text.ReadTextFile"; "/Users/cs/Desktop/test.xml"; "Windows") ]
Set Variable [ $r; Value:MBS("XML.Import"; $text; ""; "Import2") ]
Set Variable [ $text; Value:"" ]
If [ MBS("IsError") = 0 ]
Set Variable [ $total; Value:MBS("XML.Import.Total") ]
Loop
Set Variable [ $todo; Value:MBS("XML.Import.TODO") ]
Set Variable [ $r; Value:MBS("ProgressDialog.SetProgress"; ($total - $todo) * 100 / $total) ]
```

```

Set Variable [ $r; Value:MBS("ProgressDialog.SetBottomText"; "Schritt " & ($total - $todo) & " von " &
$total) ]
Pause/Resume Script [ Duration (seconds): 1 ]
Set Variable [ $s; Value:MBS("XML.Import.Status") ]
Exit Loop If [ $s "Working" ]
If [ MBS("ProgressDialog.GetCancel") = 1 ]
Set Variable [ $r; Value:MBS("ProgressDialog.Hide") ]
Set Variable [ $r; Value:MBS("XML.Import.Cancel") ]
Exit Script [ ]
End If
End Loop
Set Variable [ $r; Value:MBS("ProgressDialog.Hide") ]
Show Custom Dialog [ "XML Import"; $r & " " & $s ]
End If
Set Variable [ $r; Value:MBS("ProgressDialog.Hide") ]

```

Read Database Design Report:

```

# read XML from file in UTF-16
Set Variable [ $text; Value:MBS("Text.ReadTextFile"; "/Users/cs/Desktop/test.xml"; "UTF-16") ]
# now remove the UTF-16 encoding marker
Set Variable [ $text; Value:Substitute($text; "<?xml version=\\"1.0\\" encoding=\\"UTF-16\\"?>"; "") ]
# read XML from file
Set Variable [ $r; Value:MBS("XML.Import"; $text; ""; "Import") ]

```

See also

- 130.14 ProgressDialog.Hide 6508
- 130.17 ProgressDialog.SetButtonCaption 6513
- 130.27 ProgressDialog.SetTitle 6529
- 130.29 ProgressDialog.SetTopText 6533
- 164.49 Text.ReadTextFile 7843
- 191.13 XML.Import.Cancel 9277
- 191.17 XML.Import.SetExtraField 9281
- 191.18 XML.Import.Status 9282
- 191.19 XML.Import.TODO 9283
- 191.20 XML.Import.Total 9284

Example Databases

- [XML/XML Import](#)

191.12.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr3](#)
- [MBS FileMaker Plugin, version 8.5pr5](#)
- [MBS FileMaker Plugin, version 7.5pr6](#)
- [MBS FileMaker Plugin 7.1 - Über 4400 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 7.1 - More than 4400 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 7.1pr3](#)
- [MBS FileMaker Plugin, version 7.1pr1](#)
- [MBS FileMaker Plugin, version 6.4pr1](#)
- [MBS FileMaker Plugin, version 6.2pr5](#)
- [MBS FileMaker Plugin, version 6.0pr7](#)

191.12.2 FileMaker Magazin

- [Ausgabe 5/2018, Seite 25](#)
- [Ausgabe 5/2018, Seite 24](#)
- [Ausgabe 5/2015, Seite 38](#)

Created 8th September 2015, last changed 21st November 2019.

191.13 XML.Import.Cancel

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	5.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.Cancel")

Result Returns OK.

Description

See also

- 100.57 JSON.Import.Cancel 5325
- 191.12 XML.Import 9273

Example Databases

- [XML/XML Import](#)

191.13.1 Blog Entries

- [MBS FileMaker Plugin, version 6.2pr7](#)

191.13.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 25

Created 8th September 2015, last changed 26th October 2015.

191.14 XML.Import.ErrorCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	9.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.ErrorCount")

Result Returns number or error.

Description

Should be zero if we had no errors while importing.

See also

- [100.58 JSON.Import.ErrorCount](#) 5326
- [191.15 XML.Import.Errors](#) 9279

191.14.1 Blog Entries

- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 18th June 2019, last changed 18th June 2019.

191.15 XML.Import.Errors

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	9.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.Errors")

Result Returns list or error.

Description

We remove duplicates, so you may not see all errors.

See also

- [100.59 JSON.Import.Errors](#) 5327
- [191.14 XML.Import.ErrorCount](#) 9278
- [191.18 XML.Import.Status](#) 9282
- [191.21 XML.Import.Work](#) 9285

191.15.1 Blog Entries

- [Whats new in MBS FileMaker Plugin version 9.3](#)
- [MBS FileMaker Plugin, version 9.3pr3](#)

Created 18th June 2019, last changed 18th June 2019.

191.16 XML.Import.SetBaseFields

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.1	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.SetBaseFields"; RecordUUIDFieldName; CreationTimeStampFieldName; ParentRecordUUIDFieldName)

Parameters

RecordUUIDFieldName

The field name for the record UUID field.

"_RecordUUID"

CreationTimeStampFieldName

The name for the time stamp field.

"_CreationTimeStamp"

ParentRecordUUIDFieldName

The name for the parent record UUID field.

"_ParentRecordUUID"

Result Returns OK or error.

Description

If the names are empty, the field is not created.

Examples

Disable all fields:

