



**FileMaker
Server Advanced
Quick Start**

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Chapter 1 Introduction

This paper provides instructions for how to install and configure FileMaker Server Advanced for access through Lasso Professional 8.5. This documentation has four chapters.

- This *Introduction* includes background information about FileMaker Server Advanced and Lasso Professional 8.5.
- *Preparing FileMaker Databases* includes instructions for how to configure the security of each FileMaker database for sharing through FileMaker Server Advanced.
- *Installing and Configuring FileMaker Server Advanced* includes detailed instructions for installing FileMaker Server Advanced and performing the initial configuration steps required to access it through Lasso Professional 8.5.
- *Troubleshooting* includes some common problems that you might encounter and how to solve them.

Background

The FileMaker 8 product line includes technologies for Web publishing and inter-application communication. FileMaker Server Advanced provides XML, XSLT, ODBC, and JDBC interfaces which allow Lasso and other applications to interact with FileMaker databases. FileMaker Server Advanced is required in order for Lasso to access FileMaker 7 or 8 databases.

FileMaker Server Advanced ships in a bundle with FileMaker Server or can be purchased separately as an add-on to FileMaker Server. Lasso cannot communicate with FileMaker Server directly without the FileMaker Server Advanced additions.

FileMaker Pro 7 and 8 includes an Instant Web Publishing interface, but does not support any of the other interfaces which FileMaker Server Advanced provides. Lasso is not able to communicate with FileMaker Pro 7 or 8 directly. However, FileMaker Pro or FileMaker Pro Advanced is required in order to prepare databases for publishing using FileMaker Server Advanced.

Note: Lasso can communicate with FileMaker Pro 5 or 6 Advanced and with FileMaker Pro 4. See the Lasso 8.5 Setup Guide for additional details about connecting to these data sources using the Lasso Connector for FileMaker Pro.

Lasso connects to FileMaker Server Advanced through the Lasso Connector for FileMaker SA which is provided as a component of Lasso Professional 7.1 through 8.5. This connector provides much the same appearance from within LassoScript as the traditional Lasso Connector for FileMaker Pro. The following differences do apply:

- -ReturnField is not supported. Instead customized layouts should be used to limit the number of fields which will be returned to Lasso.

- A new `-LayoutResponse` tag allows an alternate layout from that used to specify a database action to be selected for databases accessed through FileMaker Server Advanced. This allows the set of returned fields to be different from those required to specify the database action.
- Related fields and portal fields must be referred to in a new format in updates and adds for databases accessed through FileMaker Server Advanced.

`DatabaseName::FieldName.RecordID`

- Repeating fields must be referred to in a new format in updates and adds for databases accessed through FileMaker Server Advanced.

`FieldName(#)`

- A new `[Database_FMContainer]` tag takes the name of a FileMaker container field and returns the contents of the field as a byte stream. This tag works with any version of FileMaker. Data of any type can be returned from FileMaker SA databases. Only images (JPEG by default) can be returned from FileMaker Pro databases.

See the *Upgrading Your Solutions* chapter in the Lasso 8.5 Language Guide for a full list of differences between the two connectors.

Overview

Setting up an installation of FileMaker Server Advanced for access through Lasso consists of the following steps. These are covered in detail in the following chapters.

- Prepare one or more FileMaker 7 or 8 databases for sharing using FileMaker Pro or FileMaker Pro Advanced.
- Install FileMaker Server and the FileMaker Web Publishing Engine from FileMaker Server Advanced.
- Configure FileMaker Server and the Web Publishing Engine.
- Install and initialize Lasso Professional 8.5.
- Create a host in Lasso Professional 8.5, enable the FileMaker databases which should be published to the Web, and adjust Lasso security.
- Write custom LassoScript code to access the database or use the built-in Database Browser to access the data without performing any coding.

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Chapter 2

Preparing FileMaker Databases

This chapter includes instructions for how to prepare a FileMaker 7 or 8 database for sharing through FileMaker Server Advanced to Lasso Professional 8.5. The steps in this chapter must be followed for each database that is to be shared to Lasso Professional 8.5.

Overview

FileMaker has a new security system which requires some configuration in order to share files through the XML interface provided with FileMaker Server Advanced.

