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# **FmPro Migrator - Access to FileMaker Migration Procedure**

# FmPro Migrator - Access to FileMaker Migration Procedure

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# **Overview**

### Overview

This document provides an explanation of the steps required to perform a Microsoft Access to FileMaker Pro Migration project using FmPro Migrator. This migration process includes the migration of Tables/Fields, data, Relationships, Value Lists, Forms/Reports and Visual Basic code.

Revision 20 4/14/2024

[Revision Notes: Updated for FmPro Migrator Platinum Edition 11.01. Added new Licensing FmPro Migrator info, updated screenshots.] As of FmPro Migrator v11, all FmPro Migrator downloads are fully functional with features unlocked via a single license key.

This section of the manual shows how to enter the license key to unlock the features within FmPro Migrator.

FmPro Migrator 11.01 4/14/2024

## Demo Edition Dialog

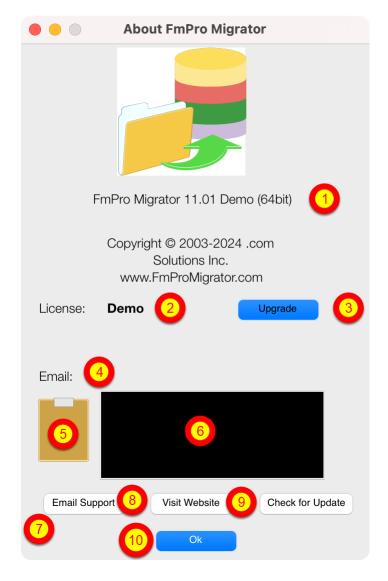


When launched the first time, FmPro Migrator will be running in Demo mode as shown in this screenshot. Clicking the Ok button opens the order page of the website.

In addition to transferring data for 5 database fields, the conversion features shown on the GUI tab of the Migration Process window will convert 5 layouts or forms/reports & scripts.

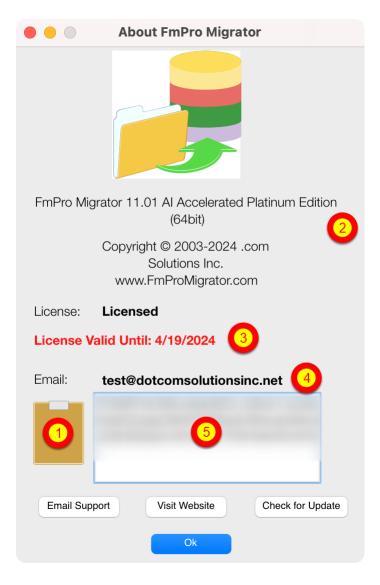
•••	FmPro Migrator	
About F	ileMaker	
	<ul> <li>FmPro Migrator migrates FileMaker Pro database structure a MySQL, Access, SQLite, SQL Server, Sybase, DB2 and Post tables.</li> <li>FileMaker to FileMaker 11+ migrations/table consolidation p Access, Visual FoxPro, Firebird, SQL Server, MySQL to FileM supported.</li> <li>FileMaker Pro Layouts, Microsoft Access or Visual FoxPro F converted into LiveCode stacks, Access databases or Visua</li> <li>FileMaker Layouts are converted into PHP web applications</li> </ul>	greSQL database rojects are supported. Maker 11+ migrations are forms and scripts are I Studio .Net projects.
	Developed by .com Solutions Inc. www.fmpromigrator.com <b>FmPro Migrator 11.01 Demo (64bit)</b> License	
.com Solutions I	nc.	Chat now

Clicking the "License" button on the About tab, or selecting the Help -> License/About menu items will open the About window where you can enter the license key.



On the About FmPro Migrator window:

(1) Product name and version licensed, (2) Demo or Licensed will be displayed, (3) The Upgrade button opens the website order page, (4) Email address associated with your license key, (5) Clipboard button reads the license key from the clipboard, (6) License key field, (7) Email Support button opens the Contact form on the website, (8) Visit Website opens the order page in Demo mode or the product page in Licensed mode, (9) Check for Update opens the downloads page with the latest software version, (10) Ok button closes the About window.



Your product license key will be displayed in your web browser when your order has been completed. It will also will be sent via email at the same time, please check your SPAM folder if the email doesn't arrive in a few minutes.

(1) Copy the license key to the clipboard and click the clipboard icon. Once validated (2) the product name will change, (3) the License validation date will be updated, (4) your email address will be displayed, and (5) the license key will be displayed in the field under the Email address when clicking inside the field. In this screenshot the license key has been obscured.

And that is all you need to do to license all of the features of FmPro Migrator.

# Step 1

Previously, Microsoft Office 365 was incompatible with the installation of the ACEODBC.dll file required to provide support for reading or writing Access .accdb database files by external applications via ODBC. This problem is now resolved with Office 365 installations in 2023 when running the offline installer.

Installing Microsoft 365 Access Runtime - for ODBC Driver [Optional]

Install the	e Microsoft 365 Access Runtime						
	5 Access Runtime files are available as a free download in either the 32-bit (x86) or 64- in all supported languages.						
	hich bit version you need. For more information, see Choose between the 64-bit or 32- n of Office.						
2. In the foll version.							
or SaveFi	ig on your browser, select <b>Run</b> (in Edge or Internet Explorer), <b>Setup</b> (in Chrome), <b>le</b> (in Firefox). If you see the User Account Control prompt that says, <b>Do you want to</b> <b>s app to make changes to your device?</b> select <b>Yes</b> . The install begins.						
English	$\checkmark$						
	CULTURE (LL- DOWNLOAD LINKS CC)						
English	en-us 32-bit Download						

This step can probably be skipped as of 2023.

Testing being done in June 2023 shows that the Access 2016 32-bit and 64-bit ODBC drivers are being installed with the Office 365 offline installer: O365HomePremRetail.img (4.7GB). You only

need to install this runtime if the installer didn't install the ODBC driver.

But after installing the runtime, you will probably need to uninstall the runtime - which will leave the ODBC driver in place. Testing after installing the runtime caused problems with Access which prevented seeing any of the tables/fields or data within the database since the runtime was being used instead of the full copy of the Access database application.

The URL for this Microsoft 365 Runtime is currently located as follows:

https://support.microsoft.com/en-us/office/download-and-install-microsoft-365-access-runtime-185c

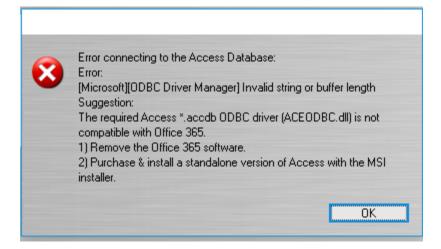
#### FmPro Migrator Office 365 Error Dialog - Importing .accdb Files [Obsolete]



This error should no longer occur with new Office 365 installations. New installations are installing the ODBC driver and it works correctly on x86-64 hardware. This note in the manual is just for historical and documentation purposes - and should not occur with newer versions of Office 365 as of 2023.

If this error occurs, please send an email via the Contact page on the FmProMigrator website. The code which checks for this registry key still remains in FmPro Migrator, but should not get triggered anymore.

FmPro Migrator Office 365 Error Dialog - Exporting to .accdb Files [Obsolete]

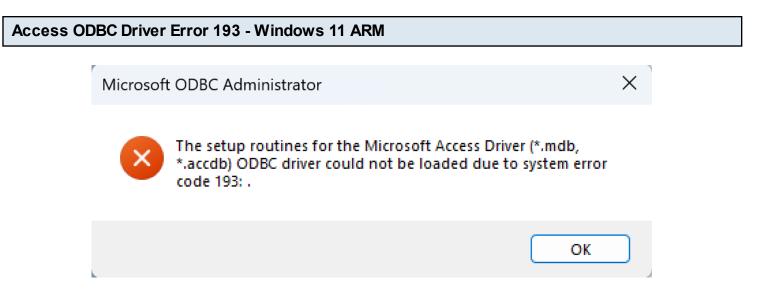


This error should no longer occur with new Office 365 installations as of 2023. Previously, this error could occur when creating a table or transferring data into an Access .accdb file.

Microsoft	×
NV V	
Download and install M When you install Microsoft 365, Mi device's operating system, disk spa measure and improve the installation Choose a language ⑦ English	crosoft collects data about your ce, and download performance to
Offline installer Need help installing? System requirements Microsoft 365 help & training Frequently asked questions	∨ Install Cancel

By default, Microsoft will use the ClickToRun installer. You should download the offline installer. The offline installer includes both 32-bit and 64-bit versions of Office software.

FmPro Migrator is available in both 32-bit and 64-bit versions which are both included with your purchase. You should match the version of FileMaker Pro which you have installed. For instance, if the copy of FileMaker Pro is 64-bit, then all of the rest of the software should also be 64-bit.



The remaining issues with Office 365 or Access 2016 ODBC functionality at this time, seems to be when running on Windows 11 ARM.

1) When creating/updating a 64-bit ODBC DSN, error 193 is displayed. Manually editing the registry entries has not solved this issue. A32bit DSN can be created and edited, but the .mdb driver doesn't support .accdb files. It may be possible to convert .accdb files into .mdb files, but features may be lost.

2) The system created links to the 32-bit and 64-bit ODBC Administrator EXE files are not created properly and need created manually for the Start menu.

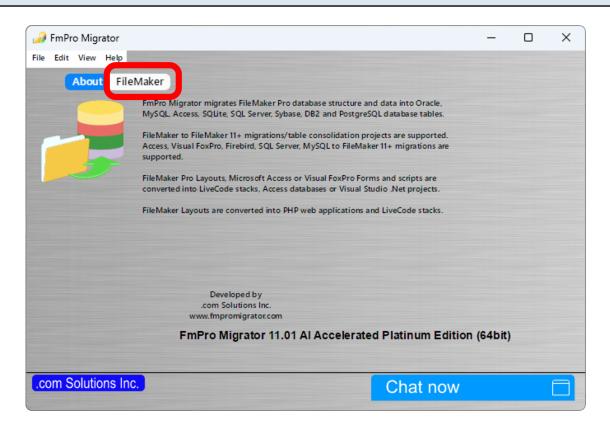
These problems don't occur with Windows 11 on x86-64 CPUs.

### Step 1 - Get Info - Access to FileMaker Pro

FmPro Migrator uses the information within the Access mdb/accdb file to perform the conversion of tables/fields and data from Microsoft Access to FileMaker Pro. FmPro Migrator can be running on macOS or Windows in order to perform the conversion. It is not necessary to have a copy of Access running on the computer which is being used to perform the conversion, but FileMaker Pro is required.

When using FmPro Migrator on macOS, the <u>Actual Technologies</u> ODBC Driver for Access is required.

#### Step 1 - Click FileMaker Tab



Launch FmPro Migrator, then click on the FileMaker tab at the top of the window.

🎣 FmPro Migrator						_		×
File Edit View Help								
About F	ileMaker				Continue			
Step 1						_		
Get Info	Output Directory:	//Mac/Home/FmP	ro				Browse	JU
	Source Datab	Access	$\sim$	ODBC DSN:	example_acs_dsn			
	Source Db User:	Admin		Source Db Pas	sword:			
	Destination Database:	FileMaker 20	$\sim$	ODBC DSN:	example2_fmp_dsn			3
	Destination Db User:	Admin		Destination Db	Password:			-
.com Solutions I	nc.			(	Chat now			

FmPro Migrator stores migration process information within a SQLite database file named MigrationProcess.db3. This file contains the metadata for the source Access database file, including tables, fields, table creation SQL code and status info. Therefore the first step in the migration process is to click the Browse button to select the output folder FmPro Migrator will use when creating the MigrationProcess.db3 file.

(1) Select the output directory, then (2) select Access from the Source Database menu.
(3) Create an ODBC DSN to the FileMaker database using the name already shown in the Destination Database ODBC DSN field. Or you may create an ODBC DSN with a different name and enter the name in this field.

[Details are provided in the following pages for installing FileMaker ODBC drivers and creating the ODBC DSN.]

**Note:** FmPro Migrator will automatically create a File DSN to read table info from the Access database. But you should create an ODBC DSN (shown later) when transferring data from Access to FileMaker [on Windows].

#### **Continue Migration...**

\_

File	Edit	Help		
Dis	play T	ips	ЖТ	
Open XO				
Save As				
Continue Migration				
Status Window				

**Tip**: To restart an existing migration project, select the output directory, then select Continue Migration... from the File menu.

Click the yellow Continue button to open the Migration Process window.

	🧀 FmPro Migrator				- 🗆	$\times$
	File Edit Help					
I I = C:\ds\customer_files\Access_to_F − □	About F	FileMaker				
File Home Share View	Step 1	Output Directory:	/test/			
Pin to Quick Copy Paste P	Get Info	Capa Directory.	/iesi/		Browse	
Clipboard Organize	Drag & Drop 🗸 🗸	Source Database:	Access ~			
$\leftarrow \rightarrow \checkmark \uparrow$ $\checkmark$ cust $\rightarrow$ Access_t $\checkmark \bar{o}$ Syntch A		Source Db User:	Access	Source Db Password:		
Home Name		Destination Database:	FileMaker 16 🗸	ODBC DSN: example2_fmp_dsn		
revCloseDatabas 🔬 Access2000Demo3_v2.accdb		Destination Db User:	Admin	Destination Db Password:		
즑 OneDrive						
This PC v <						
1 item						

Drag & Drop the Access file onto the Step 1 Get Info icon.

