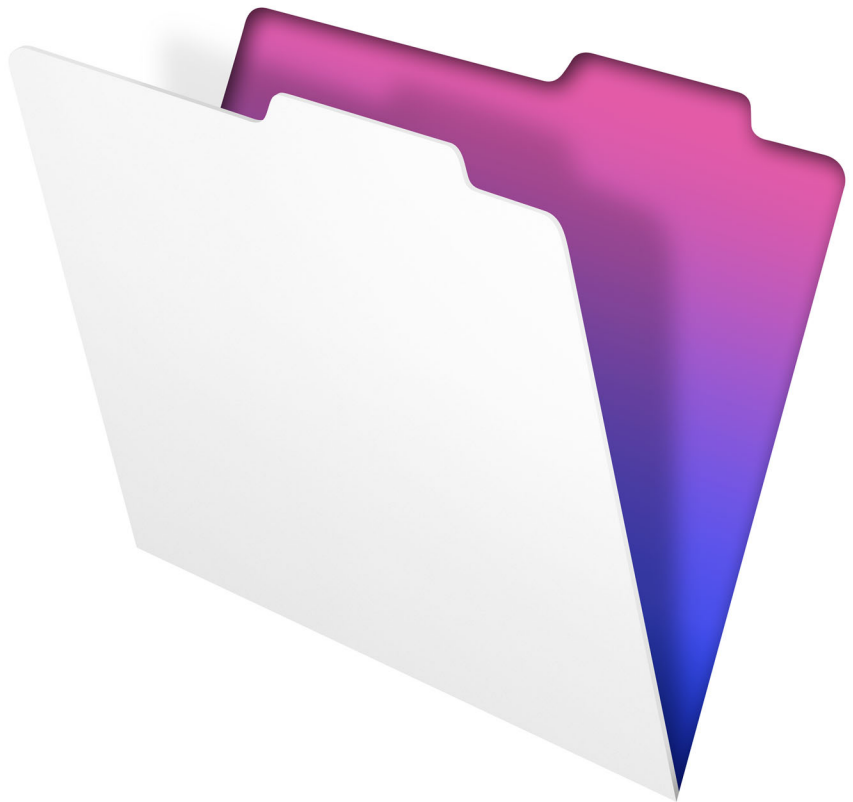


FileMaker® Pro 12

Using a Remote Desktop Connection
with FileMaker Pro 12



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Contents

Chapter 1

<i>Introduction to Remote Desktop Services and Citrix XenApp</i>	4
About Remote Desktop Services	4
Remote Desktop Services server	4
Remote Desktop Services client (Remote Desktop Connection)	4
Remote Desktop Protocol (RDP)	4
Benefits of using Remote Desktop Services	4
System requirements for Remote Desktop Services	5
Installing Remote Desktop Services client software (Remote Desktop Connection)	5
About Citrix XenApp	5
Application server	5
Citrix ICA client	6
Citrix ICA protocol	6
Benefits of using Citrix XenApp	6
System requirements for Citrix XenApp	6
Citrix ICA client minimum requirements	7
Before installing Citrix XenApp	7
Installing Citrix ICA client software	7

Chapter 2

<i>Using FileMaker Pro with Remote Desktop Services or Citrix XenApp</i>	8
Installing FileMaker Pro on a Remote Desktop Services server or Citrix XenApp	9
Installing on Windows Server 2003	9
Installing on Windows Server 2008	10
Deployment recommendations	10
Deployment recommendations for Remote Desktop Services	10
Deployment recommendations for Citrix XenApp	10
Environments for deploying FileMaker Pro files	11
Connecting to FileMaker Server	11
Mac OS Citrix ICA clients	11
Non-shared files	11
FileMaker Pro feature issues	12
Features not supported for Remote Desktop Services clients	12
Features not supported for Citrix XenApp clients	12
FileMaker Knowledge Base articles	12

Appendix A

<i>Standard requirements</i>	13
FileMaker, Inc. standard requirements	13
Volume License Agreement (VLA)	13
Site License Agreement (SLA)	13

Chapter 1

Introduction to Remote Desktop Services and Citrix XenApp

This chapter describes Remote Desktop Services (formerly Terminal Services) and Citrix XenApp.

About Remote Desktop Services

Remote Desktop Services is a component of Microsoft Windows Server 2003 and Windows Server 2008 that lets you remotely access applications installed on a Windows Server 2003 or 2008 machine from a wide range of machines over most types of network connections.

