

Chapter 4

New features in FileMaker Pro

This chapter provides you with an overview of the new features in FileMaker Pro 5.5. See page 34 for the new features in the previous version, FileMaker Pro 5.

Important See FileMaker Pro Help for complete details on new features in FileMaker Pro 5.5.

New features in FileMaker Pro 5.5

FileMaker Pro 5.5 presents additional features and improvements to the application that have been made in response to feedback from users and developers.

New features in FileMaker Pro 5.5 include:

- support for Windows 2000 Professional and Mac OS X
- many ease-of-use improvements, for example, being able to resize the Specify Calculation dialog box
- the ability to secure individual records through FileMaker Pro 5.5 access privileges, including record-by-record security for databases published on the Web
- many new script steps and functions, for example, an Execute SQL script step
- extended ODBC and SQL functionality, such as the ability to execute SQL statements from a field value
- improved functionality, for example, importing named ranges of Microsoft Excel data
- more power in publishing data on the Web, for example, support for more script steps in Instant Web Publishing

Support for Windows 2000 and Mac OS X

FileMaker Pro 5.5 now supports Windows 2000 Professional and Mac OS X, making FileMaker Pro 5.5 available on a broader range of computers and operating systems.

Windows 2000 Professional

New features include:

- accessibility for visually or hearing-impaired users, including new layout themes and keyboard access to the layout tools
- support for OnNow power management for a better mobile experience and energy conservation
- easier software deployment in large organizations
- maintenance of user preferences on multiple machines without data loss

Mac OS X


In addition to supporting Mac OS Systems 8.1 through 9.x, FileMaker Pro 5.5 introduces native support for Mac OS X. See the *Getting Started with Mac OS X* document for more information.

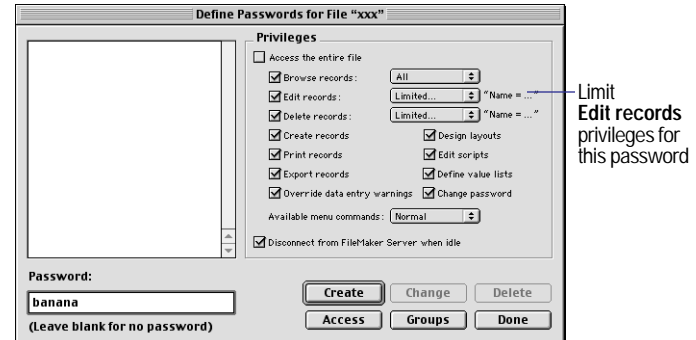
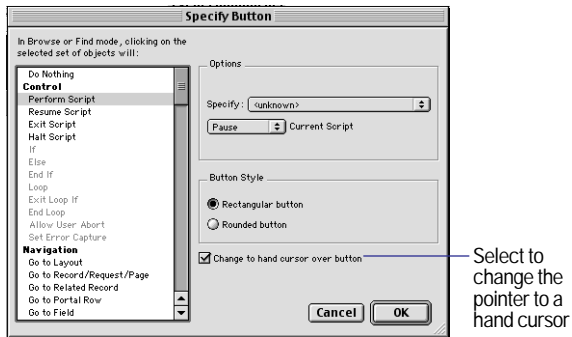
Ease-of-use improvements

FileMaker Pro 5.5 provides a number of improvements in response to customer requests and feedback:

- An Open Remote menu item and an Open Host script step, which give you the ability to open the Hosts dialog box in just one step.



- More resizable dialog boxes, including the Specify Calculation dialog box. When you reposition or resize a dialog box, FileMaker Pro now remembers the location and size when you reopen your file or re-launch the application. Non-resizable dialog boxes open in their default position and size.
- An option to change the pointer to a hand when it's over a button in Browse and Find modes. 



Scripting improvements

Scripting improvements include:

- Comments in script steps now print in italics for increased visibility.
- The Allow Toolbars script step lets you hide toolbars and disable the related menu items.
- The new Set Next Serial Value script step allows you to use a calculation expression to determine the next serial value of a field defined as an auto-entry serial number field. This is helpful if you want to import records into a FileMaker Pro 5.5 database with an auto-entry serial number or if you want to delete multiple serialized numbers from a FileMaker Pro 5.5 file.
- In the Mac OS, the Send Mail script step now supports Microsoft Outlook Express 5 or Entourage.

