



OpenText RightFax 16 EP6

Installation Guide

Edition

OpenText RightFax 16 Enhancement Pack 6

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Contents

Chapter 1: What is installed on the RightFax server?	5
RightFax software	5
Chapter 2: Hardware and software requirements	6
Fax server requirements	6
SQL requirements and information	7
Virtualization support	9
Fax board requirements	9
Phone line requirements	10
Antivirus exclusions	11
Chapter 3: Installing RightFax server software	12
Step 1: Selecting setup options and features	12
Step 2: Installing the RightFax software	13
Step 3: Configuring RightFax Server	15
Adding an exception to the Windows firewall	15
Uninstalling the RightFax server	16
Running a silent RightFax server installation	16
Chapter 4: Installing RightFax web applications	18
IIS server requirements	18
Installing and configuring RPC over HTTP proxy	19
Installing Web applications	20
URL for RightFax web applications	22
Installing a TLS/SSL certificate	23
Configuring RightFax Web Delivery	24
Chapter 5: Installing RightFax client applications	26
RightFax client computer requirements	27
Upgrading the RightFax client applications	27
Before you begin	27
Installing the client applications	28
Creating an automated client install or uninstall	29
Installing and configuring the RightFax client for remote use	33
Chapter 6: Installing and configuring the Shared Services Module	36
Server topology	36
System requirements	38
Installing RightFax servers to share a SQL database	38
Configuring data sharing	40
Selecting a service account	42
Configuring remote services	43

Using dialing rules	43
Copying service configuration settings to other nodes	43
Chapter 7: Performing daily maintenance	45
Aging and purging	45
Orphan scanning	45
Recovery	45
Configuring the maintenance processes	45
Viewing the maintenance logs	46
Chapter 8: Installing RightFax in a Windows Server cluster	47
System requirements	47
Installing RightFax onto the cluster	48
Configuring the Integration module in a Windows Server cluster	55
Chapter 9: Upgrading RightFax server software	58
Retaining customized configuration file information	58
Running the RightFax server upgrade	59
Running a silent RightFax server upgrade	60
Updating the RightFax Connect URL	60
Chapter 10: Adding features and fax channels	61
Checking for installed components	61
Activating RightFax components	61
Licensing Brooktrout SR140 channels	62
Chapter 11: Installing RightFax database schemas	63

Chapter 1: What is installed on the RightFax server?

The RightFax server is the computer that runs the fax server software. The server performs all the work required for sending and receiving faxes, including managing the fax database, converting documents into fax images, adding signatures, overlaying forms, maintaining logs, printing faxes, and creating fax cover sheets.

When you install RightFax, the complete suite of RightFax products is installed. Product licensing determines the capabilities of the server and which modules you can activate. You can upgrade the RightFax server and purchase licenses for optional modules as needed. For information about upgrading the server and adding new RightFax modules, see [Adding features and fax channels on page 61](#).

In addition to the installed software, Setup creates several Windows services, adds RightFax configuration settings to the Windows Registry, adds some configuration programs to Windows Control Panel, and installs the FaxUtil and Enterprise Fax Manager client programs.

RightFax uses a SQL database to store all its data. If you do not connect to an existing SQL server on your network during installation, RightFax will install a SQL Server Express database on the RightFax server.

RightFax software

All of the RightFax software is installed on the server in the folder you specify during installation. By default, the software installs in the C:\Program Files (x86)\RightFax folder.

Do not install the software in the Program Files folder reserved for 64-bit program files.

Chapter 2: Hardware and software requirements

After purchasing RightFax or any of its components, you will receive a confirmation email with user login and password and other information you need to access files at <https://mysupport.opentext.com>—the central repository for RightFax software, upgrades, patches, and documentation.

Fax server requirements

Many of the software prerequisites for RightFax 16 EP6 are included with the RightFax software. RightFax Setup checks for required third-party components and installs them if necessary. Some components, such as Microsoft service packs and Microsoft Exchange server, are not provided.

Server and client combinations

Server and client features are interdependent. RightFax 16 EP6 features require that both server and client computers run the latest version of the software.

The following combinations of RightFax server and client software versions also are supported but will result in a loss of new functionality:

- 16 EP6 servers with 16 EP4, 16 EP2, 10.6, 10.5, and 10.0 client software.
- 16 EP6 client software with 16 EP4, 16 EP2, 10.6, 10.5, and 10.0 server software.

When you configure the RightFax server, you can select that all client computers must run a minimum version of client software. For more information, see the *RightFax Administrator Guide*.

Supported Microsoft Windows operating systems

RightFax server software is supported on the following server operating systems (with current updates):

- Windows Server 2019
- Windows Server 2016

Minimum hardware requirements

Computer/Processor	2.6 GHz or higher Pentium IV-compatible CPU
Memory	1 GB RAM
Hard drive	10 GB free space Important This does not include space for storing document images. To calculate disk space, estimate 35kb per document page.
CPU support	Single and dual CPU systems
Display	SVGA or higher resolution monitor running at a resolution of 800×600 or higher
Keyboard and mouse	Required

Recommended hardware

Computer/Processor	3.6 GHz or higher Pentium IV-compatible CPU
Memory	2 GB RAM
Hard drive	10 GB free space
CPU	Dual CPU system
Drive	DVD drive
Display	SVGA or higher resolution monitor running at a resolution of 1024×768 or higher
Keyboard and mouse	Required

Additional server requirements

- Microsoft Internet Information Services (IIS) 10.
- A Windows account to run RightFax services. The account you choose must be a member of the local administrators group and must have the right to log on as service on the local computer.
- Reserved network ports.
- Update for Universal C Runtime (CRT) in Windows.
- To run Web Admin, the Remoting Service must be set to a domain account.

The following required components can be installed as part of the RightFax Setup:

- RightFax PostScript Printer Driver
- Microsoft Messaging Queue (MSMQ) Server
- Windows PowerShell 2.0
- Microsoft Primary Interoperability Assemblies 2005
- Microsoft Visual C++ runtime components

- Microsoft .NET 4.7.2 Framework
- Microsoft Data Access Components (MDAC)
- Microsoft Windows Installer 3.1
- Crystal Reports 13.0 runtime (used for FaxReporter and Enterprise Fax Manager)

To install RightFax, you must log on to the computer using a Windows account that is a member of the domain and local Administrators group.

SQL requirements and information

The RightFax server maintains SQL databases that can reside on your organization's SQL server, on the RightFax server, or on SQL servers installed on virtual machines running in Microsoft Azure Infrastructure as a Service.

The RightFax Setup program will either:

- Connect the RightFax server to an existing SQL server, or
- Install SQL Server 2017 Express on the RightFax server.

The following versions of Microsoft SQL server are supported:

- SQL Server 2017 Express Edition
- SQL Server 2017 Enterprise Edition
- SQL Server 2017 Standard Edition
- SQL Server 2016 Enterprise Edition
- SQL Server 2016 Standard Edition
- SQL Server 2016 Express Edition
- SQL Server 2014 Enterprise Edition
- SQL Server 2014 Standard Edition
- SQL Server 2014 Express Edition

Account permissions for SQL connections

The following accounts are required to establish SQL connections from the RightFax server to the RightFax database:

- An account to create the RightFax database during setup.
- An account for RightFax services to access the RightFax database during setup and normal operations. These services include Database, DocTransport, Remoting Service, and the Server modules.

SQL connection for Setup

Setup can create a new RightFax database using a fully-automated process. The account that creates the database requires the following permissions which are part of the db-datareader and db_datawriter database roles:

- Create database

Note This permission may not be needed if the SQL administrator has created an empty database in advance of Setup.

- Create table
- Create procedure
- Create view
- Create rule
- Create default

SQL connection for RightFax Services

RightFax services that access the RightFax database require an account with the following access levels:

- Server Roles: None required.
- **Select, Update, Insert, Delete**, and **Execute** permissions on all RightFax database objects.

Note DB_writer and DB_reader database roles provide Select, Update, Insert, and Delete permission, but do not grant explicit Execute permission.

Supported database collations

The RightFax database supports SQL **Language** and **Accent sensitivity** collations. **Case sensitivity** and **Kana sensitivity** collations are not supported and may prevent RightFax services from starting.

Note You cannot change the collation after RightFax has been installed.

Supported database character sets

To use characters and symbols from non-English alphabets, the RightFax server, SQL database, and client applications must be configured to use the same symbol sets.

The symbol set used by the SQL database must be configured in the Regional setting on the SQL server before you install the RightFax database. The Region and Language settings in Control Panel on the RightFax server and on the client computers can be changed at any time.

Important Verify that the Regional setting on the SQL server is properly configured for your desired character set before installing the RightFax database. If you already installed a SQL database with an incorrect Regional setting, contact Microsoft for assistance in reconfiguring the SQL Regional setting.

The following ASCII code pages are supported on the RightFax server and in RightFax client applications:

- 1250 Central Europe: Albania, Croatia, Faeroese, Hungarian, Polish, Romanian, Serbian, Slovak, Slovenian

- 1251 Cyrillic: Byelorussian, Bulgarian, Russian, Ukrainian
- 1252 Latin 1: Afrikaans, Basque, Catalan, Danish, Dutch (standard and Belgium), English (United States, Britain, Canada, New Zealand, Ireland, South Africa), Finnish, French (standard, Belgium, Switzerland, Canada, Luxembourg), German (standard, Switzerland, Austria, Luxembourg, Liechtenstein), Icelandic, Indonesian, Italian (standard, Swiss), Norwegian (Bokmal, Nynorsk), Portuguese (standard and Brazil), Spanish (Mexican, traditional, modern) and Swedish.
- 1253 Greek
- 1254 Turkish
- 1255 Hebrew
- 1256 Arabic
- 1257 Baltic: Estonian, Latvian, Lithuanian
- 1258 Vietnam

Note Time strips are printed using the printer's available symbol set. For characters on these lines to appear as expected, the code page on the fax server must match the printer's available symbol set. Because TTI lines and quick headers are placed onto the fax image by your fax board, RightFax does not support the use of diacritical characters on these lines.

Virtualization support

RightFax 16 EP6 server software is supported in the following virtualization environments:

- Amazon Web Services (AWS)
- Microsoft Azure
- Microsoft Hyper-V
- Citrix XenServer 6.2 or later
- VMware ESX server 3.0.1 or later
- VMware vSphere 4.0 or later
- VMware vMotion

Note that:

- Virtual RightFax servers may not contain fax board hardware. Therefore, sending and receiving faxes must be achieved by either:
 - Fax over IP (FoIP) or
 - Dialing rules that route faxes to and from a physical server containing one or more fax boards. For more information about creating dialing rules, see the *RightFax Administrator Guide*.
- If a virtual machine is configured to use device printers on the host machine, you must manually add print drivers either through the virtualization tools or EFM.

For VMWare virtual machines verify that:

- The VMware tool ThinPrint has been disabled before you install RightFax client software on VMware virtual machines.
- The same time has been set on ESX host machine and the RightFax server virtual machine.

For information about general RightFax server requirements, see [Fax server requirements on page 6](#).

Fax board requirements

RightFax supports Dialogic Brooktrout fax boards. For a list of supported fax board types, refer to <https://mysupport.opentext.com>.

Fax boards can be installed in the physical computer running the RightFax server software or on a separate computer called a Remote DocTransport. For information about using Remote DocTransport computers, refer to the *RightFax Administrator Guide*.

Each RightFax server can support a maximum of 1024 channels. Each DocTransport supports a maximum of 120 channels, in any combination of fax boards or SR140 instances.

Phone line requirements

The supported fax boards can make use of several different types of phone lines: loop-start (regular analog phone lines), Direct Inward Dial (DID), Dialed Number Identification Service (DNIS), Integrated Services Digital Network (ISDN), and several types of digital phone lines.

Different types of fax boards support different types of phone lines. For information on the types of fax boards that are compatible with your available phone lines, refer to your fax board supplier or manufacturer.

Loop-start phone lines

Loop-start lines can be used for incoming or outgoing faxes. A line can be installed by the local telephone company if one is not already available through your organization's existing phone system. Loop-start lines are also called POTS (Plain Old Telephone Service) lines.

Direct Inward Dial (DID) phone lines

DID lines support inbound phone service only. A DID interface assigns more than one telephone number to a pair of wires (a telephone trunk). This enables RightFax to automatically route faxes to the proper destination in a multi-user system.

Example With one DID telephone trunk and one fax channel, 100 RightFax users can each have a private fax number. The company is assigned one DID trunk and 100 telephone numbers ranging from 239-9400 to 239-9499. When any one of the numbers in this range is dialed and the DID trunk is available, the telephone company connects to the trunk and transmits the last few digits (three or four) of the dialed number to the fax board. With these digits, called the routing code, the fax board detects which one of the 100 numbers was dialed by the caller. The RightFax software routes the fax to the user with that routing code.

If the trunk is busy receiving a fax for one of the users, callers to any of the other 99 numbers encounter a busy signal. Because of this, you may have to assign the range of DID telephone numbers to more than one DID trunk. The number of trunks required depends on the traffic demands on the system.

Because DID trunks only support inbound calls, you need one or more additional loop-start telephone channels for sending faxes.

Caution Never plug a loop-start phone line into a DID fax board when there is any voltage on the phone line. This will damage the fax board and void all warranties.

Dialed Number Identification Service (DNIS) phone lines

DNIS is a T1-based version of DID service. For information on configuring your fax boards for DNIS, refer to the hardware guide included with your fax board.