#### Step 1 - Get Info - Troubleshooting

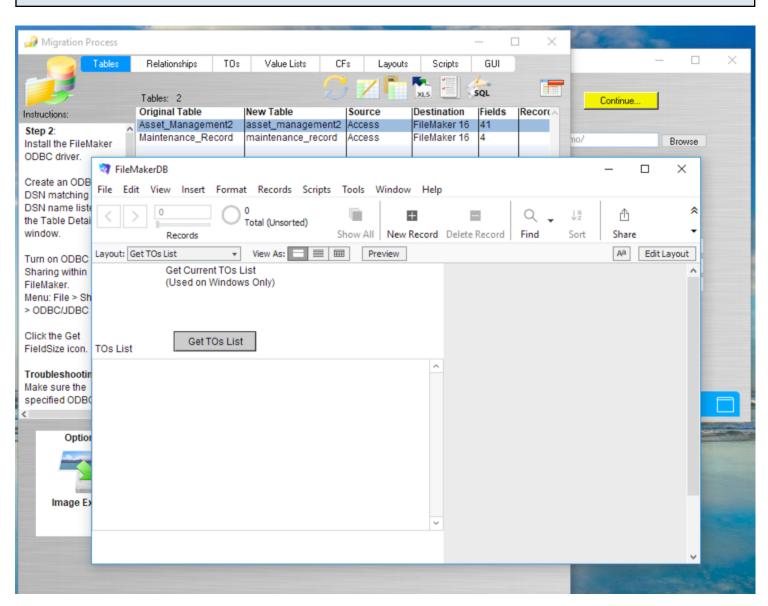
**Note:** FmPro Migrator makes a file DSN connection to read the structure info from the Access database file. On macOS, this process requires the Actual ODBC Driver for Microsoft Access from Actual Technologies (<u>www.actualtech.com</u>).

On Windows, the Microsoft Access ODBC driver is pre-installed when Microsoft Access is installed.

#### Step 1 - Get Info - Select Continue... Menu

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	FmPro Migrator						_		×
File	Export AccessDD Export VFPExport	exe Utility Template Database n	Ctrl+T	tomer_files//	Access_to_FM_[	Demo/		Browse	
~	Fix Duplicate Colu Status Window Quit		Ctrl+Q FileMake	s ~	Source Db Pa ODBC DSN:	assword: example2_fm	p dsn		
		Destination Db User:	Admin		Destination D				
	om Solutions Inc.					Chat now			

After the Gathering Info... dialog disappears, select the File -> Continue Migration... menu or click the yellow Continue... button.



#### Step 1 - FileMakerDB & Migration Process Windows

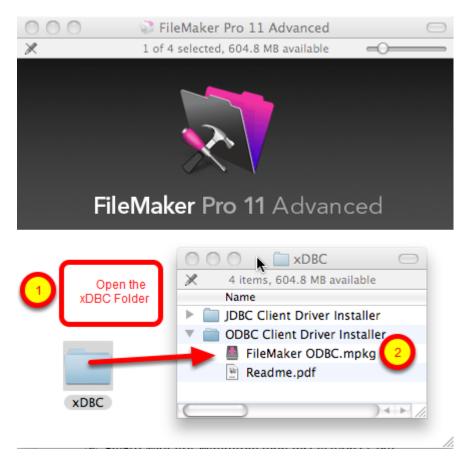
After Continue Migration has been selected, the Migration Process window will open. FmPro Migrator will also save a FileMaker template database file named FileMakerDB.fp7/.fmp12 to the output directory and will open the FileMaker database file.



Download and install the free ODBC Administrator for macOS from www.odbcmanager.net

You will use the ODBC Administrator to create and manage your ODBC DSNs on macOS.





(1) Open the xDBC folder on the FileMaker install CD (or installer image DMG file).

(2) Double-click the FileMaker ODBC.mpkg installer to install the FileMaker ODBC driver. Follow the insular prompts.

# Add a System DSN

Us 1 N S	ystem DSN Dri	ivers Tracing Connection Pooling About
Name	Description	Driver
example_acs_dsn		Actual Access 2 Add
example_fmp_dsn		FileMaker 9 ODBC
example_fmp_dsn7		FileMaker 9 ODBC Remove
FMSR_DSN	SQLite ODBC	Actual Open Source Databases Configure
frontbase_dsn		FrontBase
mysql_dsn		Actual Open Source Databases
openbase_dsn		Actual OpenBase
oracle_dsn		Actual Oracle
pg_pv360_dsn	PostgreSQL o	Actual Open Source Databases
pv360_oracle_dsn		Actual Oracle
sqlserver2_dsn		Actual SQL Server
sqlserver_dsn		Actual SQL Server
sybase_dsn		Actual SQL Server
test_acs	my database	Actual Access

(1) Click the System DSN tab, then (2) click the Add button.

#### Choose the FileMaker ODBC Driver

Us	oose a	driver:			About
Name	Driver				
example example	Actual Or Actual SQ				
exam FMSR	FileMaker	ODBC			
front mysq	MySQL 3 SQLite3	ODBC			*
open			Асция Оренвазе		_
oracle_d			Actual Oracle	cel OK	
			Actual Open Sou Can Actual Oracle		
sqlserve	racle_dsn r2_dsn		Actual SQL Server		
sqlserve			Actual SQL Server		
sybase_o			Actual SQL Server	¥	
test_acs		my database	Actual Access	<b>v</b>	

(1) Select the FileMaker ODBC driver from the list, (2) click the Ok button.

## FileMaker ODBC DSN Configuration - Page 1

FileMaker DSN Configuration					
Introduction					
The FileMaker ODBC assistant helps you manage your ODBC driver and connections. About You will be prompted for the host address and database name.					
To configure the data source, click the Continue button.					
Cancel Go Back Continue					

Click the Continue button.

	FileMaker DSN Configuration
	Enter the data source name and description
<ul> <li>Introduction</li> <li>Data Source</li> <li>Connection</li> <li>Database</li> <li>Conclusion</li> </ul>	This assistant creates an ODBC data source that you can use to connect to your database. What name do you want to use to refer to the data source? Name: example_fmp_dsn11 How do you want to describe the data source? Description:
FileMaker	
	Cancel Finish Go Back Continue

(1) Enter a name for the FileMaker ODBC DSN. The name used here needs to be exactly the same as the ODBC DSN Name you enter into FmPro Migrator.

(2) Click the Continue button.

**Note:** You can pick a different name than you see here, just make sure that you enter exactly the same name into FmPro Migrator.

FileMaker ODBC DSN Configuration - ODBC DSN Field in FmPro Migrator

00		FmPro Migra	ator			
About File	Maker					
Step 1	O de la Diserta en					
	Output Directory:	/Users/dsimpson/Desl	.top/Access_To	_FM/	Browse	•
Get Info Drag & Drop						
	Source Database:	Access 🛟				
	Source Db User:	1	Source Db Pas	ssword:		
	Destination Database:	FileMaker 11	ODBC DSN:	example_fm	p_dsn11	
	Destination Db User:	Admin	Destination D	b Password:		
.com Solutions Inc.						14.

In this screenshot, the FileMaker 11 database is the destination database, therefore the FileMaker ODBC DSN name is entered in the Destination Database ODBC DSN field.

If the FileMaker database was the source database, and the data was being copied to a different database server, then the FileMaker ODBC DSN would be entered into the ODBC DSN field for the Source Database (not shown in this screenshot).

#### FileMaker ODBC DSN Configuration - Page 3

	FileMaker DSN Configuration
	Enter the connection information
<ul> <li>Introduction</li> <li>Data Source</li> <li>Connection</li> <li>Database</li> <li>Conclusion</li> </ul>	Which host do you want to connect to?
ODBC for FileMaker	Connect to host to obtain the names of available databases.
	Cancel Finish Go Back Continue

(1) Enter the hostname for the FileMaker database (default is localhost).

(2) Click the Continue button.

For a file which has been opened on your local desktop machine, leave the default setting of localhost.

For a hosted file hosted by FileMaker Server Advanced, enter the IP Address or hostname of the FileMaker Server Advanced computer.

	FileMaker DSN Configuration		
	Enter the database information		
⊖ Introduction	Which database do you want to connect to?		
Data Source	1 Database: Default		
<ul> <li>Connection</li> <li>Database</li> </ul>			
<ul> <li>Database</li> <li>Conclusion</li> </ul>	If your application requires special handling of non-English text, click Advanced Language.		
	Chick Advanced Language.  Advanced Language  Advanced Language  Save long running queries to a log file:  Choose		
ODBC for FileMaker	Long query time (milliseconds): 5000		
	Cancel Finish Go Back Continue		

(1) For most locally hosted database files, enter the text "Default" into the Database field, instead of selecting a database from the list. This way you can use any single database file without re-selecting the database name each time you open a new file.

To use this feature, you must only have one FileMaker database file open at a time, or an error will occur when attempting to read info from the database.

(2) Click the Advanced Language button.

	FileMaker DSN Configuration
	These options affect the way non-English characters are handled by the driver.
<ul> <li>Introduction</li> <li>Data S</li> <li>Connection</li> <li>Database</li> <li>Conclusion</li> </ul>	<ul> <li>Auto-detect language settings for application</li> <li>Application uses the "wide" ODBC API</li> <li>Treat text types as code</li> <li>System (MacRoman)</li> <li>Multi-byte text encoding ✓ UTF-8</li> <li>Cance 3 OK</li> </ul>
ODBC for FileMake	
	Cancel Finish Go Back Continue

- (1) Un-check the Auto-detect language settings checkbox.
- (2) Select UTF-8 from the Multi-byte text encoding menu.
- (3) Click the Ok button.

## FileMaker ODBC DSN Configuration - Page 4

	FileMaker DSN Configuration
	Enter the database information
<ul> <li>Introduction</li> <li>Data Source</li> <li>Connection</li> </ul>	Which database do you want to connect to? Database: Default
<ul> <li>Database</li> <li>Conclusion</li> </ul>	If your application requires special handling of non-English text, click Advanced Language Advanced Language
ODBC for FileMaker	Long query time (milliseconds): 5000
	Cancel Finish Go Back Continue

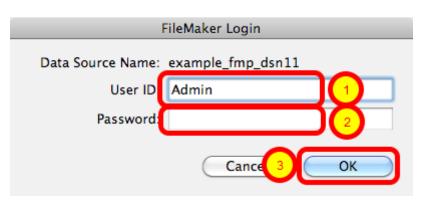
(1) Click the Continue button.

	FileMaker DSN Configuration
	Conclusion
Introduction	The ODBC data source has the following configuration:
<ul> <li>Data Source</li> <li>Connection</li> <li>Database</li> <li>Conclusion</li> </ul>	FileMaker ODBC Driver 11.0.58 Data Source Name: example_fmp_dsn11 Description: Host: localhost Database: Default Auto-detect Language Settings: No Application Uses "Wide" API: No Treat Text Types as Unicode: No Multi-Byte Encoding: UTF-8 Log Long Running Queries: No
ODBC for FileMaker	
	Cancel Test Go Back Done

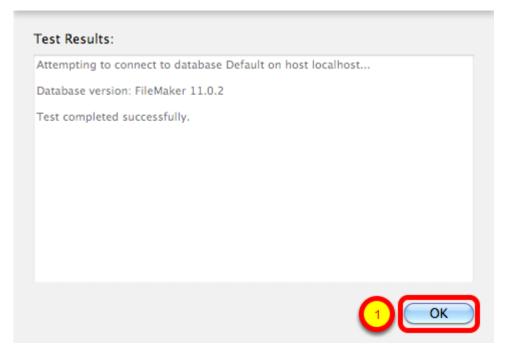
(1) Click the Test button.

If the test fails, use the following steps to enable ODBC sharing for the FileMaker database. **Note:** Each FileMaker database needs to have ODBC sharing enabled individually.

#### FileMaker ODBC DSN Configuration - Page 5 - ODBC DSN Test



Enter the (1) Username, (2) Password, then (3) click the Ok button to test the ODBC DSN.



(1) Click the Ok button.

If the test passes, this dialog will be displayed, showing that the ODBC Driver Manger has used this ODBC DSN to successfully connect to the FileMaker database.

If the test fails:

1) Verify that the FileMaker database file is open.

2) Verify that FileMaker ODBC sharing is enabled for the account entered in the connection test dialog prompt.

4) Make sure that there aren't two different copies of FileMaker running at the same time. Both older and current versions of FileMaker use TCP/IP Port# 2399 for ODBC connectivity. If this type of conflict occurs, close both versions of the FileMaker application, and only open the one copy you want to serve the database file being migrated.

5) Try rebooting the computer (after clicking Ok to save changes and close this ODBC dialog). Then test the DSN again after rebooting.

	FileMaker DSN Configuration
	Conclusion
<ul> <li>Introduction</li> <li>Data Source</li> <li>Connection</li> <li>Database</li> <li>Conclusion</li> </ul>	The ODBC data source has the following configuration: FileMaker ODBC Driver 11.0.58 Data Source Name: example_fmp_dsn11 Description: Host: localhost Database: Default Auto-detect Language Settings: No Application Uses "Wide" API: No Treat Text Types as Unicode: No Multi-Byte Encoding: UTF-8 Log Long Running Queries: No
FileMaker	
	Cancel Test Go Bac Done

(1) Click the Done button to save the new ODBC DSN.

#### Enable ODBC/JDBC Sharing within FileMaker Pro

New Database Open Open Remote Open Recent Close Manage	第0 <b>企</b> 第0 ▶ 策W	
Sharing	•	FileMaker Network
File Options Change Password	M	Instant Web Publishing ODBC/JDBC
Page Setup		
Print	ЖP	
Import Records	•	
Export Records		
Save/Send Records A	s 🕨	
Send Mail		
Send Link		
Save a Copy As		
Recover		

ODBC/JDBC Sharing needs to be enabled within any FileMaker Pro database file which is going to be used with the FileMaker ODBC driver.

Select Sharing Parameters			
	FileMaker ODBC/JDBC Settings		
	ODBC/JDBC Settings Turn on ODBC/JDBC Sharing to publish all shared open files using this protocol. ODBC/JDBC Sharing:		
	File access via ODBC/JDBC		
	CODBC/JDBC access to file FileMakerDB.fp7 CODBC/JDBC access to file File: FileMakerDB.fp7 Code All Users Specify users by privilege set Specify No users		
	Cancel OK		

(1) Turn on ODBC/JDBC Sharing, (2) for the currently open FileMaker Pro database file, (3) for All Users, then (4) click the Ok button.