Remote Desktop Services has three components: the server, the client, and the protocol by which the server communicates with the client.

Remote Desktop Services server

When you are running Remote Desktop Services in application server mode, all applications are run on the server. The Remote Desktop Services server sends only screen information to the client and receives input only from the mouse and keyboard.

Remote Desktop Services client (Remote Desktop Connection)

The Remote Desktop Services client, called Remote Desktop Connection (RDC), uses thin-client technology to provide the Windows Desktop to users. The client only needs to make a connection with the server and display the visual information that the server sends.

Remote Desktop Protocol (RDP)

The Remote Desktop Protocol (RDP) is automatically installed when you install Remote Desktop Services. RDP is the only connection you need to configure in order for clients to connect to the Remote Desktop Services server. You can configure only one RDP connection per network adapter.

Benefits of using Remote Desktop Services

- Organizations can deploy Windows-based applications on older systems that may have inadequate resources.
- Users can continue to use their current operating system and applications.
- Organizations can deliver Windows-based applications to a variety of desktop environments and over LANs and WANs.
- Administrators only need to install and update one copy of an application on a server machine instead of on all the computers in their network.
- Networked applications will perform better over slow network connections.

System requirements for Remote Desktop Services

The hardware requirements for Remote Desktop Services depend on how many clients will be connecting at a time and the usage requirements of the clients. For more information, see <http://www.microsoft.com>.

The following clients are supported by FileMaker, Inc. at this time. Other clients may work as expected but have not been tested with FileMaker® Pro and are not currently supported.

- Windows: One of the following:
 - Remote Desktop Services Client (Remote Desktop Connection) version 6.1.7600 (Windows 7) running in Internet Explorer version 8
 - Remote Desktop Services Client version 6.0.6001 (Windows XP) or version 6.0.6000 (Windows Vista) running in Internet Explorer version 7.0.5730.11
- Mac OS: Remote Desktop Connection Client for Mac 2.0

Remote Desktop Services shares executable resources among users, so memory requirements for additional users running the same application are less than the requirements for the first user to load the application.

Installing Remote Desktop Services client software (Remote Desktop Connection)

Remote Desktop Services client software (Remote Desktop Connection) should be installed on every machine that needs to use Remote Desktop Services.

- Windows Server 2003 or 2008, Windows XP, Windows Vista, Windows 7: The Remote Desktop Connection software is installed by default. You can also use Remote Desktop Web Connection.
- Mac OS: You must download the Remote Desktop Connection software. See <http://www.microsoft.com/mac>.

About Citrix XenApp

Citrix XenApp 5.0 or Citrix XenApp 6.0 is a server-based application server that runs with Microsoft Remote Desktop Services. Citrix XenApp extends the reach of Remote Desktop Services by providing application access by a wider variety of platforms and clients and supporting a wider range of features such as application transparency, better bandwidth performance, enhanced security, load balancing, and more. Citrix XenApp has three components similar to Remote Desktop Services in Windows Server 2003 or 2008: the server, the client, and the Citrix Independent Computing Architecture (ICA) protocol by which the server communicates with the client.

Application server

Similar to Remote Desktop Services, when you are running Citrix XenApp, all applications are run on the server. Also like Remote Desktop Services, the server sends only screen information to the client and receives input only from the client mouse and keyboard.

Citrix ICA client

The Citrix ICA client uses thin-client technology to provide a Windows desktop or an application to users. Unlike with Remote Desktop Services clients, when a seamless application is published for Citrix ICA clients, the application appears as if it is running locally on the client desktop. For Windows desktops and applications, the client only needs to make a connection to the server; the server displays any needed visual information to the client, while the client sends back keyboard and mouse information to the server. The application processing is done on the server; the application is not actually loaded onto the client.

Citrix ICA protocol

The Citrix ICA protocol is installed when you install Citrix XenApp. The ICA protocol transmits data between the Citrix ICA client and Citrix XenApp and is designed for transparent support of Windows applications, low-bandwidth requirements, data compression, and encryption.

ICA connections have been tested and are supported with the TCP/IP protocol when FileMaker Pro runs on Citrix XenApp.

Note If you have any Remote Desktop Services clients accessing Citrix XenApp via Remote Desktop Connection (RDP), you must enable the TCP/IP protocol on Citrix XenApp.

