



# FileMaker®

Installation and New Features Guide  
for FileMaker Pro 12 and FileMaker Pro 12 Advanced

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# Chapter 1

## Before you begin

Welcome to your FileMaker® software. FileMaker Pro is designed to help you manage information easily and effectively.

### About FileMaker documentation

This *Installation and New Features Guide* tells you how to install FileMaker Pro 12 or FileMaker Pro 12 Advanced on your Windows or Mac computer and introduces new features in the software.

**Note** This guide uses “FileMaker Pro” to refer to both FileMaker Pro and FileMaker Pro Advanced, unless describing specific FileMaker Pro Advanced features.

The *FileMaker Pro User’s Guide* provides essential information to get you working productively right away. If you’ve never used FileMaker Pro, work through the *FileMaker Pro Tutorial* to try out the major features. For details and comprehensive, step-by-step procedures, see FileMaker Pro Help.

The *FileMaker Pro Advanced Development Guide* describes additional features available in FileMaker Pro Advanced, including features such as customizing menus; copying and importing tables; Database Design Reports; and field, variable, and expression monitoring using the Data Viewer.

**Note** When a feature or procedure is specific to a particular platform, you see instructions and illustrations that are also specific to that platform. For features or procedures that are similar on both platforms, you may see illustrations for either Windows or the Mac OS.

To view and download FileMaker documentation, visit <http://www.filemaker.com/documentation>.

To send your feedback on this guide, visit [http://www.filemaker.com/company/documentation\\_feedback.html](http://www.filemaker.com/company/documentation_feedback.html).

## Customer support and Knowledge Base

Choose **Help** menu > **Resource Center** to access:

- ready-made solutions
- instructional videos and tutorials
- customer stories
- forums and other support options

To access the FileMaker Knowledge Base, visit <http://help.filemaker.com>.

To see system requirements, visit <http://www.filemaker.com/products>.

**Note** Information in the FileMaker Knowledge Base and the FileMaker Forum may not be available in all languages.

## Contact Support

FileMaker support representatives can help you with installation, launch, or reinstallation (not including data recovery) when your hardware configuration meets the minimum system requirements for the software. Visit <http://www.filemaker.com/cs>.

## Update notification

FileMaker Pro 12 automatically checks for software updates every seven days. If you have an internet connection, you can go to the update web page and download the updater software. You can update later by choosing **Help** menu > **Check for Updates**.

**Note** This feature does not install the software for you. You must have an internet connection to access and download the updater software.

To turn off update notification, do one of the following:

- In the Update Notification dialog box, select **Do not automatically check for updates**.
- In Windows, choose **Edit** menu > **Preferences**. In the Mac OS, choose **FileMaker Pro** menu > **Preferences**. In the **General** tab, deselect the **Notify me when an update is available** option. To turn on update notification again, select this preference.

If you disable update notification, the Update Notification dialog box will not display.

## New version notification

FileMaker Pro 12 automatically checks for new software versions every 30 days and informs you if a new version is available for purchase.

To turn off new version notification, do one of the following:

- In the New Version Notification dialog box, select **Don't tell me about new versions again**.
- In Windows, choose **Edit menu > Preferences**. In the Mac OS, choose **FileMaker Pro menu > Preferences**. In the **General** tab, deselect the **Notify me when a new version is available** option. To turn on new version notification again, select this preference.

If you disable new version notification, the New Version Notification dialog box will not display.

## About the license key

FileMaker software comes with a unique, 35-digit alphanumeric license key. Do not lose this license key. We recommend that you keep the license key in a safe place in case the software ever needs to be reinstalled.

You can find your license key(s) on the back of the DVD sleeve. If you are installing the software using an electronic download, follow the instructions in your order confirmation email. You must enter a valid license key to install the software.

The license key ensures adherence to the FileMaker Pro or FileMaker Pro Advanced Software License, which allows for use of one (1) copy of the software on a single computer at a time along with a second copy for use on a home or portable computer, subject to the restrictions in the Software License. For more information, refer to the FileMaker Pro or FileMaker Pro Advanced Software License located in the application folder where you installed your software.

