



Productive
Computing



Developer's Guide

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I. Introduction

Description

The Outlook SendMail plug-in is a simple utility tool that allows FileMaker® to send plain text or HTML formatted emails with multiple attachments through Microsoft® Outlook (32-bit) while suppressing the Outlook security dialog. These operations are accomplished using FileMaker function calls from within FileMaker calculations. These calculations are generally determined from within FileMaker "SetField" or "If" script steps. For a list of available FileMaker functions and their functionality please see the accompanying Functions Guide document.

Product Version History

http://www.productivecomputing.com/outlook-sendmail/version_history

Intended Audience

FileMaker developers or persons who have knowledge of FileMaker scripting, calculations and relationships as proper use of the plug-in requires that FileMaker integration scripts be created in your FileMaker solution.

Successful Integration Practices

- 1) Read the Developer's Guide
- 2) Read the Functions Guide
- 3) Review our FileMaker Demo and video tutorials

Demo and video tutorials: <http://www.productivecomputing.com/outlook-sendmail>

- 4) Familiarize yourself with Microsoft Outlook

Error Handling

Any of the plug-in functions may encounter an error during processing. A list of error codes and their meanings can be found at the end of this document. Since all errors have a value that is less than zero, trapping for return values that are less than zero will trap only the errors. If you call GetLastError immediately after the error, a detailed description of the last error will be returned. These error handling methods are designed to assist the user troubleshoot script or logic failures.

II. Integration Steps

Accessing and using the plug-in functions involve the following steps.

1) Prerequisites For Plug-In Installation

32-bit vs 64-bit:

New plug-in version 3.0.2.2 of Outlook SendMail is available in 32-bit or 64-bit mode. The plug-in bit version that you use depends upon your FileMaker Pro bit version and the bit version of Microsoft Outlook. All applications need to be running in the same bit version. Note: 32-bit applications and 32-bit plug-ins will work on a 64-bit operation system.

	Windows OS 32-bit FileMaker 32-bit	Windows OS 64-bit FileMaker 32-bit	Windows OS 64-bit FileMaker 64-bit
Microsoft Outlook (32-bit)	Use 32-bit version of the plug-in	Use 32-bit version of the plug-in	Will not work. Requires Outlook 64-bit version of the plug-in
Microsoft Outlook (64-bit)	Will not work. Requires Outlook 32-bit and 32-bit version of the plug-in	Will not work. Requires Outlook 32-bit and 32-bit version of the plug-in	Use 64-bit version of the plug-in

Installing the Microsoft Visual C++ 2008 Redistributable Package:

Included in the package is a download link.

Name of link is: "Download Microsoft Visual C++ 2008 Redistributable Package (x86)"

This link will direct you to download the Microsoft Visual C++ Redistributable Package (x86). Some systems do not have a Visual C++ 2008 Redistributable Package installed by default. However, certain programs may have added it to your machine during their installation process.

If the plug-in fails to be recognized by FileMaker after installation (i.e. does not show up in the Edit > Preferences > Plug-ins section), then please install the included redistributable package.

Machines running 64-bit versions of Windows need to install the 64-bit ("x64") version of the redistributable package, which is also available from Microsoft.

2) Installing the Plug-in

The first step is to install the plug-in into FileMaker Pro.

FileMaker 12 or later:

1. Open the FileMaker demo file available in the plug-in bundle (www.productivecomputing.com).
2. Select the "Install" button.

For FileMaker 11 or earlier, follow the steps below to manually install the plug-in into the FileMaker Extensions folder.

1. Quit FileMaker Pro completely.
2. Locate the plug-in in your download which will be located in a folder called "Plug-in." On Windows the plug-in will have a ".fmx" extension.
3. Copy the actual plug-in and paste it to the Extensions folder which is inside the FileMaker program folder.

On Windows this is normally located here: C:\Program Files\FileMaker\FileMaker X\Extensions

4. Start FileMaker Pro. Confirm that the plug-in has been successfully installed by navigating to "Preferences" in FileMaker, then select the "Plug-ins" tab. There you should see the plug-in listed with a corresponding check box. This indicates that you have successfully installed the plug-in.

3) Registering the Plug-in

The next step is to register the plug-in which enables all plug-in functions.

