



Outlook/Exchange Manipulator

Functions Guide

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Product Description:

The Outlook Manipulator and Exchange Manipulator plug-ins offer functions that support inter-application communication between FileMaker and Microsoft Outlook. The basic operation of the Outlook and Exchange Manipulator plug-ins is to offer the FileMaker developer access to records held in Outlook (Outlook Items.) With these plug-ins FileMaker developers are able to 'push' new records into Outlook, 'pull' records from Outlook, and modify existing records in Outlook. These operations are accomplished by using FileMaker function calls from within FileMaker calculations. These calculations are generally determined from within FileMaker 'SetField' or 'If' script steps.

Intended Audience:

FileMaker is an application that is very easy to use and because of this not all FileMaker users are familiar with many of the more advanced features it offers. Therefore this document may not be entirely clear to the basic FileMaker user. Every attempt will be made to accommodate all FileMaker users, but it is recommended that the reader of this document (and the users of the plug-ins) be at least familiar with FileMaker Scripting. The remainder of this document describes the plug-in functions. It is broken into three sections:

Function Descriptions

Available Fields

Return / Error Codes



It is best to familiarize yourself with this document before attempting to use the plug-in. Productive Computing has also created a FileMaker 7/8 file that demonstrates the usage of the plug-ins.

Functional Differences: Outlook vs. Exchange Manip.

This section describes the differences between the Outlook Manipulator, the Exchange Manipulator, and the Exchange Client Manipulator. All three plug-ins offer the same access on the record level: there are no differences between the plug-ins as to record type access and field access. The differences between the plug-ins lie in which *folders* are accessible. The following table describes the access:

Plug-In	Accessible Folder Groups		
	Default Folders	Public Folders	Others' Folders
Exchange	Yes	Yes	Yes
Exchange Client	Yes	Yes	No
Outlook	Yes	No	No

Default Folders: The group of folders that Outlook uses to store items by default. In the Exchange Environment these folders are children of a parent named 'Mailbox - User Name.' In non-Exchange environments these folders are subfolders of a parent named 'Personal Folders.'

Public Folders: The public folders hosted on an Exchange Server.

Others' Folders: 'Mailboxes' of other users to which the current user has access. Access to a 'Mailbox' that belongs to a user other than the current user is delegated by the Exchange Administrator.



Function Descriptions

This section describes the functions that are available with the Outlook/Exchange Manipulator plug-ins. Each available function is listed with a short description of the functionality, the required parameters and their meaning, and the return values expected from the functions.

All functions return a text string. It is up to the user to convert this the returned value when necessary. If an error occurs the function returns a representation of a negative number as a character string. This may help with capturing errors within your scripts.

The various function definitions follow.

Version(type)

Description

Used to identify the product and product version.

Parameters

type = 'Short' or 'Long.'

Return Values

The current version of the plug-in in string format. A 'Short' version contains only the version number. A 'Long' version contains the product name and the version number.



Authenticate(Profile ; Password)

Description

Opens an Outlook profile for reading and writing. If there is an error opening the designated Profile, the user will be prompted to choose a profile. Must be called before any other Outlook function.

Parameters

Profile = the name of the Profile to use for the session (Optional).
Password = optional password for the designated profile (Optional).

Return Values

0 if successful otherwise an error.

Note: This function must be called to initiate and Outlook session. It only needs to be called once pr FileMaker session.

NewRecord(optModule)

Description

Creates a new record/Item in the current Outlook Folder. This record may be modified using calls to SetField(); Must call OpenFolder first to set the folder that the item will be saved to.

Parameters

optModule = The type of record to create. This is an optional parameter and if left blank the new record will match the type for the current folder. Valid values are "Post", "Calendar", "Tasks", "Contacts", "Note", "Journal", and "Mail."

Return Values

0 for success otherwise an error code.

SetFieldData(FieldName ; Data)

Description

Sets the specified field to the specified value.

Parameters

FieldName = Name of the Outlook field to populate (See 'Available Fields' section).
Data = The information to populate the Outlook field.

Return Values

0 for success otherwise an error code.



SetCustomFieldData(FieldName ; Data)

Description

Sets the value of a custom field of an Item. If the item does not exist it is created.

Parameters

FieldName = Name of the Outlook field to populate (See 'Available Fields' section).

Data = The information to populate the Outlook field.

Return Values

0 for success otherwise an error code.