If another copy of the application installed with the same license key is running on the network, the FileMaker Pro application displays this error message: "The maximum number of licensed users are currently using this copy of FileMaker Pro."

To install FileMaker Pro on multiple computers, you must have a unique license key for each installation, or obtain a volume license for multiple computers. You must license one copy of FileMaker Pro for each computer.

## Requirements for features in Windows

Some of the features of FileMaker Pro for Windows require additional software.

| Feature  | Software requirement  |
|--|---|
| Send Mail script step using an email application | Microsoft Outlook Express, Windows Mail, Windows Live Mail, or Office Mail<br>This requirement does not apply to SMTP mail.   |
| Phone dialing                                    | Phone dialer or other Telephony API (TAPI) compliant software   |
| ODBC and JDBC features                           | FileMaker ODBC and JDBC drivers are available in the xDBC folder in the installation disk image, and in the FileMaker Knowledge Base:<br><a href="http://help.filemaker.com/">http://help.filemaker.com/</a> .<br>For more information about using ODBC and JDBC features, see the <i>FileMaker ODBC and JDBC Guide</i> and FileMaker Pro Help.<br>For more information about using third-party ODBC and JDBC drivers, visit<br><a href="http://www.filemaker.com/support/technologies">http://www.filemaker.com/support/technologies</a> . |
| Insert QuickTime movie and image files           | QuickTime 7.5 software (available at<br><a href="http://www.apple.com">http://www.apple.com</a> )   |

## Requirements for features in the Mac OS

Some of the features of FileMaker Pro for the Mac OS require additional software.

| Feature  | Software requirement  |
|--|---|
| Send Mail script step using an email application | Apple Mail, Microsoft Entourage, or Microsoft Outlook 2011<br>This requirement does not apply to SMTP mail.   |
| ODBC and JDBC features                           | ODBC Manager from Actual Technologies (available at <a href="http://www.odbcmanager.net">http://www.odbcmanager.net</a> ), which is a freeware product not supported by FileMaker.<br>FileMaker ODBC and JDBC drivers are available in the xDBC folder in the installation disk image, and in the FileMaker Knowledge Base:<br><a href="http://help.filemaker.com/">http://help.filemaker.com/</a> . For more information about using ODBC and JDBC features, see the <i>FileMaker ODBC and JDBC Guide</i> and FileMaker Pro Help.<br>For more information about using third-party ODBC and JDBC drivers, visit <a href="http://www.filemaker.com/support/technologies">http://www.filemaker.com/support/technologies</a> . |
| Import files from Bento®                         | Bento 2 or a later supported version (available at <a href="http://www.filemaker.com">http://www.filemaker.com</a> )  |

## Features not supported in Windows

In Windows, FileMaker Pro does not support the Perform AppleScript and Speak script steps. It also does not support importing files from Bento.

## Features not supported in the Mac OS

In the Mac OS, FileMaker Pro does not support the Dial Phone and Send DDE Execute script steps.

Excel export: Export to .xls requires Rosetta, which is not available on OS X Lion.

## Converting the trial version to the full version of FileMaker Pro

If you have installed the FileMaker Pro 12 trial version on your computer, you can convert to the full version of FileMaker Pro 12 without uninstalling the trial version first. You can also upgrade your retail copy of FileMaker Pro version 9, 10, or 11 to the full version of FileMaker Pro 12 by entering an upgrade license key during the trial conversion process.

## Upgrading FileMaker Pro from a previous version

If you are upgrading FileMaker Pro from a previous version, FileMaker recommends that you upgrade to the new version before uninstalling the previous version.