Install the FileMaker ODBC driver from within the xDBC folder on the installation CD or CD image file.

#### Downloading the FileMaker ODBC Driver

#### Software Update: FileMaker xDBC client drivers for FileMaker

xDBC Client Drivers for FileMaker 19

Products	Windows download	Macintosh download
FileMaker Pro 19.4.1 FileMaker Server 19.4.1	Win 🧿	Mac O Requires 64-bit ODBC Manager
Products	Windows download	Macintosh download
FileMaker Pro 19.3.1 FileMaker Server 19.3.1	Win 🧿	Mac O Requires 64-bit ODBC Manager

The FileMaker ODBC driver is also available from the Claris support website: https://www.claris.com/resources/downloads/

On this web page, look for the item labelled: xDBC update for FileMaker Platform

This item will link to the page shown in this screenshot, the actual URL has a very specific document number, which might change - so it is best to start with the downloads page.

FileMaker Pro 18 Advanced
Version: 18.0.2.209 (07-05-2019)
Windows Version: 10.0 (Build 19043) Windows Platform: Windows 10 Pro Application Architecture: 64-bit Physical RAM: 4,073.300 Meg (80% Used)
License Key:
1 Info Credits About OK

Starting with FileMaker Pro 19, only 64-bit versions are available for installation. Earlier versions of FileMaker may include both 32-bit and 64-bit versions. To find the version of FileMaker running on your computer:

1) Select the Help -> About FileMaker Pro Advanced menu. 2) Click the Info button as shown above to see the Application Architecture.

If you are running the 64-bit version of FileMaker Pro, then you want to be using the 64-bit version of FmPro Migrator and the 64-bit version of the ODBC Administrator to create the ODBC DSN.

🧀 FmPro Migrator	-	$\times$
File Edit Help		
About FileMaker		
FmPro Migrator migrates FileMaker Pro database structure and data into Oracle, MySQL, Access, SQLite, SQL Server, Sybase, DB2 and PostgreSQL database tables.         FileMaker to FileMaker 11+ migrations/table consolidation projects are supported.         Access, Visual FoxPro, Firebird, SQL Server, MySQL to FileMaker 11+ migrations are supported.         FileMaker Pro Layouts, Microsoft Access or Visual FoxPro Forms and scripts are converted into LiveCode stacks, Access databases or Visual Studio 2010.Net projects.         FileMaker Layouts are converted into PHP web applications and LiveCode stacks.		
Developed by .com Solutions Inc. FmPro Migrator 9.37 DE (64bit)		

Both 32-bit and 64-bit versions of FmPro Migrator are available. The About screen shows which version you are running.

#### **Create ODBC DSN - Windows**

Organize 🔻 🛛 Burn						0
-	Name	Date modified	Туре	Size		
🔆 Favorites			21	5120		
🧾 Desktop	Component Services	7/13/2009 9:09 PM	Shortcut		2 KB	
🗼 Downloads	Computer Management	7/13/2009 9:08 PM	Shortcut		2 KB	
🗐 Recent Places	Data Sources (ODBC)	7/13/2009 9:08 PM	Shortcut		2 KB	
		C data sources and dri	vers. rtcut		2 KB	
📄 Libraries	🔝 iSCSI Initiator	7/13/2009 9:08 PM	Shortcut		2 KB	
Documents	🔁 Local Security Policy	6/5/2011 9:50 AM	Shortcut		2 KB	
🌙 Music	Performance Monitor	7/13/2009 9:08 PM	Shortcut		2 KB	
Pictures	🕞 Print Management	6/5/2011 9:49 AM	Shortcut		2 KB	
🛃 Videos	😹 Services	7/13/2009 9:08 PM	Shortcut		2 KB	
	🛃 System Configuration	7/13/2009 9:08 PM	Shortcut		2 KB	
🖳 Computer	🔝 Task Scheduler	7/13/2009 9:09 PM	Shortcut		2 KB	
🏭 Local Disk (C:)	ᡒ Windows Firewall with Advanced Security	7/13/2009 9:08 PM	Shortcut		2 KB	
🚽 FileMaker_xDBC_Up	減 Windows Memory Diagnostic	7/13/2009 9:08 PM	Shortcut		2 KB	
🚽 share on 'psf' (X:)	😹 Windows PowerShell Modules	7/13/2009 9:51 PM	Shortcut		3 KB	
🖵 Home on 'psf' (Y:)						
🖵 Host on 'psf' (Z:)						
📬 Network						

To create a new System ODBC DSN, open the Control Panel > Administrative Tools > Data Sources (ODBC) Control Panel.

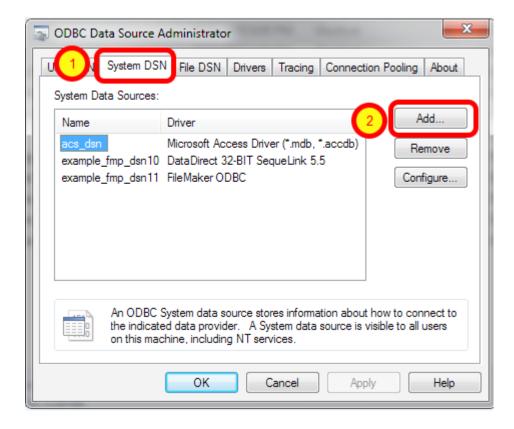


Name			Platform	n Dr	iver			^	Add
	_acs_dsn32bit		64-bit 32-bit	М	icrosoft Ac	cess Driver (*.mo cess Driver (*.mo	db)		Remove
example	_acs_dsn64bit _fmp_dsn18_32 _fmp_dsn19	2bit	64-bit 32-bit 64-bit	Fil	icrosoft Ac eMaker O eMaker O		db, *.ac	c	Configure
-	loud_dsn		64-bit			tantclient_19_6			
SQL_Se	rver_2017_dsn		64-bit	S	QL Server				
_	rver_2017_dsn	_32bit			QL Server				
sqlserve ≪	r2 dsn		32-bit	S	QL Server		>	~	
						tion about how to this computer, ir			he indicated data provider. ervices.

The 64-bit ODBC Administrator shown in this screenshot is available from the path: %windir%\system32\odbcad32.exe

Both 32-bit and 64-bit ODBC DSNs are displayed in the ODBC Administrator, as shown in the Platform column of the listing.

Running under Windows 10, it shows (64-bit) in its window title when running.



The 32-bit ODBC Administrator is available from the path: %windir%\syswow64\odbcad32.exe

This screenshot is from an earlier version of Windows, which doesn't show the Platform type in the list of ODBC DSNs and it also doesn't show in its title whether it is running 32-bit or 64-bit.

(1) Click the System DSN tab, then (2) click the Add button.

Create New Data Source	
Create New Data Source	Select a driver for which you want to set up a data source.
	< Ba 2 Finish Cancel

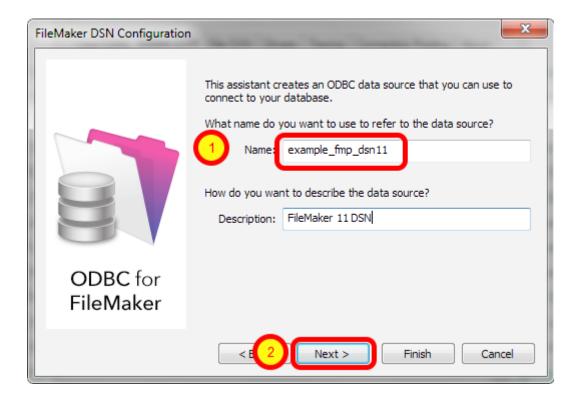
(1) Select the FileMaker ODBC driver, then (2) click the Finish button.

#### ODBC Driver Configuration - FileMaker 11+ - Windows (1)

FileMaker DSN Configuration	<b>— X</b> —
	The FileMaker ODBC assistant helps you configure your ODBC driver and connections. About You will be prompted for the host address and database name. To configure your data source, click the Next button.
ODBC for FileMaker	
	< Back Next > Cancel

#### Click Next button.

Click the About button if you need to find the version number for the driver.



1) Enter a name for the ODBC DSN, (2) click the Next button.

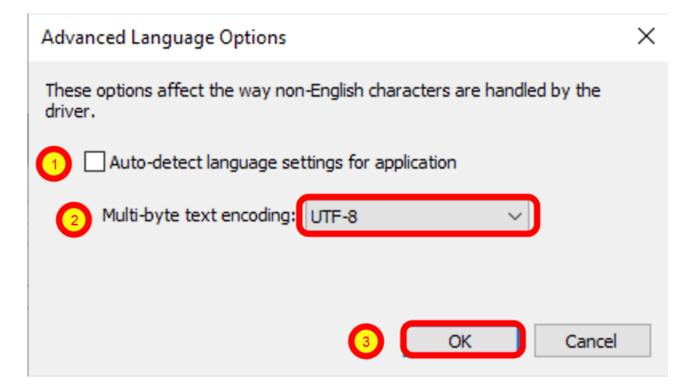
#### ODBC Driver Configuration - FileMaker 11+ - Windows (3)

FileMaker DSN Configuration	, <b>x</b>
	Which host do you want to connect to?  Host: localhost The host is typically referred to by its IP address. If the database is on this computer, enter localhost.  Connect to host to obtain the names of available databases.
ODBC for FileMaker	
	<

 If you are using a local copy of FileMaker Pro or FileMaker Pro Advanced, then use "localhost" as the host name. Otherwise use the IP address or hostname of the FileMaker Advanced Server.
 You may optionally click the "Connect to host ..." button to get a list of database files. **ODBC Driver Configuration - FileMaker 11+ - Windows (4)** 

FileMaker DSN Configuration	
ODBC for FileMaker	Which database do you want to connect to?  Database: Default  If your application requires special handling of non-English text, click Advanced Language  Advanced Language  Describe text fields as long varchar  Save long running queries to a log file:  Browse  Long query time (milliseconds): 5000
	< Back Next > Finish Cancel

1) Enter "Default" as the database name. Or if you have multiple database files open locally or on the server, then select the database name from the list or enter the name of the database. Using the Default keyword means that you can avoid changing the setup of the ODBC DSN when using different database files - but it means that only one file can be open at a time. 2) Click the Advanced Language button.



1) Uncheck the "Auto-detect language settings" button, 2) select System (WinLatin1) for the text encoding, 3) click the Ok button.

It has been found that for proper character encoding, the following configuration works well: 1) Install matching platform versions (64-bit or 32-bit) of the FileMaker database and FmPro Migrator on Windows.

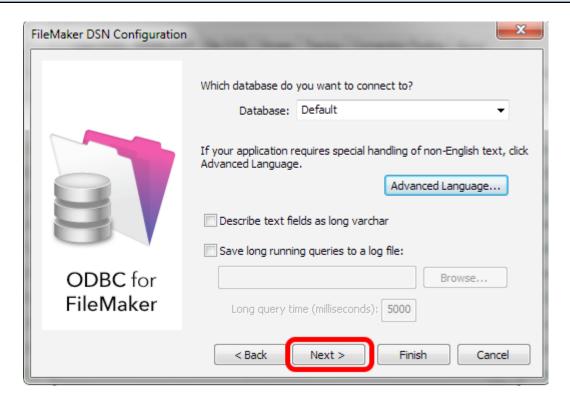
2) In the FileMaker ODBC driver, disable the Auto-Detect Language checkbox in the Advanced Language dialog.

3) Set the Multi-byte Text Encoding menu to UTF-8 in the Advanced Language dialog. For SQL Server:

4) Enable the Perform Translation for Character Data checkbox on the last panel of the SQL Server ODBC DSN configuration.



**ODBC Driver Configuration - FileMaker 11+ - Windows (7)** 



Click the Next button.

	The ODBC data source has the following configuration: FileMaker ODBC Driver (32-bit) 11.3.76.0 Data Source Name: example_fmp_dsn11 Description: FileMaker 11 DSN Host: localhost Database: Default Use Long Varchar Type: No Auto-detect Language Settings: No Multi-byte text encoding: UTF-8 Log Long Running Queries: No
ODBC for FileMaker	

Click the Test button.

#### **ODBC Driver Configuration - FileMaker 11+ - Windows (8)**

FileMaker Login	<b>—X</b> —
Data Source Name: example_fmp_dsn11	3 OK Cancel

1) Enter Username, 2) Password (if needed), 3) click the Ok button.

Review the test results, make corrections as necessary until the test passes.

ODBC Error Troubleshooting Steps:

1) Verify that the FileMaker database file is open.

2) Verify that ODBC sharing is enabled for the account entered in the connection test dialog prompt.

3) Make sure that there aren't two different copies of FileMaker running at the same time. Both older and current versions of FileMaker use TCP/IP Port# 2399 for ODBC connectivity. If this type of conflict occurs, close both versions of the FileMaker application, and only open the one copy you want to serve the database file being migrated.

4) Try rebooting the computer (after clicking Ok to save changes and close this ODBC dialog). Then test the DSN again after rebooting.

#### **ODBC Driver Configuration - FileMaker 11+ - Windows (9)**

FileMaker DSN Configuration	
ODBC for	Which database do you want to connect to? Database: Default  If your application requires special handling of non-English text, click Advanced Language  Advanced Language  Describe text fields as long varchar  Save long running queries to a log file: Browse
FileMaker	Long query time (milliseconds): 5000
	< Back Next > Finish Cancel

Click the Finish button.

## Step 2

#### Step 2 - Create Tables

At this point in the process, the FileMaker ODBC driver should be installed. The Access tables can be created in FileMaker Pro either by pasting the tables into FileMaker Pro Advanced via the ClipBoard, or via the FileMaker Pro ODBC DSN created earlier.

**Note**: Starting with FileMaker 16, both FileMaker Pro and FileMaker Pro Advanced allow copying/pasting of tables via the clipboard - so the older ODBC method is no longer detailed in this manual.