SaveRecord(optParam)

Description

Saves the record to the currently opened Outlook folder and returns the Outlook ID or an error code. If the item being saved is an e-mail, the message will be sent.

Exchange Environment Only - If the item is a Calendar record the developer can choose to send the meeting request to Attendees.

Parameters

optParam = The string literal "Appointment."

Return Values

The Outlook id for the Item or an error code.



DeleteRecord(OutlookID ; Permanent)

Description

Deletes a record in the currently opened folder.

Parameters

OutlookID = *The Outlook ID of the record to delete.*

Permanent = "Y" or empty ("")

Return Values

0 for success otherwise an error code

Note: Permanent (Parameter 2)

- : Use **"y"** to delete records permanently. This will remove records from outlook WITHOUT moving them to the "Deleted Items" folder. We suggest you do not use this option especially if you have a more than 100 records in a given Outlook module. This option can take several seconds to delete a single record.
- : Use **blank ""** to move the item to the "Deleted Items" folder. This option will move the object to the "Deleted Items" folder instantly which is the preferred method when dealing with many records in a given Outlook module. For instance, if you are to delete 1000 items from a set of 3000 items, this method should be used and the third parameter should be left blank. Later you can permanently delete the items from the "Deleted Items" folder simply by calling the command "PCEM_EmptyAllDeletedItems"

EmptyAllDeletedItems

Description

This command will remove all items from the "Deleted Items" folder in Outlook. Keep in mind it will delete items you've moved there using the "DeleteRecord" command (see above) and it will also remove ALL objects that the developer moved to this folder manually. This option should be used with caution.

Parameters

none

Return Values

0 for success otherwise an error code



DeleteAllRecords(ExcludePrivate ; ExcludeDistList)

Description

This command will delete all records from a given module. This command should be used with extreme caution as it will remove ALL items permanently and it will not save a copy of items in the "Deleted Items" folder in Outlook. There is no "undo" for this command. The optional parameters to exclude "Private" will remove all records except for those marked as "private" in Outlook. The optional parameter to exclude "Distribution List" applies to the Contacts module only. Use this option if you wish exclude any "Distribution List" and its associated members. See the Outlook help file for more information on "Distribution Lists" in Outlook.

Parameters

ExcludePrivate = excludes Private items (set to "1" to exclude)

ExcludeDistList = exclude Distribution List (set to "1" to exclude) Contacts module

Return Values

0 for success otherwise an error code

OpenRecord(OutlookID)

Description

Opens the specified record for editing

Parameters

OutlookID = The Outlook ID of the item to open.

Return Values

0 for success otherwise an error code

GetFieldData(FieldName)

Description

Extracts the value contained in the specified field.

Parameters

FieldName = The name of the Outlook field to extract the data from (see 'Available Fields' section)

Return Values

The string representation of the field value or an error code.



GetCustomFieldData(FieldName)

Description

Extracts the value contained in the specified field. The field must exist in the form that the Outlook Item/Record was created with.

Parameters

FieldName = The name of the Outlook field to extract the data from

Return Values

The string representation of the field value or an error code.

VerifyFieldData(FieldName ; VerifyData)

Description

Compare the specified value to the value contained in the specified field

Parameters

FieldName = The name of the Outlook field to compare VerifyData to.

VerifyData = The data to compare to the contents of the Outlook field identified by FieldName

Return Values

0 if the VerifyData matches the contents of the Outlook field, else an error code

GetFirstRecord

Description

Opens the first record in the currently opened folder.

Parameters

none

Return Values

The Outlook EntryID or an error code.



GetNextRecord

Description

Opens the next record in the currently opened folder. Requires a single call to GetFirstRecord in order to build the list of available records in the currently opened folder

Parameters

none

Return Values

'End' if there are no more records or the OutlookID of the next record or an error code.

GetRecordCount

Description

Returns the number of available records in the currently opened folder.

Parameters

none

Return Values

The number of records or an error code

OpenFolder(FolderPath)

Description

Opens the specified Folder for editing.

Parameters

FolderPath = The path to the folder from the current root folder.

Return Values

The Outlook EntryID for the Folder or and error code.

Note: If path starts with "/" then it will search for the folder from the root folder.

If path does not start with "/", it will find the folder from the current folder.

Any call to 'NewRecord' will create a record of the same type as the default type for the folder.