Benefits of using Citrix XenApp

- Organizations can deploy Windows applications in heterogeneous computing environments regardless of client hardware, operating system, or network connections.
- Users can continue to use their current operating system and applications.
- IT professionals can support specific Windows applications from a single location and manage application deployment, access, performance, security, and reliability.
- Administrators need to install and update only one copy of an application on a server machine and can create a variety of application environments, from complete Windows desktops to application windows.
- Citrix Web Interface working with Citrix XenApp is supported in the FileMaker Pro configuration model and allows organizations to integrate applications into any standard web browser.

System requirements for Citrix XenApp

The hardware requirements for Citrix XenApp depend on how many clients will be connecting at a time and the usage requirements of the clients.

Citrix ICA client minimum requirements

Only the following clients are supported by FileMaker, Inc. at this time. Other clients may work as expected but they have not been tested for use with FileMaker Pro and are not currently supported.

Windows clients

- Citrix XenApp 6:
 - Windows 2008 R2
 - Citrix Online Plug-in for Windows 11.2

- Citrix XenApp 5:
 - Windows 2003 SP2
 - Citrix Online Plug-in for Mac 11.1

Mac OS X clients

- Citrix Online Plug-in for Mac 11.1

Clients are available from the Citrix website at <http://www.citrix.com>.

Remote Desktop Services and Citrix XenApp both share executable resources among users, so memory requirements for additional users running the same application are less than the requirements for the first user to load the application.

Before installing Citrix XenApp

Before installing Citrix XenApp, Remote Desktop Services should be set to run in application server mode. For information about enabling Remote Desktop Services, see <http://www.microsoft.com>.

Before installing Citrix XenApp, consider carefully the number of users or clients that will be connecting, the types of applications you will be serving to clients, and how your users will be connecting to Citrix XenApp.

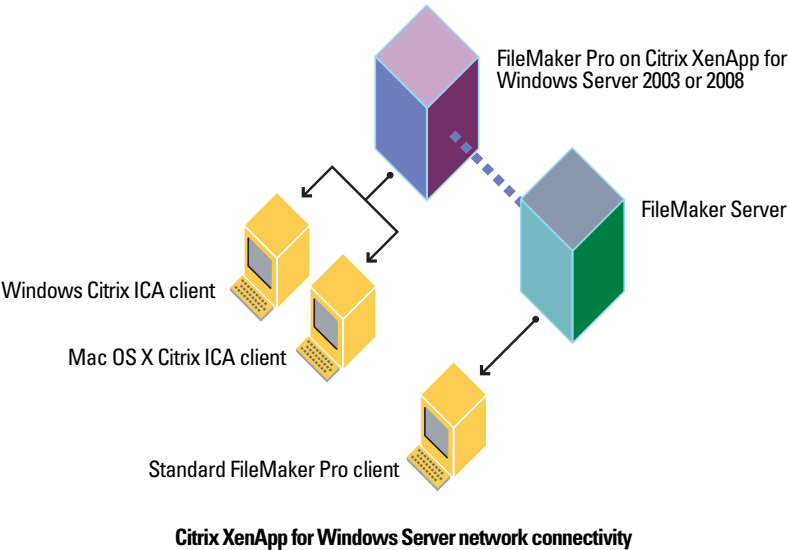
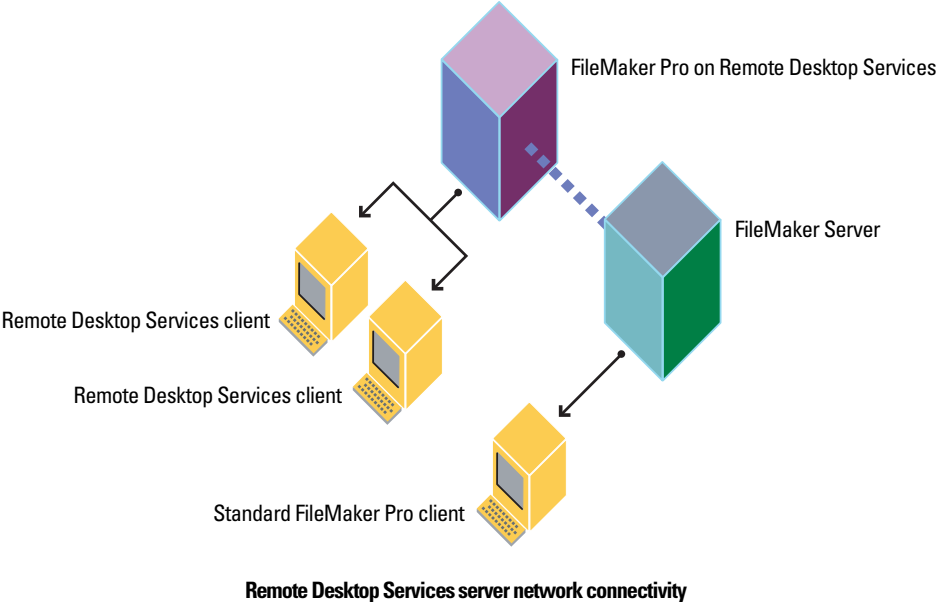
Installing Citrix ICA client software