New calculation, design, and status functions

New calculation, design, and status functions make working with fields, files, and layouts easier than ever. The new functions are:

- GetField(fieldname)
- FieldIDs(dbname, layoutname)
- GetNextSerialValue(dbname, fieldname)

Record-by-record access privileges

FileMaker Pro extends data access control to individual records. You can now specify calculation formulae to restrict browsing, editing, or deleting individual records, based on the user's password.

For example, a management-level password can be given privileges for the records of all employees in that manager's department. At the same time, non-management password privileges can be limited to browsing only an employee's personal records.

This option is also available for databases published on the Web.

- LayoutIDs(dbname)
- RelationIDs(dbname)
- ScriptIDs(dbname)
- ValueListIDs(dbname)
- Status (CurrentFieldContents)
- Status (CurrentFilePath)
- Status (CurrentHighContrast)
- Status (CurrentHighContrastColor)
- Status (CurrentLayoutAccess)
- Status (CurrentODBCError)
- Status (CurrentRecordAccess)
- Status (CurrentStatusArea)
- Status (CurrentView)
- Status (CurrentWebSharing)

See FileMaker Pro Help for details about these functions.

Extended ODBC and SQL functionality

FileMaker Pro 5.5 gives you more control over how you interact with ODBC data sources. FileMaker Pro 5 introduced the ability to query ODBC data. Now you can use FileMaker Pro 5.5 to execute SQL statements. This ability to export data and manipulate tables enhances FileMaker Pro integration with enterprise data sources such as Oracle, SAP, and SQL Server.

FileMaker Pro 5.5 has a new Status(CurrentODBCError) function that returns a string displaying the error state published by ODBC standards (based on ISO/IEF standards).

Execute any SQL statement via FileMaker Pro script

FileMaker Pro 5.5 introduces the Execute SQL script step, which you can use to execute any SQL statement supported by your data source.

Execute SQL statements from a field value

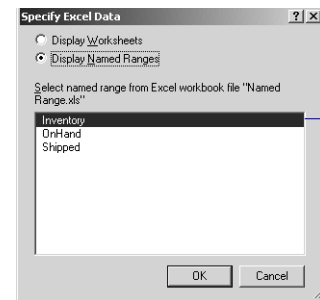
You can now use a SQL statement stored in a field to both import and export ODBC data.

- Use a calculation field to dynamically generate SQL statements for each record.
- Use a text field if you want to store a static SQL statement.
- Use a global field to store or calculate a single static or dynamic SQL statement that is executed for every record.
- Use a non-global field to store a different static statement in each record.

Import named ranges of Microsoft Excel data

The ability to import named ranges of Microsoft Excel data is especially useful when you have:

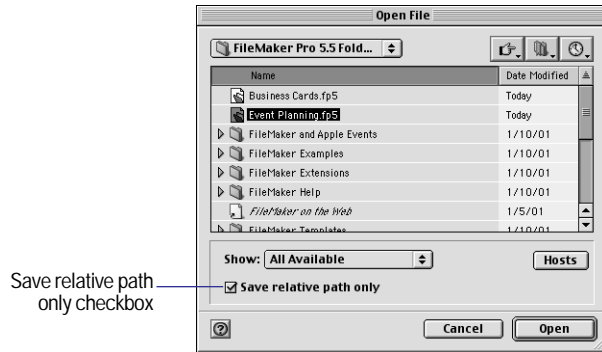
- more than one row of description
- label data above the actual spreadsheet data that you want to import
- a number of sets of tabular data on a single spreadsheet that can begin at any cell location



Select a named range

Search only the relative path for FileMaker Pro files

When you open a file with the relative path option selected, FileMaker Pro searches only the volume the parent file is on. Neither the network nor any other volume is searched. When you open a file on a host with the relative path option selected, FileMaker Pro searches only the volume on that host. The local disk is not searched.

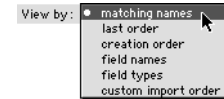


Relaxed rules for mapping fields and relationships when importing scripts

When you import scripts, case is no longer significant for matching field names and relationship names, and relationship keys are no longer compared. Fields will map if the field types are the same and the field names are the same, regardless of whether the field name is uppercase or lowercase. Relationships map regardless of the case of the relationship name.

Dynamic field name matching in data import scripts

Field names are matched dynamically when the View by matching names Import option is selected, even with scripted data imports. Previously, FileMaker Pro matched the field names once and stored the results with the script. Now FileMaker Pro matches field names each time the Import Records script is run and View by matching names is the import order.