GetFirstFolder

Description

Returns the full path of the first folder identified by Outlook in the current root folder.

Parameters

none

Return Values

A path to a folder or an error code.

GetNextFolder

Description

Returns the full path of the next folder identified by outlook in the current root folder.
A call to GetFirstFolder must be made before calling this function for the first time.

Parameters

none

Return Values

A path to a folder, "End" if there are no more folders, or an error code.

GetFolderID

Description

This is used to get the OutlookID of the currently opened Folder.

Parameters

none

Return Values

An OutlookID or an error code.



MoveRecord(FolderPath)

Description

Moves the currently opened Outlook Item from its current folder to another folder.

Parameters

FolderPath = The path of the destination folder

Return Values

0 for success or an error code

Note:

Non-Exchange - Must include the full path of the folder to move the item into. The destination folder becomes the currently opened folder.

Exchange - Must include the full path of the folder to move the item into including the desired root folder (Mailbox / Public Folder). The destination folder becomes the currently open folder.

AddAttachment(FilePath ; Name)

Description

Adds an attachment to the currently open item. This function is called once for each attachment to be added to the current Outlook item.

Parameters

FilePath = The absolute path to the file to attach.

Name = The name of the file as it is to appear in Outlook.

Return Values

0 for success otherwise an error.

GetAttachmentCount

Description

Returns the number of attachments the currently opened item has.

Parameters

none

Return Values

the count or and error code



GetAttachmentName(Index)

Description

Gets the name of the specified attachment of the currently opened Outlook Item. This function is used in conjunction with the 'GetAttachmentCount' function to iterate through all the current Item's attachments.

Parameters

Index = The index of the attachment. e.g. A "1" will return the name of the first attachment, a "2" the name of the second, and so on.

Return Values

A the name of the attachment or an error code

SaveAttachment(FilePath ; Index)

Description

Saves the specified attachment to a specified location.

Parameters

FilePath = The path that you would like to save the attachment to.
Index = The index of the items attachment.

Return Values

0 for success otherwise an error

Register(ServerName ; ServerPort ; ServerPage ; licenseID)

Description

Registers the product with Productive Computing's registration servers.

Parameters

ServerName = URL of Registration server
ServerPort = The Port that the server is listening on (normally 80)
ServerPage = The page to post the information to (includes the path)
licenseID = Your license ID (provided by Productive Computing)

Return Values

0 for success otherwise an error



ExportPCICertificateSettings(LicenseID)

Description

Writes to a file the information that the Registration Process uses to register the product. The name of the file is dictated by the full product version. After its created it is saved to the 'Application' folder on the current machine

Parameters

LicenseID = Your license ID (provided by Productive Computing)

Return Values

0 for success otherwise an error

GetOperatingMode

Description

Returns the current mode of operation for the plug-in.

Parameters

none

Return Values

"LIVE" , "DEMO" , "UNREGISTERED"

OpenRootFolder(RootFolderName) (Exchange Version Only)

Description

Opens the specified mailbox/folder

Parameters

RootFolderName = The Name of the root folder (Mailbox) to open (e.g. "Public Folders" , "Mailbox – User")

Return Values

0 for success otherwise an error



GetFirstRootFolder (Exchange Version Only)

Description

Returns the Name of the first Mailbox/folder encountered by Outlook at the NameSpace level.

Parameters

none

Return Values

The name of the first root folder or an error

GetNextRootFolder (Exchange Version Only)

Description

Returns the Name of the next Mailbox/folder encountered by Outlook at the NameSpace level. Requires a call to GetFirstRootFolder before the first call to GetNextRootFolder.

Parameters

None

Return Values

The Folder Name, 'End', or an error.

GetFolderType

Description

Returns a string representation of the default item type for the currently opened folder.

Parameters

none

Return Values

'Mail', 'Contact', 'Task', 'Calendar', 'Note', 'Post', 'Journal' or an error



GetCurrentFolderName

Description

Returns the name of the currently opened folder

Parameters

none

Return Values

The name of the folder or an error



Available Fields

The following table gives a listing of all the Outlook record fields that are available for access by the plug-in using the GetFieldData and SetFieldData commands. 'Read Only' fields cannot be set using the SetFieldData function.