Citrix ICA client software should be installed on every machine that needs to use Citrix XenApp. Remote Desktop Services clients will be able to access the server but will not have the full feature set that Citrix ICA clients get. See your Citrix documentation for information on installing Citrix ICA clients.

Chapter 2

Using FileMaker Pro with Remote Desktop Services or Citrix XenApp

This chapter describes how to install and use FileMaker Pro on a Remote Desktop Services server or on Citrix XenApp.



Installing FileMaker Pro on a Remote Desktop Services server or Citrix XenApp

Note The installations described in the following sections require FileMaker Pro (Volume License or Site License). Single licensed copies of FileMaker Pro are not supported. FileMaker, Inc. has tested and certified the Worldwide English versions of FileMaker Pro, Remote Desktop Services, and Citrix XenApp.

Installing on Windows Server 2003

1. If you are installing:
 - Remote Desktop Services: Make sure Remote Desktop Services is installed and configured on your Windows Server 2003 SP2 machine and you are logged on as administrator.
 - Citrix XenApp: Make sure Remote Desktop Services is installed and configured on your Windows Server 2003 SP2 machine, Citrix XenApp 5.0 is installed, and you are logged on as administrator.
2. Do one of the following:
 - If you downloaded your software electronically, double-click the download file to unpack the files.
 - If you have a FileMaker Pro Volume License or Site License DVD, insert it into your DVD drive.
3. In the Control Panel, double-click **Add/Remove Programs**.

Note Do not directly access the Setup icon on your FileMaker Pro Volume License or Site License DVD.

4. Click **Add New Programs**.
5. Click **CD or Floppy**, then click **Next**.
If you purchased your software online, browse to Setup.exe.
6. Choose a setup language, then click **OK**.
The FileMaker Pro InstallShield Wizard appears.
7. When the License Agreement panel appears, read the Software License Agreement. If you accept the terms of the license agreement, click **I Accept**.
8. Install FileMaker Pro by following the onscreen instructions.
For details about installation issues, see the *Installation and New Features Guide for FileMaker Pro and FileMaker Pro Advanced*.
9. When Add/Remove Programs has finished the installation, click **Finish**.

Installing on Windows Server 2008

1. If you are installing:
 - Remote Desktop Services: Make sure Remote Desktop Services is installed and configured on your Windows Server 2008 R2 machine and you are logged on as administrator.
 - Citrix XenApp: Make sure Remote Desktop Services is installed and configured on your Windows Server 2008 R2 machine, Citrix XenApp 6.0 is installed, and you are logged on as administrator.
2. Do one of the following:
 - If you downloaded your software electronically, double-click the download file to unpack the files.
 - If you have a FileMaker Pro Volume License or Site License DVD, insert it into your DVD drive.
3. In the Control Panel, double-click **Install Application on Remote Desktop Server**.
If you purchased your software online, browse to Setup.exe.
4. Click **Next** to locate your installation program.
5. Click **Next** to begin the installation.
6. Choose a setup language, then click **OK**.
The FileMaker Pro InstallShield Wizard appears.
7. When the License Agreement panel appears, read the Software License Agreement. If you accept the terms of the license agreement, click **I Accept**.
8. Install FileMaker Pro by following the onscreen instructions.
For details about installation issues, see the *Installation and New Features Guide for FileMaker Pro and FileMaker Pro Advanced*.
9. When the installation is finished, click **Finish**.

Deployment recommendations

Deployment recommendations for Remote Desktop Services

- Estimate more RAM per client if your solution is memory-intensive or if you are serving multiple applications in addition to FileMaker Pro.
- Use a fast, modern processor.