```
MBS("XML.Import.SetBaseFields"; ""; ""; "")
```

Set default names:

```
MBS("XML.Import.SetBaseFields"; "_RecordUUID"; "_CreationTimeStamp"; "_ParentRecordUUID")
```

See also

- 100.56 JSON.Import 5322
- 191.12 XML.Import 9273
- 191.17 XML.Import.SetExtraField 9281

191.16.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

Created 2nd February 2017, last changed 2nd February 2017.

191.17 XML.Import.SetExtraField

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.1	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.SetExtraField"; FieldName; FieldValue { ; FieldType })

Parameters

FieldName

The name of the extra field.

"ImportID"

FieldValue

The value for this field. Can be any data type, but must match field type.

1

FieldType

Optional

The SQL field type. Default is "VARCHAR" for a text field.

"VARCHAR"

Result Returns OK or error.

Description

Please call before XML.Import.

You can call it again when import loop is done and pass in empty name and value to clear it.

Only one extra field and only added when table is created.

Examples

Set extra field:

```
Set Variable [ $r ; Value: MBS( "XML.Import.SetExtraField"; "test"; "Hello"; "VARCHAR" ) ]
```

See also

- 100.56 JSON.Import 5322
- 191.12 XML.Import 9273
- 191.16 XML.Import.SetBaseFields 9280

191.17.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)

Created 2nd February 2017, last changed 19th June 2019.

191.18 XML.Import.Status

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	5.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.Status")

Result Returns status value.

Description

Returns Working, Finished or Unknown depending of the state.

So before first import, it is unknown. Than with first import it switches to working. Now when it's ready, you get back Finished.

See also

- 100.60 JSON.Import.Status 5328
- 191.12 XML.Import 9273
- 191.15 XML.Import.Errors 9279
- 191.21 XML.Import.Work 9285

Example Databases

- [XML/XML Import](#)

191.18.1 Blog Entries

- [XML Import for FileMaker](#)

191.18.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 25
- Ausgabe 5/2018, Seite 24

Created 8th September 2015, last changed 26th October 2015.

191.19 XML.Import.TODO

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	5.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.TODO" { ; Selector })

Parameters

Selector

Optional

Which value to return. By default we return number of records to create. You can pass here "Tables" to get number of tables, "Fields" to get number of fields or "Records" to get number of records.

Result Returns number.

Description

See also

- 100.61 JSON.Import.TODO 5329
- 191.12 XML.Import 9273
- 191.20 XML.Import.Total 9284
- 191.21 XML.Import.Work 9285

Example Databases

- [XML/XML Import](#)

191.19.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)
- [XML Import for FileMaker](#)

191.19.2 FileMaker Magazin

- Ausgabe 5/2018, Seite 25

Created 8th September 2015, last changed 10th November 2015.

191.20 XML.Import.Total

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	5.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.Total")

Result Returns number.

Description

See also

- 100.62 JSON.Import.Total 5330
- 191.12 XML.Import 9273
- 191.19 XML.Import.TODO 9283
- 191.21 XML.Import.Work 9285

Example Databases

- [XML/XML Import](#)

191.20.1 FileMaker Magazin

- Ausgabe 5/2018, Seite 25

Created 8th September 2015, last changed 26th October 2015.

191.21 XML.Import.Work

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	5.4	Yes	Yes	Yes	Yes	Yes

MBS("XML.Import.Work")

Result Returns OK or error.

Description

Normally we do import on idle while a script pause. But on server this does not work.

You can call this method in a loop to do the inserts for the import.

But it will not create the tables and fields required for import.

Examples

Import on server:

```
Set Variable [ $text; Value:MBS("Text.ReadTextFile"; "/Users/cs/Desktop/test.xml"; "UTF-8") ]
Set Variable [ $r; Value:MBS("XML.Import"; $text; ""; "" ) ]
Set Variable [ $text; Value:"" ]
If [ MBS("IsError") = 0 ]
Set Variable [ $total; Value:MBS("XML.Import.Total") ]
Loop
Set Variable [ $work; Value:MBS("XML.Import.Work") ]