To upgrade FileMaker Pro from a previous version:

1. Install the upgrade using the 35-character license key, which is on the back of the DVD sleeve or emailed to you with your download link.
2. Move plug-ins, dictionary information, and your preferences to the new version of FileMaker Pro. For information about moving your preferences, refer to the FileMaker Knowledge Base available at <http://help.filemaker.com>.
3. If you plan to use only the latest version, uninstall the previous version.

If you choose to uninstall the previous version before upgrading to the latest version, make sure you have the license key for the previous version. When installing FileMaker Pro with an upgrade license key, the installer searches your hard drive for the previous version. If a previous version is not located, you are asked to enter the license key for the previous version of the product.

## Opening files from previous versions

FileMaker Pro 12 can open files created in FileMaker Pro versions 7.x, 8.x, 9.x, 10.x, or 11.x. In order to use the files with FileMaker Pro, however, you'll need to convert them to the FileMaker Pro 12 file format. For more information about converting files, see FileMaker Pro Help.

## Updating your User Dictionary

If you added words to a User Dictionary in a previous version of FileMaker Pro, you can use it with FileMaker Pro 12. See FileMaker Pro Help for information about converting a User Dictionary.

## Installing under a volume license

If you're installing multiple copies of FileMaker Pro under a volume license, or if you want to do a silent install, you can automate the process. Use the Assisted Install.txt file on the disk image to bypass the usual install dialog boxes. For more information, see *FileMaker Pro Network Install Setup Guide*. For information on volume licensing, visit <http://www.filemaker.com>.



# Chapter 2

## Installing FileMaker Pro in Windows

Before you begin the installation process, exit other open programs and save your work. For late-breaking information and release notes about FileMaker Pro, visit <http://help.filemaker.com>.

### Installation notes

Before you install FileMaker Pro, review the following notes:

- To install FileMaker Pro, you must have Administrator privileges and use the Administrator user name and password.
- If your computer is running virus protection software, turn it off prior to installing FileMaker Pro, and then turn it back on afterwards.
- By default, FileMaker Pro will be installed in this folder:  
C:/Program Files/FileMaker/FileMaker Pro 12  
During installation, you can choose another drive or another folder.
- By default, FileMaker Pro Advanced will be installed in this folder:  
C:/Program Files/FileMaker/FileMaker Pro 12 Advanced  
During installation, you can choose another drive or another folder.
- During installation, you can choose whether to install all program features (Complete), or to install only selected portions of the program (Custom). For example, you may choose not to install certain features in order to save disk space.
- At the start of installation, you choose a language version for the FileMaker Pro installer. The default selection matches your operating system language. A Complete install will install only the language version you choose. You can install additional language versions by choosing Custom install, then selecting other language packs from the list of supported languages.
- Prior to an upgrade installation or software update, FileMaker software scans all hard drives and volumes connected to your system, searching for previous versions. This scan may take several minutes if you have multiple drives or volumes.

## Installing FileMaker Pro

You must use the installation program to install FileMaker Pro—you can't install FileMaker Pro by dragging files to your hard disk.

If you want to create an install log file that lists the registry entries and path of all installed files, you must install FileMaker Pro from the command line. See "Installing FileMaker Pro from the command line" on page 15.

To install FileMaker Pro on your hard disk:

**1. Do one of the following:**

- If you received your software electronically, after downloading the file, double-click the installation icon (.exe file).



- If you are installing FileMaker Pro using a DVD, insert the DVD into your DVD drive, open the FileMaker DVD window, and click the installation icon.



Click to install  
the  
application



Click to browse  
the contents of  
the DVD



Click to exit

**2. Install FileMaker Pro by following the onscreen instructions.**

For additional details about installation, see "Installation notes" on page 13.

**3. When the installation is complete, click **Finish**.**

The Product Registration dialog box appears.

## Registering FileMaker Pro

Please take a few moments to register your product. By registering your software, FileMaker will be able to assist you in recovering your license key if you ever lose it. You will also receive priority notification of software updates, upgrades, and special offers. Follow the prompts to provide your registration, product, and additional information.

If you are using the FileMaker Pro trial version, you must register your software prior to use.