Import more graphics file formats

FileMaker Pro 5.5 now supports more graphics file formats across platforms.

Increased productivity with FileMaker Server

- If you have full access privileges and are the sole guest of a database hosted from FileMaker Server, you now have access to the Define Fields dialog box directly from the guest machine. You don't have to close the database in FileMaker Server and reopen it locally in FileMaker Pro.
- FileMaker Pro 5.5 allows you to create solutions that automatically download missing or updated plug-ins to a guest's machine from FileMaker Server 5.5.
- You can now allow Idle guests to remain connected to a hosted file. This new feature prevents idle guests from being disconnected from FileMaker Server hosted files if the file has been opened, on the client, with a password that prevents idle disconnects. For example, this prevents users from being disconnected from a file that is being hosted on the Internet by a client that is used as a web server.
- LDAP directory service enables you to quickly locate FileMaker Server on the network.

Prevent users from changing passwords

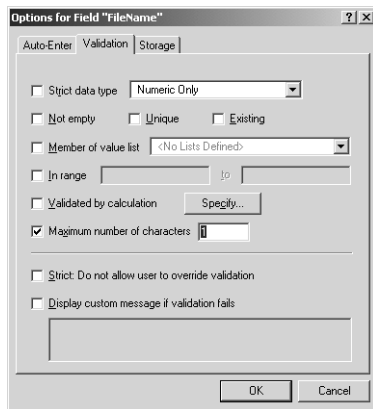
FileMaker Pro 5.5 allows you to control whether users can change a password. It's common for many people to use the same password to access a database. This new feature prevents one user from keeping all other users from gaining access to a database.

Prevent users from creating databases

FileMaker Pro 5.5 now lets network administrators set an option during installation that prevents users from creating FileMaker Pro databases. If you set the option during installation, FileMaker Pro displays an alert message when users try to create a new database. For more information, see www.filemaker.com, click the Support button, and search the TechInfo Knowledge Base for personalization file.

Validation of the number of characters in a field

FileMaker Pro 5.5 has an option to validate the number of characters a user can enter in a Text, Number, Date, or Time field. A database designer can use this feature to optimize data entry by ensuring that data is correctly entered. Users receive an alert if they attempt to enter a value outside the allowed value for the field type.



Open a FileMaker Pro database via a URL (Mac OS)

FileMaker Pro 5.5 provides you with the Get Remote URL Apple event. This Apple event opens the Hosts dialog box. When a hosted database is opened, its URL is returned, which can then be used with the getURL Apple event to reopen the database as required.

Web publishing enhancements

Faster processing

The processing capability of the FileMaker Pro Web Companion has increased for Instant Web Publishing. You should see significant improvements in response time, for example, in the display of static data and images.

In addition, the Web Companion now supports the HTTP 1.1 standard as well as HTTP 1.0.

Improvements to Table View

Improvements to Table View in Instant Web Publishing include support for buttons in headers and footers, sorting by clicking column headers, and uniform row heights despite differences in container and text field sizes.

Using access privileges for record-by-record security on the Web

Web Companion security utilizes new features in FileMaker Pro 5.5 security, including record-by-record access privileges.

Note See the Web Security.pdf document in the Web Security folder for more information on protecting databases on the Web.

Scripts and Instant Web Publishing

FileMaker Pro 5.5 improves your ability to publish database solutions on the Web by supporting more script steps and supporting multiple step scripts. In a web browser, users can execute scripts activated by a button on a layout. Over 20 script steps can now be implemented in Instant Web Publishing, including New Record/Request, Delete Record/Request, Perform Find, Sort, View as [View as Table/Form/List], Open URL, and Go to Related Record.

FileMaker Pro 5.5 supports startup scripts that run the first time a user accesses a database through Instant Web Publishing.

Suppressing the Instant Web Publishing interface controls

FileMaker Pro 5.5 now allows you to suppress the automatically generated Instant Web Publishing interface controls, enhancing your ability to serve flexible, custom solutions through Instant Web Publishing.

If you create a startup script to hide the status area, users who access your database through Instant Web Publishing can now navigate and command the database through the buttons and supported ScriptMaker script steps you put on your layouts. In many instances, this will allow you to create a single layout for use by both peer-to-peer guests and users who access your database through a web browser. Because Instant Web Publishing renders layouts as cascading style sheets (CSS), these layouts will look the same.