Set Variable [ $status; Value:MBS("XML.Import.Status") ]
Exit Loop If [ $status = "Working" ]
End Loop
End If
```

See also

- [124.6 IsError](#) 6266
- [100.63 JSON.Import.Work](#) 5331
- [164.49 Text.ReadTextFile](#) 7843
- [191.12 XML.Import](#) 9273
- [191.15 XML.Import.Errors](#) 9279
- [191.18 XML.Import.Status](#) 9282
- [191.19 XML.Import.TODO](#) 9283
- [191.20 XML.Import.Total](#) 9284

Example Databases

- [XML/XML Import](#)

191.21.1 Blog Entries

- [MBS FileMaker Plugin, version 5.4pr5](#)

Created 10th November 2015, last changed 27th March 2018.

191.22 XML.ListAttributes

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.ListAttributes"; XML { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

```
"<img width=\"123\" height=\"456\" alt=\"test\"></img>"
```

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read.

0

Result Returns list or error.

Description

Examples

Query attribute names:

```
MBS( "XML.ListAttributes"; "<img width=\"123\" height=\"456\" alt=\"test\"></img>" )
```

Example result: width

height

alt

See also

- 191.9 XML.GetAttribute 9269
- 191.11 XML.HasAttribute 9272
- 191.25 XML.Parse 9291

191.22.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)

Created 27th December 2016, last changed 2nd February 2018.

191.23 XML.NodeCount

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.NodeCount"; XML; Name { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times queries to the XML without parsing it each time.

"<test>Hello</test>"

Name

The name of the node to query. This can be a list to go over several steps to the target tree part.

"something"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read.

0

Result Returns number or error.

Description

Only the top nodes in the XML and not sub nodes down the hierarchy.

See also

- 191.24 XML.NodeNames 9289
- 191.25 XML.Parse 9291
- 191.34 XML.SubTree 9307

191.23.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr2](#)

Created 2nd January 2017, last changed 23th January 2020.

191.24 XML.NodeNames

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.NodeNames"; XML { ; recursive; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times queries to the XML without parsing it each time.

"<test>Hello</test>"

recursive

Optional

Whether to recurse in sub tree. Pass 1 for recursive or 0 for non-recursive. Default is 0.

1

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 16 to ignore empty tags. (new in plugin version 7.1)

0

Result Returns list or error.

Description

Excludes the root node. The list has no duplicates.

Examples

Query list of node names:

```
MBS( "XML.NodeNames"; "<Person><FirstName>Markus</FirstName><LastName>Müller</LastName><City>New York</City></Person>" )
```

Example result: FirstName

LastName

City

Create records and fill fields with xml values:

Go to Layout ["XML Parser"]

find the node with all the records we need:

```
Set Variable [ $xml; Value:MBS( "XML.SubTree"; XML Parser::Input XML; "Body$GetCategoryProduct-Response" ) ]
```

query number of products

```
Set Variable [ $count; Value:MBS( "XML.NodeCount"; $xml; "PRODUCT" ) ]
```

loop over products