- A new account must be created in each FileMaker database that is to be shared with a username and password which will be entered into Lasso Administration.
- A new extended privilege must be created in each FileMaker 8 database which provides access using the `fmxml` keyword.
- Each FileMaker database that is to be shared must be placed in the data folder for FileMaker Server.

The *Configuration* section below includes detailed instructions for how each FileMaker 8 database can be configured. The steps in this section require FileMaker Pro 7 or 8 or FileMaker Pro Advanced on Mac OS X or Windows.

Configuration

Important: If you are publishing multiple related databases then all of the related databases must have this same configuration performed. This is true even if a database is only accessed through a portal.

- 1 Open the FileMaker Pro application and open the FileMaker Pro database that you want to configure. For example, a database might be named `Example.FP7`.
- 2 Open the FileMaker Pro Accounts & Privileges dialog box from the menu bar at `File > Define > Accounts & Privileges...`
- 3 Select the Accounts tab. Add a new account which you will use to access this database through Lasso. Often, every database which is configured for access through Lasso will share the same account name and password. For example, the new account might have the following properties:

Account is authenticated via – FileMaker

Account Name – Lasso

Password – <select a password>

Account Status – Active

Privilege Set – [Full Access]

Description – Lasso Professional 8.5 Access

Figure 1: Edit Account



- 3 Select the Extended Privileges tab. Add a new extended privilege by selecting the New... button. The new extended privilege must have the following properties:

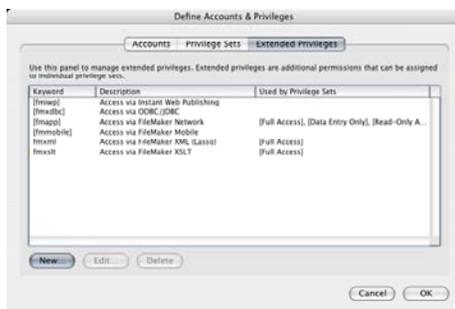
Keyword – fmxml

Description – Access via FileMaker XML (Lasso)

Privileges – [Full Access]

Note: It is also possible to add a fmxmlt extended privilege if your database will be accessed through the built-in XSLT interface, but this is not required for Lasso access.

Figure 2: Extended Privileges



- 4 The database must be closed and moved into the appropriate folder in order to be shared through FileMaker Server. The location of databases shared by FileMaker Server are by default:

Mac OS X – /Library/FileMaker Server 8/Data/Databases/

Windows – C:\Program Files\FileMaker\FileMaker Server 8\Data\Databases\

The same database cannot be accessed through FileMaker Pro and FileMaker Server simultaneously. Once you have placed the database in the folder shown above, FileMaker Server will open it automatically. You can then access it through FileMaker Pro by selecting the Remote... option in the Open File dialog box.

Note: It is also possible to create a new privilege set in order to assign the Lasso account less than full access to the database. If you do this be sure that the Lasso account is assigned to this privilege set and that the privilege set has access to the fmxml extended privilege.

Testing

Important: If you have not installed and configured FileMaker Server then you should do that now. Full instructions are included in the following chapter or in the documentation provided by FileMaker, Inc.

If you have already installed and configured FileMaker Server (i.e. you are adding the database to an existing installation) and configured the FileMaker host in Lasso Site Administration, then your new database should be available through Lasso Professional 8.5 immediately.

- 1 In Lasso Administration select the **Setup > Data Sources > Databases** section, select the Lasso Connector for FileMaker SA, the appropriate host, and select the Refresh... button. The new database should show up in the list.
- 2 Select the new database and change its status to Enabled in the left pane. Select the Update button.
- 3 Configure Lasso Security in the **Setup > Security** section to allow the appropriate access to the new database.

See the Lasso Professional 8.5 Setup Guide for additional information about how to configure, enable, and set up security for FileMaker Server Advanced data sources in Lasso Administration.

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Chapter 3

Installing and Configuring FileMaker Server Advanced

This chapter includes instructions for how to install and configure FileMaker Server 7 or 8 Advanced. The instructions in this chapter apply to both Mac OS X and Windows platforms. Platform differences are noted when required.

Overview

Lasso Professional 8.5 can only access FileMaker 7 or 8 databases through FileMaker Server Advanced. FileMaker Server Advanced consists of three components which must be installed and configured separately.