You can also register by choosing **Help** menu > **Register FileMaker Pro**.

## Installing FileMaker Pro from the command line

To install FileMaker Pro from the command line and create an installation log file:

1. Insert the DVD into your DVD drive.
2. Open a command window.
3. In the command window, type:  
`E:\Files\setup.exe /v"/Lr C:\FMP12InstallLog.txt"`  
where E: is the DVD drive. If your DVD drive uses a different drive letter, type that letter instead of E.
4. Follow the onscreen instructions.

The FMP12InstallLog.txt file will be located in the root directory of your hard disk. You can view it with WordPad or a word processing program.

## About installing Bonjour

The Bonjour service enables automatic discovery of computers, devices, and services on IP networks. You need to have Bonjour installed on your system for remote hosts to be discovered.

If Bonjour is not installed or the service is not running, FileMaker Pro can't discover remote networks. For example, you won't be able to view hosted databases in the Open Remote File dialog box or display the list of remote files to use as your external data source.

Without Bonjour, you have to manually enter the IP addresses for remote databases.

During the FileMaker Pro installation, the installer uses the following process:

- If Bonjour isn't detected, the installer alerts you and prompts you to install Bonjour.
- If Bonjour is detected but the installed version is not supported by FileMaker, the installer alerts you. It prompts you to manually uninstall the older version of Bonjour and manually install the version supported by FileMaker.
- If Bonjour is detected and the installed version is supported by FileMaker, the installer doesn't alert you and doesn't install Bonjour.

To install Bonjour manually:

1. Open the FileMaker Pro installation folder.
2. Open the Bonjour folder.
3. Open the 32-bit or 64-bit folder based on your version of Windows.
4. Double-click the BonjourSetup icon.
5. Follow the onscreen instructions to install Bonjour.

## Where files are stored on your hard disk

The FileMaker Pro installer copies files to several folders on your hard disk, depending on the installation options you choose and your operating system. If you performed a command line installation and specified an install log file, you can view the install log file, which lists the location of each installed file.

## Uninstalling, modifying, or repairing FileMaker Pro

You can use the Windows XP Add or Remove Programs control panel, or the Windows Vista or Windows 7 Programs and Features control panel, to uninstall FileMaker Pro, replace missing or corrupt files, or to change which features are installed. For more information, refer to Windows Help.

When you modify or repair FileMaker Pro, you may be prompted to enter your license key.

## Changing the FileMaker Pro cache size

FileMaker Pro maintains an internal cache of portions of your database. Depending on your computer's memory configuration, you may want to adjust the cache size to improve performance.

You may want to consider increasing the cache size if you plan to:

- work on a large database file
- work on several database files at once
- host database files
- insert a large graphic into a database file

Consider decreasing the cache size if you plan to run several applications at the same time and you have a limited amount of memory (RAM) installed.

**Note** When you increase or decrease the FileMaker Pro cache size, you also increase or decrease the amount of memory needed to run FileMaker Pro.

For more information on managing memory, see the documentation that came with your computer.

To change the cache size that FileMaker Pro uses:

1. In FileMaker Pro, choose **Edit** menu > **Preferences**.  
The Preferences dialog box appears.
2. Click the **Memory** tab.
3. Type a number in the **Attempt to set file cache to** box, then click **OK**.  
The next time you start FileMaker Pro, the new cache size is used.

## Where to go from here

After you install FileMaker Pro, you can immediately begin working with the application. Here are some suggestions on where to go in the documentation to get started:

- If you're new to databases, read chapter 2, "Using databases" and chapter 3, "Creating databases" in the *FileMaker Pro User's Guide* to learn basic database concepts.
- If you're new to FileMaker Pro, work through the lessons in the *FileMaker Pro Tutorial*. The PDF file and sample file for the tutorial are located in the Tutorial folder inside the English Extras folder.
- If you've used FileMaker Pro before, read chapter 4, "New features," in this guide for an overview of new features available in FileMaker Pro 12.
- If you're a FileMaker Pro Advanced user, see the *FileMaker Pro Advanced Development Guide* and FileMaker Pro Help.