$\Theta \Theta \Theta$		Migration Process		
Tables	Relationships 7	Os Value Lists	CFs Lavouts S	cripts GUI
	Tables: 2		/ <b>Z 📑 </b> 🗄	
Instructions:	Original Table	New Table	Source Destina	
Step 2: Install the FileMaker ODBC driver from the FileMaker installer CD.	Asset_Management2 Maintenance_Record	Asset_Management2 Maintenance_Record	Access FileMak Access FileMak	
		5	123	Varchar
Create an ODBC DSN matching the	Fields: 41			Text
DSN name listed in	ID Original Field 1 Asset ID	Iname PK Auto 0 0	o-Increment Next SN	New Fieldname Asset ID
the Table Details	2 Model	0 0		Model
window.	3 Item	0 0		Item
Turn on ODBC	4 Category	0 0		Category
Sharing within	5 Cost			Cost ) 4
FileMaker.		Stor 2		
Menu: Edit > Sharing > ODBC/JDBC		Step 2	St	ep 3
> ODBC/JDBC			<b>-</b>	
Click the Create				
Table button.				
Note: If you are	ĭ	Create Ta	ble Transf	er Data
using FileMaker	*	Not Starte	ed Not	Started
Optional				
i				
Image Export				

If FileMaker Pro Advanced is being used, it is faster to create the tables by pasting the Table XML code via the ClipBoard.

This process creates all of the tables at once, without requiring each table to be clicked in the list

of tables.

Click the CopyAll Tables to ClipBoard button on the Tables Tab of the Migration Process window.

Step 2 - Create Tables via ClipBoard - WinAutomation

Manage Database for "FileMa	lakerDB"	i aures i i	? ×	Destination FileMaker 16		cort	Lontinue	
Tables Fields Relationsh	ips			FileMaker 16		mo/		Browse
Tables are unique sets of	records and fields. A f	file can contain more than one	table.				- 0	X
1 table defined in this file	le		View by: creation order v	dow Help				
Table Name	Source	Details	Occurrences in Graph	Đ		a	đ	*
Placeholder TO	FileMaker	1 field, 0 records	= Placeholder TO	ew Record Delete	_	•	Share	-
				w	incora   in	u son i	Aa Edit La	avout
				w			he Core	A
Table Name: = Placehold	ler TO	Create	Change Delete					
		Сору	Paste Import					
		Cop)	Pasce importan					
Print			OK Cancel	1				
	Image Ex							
	intege La				Robot _	EmPro Migra	ator WA Job	os is Running
				( <b>—</b> )	Executing act	tion #7 in 'openFM	ManageTablesW	indow'
					( Click Elemen	nt In Window )		Stop Robot
					Running for:	00:00:10		
					-			

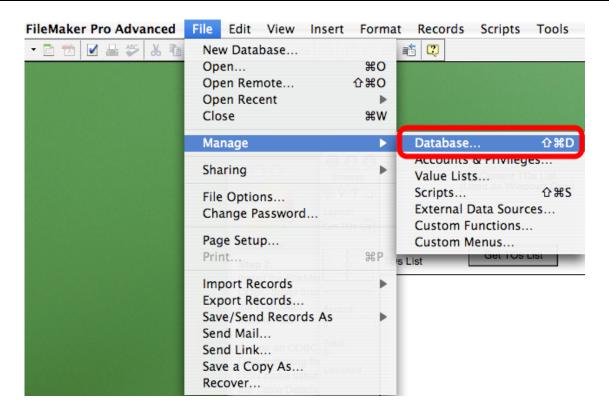
While gathering info from the Access file, FmPro Migrator created and opened a new empty FileMaker Pro database file named FileMakerDB.fp7/.fmp12 within the output directory.

FmPro Migrator will install and run a WinAutomation Robot (or AppleScript on macOS) which will automatically open the Manage Database window, and will also click the Tables tab.

Just click the Paste button to paste the tables which have already been copied to the clipboard by FmPro Migrator.

**Note**: Starting with FileMaker 16, both FileMaker Pro and FileMaker Pro Advanced allow copying/pasting of tables via the clipboard.





While gathering info from the Access file, FmPro Migrator created and opened a new empty FileMaker Pro database file named FileMakerDB.fp7/.fmp12 within the output directory.

If the WinAutomation Robot (or AppleScript on macOS) doesn't run, you can open the Manage Database window manually.

Select Define/Manage Database... from the File menu within FileMaker Pro Advanced.

Table Name	Source	Details	Occurrences in Graph	Á
Placeholder TO	FileMaker	1 field, 0 records	= Placeholder TO	

(1) Click the Tables tab (if necessary), (2) then click on the Paste button.

**Note:** If the Paste button is grayed out, this means that the table XML code didn't get copied to the ClipBoard before the Define/Manage Database dialog was opened. If this happens, click the Copy All Tables to ClipBoard button again from within FmPro Migrator. Switching from the Fields tab and then switching back to the Tables tab will cause FileMaker Pro Advanced to check the ClipBoard again for Table XML info. When the Table XML code is found on the ClipBoard, the Paste button will be enabled.

Table Name	Source	Details	Occurrences in Graph
Projects	FileMaker	18 fields, 0 records	Projects
Email_Address	FileMaker	16 fields, 0 records	Email_Address
≠ Url_	FileMaker	18 fields, 0 records	Url_
Inventory	FileMaker	19 fields, 0 records	Inventory
≠ Media	FileMaker	14 fields, 0 records	Media
Test_Library2	FileMaker	26 fields, 0 records	Test_Library2
≠ File_	FileMaker	11 fields, 0 records	File_
Street_Address	FileMaker	20 fields, 0 records	Street_Address
Phone_Number	FileMaker	15 fields, 0 records	Phone_Number
≠ Im_	FileMaker	17 fields, 0 records	lm_
Classes	FileMaker	27 fields, 0 records	Classes
<ul> <li>Contacts</li> </ul>	FileMaker	24 fields, 0 records	Contacts
To_Do_Items	FileMaker	13 fields, 0 records	To_Do_Items
Events	FileMaker	14 fields, 0 records	Events 👻
able Name:		Create	Change Delete Paste Import

The new tables will be created and then displayed within the Tables list. FileMaker Pro Advanced will also create a basic layout and a TO on the relationship graph for each of these new tables.

Click the Ok button to close the Manage Database window.

## Step 3

On macOS a File DSN is used to connect to the Access database for transferring data. On Windows a User or System DSN needs created to connect with the Access database.

#### **Configure Access ODBC DSN Name - Windows**

🧀 Table Details		_		$\times$
fields liste	he table details u d below. Change en clicking outsic	s	-	
Original Table	Asset_Manageme	ent2		^
New Table	asset_manageme	ent2		
Source DB	Access	$\sim$		
Destination DB	FileMaker 16	$\sim$		
Fields	41			
Deleted Fields	0			
Records				
Source DSN	example_acs_dsr	n		
Source DB Username				
Source DB Password				
Destination DSN	example2_fmp_d	sn		
Dest. DSN Username	Admin			
Dest. DSN Password				
Dest. DB Hostname				
Dest. DB Port#				
Dest. DB Name				
Dest. DB Username				~

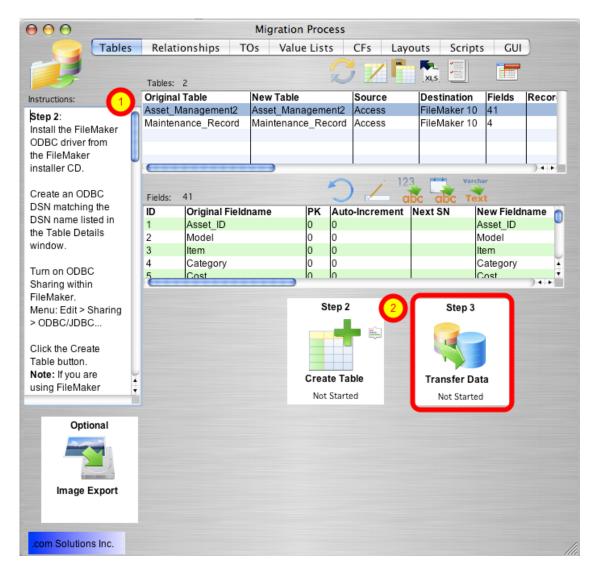
Create an ODBC DSN for the Access database file matching the name shown in the Table Details window, and enter the name of the new ODBC DSN in the Source DSN field on the Table Details window. It is not usually necessary to enter a username/password for Access database files.

#### Access ODBC DSN Creation - Windows

	Data Source Name	: example_acs_dsn		OK
stem [	Description:	Access MDB, ACCDB DSN		
lame ics_ds		Select Database		Cancel
xample xample qlserve	Database: C:\ Select	Database Name >ess2000Demo3_v2.accdb	Directories:	ОК
	System Databa	Access2000Demo3_v2	C:\ C ds C customer files	Cancel Help
	None Database:			Read Only
	A System data	List Files of Type: Access Databases (*.m. ~	Drives:	er. Network
	L			

Select the name of the Access database file (1) (2) in the Database Name pane. (3) Click the Ok button.

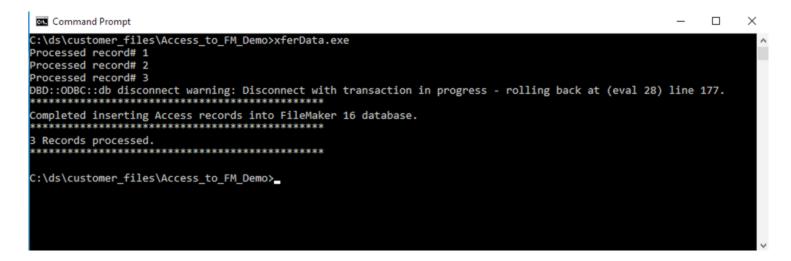
#### Step 3 - Transfer Data - Windows



(1) Click a table in the list of tables, (2) then click the Step 3 Transfer Data button to transfer data for the selected table from Access into FileMaker Pro.

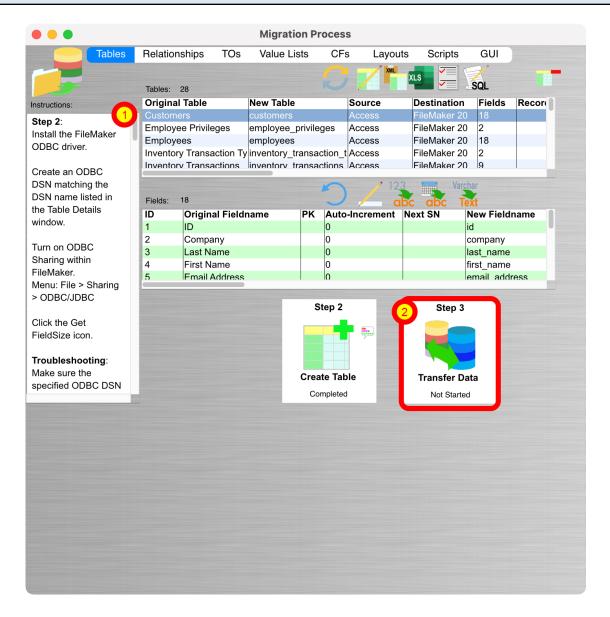
Repeat this process for each table in the Access database file.

#### Data Transfer Method - Windows - xferDataPerl.exe



On Windows, the command prompt window will open, and will display the results of transferring the data from the Access database into FileMaker Pro. This window will then close automatically once the data has been transferred.

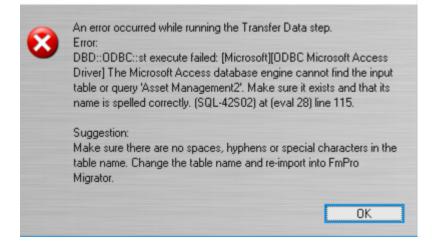
#### Step 3 - Transfer Data - macOS



(1) Click a table in the list of tables, (2) then click the Step 3 Transfer Data button to transfer data for the selected table from Access into FileMaker Pro. Afile DSN is used to connect to the Access database on macOS using the Actual Technologies ODBC for Access driver, so it isn't necessary to create a User or System DSN with ODBC Manager.

As shown in Step #2 - a DSN does need created for the FileMaker database - as shown in the Step #2 instructions.

Repeat this process for each table in the Access database file.



This error can mean that the ODBC DSN specified in FmPro Migrator for the Source Database (the Access database), does not point to the correct Access database file. This DSN needs to be changed each time a new Access database file is processed by FmPro Migrator.

**Note:** This warning dialog suggests that tables containing spaces and special characters may not be read properly. This is not always the case, it is just something to review and change if problems occur when transferring data.

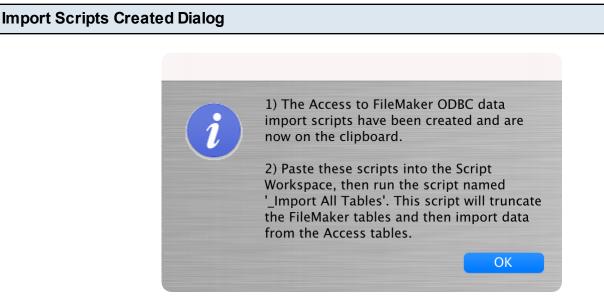
Recent improvements in the design of the FmPro Migrator data transfer scripts will allow many of these tables to work just fine because the table names are enclosed with square brackets.

FmPro Migrator versions 10.07 and higher include a new File -> Create Access Import Scripts menu item. This menu item creates FileMaker import scripts for each Access database table and can be used at any time to truncate and re-import the data from Access databases into FileMaker Pro.

**Note**: These scripts can be used to import data from any ODBC database into FileMaker Pro on macOS or Windows. You will need to create an ODBC DSN for the source database and enter the username/password info into the Import Records script step.

