



Migration Guide

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I. Introduction

Description:

This document describes the steps necessary to migrate from the FileBooks Link plug-in to the FM Books Connector plug-in. In order to make the conversion process straightforward we designed a simple six step process and added eight new functions to the FM Books Connector. In brief it is a simple matter of replacing the FileBooks Link script commands with those from FM Books Connector. This document outlines in detail the specific commands, how they relate to each other and their fundamental differences.

Intended Audience:

FileMaker developers or persons who are migrating from FileBooks Link to FM Books Connector.

II. Integration Steps

Methodology

Step 1 - Understand the Methodology

Usage: Record/Table values vs. XML Document creation

The underlying functional aspects of the FM Books Connector and FileBooks Link Plug-ins are identical in that they both use Intuits qbXML to communicate with the QuickBooks via the 'Request Processor' library provided with the application. However the major difference is that FM Books Connector offers tools to construct and parse qbXML documents without having to actually compose or parse qbXML code. The methodology behind the FM Books Connector plug-in is designed with the intentions of treating qbXML request and response messages as virtual records instead of XML documents. In doing so the following functional requirements are observed:

- 1) Only one root node is available in a qbXML request. Several root nodes may be available in a response.
- 2) Child nodes of the root node are treated as either fields or related records depending on the schema of the request/response. If a child node is allowed at most one occurrence, it is a field else it is a related record.
- 3) All requests are validated against the appropriate schema before they are executed.
- 4) Validation schema is determined by the latest version of the SDK allowed for the current file.
- 5) Schema files are loaded when a session with a QuickBooks company file is started.

The above functional requirements lead to the following procedural requirements when using the FM Books Connector. These procedural requirements must be followed regardless of which avenue is pursued when composing requests for QuickBooks:

- 1) FM Book Connector logic is bound tightly to latest available qbXML schema for the currently opened QuickBooks file and the user must design scripts accordingly.
- 2) Before a request can be made of QuickBooks a session must be started with the QuickBooks file.

Safe Practices

Step 2 – Back up your files

We highly recommend that you back up your FileMaker AND QuickBooks files before beginning the migration process. When performing a migration, upgrade or major change to any system or files, creating a complete back up is always a good practice. Before proceeding please back up your files NOW!

Functional Relationships

Step 3 – Interchange FileBooks Link Functions with their corresponding FM Books Connector functions

The following table lists FileBooks Link functions and their corresponding FM Books Connector function along with short note regarding major differences between the two functions. Generally all the functions are interchangeable with a few notable differences. All the functions added to the plug-in for FileBooks Link conversion begin with "PCQB_Z" and will be referred to as 'Z' functions. All functions are explained in the Functions Guide.

FileBooks Link	FM Books Connector	Notable Differences
fbLink_CheckSyntax	PCQB_ZValidateXML	Requires active session with previous call to PCQB_BeginSession. First parameter is either data or path to data. Second parameter is a boolean indicating content of first parameter.
fbLink_CloseCompanyFileLink	PCQB_EndSession	
fbLink_CloseQuickBooksLink	PCQB_ZCloseConnection	
fbLink_Connect	PCQB_BeginSession	
fbLink_DeleteFile	PCQB_ZDeleteFile	
fbLink_Execute_qbXML	PCQB_ZExecute	QB file reference (first parameter in fbLink) is omitted. Requires active session with previous call to PCQB_BeginSession.
fbLink_FormatData	PCQB_SFormatString	Pass variables as strings in their raw FileMaker format as there is no need to convert data. For example: Remove GetAsNumber function as there is no need to transform the date as a number.
fbLink_Modify	PCQB_ZModify	QB file reference (first parameter in fbLink) is omitted. Requires active session with previous call to PCQB_BeginSession.
fbLink_ParseXML	PCQB_ZParseXML	
fbLink_ParseXMLFile	PCQB_ZParseXML	
fbLink_Query	PCQB_ZQuery	QB file reference (first parameter in fbLink) is omitted. Requires active session with previous call to PCQB_BeginSession.
fbLink_Register	PCQB_Register	Registers the plug-in with Productive Computing.
fbLink_ResetQBOE	PCQB_ZResetQBOE	**Not yet available**
fbLink_SelectFile	PCQB_Browse	
fbLink_Version	PCQB_Version	Optional parameter in FM Books Connector to return the name of plug-in and version.

Testing

Step 4 - Install and Register the plug-in

Each FM Books Connector plug-in must be installed and registered with Productive Computing, Inc. Registration is accomplished using the PCQB_Register function available from the plug-in. Please see the accompanying "Developer's Guide" documentation for instructions on how to properly install and register the plug-in.