Integrated Services Digital Network (ISDN) phone lines

ISDN is a worldwide standard communications network for digital data, voice, and video communication. The main advantages of ISDN over analog telephone lines are fast call setup and release and additional cost-recovery information included with the call.

PRI, BRI, E1, and T1 digital phone lines

RightFax supports PRI, BRI, E1, and T1 digital phone lines assuming you have purchased and installed the appropriate type of fax boards and network interface card. For more information about digital phone lines, see the *RightFax Fax Board Administrator Guide*

Antivirus exclusions

If your antivirus software interferes with the functioning of your RightFax system, try defining exclusions for all RightFax folders, executables, and related third-party applications.

Chapter 3: Installing RightFax server software

Typical installation steps

A typical RightFax server installation includes the following steps:

1. Installing the fax boards into the RightFax server chassis.

You do not need to have fax boards installed in the RightFax server computer if you will use one or more remote DocTransport computers or will install RightFax on a virtual server. For more information about using remote DocTransport computers, see the *RightFax Administrator Guide*.

2. Installing the RightFax server software using an existing SQL Server or SQL Server Express. To perform a silent (or unattended) install, see [Running a silent RightFax server installation on page 16](#).

Note To install RightFax database schemas before installing the RightFax server software, see [Installing RightFax database schemas on page 63](#).

3. Configuring the RightFax Server, WorkServer, and DocTransport modules. See the *RightFax Administrator Guide*.
4. Adding an exception to the Windows firewall. See [Adding an exception to the Windows firewall on page 15](#).
5. Testing the fax boards. See the *RightFax Fax Board Administrator Guide*.
6. Setting up users and other RightFax database objects. See the

RightFax Administrator Guide.

7. As needed, installing additional features on remote servers, such as Microsoft Exchange servers and Microsoft IIS web servers.

Note For information about setting up and configuring RightFax Shared Services environments, see [Installing and configuring the Shared Services Module on page 36](#).

Step 1: Selecting setup options and features

Perform the following steps to begin installing a RightFax 16 EP6 server. For information about getting ready to install RightFax, see [Hardware and software requirements on page 6](#).

To select setup options and features

1. Log on to the computer using a Windows account that is a member of the domain and local Administrators group.
2. Run RightFax **Setup.exe**. RightFax Setup requires Microsoft .NET Framework 4.7.2. If this software is not installed on your system, Setup prompts you to install it. To install, click **OK**. To cancel Setup and install .NET Framework 4.7.2 yourself, click **Cancel**.
3. Review the **3-Step Setup** page of the wizard, and then click **Next**.
4. Read and accept the license agreement, and then click **Next**.

5. Select one of the following installation options, and then click **Next**:
 - **Typical RightFax Server**. This includes all core server components, RightFax Enterprise Fax Manager and FaxUtil.
If this computer will not use FoIP or fax boards, you can clear the **Include fax board and FOIP drivers** check box.
 - **Custom**. Select this option to manually select the components to install. The initial selections are those for the Typical RightFax Server.
6. The **Preview requirements for selected features** list shows third-party software that is installed (OK), will be installed automatically (Must Install), or will require your input during installation (Requires Info). Click **Next**.
7. If your server does not already have Microsoft Message Queuing installed, Setup prompts you to install it. Select your option, and then click **Next**.
8. Select the SQL Server option appropriate for your RightFax implementation:
 - To connect the RightFax server to your organization's SQL server, click **Use an existing SQL Server**.
 - To install SQL Server Express and create the database on the RightFax server, click **Install SQL Server Express Edition on this computer**, and then select an installation option.
9. If you selected to install SQL Server Express, do one of the following, and then click **Next**:
 - To install an instance of SQL Server Express specifically for use with RightFax on the RightFax server, click **Typical**.
 - To install SQL Server Express interactively, click **Custom**.
10. RightFax requires the following TCP ports: 10520, 10521, and

10522 (RPC (API and clients)), 10062 (DocTransport), 34001, 34987, and 34988 (Remoting), and 36363 (Licensing). To prevent other applications from using these ports, click **Reserve ports**, and then click **Next**.

Note If the Windows Server firewall blocks incoming connections on a port, you need to add an exception to the firewall. See [Adding an exception to the Windows firewall on page 15](#).

11. To apply your settings and install required third-party software (and if selected, SQL Server Express), click **Apply**. This will take several minutes.

Step 2: Installing the RightFax software

After you selected the options and features, and if selected, installed SQL Server Express, Setup is ready to install the RightFax Product Suite. The default features include the web applications Web API and Web Admin.

To install the RightFax software

1. On the **Ready to install** page, click **Next**.
2. Choose your installation folder, and then click **Next**.
3. Select one of the following, and then click **Next**:
 - **Configure web settings**. If more than one web site is available, click the **IIS Site** in the list.

Setup will configure IIS settings associated with the RightFax web applications you selected to install. These settings include the creation of virtual directories, enabling web service extensions, and setting access permissions.

For information about installing and configuring web applications, see [Installing RightFax web applications on page 18](#).

- **Do not Configure web settings.** You will have to perform the advanced configuration yourself.
4. To install, click **Apply**. Setup installs the RightFax Product Suite. This will take several minutes. On the **Ready to configure** page, click **Next**.
 5. On the **Select the Windows account for RightFax services** page, select the service account, and then click **Next**.
 - To use the local system account, click **Local System Account**.
 - To enter a different Windows account, click **This Account**, and then enter the account and its credentials. The account must:
 - Be a member of the local administrators group.
 - Have the right to log on as a service on the local computer.
 - To verify the account credentials, click **Test Account**.
 - To look up a user account, click **Browse**.
 6. If you selected a typical installation of SQL Server Express, the **RightFax Activation** page opens. Click **Launch Licensing Utility** to activate RightFax. For more information, see [Activating RightFax on the next page](#).

If you selected a custom installation of SQL Server Express or selected to use an existing SQL server, select one of the following database options, and then click **Next**:

 - **Create New RightFax Database** This option creates a new RightFax database for use with a new RightFax server. It

includes the first RightFax server in a RightFax Shared Services environment.

- **Use a Pre-configured Database** This option adds the RightFax schema and other data to a database created in advance of installing RightFax.
- **Add to Shared Services Database** If you have purchased the Shared Services Module, this option adds the server to the Shared Services Module.
- **Assume Ownership** This option changes the ownership of a working current release RightFax database. Typical uses for this option include migrating to new server hardware and full system restores.

Caution If you are assuming ownership of a database already in use, you must also migrate the RightFax\Image directory to the new server. Images and library documents are not maintained in the database.

7. On the **Define a SQL connection for Setup** page, enter the account you set up to use during setup. Make the following entries, and then click **Next**.
 - a. In the **Server name** box, to look up servers, click (...).

Note If your existing SQL server uses a port number other than the default of 1433, you must specify the port number during Setup using the following syntax:
 SQLServer,55123 or
 SQLServer\MyInstance,55123

- b. In the **Authentication** box, select the authentication type.
- c. In the **Account** box, enter the account that will create the RightFax database. See [Account permissions for SQL](#)

[connections on page 8.](#)

- d. Click **Next** to not change the name of the RightFax database. To change the name, in the **Database** box, type a new name.
8. On the **Define a SQL connection for RightFax services** page, enter the account you set up for normal operations of RightFax. See [Account permissions for SQL connections on page 8.](#)
 - a. In the **Authentication** box, select the authentication type.
 - b. In the **Account** box, enter the account.
9. On the **RightFax Activation** page, click **Launch Licensing Utility** to activate RightFax and optional modules. For more information, see [Activating RightFax below.](#)

Step 3: Configuring RightFax Server

After installing the RightFax Product Suite, Setup prompts you to activate RightFax and any optional modules.

Activating RightFax

You can activate RightFax using the Internet or using a local license file. For detailed information, see [Activating RightFax components on page 61.](#)

To activate RightFax

1. On the **RightFax Activation** page, click **Launch Product Licensing Utility**.
2. To activate RightFax over the internet, click **Activate**; to activate RightFax using a license file, click **Import**.
3. If you are activating over the internet, type an email address and

the SUID, and then click **Activate**.

4. After successful activation, read the RightFax license agreement, click **Accept**, and then click **Close**.

To complete installation of RightFax

1. After activating RightFax, you can do any of the following:
 - To configure fax channels, click **Configure Fax Channels**. For information about configuring DocTransports, see the *RightFax Administrator Guide*.
 - To import users, click **Configure User Sync**. For information about configuring the Sync Module, see the *RightFax Administrator Guide*.
 - To view a log of the installation steps, click **View Installation Log**.
2. Click **Finish**. The RightFax Product Suite Setup wizard closes.

Adding an exception to the Windows firewall

The installer adds exceptions for reserved RightFax ports and services to the Windows firewall. If you find that the firewall blocks a RightFax port, you can add an exception to the firewall.

To add an exception

1. In Windows Control Panel, double-click **Windows Firewall**.
2. In the left panel, click **Allow an app or feature through Windows Firewall**.
3. Click **Allow another program**, and then click **Add**.
4. In the **Add a program** window, browse to c:\program files (x86)\RightFax\Bin\faxrpc.exe, and then click **Open**. RightFax RPC Module appears in the list of programs.
5. Click **Add**.

To verify that the system can connect

Type:

```
"telnet <rfservername> <portnumber>"
```

A flashing cursor means the port is now open.

Uninstalling the RightFax server

Before uninstalling the software, back up the contents of the entire RightFax folder. For information on creating a backup of the RightFax server, see the *RightFax Administrator Guide*.

When you uninstall the RightFax server, all RightFax program files, Windows Registry settings, shortcuts, and configuration settings are removed. Use SQL tools if you also want to remove the RightFax database.

To uninstall

1. Log on to the computer using a Windows account that is a member of the domain and local Administrators group.
2. Run RightFax **Setup.exe**. The RightFax Product Suite Setup wizard opens.
3. In the list of options, click **Uninstall** and click **Next**. The RightFax install wizard opens.
4. To remove all local RightFax settings and software, click *Remove all documents, images, and settings* followed by **Next**.
5. Verify that all RightFax services and applications on all remote RightFax servers are closed or stopped. When ready, click **I have shutdown all remote RightFax services** and click **Next**.
6. To shut down all local RightFax processes, click **Next**.
7. Click **Apply**.
8. When Setup is complete, you can click **View Installation Log** to show a log file. Click **Finish**.

Running a silent RightFax server installation

You can perform a silent (or unattended) installation of the RightFax server or a server component. The silent installation can be used to install any or all of the features that are available in Setup.exe. The silent installation cannot be used to perform a custom installation of SQL Express.

To prepare for the silent installation, you must first run Setup.exe with a command to record the settings in an XML file. You then use the XML file to silently install the server or component on another computer. To install a different server configuration or component, you must run Setup.exe and create a new XML file.

To activate the server or component, you have the following options:

- The installation program can activate the server or component via the Internet during the installation. The server must be connected to the Internet.
- You can activate the server or component after the installation.

To create an XML file for unattended installations and then install on multiple servers

1. On the computer where the RightFax server or component will be installed, log on using a Windows account that is a member of the domain and local Administrators group.
2. Place the installation files on the computer.
3. At the command prompt, enter the following command:

```
setup.exe /record=true
```
4. Complete the Setup wizard and the instructions [Step 1: Selecting setup options and features on page 12](#), [Step 2: Installing the RightFax software on page 13](#), and [Step 3: Configuring RightFax Server on the previous page](#).
5. The wizard will prompt you to save the XML file. Save the file

with any file name.

To silently install the server or component on another computer, complete the following steps.

6. If you want the installation program to activate the server via the Internet during the installation, then edit the XML file. Locate the <SUID> and <EmailAddress> tags. In the <SUID> tag, enter the System Unique ID (SUID) for the component that will be activated. In the <EmailAddress> tag, enter a valid email address. These entries are required.
7. Place the XML file and the installation files in the same folder on the computer where the server or component will be installed. At the command prompt, enter the following command:

```
setup.exe /Unattended=true /allowShutdown=true  
/Settings=filename.xml
```

8. If you elected to activate the server or component after the installation, see [Adding features and fax channels on page 61](#) for instructions.

Chapter 4: Installing RightFax web applications

The information and instructions provided in this section assume you have a functional RightFax server that is licensed to use RightFax web applications. For information on installing RightFax server software, see [Installing RightFax server software on page 12](#). To activate RightFax web applications, see [Adding features and fax channels on page 61](#).

With the exception of the Web API, web applications can be installed either on the same computer as the RightFax server software or on a separate dedicated IIS server:

- **RightFax Certified Delivery.** Requires the RightFax SecureDocs Module. See the *RightFax SecureDocs Module Administrator Guide*.
- **RightFax FaxUtil Web.**
- **RightFax Web API.** Must be installed on the RightFax server.
- **RightFax Web Admin**
- **RightFax Web Reporter**
- **RightFax SharePoint Web Service.** Requires SharePoint. See the *RightFax SharePoint Gateway Module Administrator Guide*.

Certain Multifunction Printer (MFP) device connectors require IIS on the Fax Server for file transfer between the MFP device and Fax Server.

IIS server requirements

Many of the third-party software that is required for the RightFax Web applications are included with the RightFax software. RightFax Setup checks for the required third-party components and installs them if necessary. Some components, such as Microsoft service packs, are not provided.