```
Set Variable [ $index; Value:0 ]
```

Loop

```

# get a product
Set Variable [ $xml; Value:MBS( "XML.SubTree"; $oxml; "PRODUCT"; $index) ]
# get the names of the XML nodes
Set Variable [ $names; Value:MBS( "XML.NodeNames"; $xml; 0; 16) ]
# loop over the names
Set Variable [ $NameCount; Value:ValueCount ( $names ) ]
Set Variable [ $NameIndex; Value:1 ]
New Record/Request
Loop
# Query a value and put it in a field
Set Variable [ $name; Value:GetValue($names; $NameIndex) ]
Set Field By Name [ "XML Parser::" & $name; GetXMLValue( $xml; $name) ]
Set Variable [ $NameIndex; Value:$NameIndex + 1 ]
Exit Loop If [ $NameIndex = $NameCount ]
End Loop
Commit Records/Requests [ No dialog ]
Set Variable [ $index; Value:$index + 1 ]
Exit Loop If [ $index = $count ]
End Loop

```

See also

- [191.23 XML.NodeCount](#) 9288
- [191.25 XML.Parse](#) 9291
- [191.34 XML.SubTree](#) 9307

Example Databases

- [XML/XML Test](#)

191.24.1 Blog Entries

- [MBS FileMaker Plugin, version 7.1pr1](#)
- [MBS FileMaker Plugin, version 7.0pr1](#)
- [New XML Functions in MBS FileMaker Plugin](#)

Created 25th December 2016, last changed 2nd February 2018.

191.25 XML.Parse

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Parse"; XML { ; Flags })

Parameters

XML

The XML to process.

"<test>Hello</test>"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 8 to remove all namespaces before query to have queries easier.

0

Result Returns XML reference or error.

Description

The document stays in memory and can be queried several times as needed.

If you need to query a lot of values, please parse once first. Else all XML functions need to parse again on each call.

Please use XML.Release later to free document from memory.

See also

- 191.2 XML.ApplyStylesheet 9256
- 191.3 XML.Canonical 9258
- 191.6 XML.DeletePath 9263
- 191.7 XML.ExtractText 9265
- 191.10 XML.GetPathValue 9270
- 191.11 XML.HasAttribute 9272
- 191.23 XML.NodeCount 9288
- 191.26 XML.Query 9293
- 191.29 XML.Release 9299
- 191.33 XML.SetVariables 9305

Example Databases

- [Utility functions/Trigger Script on Plugin Error](#)

191.25.1 Blog Entries

- [MBS FileMaker Plugin, version 9.1pr5](#)
- [MBS FileMaker Plugin 7.3 - Über 4800 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin 7.3 - More than 4800 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 7.3pr7](#)

Created 14th July 2017, last changed 17th September 2017.

191.26 XML.Query

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	3.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.Query"; xml; path { ; namespaceList; Flags })

Parameters

xml

The XML you'd like to parse. Can be XML as text or the reference returned by XML.Parse function, so you can make several times queries to the XML without parsing it each time.

"<hello>Hello World</hello>"

path

The XPath you'd like to query.

"/**"

namespaceList

Optional

List of namespaces. This is a list of known namespaces in "<prefix1>=<href1><prefix2>=<href2>..." format.

"SOAP-ENV=http://schemas.xmlsoap.org/soap/envelope/"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 2 to return a list of xml nodes as text instead of xml. (new in 5.4) Add 4 if you do not like the XML to be formatted. Add 8 to remove all namespaces before query to have queries easier. (new in 6.3)

0

Result Returns xml text.

Description

Result is either simple text, a xml node or several xml nodes in a result root node. XML is returned formatted.

Please check on the web for XPath manuals and tutorials.

Version 3.4 of the plugins now also return string, number and boolean results instead of just XML nodes.

If the query to find the node is too difficult, you can of course use text functions instead. For example use Text.FindBetween and Text.DecodeFromXML.

Examples

Query the Hello World text:

MBS("XML.Query"; "<hello>Hello World</hello>"; "/hello/text()")

Example result: Hello World

Query an attribute of a XML Node:

```
MBS("XML.Query"; "<OrderRequestHeader orderID=\"1629\" orderDate=\"2013-07-26T12:20:27\" type=\"new\"><OrderRequestHeader>"; "/OrderRequestHeader/@orderID" )
```

Example result: <?xml version="1.0" encoding="UTF-8"?>
orderID="1629"

Query an attribute of a XML Node as string:

```
MBS("XML.Query"; "<OrderRequestHeader orderID=\"1629\" orderDate=\"2013-07-26T12:20:27\" type=\"new\"><OrderRequestHeader>"; "string(/OrderRequestHeader/@orderID)" )
```

Example result: 1629

Query all text from all nodes named reference ignoring namespaces:

```
MBS( "XML.Query"; XML Query::XML; "//*[ local-name()='reference' ] /text()"; "" ; 2 )
```

Finds a Field node where attribute name is "Class":

```
MBS( "XML.Query"; $xml; "/CDETS/Defect/Field [ @name='Class' ] /text()" )
```

Finds second companyname node in xml data with namespace invoice:

```
MBS("XML.Query"; XML Query::XML; "//invoice:companyname [ 2 ] "; "invoice=http://www.forum-datenaustausch.ch/invoice"; 2)
```

Query node without namespaces:

```
MBS( "XML.Query"; "<cfdi:Invoice invoiceTotal=\"450.24\"></cfdi:Invoice>"; "/Invoice/@invoiceTotal"; "" ; 8+2)
```

Example result: 450.24

Query attributes:

```
MBS( "XML.Query"; "<a><b Guid=\"123\">Entry1</b><b Guid=\"456\">Entry2</b></a>"; "/a/b/@Guid"; "" ; 2 )
```

Example result: 123
456

See also

- 85.170 GMIImage.GetXMP 4552
- 164.20 Text.DecodeFromXML 7805
- 164.39 Text.FindBetween 7831

- 191.25 XML.Parse

Example Databases

- [CURL/WebServices/Swiss Post Addresscheck V4-02-00](#)
- [CURL/WebServices/Swiss Post Addresscheck](#)
- [DynaPDF/List XFA Fields](#)
- [XML/XML Query](#)

191.26.1 Blog Entries

- [MBS FileMaker Plugin, version 8.0pr9](#)
- [MBS FileMaker Plugin, version 6.3pr5](#)
- [MBS FileMaker Plugin, version 6.2pr4](#)
- [Swiss Post Webservice to verify addresses](#)
- [MBS FileMaker Plugin, version 5.4pr4](#)
- [MBS FileMaker Plugin, version 5.4pr3](#)
- [MBS FileMaker Plugin, version 5.1pr6](#)
- [MBS Filemaker Plugin, version 3.4pr1](#)
- [MBS FileMaker Plugin 3.0 for OS X/Windows - More than 1300 Functions In One Plugin](#)
- [MBS Filemaker Plugin, version 3.0pr5](#)

191.26.2 FileMaker Magazin

- [Ausgabe 3/2017, Seite 27](#)
- [Ausgabe 4/2016, Seite 19](#)

Created 18th August 2014, last changed 19th April 2018.

191.27 XML.ReadContainer

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.4	Yes	Yes	Yes	Yes	Yes

MBS("XML.ReadContainer"; Container { ; Flags })

Parameters

Container

The container value to read as XML file.

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 8 to remove all namespaces before query to have queries easier.

0

Result Returns XML reference or error.

Description

The document stays in memory and can be queried several times as needed.

If you need to query a lot of values, please parse once first. Else all XML functions need to parse again on each call.

Please use XML.Release later to free document from memory.

By passing XML directly from file content to XML engine, we avoid any corruption due to wrong encoding or line endings.

Examples

Read XML from container:

```
MBS( "XML.ReadContainer"; Test::XMLContainer )
```

See also

- [191.29 XML.Release](#)

9299

191.27.1 Blog Entries

- [MBS FileMaker Plugin, version 9.3pr4](#)
- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 17th September 2017, last changed 17th September 2017.

191.28 XML.ReadFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.4	Yes	Yes	Yes	Yes	Yes

MBS("XML.ReadFile"; Path { ; Flags })

Parameters

Path

The file path or URL to read as XML file.

"/Users/cs/Desktop/test.xml"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 8 to remove all namespaces before query to have queries easier.

0

Result Returns XML reference or error.

Description

The document stays in memory and can be queried several times as needed.

If you need to query a lot of values, please parse once first. Else all XML functions need to parse again on each call.

Not limited in file size, so you can read in giga byte big files if you have free memory.

Please use XML.Release later to free document from memory.

By passing XML directly from file content to XML engine, we avoid any corruption due to wrong encoding or line endings.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions.

For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Read XML file:

```
$xmlRef = MBS( "XML.ReadFile"; "/Users/cs/Desktop/iTunes Library.xml")
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 191.29 XML.Release 9299

191.28.1 Blog Entries

- [MBS FileMaker Plugin, version 7.4pr7](#)

Created 17th September 2017, last changed 17th September 2017.

191.29 XML.Release

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.Release"; XMLRef)

Parameters**XMLRef**

A XML reference number.

\$XML

Result Returns OK or error.

Description**See also**

- 157.21 SSH.Release 7508
- 187.17 WMFP.Release 8785
- 48.29 X509.Release 1376
- 191.25 XML.Parse 9291
- 191.27 XML.ReadContainer 9296
- 191.28 XML.ReadFile 9297
- 191.30 XML.ReleaseAll 9300

191.29.1 Blog Entries

- [MBS FileMaker Plugin, version 7.3pr7](#)

Created 14th July 2017, last changed 14th July 2017.

191.30 XML.ReleaseAll

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.3	Yes	Yes	Yes	Yes	Yes

MBS("XML.ReleaseAll")

Result Returns OK or error.

Description

Be aware that on a server this may free objects, which are used by other scripts running in parallel!

See also

- 97.11 Java.ReleaseAll 5174
- 100.67 JSON.ReleaseAll 5338
- 112.24 Menu.ReleaseAll 5888
- 163.29 TAPI.ReleaseAll 7756
- 191.29 XML.Release 9299

Created 14th July 2017, last changed 9th January 2020.

191.31 XML.SetPathValue

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.4	Yes	Yes	Yes	Yes	Yes

MBS("XML.SetPathValue"; XML; Path; Flags; Value)

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Path

The path to the node or attribute to query.