1. Confirm that you have access to the internet and open our FileMaker demo file, which can be found in the "FileMaker Demo File" folder in your original download.
2. If you are registering the plug-in in Demo mode, then simply click the "Register" button and do not change any of the fields. Your plug-in should now be running in "DEMO" mode. The mode is always noted on the Setup tab of the FileMaker demo.
3. If you are registering a licensed copy, then simply enter your license number in the "LicenseID" field and select the "Register" button. Ensure you have removed the Demo License ID and enter your registration information exactly as it appears in your confirmation email. Your plug-in should now be running in "LIVE" mode. The mode is always noted on the Setup tab of the FileMaker demo, or by calling the `PCEM_GetOperatingMode` function.

Congratulations! You have now successfully installed and registered the plug-in!

Why do I need to Register?

In an effort to reduce software piracy, Productive Computing, Inc. has implemented a registration process for all plug-ins. The registration process sends information over the internet to a server managed by Productive Computing, Inc. The server uses this information to confirm that there is a valid license available and identifies the machine. If there is a license available, then the plug-in receives an acknowledgment from the server and installs a certificate on the machine. This certificate never expires. If the certificate is ever moved, modified or deleted, then the client will be required to register again. On Windows this certificate is in the form of a ".pci" file.

The registration process also offers developers the ability to automatically register each client machine behind the scenes by hard coding the license ID in the PCEM_Register function. This proves beneficial by eliminating the need to manually enter the registration number on each client machine. There are other various functions available such as PCEM_GetOperatingMode and PCEM_Version which can assist you when developing an installation and registration process in your FileMaker solution.

How do I hard code the registration process?

You can hard code the registration process inside a simple "Plug-in Checker" script. The "Plug-in Checker" script should be called at the beginning of any script using a plug-in function and uses the PCEM_Register, PCEM_GetOperatingMode and PCEM_Version functions. This eliminates the need to manually register each machine and ensures that the plug-in is installed and properly registered. Below are the basic steps to create a "Plug-in Checker" script.

```
If [ PCEM_Version( "short" ) = "" or PCEM_Version( "short" ) = "?" ]
Show Custom Dialog [ Title: "Warning"; Message: "Plug-in not installed."; Buttons: "OK" ]
If [ PCEM_GetOperatingMode ≠ "LIVE" ]
Set Field [Main::gRegResult; PCEM_Register( "licensing.productivecomputing.com" ; "80" ; "/PCIReg/pcireg.php" ;
"your license ID" )
If [ Main::gRegResult ≠ 0 ]
Show Custom Dialog [ Title: "Registration Error"; Message: "Plug-in Registration Failed"; Buttons: "OK" ]
```

4) Authenticate to Outlook

When communicating with Outlook you must first specify what Outlook profile will be used. This is accomplished by authenticating to Outlook by calling the PCEM_Authenticate (ProfileName ; ProfilePassword) function. Authenticate must be called once per FileMaker session.

If Outlook is open when this function is called, then FileMaker will simply authenticate to the currently opened Outlook profile.

If Outlook is not open when this function is called, then FileMaker will open Outlook in the background and authenticate with the default Outlook profile or it will prompt the user to select one. This depends on your machine settings found in the Windows Control Panel under Mail. Most users do not have multiple Outlook profiles set up on their machine and will benefit from leaving the two parameters (ProfileName ; ProfilePassword) blank. If you do have multiple Outlook profiles set up on your machine, then you can pass the ProfileName and ProfilePassword to access the desired Outlook profile. Please note that not all profiles have passwords associated with them.

If you desire to authenticate with a different Outlook profile, then you must first close FileMaker AND Outlook. This is because FileMaker will hold onto the authenticated Outlook profile until both FileMaker and Outlook processes are terminated.

Note: If in the course of setting field data, saving an e-mail record, or sending an e-mail you receive a dialog in Outlook asking to allow a program to send on behalf of an email account, ensure that the current machine has an anti-virus program installed and updated to the latest definitions. This is a normal security response from Outlook when it detects that there is no anti-virus software installed on the system, or that software is not up to date.

5) Sending Emails

Sending an email can be done in a single script step using the PCEM_SendMail function. Simply set the parameters in the PCEM_SendMail(To ; Cc ; Bcc ; Subject ; Body ; Attachments ; optUseHTML) function. Please note that all parameters except Subject, Body and OptUseHTML can contain multiple comma separated values.