- Microsoft Data Access Components
- Microsoft Internet Explorer (IE) 8 or later
- Microsoft Internet Information Services (IIS) 10
- Microsoft Internet Information Services Management Tools

The following required components can be installed from RightFax Setup:

- Microsoft .NET Framework
- Microsoft Visual C++ runtime components
- Microsoft Windows Installer 3.1

Additional IIS server requirements and information

The following additional IIS requirements may apply:

- When you install the RightFax web applications, you can have RightFax Setup create the required Web (IIS) settings. Otherwise you must create them yourself. See [Configuring IIS settings if web applications were not configured during installation on page 22](#).
- If you are installing an application that sends faxes from the RightFax Web API in a Shared Services system, change the account of the Application Pool that hosts the RightFax Web API. Unless you change it, the name of the Application Pool is RightFax. Change the Identity from ApplicationPoolIdentity to a domain account that has full access to the attachments folder. For information about the attachments folder, see [Configuring data sharing on page 40](#).
The Shared Services Module is licensed separately.
- To use the HTTP protocol (HTTP or HTTPS) for print-to-fax, install the Windows RPC over HTTP Proxy component on the server and, as needed, configure the client for HTTPS. See [Installing and configuring RPC over HTTP proxy below](#).

Installing and configuring RPC over HTTP proxy

To use HTTP as the communication protocol for the client applications, install and configure the Windows RPC over HTTP Proxy component on the RightFax server so that users can send faxes from FaxUtil or from the system tray using RightFax Quick Fax. To connect with HTTPS instead of HTTP, on the server install and configure RPC as for HTTP, and then configure the RightFax client application for HTTPS.

Note IIS must be configured to use Windows authentication. Do not use Basic or Anonymous Authentication.

Installing and configuring RPC over HTTP proxy on the IIS server

Complete the following steps independent of whether client applications will connect using HTTP or HTTPS.

To install RPC over HTTP Proxy

1. On the IIS server, on the **Start** menu, point to **Administrative Tools**, and then click **Server Manager**.
2. Under Server Manager, right-click **Features**, and then click **Add Features**.
3. In the **Add Features Wizard** window, on the **Features** page, select the **RPC over HTTP Proxy** check box.
4. Click **Next**, and then **Install**.

To configure RPC Proxy

1. On the IIS server, open the Windows Registry to HKLM\Software\Microsoft\Rpc\RpcProxy.
2. To set RPC proxy for non-SSL communication, edit the **AllowAnonymous** entry to contain a value of **1**. If it does not exist, create a REG_DWORD entry of **AllowAnonymous** and set it to **1**. This setting enables anonymous access.

Note If anonymous access is disabled at the virtual directory level, it will still be blocked at the IIS level.

3. Edit the **ValidPorts** entry, adding the following values to any existing values. All values are separated by semicolon:
RightFax Server:10522;
RightFax Server.domain:10522

Example ROSCO:593;ROSCO:2000-8000;RFServer:10522;RFServer.domain.com:10522, where the ROSCO entries were existing entries in the **ValidPorts** key.

4. Restart the IIS server.

Configuring the RightFax client for HTTPS

Complete the following tasks for HTTPS only. After these registry changes, the RightFax client will connect using HTTPS when HTTP is selected as the connection protocol.

To enable secure communication (HTTPS)

1. Open the Windows Registry to HKEY_LOCAL_MACHINE\Software\Classes\RightFax.
2. Create the registry key **Server** if it does not exist.
3. In the Server key, add a new DWORD Value called **RPCSecure** and set it to a value other than 0 (zero).

To set the server certificate subject name

1. Open the Windows Registry to HKEY_LOCAL_MACHINE\Software\RightFax Client.
2. Create the key **ServerCertificateSubject** and add a string value with the following value name and data:
 - **Value name.** Name of the RightFax server exactly as entered during installation of the client.
 - **Value data.** The fully qualified domain name (FQDN) of the proxy server entered during installation of the client in the format **msstd:ProxyServerFQDN**.

To enable SOAP Proxy

1. Open the Windows Registry to HKEY_CURRENT_USER\Software\RightFax Client\FUW32.
2. Verify that the value of the **SoapProxyServer** key is the fully qualified domain name of the RPC Proxy server.
3. Verify that the value of the **UseSoapProxy** key is set to a value other than 0 (zero).

Example The fully qualified domain name of the RightFax Server is RPCweb.contoso.com. A RightFax client application with the following registry settings will connect to the RightFax Server with HTTPS when HTTP is the selected protocol:

- msstd:RPCweb.contoso.com (ServerCertificateSubject)
- PRCweb.contoso.com (SoapProxyServer)
- 1 (UseSoapProxy)

Installing Web applications

To install Web applications on an IIS server

1. Log on to an Internet Information Services (IIS) server using a Windows account that is a member of the domain and local Administrators group.
2. Run RightFax **Setup.exe**. RightFax Setup requires Microsoft .NET Framework 4.7.2. If this software is not installed on your system, Setup prompts you to install it. To install, click **OK**. To cancel Setup and install .NET Framework 4.7.2 yourself, click **Cancel**.
3. Review the welcome page, and then click **Next**.
4. Read and accept the license agreement, and then click **Next**.
5. Select one of the following installation options, and then click **Next**:
 - **Typical Web Server.** This includes Web Admin and the Web API.
 - **Custom.** Select this option to select the Web-based components to install. The initial selections are those for the Typical RightFax Server.
6. The **Preview requirements for selected features** list shows third-party software that is installed (OK), will be installed

automatically (Must Install), or will require your input during installation (Requires Info). Click **Next**.

7. To apply your settings and install required third-party software, click **Apply**. This may take several minutes. On the **Ready to install** page, click **Next**.
8. Choose your installation folder, and then click **Next**.
9. To install, click **Apply**. Setup installs the RightFax Product Suite. This will take several minutes. On the **Ready to configure** page, click **Next**.
10. On the **Configure Web Applications** page, select the **Enable single sign on** check box if you wish to enable single sign on (SSO) for Web Admin, FaxUtil Web, and RightFax Analytics.

Integrated Windows authentication is required for single sign on. If you enable single sign on, then users only can log in to Web Admin and FaxUtil Web with Windows authentication. They cannot log in with RightFax credentials.
11. Select one of the following, and then click **Next**:
 - **Configure web settings.** If more than one web site is available, click the **IIS Site** in the list.

Setup will configure IIS settings associated with the RightFax web applications you selected to install. These settings include the creation of virtual directories, enabling web service extensions, and setting access permissions.
 - **Do not Configure web settings.** You will have to perform the advanced configuration yourself.
12. Click **Next** to allow Setup to stop IIS, and then click **Apply**. Setup configures the web settings. This will take several minutes.

Type the name of your RightFax server and click **Next**.
13. When Setup is complete, you can click **View Installation Log**

to view a log of the installation steps.

Note If Setup fails to apply IIS settings, you must configure Web application settings in IIS. For more information, see [Configuring IIS settings if web applications were not configured during installation on the next page](#).

14. Click **Finish** to close the RightFax Product Suite Setup.
15. To configure FaxUtil Web, see the *RightFax Administrator Guide*.

Configuring the IIS server for multiple RightFax servers

If you are installing the RightFax web applications on an IIS server that is separate from the RightFax server, and you want to allow users to connect to more than one RightFax server from the applications, you may want to create short alias names. This can make it easier for users to choose the correct server.

Before you configure the web applications, complete the following steps.

To configure the IIS server for multiple RightFax servers

1. In the domain name service, for each of the RightFax servers to which users can connect, create a DNS alias for which the target host is the IIS server.
2. On the IIS server, navigate to **Program Files (x86)\RightFax\WebApps\WebAPI\API**. Open the file **Web.config** in a text editor.
3. Uncomment the following lines of code:


```
<!--
<add key="ServerMappingType"
value="Fax.WebApi.IIS.DirectServerMapping"/>
<add key="DirectServerMapping.Dog" value="192.168.10.1"/>
<add key="DirectServerMapping.Cat" value="192.168.10.2"/>
```

```
<add key="DirectServerMapping.Fish" value="192.168.10.3"/>
-->
```

4. Replace the text *Dog*, *Cat*, or *Fish* with the DNS alias of the RightFax server, and replace the example IP address with the IP or the server address of the RightFax server. Create a new line of code for each RightFax server to which users can connect, and delete the sample code.
5. Restart the IIS server.
6. Configure the web application.

Configuring IIS settings if web applications were not configured during installation

If you selected not to configure web settings while installing web applications, you must create these IIS settings yourself. You should have a working knowledge of Microsoft Internet Information Services.

RightFax FaxUtil Web and SharePoint Web Service by themselves do not require the additional setup as RightFax makes the changes when you select the feature.

To manually set up the web applications

1. Register **ASP.NET** as a Web Service Extension.
2. Create a new application for each RightFax web application you have installed. Configure each site with the following attributes:
 - Create a unique site alias. We recommend using the default names of RightFax\Admin (Web Admin), SecureDocs (RightFax Certified Delivery), and RightFax\User (RightFax FaxUtil Web)
 - The path to all RightFax Web content is installed during Setup to the \RightFax\WebApps folder, where each application has its own folder.
 - Set directory permissions to: **Read, Run Scripts, Execute,**

and Browse.

- Set Authentication to **Anonymous Authentication**.
 - Set ASP.NET to version 2.0 or later.
3. Enable **Active Server Pages, ASP.NET**, and **ISAPI Extensions** for all RightFax web sites.
 4. If using Certified Delivery, enable **Parent Paths** either for the entire Default Web Site, or for the SecureDocs virtual directory, which is created when Certified Delivery is installed.
 5. Restart the Default Web Site.

URL for RightFax web applications

In the following examples, *<servername>* is the machine name of the IIS server where each web application is installed.

Note Some RightFax web applications rely on cookies for information. Do not disable cookies on client machines.

Analytics

- <http://<servername>/RightFax/Analytics> or
- <https://<servername>/RightFax/Analytics>

Certified Delivery

- <http://<servername>/SecureDocs>

FaxUtil Web

- <http://<servername>/RightFax/User> or
- <https://<servername>/RightFax/User>

Servers

- `http://<servername>/RightFax/Server` or
- `https://<servername>/RightFax/Server`

Web Admin

- `http://<servername>/RightFax/Admin` or
- `https://<servername>/RightFax/Admin`

Installing a TLS/SSL certificate

You can install digital code signing certificates on the IIS server for secure sessions via HTTPS.

You have the following options for installing and uploading a certificate.

- Create a self-signed certificate.
- Use a certificate from a third-party certificate authority. The certificate must be X.509 format, base-64 encoded.
- Use a private certificate authority.

To create a self-signed certificate

1. In Web Admin, in the left pane, click **System**.
2. Under **Self-Signed Certificate**, click **Create**. The **Create Self-Signed Certificate** dialog box opens.
3. In the **Common name** box, enter the unique, fully qualified domain name of the IIS server.
4. Enter the identifying organizational information in the **Organization**, **Organizational unit**, **City/Locality**, **State/Province**, and **Country/Region** boxes, and then click **Ok**.
5. After the certificate is created, under **Security**, click **Change**. In the **Change Security** dialog box, select the certificate, and then select the **Use TLS/SSL** check box.

To use a certificate from a third-party certificate authority

1. In Web Admin, in the left pane, click **System**.
2. Under **Signing Request**, click **Create**. The **Create Signing Request** dialog box opens.
3. In the **Common name** box, enter the unique, fully qualified domain name of the IIS server.
4. Enter the identifying organizational information in the **Organization**, **Organizational unit**, **City/Locality**, **State/Province**, and **Country/Region** boxes, and then click **Ok**.
5. When you receive the third-party certificate, under **Certificate**, click **Upload**.
6. In the **Upload Certificate** dialog box, click **File name**, and select the third-party certificate. Select **Upload signed response**, and then click **Ok**.
7. Under **Security**, click **Change**. In the **Change Security** dialog box, select the certificate, and then select the **Use TLS/SSL** check box.

To use a private certificate authority

1. First, install the organization's root certificate on client computers.
2. In Web Admin, in the left pane, click **System**.
3. Under **Certificate**, click **Upload**. In the **Upload Certificate** dialog box, select **Upload root certificate**.
4. Click **File name**, and select the trusted root certificate, and then click **Ok**.
5. Second, create your signed response certificate. Under **Signing Request**, click **Create**. The **Create Signing Request** dialog box opens.
6. In the **Common name** box, enter the unique, fully qualified

domain name of the IIS server.

7. Enter the identifying organizational information in the **Organization**, **Organizational unit**, **City/Locality**, **State/Province**, and **Country/Region** boxes, and then click **Ok**.
8. Third, after the certificate is prepared by your private certificate authority, install the signed response certificate on the IIS server. Under **Certificate**, click **Upload**. In the **Upload Certificate** dialog box, click **File name**, and select the signed response certificate.
9. Select **Upload signed response**, and then click **Ok**.
10. Under **Security**, click **Change**. In the **Change Security** dialog box, select the root certificate, and then select the **Use TLS/SSL** check box.

Configuring RightFax Web Delivery

With RightFax Web Delivery users receive an email notification with a link to the fax image on the RightFax server instead of an email attachment. When the user clicks the link or pastes the URL into a browser window, the fax opens in FaxUtil Web. Users reply to, forward, and delete the faxes in FaxUtil Web.

You can set up Web Delivery for users in the network served by your RightFax server. The link and URL in the email notification do not work outside this network.

To implement Web Delivery

1. Set up Windows authentication, if needed.
2. Configure the server for Web Delivery. See the advanced server configuration settings for Web Delivery in the *RightFax Administrator Guide*.
3. Configure users to receive email notifications of received faxes. See [Configuring users to receive email notifications of faxes](#)

[below](#).

