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Installing and Configuring FileMaker Server Advanced 8.0v4 (FMSA), iTools 8.2.2, FX.php, and on Mac OSX 10.4 (Single Server Configuration)


August 21, 2006: Currently Tenon is shipping its freshly released iTools 8.2.2, which features Apache 2.2.   RCC has worked to enable Apache 2.2 to work with FMSA 8.0v4, with success on a single server configuration.   Only Apache 1.3 is "certified" by FileMaker Inc to work with FMSA 7 or 8, so the use of the following instructions is not covered by any sort of warranty in any way. Using these instructions may cause global warming, or melt your server. :-)

> *For the hard core geeky types: We had posted a previous version of this document, which detailed issues with iTools 8.2.0, but those bugs (which were apparently caused by Apple Computer, Inc) have been fixed by Tenon in iTools, 8.2.2. :-)*

Installation Instructions

These instructions detail the installation, configuration, and deployment of FileMaker Server Advanced on a single server with a static IP running Mac OSX. The server will host FileMaker databases on FileMaker Server and run the FileMaker Web Publishing Engine and iTools Apache Server to drive one or more websites.

One-computer configuration
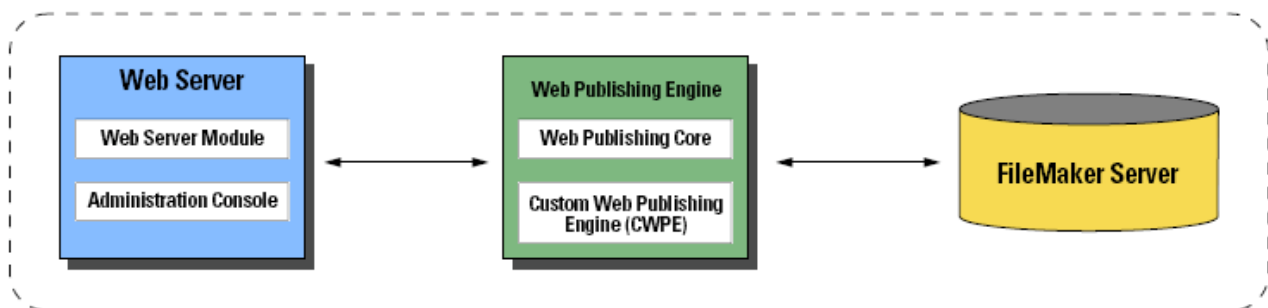
Ports 5003 and 16008 through 16018 must be available on this computer. Port 5003 must also be open if there is an internal software firewall on the computer.

1. **Install FileMaker Server 8.0v4**

At this point, it would be wise to select a username and password for use in this installation of FileMaker Server Advanced and iTools. There will be several username and password combinations involved, and it is less confusing if there is only one username and password for all of them.

Find the disk labeled "FileMaker Server 8" and insert it into the CD drive. When the CD is mounted in the Finder, click on the volume. Click on the icon named "FileMaker Server 8" and it will launch the install program. When prompted, supply a username and password for an administration account on the computer. Agree to the license and click install. FileMaker Server may take a moment to install. When prompted, select the option to automatically start the processes on boot. You will need to reboot after the installation is complete.

Make sure that you have the latest update for FileMaker Server. If your install disks are 8v1 or 8v3, make sure to update to the latest version. If you have 8v1, you will need the 8v1 to 8v2, 8v2 to 8v3, and 8v3 to 8v4 updates. If you are using 8v3 you will need only the last of the three updates. You can download the updates from http://www.filemaker.com/downloads. You will need to stop the FileMaker Server before applying the updates. Open the FileMaker Server Admin. From the Server menu, select "Stop FileMaker Servers." Close the FileMaker Server Admin. There is still a stray FileMaker process that needs to be stopped. Open the Activity Monitor, set it to "All Processes" and select the fmserver_helperd item. Click the "Force Quit Process" button to stop this process. When prompted, supply the username and password for an administrator account on this computer. With all the FileMaker Server processes stopped, the updates can now be installed. Click on the .dmg file to mount it in finder. Open the volume, and run the FileMaker Server Updater. Supply the username and password for an administrative account when prompted. Click "accept" to agree to the license, and click the "install" button to start the update. When it is finished, restart the computer.

Open the FileMaker Server Admin. Select the Configure icon, and click on the Clients tab. In the lower half of the window, you will see an empty list titled "FileMaker Web Publishing Engines." Here we will create the account in FileMaker Server that the FileMaker Web Publishing Engine will use to connect to FileMaker databases. Click the Add button and click on the identifier field. Type the username decided upon earlier, press tab, and type your password. Individual databases will need to be configured later, but for now, FileMaker Server is installed and appropriately configured.

2. **Install iTools 8.2.2**

Download the iTools Core Software from http://www.tenon.com/products/itools-osx/done.php. Mount the disk image as a volume in the finder, and open it. You will see a file labeled iTools8. Double click that file to launch the iTools installer. Click continue as appropriate, agree to the license, and choose the appropriate drive for installation. When the installer is finished, you will be prompted to restart the computer. When the machine finishes booting, open Safari and go to https://localhost:85. Enter the default username and password, "admin" and "admin." To set up your license key so iTools does not quit working, click the License Information icon. Enter the license key number you obtained from Tenon. Click save, and then click Main Menu in the upper left corner. You should now be at the main menu. Next, click the User Settings icon. Select the admin user, and change the username and password to the one previously used in the FileMaker Server Admin. When you are finished, click the Save button. If your username is something other than "admin," the admin account will still be active. Just select the "admin" account and change its password to match the account you just created, click save, and close Safari.