Registration differences: Machine centric vs. QB File centric

The FM Books Connector is licensed per client machine. This means that each machine using the plug-in is to have its own license and can access an unlimited number of QuickBooks company files.

This is in sharp contrast to FileBooks Link which is licensed per QuickBooks company file meaning that each registered installation can only access a single QuickBooks company file from various machines.

Step 5 – Connect with a QuickBooks file

The next step is to establish a connection with a QuickBooks company file. Use PCQB_BeginSession to connect and begin a session with Quick Books. Open the QuickBooks file as the administrator in single user mode. You will be asked to accept the FM Books Connector as an approved application to allow communication with QuickBooks. PCQB_BeginSession must be called before any modify, execute, query, or validate function. The PCQB_BeginSession functionality is further explained in the "Functions Guide".

Step 6 – Capturing Errors

While testing please note that the values returned by the query, execute, or modify functions have changed.

In the case of capturing errors the fundamental difference is that if an error occurs all of our plug-in functions return "!!ERROR!!" as opposed to the FileBooks Link functions which return "\$\$ + error number".

When an "!!ERROR!!" is returned during processing, immediately call the PCQB_SGetStatus function in order to obtain a full description of the error. PCQB_SGetStatus will return the message associated with the last error.

The message is used to identify errors in the request or the processing of requests. The text returned by this function can assist to troubleshoot script or logic failures.

III. Appendix

Available Objects in Modify and Query Requests – Desktop editions of QuickBooks

The Object column contains the values to pass in the PCQB_ZModify or PCQB_ZQuery functions. The Query and Modify columns indicate the EARLIEST required version of QuickBooks for the desired object and edition of QuickBooks. 'N/A' indicates the object is not available to the particular function for the particular edition of QuickBooks. R2 indicates Revision 2 and E2 indicates Enterprise 2.

Object	US Editions		Canadian Editions		UK/OZ Editions	
	Query	Modify	Query	Modify	Query	Modify
Account	2002 (R2)	2002 (R2)	2003	2008	2003	2003
AgingReport	2003 and E2	N/A	2003	N/A	2003	N/A
Bill	2002 (R2)	2004	2003	2004 - 2007	2003	2003
BillPaymentCheck	2003 and E2	2007	2003	2008	2003	2003
BillPaymentCreditCard	2003 and E2	N/A	2003	N/A	2003	N/A
BillToPay	2003 and E2	N/A	2003	N/A	2003	N/A
BudgetSummaryReport	2004	N/A	2004 - 2007	N/A	2004 - 2006	N/A
BuildAssembly	2006	2006	2008	2008	2008	2008
Charge	2002 (R2)	2004	2003	2004 - 2007	2003	2003
Check	2002 (R2)	2007	2003	2008	2003	2003
Class	2002 (R2)	2002 (R2)	2003	2008	2003	2008
ClearedStatus	N/A	2003 and E2	N/A	2008	N/A	2008
Company	2002 (R2)	N/A	2003	N/A	2003	N/A
CompanyActivity	2003 and E2	N/A	2003	N/A	2003	N/A
CreditCardCharge	2002 (R2)	2007	2003	2008	2003	2003
CreditCardCredit	2002 (R2)	2007	2003	2008	2003	2003
CreditMemo	2002 (R2)	2004	2003	2004 - 2007	2003	2003
Currency	N/A	N/A	2003	2003	2003	2003
CustomDetailReport	2003 and E2	N/A	2003	N/A	2003	N/A
Customer	2002 (R2)	2002 (R2)	2003	2003	2003	2003
CustomerMsg	2002 (R2)	2002 (R2)	2003	2008	2003	2008
CustomerType	2002 (R2)	2002 (R2)	2003	2008	2003	2008
CustomSummaryReport	2003 and E2	N/A	2003	N/A	2003	N/A
DataEventRecoveryInfo	2004	N/A	2004 - 2007	N/A	2004 - 2006	N/A
DataExt	N/A	2003 and E2	N/A	2008	N/A	2008
DataExtDef	2003 and E2	2003 and E2	2003	2003	2003	2003
DateDrivenTerms	2002 (R2)	2002 (R2)	2003	2008	2003	2008
Deposit	2003 and E2	2008	2003	2008	2003	2008
Employee	2002 (R2)	2002 (R2)	2003	2003	2003	2003
Entity	2002 (R2)	N/A	2003	N/A	2003	N/A
Estimate	2002 (R2)	2004	2003	2004 - 2007	2003	2003
GeneralDetailReport	2003 and E2	N/A	2003	N/A	2003	N/A
GeneralSummaryReport	2003 and E2	N/A	2003	N/A	2003	N/A
Host	2002 (R2)	N/A	2003	N/A	2003	N/A