4. Configure notification messages. See [Configuring notification messages to include URLs](#) [below](#).

Configuring users to receive email notifications of faxes

To configure users to receive email notifications

Configure each user who receives email notification of a fax with a URL.

1. In Enterprise Fax Manager, double-click a user to edit. The **User Edit** dialog box opens.
2. On the **Inbound Routing** tab, in the **Routing Type** box, click **Fax Mailbox**.
3. On the **Notification** tab, in the **Method** box, select the email gateway you have installed, such as Microsoft Exchange.
4. In the **Notification Address/Info** box, type the user's email address.
5. To activate email notification of fax status, select one or more of the boxes under **Notification about outbound faxes** or **Notification about received faxes**. These faxes will be stored only on the RightFax server, and a link to the fax will be included in the notification email.

Configuring notification messages to include URLs

Some notification messages can include a URL link to the fax on the fax server. To configure a notification message to include a URL link, insert the appropriate variable in the custom message.

Example In the following new fax notification message ~6 will be replaced by the URL link: "You have received a fax; click here to view it ~6."

For detailed information about notification messages and their variable options, refer to the documentation for configuring custom messages and user messages in the *RightFax Administrator Guide*.

Chapter 5: Installing RightFax client applications

Using the following Windows-based RightFax client applications, users can send and receive faxes via the RightFax server and administrators can manage RightFax servers from remote computers:

- **Enterprise Fax Manager.** RightFax administrators use this application to manage all aspects of the RightFax servers on the network, such as managing users and other database objects, starting and stopping RightFax services, and monitoring server statistics.

Install Enterprise Fax Manager (EFM) on all computers used for managing the different aspects of the RightFax servers. For more information, see the *RightFax Administrator Guide*.

- **Print Driver.** With the Print Driver installed, users can fax documents from the applications in which they were created, such as Microsoft Word. The print driver also adds an icon (RightFax FaxCtrl Module) in the notification area on the Windows taskbar where users can configure fax options, run fax client applications, send faxes, and set the default printer.

Install Print Driver on all computers where RightFax users will send and receive faxes.

Adobe Reader Helper. For Adobe Reader 11 or later, select to perform a Custom install and then select the **Adobe Reader Helper** check box under **RightFax Print Driver**. This setting ensures that Adobe Reader can print to the RightFax Print Driver. It modifies the

Adobe Reader registry and requires that the Administrator performing the install has write access to the Windows registry on the client.

- **FaxUtil.** The fax mailbox tool used to send, receive, view, edit, and manage faxes.

FaxUtil should be installed on all computers where RightFax users will send and receive faxes, unless you will install alternative client applications such as FaxUtil Web, the client for Microsoft Outlook (see the *RightFax Connector for Microsoft Exchange Administrator Guide*), or the Lotus Notes client (see the *RightFax Lotus Notes Module Administrator Guide*).

- **Outlook Advanced Fax Extensions.** This application enables advanced fax functionality in your users' Outlook mailboxes, including the RightFax Outlook Add-In.

Install Outlook Advanced Fax Extensions on computers running Microsoft Outlook only if you will install the RightFax Gateway for Microsoft Exchange. For information about using the Advanced Fax Extensions, refer to the *RightFax Connector for Microsoft Exchange Administrator Guide*.

The client applications can be installed in the following languages:

- English
- French

- French Canadian
- German
- Italian
- Japanese
- Korean
- Portuguese
- Russian
- Simplified Chinese
- Spanish
- Turkish

RightFax client computer requirements

RightFax client applications for this version can be installed only on computers running the following operating systems:

- Microsoft Windows 10
- Microsoft Windows 8.1
- Microsoft Windows 8
- Microsoft Windows 7 x86 and x64 versions

Ensure that the operating system is installed with print drivers, and install the latest Windows updates.

The minimum hardware requirements for the client computer vary depending on the operating system you are running. See Microsoft documentation for Windows hardware requirements.

Additional client computer requirements

The following required components can be installed as part of the RightFax Setup:

- Crystal Reports 13.0 runtime (if using Enterprise Fax Manager)
- Microsoft Data Application
- Microsoft VSTO Tools 4.0 (if using Microsoft Outlook)
- Microsoft .NET Framework
- Microsoft Visual C++ Runtime Components

Upgrading the RightFax client applications

Newer versions of the RightFax client applications are not compatible with older versions of the RightFax server. Therefore upgrade all RightFax servers on your network that are accessed by fax users before you upgrade the client applications.

Before you begin

During the RightFax client installation, you will be prompted to install the OpenText Printers (RightFax PostScript Printer Driver). If you select to install the client without installing the PostScript printer driver, you must obtain a PCL or PostScript printer driver elsewhere.

Note Printer drivers installed by RightFax are not removed or overwritten by subsequent RightFax installs or uninstalls.

In addition to requiring a PCL or PostScript printer driver, all RightFax client computers must have network access to the HPFAX print queue on the RightFax server.

Decreasing FaxUtil load time

If the RightFax server contains a large number of users, FaxUtil can be noticeably slow to load.

To decrease load times, you can create registry entries on the client computer that prevent the records of some users from loading automatically when the user starts FaxUtil. The records will be loaded

only when a user action in FaxUtil requires it. You can create registry entries for the following:

- **Administered users.** Users that appear in the FaxUtil mailboxes of RightFax administrators and group monitors. When the client registry key LoadAdministeredUsers is set to 0, these users do not load automatically.
- **Unprotected users.** Users with the *Unprotected Mailbox* permission that appear in all FaxUtil user lists as though they granted everyone delegate access to their fax mailboxes. When the client registry key LoadUnprotectedUsers is set to 0, these users do not load automatically.

For RightFax administrators, it may be necessary to disable loading of both administered and unprotected users. For other FaxUtil users, it may be sufficient to disable the loading of unprotected users only. You must shut down FaxUtil before setting the registry keys. For more information, see the *RightFax Administrator Guide*.

To automatically disable user loading for new FaxUtil users

The LoadAdministeredUsers and LoadUnprotectedUsers values can also be applied for all new FaxUtil users on a particular computer. Modify the Windows Registry to add the REG_DWORD values described above to HKEY_LOCAL_MACHINE\Software\RightFAX Client\FUW32 (x64: HKEY_LOCAL_MACHINE\Software\Wow6432Node\RightFax\Faxserver). When users run FaxUtil for the first time, they will automatically be configured to disable the loading of users.

Disabling the "Remember password" option for FaxUtil

The FaxUtil login window includes a "Remember password" option. You can disable this option to prevent users from inadvertently saving their account credentials on a centralized workstation.

You can manually add registry key DisableRememberPassword to HKEY_LOCAL_MACHINE\Software\RightFAX Client\FUW32 or use a silent install to do so. For more information, see [Creating an automated client install or uninstall on the next page](#).

To set the DisableRememberPassword keyword

Type: REG_DWORD

Default: 00000001 (The "Remember password" option is disabled)

Installing the client applications

The RightFax client applications are installed using the setup program located in the Client folder of the RightFax Product Suite. Do not use the setup.exe that you used to install the server software. Depending on the settings you chose, you will be asked to reboot your machine to complete the installation.

To install the RightFax client applications

1. Log on to the computer using a Windows account that is a member of the domain and local Administrators group.
2. From the Client folder, run **Setup.exe**. RightFax client applications setup requires Microsoft .NET Framework. If this software is not installed on your system, Setup prompts you to install it. To install, click **OK**. To cancel Setup and install .NET Framework yourself, click **Cancel**.
3. Review the welcome page, and then click **Next**.
4. Read and accept the license agreement, and then click **Next**.
5. Select one of the following installation options, and then click **Next**:
 - **Typical Client.** This includes FaxUtil, RightFax print driver, and Outlook fax extensions.
 - **Admin Client.** This includes Enterprise Fax Manager and

FaxUtil.

- **Custom.** Select this option to select the features to install.

6. The **Preview requirements for selected features list** shows third-party software that is installed (OK), will be installed automatically (Must Install), or will require your input during installation (Requires Info). Click **Next**.
7. To apply your settings and install required third-party software, click **Apply**.
8. When prompted to install the OpenText Printers (RightFax PostScript Printer Driver), click **Install** to install the PostScript driver and create the RightFax Control Printer.

To not install the PostScript driver, click **Don't Install**, and then click **OK**. The client software installation will proceed despite the error messages. You may have to create a RightFax Fax Printer. See the *RightFax Administrator Guide*.
9. On the **Ready to install** page, click **Next**.
10. Choose your RightFax installation folder, and then click **Next**.
11. To install, click **Apply**. Setup installs the selected features of the RightFax Product Suite. This will take several minutes. On the **Ready to configure** page, click **Next**.
12. In the **RightFax Server Name** box, type the name of your RightFax server, and then click **Next**.
13. To complete setup, click **Apply**.
14. When setup is complete, you can click **View Installation Log** to view a log of the installation steps.

Click **Finish** to close the RightFax Product Suite Setup.

Creating an automated client install or uninstall

If your network is equipped with Microsoft Systems Management Server (SMS), LanDesk, or a similar network management system, you can automate the installation of RightFax client software using an SMS script or equivalent command. The RightFax client installation program uses Microsoft Windows Installer (Msiexec.exe), which can force the installation to complete without any additional user input. Refer to Microsoft documentation for detailed information on running the Msiexec.exe with a command.

Before you begin a command line installation

Before the command line installation,

- Verify that all prerequisites are installed. See [RightFax client computer requirements on page 27](#). For additional information about installing these packages, contact Microsoft.
- Installation of the RightFax PostScript Printer Driver (OpenText Printers) requires responding to a pop-up window. To prevent this, install the RightFax PostScript Printer Driver manually, for example using rundll.exe:

```
C:\Windows\System32\rundll32.exe" printui.dll
PrintUIEntry /ia /m "RightFax PostScript" /f
%RFInstall%\Prereqs\Drivers\rfps.inf
```

- For client upgrades, perform a silent uninstall before the silent install.

Note The silent uninstall will not uninstall the prerequisites.

Installing the print processor for 64-bit operating systems

For client machines running 64-bit operating systems, install the RightFax Print Processor x64.msi before installing the RightFax client.

Caution Do not install the RightFax Print Processor x64.msi on 32-bit operating systems.

The RightFax print processor installation uses the following msixec switches:

Option	Parameter	Description
/i	"MSI name and path"	Install the specified print processor. Example /i"RightFax Print Processor x64.msi"
/x	"MSI name and path"	Uninstall the specified print processor. Example /x"RightFax Print Processor x64.msi"
/q	b	Display a basic user interface (progress indicators and completion message).
	n	Display no user interface. Example /qn
	r	Display a reduced user interface (completion message only).
	f	Display the full user interface (prompt for information, show progress indicators and completion message).

In addition, you can use any of the following custom RightFax actions:

Option	Parameter	Description
INSTALLDIR=	"folder name and path"	The destination folder on the server where the RightFax software is installed. The value must end with a backslash (\). The default is C:\program files\rightfax\ Example INSTALLDIR="C:\Program Files\RightFax\"
RUNFROMSETUP=	1	Do not run the installation from setup. Example RUNFROMSETUP=1

Example A typical command line to install the print processor on a 64-bit client machine:

```
msiexec.exe /i "RightFax Print Processor x64.msi"
/qn RUNFROMSETUP=1 INSTALLDIR="C:\Program Files
(x86)\RightFax\"
```

Installing the RightFax client

After you have installed the prerequisite files and (for 64-bit clients only) the print processor, you can install the RightFax client. The following tables describe the command line options and properties you can use.

The RightFax client installation uses the following msixec switches:

Option	Parameter	Description
/i	"MSI name and path"	Install the specified client. Example /i"RightFax Product Suite - Client.msi"
/x	"MSI name and path"	Uninstall the specified client. Example /x"RightFax Product Suite - Client.msi"

Option	Parameter	Description
/q	b	Display a basic user interface (progress indicators and completion message).
	n	Display no user interface. Example /qn
	r	Display a reduced user interface (completion message only).
	f	Display the full user interface (prompt for information, show progress indicators and completion message).

In addition, you can use any of the following custom RightFax actions:

Option	Parameter	Description
/log	<i>"file name and path"</i>	Write logging information to the specified log file. Example /log "C:\RFInst.log"
ADDLOCAL=	FaxUtil FaxCtrl EFM OutlookAdvancedAddIn (for Outlook 2010)	Install the specified local components. Separate parameters by commas and enclose in quotes. Example ADDLOCAL="FaxUtil,FaxCtrl,EFM"
CONFIGUREADOBEREADER=	1	Configure Adobe Reader. This setting modifies the Adobe Reader registry and requires that the account performing the install has write access to the Windows registry on the client.