"name"

Flags

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 4 to format returned XML. Add 32 to return result as XML.

0

Value

The new value for node or attribute.

"Hello"

Result Returns OK or error.

Description

If needed, new nodes / attributes are added.

This function uses a path notation like the JSON functions in FileMaker to describe paths.

You can use name of a node followed by option index in square brackets. On the end you can use # followed by a name of an attribute to select only the attribute. Empty brackets or too big index allow you to append new node in v8.1.

Delimiter between items can be dot like FileMaker or newline.

If you pass in a XML reference number and you do not pass Flag value 32 for returning as XML, we just modify the XML reference in memory. This avoids performance hit for outputting and parsing xml for each change.

Examples

Add a first name:

MBS("XML.SetPathValue"; "<person/>"; "person.firstName"; 0; "Joe")

Example result: "<?xml version="1.0" encoding="UTF-8"?><person><firstName>Joe</firstName></person>"

Add id attribute:

```
MBS( "XML.SetPathValue"; "<person/>"; "person# id"; 0; "123" )
```

```
Example result: "<?xml version="1.0" encoding="UTF-8"?>
<person id="123"/>"
```

Adds a new name node with href number.

```
MBS( "XML.SetPathValue"; "<person></person>"; "person.name href=\"10.00\""; 4; "" )
```

```
Example result: "<?xml version="1.0" encoding="UTF-8"?>
<person>
<name href="10.00"/>
</person>"
```

See also

- [191.10 XML.GetPathValue](#) 9270
- [191.25 XML.Parse](#) 9291

Example Databases

- [CURL/Amazon S3 Upload File](#)

191.31.1 Blog Entries

- [MBS FileMaker Plugin, version 8.1pr1](#)
- [MBS FileMaker Plugin, version 7.4pr6](#)

Created 16th September 2017, last changed 2nd February 2018.

191.32 XML.SetPathXML

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	8.1	Yes	Yes	Yes	Yes	Yes

MBS("XML.SetPathXML"; XML; Path; Flags; NewXML)

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Path

The path to the node or attribute to query.

"name"

Flags

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 4 to format returned XML. Add 32 to return result as XML.

0

NewXML

The new xml for node or attribute. Can be XML as text or the reference returned by XML.Parse function, so you can make several times queries to the XML without parsing it each time.

"<name>Christian</name>"

Result Returns OK or error.

Description

If needed, new nodes / attributes are added.

This function uses a path notation like the JSON functions in FileMaker to describe paths. Please point with path to new node.

You can use name of a node followed by option index in square brackets. On the end you can use # followed by a name of an attribute to select only the attribute. Empty brackets or too big index allow you to append new node.

Delimiter between items can be dot like FileMaker or newline.

If you pass in a XML reference number and you do not pass Flag value 32 for returning as XML, we just modify the XML reference in memory. This avoids performance hit for outputting and parsing xml for each change.

Examples

Insert new node:

```
MBS("XML.SetPathXML"; "<export><person></person></export>"; "export$person$name"; 0; "<name>Test</name>")
```

Example result: <?xml version="1.0" encoding="UTF-8"?>

```
<export><person><name>Test</name></person></export>
```

Insert second node with index:

```
MBS("XML.SetPathXML"; "<export><person><name>First</name></person></export>"; "export$person$name [ 1 ] "; 0; "<name>Test</name>")
```

Example result: `<?xml version="1.0" encoding="UTF-8"?>`
`<export><person><name>First</name><name>Test</name></person></export>`

Append node:

```
MBS("XML.SetPathXML"; "<export><person><name>First</name></person></export>"; "export$person$name [ ] "; 0; "<name>Test</name>")
```

See also

- [191.25 XML.Parse](#)

9291

191.32.1 Blog Entries

- [MBS FileMaker Plugin v8.1 with 5100 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.1](#)
- [MBS FileMaker Plugin, version 8.1pr1](#)

Created 2nd February 2018, last changed 2nd February 2018.

191.33 XML.SetVariables

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.SetVariables"; XML { ; recursive; Flags; Prefix })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times queries to the XML without parsing it each time.

"<test>Hello</test>"

recursive

Optional

Whether to recurse in sub tree. Pass 1 for recursive or 0 for non-recursive. Default is 0.

1

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read.

0

Prefix

Optional

The prefix to use for the variables names.

""

Result Returns list or error.

Description

Returns list of variable names.

If variables receive multiple values the name in the result comes the highest index in square brackets.

You can call XML.ClearVariables later to clear those variables.