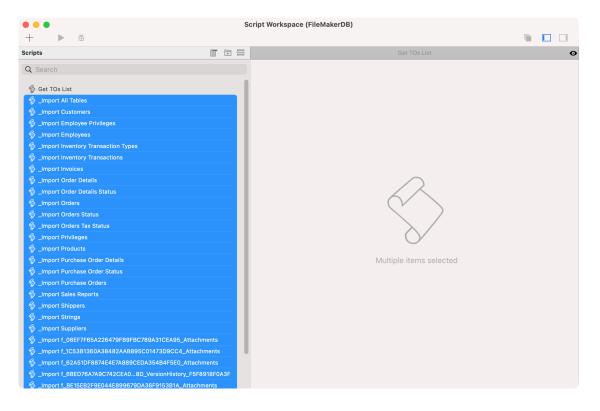
Select File	-> Crea	te Acc	cess Impo	rt Sc	ripts							
	🗯 FmF	Pro Migra	ator 10.07 DE	File	Edit	View	Help					
	D Inspector	Code	Message Box	Expor Expor Export Conti Creat	rt Acces rt VFPE rt FileM nue Mig e Proje	ssDDRE: xport.ex aker Ter gration ct File	nplate Database rt Scripts	·	sages Relatio	Errors onships	Sa TOs	mple St Migr Value
					s Wind		otop 2.	Makar	Custor	al Table ners yee Privile	ges	New Ta custom employ

Select the File -> Create Access Import Scripts to create the ODBC import scripts.



Click the Ok button.

#### Paste Scripts into FileMaker Script Workspace



Click the top script in the list, then select the Edit -> Paste menu or Command/Control V to paste the scripts into the Script Workspace.

# Verify Layout Name - Each Import Script \_\_Import Customers • 1 # This script impports data into table: Customers. 2 # 2/25/2024 - .com Solutions Inc. - www.FmProMigrator.com - Generated by FmPro Migrator. 3 6 to Layout [ "customers" (customers) ; Animation: None ] 7 Truncate Table [ With dialog: Off ; Table: "customers" ] 7 Import Records [ With dialog: Off ; Table: customers ; DSN: example\_acs\_dsn; SQL Text: SELECT \* FROM "Customers" ; Add; UTF-8 ]

It is not always possible for FmPro Migrator to identify the correct layout name to be used for each import and Truncate Table script. So it is important to verify the name of each layout you want to use for each table import.

```
Edit Import Parameters (1)
```

able [ with dialog: OIT ; Hable: Customer	15 ]		
ords [With dialog:Off ; Table: customers le_acs_dsn; SQL Text: SELECT * FROM "Cus		9	
	<ul> <li>Specify data source</li> <li>Specify import order</li> <li>Verify SSL Certificates</li> </ul>	ODBC Data 1 Specify.	

Click Specify... button.

Edit Import Parameters (	2)	
	Connect to "example_acs_dsn"	
	Please enter your user name and password for the ODBC data source, "example_acs_dsn".	
	User n 1	
	Password:	
	2 Save user name and password	
	Cancel 3 OK	

(1) By default, FmPro Migrator sets a user name of "1" for the ODBC import dialog because FileMaker doesn't seem to allow a blank value. On macOS, the Actual Technologies ODBC for Access driver doesn't require or use any login info when connecting to Access database files. Also - FmPro Migrator uses the ODBC DSN shown for the source Access database on the main screen. Changing this default name of "example\_acs\_dsn" will use the value you configure when

generating the scripts.

(2) Check the "Save username and password" check box so that the scripts can run without prompting.

(3) Click the Ok button.

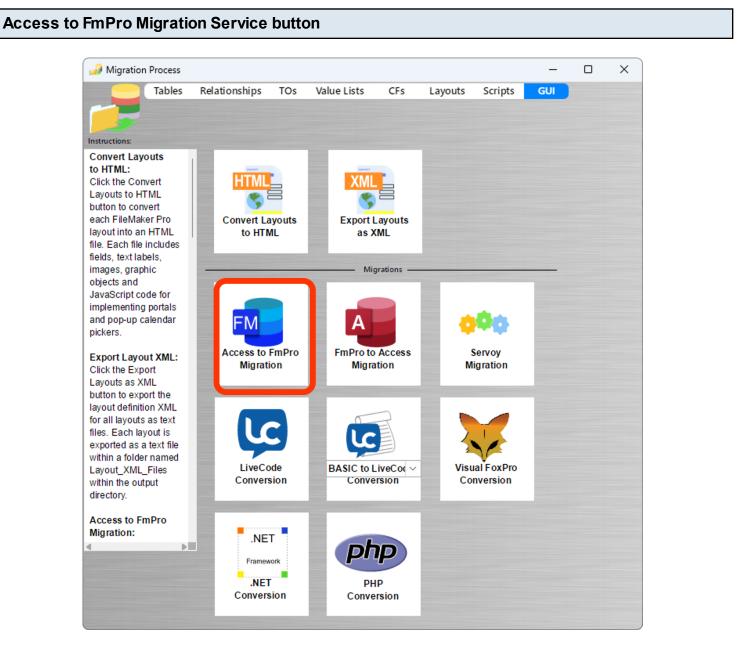
	Specify	Import C	rder			
Specify the import order for the target fields.	2	SOURCE		TARGET		
<b>&gt;</b> 1 of 29	example_acs_dsn	ODBC	Add	→ Current Table ("cu	ustomers")	٥
Data 🗘	Source	e Fields	Mapping	Target Fields	Custom Order	\$
1		ID 🧲	Import	id		~
Company A	Co	ompany 🧲	Import	company		
Bedecs		t Name 🧲	Import	last_name		
Anna		t Name 🧲	Import	first_name		
-	Email A		Import	email_address		
Owner		ob Title	Import	job_title		
(123)555-0100	Business		Import	business_phone		
		Phone Phone	Import Import	home_phone mobile_phone		
(123)555-0101		Number	Import	fax_number		
123 1st Street		ddress	Import	address		
Seattle		City	Import	city		
~ Import Options						
Character set for source file:	Unicode (UTF-8)		Perform the aut	to-enter options for fields during	import	0
Field delimiter for source file:		E	xamples: serial n	umber, creation timestamp, modification		-
		t	imestamp, lookup	os.		
• Tab	٥		Preserve extern	nal container storage		
Other:		Ren	eating Fields:	Keep values in the original record	ł	0

Verify the selection of the Target Fields, then click the Ok button to save the changes and save the script changes in the Script Workspace.

Test each individual script, then test the \_Import All Tables script.

# Migrating Forms/Reports, Relationships, Value Lists & Visual Basic Code

FmPro Migrator Platinum Edition includes features for migrating Microsoft Access Forms/Reports, Queries, Relationships, Value Lists and Visual Basic code into FileMaker Pro. These features utilize AppleScript/WinAutomation to automate the process of creating the objects within the FileMaker database file, along with the Access to FmPro Migration Service feature on the GUI tab of FmPro Migrator Developer Edition.

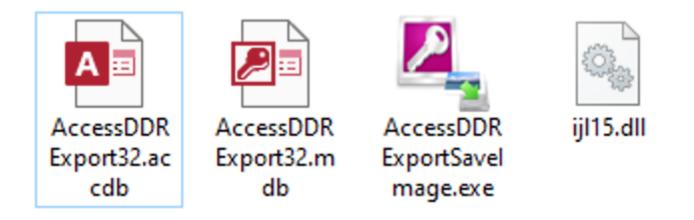


Click the Access to FmPro Migration button on the GUI tab within FmPro Migrator Platinum Edition.

🔒 Access to FmPro Mig	gration Service	—	×
Instructions: Migrate Microsoft Access Databases to FileMaker Pro: Step 1) Drag & Drop the Access accdb/mdb file onto	Access DDR File: // IND 2007_Info/Northwind 20	07.txt	
the Step #1 button to gather info about the tables/fields and relationships within the Access database file.	Forms/Reports Qty: 49		
Step 2) Uncompress the AccessDDRExport.zip file saved to the output directory. [These files were saved automatically when the Access to FmPro Migration	Migrate		

Clicking the Access to FmPro Migration Service button opens the Access to FmPro Migration Service window.

As this window is opened, the AccessDDRExport.zip file is written into the output directory.



Extract the files from this zip archive.

The files within this zip archive include:

AccessDDRExport??.accdb - An unsigned Access 2010+ DDR Export database file, created with Access 2016.

AccessDDRExport??.mdb - The Access 2000/2003 DDR Export database file.

AccessDDRExportSaveImage.exe - Adigitally signed 32-bit VB6 compiled EXE which extracts images from Access forms/reports by using the ijl15.dll within the same folder.

ijl15.dll - Adigitally signed 32-bit dll licensed from Intel which is used to extract images from Access forms/reports. This dll no longer needs to be installed into the Windows folder.

Access	sDDRExpo	ort.accdb	- Security Notic	ce							
	5- <b>č</b> -	⊽					į	Access DDR Export 3.2			
File	Home	Create	External Data	Database Tools	Help	Q	Tell m	Tell me what you want to do			
SECURITY WARNING Some active content has been disabled. Click for more details.     Enable Content								J			

The Access 2010/2016 ACCDB file always disables active content until the "Enable Content" button is clicked.

#### Overview - Using the AccessDDRExport.accde/.mde Database Files

The process for extracting Forms/Reports, Queries, Value Lists and Visual Basic code from Access database files requires running one of the two Microsoft Access Export database files on a computer or virtual machine running Windows. These database files cannot be used with

CodeWeavers CrossOver Mac. They must be run under a full copy of Windows with a full copy of Microsoft Access.

The AccessDDRExport.accde/mde database creates a database design report text file within a top-level folder having the same name as the selected Microsoft Access database file. Images embedded within the Forms/Reports are exported into an Images folder within the top-level folder. Once the database design report and images have been extracted from the Access database file, the top-level folder and its contents may be copied between computers and used on either macOS or Windows to complete the migration process.

# AccessDDRExport - AccessDDRExportSaveImage.EXE and ijI15.dll on Windows Image: Access DDR Export Image: Access DDR Export

Before running the AccessDDRExport.accde/mde database files, the ijl15.dll and AccessDDRExportSaveImage.exe files both need to be located within the same folder as the AccessDDRExport??.accdb/mdb files. This is the default location for these files when the folder is unzipped, so unless these files get moved or renamed, the error message shown above won't be displayed.

These two files are used for extracting the embedded images from Microsoft Access Forms/Reports. If these files are not installed, the rest of the database design report creation process will work Ok, but the images won't be processed.

After these files have been restored to the same folder, re-launch the AccessDDRExport.accdb/mdb database.

#### AccessDDRExport - Exporting the Database Design Report

📧 Access DDR Export		_	×
	AccessDDR Export Utility 3.2 www.FmProMigrator.com This utility exports a Database Design Report textfile for Access 2000 - 2016 .mdb/.accdb database files. Images are extracted to an Images subfolder, in preparation for importing into FmPro Migrator.		
Select database Quit			

Launch the AccessDDRExport.accdb/mdb database file. Click the Select Database button.



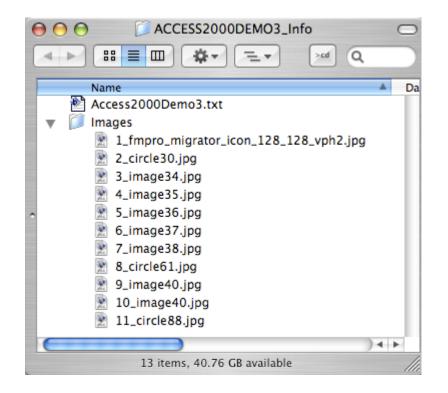
A Database selection	×
$\leftarrow \rightarrow \checkmark \uparrow$ _ < cust > Access_to_FM > $\checkmark$ $\eth$	Search Access_to_FM_Demo 🔎
Organize 👻 New folder	III 🔹 🕶 🔲 💡
Desktop ^ Name	Date modified Type
fmpro_migrator	9/13/17 8:05 PM File folder
revCloseDatabas	2 9/13/17 2:20 PM Microsoft
ConeDrive	9/13/17 8:11 PM Microsoft
<ul> <li>This PC</li> <li>Desktop</li> <li>Documents</li> <li>Downloads</li> <li>Music</li> <li>Pictures</li> <li>Videos</li> <li>Local Disk (C:) ∨ </li> </ul>	1,
File name: Access2000Demo3_v2.accdb	Access 2007/2016 (*.accdb) ∨ Open ▼ Cancel

(1) Select the type of Access database file to be opened (accdb/mdb), (2) select the database file, then click the Open button.

**Note**: By default, .accdb files will be displayed in the open file dialog when running Access 2007 and higher.

AccessDDRExport - Processing Status				
	Processing Form Assets ( 2 of 3)			

The selected Access database will be opened, and the processing status will be displayed in the lower left corner of the AccessDDRExport window. At the completion of the export process, the selected database file will be closed and the cursor will return to the arrow cursor and the status area text will change to "Processing Completed".



The AccessDDRExport text file and the embedded Form/Report images will be extracted into a folder within the same directory as the original Access database file. This folder can be copied to another computer if necessary for further processing by FmPro Migrator Developer Edition.