- **FileMaker Server** can be installed on Mac OS X or Windows Server. It installs as a background process or daemon on Mac OS X and as a service on Windows.
- **FileMaker Web Publishing Engine** is a component of FileMaker Server Advanced that provides the XML interface for Lasso to access. The Publishing Engine also provides an XSLT interface and Instant Web Publishing capabilities.
- **FileMaker Web Publishing Tools** is a component of FileMaker Server Advanced that provides documentation and translation tools for converting CDML sites to use XSLT. Lasso access does not require installation of these tools.

Note: It is possible to purchase FileMaker Server 7 or 8 and then buy the Server Advanced components as an add-on at a later time. However, Lasso requires that both FileMaker Server and the Publishing Engine that comes with Server Advanced be installed before it can access FileMaker 7 or 8 data sources.

The process for installing and configuring FileMaker Server Advanced for access through Lasso Professional 8.5 is as follows. These steps are covered in more detail in the *Installation*, *Initial Configuration*, and *Lasso Configuration* sections below.

- Install FileMaker Server.
- Install FileMaker Web Publishing Engine.
- Register the Publishing Engine by configuring FileMaker Server with an identifier and passcode.
- Configure the Publishing Engine in the Web browser. Enter a FileMaker Server administrator username and password, a Publishing Engine administrator username and password, and the identifier and passcode.
- Prepare one or more FileMaker databases for access through FileMaker Server Advanced using the instructions provided in the prior chapter.
- Configure a new data source host in Lasso Administration, enable the FileMaker databases, and configure Lasso security.

After these steps have been performed once, additional FileMaker databases can be prepared for access through FileMaker Server Advanced using the instruction provided in the prior chapter. It is only necessary to perform the steps in this chapter once for each FileMaker Server.

Installation

It is recommended that FileMaker Server and the FileMaker Web Publishing Engine be installed on the same machine. FileMaker, Inc. provides documentation for installing the various components on different machines if required, but this configuration is not covered by the instructions in this paper.

- 1 Install FileMaker Server. Use the installer which FileMaker, Inc. provides. It is recommended that FileMaker Server be installed in the default location on either Mac OS X or Windows Server. FileMaker Server should be set to auto-start with the system.
- 2 Install the FileMaker Web Publishing Engine. Use the installer which FileMaker, Inc. provides. FileMaker Web Publishing Engine should be set to auto-start with the system.
- 3 Optionally install the FileMaker Web Publishing Tools. These are not required for Lasso access and can be installed later if you find that you need them.
- 4 Restart your server. It is possible to use system tools to restart FileMaker Server, the Publishing Engine, and the local Web server, but it is easier to simply restart the server as this ensures that all the processes and services are started in the right order.

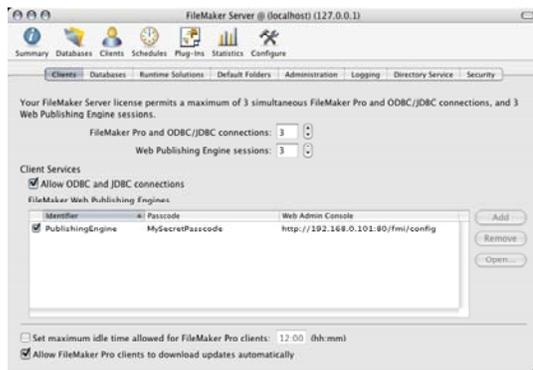
Initial Configuration

The following steps must be performed in the order presented here after FileMaker Server and the FileMaker Web Publishing Engine have been installed. These steps only need to be performed once for each FileMaker Server Advanced machine. These steps are different depending on whether you are configuring FileMaker Server on Mac OS X or Windows Server.

Mac OS X

- 1 Open the FileMaker Server Administration application. If an alias was not placed on your desktop or in your dock, the application is usually located in `/Applications/FileMaker Server 8/`.
- 2 In the Connect to FileMaker Server... dialog box choose the (localhost) server if you are connecting to FileMaker Server located on the same machine. Alternately, select Add to Favorites and edit the Hostname and Address to specify the IP address of the FileMaker Server you want to access. Select the Connect... button.
- 3 Select the Configure section of the FileMaker Server administration interface. Select the Add... button. A new row will appear. Double-click in the Identifier column and enter an identifier then double-click in the Passcode column and enter a passcode. The identifier and passcode you select can be any unique values, just be sure to note them so you can enter them in the Publishing Engine configuration below.