In the examples below an email will be sent with three attachments using various methods. Please refer to the Functions Guide and our FileMaker demo file for further details and live examples.

Example of sending an email by hardcoding parameter values:

- PCEM_SendMail("joe@somecompany.com" ; "" ; "" ; "New Release" ; "A new product was just released allowing for please contact us" ; "C:\Pricing.pdf, C:\Overview.pdf, F:\SpecSheet.pdf" ; "N")

Example of sending an email by using field names:

- PCEM_SendMail(Main::gEmail To ; Main::gEmail Cc ; Main::gEmail Bcc ; Main::gEmail Subject ; Main::gBody ; FullPath1 & "," & FullPath2 & "," & FullPath3 ; Main::gUseHTML)

The FullPath1, FullPath2 and FullPath3 represent the field that stores the full file path.

6) Known Issues

- **Outlook Authentication – “Unknown MAPI Error” / “Interface Not Registered”:**

In certain cases, Outlook SendMail may return an error “80040155” (“Unknown MAPI Error” or “Interface Not Registered”) result when calling PCEM_Authenticate(username ; password). This issue is most prominent in Outlook 2013, and specifically from using a “Click-To-Run” installer for Outlook 2013 or Outlook 365.

The following fix has been provided for the plug-in (version 3.0.1.0 or later):

- ▶ Ensure that FileMaker and Outlook are both closed.
- ▶ Right-click on the FileMaker application and select “Run as Administrator.” (In Windows 7 or 8, you may need to right-click on FileMaker within the first pop-up box to see “Run as Administrator”)
- ▶ Allow FileMaker to run with the administrator elevated privileges.
- ▶ Once FileMaker has completed loading, close and reopen FileMaker as normal.
- ▶ Optionally, you may reopen Outlook if your solution requires Outlook to be open.
- ▶ This fix will make a modification to the Windows Registry to ensure that the communication interface the plug-in uses to talk to Outlook is properly set up. The changes will only work if FileMaker runs in “administrator” mode. Once FileMaker has been run with these elevated permissions for the first time, the fix will be set and any further calls to PCEM_Authenticate, whether FileMaker is running in standard or administrator mode, will have the proper communication interface set up for it.

III. Tips

We offer various Outlook and Exchange Manipulator plug-ins depending on your needs. The features of the different plug-ins are outlined in the screenshot below. This should assist you when trying to evaluate the correct plug-in to use in your environment.

FileMaker/Outlook Functions	Outlook SendMail	Outlook Manipulator	Exchange Manipulator
Send Mail (HTML & plain text)	▲	▲	▲
Send Mail with multiple attachments	▲	▲	▲
Extract Mail into FileMaker		▲	▲
Push or Pull Contact Items (Add, Edit, Delete)		▲	▲
Push or Pull Calendar Items (Add, Edit, Delete)		▲	▲
Push or Pull Task Items (Add, Edit, Delete)		▲	▲
Push or Pull Note Items (Add, Edit, Delete)		▲	▲
Push or Pull Post Items (Add, Edit, Delete)		▲	▲
Push or Pull Journal Items (Add, Edit, Delete)		▲	▲
Push or Pull Distribution Lists (Add, Edit)		▲	▲
Pull Reports, Meeting and Task Requests		▲	▲
Access User's Default Mailbox		▲	▲
Access Shared Folders		▲	▲
Access Public Folders		▲	▲
Send Email On Behalf Of Another User		▲	▲
Send Email As Another User			▲
Access All User Exchange Mailboxes via Outlook			▲

IV. Contact Us

Successful integration of a FileMaker plug-in requires the creation of integration scripts within your FileMaker solution. A working knowledge of FileMaker Pro, especially in the areas of scripting and calculations is necessary. If you need additional support for scripting, customization or setup (excluding registration) after reviewing the videos, documentation, FileMaker demo and sample scripts, then please contact us via the avenues listed below.

Phone: 760-510-1200

Email: support@productivecomputing.com

Forum: www.productivecomputing.com/forum

Please note assisting you with implementing this plug-in (excluding registration) is billable at our standard hourly rate. We bill on a time and materials basis billing only for the time in minutes it takes to assist you. We will be happy to create your integration scripts for you and can provide you with a free estimate if you fill out a Request For Quote (RFQ) at www.productivecomputing.com/rfq. We are ready to assist and look forward to hearing from you!