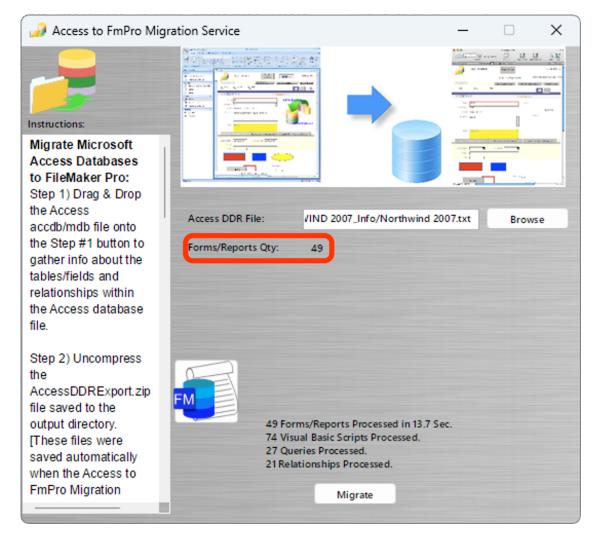
🎣 Access to FmPro Mig	gration Service	_		×
Instructions: Migrate Microsoft Access Databases to FileMaker Pro:				
Step 1) Drag & Drop the Access accdb/mdb file onto the Step #1 button to gather info about the tables/fields and relationships within the Access database file.	Access DDR File: /IND 2007_Info/Northwind 2 Forms/Reports Qty: 49		Brow	se
Step 2) Uncompress the AccessDDRExport.zip file saved to the output directory. [These files were saved automatically when the Access to FmPro Migration	Migrate			

Click the Browse button to select the AccessDDR text file.

# Select the Access DDR Text File

Please select the Acces	sDDR text file:	×
$\leftrightarrow$ $\rightarrow$ $\checkmark$ $\uparrow$	🦰 « No > NORT 🗸 🗸	C Search NORTHWIND 2007_I 🔎
Organize 🔻 New fol	der	≣ ▾ 🔲 😗
A Home	Name	Date modified Typ
📩 Gallery	📒 Images	7/29/2009 3:00 PM File
> 🔷 OneDrive - Persi	Northwind 2007.txt	1 7/21/2020 1:13 PM Tex
🛄 Desktop 🛛 🖈		
📒 Desktop 🛛 🖈		
🛓 Downloads 🖈		
📑 Documents 🖈		
📑 Dictures 🌧		
File	name: Northwind 2007.txt	<ul> <li>Text files (*.txt)</li> <li>Open</li> <li>Cancel</li> </ul>

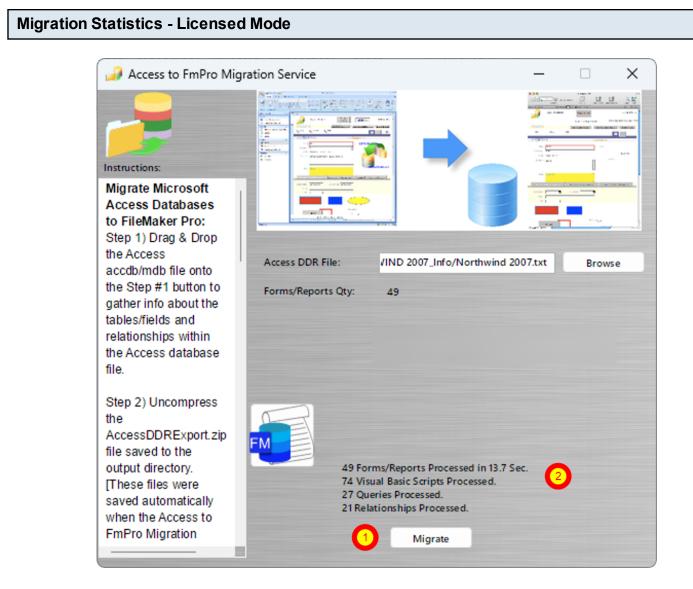
(1) Select the text file created by the AccessDDRExport database, (2) click the open button.



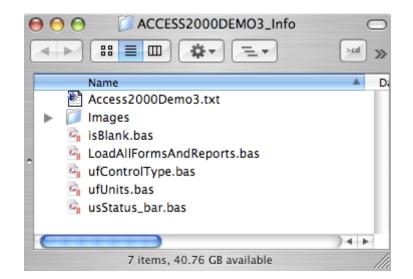
FmPro Migrator will read the Access DDR text file, validate the format of the file and display the count of Forms and Reports within the file.

**Note**: Even if there are no Forms/Reports within the file, Relationships and VBAcode will still be imported.

Using the Access to FmPro Migration Service in Demo mode, limits processing tasks to 5 Forms/Reports and 5 Visual Basic scripts. Ordering a license key lifts these operating limits for this service. Using the License Key allows for the processing of an unlimited number of database files and scripts for the purchased Forms/Reports quantity during the duration of the license key.



(1) Click the Migrate button to convert the AccessDDR text info into FileMaker layouts, value lists, scripts and relationships. Aprogress dialog will be displayed during the processing of the file. Clicking the Migrate button with the license key enables the processing of the number of Forms/Reports as specified in the license key and the conversion of an unlimited number of Visual Basic scripts, with the (2) resulting processing statistics displayed the Migrate button. Value Lists will also be created from the Form/Report objects imported into FmPro Migrator. These Value Lists will be visible under the Value Lists tab of the Migration Process window after the completion of processing.



The exported Visual Basic code has been converted into FileMaker Scripts formatted for pasting into the FileMaker scripts window. This code has also been saved as individual text files within the AccessDDR Info directory.

Visual Basic Code	Details
	😝 😑 🔄 🖓 usStatus_bar.bas 🖂
	◊
	usStatus_bar.bas \$
	'Module: Common
	Option Compare Database
	Option Explicit Global gbooDev As Boolean
	Global gstrApp_name As String, gstrCurrent_folder As String
	Public Sub usStatus_bar(Optional xMsg As Variant)
	Dim Temp As Variant ' if the Msg variable is omitted or is empty, return the control of the
	Select Case True Case IsMissing(xMsg): Temp = SysCmd(acSysCmdClearStatus) Case xMsg = "": Temp = SysCmd(acSysCmdClearStatus) Case Else: Temp = SysCmd(acSysCmdSetStatus, xMsg) End Select
	End Sub

Each Visual Basic Subroutine or Function is extracted into a separate text file and corresponding FileMaker script (1) including the name of the original code module, (2) global variables for the enclosing code module, (3) followed by the actual text of the Subroutine or Function.

# **Troubleshooting - Visual Basic Code**

If the AccessDDRExport database reports that 0 Visual Basic modules were found within the file, verify that the Visual Basic code was compiled within the Access database. Uncompiled Visual Basic code will cause the number of code modules to be reported as 0.

During the migration process, FmPro Migrator creates additional TOs to represent each migrated Query. These additional TOs need to be created prior to creating relationships and layouts.

# **TOs List**

$\Theta \Theta \Theta$			Mig	gration Proces	s			
	Tables	Relationships	TOs	Value Lists	CFs	Layouts	Scripts	GUI
				×	) 🖬			
Instructions:		Table Occurrences:	5					
Table Occurr and File Refe Migration: [Only used for FileMaker Tab Consolidation	rences	Table Occurrence Asset Managemen Find_duplicates_fo Maintenance_Reco Query1 Querv2	t2 r_Asset_l				Asset_ Find_c	
Migration Proj	jects.]	Original Manage	_		Marrish			
Table Occurre		Original Name:			New N			
and File Refer are imported automatically	when	Asset_Management2			Asset	_Management2		_
reading an ex DDR on the Relationships TOs and File References ca manually ente this tab, and c	an be	Original File Reference	::		New F	ile Reference:		
re-mapped to		Original Color (HEX):			New C	olor (HEX):		
values.		#777777			#777	777		
By default, File References as re-mapped to meaning that tables exist in file. If some ta will continue t in separate file then the File Reference sh be entered int	re empty, all one bles to exist es, nould to the							
.com Solution	ns Inc.							11.

Click on the TOs tab of the Migration Process window to display the list of TOs. Clicking on a TO in the list will display the details of the TO.

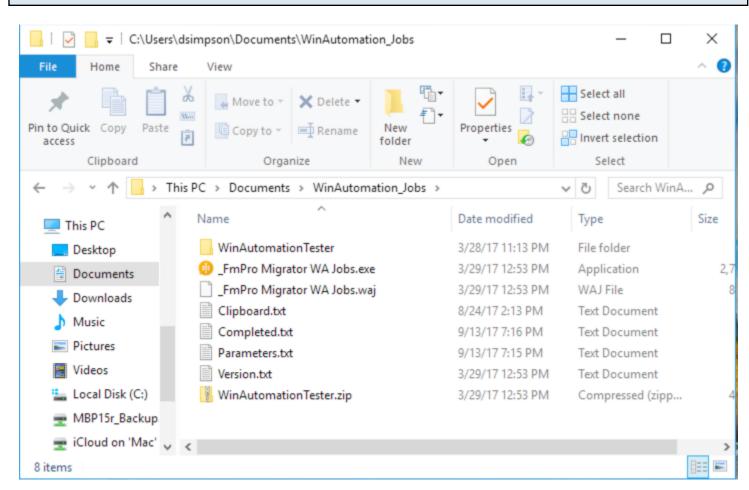
Click on the Create All TOs in FileMaker button to automate the creation of the TOs using WinAutomation(Windows)/AppleScript(macOS).

### **Create TOs Button**

000	Migration Process	
	Tables Relationships TOs Layouts	Scripts GUI
	/~ _ ~	_
<b>1</b>	Table Occurrences: 86	
Instructions:	Table Occurrence Name (Original)	Table Occurrence
Table Occurrences	Address_Book Asset Management333	Address_Book Asset Management
and File References	Asset_Management3	Asset Management
Migration:	Claim	Claim
[Only used for	Claim to Client, Call Log	Claim to Client Call
FileMaker Table		) <b>.</b> .
Consolidation	Original Name: New Name:	
Migration Projects.]	Asset Management333 Asset Managemen	nt333
Table Occurrences		
and File References		
are imported automatically when	Original File Reference: New File Referen	nce:
reading an exported		
DDR on the	Original Color (HEX): New Color (HEX)	
Relationships tab.	#777777 #777777	
TOs and File		
References can be		
manually entered on		
this tab, and can be		
re-mapped to new		
values.		
By default, File References are		
re-mapped to empty.		
meaning that all		
tables exist in one		
file. If some tables		
will continue to exist		
in separate files, then		
the File Reference	U	
should be entered	¥	
into the File (New)	•	
.com Solutions Inc.		
com Solutions inc.		11.

Click the TOs tab.

Click the Create All TOs in FileMaker button, to build the non-Base Table TOs within the destination FileMaker database file.



# Create Relationships - Windows WinAutomation Files

The first time you click the Create All TOs button on Windows, the WinAutomation Jobs folder will be created. The \_FmPro Migrator WAJobs.exe will be executed in order to perform the automation tasks sent by FmPro Migrator.

The WinAutomationTester folder is a separate zip file which can be downloaded from the File menu of FmPro Migrator for testing purposes - but is not required for normal automation tasks.

**macOS Note:** On macOS, AppleScript is executed from within FmPro Migrator to perform the automation tasks. If you want to see the AppleScript automation source code, select the File menu option "Export AppleScript or WinAutomation scripts".

# **Creating Relationships on Windows:**

At the present time, FmPro Migrator is not able to automate the creation of relationships on Windows. This task can only be automated on macOS.

000	Mi	gration Process	
Tables	Relationships TOs	Value Lists CFs Layout	
		C 🏦 📑	SQL SQL
Instructions:	Relationships: 1		
Relationships	Left Table Name Asset Management2	Right Table Name Maintenance_Record	Predicate Count L1
Migration -	Asset_managementz	Maintenance_Record	1 0
FileMaker to SQL			
Databases: Within FileMaker Pro			
7+ export a DDR			
report if using	C		)++
FileMaker	Left Table		Right Table
Developer/Advanced.	Table: Asset_Manag	gement2 🔷 Table:	Maintenance_Record
FileMaker Pro users	Cascade Create: Cas	cade Delete: Cascade Creat	te: Cascade Delete:
may manually add		cade Delete.	te. 🔄 Cascade Delete. 🕒
Relationships and	Relationship SQL Code:		
Predicates on this			
screen.			
Click the Import			
Relationships button to import a DDR xml			
file for each			
FileMaker database	Predicates: 1		
file, in order to obtain	Left Table::Field	Join Type Right T	Table::Field
a complete list of all	Asset_Management2::Asse		nance_Record::Asset_ID
Relationships, Table			
Occurrences and			
File References.			
Once this info has	(		) 4 >
been imported,			
delete duplicate Table Occurrences.			
Select all of the			
Relationships, then			

Click on the Relationships tab of the Migration Process window to display the list of converted relationships. Clicking on a relationship in the list will display the details of the relationship. Click on the Create All Relationships in FileMaker button to automate the creation of the relationships using WinAutomation(Windows)/AppleScript(macOS).



TOs_List Asset_ID Asset_ID Asset_ID Asset_ID Asset_ID Model Item Category Cost Date_Purchased Date_Created Asset_ID	Asset_/D Model Item Category Cost Date_Purchased	= Placeholder TO	Asset_Management2	Maintenance_Record
		TOs_List	Asset_/D Model Item Category Cost	Maintenance_ID Date_ Notes

After the relationships have been created, they can be observed on the FileMaker relationship graph.

Value Lists - Overview

$\Theta \Theta \Theta$			Mi	gration Proces	5			
	Tables	Relationships	TOs	Value Lists	CFs	Layouts	Scripts	GUI
				K	3	<b>F</b>		
Instructions:		Value Lists: 6						
Value Lists Migration: [Used for File Table Consol Migration Pro and Access to	lidation jects	Value List Name Checkbox 1/0 Value List 1 Value List 2 Value List 3 Value List 4				Type Custom Custom Custom Custom		Û
FileMaker Mi Projects.] Val are imported automatically reading an ex DDR on the Relationships Static Value L migrated to th FileMaker Pro database.	gration ue Lists when kported s tab. Lists are he new	Static Value List: Credit Card Check Cash						
During Access FileMaker min projects, the V Lists are read the Access D file. This featu available from Access to Fm Migration Ser button on the	gration Value I from DR Text ure is n the Pro vice							
.com Solution	ns Inc.							

Click on the Value Lists tab of the Migration Process window to display the list of converted Value Lists. Clicking on a Value List in the list will show the details for the selected Value List.