Option	Parameter	Description
CONFIGUREFAXCTRL=	1	Configure and launch faxctrl. Example CONFIGUREFAXCTRL=1
	2	Remove faxctrl and its printer.
CONFIGUREFAXUTIL=	1	Configure and launch FaxUtil. Example CONFIGUREFAXUTIL=1
	2	Remove FaxUtil.
CONFIGUREOUTLOOKCLIENT=	1	Configure and launch the Outlook client.
	2	Remove the Outlook client.
HIDESAVEPWD=	0	Make the "Remember password" option available in the FaxUtil login window. Example HIDESAVEPWD=1
	1	Disable the "Remember password" option in the FaxUtil login window.
INSTALLDIR=	<i>"folder name and path"</i>	The destination folder on the server where the RightFax software will be installed. The value must end with a backslash (\). The default is C:\program files\rightfax\ Example INSTALLDIR="C:\Program Files\RightFax\"
NAMESPACE=	<i>namespace</i>	The namespace on the RightFax server. Example NAMESPACE=RFAX

Option	Parameter	Description
NETID=	0	Set the FaxCtrl user to the specified user.
SPECIFIEDUSER=	<i>username</i>	
NETID=	1	Set the FaxCtrl user to Network ID.
	2	Set the FaxCtrl user to NTAUTH.
REBOOT=	Force	Always prompt for a restart at the end of the installation. Example REBOOT=Force
	Suppress	Prompt for a restart at the end of the installation.
	ReallySuppress	Suppress all restarts and restart prompts initiated by ForceReboot during the installation.
RFSERVERNAME=	<i>RightFax server name</i>	The RightFax server the clients, IIS, or remote services will connect to. <ul style="list-style-type: none"> For clients, this is the server the client will open when first installed. For IIS and remote services, this is the server to connect to for configuration info or settings. Example RFSERVERNAME=<myserver name>
RUNBYRIGHTFAXSETUP=	2	Do not use setup.exe. This is a silent installation. Example RUNBYRIGHTFAXSETUP=2

Examples of a silent install and uninstall

Following are examples of common operations that can be performed. Note that these examples wrap to fit on this page. The command line does not include a carriage return.

Example A typical command line to perform a silent install on a client machine:

```
msiexec.exe /i "RightFax Product Suite - Client.msi" /qn REBOOT=ReallySuppress RUNBYRIGHTFAXSETUP=2 CONFIGUREFAXCTRL=1 CONFIGUREOUTLOOKCLIENT=1 CONFIGUREADDOBEREADER=1 ADDLOCAL="FaxUtil,FaxCtrl,EFM,OutlookAdvancedAddIn" INSTALLDIR="C:\Program Files\RightFax" RFSERVERNAME=<myservername> NAMESPACE=RFAX
```

Example A typical command line to perform a silent uninstall on a client machine:

```
msiexec.exe /x "RightFax Product Suite - Client.msi" RUNBYRIGHTFAXSETUP=2 CONFIGUREFAXCTRL=2 /log "C:\RFUnInstall.log" /qb
```

Example A typical command line to uninstall (not silent):

```
msiexec.exe /x "RightFax Product Suite - Client.msi" RUNBYRIGHTFAXSETUP=2 CONFIGUREFAXCTRL=2 /log "C:\RFUnInstall.log"
```

Removing RightFax registry entries

If you remove the RightFax software using the silent uninstall, RightFax registry entries are not automatically removed. If you've manually entered any of the following keys, you'll need to manually remove them from each client machine:

HKEY_CLASSES_ROOT (HKCR)

HKCR*RightFax*.*

HKEY_CURRENT_USER (HKCU)

HKCU\Printers\DevModePerUser\RightFax Fax Printer

HKCU\Software\Microsoft\Windows\ShellNoRoam\
MUICache\<RightFax Directory>\FaxCtrl.exe

HKCU\Software\Microsoft\Windows NT\CurrentVersion\
Devices\RightFax Fax Printer

HKCU\Software\Microsoft\Windows NT\CurrentVersion\
PrinterPorts\RightFax Fax Printer

HKCU\Software\Microsoft\Windows NT\CurrentVersion\
Windows\Device

HKCU\Software\RightFax Client\

HKEY_LOCAL_MACHINE (HKLM)

HKLM\Software\Classes*RightFax*.*

HKLM\Software\Microsoft\Exchange\Client\Extensions\
OpenTextRightFax Client Extension

HKLM\Software\Microsoft\Windows\CurrentVersion\
Installer\Folders*RightFax*.*

HKLM\Software\Microsoft\Windows\CurrentVersion\
Installer\UserData*RightFax*.*

HKLM\Software\Microsoft\Windows\CurrentVersion\
Run\RightFAX Print-to-Fax Driver

HKLM\Software\Microsoft\Windows\CurrentVersion\
Uninstall\<find component GUIDs for RightFax>

HKLM\Software\Microsoft\Windows NT\CurrentVersion\
Ports\<C:\Documents and Settings\
All Users\Application Data\RightFax\SpoolJob>

HKLM\Software\Microsoft\Windows NT\CurrentVersion\
Print\Printers\RightFax Fax Printer\

HKLM\Software\RightFax Client\

HKLM\System\ControlSet001\Control\Print\Printers\
RightFax Fax Printer\

HKLM\System\CurrentControlSet\Control\Print\Printers\
RightFax Fax Printer\

HEKY_USERS (HKU)

HKU*.*\RightFax Fax Printer

HKU*.*\RightFax Fax Printer\

HKU*.*\RightFax Client\

Installing and configuring the RightFax client for remote use

Using Remote Desktop Services on the Windows server you can run RightFax applications remotely, thus making a single installation of the RightFax client available to an unlimited number of simultaneous users.

Install the RightFax client on a supported version of Windows Server and select the RightFax applications to run as remote applications.

This installation supports, but does not require, Citrix XenApp 5.0 or later.

Note Print-to-fax can only be used from published applications opened within the same user session as FaxCtrl.

Another option is to make the Windows server's full desktop available. To set up this option, refer to your Windows documentation.

To install and configure the RightFax client for remote use

1. Log on to the Windows server using an account with administrative access.
2. In the **Command Prompt** window, type **change user /install**.
3. Install the RightFax client application according to the instructions in [Installing the client applications on page 28](#).

4. In the **Command Prompt** window, type **change user /execute**.
5. Open **RemoteApp Manager**.
6. Depending on the version of the Windows Server do one of the following:
 - In Windows Server 2012 R2 and later, under **RemoteApps program**, on the **Task** menu, click **Publish RemoteApp Programs**.
 - In earlier server versions, on the **Action** menu, click **Add RemoteApp Programs**, and then click **Next**.
7. In the **RemoteApps Programs** list, select the check box next to each RightFax client application you wish to make available over Remote Desktop Services. When finished, click **Next**.
8. Review your application settings and click **Finish**.

Troubleshooting the client installation and configuration

The following table lists the most common error messages that appear after installing the RightFax client applications with the probable causes and solutions.

Error or error message	Possible solutions
The server is unavailable	Verify that the RightFax Database module and RightFax RPC Server module services are running on the RightFax server.

Error or error message	Possible solutions
The common network protocol being used is not routed between LAN segments	<ul style="list-style-type: none"> • Try running a client on the same LAN segment as that of the server. Modify the appropriate bridge or routers to route the proper protocols. • Update the server and clients to use a routed protocol. • If the server machine has multiple network adapters installed, try removing all but one of the adapters and allow other routers on the network to route the packets.
The Windows server running RightFax is not configured to support NetWare clients	Verify that the Windows server is running gateway services for NetWare and the SAP Agent. Verify that the IPX/SPX transport is properly configured using the Network program in Windows Control Panel.
The NetWare clients are using different frame types than the Windows NT server	On the client computer, the frame type is in the Link Driver section of the NET.CFG. On the Windows server, the frame type is in the configuration of the NWLink IPX/SPX transport object in the Network program in Windows Control Panel. If the Windows server supports more than one frame type, verify that the internal network number is a unique, non-zero number and that the Auto Frame Type Detection is disabled.
There is no SAP agent computer accessible to both the client and server machines	<ul style="list-style-type: none"> • Verify that the client and server machines can log on to a NetWare server. Verify that the SAP Agent is installed on the Windows server. • Verify that the client and server are on the same network segment and that the router between the segments is configured to transport SAP type 0x640 messages.

Error or error message	Possible solutions
User ID was not found in database	RightFax has its own list of fax users and the user ID specified is not on that list. You can use Enterprise Fax Manager to add users, either individually or by reading them from the domain or file server. When RightFax is first installed, the users "Administrator" and "Default" are loaded. Initially, neither user ID has a password.
The password supplied is incorrect	Use the correct password for the user specified. If the user has lost his password, a RightFax administrator can re-set the password in Enterprise Fax Manager.
The RightFax fax addressing dialog box opens, but nothing appears in FaxUtil	You are using a different user ID than expected. Check the RightFax Client program in Control Panel to see what user ID the software is using.

Chapter 6: Installing and configuring the Shared Services Module

You can multiply server capacity by combining two or more RightFax servers in a Shared Services environment. Multiple RightFax servers are installed and configured to share a database and corresponding resource folders. The benefits of the Shared Services Module include:

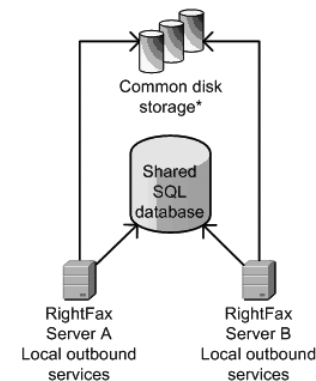
- Increased throughput for sending faxes due to internal load sharing among RightFax services.
- Multiple RightFax servers share all SQL stored data (for example users, delegates, phonebook entries, distribution lists, and document data such as fax status).
- All received faxes are stored on the SQL server and are available to all clients in the network.
- Redundant data is eliminated thus saving storage space.
- Remote RightFax services can be shared by multiple machines to balance the workload from many RightFax clients.

Note This feature is only available on RightFax Enterprise Servers and must be purchased separately.

Server topology

The following examples describe some basic shared configurations.

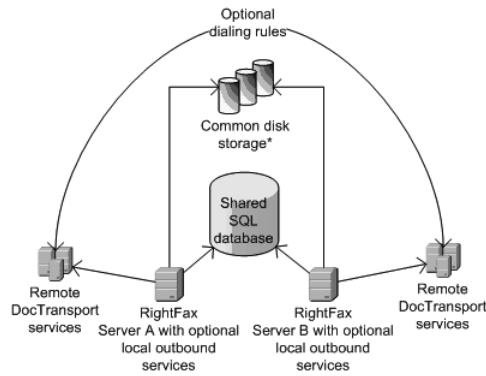
Example 1



*Common disk storage:
 - SAN
 - Network share on file server
 - Network access to a local drive on one of the RightFax servers

- Two RightFax servers share a SQL database.
- Common disk storage is used to share RightFax resources.

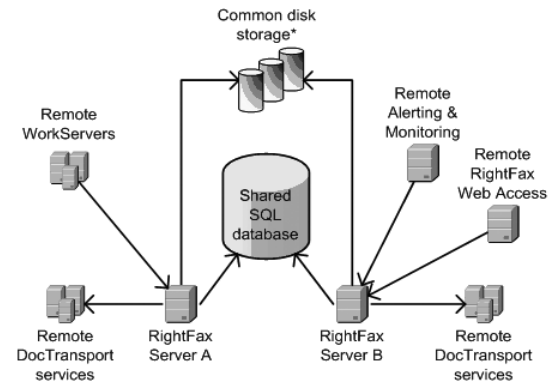
Example 2



*Common disk storage:
 - SAN
 - Network share on file server
 - Network access to a local drive on one of the RightFax servers

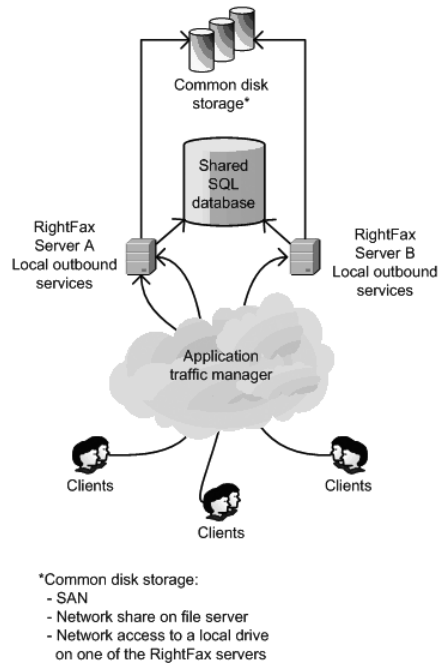
- Two RightFax servers share a SQL database.
- Common disk storage is used to store shared RightFax resources.
- DocTransport services are located on remote servers to off-load processing from the RightFax servers.
- Dialing rules specify the DocTransport services and RightFax servers from which documents will be sent.

Example 3



*Common disk storage:
 - SAN
 - Network share on file server
 - Network access to a local drive on one of the RightFax servers

- Two RightFax servers share a SQL database.
- Common disk storage is used to store shared RightFax resources.
- DocTransport and WorkServer services are located on remote servers to off-load processing from the RightFax servers.
- Dialing rules specify the DocTransport services and RightFax servers from which documents will be sent.

Example 4

- Two RightFax servers share a SQL database.
- Common disk storage is used to store shared RightFax resources.
- An application traffic manager, such as BIG IP, directs RightFax client traffic to available RightFax servers.

Geographic distribution of services

Although servers can be geographically dispersed over a wide-area network, this configuration has not been tested by OpenText.

System requirements

The requirements for RightFax Server environments are described in [Hardware and software requirements on page 6](#). In addition, the Shared Services environment requires:

- A minimum of two RightFax servers capable of network communication. Each must be licensed for the Shared Services Module.
- A maximum of 12 RightFax servers joined to the Shared Services environment. Each must be licensed for the Shared Services Module.
- An existing SQL Server. SQL Express is not supported.

Note that in a Shared Services environment:

- IP v6 environments must use host names to resolve IP addresses. IP v6 IP addresses are not supported.
- All WorkServers used for printing must have the same local printers installed, each with the exact same name on all servers. Otherwise, Windows GDI printing may not work as expected.