A new Sort page, available only from layouts served with the interface suppressed, displays the familiar FileMaker Pro Sort dialog box to web users.

Web Companion support for custom MIME types

MIME is a protocol that is used in Internet communications to transmit documents in different formats. You can customize the FileMaker Pro Web Companion support for different MIME types, allowing you to specify and display a broader range of documents and images.

By inserting a text file named `mime.types` in the same directory or folder as the FileMaker Pro application, you can extend the ability of the FileMaker Pro Web Companion to interpret MIME types not included with the FileMaker Pro application.

Backward compatibility

Features available in FileMaker Pro 5.5 may have limited functionality in files that are open in FileMaker Pro 5. If you have a question about compatibility issues, check the FileMaker Pro 5.5 Help topic associated with the feature you are using.

New features in FileMaker Pro 5

FileMaker Pro 5 brings a wide range of new features and improvements to the application. Responding to feedback from users and developers, much attention has been paid to the ways that users interact with the software. Menus, dialog boxes, and toolbars have all received attention in an effort to make the experience of using FileMaker Pro more productive and enjoyable, while FileMaker Pro software's ODBC and Microsoft Office compatibility have also been enhanced. Some of these changes will make using FileMaker Pro easier for people who are new to the application, while others will please longtime users and developers.

Access to menu commands

There are two new ways to access menu commands:

- selecting buttons on a toolbar
- displaying context menus

Toolbars provide quick access to many FileMaker Pro menu commands. Show or hide toolbars by choosing View menu > Toolbars, then the name of the toolbar to display.

The standard toolbar in Browse mode



Drag a toolbar by the handle to reposition it

You can also quickly edit an object or data by choosing editing commands directly from a *context menu*. To display a context menu in Windows, hold down the right mouse button while the pointer is over an object or data. In the Mac OS, hold down the Control key, then click the mouse button over an object or data. The type of object you click on and the mode you're in will determine which menu commands you can access.

Important Some menu commands and key equivalents have changed from their previous location. (See appendixes C and D in the *FileMaker Pro User's Guide*.)

Resizable dialog boxes, item list sort

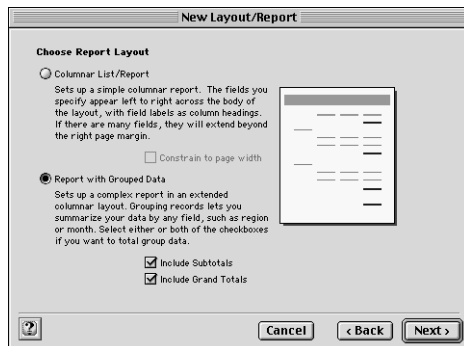
Longtime users will appreciate subtle but much-anticipated improvements, such as resizable dialog boxes for Define Fields, Script Definition, Define Relationships, and Define Value Lists. Additionally, the contents of Define Fields, Define Relationships, and Define Value Lists can be easily sorted with a single click of a column heading.

Printing script definitions

Script definitions now print in a style that is more consistent with their appearance in the Define Scripts dialog box. When a script is printed, the steps appear in bold, and data associated with a step appears in square brackets following the step name. Selected script step options are displayed in plain text under the step. The overall effect is that printed scripts are now easier to read and follow.

New Layout/Report assistant

FileMaker Pro 5 now has an assistant to help you with the creation of layouts. (You use layouts to display and print the data in your database.) The New Layout/Report assistant guides you through creating a layout according to options you choose in a series of panels. You can choose to create layouts that are appropriate for viewing your data onscreen, or for printing reports. You can also create layouts that make it easy to print mailing labels or envelopes using the data in your database. Once you have created a layout, you have complete control over modifying it to suit your needs.

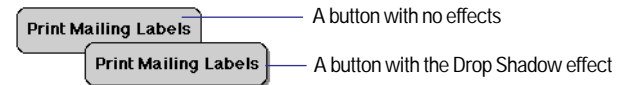


Using the New Layout/Report assistant, you can also now specify a layout *theme* to enhance the appearance of a layout or report and to give all your layouts a consistent look. Choose from a wide array of styles, each with a variation designed specifically for onscreen use or print.

Other layout improvements

Add a 3D look to layout objects

You can apply an effect that adds three-dimensional qualities to a field or object on a layout, including an embossed effect, an engraved effect, and a drop-shadow effect.