Microsoft Access does not contain a centralized list of value lists like FileMaker Pro. Value lists are embedded within Form/Report objects throughout the entire database.

FmPro Migrator extracts value lists embedded within all fields in the Forms/Reports within the Access database file. Achecksum is created for the contents of each value list during the migration processing. If a new value list is found, which matches the checksum of an existing value list, then the existing value list name is used to represent the value list when it is converted for use in FileMaker. Otherwise, a new value list will be created for use within the FileMaker database.

Microsoft Access also embeds value list information within checkbox and radio button (acOptionGroup) objects. FmPro Migrator automatically extracts the numeric values assigned to each individual checkbox/radio button object, along with the associated text label. As shown in the screenshot, the numeric values are listed, followed by a semi colon and the text label value.

FmPro Migrator always creates the first value list named "Checkbox 1/0" for use with single (ungrouped) radio buttons and checkboxes.

FileMaker developers have a couple of options to choose from concerning how to handle the numeric values utilized within Access value lists.

**Option #1:** If you have an Access database which will be used to refresh information within the FileMaker database on a regular basis, then you should continue to store numeric values within the FileMaker database fields.

In this scenario, manually create a value list lookup table for each Access value list, and populate the table with the numeric and text values within the value list. Change the created value list to use values from the fields of the value list lookup table.

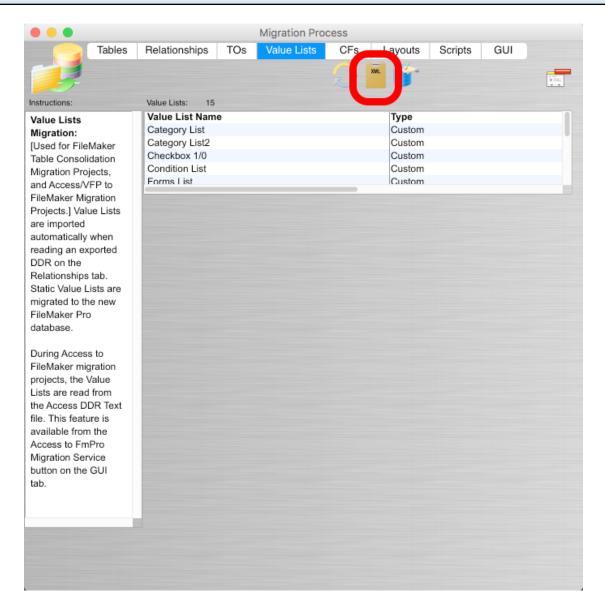
**Option #2:** If all of the functionality within the Access database will be permanently transferred into the FileMaker database, then follow the following steps:

1) Change the underlying FileMaker database field from numeric to text within the Manage Database -> Fields window.

2) Individually search for each value list numeric value, then use the Records -> Replace Field Contents feature to replace the numeric value with the value list text value.

3) Edit the contents of the actual static value list to remove the numeric value and its semicolon. The editing of the value list contents may be done either in FmPro Migrator or within FileMaker.

# Step 7 - FileMaker 16+ Copy Value Lists to Clipboard



FileMaker Pro Advanced 16 and higher versions include a new feature enabling the copy & paste of Value Lists via the clipboard. FmPro Migrator supports this new feature with a new button on the Value Lists tab.

Click the CopyAll Value Lists to Clipboard button.

i items		View by: creation order
alue List Name	Source	Values
Category List	Custom Values	"Office Furniture", "Computers", "Telephones", "-"
		"1"
		"Office Furniture", "Computers", "Telephones", "Table",
		"New", "Excellent", "Good", "Poor", "Scrap"
		Fields: "tbl_Maintenance_Records::ID" and "tbl_Mainte
Maint Status Value List (Text)		Field: "tbl_Maintenance_Records::Maint_Condition2" (r
Maint Status Value List (numeri		Field: "tbl_Maintenance_Records::ID"
Maint Status Value List (Text)2		Field: "tbl_Maintenance_Records::Maint_Condition1"
		Field: "tbl_Assets::Item"
		Fields: "tbl_Value_List_Data_Items::ID" and "tbl_Value_Li
		Fields: "tbl_Value_List_Data_Items::ID" and "tbl_Value_Li
One Field VL - numeric		Field: "tbl_Value_List_Data_Items::ID"
One Field VL - text		Field: "tbl_Value_List_Data_Items::text_label"
		"Assets", "Maintenance Record"
Query Operators		пн

FmPro Migrator will:

1) Put the Value Lists data onto the clipboard in the correct format for FileMaker to read.

2) Open the Manage Value List s window.

3) Automatically enter Command-V (macOS) or Control-V (Windows) which instantly pastes the Value Lists into the Manage Value Lists window.

Notice in this screenshot, that all Custom and Field based Value Lists have been created automatically.

From here, you may Click the Ok button to save the new Value Lists, make changes or click the Cancel button.



When using FileMaker 16+, if you click the "Create All Value Lists in FileMaker" button, you will be prompted to use the new "CopyAll Value Lists to Clipboard" button.

$\Theta \Theta \Theta$	N	ligration Process			
Tables	Relationships TOs	Value Lists	CFs Layouts	Scripts GUI	
	Value Lists: 47	K			
Instructions:	Claim Type		Custom		
Value Lists	Claims Adjuster		Custom		
Migration:	Doh/VC		Custom		
[Only used for	Employee Names		Custom Field		
FileMaker Table	Endorsement - Numeric		Field		
Consolidation					
Migrationdjuster1Adjus	Static Value List:				
Projects.] Value Lists	Reporting				
are imported	Updated Report Potential Claim				
automatically when reading an exported	Claim				
DDR on the	ASD Claim				
Relationships tab.	Medical Claim				
Static Value Lists are					
migrated to the new					
FileMaker Pro					
database.					

Click the Create All Value Lists button.

Click on the Create All Value Lists in FileMaker button to automate the creation of the Value Lists

# Converted Value Lists - Within FileMaker Pro Manage Value Lists Window

items		View by: creation order	1
Value List Name	Source	Values	
<ul> <li>Checkbox 1/0</li> </ul>	Custom Values	"1"	
<ul> <li>Value List 1</li> </ul>	Custom Values	"Credit Card", "Check", "Cash"	
Value List 2	Custom Values	"2002", "2003", "2004", "2005"	
+ Value List 3	Custom Values	"1", "Monthly Sales", "2", "Quarterly.	
<ul> <li>Value List 4</li> </ul>	Custom Values	"1", "1st Quarter", "2", "2nd Quarte	
+ Value List 5	Custom Values	"1", "January", "2", "February", "3", ".	
			Į

The created Value Lists as displayed within the Manage Value Lists window.

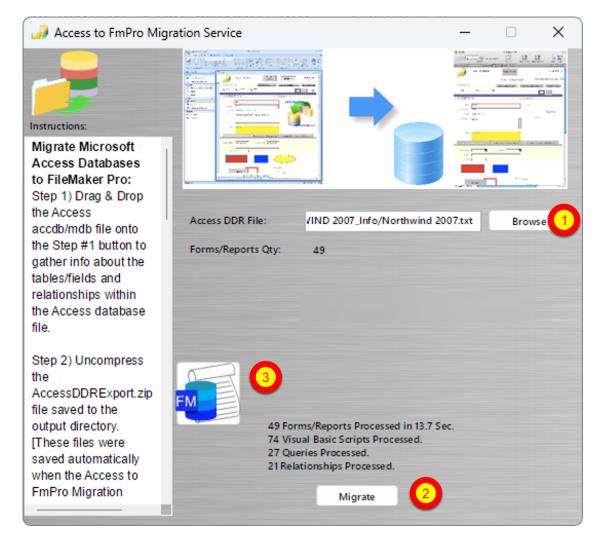
# Using the Microsoft Access Code Conversion Workbench - Access to FmPro Conversions

This chapter shows how to use the Microsoft Access Code Conversion Workbench - included with the AI Accelerated version of FmPro Migrator. This feature replaces copying the unconverted scripts into the FileMaker Pro database as was done previously. Before performing the code conversion with the Microsoft Access Code Conversion Workbench, you should have already imported the Microsoft Access database into FmPro Migrator, including tables, relationships, value lists, forms/reports and scripts.

Access to FmPro Migration Button - GUI Tab



Click the <u>Access to FmPro Migration</u> button on the GUI tab of the Migration Process window of FmPro Migrator.



Prior to reaching this step, you should have, (1) selected the AccessDDRExport text file and (2) clicked the Migrate button to import the Access database metadata into FmPro Migrator. You may have already started building the new FileMaker Pro database which would mean that you are ready (3) to click the Code Conversion Workbench button.

## Microsoft Access Code Conversion Workbench Window

•••				Code Conversion Workbench	
A	+		Workb		
	mpleted: 2 atus ID	of 6 Scri	Script Name	Source Script (Editable): Size: 175 Module: Order Details:Form_Order Details Option Compare Database	Source:
Com	pleted 1	175	Open Script	Option Explicit	Microsoft Access
C	pleted 2	46	Clear Sort Indicator	Sub SetDefaultShippingAddress() If IsNuil(Mel[Customer ID]) Then ClearShippingAddress	Output Language: FileMaker Pro
	pleted 3	35	Toggle Window	Else Dim rsw As New RecordsetWrapper	
	Started 4	675	Find	If rsw.OpenRecordset("Customers Extended", "[ID] = " & Me.Customer_ID)	
	Started 5	59	Go to Form Layout	Command (Editable):	Convert
	Started 6	66	Go to Information Lavout	Translate this Microsoft Access VBA code into FileMaker Pro script	Vendor:
	Started 7	66	Go to List Layout		OpenAl <
		354			
			Sort by Category		
	Started 9	333	Sort by Item		
	Started 10	339	Sort by Model	Converted Script:	API Key: dcsi
Not S	Started 11	381	Sort by Serial Number	"' FileMaker Pro #Module: Order Details:Form_Order Details	Model:
Not S	Started 12	369	Sort by Assigned To	#SetDefaultShippingAddress If IsEmpty(GetField("Customer ID")) Then Perform Script ("ClearShippingAddress")	gpt-3.5-turbo
Not S	Started 13	355	Sort by Location	Else Else Set Variable [\$rsw; Value:New RecordsetWrapper] If \$rsw.OpenRecordset["Customers Extended"; "[ID] = " & GetField("Customer	Tokens Used Today: 597
Not S	Started 14	228	Sort by Category Ascending	ID")) Then With \$rsw.Recordset	Output Filename:
Not S	Started 15	229	Sort by Category Descending	Set Field ("Ship Name", \$rsw Recordset.GetField("Contact Name")] Set Field ("Ship Address", \$rsw.Recordset.GetField("Address")] Set Field ("Ship City", \$rsw.Recordset.GetField("City")] Set Field ("Ship State/Province";	Open Script.txt
Not S	Started 16	188	Sort by Item Ascending	<pre>\$rsw.Recordset.GetField("State/Province")] Set Field ["Ship ZIP/Postal Code": \$rsw.Recordset.GetField("ZIP/Postal</pre>	
Not S	Started 17	189	Sort by Item Descending	Code")] Set Field ["Ship Country/Region"; \$rsw.Recordset.GetField("Country/Region")]	
Not S	Started 18	190	Sort by Model Ascending	End With End If End If	_
Not S	Started 19	191	Sort by Model Descending		Need Help?

By default, the Microsoft Access Code Conversion Workbench window opens with the (1) scripts listed in the grid, (2) Microsoft Access selected as the Source Database Type and (3) FileMaker Pro selected as the destination language.

Just because the options are selected a certain way when the window opens, doesn't mean you can't change them. You can easily change the default settings on this window for Output Language, Vendor, API Key Type, or Al Model - and the changes will be saved into the project or application preferences for FmPro Migrator.

# Microsoft Access Code Conversion Workbench Demo



# Microsoft Access Code Conversion Workbench Demo

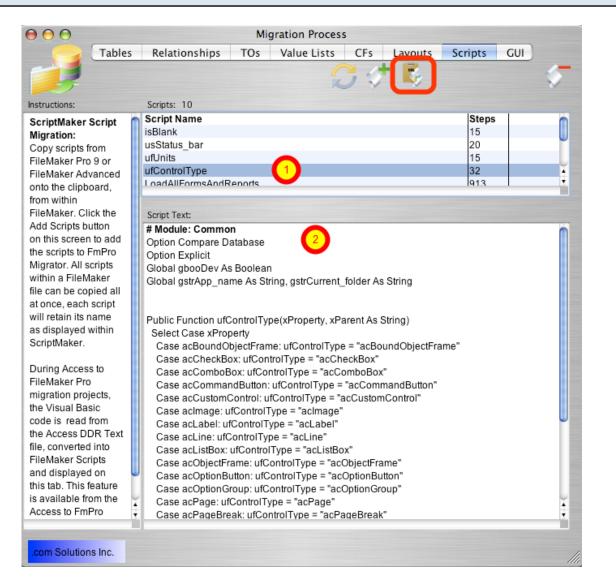
If you forgot to enter your license key or didn't have a license for the Al Accelerated version of FmPro Migrator, then the Microsoft Access Code Conversion Workbench will open in Demo mode. Apreviously converted set of sample scripts will be displayed in the grid instead of the scripts from your own Microsoft Access database. Clicking any of the scripts will display the text "This demo only includes a few scripts." in the Source Script field.

[At the present time, there aren't any Microsoft Access demo scripts.]

**Note**: This is the legacy script copying feature which copies the commented Visual Basic scripts from Access into FileMaker Pro. This feature is replaced with the new Code Conversion Workbench feature included with the Al Accelerated version of FmPro Migrator.

The copying of the scripts from FmPro Migrator to FileMaker should occur before creating the layouts. The layouts will typically contain buttons linked to the scripts, therefore the scripts need to be available within FileMaker at the time the layouts are created.

**Scripts List** 



Click on the Scripts tab of the Migration Process window to display the list of converted Scripts. Clicking on a Script in the list will display its contents.