Installing RightFax servers to share a SQL database

Note the following when installing multiple RightFax servers that share a SQL database:

- If you are upgrading, print or make a copy of the Windows registry key HKEY_LOCAL_MACHINE\ Software\RightFax so that you have a copy of any changes that were made to customize the system. In a typical shared database configuration, customization should be identical on each RightFax server.
- Install the RightFax server on each RightFax server computer.

When installing the first server, select to create a new database, for all subsequent servers, select to add to a Shared Services database.

- After installing the RightFax server software, each server in a Shared Services environment must be configured to have a DocTransport for outbound faxing or dialing rules that specify a fax be sent from a specific server. For more information about this and other configurations, see the *RightFax Administrator Guide*.

To install RightFax server software in a Shared Services environment

1. Log on to the computer using a Windows account that is a member of the domain and local Administrators group.
2. Run RightFax **Setup.exe**.
3. Review the welcome screen, and then click **Next**.
4. Read and accept the license agreement, and then click **Next**.
5. Select one of the following installation options, and then click **Next**:
 - **Typical RightFax Server**. This includes all core server components, RightFax Enterprise Fax Manager and FaxUtil. If this computer will not use FoIP or fax boards, you can clear the **Include fax board and FOIP drivers** check box.
 - **Custom**. Select this option to manually select the components to install. The initial selections are those for the Typical RightFax Server.
6. The **Preview requirements for selected features** list shows third-party software that is installed (OK), will be installed automatically (Must Install), or will require your input during installation (Requires Info). Click **Next**.
7. Click **Use an existing SQL Server**, and then click **Next**. This

option adds a RightFax database instance to an existing SQL server running on your network

8. RightFax requires the following TCP ports: 10520, 10521, and 10522 (RPC (API and clients)), 10062 (DocTransport), 34001, 34987, and 34988 (Remoting), and 36363 (Licensing). To prevent other applications from using these ports, click **Reserve ports**, and then click **Next**.
 9. To apply your settings and install required third-party software, click **Apply**. This will take several minutes. On the **Ready to install** page, click **Next**.
 10. Choose your **Installation Folder**, and then click **Next**.
 11. To install, click **Apply**. Setup installs the RightFax Product Suite. This will take several minutes. On the **Ready to configure** page, click **Next**, or click **Stop** to do so at a later time. When you run Setup later, it will resume at this point.
 12. On the **Select the Windows account for services** page, select the service account, and then click **Next**.
 - To use the local system account, click **Local System Account**.
 - To enter a different Windows account, click **This Account**, and then enter the account and its credentials. The account must:
 - Be a member of the local administrators group
 - Have the right to log on as a service on the local computer.
- To look up a user account, click **Browse**.
- To verify the account credentials, click **Test Account**.
13. Click the appropriate database option for the RightFax server you are installing, and then click **Next**.

- For the first RightFax server, click **Create New RightFax Database**.
 - For all subsequent installations, click **Add to Shared Services Database**. When prompted, point the install to the SQL database that you defined for the first server.
14. On the **Define a SQL connection for Setup** page, enter the account you set up to use during setup. Make the following entries, and then click **Next**.
 - a. In the **Server name** box, to look up servers, click (...).

Note If your existing SQL server uses a port number other than the default of 1433, you must specify the port number during Setup using the following syntax:
 SQLServer,55123 or
 SQLServer\MyInstance,55123
 - b. In the **Authentication** box, select the authentication type.
 - c. In the **Account** box, enter the account that will create the RightFax database. See [Account permissions for SQL connections on page 8](#).
 - d. For the first RightFax server, click **Next** to not change the name of the RightFax database. To change the name, in the **Database** box, type a new name.
 15. On the **Define a SQL connection for RightFax services** page, enter the account you set up for normal operations of RightFax. See [Account permissions for SQL connections on page 8](#).
 - a. In the **Authentication** box, select the authentication type. If you are logged in as that user, select **Windows Authentication**.
 - b. In the **Account** box, enter the account.

16. On the **Shared Services Data Locations** page, you can specify the location of the shared database and MSMQ Server. If you want to skip this step, you can enter these locations at a later time.
17. On the **RightFax Activation** page, click **Launch Licensing Utility** to activate RightFax and optional modules. For more information, see [Activating RightFax on page 15](#).
18. To complete Setup, click **Apply**, and then click **Close**.

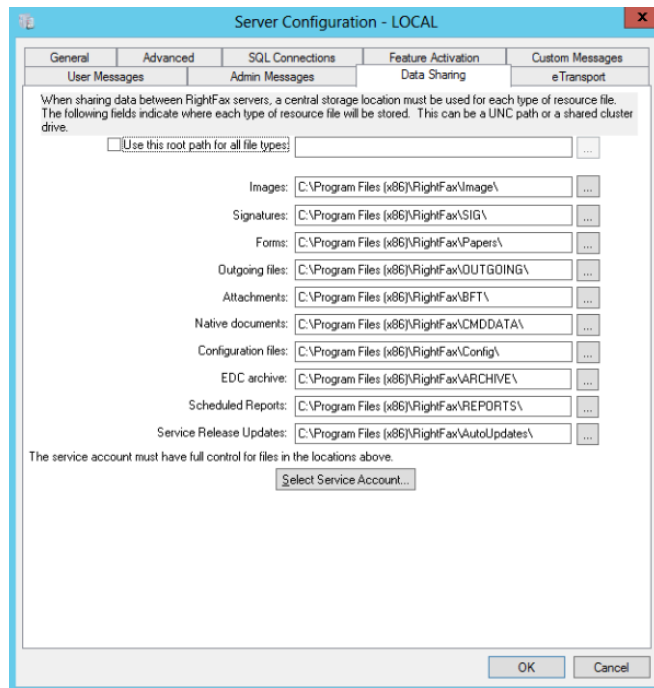
Configuring data sharing

The Data Sharing tab shows the folders that the server or servers use to store the specified file types. In a Shared Services system, these are the folders that must be shared among all its RightFax servers. For information about installing the Shared Services Module, see the *RightFax Installation Guide*.

Each of these folders can be located in common disk storage, such as a storage area network (SAN), network share on a file server, or network access to a local drive on one of the RightFax servers. The folders must be accessible to all servers in a shared configuration.

To configure data sharing

1. In the **Server Configuration** window, click the **Data Sharing** tab.



- Specify the file paths for the resource files. Select the **Use this root path for all file types** check box to use a single path for all file types or select for each file type the folder. The following table lists and describes the data folders.

Field	Folder Name	Description
Images	IMAGE	Contains sent and received faxes stored as compressed graphic image files.
Signatures	SIG	Contains graphic images of user signatures for placement on faxes.

Field	Folder Name	Description
Forms	PAPERS	Contains the names of overlay form files.
Outgoing files	OUTGOING	Contains outbound files from all submission methods that are held while being processed into fax images, such as temporary fax queue pool files.
Attachments	BFT	Contains text files created by the OCR process. The folder also temporarily stores attachments for faxes sent from the RightFax Web API.
Native documents	CMDDATA	Contains transaction files for each fax sent via email or via SecureDocs.
Configuration files	Config	Contains the files used to control fax conversions. You must maintain all customizations and custom files in this location.
EDC archive	ARCHIVE	Contains the job files that EDC processes for archiving.
Scheduled reports	REPORTS	Contains the reports that are generated on a schedule set in EFM.

Field	Folder Name	Description
Service Release Updates	AutoUpdates	<p>RightFax monitors this folder in five minute intervals for a new service release (SR) update file to start an automated update of all servers in a Shared Services system.</p> <p>When you place a downloaded SR executable file into the folder and the version is higher than the installed version, RightFax starts the update.</p>

- Share permissions must be given to the account used to run the Server module and DocTransport module. This account must have full control of these folders. To specify this account, click **Select Service Account**. See [Selecting a service account below](#).
- Click **OK**, and then restart remote WorkServers if you updated a shared location.

Selecting a service account

RightFax services log on to the network using a Windows user account that you specify. The user account for a service must have access to all the network resources that the tasks managed by that service require. This account is initially selected during the RightFax installation.

To change service accounts, you can set the account for the Server Service and then copy these settings to the other services.

To view service account settings

- Click **Select Service Account**. The **Service Account Editor** window opens, showing for each service the currently defined

account. The default is to use one of the predefined accounts.

RightFax Service Account Editor

You can use a separate account for each service or a single account for multiple services.

Server Service Account

DocTransport Service Account

Workservers Service Account

Gateways Service Account

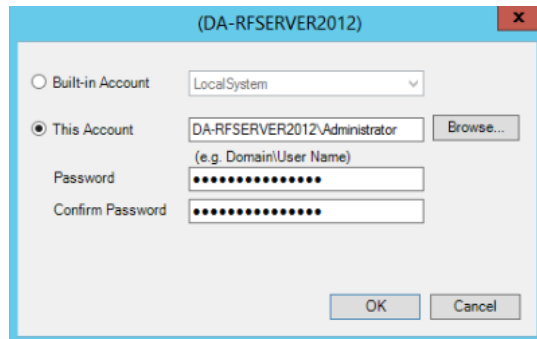
Remoting Service Account

RightFax Conversion Engine Service Account

Worker Host Service Account

To change service accounts

- In the **Service Account Editor** dialog box, next to the account you want to change, click **Modify**. To define account settings once and then copy them to all other services, first modify the Server Service Account.



2. Do one of the following:
 - Click **Built-in Account**, select an account from the list, and then click **OK**.
 - Click **This Account**, type or browse for an account, and then click **OK**:
 - Type a new service account name in the format *domain\username* or *machine\username*. If the domain name is longer than 15 characters, click **Browse** instead.
- Caution** Typing a domain name longer than 15 characters may result in errors in services performed by the WorkServer.
- Click **Browse**. For information about the **Select User** dialog, see your Windows server documentation.
 3. As needed enter the case-sensitive password for the selected user account in both the **Password** and **Confirm Password** boxes, and then click **OK**.
 4. To copy the Server Service account information to the other services, click **Copy to all**.
 5. Click **OK**.

Configuring remote services

The following RightFax services can be installed on remote computers.

- **DocTransport** specifies the methods for transmitting documents, and converts and copies received documents to the Image directory.
- **WorkServer** performs processor-intensive functions such as cover sheet generation, print-to-fax conversion, and optical character recognition.

To support remote fax board services, the DocTransport module must be installed on a remote computer. The DocTransport module must be defined on each RightFax server. DocTransport modules (whether local or remote) are discrete and should not be shared. A remote DocTransport module can connect to one RightFax server only. For information about installing and configuring Remote DocTransports see the *RightFax Administrator Guide*.

A remote WorkServer can connect to one RightFax server. It cannot access multiple RightFax servers. Refer to example 2 in [Server topology on page 36](#) for a basic illustration of remote services.

Using dialing rules

A fax can be sent by any server using the shared database, not necessarily the one that received the job. Use dialing rules to specify that a fax be sent from a specific server. For more information about using dialing rules, see the *RightFax Administrator Guide*.

Refer to [Example 3 on page 37](#) for a basic illustration.

Copying service configuration settings to other nodes

In a Shared Services environment, you can create service configuration settings on one server, save them, and then copy them to the other

nodes. The following table shows the services and settings that will be copied.

Service	Settings copied
Conversion Engine	All settings, except service account and logging settings.
Integration Module	All settings, except event log level settings.
Remoting Service	All settings, except logging settings.
Server Module	All settings, except event log level, exclude this server, and service account settings.
Sync Module	All settings, except logging settings.

To copy the configuration settings of a service to other nodes

1. In EFM, in the left pane, expand the server, and then click **Services**.
2. In the list of services in the right pane, right-click the name of the service, and then click **Copy Settings to Other Nodes**.
3. The other nodes in your Shared Services environment appear in the **Copy the current settings to these shared services nodes** list.
4. Clear the check boxes of those nodes to which the settings should not be copied, and then click **OK**.

Chapter 7: Performing daily maintenance

Maintenance is a collection of daily tasks that help maintain an efficient SQL database. Maintenance tasks can be run by any server on a first come first serve basis.

Aging and purging

The aging process evaluates the age of each fax on the RightFax server. When a fax exceeds the age limit, it is marked for deletion. The marked faxes are later deleted by the purge process. Until then, the marked faxes can be recovered and can be queried for reporting purposes. The age limit for faxes is defined for each RightFax user group in Enterprise Fax Manager.

The purging process removes faxes from the SQL database that are both marked for deletion and have reached the configured limit. The purging process deletes the corresponding image files that are stored in the Image directories on the RightFax servers in the shared configuration.

To set up automatic fax aging, see the *RightFax Administrator Guide*. To run the fax aging utility program, see *RightFax Administrative Utilities Guide*.

Orphan scanning

The orphan process scans the \RightFax\Image directories on the RightFax servers for fax image files that are not referenced by any document or library document in the SQL database. Also, it identifies faxes that do not have images. The image files are called orphans

because RightFax has no record of their existence and cannot access them.

To manually delete orphan image files from the RightFax server or to create a list of faxes that do not have images, use the Orphan.exe utility. See the *RightFax Administrative Utilities Guide*.

Recovery

The RightFax event queue is stored in the SQL database on the SQL server, and it is shared among RightFax servers. The queue is persistent, that is, it retains its objects and values if the RightFax Server module stops. If one of the RightFax Server modules in the shared configuration stops, it is not necessary to rebuild the queue. The recovery process is performed daily on the RightFax servers as a fail safe.