# Chapter 3

## Installing FileMaker Pro in the Mac OS

Before you begin the installation process, quit other open programs and save your work. For late-breaking information and release notes about FileMaker Pro, visit <http://help.filemaker.com>.

### Installation notes

Before you install FileMaker Pro, review the following notes:

- To install FileMaker Pro, you must have Administrator privileges and use the Administrator user name and password.
- If your computer is running virus protection software, turn it off prior to installing FileMaker Pro, and then turn it back on afterwards.
- During installation, you can choose whether to install all the program files (a Standard Install), or to install portions of the program (a Custom Install). For example, you may choose not to install certain features in order to save disk space.
- A Standard Install installs FileMaker Pro in the language matching your operating system. You can install additional language versions by choosing Custom Install, then selecting other language packs from the list of supported languages.
- Prior to an upgrade installation or software update, FileMaker software scans all hard drives and volumes connected to your system searching for previous versions. This scan may take several minutes if you have multiple drives or volumes.
- You can also install FileMaker Pro using the command line or remotely using Apple Remote Desktop. For more information, see the *FileMaker Pro Network Install Setup Guide*.

## Installing FileMaker Pro

You must use the installation program to install FileMaker Pro—you can't install FileMaker Pro by dragging files to your hard disk.

To install FileMaker Pro on your hard disk:

**1. Do one of the following:**

- If you received your software electronically, after downloading the file, double-click the disk image icon (.dmg file).



- If you are installing FileMaker using a DVD, insert the DVD into your DVD drive, and open the FileMaker DVD window.

**2. Locate and double-click the FileMaker Pro installation icon.**



**3. Install FileMaker Pro by following the onscreen instructions.**

For additional details about installation, see "Installation notes" on page 19.

**4. When the installation is complete, the Product Registration dialog box appears.**

## Registering FileMaker Pro

Please take a few moments to register your product. By registering your software, FileMaker will be able to assist you in recovering your license key if you ever lose it. You will also receive priority notification of software updates, upgrades, and special offers. Follow the prompts to provide your registration, product, and additional information.

If you are using the FileMaker Pro trial version, you must register your software prior to use.

You can also register by choosing **Help menu > Register FileMaker Pro**.

## Viewing the installation log file

To view and save the installation log file, choose Window menu > **Installer Log** in the installer window. You can display both error messages and progress messages, only error messages, or all available installation messages.

## Uninstalling FileMaker Pro 12

To uninstall FileMaker Pro 12:

1. Drag the FileMaker Pro 12 or FileMaker Pro 12 Advanced folder and all its contents from the Applications folder to the Trash.
2. Drag the FileMaker Pro or FileMaker Pro Advanced preferences file to the Trash.

The pathname for the preferences file is:

For FileMaker Pro:

`<home>/Library/Preferences/com.filemaker.client.pro.plist`

For FileMaker Pro Advanced:

`<home>/Library/Preferences/com.filemaker.client.advanced.plist`

## Adjusting the FileMaker Pro cache

Because the Mac OS dynamically allocates memory to applications as needed, there is no way to set a specific amount of memory to allocate to the FileMaker Pro application. However, you can adjust the FileMaker Pro cache size.

You may want to increase the cache size if you plan to do any of the following:

- work on a large database file
- work on several database files at once
- host database files
- insert a large graphic into a database file

Consider decreasing the cache size if you plan to run several applications at the same time and you have a limited amount of memory (RAM) installed.

To change the cache size that FileMaker Pro uses:

1. In FileMaker Pro, choose FileMaker Pro menu > Preferences and click the **Memory** tab.

2. Type a number in the **Attempt to set file cache size to** box, then click **OK**.

The next time you start FileMaker Pro, the new cache size is used.