Click on the CopyAll Scripts to ClipBoard button to copy the scripts onto the clipboard.

# Pasted Scripts into the Manage Scripts Window

$\bigcirc \bigcirc \bigcirc$	Manage Scripts (FileMakerDB)	
Show A		
	Get TOs List isBlank usStatus_bar ufUnits ufControlType LoadAllFormsAndReports CloseAllForms CloseAllReports Find duplicates for Asset_Management2 Query1 Query2	
📃 Inclue	de in menu	·
子 New	🔻 🧊 Edit 🐹 Delete 🕼 🛓 💽 🕟	

Select the Scripts -> Manage Scripts menu item to open the Manage Scripts window within FileMaker.

Select Paste from the Edit menu to paste the scripts.



00	Edit Script "Query2" (FileMakerDB)*	_
/iew: all by category	Script Name: Query2	_
Control Perform Script Pause/Resume Script Exit Script Halt Script If Else If Else If Else End If Loop Exit Loop If End Loop Allow User Abort Set Error Capture	<ul> <li># From Access Query: Query2</li> <li>Set Variable [SQueryResult; Value:mFMb_DoSQL( "SELECT * FROM asset_management2; ")]</li> </ul>	
Set Variable Install OnTimer Script Navigation Go to Layout Go to Record/Request/Page Go to Related Record Go to Object Go to Object Go to Field	Script Step Options	
how Compatibility Client	Clear Duplicate Disable	

In addition to converting Visual Basic Subroutines and Functions into FileMaker Scripts, FmPro Migrator also converts Microsoft Access Queries into FileMaker Scripts. Each Microsoft Access Query is converted into a Script using the <u>SHPartners/myFMButler</u> DoSQL plug-in from myFMButler to implement the SQL code of the original Query.

# FileMaker Themes with FileMaker 12+

Theme: Minimalist 🖷 🛛 🖃 Field Picker

FmPro Migrator includes a template database FileMakerDB.fp7/FileMakerDB.fmp12 which is exported automatically for your use. When using FileMaker 12+ versions, the FileMakerDB.fmp12 file is used. This database has been configured to use the Minimalist theme by default. Using this theme will insure that all layout objects look as closely as possible to their original style within the original Access database.

**Note**: Some objects (like rectangles), will lose their fill and border color if the theme is changed on the layout. So if you want to change the theme, please be aware that you may need to manually change the colors of some objects.

Step 7 - Automatically Save Layout Changes Preference (macOS) - [1st Time Setup Step]

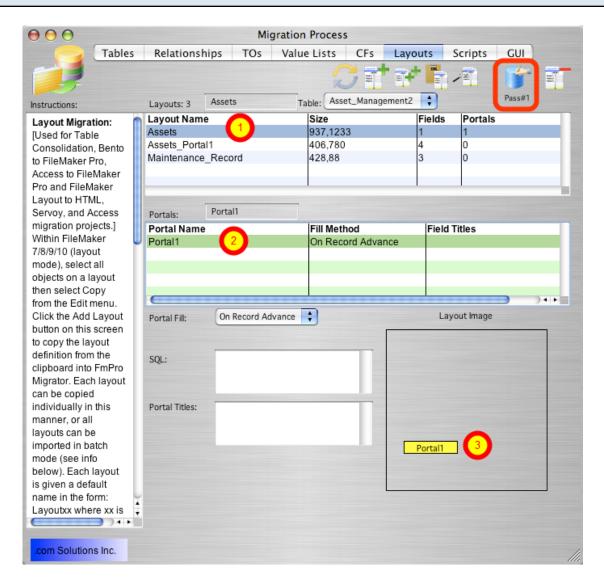
Preferences
Ge 1 Layout Memory Plug-Ins Fonts
Layout Options
Always lock layout tools
Add newly defined fields to current layout
2 Save layout changes automatically (do not ask)
Color Palette
<ul> <li>System subset (88 colors)</li> </ul>
Standard system palette (256 colors)
Web palette (216 colors)
Can 3 OK

Select the FileMaker Preferences menu item, (1) click the Layouts tab, (2) click the checkbox to enable the "Save layout changes automatically (do not ask)" option, then (3) click the OK button.

Step 7 - Automatically Save Layout Changes Preference (Windows) - [1st Time Setup Step]

Layout Memory Plug-Ins Fonts      Layout Options      Always lock layout tools      Add newly defined fields to current layout      Save layout changes automatically (do not ask)      Color Palette	
<ul> <li>Always lock layout tools</li> <li>Add newly defined fields to current layout</li> <li>Save layout changes automatically (do not ask)</li> </ul>	
<ul> <li>Always lock layout tools</li> <li>Add newly defined fields to current layout</li> <li>Save layout changes automatically (do not ask)</li> </ul>	
2 Save layout changes automatically (do not ask)	
- Color Dalatta	
<ul> <li>System subset (88 colors)</li> </ul>	
C Standard system palette (256 colors)	
C Web palette (216 colors)	

One of the important tasks listed in the WinAutomation Installation PDF file is to set the "Save layout changes automatically" option within the FileMaker Advanced Preferences dialog. Select the FileMaker Preferences menu item, (1) click the Layouts tab, (2) click the checkbox to enable the "Save layout changes automatically (do not ask)" option, then (3) click the OK button.



Click on the Layouts tab of the Migration Process window to display the list of converted Layouts. Clicking on a Layout in the list will display the details for the layout.

The converted form shown in this screenshot of the list of Layouts, shows a layout named (1) Assets which will be created within the FileMaker database with one (2) portal. The portal will be created in the location shown in yellow within the empty Layout Image box. This Layout was created from a Form within the Access database which had a SubForm embedded within the original form. FmPro Migrator will convert this SubForm into a FileMaker portal, related to the base table associated with the original SubForm. The portal fields will automatically be created and placed within the portal on the new FileMaker layout.

Click on the Create All Layouts in FileMaker button to automate the creation of the Layouts using WinAutomation(Windows)/AppleScript(macOS).

Note: The pop-up menu below this button should be left at its default value of "Pass 1".



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The converted Assets form from Microsoft Access is shown in Layout mode within FileMaker Pro. Embedded graphics, rectangles, fields, checkbox/radio button groups and drop down calendar pickers are implemented within FileMaker in the same manner as they were displayed within the original Access Form.

# **Manual Completion Tasks**

FmPro Migrator - Access to FileMaker Migration Procedure - 103

There are some processing steps which must be completed manually when performing an Access to FileMaker Migration.

# Layout Parts - Header, Footer, Subsummary

Microsoft Access incorporates Form/Report part objects with similar functionality to FileMaker layout parts. However there is not any method available to specify the inclusion of layout parts or the placement of objects within these parts when pasting FileMaker layouts via the clipboard. These layout parts will need to be added manually.

# **Unsupported Form/Report Objects**

Some objects implemented on Microsoft Access Form/Reports do not have equivalent features within a FileMaker database:

**acToggleButton** - FmPro Migrator creates these objects as regular buttons on the layout. **acBoundObjectFrame** - These are created as regular field objects, using the table/field specified within the original object.

**acObjectFrame** - These are created as regular field objects, using the table/field specified within the original object.

**chart** - Access database charts should be manually re-created by using the FileMaker chart object. This feature can also be implemented using a variety of plug-ins (i.e. <u>xmChart</u>) or add-ons which can use the WebViewer to display rendered JavaScript code (i.e. <u>FusionCharts for</u> <u>FileMaker</u>).

**acCustomControl** - An acCustomControl can represent any compiled ActiveX dll installed for use with Microsoft Access. These types of features can usually be replaced with FileMaker plug-ins available from a variety of vendors.

# **Relationship Testing**

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Instructions:		Relationships: 1								
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may manually add Relationships and Predicates on this screen. Click the Import Relationships button		Cascade Create: Belationship SOL ( One-to-many Asset_ID = Asset_	Code:	Cascade Delete:		Cascade Crea	ate:	Cascade	e Delete	× 🗆
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duplicate Table Occurrences. Select all of the Relationships, then click the Create SQL button. After creating	>									

Within Access databases, there are no TOs within the database structure. All Forms/Reports and fields are tied directly to a base table, SQL Query or view within the database. When creating the Access relationships within a FileMaker database, additional TOs will often be created automatically. It will be necessary to review the additional TOs to verify whether the base table or the new TOs should be used.

Access database files may contain Left Outer Join or Right Outer Join relationships not directly supported in FileMaker. FmPro Migrator will create all Access relationships as equijoin relationships. However the text description about the original relationship will be displayed in the normally unused SQL code field of each converted relationship, as shown above.

# **Portal Field Sizes**

FmPro Migrator automatically creates a new portal to represent any SubForms/SubReports found on the original Access Form/Report. Unlike FileMaker portal objects, Access SubForm/SubReport objects contain horizontal scrollbars. Therefore there could be too many fields incorporated on the original SubForm/SubReport to make a readable display within the area of the new FileMaker portal. FmPro Migrator divides the width of the portal by the number of fields and creates each field of the same size. The fields are also created in the same left to right display order as they were created on the original SubForm/SubReport. Therefore some objects surrounding the portal may need to be moved and the portal may need to be enlarged to support a readable display of large numbers of fields. It may also be helpful to manually resize the individual portal fields to accommodate the actual data which will be displayed within the portal fields.

## Visual Basic Code Conversion with the Microsoft Access Code Conversion Workbench

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Completed		of 200 Scrip		Source Script (Editable): Size: 320 Module: Privileges	Source:
Status	ID	Size	Script Name	Option Compare Database Option Explicit	Microsoft Access
Not Started	1	1074	Order Details_cmdCompleteOrd	Public Enum PrivilegeEnum Administrator_Privilege = 1 PurchaseApprovals_Privilege = 2	Output Language:
Completed	2	320	CanApprovePurchases	End Enum	FileMaker Pro
Not Started	3	419	DAvgWrapper	Public Function CanApprovePurchases() As Boolean	
Not Started	4	2051	Sales Reports Dialog_InitFilterIterr		Convert
Not Started	5	471	Purchases Subform for Purchase (	Command (Editable): Translate this Microsoft Access VBA code into FileMaker Pro script	Vendor:
Not Started	6	547	Purchase Order Details_cmdSubm		OpenAl Y
Not Started	7	740	Purchase Order Details_FRemove		
Not Started	8	1252	Monthly Sales Report_Report_Ope		
Not Started	9	803	Order Details_cmdClearAddress_(		
Not Started	10	404	Receiving Subform for Purchase C		API Key: dcsi
Not Started	11	362	Edit	Converted Script:	
Not Started	12	525	Purchases Subform for Purchase (	# Script: Privileges Allow User Abort [ Off ] Set Error Capture [ On ]	Model:
Not Started	13	784	LogError	# Enum: PrivilegeEnum Set Variable [\$Administrator_Privilege ; Value: 1 ] Set Variable [\$PurchaseApprovals_Privilege ; Value: 2 ]	
Not Started	14	1926	Sales Reports Dialog IstSalesPeri	# Function: CanApprovePurchases	Tokens Used Today: 40 Output Filename:
Not Started	15	2003	Order Subform for Order Details	Set Variable [ \$CanApprovePurchases ; Value: EmployeeHas ( GetCurrentUserID ; \$PurchaseApprovals _Privilege ) ] Set Field [ Table::CanApprovePurchases ; \$CanApprovePurchases ]	CanApprovePurchases.txt
Not Started	16	2068	Order Details cmdCreateInvoice	······································	
Not Started	17	462	DLookupNumberWrapper		
Not Started	18	3568	SetStatus		Need Help?
Not Started	19	1579	Receiving Subform for Purchase C		Need help:

The Microsoft Access Code Conversion Workbench feature is included with the Al Accelerated edition of FmPro Migrator. Each VBAscript can potentially be converted into FileMaker script code by an Al model. Once converted, clicking the clipboard icon copies the commented script code onto the clipboard for pasting into the FileMaker Pro script workspace window. The script is also written to disk as a text file.

Each script step is commented, and the text can be copied into a new script script step. This converted code is intended to serve as a template for the writing of new FileMaker script functionality. Many Visual Basic commands can be deleted, because they incorporate functionality which is not needed or doesn't exist within a FileMaker database. All commands will need to be carefully examined in order to replicate the original program logic as functional FileMaker script steps.

More details about using this feature are included in the "Using the Microsoft Access Code Conversion Workbench" section of this manual.

# **Button Linking**

FmPro Migrator automatically links buttons scripts on the original Access forms to scripts with the same names in the new FileMaker Pro database. Form event code is extracted from the Access database, with the VBA code commented to show the original business logic. This functionality will need to be rewritten within FileMaker scripts. The Code Conversion Workbench feature can provide a significant amount of help with this process.

Access Queries are converted into TOs on the RelationshipGraph and are also converted into FileMaker scripts. The entire SQL code of the original Access query is available for review. FileMaker TOs, can only reference a single table, so to implement a multi-table join as shown in this SQL code, additional TOs and corresponding relationships would need to be manually added to the FileMaker RelationshipGraph.

Unbound Calculated Form Fields		
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<table missing=""></table>		
Employees Extended.=IIf(DCount('*','[Employees Extended]', ([Employee Name]),''','''') & ''')>0,'Possible Duplicate','')	'[ID]<>' & Nz([ID],0) & ' And [Employ	yee Name] = " & Replace(Nz

Access Form/Report fields can be implemented as calculation fields not directly referenced to a a field in a database table. These fields can potentially be created as new calculated fields within a related table in the converted FileMaker database file. In some cases, a centrally located global field may be a more appropriate implementation.

0	erlapping Layout Objects
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There isn't any method to determine the top to bottom stacking order of objects on an Access Form/Report. FmPro Migrator builds objects within the new FileMaker Layout in a specific logical order to minimize issues with overlapping objects. The order of creating layout objects is: Rectangle Line Graphic Image

. Text Label Field

Some cosmetic changes will potentially still need to be performed manually to fine tune the stacking order.