Examples

Set variables:

```
MBS( "XML.SetVariables"; "<Person><FirstName>Markus</FirstName><LastName>Müller</LastName><City>New York</City></Person>" )
```

Example result: LastName

City

FirstName

See also

- 120.18 OCR.SetVariable

9306

CHAPTER 191. XML

- 123.10 PHP.SetVariable 6258
- 191.4 XML.ClearVariables 9260
- 191.25 XML.Parse 9291

Example Databases

- [XML/XML Test](#)

191.33.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)
- [New XML Functions in MBS FileMaker Plugin](#)

191.33.2 FileMaker Magazin

- Ausgabe 3/2017, Seite 27

Created 25th December 2016, last changed 2nd February 2018.

191.34 XML.SubTree

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	7.0	Yes	Yes	Yes	Yes	Yes

MBS("XML.SubTree"; XML; Name { ; Flags; Index })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Name

The name of the node to query. This can be a list to go over several steps to the target tree part.

"something"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 4 if you do not like the XML to be formatted. Add 8 to remove all namespaces before query to have queries easier. (new in 6.3)

0

Index

Optional

The index of the item to get. First has index 0 as this counts down how many to skip.

0

Result Returns OK or error.

Description

You can pass an index to get nth item.

Returns empty result if index is too high, so you can loop until you get empty result.

Examples

Query person entry:

```
MBS( "XML.SubTree"; "<People><Person><FirstName>Markus</FirstName><LastName>Müller</LastName><City>New York</City></Person></People>"; "Person")
```

Example result: <?xml version="1.0" encoding="UTF-8"?>

```
<Person>
```

```
<FirstName>Markus</FirstName>
```

```
<LastName>Müller</LastName>
```

```
<City>New York</City>
```

```
</Person>
```

Queries values:

```

Set Variable [ $xml; Value:"<a><b>123</b><b>456</b><b>789</b></a>" ]
Show Custom Dialog [ "First item:"; MBS( "XML.ExtractText"; MBS( "XML.SubTree"; $xml; "b"; 0; 0) ) ]
Show Custom Dialog [ "Second item:"; MBS( "XML.ExtractText"; MBS( "XML.SubTree"; $xml; "b"; 0; 1) ) ]
Show Custom Dialog [ "Third item:"; MBS( "XML.ExtractText"; MBS( "XML.SubTree"; $xml; "b"; 0; 2) ) ]

```

Query data in SOAP Webservice response:

```
MBS( "XML.SubTree"; $XML; "Envelope$Body$AddressCheckerResponse$rows")
```

Custom function to get xml value as text:

```
GetXMLValue(xml, name)
```

```
# returns text of a xml node
```

```

Let ( [
part = MBS( "XML.SubTree"; xml; name);
result = If( MBS("IsError"); "" ; If(Length(part) = 0; "" ; MBS( "XML.ExtractText"; part)))
] ; Trim( result))

```

Create records and fill fields with xml values:

```

Go to Layout [ "XML Parser" ]
# find the node with all the records we need:
Set Variable [ $oxml; Value:MBS( "XML.SubTree"; XML Parser::Input XML; "Body$GetCategoryProductsResponse" ) ]
# query number of products
Set Variable [ $count; Value:MBS( "XML.NodeCount"; $oxml; "PRODUCT" ) ]
# loop over products
Set Variable [ $index; Value:0 ]
Loop
# get a product
Set Variable [ $xml; Value:MBS( "XML.SubTree"; $oxml; "PRODUCT"; $index ) ]
# get the names of the XML nodes
Set Variable [ $names; Value:MBS( "XML.NodeNames"; $xml; 0; 16) ]
# loop over the names
Set Variable [ $NameCount; Value:ValueCount ( $names ) ]
Set Variable [ $NameIndex; Value:1 ]
New Record/Request
Loop
# Query a value and put it in a field
Set Variable [ $name; Value:GetValue($names; $NameIndex) ]
Set Field By Name [ "XML Parser::" & $name; GetXMLValue( $xml; $name) ]
Set Variable [ $NameIndex; Value:$NameIndex + 1 ]
Exit Loop If [ $NameIndex = $NameCount ]

```


191.34. XML.SUBTREE

9309

```
End Loop  
Commit Records/Requests [ No dialog ]  
Set Variable [ $index; Value:$index + 1 ]  
Exit Loop If [ $index $count ]  
End Loop
```

See also

- [124.6 IsError](#) 6266
- [191.7 XML.ExtractText](#) 9265
- [191.23 XML.NodeCount](#) 9288
- [191.24 XML.NodeNames](#) 9289
- [191.25 XML.Parse](#) 9291

Example Databases

- [CURL/WebServices/magento older](#)
- [CURL/WebServices/Sales Force Test](#)
- [XML/XML Test](#)

191.34.1 Blog Entries

- [MBS FileMaker Plugin, version 7.0pr1](#)
- [New XML Functions in MBS FileMaker Plugin](#)

191.34.2 FileMaker Magazin

- [Ausgabe 3/2017, Seite 27](#)

Created 25th December 2016, last changed 2nd February 2018.