## Where to go from here

After you install FileMaker Pro, you can immediately begin working with the application. Here are some suggestions on where to go in the documentation to get started:

- If you're new to databases, read chapter 2, "Using databases" and chapter 3, "Creating databases" in the *FileMaker Pro User's Guide* to learn basic database concepts.
- If you're new to FileMaker Pro, work through the lessons in the *FileMaker Pro Tutorial*. The tutorial PDF file and sample file are located in the Tutorial folder inside the English Extras folder.
- If you've used FileMaker Pro before, read chapter 4, "New features," in this guide for an overview of new features available in FileMaker Pro 12.
- If you're a FileMaker Pro Advanced user, see the *FileMaker Pro Advanced Development Guide* and FileMaker Pro Help.

# Chapter 4

## New features

This chapter provides you with an overview of the new features and improvements in FileMaker Pro 12. Unless otherwise noted, please see FileMaker Pro Help for more information on these features.

### New layout design and controls

- FileMaker Pro themes – The FileMaker Pro architecture has been redesigned to support rich, beautiful layout themes. You can easily change the theme by choosing from the Layouts menu in Layout mode.
- Layout object formatting – FileMaker Pro provides greater control over object formatting with features such as gradient fills, image fills (including scaling and slicing), transparency, object states, and rounded corners. Rather than setting default object styles with no objects selected, use themes to set object formatting. You can remove styles from selected objects and control changing themes with multiple undo.
- New layout assistance tools – In Layout mode, dynamic alignment guides, guidelines that drag out from rulers, and control over the grid give you visual cues to help you design new layouts and modify existing ones. Multiple undo and redo let you experiment and refine with ease.
- Screen stencils – In Layout mode, you can click  to display guides that help you design layouts optimally for iPad, iPhone, and common desktop resolutions, or set custom dimensions.
- Improved accessibility – FileMaker Pro supports assistive technology and the ability to access the FileMaker Pro document window and objects on layouts using the keyboard and screen readers. With the new Accessibility inspector, you can add accessibility labels to layout objects, which are then interpreted (for example, read aloud) by users' software screen readers. Also, you can create accessible runtime solutions (with FileMaker Pro Advanced).
- Updated Starter Solutions – FileMaker Pro Starter Solutions have been updated to a modern appearance with more options for customization. Some Starter Solutions contain layouts designed for FileMaker Go.
- New file format – The FileMaker Pro file format has been changed to support the new features.

## Improved performance and usability

- Enhanced container fields – You can now store container data outside of the database file in managed storage. Storing container data externally facilitates sharing multi-user databases, improves backups, and maintains security through encryption of the external data. Enhancements also let you render images faster with thumbnails; drag and drop files; and work interactively with audio, video, and PDF files in container fields.
- Plug-in updating – Store plug-in files in solution files, then use scripts and calculations to ensure users always have the correct version of required plug-ins installed.
- Define window styles – Control user interaction with your solution by specifying that layouts opened by a script or button display as standard document windows, floating document windows, or modal dialog windows, and by choosing the controls that appear in the windows.
- Enhanced tab control – Modify tab behavior so that the active tab is retained when switching to Layout mode. You can set up conditional formatting of individual tab panels and tab labels.
- Record sorting – You can control whether record sorting is persistent or temporary. Records added or edited after being sorted are by default integrated into the sort order. Deselect **Keep records in sorted order** to change this behavior.
- New badges in Layout mode:
  - A  badge in the lower-right corner on a layout indicates that script triggers are associated with the layout.
  - A  badge on a layout indicates that the object on which the badge appears is a button.
- Layout variable symbols – New layout variables display the status of a file, elements in the file, or an action being performed. Also, variable symbols for date, time, user name, page number, and record number have changed.
- Working with shared files – You can now run a script in a remote file using a URL.
- FileMaker Pro features by version – See Help for information about the version in which FileMaker Pro and FileMaker Pro Advanced features were introduced, starting from version 8.0.