Create custom colors and use expanded color palettes

You can now add custom colors to fields, lines, rectangles, body parts, and other layout objects, as well as use standard colors from an expanded choice of color palettes, including an 88 color palette, a “web safe” 215 color palette, and a 256 color palette.

ODBC support in FileMaker Pro

FileMaker Pro 5 also brings some hefty improvements to its ODBC support.

You can use the ODBC support in FileMaker Pro to:

- access FileMaker Pro data from ODBC-compliant applications to create charts, construct ad-hoc queries, or build a front-end with other applications, like Microsoft Visual Basic
- construct SQL queries in FileMaker Pro (as in FileMaker Pro 4.1) to import data from other ODBC data sources like Microsoft Access or Oracle databases

FileMaker Pro shares data via ODBC with the Data Access Companions. The companions respond to SQL queries sent from other ODBC-compliant applications and interface between the FileMaker Pro ODBC driver and your FileMaker Pro database. Use the Local Data Access Companion to receive queries from an ODBC-compliant application on the same computer. The Remote Data Access Companion can receive requests from ODBC-compliant applications over a TCP/IP network.

Microsoft Excel import and file conversion

Converting many versions of Microsoft Excel spreadsheets is now easier than ever. FileMaker Pro can interpret column names as field names and assign an appropriate data type (text, number, date, or time) to fields, based on the data in the column. You can import and convert recent versions on both platforms through Excel 98.

ActiveX Automation support (Windows)

FileMaker Pro 5 adds support for ActiveX Automation on Windows. Using ActiveX Automation, you can automate a task that spans applications — similar to the way Apple Events allows one application to command another on the Mac OS. Typically, this is accomplished by building a custom application in Visual Basic, and using this application to command other applications.

With ActiveX Automation and Visual Basic you can create your own application (with its own interface) and drive multiple applications to accomplish a task. For example you could define a window in Visual Basic that has one button that says, “get today’s sales data”. The procedure for “get today’s sales data” would open a FileMaker file and find all the sales for today; it would then export the data to a file. It would then start up Microsoft Excel and graph the exported data and have Microsoft Excel display the graph.

QuickTime

FileMaker Pro 5 supports Apple QuickTime 3.0 and QuickTime VR 3.0. You can insert any file type supported by QuickTime into a container field. If your database contains QuickTime movies in container fields and you publish the database on the Web using FileMaker Pro Instant Web Publishing, you can also play the QuickTime movies in a web browser.

Web publishing

Changes have been made to the Instant Web Publishing feature in FileMaker Pro to enhance the appearance of published databases and improve their security.

Web styles

FileMaker Pro Instant Web Publishing now includes web styles that determine the appearance of your database in a web browser. For example, you can choose the Lavender style to display titles and buttons in a purple color scheme. You can also choose styles that are specifically designed for searching or creating records. For example, you can create a guest book using the Entry Only style. You can choose a different style for each published database.

Most FileMaker Pro web styles *render* layouts. That is, they display your layouts in a web browser almost as they appear in a FileMaker Pro window. Web styles can render layouts in Form View, New Record, and Edit Record pages. Most FileMaker Pro web styles use cascading style sheets to render layouts.

Note The browser viewing the FileMaker Pro application via the FileMaker Pro Web Companion must support cascading style sheets for this feature to function properly.

New Web Companion options

A new security option is available to limit access to your databases. You can now specify the IP addresses that can request data from the FileMaker Pro Web Companion. For example, you can specify that only IP addresses that start with 1.2.3.* can access your databases. Additionally, the log file format has been changed to comply with the NCSA/CERN compatible Common Log format. Also, there are new options for tracking Web Companion activity in log files.

View as Table

FileMaker Pro has always offered two ways to view your layouts: View as Form, which displays one record on the screen at a time, and View as List, which displays more than one record at a time. FileMaker Pro 5 now adds a third method of viewing your data onscreen: View as Table. With View as Table, data is displayed in a grid-like arrangement, similar in appearance to a spreadsheet, with each row displaying a record and each column displaying a field.