3. Install iTools Tomcat

Download Tomcat from http://www.tenon.com/products/itools-osx/done.php. Click the Tomcat icon in the window that will pop open when the download is finished. When you are prompted for a login, provide the username and password for an account with administrative privileges. Click "continue" as necessary. Restart the computer. When the computer reboots, open Safari and go to the iTools configuration page (https://localhost:85). Type in the username and password you set in the previous step. Click the System Status icon. In the page that will load, disable everything except the Web Server. When you are finished, the buttons in the "Launch on reboot" column should all say "Disabled on startup," except for the Web Server, whose button should say, "Enabled on startup." Close Safari, and restart the computer.

4. Install iTools PHP

Download PHP from http://www.tenon.com/products/itools-osx/done.php. Click the PHP icon in the window that will pop open when the download is finished. When you are prompted for a login, provide the username and password for an account with administrative privileges. Click "continue" as necessary.

5. Install the FileMaker Web Publishing Engine

Insert the disk labeled "FileMaker Server 8 Web Publishing" into the server. Open the CD in the Finder and click the FMS 8 Web Publishing Engine icon. When prompted, supply the username and password for an administrative account. Accept the license and click install. When installation is finished, restart the computer. If you installation disc is 8v1 or 8v3, you will need to download and install the necessary updates. After the machine boots, download the 8v3 and 8v4 updates for Server Advanced, Web Publishing from http://www.filemaker.com/downloads. Open Terminal and type *sudo SystemStarter stop "FileMaker Web Publishing"*. Click the .dmg files downloaded from filemaker.com and run the updates. Supply a username and password for an administration account, and restart the computer when the update is finished.

6. Configure iTools to work with FileMaker Web Publishing

Open the Finder and go to "/Library/Tenon/WebServer/Configuration/". Copy mod_jk.conf to the desktop and open it in TextEdit. Select all the text and replace it with the following text:

```
<IfModule mod_jk.c>

JkWorkersFile "/Library/FileMaker Server/Web Publishing/web-configuration/WEB-
INF/conf/workers.properties"
JkLogFile "/Library/FileMaker Server/Web Publishing/logs/web_server_module_log.txt"
JkLogLevel error
JkLogStampFormat "[%a %b %d %H:%M:%S %Y]"
JkOptions +ForwardKeySize +ForwardURICompat -ForwardDirectories
JkRequestLogFormat "%w %V %T"

JkMount /fmi/config config
JkMount /fmi/config/* config
JkMount /fmi/conf/*.cwpe cwpe
JkMount /fmi/conf/*.wpc wpc
JkMount /fmi/iwp wpc
JkMount /fmi/iwp/* wpc
JkMount /fmi/xml/* wpc
JkMount /fmi/xsl/cnt/* cwpe
JkMount /fmi/xsl/relay/* cwpe
JkMount /fmi/xsl/*.xsl cwpe
</IfModule>
```

Save the file and copy it back to the /Library/Tenon/WebServer/Configuration/ directory. Restart the computer.

6. **Configure FileMaker Web Publishing Engine**

Open Safari and go to http://localhost/fmi/config. You will be prompted to set the username and password for the FileMaker Server Advanced Web Publishing Administration Console. Please use the same password you used to configure the FileMaker Server and iTools and click "apply". On the page that loads next, click the top option, the default, to specify that the Publishing Engine runs on the Web Server, the same computer as iTools Apache and click "continue". You will be asked to provide a username and password for the Web Publishing Engine (WPE). Again, use the same username and password used previously and click "apply". Finally, select the "installed on the same machine" option as well set the identifier and passcode set when the FileMaker Server was configured, which should be the same username and password used elsewhere in this installation. When you have entered this information, click "commit" and then restart the publishing engine when prompted. Ignore any error messages that appear on the screen and restart the computer.

7. **Configure Individual FileMaker Databases to Allow FX.php Access**

To allow FX.php to access a particular database, you must grant the appropriate privilege in the in the database. Once the database is loaded on the server, open it from another computer using a username and password that has administrative privileges. From the "File" menu select "Define" => "Accounts & Privileges." Click the "new" button. In the dialog box that pops up, type the name fmsadmin, and use the password used elsewhere. Select the "[Full Access]" option from the Privilege Set menu. Click the "Edit" button to the right of the Privilege Set menu. In the "Extended Privileges" box, check the option "Access via XML Web Publishing – FMSA only (fmxml)." Exit each of the three dialog boxes by clicking the OK button. You can close the database, and the database should be accessible from FX.php.

About Richard Carlton Consulting

Richard Carlton Consulting, Inc. is a solutions development company that utilizes FileMaker Pro to deploy mission critical business solutions. We service both small and large businesses as well as government agencies. We employ approximately sixteen FileMaker and Web engineers, with varying skill sets, allowing us to develop complete solutions and support customer needs.

Richard Carlton has been in the business of writing custom software and contracting with businesses for computer consultation purposes since 1985. In 1990, Richard Carlton Consulting was created, and later was "recommissioned" as Richard Carlton Consulting, Inc.

Richard Carlton Consulting (RCC) provides customized database development services for business and government organizations. Our core competency is FileMaker Pro, where we hold FileMaker's highest certification. We are "Certified" as well as a "FileMaker Partner." We support FileMaker 3,4,5,6,7,8,9 and of course, FileMaker 10. We also utilize FileMaker Web Publishing and PHP to deploy FileMaker databases to the web. RCC has extensive experience in deploying web solutions with database connectivity. Our experience ranges from simple projects to complex e-commerce based systems.