## Improved reporting and analysis

- FileMaker charts – Create quick charts in Table View, with the option to summarize data and print charts without changing the database schema. You can modify charts using a new Chart inspector. New chart types include stacked column or bar, positive/negative column, scatter, and bubble. (You can also create quick charts by right-clicking a field in Form View or List View.)
- Table View refinements – Column headers in Table View provide more options for grouping, sorting, and summarizing, and make it easier to customize the appearance of the table so your data and calculations are clear.

## Integration with other applications and data sources

- Mac OS: Enhanced support for Bento data import – Import Bento Location fields as *[Fieldname](Longitude)* and *[Fieldname](Latitude)*.
- Support for FileMaker Go – FileMaker Pro includes new script steps, functions, and extended privileges, as well as layout themes optimized for touch screens on the iPad and iPhone, and includes changes to custom menus that support the use of FileMaker Go.
- Improved integration with external SQL sources (ESS) – If one or more table names have changed in an ODBC data source, you can update links between a FileMaker Pro file and the source. You can also force-commit changes when optimistic locking otherwise prevents the commit action.

## Script steps, script triggers, and functions

### Script steps

#### Enhancements to script steps

- Compatibility information – In Help and the Edit Script dialog box, the compatibility section has been refined to include FileMaker Pro, FileMaker Server scheduled script, FileMaker Go, Custom Web Publishing, and Instant Web Publishing. Help also includes whether a script step is supported in runtime solutions.

- Insert File script step – You can now specify advanced options for the Insert File dialog, which appears when you choose a file to insert into a container field. These options include whether content can be inserted by reference, whether content can be compressed, and which formats are allowed in the field.
- New Window script step – Creates a new window based on the foreground window. You can create a document window, a floating document window, or a dialog window.

### New script steps

- Find Matching Records script step – Finds records based on the context of a specified field, letting you create scripts that behave similarly to using Find Matching Records in a shortcut menu.
- Insert Audio/Video script step – Imports an audio or video file, or a reference to an audio or video file, into the current interactive container.
- Insert From URL script step – Enters the content from a URL into a field.
- Insert PDF script step – Imports a PDF file, or a reference to a PDF file, into the current interactive container.
- Install Plug-In File script step – Installs or updates a plug-in file that's in a container field onto your computer.
- Open Manage Containers script step – Opens the Manage Containers dialog box, where you can manage thumbnail settings and external locations for container content.
- Sort Records by Field script step – Sorts the records in the current found set based on the context of a specified field, letting you create scripts that behave similarly to using Sort Records by Field in a shortcut menu.

### Changed script steps

- Allow Toolbars script step is now Allow Formatting Bar.
- Show/Hide Status Area script step is now Show/Hide Toolbars.

## Script triggers

### Enhancements to script triggers

- Four windows script triggers are available in a new Script Triggers tab in the File Options dialog box: OnWindowOpen, OnWindowClose, OnFirstWindowOpen, and OnLastWindowClose.

### New script triggers

- OnFirstWindowOpen – Triggers a script to run each time you open a window of a database file when no other windows for the file are open.
- OnLastWindowClose – Triggers a script to run each time you close the last window of a database file.
- OnTabSwitch script trigger – Captures when a tab in a tab control was selected and which tab was selected.
- OnWindowClose script trigger – Runs a script each time a window of a database file is closed.
- OnWindowOpen script trigger – Runs a script each time a window of a database file is opened.

### Changed script triggers

- OnFileClose script trigger is now OnLastWindowClose.
- OnFileOpen script trigger is now OnFirstWindowOpen.

## Functions

### New functions

- ExecuteSQL function – Executes a specified SQL statement within a FileMaker Pro database, which can combine the results of two queries, include dynamic parameters, and let you specify relationships independent of the relationships graph.
- GetHeight function – Returns the height in pixels of the content in a container field that holds images.
- GetThumbnail function – Returns a thumbnail image of the content in a container field, according to specified values for width and height.
- GetWidth function – Returns the width in pixels of the content in a container field that holds images.