Object	US Editions		Canadian Editions		UK/OZ Editions	
	Query	Modify	Query	Modify	Query	Modify
InventoryAdjustment	2003 and E2	N/A	2003	N/A	2003	N/A
Invoice	2002 (R2)	2004	2003	2004 - 2007	2003	2003
Item	2002 (R2)	N/A	2003	N/A	2003	N/A
ItemDiscount	2002 (R2)	2002 (R2)	2003	2004 - 2007	2003	2003
ItemFixedAsset	2004	2004	2004 - 2007	2004 - 2007	2004 - 2006	2004 - 2006
ItemGroup	2002 (R2)	2002 (R2)	2003	2004 - 2007	2003	2003
ItemInventory	2002 (R2)	2002 (R2)	2003	2003	2003	2003
ItemInventoryAssembly	2003 and E2	2004	2003	2004 - 2007	2003	2003
ItemNonInventory	2002 (R2)	2002 (R2)	2003	2003	2003	2003
ItemOtherCharge	2002 (R2)	2002 (R2)	2003	2004 - 2007	2003	2003
ItemPayment	2002 (R2)	2002 (R2)	2003	2004 - 2007	2003	2003
ItemReceipt	2004	2005	2004 - 2007	2008	2004 - 2006	2004 - 2006
ItemSalesTax	2002 (R2)	2002 (R2)	2008	2008	2008	2008
ItemSalesTaxGroup	2002 (R2)	2002 (R2)	2008	2008	2008	2008
ItemService	2002 (R2)	2002 (R2)	2003	2003	2003	2003
ItemSubtotal	2002 (R2)	2002 (R2)	2003	2004 - 2007	2003	2003
JobReport	2003 and E2	N/A	2003	N/A	2003	N/A
JobType	2002 (R2)	2002 (R2)	2003	2008	2003	2008
JournalEntry	2002 (R2)	2007	2003	2008	2003	2003
ListDeleted	2003 and E2	N/A	2003	N/A	2003	N/A
ListDisplay	N/A	2004	N/A	2008	N/A	2008
OtherName	2002 (R2)	2002 (R2)	2003	2003	2003	2003
PaymentMethod	2002 (R2)	2002 (R2)	2003	2008	2003	2008
PayrollDetailReport	2004	N/A	2004 - 2007	N/A	2004 - 2006	N/A
PayrollItemNonWage	2004	N/A	2004 - 2007	N/A	2004 - 2006	N/A
PayrollItemWage	2002 (R2)	N/A	2003	N/A	2003	N/A
PayrollSummaryReport	2004	N/A	2004 - 2007	N/A	2004 - 2006	N/A
Preferences	2002 (R2)	N/A	2003	N/A	2003	N/A
PriceLevel	2005	2005	2008	2008	2008	2008
PurchaseOrder	2002 (R2)	2004	2003	2004 - 2007	2003	2003
ReceivePayment	2002 (R2)	2007	2003	2008	2003	2003
ReceivePaymentToDeposit	2003 and E2	N/A	2003	N/A	2003	N/A
SalesOrder	2003 and E3	2004	2004 - 2007	2004 - 2007	2004 - 2006	2004 - 2006
SalesReceipt	2002 (R2)	2006	2003	2008	2003	2003
SalesRep	2002 (R2)	2002 (R2)	2003	2004 - 2007	2003	2003
SalesTaxCode	2002 (R2)	2002 (R2)	2008	2008	2008	2008
ShipMethod	2002 (R2)	2002 (R2)	2003	2008	2003	2008
StandardTerms	2002 (R2)	2002 (R2)	2003	2008	2003	2008
TaxCode	N/A	N/A	2003	2003	2003	2003
Template	2004	N/A	2004 - 2007	N/A	2004 - 2006	N/A
Terms	2002 (R2)	N/A	2003	N/A	2003	N/A
TimeReport	2003 and E2	N/A	2003	N/A	2003	N/A
TimeTracking	2002 (R2)	2007	2003	2008	2003	2003
ToDo	2002 (R2)	2002 (R2)	2003	2008	2003	2008
TxnDeleted	2003 and E2	N/A	2003	N/A	2003	N/A
TxnDisplay	N/A	2004	N/A	2008	N/A	2008
Vehicle	2007	2007	2008	2008	2008	2008
Vendor	2002 (R2)	2002 (R2)	2003	2003	2003	2003
VendorCredit	2002 (R2)	N/A	2003	N/A	2003	N/A
VendorType	2002 (R2)	2002 (R2)	2003	2008	2003	2008
WorkersCompCode	2008	2008	2008	2008	2008	2008

IV. Contact Us

In addition to this document we highly recommend that you read the Developer's Guide and Function's Guide before beginning the migration. 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!