Contacts (Available Fields)

Outlook Field Name	Note/Restriction
Account	
Anniversary	Date
Assistant's Name	
Assistant's Phone	
Billing Information	
Birthday	Date
Body	This field is the "note" field in contacts
Business Address	Read Only
Business Address City	
Business Address Country	
Business Address PO Box	
Business Address Postal Code	
Business Address State	
Business Address Street	
Business Fax	
Business Home Page	
Business Phone	
Business Phone 2	
Callback	
Car Phone	
Categories	
Children	
City	Auto-calc
Company	
Company Main Phone	
Computer Network Name	
Customer ID	
Created	Read Only
Department	
E-mail	
E-mail 2	
E-mail 3	
Email Address Type	
Email 2 Address Type	
Email 3 Address Type	
E-mail Display As	
E-mail 2 Display As	
E-mail 3 Display As	
File As	
First Name	
Form Name	Outlook Message Class



Contacts Available Fields (cont'd)	
FTP Site	
Full Name	
Gender	Male/Female/Unspecified
Government ID Number	
Hobbies	
Home Address	Read Only
Home Address City	
Home Address Country	
Home Address PO Box	
Home Address Postal Code	
Home Address State	
Home Address Street	
Home Fax	
Home Phone	
Home Phone 2	
IM Address	
ID	Outlook Entry ID
Internet Free/Busy Address	
ISDN	
Job Title	
Journal	"True" or "False"
Language	
Last Name	
Location	
Mailing Address	Read Only
Manager's Name	
Middle Name	
Mileage	
Mobile Phone	
Modify	(Date Modified) Read Only
Nickname	
Office Location	
Organizational ID Number	
Other Address	Read Only
Other Address City	
Other Address Country	
Other Address PO Box	
Other Address Postal Code	
Other Address State	
Other Address Street	
Other Fax	
Other Phone	
Pager	
Personal Home Page	
Primary Phone	
Profession	
Radio Phone	
Referred By	
Sensitivity	Confidential/Normal/Personal/Private
Size	Read Only
Spouse	



Contacts Available Fields (cont'd)	
Subject	
Suffix	
Telex	
Title	
TTY/TDD Phone	
User Field 1	
User Field 2	
User Field 3	
User Field 4	
Web Page	



Calendar (Available Fields)

Outlook Field Name	Note/Restriction
All Day Event	"True" or "False"
Billing Information	
Body	This field is the "note" field in calendar
Busy Status	Busy/Free/Out of Office/Tentative
Categories	
Created	Read Only
Duration	Time in minutes
End	Date/Time
Form Name	Outlook Message Class
ID	Outlook EntryID
Importance	H, N, or L (for High, Normal or Low)
IsRecurring	"True" or "False"
Location	
Meeting Status	Meeting/Canceled/Received/NonMeeting
Mileage	
Modify	(Date Modified) Read Only
NetMeeting AutoStart	"True" or "False"
NetMeeting Office Document	Path to file
NetMeeting Organizer Alias	
NetMeeting Server	
Optional Attendees ⁺	
Organizer	
Remind Beforehand	Minutes to remind before appointment
Reminder	"True" or "False"
Reminder Override Default	"True" or "False"
Reminder Sound	"True" or "False"
Reminder Sound File	Path to sound file
Required Attendees ⁺	
Resources	
Response Requested	"True" or "False"
Sensitivity	Confidential/Normal/Personal/Private
Size	Read Only
Start	Date/Time
Subject	

⁺ = Option to auto invite meeting attendees if you use MS Exchange Server. When calling the "SaveRecord" record command, use the word "Appointment"
 (example: PCEM_SaveRecord ("Appointment")). This applies to the calendar module only.



Tasks (Available Fields)

Outlook Field Name	Note/Restriction
% Complete	Number, no decimals
Actual Work	Time in minutes
Attachment	See functions below for specific usage
Billing Information	
Body	This field is the "note" field in tasks
Categories	
Company	
Complete	"True" or "False"
Contacts	List of names
Created	Read Only
Date Completed	Date/Time
Due Date	Date/Time
Form Name	Outlook Message Class
Importance	High/Low/Normal
Mileage	
Modify	(Date Modified) Read Only
Owner	
Reminder	"True" or "False"
Reminder Override Default	"True" or "False"
Reminder Sound	"True" or "False"
Reminder Sound File	Name of sound to play
Reminder Time	Date/Time or 'None'
Role	
Schedule + Priority	
Sensitivity	Confidential/Normal/Personal/Private
Size	Read Only
Start Date	Date/Time
Status	"Complete", "Deferred", "InProgress", "NotStarted", or "Waiting"
Subject	
Team Task	"True" or "False"
Total Work	Time in minutes