- Location function – In FileMaker Go, returns a device's current position in one line on a form.
- LocationValues function – In FileMaker Go, returns a device's current position using a set of return-delimited values.
- VerifyContainer function – Returns a Boolean value representing the validity of data stored externally in a container field.
- Get(ConnectionState) – Returns a number representing the security state of the network connection for the current file.
- Get(InstalledFMPlugins) function – Returns the name, version number (if available), and enabled state of installed plug-ins.
- Get(PersistentID) – Returns text representing a unique identifier of the computer or device on which FileMaker is running.
- Get(TriggerCurrentTabPanel) function – Returns the index and the object name of the current tab panel (the tab panel to be switched from) when the OnTabSwitch script trigger is activated.
- Get(TriggerTargetTabPanel) function – Returns the index and the object name of the target tab panel (the tab panel to be switched to) when the OnTabSwitch script trigger is activated.
- Get(UUID) function – Returns a Universally Unique Identifier (UUID).
- Get(WindowStyle) function – Returns the style of the window on which the script is acting.

### Changed functions

- Get(AllowToolbarState) function is now Get(AllowFormattingBarState).

## Changed and removed features

### Features changed in FileMaker Pro

- Layout mode – Some features have been changed or removed in Layout mode.
- Plug-in updating – Plug-in updating has been simplified. You now store plug-ins in solution files and install updates from container fields. The Auto Update plug-in has been removed from FileMaker Pro.
- Table View sorting – Instead of clicking a column heading to sort data, you now choose from the shortcut menu for the column. This makes sorting more predictable and allows for selection of one or more column headers in order to perform additional actions on the associated fields.

- Importing data from FileMaker Pro databases – Import order has been improved. The addition or deletion of fields after field mapping no longer affects the sort order in import target files.
- Extended privileges – The fmmobile and fmxslt extended privileges have been removed. A new extended privilege, fmreauthenticate10, has been added for FileMaker Go. Also, brackets have been removed from all default extended privileges for consistency and to enable editing.
- You can now specify which buttons in the Specify Custom dialog box commit data to a database.
- Mac OS X Lion: Export to .xls requires Rosetta, which is not available on OS X Lion.

## Features removed from FileMaker Pro

- Mac OS: Support for importing photos from a digital camera or device – Script steps and menu commands that support importing photos from a digital camera or device have been removed from FileMaker Pro.
- Windows: Support for OLE – You can no longer insert or work with OLE objects from earlier versions of FileMaker Pro. Because of this change, the Insert Object and Update Link script steps, menu items related to OLE objects, and the **Update all links before printing** option in the Print dialog box have been removed. However, you can activate OLE objects in container fields and on layouts and save them to their original formats.
- Windows: The **Flash menubar on misspelled words** option has been removed from the Spelling tab in the File Options dialog box.

## FileMaker Pro 12 Advanced

- Improved custom menus:
  - To support FileMaker Pro files created for devices such as the iPad and iPhone, default custom menus and menu sets are no longer created when you create a file. You can add custom menus and menu sets to files manually, if you want to use them in your solution files.
  - If you don't specify a menu item name, FileMaker Pro installs a blank item in the menu. Choosing it executes the settings defined for the item.
  - Specify calculations that determine when custom menus or menu items are installed.

- Enhanced Script Debugger – You can now temporarily disable or enable script triggers while you work in the Script Debugger.
- Database Design Report – The Database Design Report now identifies the tab controls or portals in which objects are located.
- Close window button in runtime solutions – The close window button in runtime solution windows now works as it does in FileMaker Pro windows. If you want to prevent users from closing a runtime window, use custom menus, scripts, or window styles.
- Support for PHP Site Assistant (FileMaker Server) – Because support for PHP Site Assistant in FileMaker Server has been removed, the **Launch PHP Assistant** menu item has been removed from the Tools menu in FileMaker Pro Advanced.