FileMaker supports deployment and development of FileMaker Pro solutions running on Remote Desktop Services. Some aspects of development may not function as expected when using Remote Desktop Services clients as a FileMaker development environment.

Deployment recommendations for Citrix XenApp

- Use a fast, modern processor.

FileMaker supports deployment and development of FileMaker Pro solutions running on Citrix XenApp clients. Some aspects of development may not function as expected when developing on Citrix XenApp clients.

Environments for deploying FileMaker Pro files

Connecting to FileMaker Server

You can use FileMaker Server (or FileMaker Server Advanced) to host files to the Remote Desktop Services server or the Citrix XenApp server.

Remote Desktop Services

The Remote Desktop Services server that is deploying FileMaker Pro will access FileMaker Server to host FileMaker Pro files to Remote Desktop Services clients as well as local FileMaker Pro clients. When a user opens FileMaker Pro running on Remote Desktop Services, accessing FileMaker Pro files hosted by FileMaker Server is done in the same way as accessing FileMaker Server under normal networking conditions.

Citrix XenApp

FileMaker Server will host FileMaker Pro files to ICA clients via Citrix XenApp deploying FileMaker Pro and will continue to host files to standalone FileMaker Pro clients. When a user opens FileMaker Pro running on Citrix XenApp, accessing FileMaker Pro files hosted by FileMaker Server is done in the same way as accessing FileMaker Server under normal networking conditions.

For more information, see “Opening shared files as a client” in chapter 5 of the *FileMaker Pro User’s Guide*.

Note FileMaker Server should not be installed on the same machine with Citrix XenApp and Remote Desktop Services. FileMaker, Inc. does not support FileMaker Server running on the same machine with Citrix XenApp and Remote Desktop Services.

Mac OS Citrix ICA clients

When a Mac OS ICA client accesses FileMaker Pro through Citrix XenApp, remember that the client will be accessing a Windows application. The shortcut keys used on the Mac OS client will be Windows shortcut keys, and the look and feel of the application will be that of a Windows application.

Non-shared files

Remote Desktop Services clients and Citrix XenApp clients can access FileMaker Pro files that are not shared over a network. Non-shared files can be developed and deployed by Remote Desktop Services clients and Citrix XenApp just like any non-shared FileMaker Pro file. Shared files and peer-to-peer hosting (FileMaker Network Sharing) are not supported on Remote Desktop Services clients or Citrix XenApp clients.

Note To turn off sharing for a specific file, choose **File** menu > **Sharing** > **FileMaker Network**, select the file, then select **No users**.

FileMaker Pro feature issues

Features not supported for Remote Desktop Services clients

- FileMaker Network Sharing
- Instant Web Publishing
- ODBC/JDBC sharing
- Third-party plug-ins. Plug-in developers must test and certify their support for the plug-ins they supply to run under Remote Desktop Services.

Features not supported for Citrix XenApp clients

- Peer-to-peer hosting
- Web hosting
- JDBC drivers
- xDBC plug-in
- Third-party plug-ins. Plug-in developers must test and certify their support for the plug-ins they supply to run under Citrix XenApp.

Note Only the ICA clients listed in “System requirements for Citrix XenApp” on page 6 are supported at this time. Other clients may work as expected but have not been tested by FileMaker and are not currently supported.

FileMaker Knowledge Base articles

Check the FileMaker Knowledge Base for articles about running FileMaker Pro on Remote Desktop Services or Citrix XenApp. You can access the FileMaker Knowledge Base from <http://help.filemaker.com>.

Appendix A

Standard requirements

FileMaker, Inc. standard requirements

In order to use FileMaker Pro via Remote Desktop Services or Citrix XenApp, you must purchase a Volume License Agreement (VLA) or a Site License Agreement (SLA) license. Retail packages of FileMaker Pro cannot be used with Remote Desktop Services or Citrix XenApp.

Volume License Agreement (VLA)

The FileMaker VLA is a transactional agreement that grants you the right to use the software on as many computers as are listed on your License Agreement.

For information about the VLA, visit <http://www.filemaker.com>.

Site License Agreement (SLA)

The FileMaker SLA allows for any combination of FileMaker Pro, FileMaker Pro Advanced, FileMaker Server, and FileMaker Server Advanced to be installed anywhere in your organization of 50 or more employees or computers.

For more information on licenses, please visit <http://www.filemaker.com>.