Figure 1: FileMaker Server Administration

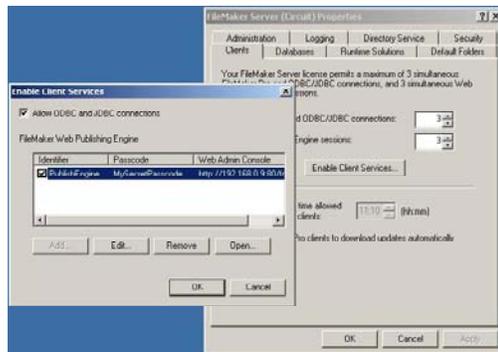


The remaining steps are covered in the *All Platforms* section below.

Windows

- 1 Open the FileMaker Server Administration application. If a shortcut was not placed on your desktop or in your start bar, the application can be accessed from the start menu or found in C:\Program Files\FileMaker\FileMaker Server 8\.
- 2 Select the FileMaker Server icon. In the Connect to FileMaker Server... dialog box choose the (localhost) server if you are connecting to FileMaker Server located on the same machine. Alternately, select Add to Favorites and specify the Hostname and Address of the FileMaker Server you want to access. Select the Connect button.
- 3 Select the Properties... option from the context-menu (right click) of the FileMaker Server listed in the outline on the left side of the FileMaker Server administration interface.
- 4 Select the Clients tab of the FileMaker Server Properties dialog box. Select Enable Client Services... and elect the Add... button. Enter an identifier and a passcode. The identifier and passcode you select can be any unique values, just be sure to note them so you can enter them in the Publishing Engine configuration below.

Figure 2: FileMaker Server Properties Dialog Box



The remaining steps are covered in the *All Platforms* section below.

All Platforms

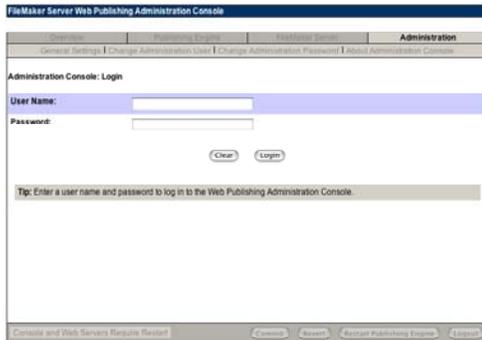
These steps should be performed after the platform specific configuration steps above.

- 1 Type the following URL in a Web browser in order to access the administration console for FileMaker Server Advanced. It is recommended that you first access the administration console from the Web browser on the same machine which it is installed.

`http://localhost/fmi/config`

- 2 Select an administration console username and password. This username and password will be required in order to access the administration console in the future. Select Apply to continue.

Figure 3: FileMaker Administration Console



- 3 The following page asks for the IP address or hostname of where the Publishing Engine is installed. By default, enter localhost into this field and select Apply to continue.
- 4 Select an administration username and password for the Publishing Engine. This can be the same username and password as entered above. Select Apply to continue.
- 5 The Overview page will be shown. This page confirms that all the appropriate components are installed.
- 6 Select the FileMaker Server link at the top of the overview page. The following page prompts for the IP address or host name of the Publishing Engine and the identifier and passcode that was registered within the FileMaker Server Administration interface. By default enter localhost for the address. Enter the same identifier and passcode that you entered in FileMaker Server Administration and select Apply to continue.
- 7 Select the Commit button at the bottom of the page to commit all of the changes that have been made so far.

The Published Databases tab in the FileMaker Server section shows what databases are currently available. Any databases which are available through XML Publishing will be available to Lasso Professional 8.5. The next section describes how to prepare databases for publishing.

Prepare Databases

Each databases which is to be shared through FileMaker Server Advanced must have an account for Lasso and an `fmxml` extended privilege created. Full instructions for doing this are provided in the prior chapter *Preparing FileMaker Databases*. The extended privilege must be configured even in databases which are only going to be accessed through a portal in another database.

After FileMaker databases are prepared to be shared through FileMaker Server and are placed in the appropriate folder they can be accessed through Lasso Professional 8.5. See the following section for instructions to create a data source host in Lasso Administration and to confirm that the appropriate databases are available.