191.35 XML.ToJSON

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	8.2	Yes	Yes	Yes	Yes	Yes

MBS("XML.ToJSON"; XML { ; Flags })

Parameters

XML

The XML to process.

"<test>Hello</test>"

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read.

0

Result Returns JSON or error.

Description

For nodes in the XML we create objects and key/values.

Attributes are put in @attributes nodes.

Example Databases

- [XML/XML to JSON](#)

191.35.1 Blog Entries

- [Neues MBS FileMaker Plugin 10.0](#)
- [MBS FileMaker Plugin 10.0 - More than 6000 Functions In One Plugin](#)
- [MBS FileMaker Plugin, version 9.6pr2](#)
- [MBS FileMaker Plugin, version 9.5pr8](#)
- [MBS FileMaker Plugin 8.2 - More than 5200 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.2 - 5200 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin, version 8.2pr7](#)
- [MBS FileMaker Plugin, version 8.2pr5](#)

Created 27th April 2018, last changed 27th April 2018.

191.36 XML.Validate

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	8.1	Yes	Yes	Yes	Yes	Yes

MBS("XML.Validate"; XML; Schema { ; Flags })

Parameters

XML

The XML to process. Can be XML as text or the reference returned by XML.Parse function, so you can make several times changes to the XML without parsing it each time.

"<test>Hello</test>"

Schema

The schema definition.

\$schema

Flags

Optional

Various Flags. Add 1 to ignore errors in xml and continue parsing. This may lead to not everything in the xml being read. Add 8 to remove all namespaces before query to have queries easier.

0

Result Returns OK or error.

Description

Please pass in XML (or reference number from XML.Parse) and a valid XSD schema.

Version 8.2 or newer will return list of errors, so you see them all.

Examples

Validate XML:

Set Variable [\$result; Value:MBS("XML.Validate"; XML Validation::XML; XML Validation::Schema; 0)]

See also

- 191.25 XML.Parse 9291
- 191.37 XML.ValidateFile 9313

Example Databases

- [XML/XML Validation](#)

191.36.1 Blog Entries

- [MBS FileMaker Plugin, version 8.2pr1](#)

- [MBS FileMaker Plugin v8.1 with 5100 Functions In One Plugin](#)
- [MBS FileMaker Plugin 8.1](#)
- [MBS FileMaker Plugin, version 8.1pr2](#)

Created 6th February 2018, last changed 16th May 2019.

191.37 XML.ValidateFile

Component	Version	macOS	Windows	Server	FileMaker Cloud	FileMaker iOS SDK
191 XML	8.2	Yes	Yes	Yes	Yes	Yes

MBS("XML.ValidateFile"; FilePath; Schema)

Parameters

FilePath

Native file path to the file to check.

"/Users/cs/Desktop/test.xml"

Schema

The schema definition.

\$schema

Result Returns OK or error.

Description

Please pass in XML file path and a valid XSD schema.

Return list of errors, so you see them all.

If you use Process.SetCurrentDirectory to change current folder for the application process, the library uses this folder to search for referenced xsd files.

This function requires a native path. Use Path.FileMakerPathToNativePath to convert a FileMaker path to a native path if required. If you like to have the user choose the path, you can use FileDialog functions. For Server be aware that server has limited permissions and may not be able to access all files on a computer.

Examples

Validate a file in a folder:

```
Set Variable [ $r ; Value: MBS( "Process.SetCurrentDirectory"; "/Users/cs/Documents/todo/XML Vali-
date/" ) ]
```

```
Set Variable [ $result ; Value: MBS("XML.ValidateFile"; "test.xml"; XML Validation::Schema) ]
```

```
Set Field [ XML Validation::Result ; $result ]
```

See also

- 121.2 Path.FileMakerPathToNativePath 6139
- 129.9 Process.SetCurrentDirectory 6485
- 191.36 XML.Validate 9311

191.37.1 Blog Entries

- [MBS FileMaker Plugin 8.2 - More than 5200 Functions In One Plugin](#)

- [MBS FileMaker Plugin 8.2 - 5200 Funktionen in einem Plugin](#)
- [MBS FileMaker Plugin, version 8.2pr1](#)

Created 6th March 2018, last changed 6th March 2018.