Configuring the maintenance processes

Each maintenance process is an event that is stored in the event queue on the SQL server. When a maintenance event is queued, one RightFax server will perform maintenance on a first-come, first-served basis. Aging is performed before purging.

The default time for maintenance is 2 AM. The time is set in the Server Module Configuration on the Advanced tab.

Viewing the maintenance logs

Logs of the maintenance process are stored in the \RightFax\Database folder on the server that performed the process. These logs are:

- MaintAgingAndPurging.log
- MaintOrphanScan.log
- MaintDocRecovery.log

Chapter 8: Installing RightFax in a Windows Server cluster

Caution The RightFax server software architecture is not fully cluster-aware with replayable transaction logs. This can lead to loss of in-process data during a cluster failover, such as in-process faxes failing conversion, fax conversions being delayed, lost or unrecoverable.

The following instructions describe how to install RightFax on a Microsoft Windows 2012 or 2012 R2 Server cluster. You must be familiar with clustering concepts, configuration, operation, and the Microsoft Cluster Service (MSCS) before beginning this procedure.

System requirements

The following Windows cluster services are supported:

- Microsoft Windows Server 2016 Failover Clustering
- Microsoft Windows Server 2012 and Windows Server 2012 R2 Failover Clustering

Cluster servers

Before you install RightFax in a Windows Server 2012 or 2012 R2 cluster environment, configure two servers with the following components:

- Microsoft Cluster Service (MSCS.)
- Windows Application Server role with Distributed Transaction

Coordinator (MSDTC) and Message Queuing (MSMQ) installed.

Ensure that both servers pass the Microsoft Cluster Validation tests.

For high availability printing with Windows Server 2012 and 2012 R2, configure two hyper-V machines in high availability mode.

Configuring the cluster group

Create a new cluster group specifically for RightFax resources. All of the clustered RightFax resources must be maintained in a single cluster group to provide failover protection.

This group must include:

- A disk resource
- A server name resource
- An IP address resource

SQL server

Install a local or remote Microsoft SQL Server that is supported by RightFax and includes high availability functionality. Set the SQL server to Mixed Mode, with SQL authentication enabled.

Important If SQL Server is installed on the same cluster, add the RightFax resources to the cluster group containing the SQL instance. For each RightFax resource, create a dependency upon the SQL instance. This will prevent the RightFax services from attempting to start if the SQL instance is unavailable.

For more information about SQL requirements for RightFax, see [SQL requirements and information on page 7](#).

Remote DocTransport servers

Phone lines and T1 lines cannot be clustered and will not fail over in the event of a hardware problem. Install the fax boards on remote DocTransport servers. For more information about remote DocTransports, see the *RightFax Administrator Guide*.

Optional components

If your organization uses the optional RightFax Integration Module, install Print Services for Unix. For more information, see [Configuring the Integration module in a Windows Server cluster on page 55](#).

Installing RightFax onto the cluster

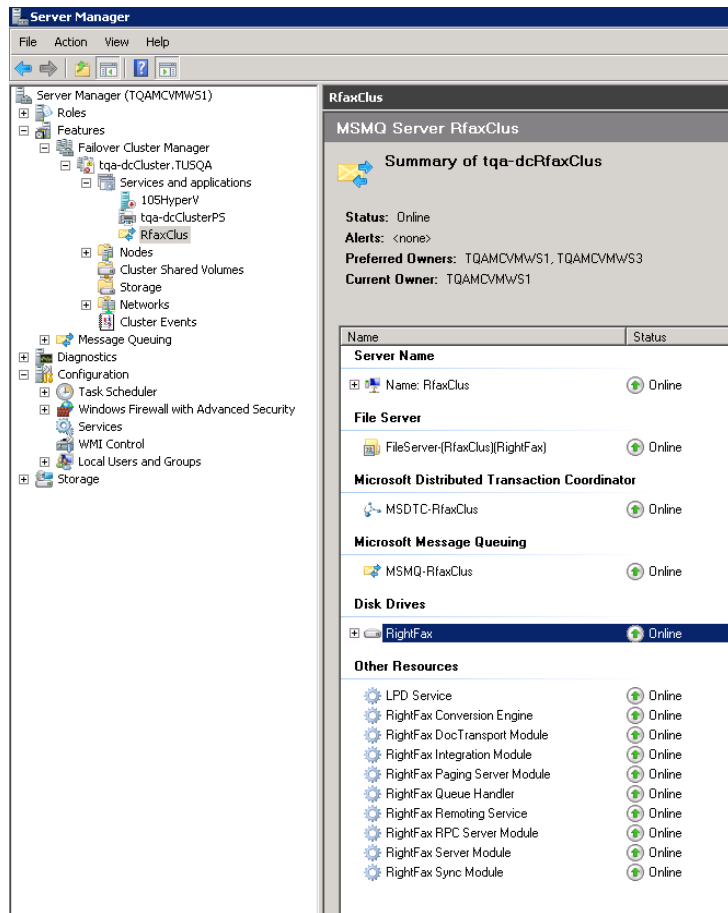
Installing RightFax onto a cluster consists of:

- Configuring the MSMQ cluster resource.
- Configuring the MSDTC cluster resource.
- Installing the RightFax server software on each node.
- Configuring RightFax services to be cluster resources.
- Setting up two HyperV virtual machines before installing the printers for high availability printing in a Windows 2012 or 2012 R2 cluster.
- Providing the cluster name to the RightFax services.
- Installing the remote DocTransports.
- Creating the MSMQ queues.

The term RightFax group stands for the network name of the cluster group containing the RightFax resources.

To run Failover Cluster Manager

1. On **Start** menu, click **Administrative Tools**, and then click **Server Manager**.
2. Under **Features** in the left pane, find Failover Cluster Manager.



To create cluster resources for required networking services

- Run Failover Cluster Manager and then do the following:
 - In Windows 2012 or 2012 R2, right-click **Roles**, and then click **Configure Role**.
- On the **Before you Begin** page of the **High Availability Wizard**, click **Next**.

- On the **Select Service or Application** page, select **Message Queuing**, and then click **Next**.
- On the **Client Access Point** page, type a name for the RightFax group, and then click **Next**. Client software will use this name to access the cluster.
- On the **Select Storage** page, select the storage device where the RightFax software will be installed, click **Next**, and complete the remaining prompts of the wizard.
- In Failover Cluster Manager, right-click the name of the RightFax group, click **Add a Resource**, and then click **Add Distributed Transaction Coordinator**.
- Double-click the MSDTC resource.
- On the **Dependencies** tab, select the disk drive resource and the RightFax group name, and then click **OK**.
- In Failover Cluster Manager, right-click the cluster application, and then click **Properties**.
- Confirm that both cluster nodes are listed in the **Possible Owners** box, and then click **OK**.
- Bring all resources online.

To verify failover and fallback

- In Failover Cluster Manager, right-click the RightFax group, and then click **Properties**. Confirm that the primary node is the **Preferred Owner**.
- Click the **Failover** tab, select the **Allow for fallback immediately** option, and click **OK**.
- Verify that the primary node is the owner of all resources, and that they are online.
- Shut down the primary node and verify that all resources fail over

to the secondary node.

- Restart the primary node and verify that all resources fail back.

Installing RightFax on each cluster node

- On the primary node, install the RightFax server software on the shared drive.
- Open the Windows Services Management Console and stop all running RightFax services. Set the **Startup type** of all RightFax services to **Manual**.
- In Control Panel, open **Printers**.
- Right-click the HPFAX printer, and then click **Stop sharing**.
- In Failover Cluster Manager, right-click the RightFax group, and then click **Move this service or application to another node**.
- Select the secondary node.
- Confirm that the disk resources are back online and are owned by the secondary node.
- Switch to the secondary node and delete the entire RightFax directory from the shared drive.
- On the secondary node, install the RightFax server software on the shared drive. Use the same options you used on the primary node.
- When asked whether to overwrite the existing database or add a new instance, select **Overwrite**.
- Open the Windows Services Management Console, stop all running RightFax services, and then set the **Startup type** of all RightFax services to Manual.
- In Control Panel, open **Printers**, right-click the HPFAX printer, and then click **Stop sharing**.

RightFax cluster resources

To run RightFax in the cluster environment, a number of resources need to be added to the service and application group. Some resources are optional depending on which modules your organization uses.

- RightFax File Share
- RightFax RPC Server Module.
- RightFax Remoting Service
- RightFax DocTransport
- RightFax Server Module
- RightFax Queue Handler
- RightFax Sync Module
- RightFax Conversion Engine
- RightFax Paging Module
- HPFAX Print Queue
- RightFax E-mail Gateway, if your organization uses an optional E-mail Gateway module.
- TCP/IP Print Server, if your organization uses the RightFax Integration Module. See [Configuring the Integration module in a Windows Server cluster on page 55](#).

To create the File Share resource

- In Failover Cluster Manager, right-click the RightFax group, and then click **Add a Shared Folder**.
- In the **Provision a Shared Folder** wizard, under **Location**, browse to the folder on the shared drive where RightFax was installed, and then click **Next**.
- Set the appropriate NTFS permissions for the file share.
- In the **Share Name** box, type **RightFax**.

5. Set the appropriate SMB Share Permissions
6. Finish the wizard by following the prompts.

To create the RightFax RPC Server Module resource

1. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
2. In the **New Resource** wizard, select **RightFax RPC Server Module** from the list of services, and then click **Next**.
3. Follow the remaining prompts of the wizard.
4. In Failover Cluster Manager, click the RightFax group. Under **Other Resources**, double-click **RightFax RPC Module**.
5. On the **Dependencies** tab, add the RightFax file share, disk resource, network name, IP address, and licensing service as resource dependencies. If you are clustering your SQL Server or your MSMQ Server, add the respective server name as a resource dependency.
6. On the Registry Replication tab, click **Add** and type **SOFTWARE\Wow6432Node\RightFax**. This allows the registry information stored by RightFax to dynamically change from one node to another in the event of a failure.
7. To add the resource to the group, click **OK**.

To create the RightFax Remoting Service resource

1. In Control Panel, open **RightFax Remoting Service**. In the RightFax Remoting Configuration window, click **OK** to write service information to the Windows registry.
2. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
3. In the **New Resource** wizard, select **RightFax Remoting Service** from the list of services, and then click **Next**.
4. Follow the remaining prompts of the wizard.

5. Double-click the RightFax Remoting resource.
6. On the **Dependencies** tab, add RightFax RPC (RFRPC) as a resource dependency.
7. On the **General** tab, clear the **Use Network Name for Computer Name** check box.
8. Click **OK**.

To create the DocTransport Module resource

1. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
2. In the **New Resource** wizard, select **RightFax DocTransport Module** from the list of services, and then click **Next**.
3. Follow the remaining prompts of the wizard.
4. Double-click the RightFax DocTransport Module resource.
5. On the **Dependencies** tab, add RightFax RPC (RFRPC) as a resource dependency.
6. On the **General** tab, select the **Use Network Name for Computer Name** check box.
7. Click **OK**.

To create the RightFax Server Module resource

1. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
2. In the **New Resource** wizard, select **RightFax Server Module** from the list of services, and then click **Next**.
3. Follow the remaining prompts of the wizard.
4. Double-click the RightFax Server Module resource.
5. On the **Dependencies** tab, add RightFax RPC (RFRPC) as a resource dependency.

6. On the **General** tab, select the **Use Network Name for Computer Name** check box.
7. Click **OK**.

To create the RightFax Queue Handler resource

1. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
2. In the **New Resource** wizard, select **RightFax Queue Handler** from the list of services, and then click **Next**.
3. Follow the remaining prompts of the wizard.
4. Double-click the RightFax Queue Handler resource.
5. On the **Dependencies** tab, add RightFax RPC (RFRPC) as a resource dependency.
6. On the **General** tab, select the **Use Network Name for Computer Name** check box.
7. Click **OK**.

To create the RightFax Sync Module resource

1. In Control Panel, open **RightFax Sync Module**. In the RightFax Sync Module Configuration window, define sources and destinations as required. For more information about the RightFax Sync Module, see the *RightFax Administrator Guide*.
2. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
3. In the **New Resource** wizard, select **RightFax Sync Module** from the list of services, and then click **Next**.
4. Follow the remaining prompts of the wizard.
5. Double-click the RightFax Sync Module resource.
6. On the **Dependencies** tab, add RightFax RPC (RFRPC) as a

resource dependency.

7. In the **Generic Service Parameters** box, type **CapaSync**.
8. Clear the **Use Network Name for Computer Name** check box.
9. Click **OK**.

To create the RightFax Conversion Engine resource

1. In Control Panel, open **RightFax Conversion Engine**. In the **RightFax Conversion Engine Configuration** window, click **OK** to write the service information to the Windows registry.
2. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
3. In the **New Resource** wizard, select **RightFax Conversion Engine** from the list of services, and then click **Next**.
4. Follow the remaining prompts of the wizard.
5. Double-click the RightFax Conversion Engine resource.
6. On the **Resource Dependencies** box, add RightFax Remoting as a resource dependency.
7. On the **General** tab, clear the **Use Network Name for Computer Name** check box.
8. Click **OK**.

To create the RightFax Paging Module resource

1. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
2. In the **New Resource** wizard, select **RightFax Paging Module** from the list of services, and then click **Next**.
3. Follow the remaining prompts of the wizard.
4. Double-click the RightFax Paging Module resource.
5. On the **Dependencies** tab, add RightFax RPC (RFRPC) as a

resource dependency.