First Name	Last Name	Home Address 1	Home Address 2	City
Juanita	Alvarez	147 Houston Avenue		New York
Michelle	Cannon	123 4th St SW		Edmonton
Andrie	Common	147 White Avenue		Los Angeles
Jacques	Dupont	Rue des Alpes 14		Lausanne
Marie	Durand	11 rue de la Poste		Paris
Jean	Durand	1001 place du Monde		Montreal
Costanza	Ferrini	via del Marsi 34		Roma
Juan	Garcia	Calle Real Manzana 123	Colonia Aquimero	Mexico Df
Jens	Jensen	Bredgade 127		Copenhagen
William	Johnson	852 Marsh Road		London
Bengt	Larsen	Vogts gate 33		Oslo
John	Lee	123 St Johns Circle		London
Gerard	LeFranc	Chez Pierre	456 Rue Eiffel	Paris
Ahmet	Mehmet	Bahar Caddesi 50-15	Etiler	Istanbul
Patrick	Murphy	89 Lavenorth Place	Castletknock	Dublin
Le	Nguyen	123 place de la concorde		Paris
J	Noronha	Rua Ramalho Correia,		Rio De Janeiro
Kentaro	Ogawa	2-23-5 Imachi	Setagaya	Tokyo
A. N.	Other	The Cottage	Mayflower Lane	Bristol
Vassilis	Papanicolaou	Therianou 43		Athens
Jutta	Schmidt	Grosse Elbstrasse 123		Hamburg
Mary	Smith	123 Elm St.		New York
John	Smith	41 Mary St		Sydney
Sven	Svensson	Kammerdammgatan 4		Stockholm
Sophie	Tang	126 Deepwater Bay		Kowloon
Julia	Vargas	Avenida Sevilla 87		Madrid
Annelies	Verhaag	Blauwburgstraat 33		Amsterdam
Matti	Virtanen	Matinke 2		Helsinki
Steve	Williams	789 Ninth Avenue		New York
Betty	Wilson	456 Fifth Avenue		New York

Columns can easily be resized by dragging an edge of a column's heading, sorted by clicking on a column's heading (if enabled), and reordered by dragging a column to a new position.

Improvements to value lists

Value lists have been improved in FileMaker Pro 5, too.

There are three major improvements to value lists:

- You can now base a list of values on a relationship. This can yield a subset of a field's values, rather than the field's entire contents. The value list will display only values from records that are consistent with the criteria defined in the list's underlying relationship.
- When you are deriving values from one field, but displaying another field's contents, you can now choose whether to sort on the first field (the one whose values are being stored) or the second one (the field whose values are just being displayed).
- It is now possible to specify a value list that is defined in another FileMaker Pro 5 database. This allows you to reduce the repetition of custom or field-based value lists by reusing one central list in multiple files, and to use value lists in portals (where it's necessary to use a value list that must exist in the related file).

Note The external value list (using related values) must be in the same file as the related field in the portal.

The example below shows a value list based on a relationship. The same field is displaying a different list of values because the value in the match field, Category, has changed.

Category: Accessory

Product Name:

- Caribbean travel book
- European Adventures travel book
- Exploring Asia travel book
- How To Pack For Your Cruise booklet
- Travel Calendar

Value list based on key field value "Accessory"

Category: Clothing

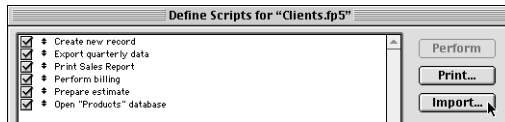
Product Name:

- ET Golf shirt
- ET Jacket
- ET Sandals
- ET Sweatshirt
- ET T-shirt

Value list based on key field value "Clothing"

Import script

You can now import scripts from other FileMaker Pro 5 databases into the current database. When you import a script, FileMaker Pro uses a strict protocol to map fields, layouts, scripts, value lists, files, relationships, and script references. Objects that do not map are still imported but are marked as unknown, allowing you to map script steps from the source file to the appropriate references in the destination file.



Import Update

You can now update records or individual fields in one file with information from matching records or fields in another file. You choose the criteria that determine which records “match” and which records and fields will be updated. It’s a great feature for updating the desktop copy of your file in your office with changes you make on the road on your laptop.

This feature is accessible for any file that can be imported.

Multi-User (Hidden)

You now have the ability to easily “hide” databases being shared on a network by choosing the Multi-User (Hidden) option. This feature is especially useful for preventing network users from accidentally opening the “wrong” file, for example opening a related Line Items file when it’s your intention that they open a Data Entry file.

Hands-on, task-oriented tutorial

To get new users up to speed more quickly, FileMaker Pro features an extensive hands-on tutorial. Tutorial lessons guide you through common database tasks, including finding records, creating databases, calculations, scripts, and reports, and defining relationships.