Mail (Available Fields)

Outlook Field Name	Note/Restriction
Auto Forwarded	"True" or "False"
Bcc	
Billing Information	
Body	
Body Format	
Categories	
Cc	
Conversation Index	
Conversation Topic	
Created	
Defer Until	Date/Time
Expires	Date/Time
Flag Status	Complete/ Marked/None
Form Name	Outlook Message Class
From1	Read Only
From2	Read Only
Header	
HTML Body	
Importance	High/Low/Normal
Mileage	
Modify	(Date Modified) Read Only
Originator Delivery Requested	"True" or "False"
Receipt Requested	"True" or "False"
Received Time	Read Only
Remote Status	Marked For Copy", "Marked For Delete", "Marked For Download", "None", "Unmarked"
Sensitivity	Confidential/Normal/Personal/Private
Sent	Not Available
Sent On	Read Only
Signed By	Not Available
Size	Read Only
Subject	
To	
Unread	"True" or "False"
Voting Response	



Note (Available Fields)

Outlook Field Name	Note/Restriction
Body	This field is the "note" field in calendar
Categories	
Created	Read Only Date/Time
Color	integer
Form Name	Outlook Message Class
Modify	(Date Modified) Read Only
Subject	

Post (Available Fields)

Outlook Field Name	Note/Restriction
Billing Information	
Body	
Body Format	
Categories	
Companies	
Conversation Index	Read Only
Conversation Topic	Read Only
Creation Time	Date/Time
EntryID	Read Only
Expires	Date/Time
Form Name	Outlook Message Class
HTML Body	
Importance	"Low/normal/High"
Is Conflict	Read Only – True/False
Last modification Time	Read Only – Date/Time
Mileage	
No Aging	"True" or "False"
Received Time	
Saved	Date/Time
Sender Name	Read Only
Sensitivity	Confidential/Normal/Personal/Private
Sent On	Read Only
Size	Read Only
Subject	



Journal (Available Fields)

Outlook Field Name	Note/Restriction
Billing Information	
Body	
Categories	
Contacts	Contact Names
Conversation Topic	Read Only
Conversation Index	Read Only
Companies	
Created	Read Only – Date/Time
Doc Posted	"True" or "False"
Doc Printed	"True" or "False"
Cod Saved	"True" or "False"
Duration	Time in minutes
End	Date/Time
Form Name	Outlook Message Class
Importance	High, Normal, Low
Is Conflict	Read Only - True/False
Mileage	
Modify	(Date Modified) Read Only
No Aging	"True" or "False"
Saved	Read Only - True/False
Sensitivity	Confidential/Normal/Personal/Private
Size	Read Only
Start	Date/Time
Subject	
Unread	"True" or "False"
Type	



Return/Error Codes

The following table lists all the error codes that may be returned by the several plug-in functions.

Note: All errors have a value that is less than zero. Trapping for return values that are less than zero will trap only errors.

Value	Meaning
0	Success
-1	Plug-in not registered
-3	Invalid # of Parameters
-10	Failed Registration
-11	Failed to load Outlook
-12	Failed to load Redemption
-1000	Logon failed
-1001	Outlook not started or Authenticate not called
-1003	Outlook - Cannot Find Root Folder
-1011	Missing field name parameter
-1012	Save Path is Missing
-1013	Missing path to attachment
-1015	Folder not found
-1016	Invalid Path or FileName
-1017	Malformed Root Folder Path
-1019	Item custom field does not exist
-1020	Save called without calling NewRecord first
-1021	Invalid module name passed
-1022	Invalid field name passed
-1023	Item Operation Called with out Opening/Creating a Record
-1024	Invalid Outlook ID parameter
-1025	Unable To save Record
-1026	Must Navigate to Folder before Operation
-1027	Outlook Entry ID not Found
-1028	Unable to find records
-1029	Unable to locate destination folder
-1030	GetFirstRootFolder Not Called
-1031	Unable to Access Root Folders
-1032	Unable to access folder
-1034	Invalid ExcludeDistributionList Argument
-1035	Invalid ExcludePrivate Argument
-1036	Item type does not match destination folder.
-1038	Unable to locate record
-1040	Invalid attachment number
-1041	No Attachments Found
-1099	Function unavailable



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