It is recommended that you prepare at least one database for publishing in order to complete the configuration of Lasso Administration successfully.

Lasso Configuration

Once FileMaker Server and the FileMaker Web Publishing Engine are installed and configured and one or more databases are prepared for publishing, the final step is to create a data source in Lasso Administration.

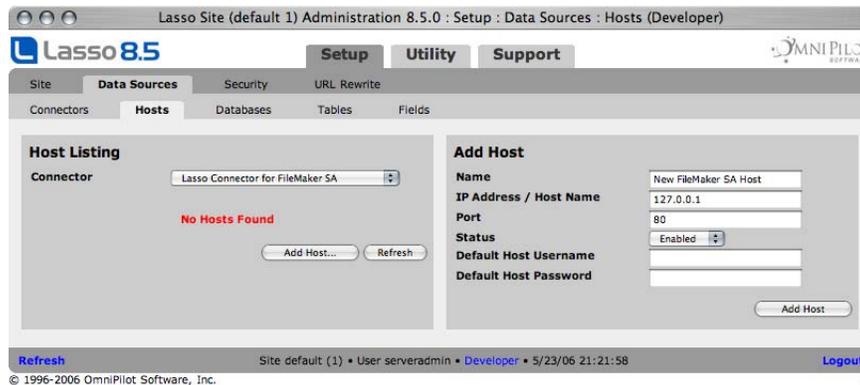
- 1 If you have not done so already, install Lasso Professional 8.5 and initialize it. Lasso Professional 7.1 is required in order to access FileMaker 7 or 8 databases. No earlier versions of Lasso can access databases through FileMaker Server Advanced.
- 2 Access Lasso Administration through the following URL. If Lasso Service is running on a different machine from the Web browser enter the appropriate IP address or host name in place of localhost. You will be prompted for your Lasso Administration username and password.

`http://localhost/Lasso/`

- 3 Select the *Setup > Data Sources > Connectors* section of Lasso Administration. Select the Lasso Connector for FileMaker SA and select the Add Host... button.
- 4 Enter the IP address or host name of the machine with FileMaker Server Advanced. The default port for accessing FileMaker Server Advanced is port 80. If you used the same account username and password in each FileMaker database that was prepared for publishing, it can be entered in the Default Username and Default Password fields. Select Add Host to continue.

Important: The username and password should be for the account which was set up within your FileMaker databases with `fmxml` privileges. Do not enter the identifier and passcode which were used to configure the Web Publishing Engine.

Figure 4: Lasso Administration



- 5 Select the List Databases... button. Each available databases is listed on the resulting page. Either select Enable All to enable all the FileMaker 8 databases or select individual databases and enable them by adjusting their status.

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Chapter 4 Troubleshooting

Consult the documentation that FileMaker, Inc. provides for additional troubleshooting information.

To tell if FileMaker Server Advanced is running:

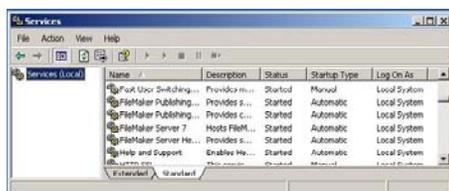
- **Mac OS X** – Open the Activity Monitor (or Process Monitor) from the Applications/Utilities folder. Open the main window and show All Processes using a filter of fm. There should be entries for FM Web Publishing, fmserver_helperd, and fmserverd.

Figure 1: Activity Monitor



- **Windows** – Open the Services control panel. There should be multiple entries for FileMaker Publishing Engine, FileMaker Server 8, and FileMaker Server Helper. Each of these services should have a status of Started.

Figure 2: Services



To make FileMaker Server Advanced start automatically at system startup:

- **Mac OS X** – Open the FileMaker Server Administration application and choose the Local FileMaker Server Administration... option from the File menu. Select the lock to enter your system administrator username and password then select the Start all FileMaker Server processes radio button.

Figure 3: Local FileMaker Server Administration

- **Windows** – Open the Services control panel. There should be multiple entries for FileMaker Publishing Engine, FileMaker Server 8, and FileMaker Server Helper. Each of these services should be set to have a startup type of Automatic. Open the Properties dialog box for each service to change the startup type.