6. On the **General** tab, select the **Use Network Name for Computer Name** check box.
7. Click **OK**.

To create the HPFAX print queue

1. For Windows Server 2012 and 2012 R2, configure two hyper-V machines for high availability printing. Refer to your Windows Server documentation.
2. Under Control Panel in Windows 2012, click **Add Printer**.
3. Click **Add a TCP/IP or Web Services Printer by IP Address or Hostname**, then click **Next**.
4. In the **Type of Device** list, click **TCP/IP**.
5. In the **Hostname** box, enter the hostname of the cluster.
6. In the **Port Name** box, type **HPFAX**.
7. Click **Custom**.
8. In the **Port Name** box, type **HPFAX**.
9. In the **Printer Name or IP Address** box, enter the hostname of the cluster.
10. In the **Protocol** list, select **RAW**.
11. In the **Port Number** box, enter **53199**.
12. Click **Install a new Driver** and select **HP LaserJet 4250 PCL6**.
13. In the **Printer Name** box, type **HPFAX**.
14. Select the **Share Printer** check box. Share the printer as **HPFAX**.
15. Click **OK**.
16. After the printer is installed, right-click the printer and then click **Properties**.

- a. On the **Advanced** tab, click **Separator Page**.
- b. In the separator page box, type:
`<SharedDrive>:\RightFax\bin\SepFiles\RightFax.sep`. `<SharedDrive>` is the drive letter of the shared drive where RightFax is installed.

Note If you need to customize the separator page, make any change in RightFax.sep, and then save the file with the same name and in the same location.

- c. Click **OK** to close the Properties window.
- d. Click **OK** to close the Separator Page window.

To create the RightFax E-mail Gateway resource

If your organization uses an optional RightFax E-mail Gateway:

1. In Failover Cluster Manager, right-click the RightFax group, click **Add a Resource**, and then click **Generic Service**.
2. In the **New Resource** wizard, select **RightFax E-Mail Gateway** from the list of services, and then click **Next**.
3. Follow the remaining prompts of the wizard.
4. Double-click the RightFax E-mail Gateway resource.
5. On the **Dependencies** tab, add the RightFax Server resource (RFSERVER) as a resource dependency.
6. On the **General** tab, select the **Use Network Name for Computer Name** check box.
7. Click **OK**.

Providing the cluster name to the RightFax services

1. Confirm that all RightFax resources are online.
2. On the node with ownership of the RightFax group, run Windows

Registry Editor.

3. Browse to HKLM\SOFTWARE\Wow6432Node\RightFax\Capasync\. Change the **RemoteHost** value to the name of the RightFax group.
4. Browse to HKLM\SOFTWARE\Wow6432Node\RightFax\Capasync\Profiles\<GUID> (the GUID subkey is a unique, 32 character name that is associated with Sync Module profiles). Change the **RemoteHost** value to the cluster name of the RightFax group.
5. Browse to HKLM\SOFTWARE\Wow6432Node\RightFax\Install\. Change the value **RFServerName** to the name of the RightFax group.
6. Browse to HKLM\SOFTWARE\Wow6432Node\RightFax\Remoting. Change the **RemoteHost** value to the name of the RightFax group.
7. Browse to HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\RightFax\WorkServer\WorkSrvx. Change the **RemoteHost** value to the name of the RightFax group.
8. Browse to HKLM\Software\WOW6432Node\RightFax\Production\ and change the **Protocol** value to **4**. This sets the protocol to TCP/IP.
9. In Failover Cluster Manager, verify that the RightFax group can be taken offline and online without errors.
10. Move the group between the nodes, verifying that all the resources start correctly on each node. Correct any issues before proceeding.

Installing remote DocTransports

1. Make sure the RightFax resources are online
2. Install remote DocTransports as required.
3. When prompted during remote DocTransport installation, select the option to use an existing SQL Server, and enter the server name (clustered instance name if applicable) and credentials.
4. After installation, on the Remote DocTransport server, open the RightFax DocTransport control panel item.
5. Click **Global DocTransport Settings** in the left pane.
6. In the **MSMQ server** box, type the name of the RightFax group, and then click **OK**.

Creating MSMQ queues

Message Queues are used by the Server Module to send faxes to remote DocTransports and receive status updates.

To create Message Queues

1. In Failover Cluster Manager, right-click the RightFax group and then click **Manage MSMQ**.
2. In the Computer Management window, expand **Services and Applications** and then expand **Message Queuing**.
3. Right-click **Private Queues**, click **to New**, and then click **Private Queue**.
4. In the **Queue Name** box, type **faxserver_sendfax** and click **OK**.
5. Repeat steps 3 and 4 to create the following queues:
 - faxserver_sendstatus
 - faxserver_deletefax
 - faxserver_notification

To set the RightFax group as the MSMQ server

1. On each node, open the Server Module configuration in Enterprise Fax Manager.
2. Click the **Advanced** tab.
3. In the **MSMQ server** box, type the name of the RightFax group, and click **OK**.

Configuring the Integration module in a Windows Server cluster

If your organization uses the optional RightFax Integration Module, complete the following additional tasks. For more information about the Integration Module, see the *RightFax Integration Module Guide*.

1. In Control Panel on the active node, open **RightFax Integration**.
If RightFax Integration does not appear in Control Panel, locate the Shared Files folder in the RightFax folder, and open rprod_ctl.cpl.
2. Click **Integration Setup Wizard** to configure the Integration Module with the setup wizard, or configure the Integration Module manually. For detailed instructions, see the *RightFax Integration Module Guide*.
3. Click **General** in the left pane. Under **RightFax information**, in the **Server name** box, enter the name of the RightFax group and then click **OK**.
4. In Windows Registry Editor, browse to HKLM\SOFTWARE\Wow6432Node\RightFax\Production\. Change the **RightFaxServerName** value to the name of the RightFax group.
5. Browse to HKLM\SOFTWARE\Wow6432Node\RightFax\Production\RFProd. The three default printer inputs are represented by the NPListen1, NPListen2, and NPListen3

subkeys.

6. In each subkey, modify the command line to use TCP/IP ports rather than named pipes by using the table below. Named pipes do not function in the cluster environment.

The numbers at the end of the new command lines are the TCP/IP port numbers. If the suggested ports are in use, you can enter any port number that is available on both nodes of the cluster.

Printer Name	Change this ...	To this ...
HostFax	nplisten -c "makedoc \$\$" -p hflpr	portlstn -c "makedoc \$\$" -p 8201
PCL	nplisten -c "pfilter \$\$ makedoc" -p hfpcl	portlstn -c "pfilter \$\$ makedoc" -p 8202
PostScript	nplisten -c "pfilter -p \$\$ makedoc" -p hfps	portlstn -c "pfilter -p \$\$ makedoc" -p 8203

7. If additional printer inputs are needed, create them in the same way using TCP/IP ports.
8. Close Windows Registry Editor.
9. Verify that the Startup Type of the RightFax Integration Module service is set to Manual.
10. Move the group to the second node.
11. In Control Panel on the second node, open **RightFax Integration**. Use the same options you used on the primary node.
12. Click **OK** to create the service.
13. Verify that the Startup Type of the RightFax Integration Module service is set to Manual.

Clustering the TCP/IP print service

To cluster the TCP/IP print service

1. On both nodes, install Print Services for Unix.
2. On both nodes, stop the LPD service (Print Services for Unix) and change its startup type to manual.
3. In Failover Cluster Manager, right-click the RightFax group and then click **Add a Resource** and then click **Generic Service**.
4. In the **New Resource** wizard, in both the **Name** and **Description** boxes, enter **RightFax Integration Module** and then click **Next**.
5. Finish the wizard by following the prompts.
6. Double-click the RightFax Integration Module resource.
7. On the Dependencies tab, add the Print Spooler and the RightFax Server (RFSERVER) resources.
8. In the Possible Owners box, select both nodes and click Add.
9. On the General tab, select the **Use Network Name for Computer Name** check box.
10. Click **OK**.
11. Bring the new resource online.
12. Verify failover and failback is successful.

Configuring Integration module printers

Create a generic printer, a PCL printer, and a PostScript printer. Repeat the following steps for each printer.

To create a printer

1. (Windows Server 2012 or 2012 R2) On the hyper-V machine, in Control Panel, click **Devices and Printers**, and then click **Add a Printer**.

2. Click **Add a TCP/IP or Web Services Printer by IP Address or Hostname** and click **Next**.
3. In the **Type of Device** list, click **TCP/IP**.
4. In the **Hostname** box, enter the hostname of the cluster.
5. In the **Port Name** box, type one of the following:
 - **HostFax** for the generic printer.
 - **HFPCL** for the PCL printer.
 - **HFPS** for the PostScript printer.
6. Click **Custom**.
7. In the Port Name box, type one of the following:
 - **HPFAX** for the generic printer.
 - **HFPCL** for the PCL printer.
 - **HFPS** for the PostScript printer.
8. In the **Printer Name or IP Address** box, enter the hostname of the cluster.
9. In the **Protocol** list, select **RAW**.
10. In the **Port Number** box, enter one of the following:
 - **8201** for the generic printer.
 - **8202** for the PCL printer.
 - **8203** for the PostScript printer.

If the suggested ports are in use, be sure that the port numbers match the port numbers in the command lines shown in the table under [Configuring the Integration module in a Windows Server cluster on the previous page](#).

11. Click **Install a new Driver** and select one of the following:

- **Generic/Text Only** for the generic printer.
 - **HP LaserJet 4250 PCL6 driver** for the PCL printer.
 - A **PostScript** driver for the PostScript printer.
12. In the **Printer Name** box, type one of the following:
- **HostFax** for the generic printer.
 - **HFPCL** for the PCL printer.
 - **HFPS** for the PostScript printer.
13. Select the Share Printer check box. Share the printer as:
- **HostFax** for the generic printer.
 - **HFPCL** for the PCL printer.
 - **HFPS** for the PostScript printer.
14. Click **OK**.

Using FTP with the Integration module

To use FTP with the Integration Module, add a virtual directory to each node by using IIS Manager. Set the local path to the \RightFax\Production\Inbox folder on the shared drive. You do not need to cluster the FTP service.

Chapter 9: Upgrading RightFax server software

You can upgrade to RightFax 16 EP6 from versions 16 EP2, 10.6 FP3, and 10.6 FP2. If you are running an earlier version of RightFax, either upgrade to a supported version, or uninstall the RightFax server and perform a new install.

Always upgrade the server first and then the client systems. For information about supported RightFax server and client combinations, see [Fax server requirements on page 6](#). For information about installing RightFax client applications, see [Installing RightFax client applications on page 26](#).

Before upgrading, back up the entire \RightFax folder structure. To get a complete server backup, stop all RightFax services. For information on RightFax backup procedures, see the *RightFax Administrator Guide*.

Any existing files for the RightFax SecureDocs Module or Enterprise Fax Manager Web Edition will be replaced during the upgrade. If you created customized files for these applications, save copies of the customized files before upgrading, and merge your customizations into the upgraded files.

By default, the RightFax Server Module, RPC service, and Queue Handler service start up automatically. If you have changed the startup type from automatic to manual, Setup will restore the default to automatic during the upgrade. Each service can be reconfigured for manual startup after finishing the upgrade.

Retaining customized configuration file information

Before running the server upgrade, you can edit the settings that determine how existing files are handled during an upgrade. RightfaxBU.xml specifies whether a file backed up during the upgrade is restored, appended, or replaced. The RightfaxBU.xml file is located in the RPS folder.

The original files are backed up to *installfolder\Backup* and the files for this release to *installfolder\BackupNewFiles*.

In this release, all existing files except Whitelist.txt are set to be restored.

For each file, RightfaxBU.xml includes the following tags:

- **BUfilename.** The name and location of the existing file.
- **BUappendfilename.** The name and location of the file to append to an existing file.
- **BUrestorefile.** The action that will be performed on the file during the upgrade.

To restore a file to its pre-upgrade state

1. In the **BUrestorefile** tag for the file, enter **RESTORE**.

Note File customizations are retained. Any new data from the upgrade is ignored.

To replace the pre-upgrade file with a new file

1. In the **BUrestorfile** tag for the file, enter **NONE**.

Note All file customizations will be lost.

To append information from another file

This option is currently only used for Whitelist.txt.

1. In the **BUrestorfile** tag for the file, enter **APPEND**.
2. In the the **BUAppendfilename** tag, enter the path of the file to append.

Note Customizations will be retained and new data will be added.

Note APPEND is only to be used for .txt files.

Running the RightFax server upgrade

RightFax Setup upgrades all supported versions of local RightFax software. This includes all core server software, fax board drivers and software, the RightFax database, and Administrative Utilities. Setup will also upgrade RightFax database installations on remote SQL Servers.

Important Run the RightFax Setup on each of your organization's remote RightFax servers (remote DocTransports, remote WorkServers, remote E-mail Gateways, remote IIS servers, and computers joined to a RightFax Shared Services environment).

To run the server upgrade

1. Shut down all running RightFax services on any remote RightFax servers. This includes remote DocTransports, remote WorkServers, remote E-mail Gateways, remote IIS servers, and computers joined to a RightFax Shared Services environment.
 2. Log on to the computer using a Windows account that is a member of the domain and local Administrators group.
 3. Run RightFax **Setup.exe**. RightFax Setup requires Microsoft .NET Framework 4.7.2. If this software is not installed on your system, Setup prompts you to install it. To install, click **OK**. To cancel Setup and install .NET Framework 4.7.2 yourself, click **Cancel**.
 4. Review the welcome page, and then click **Next**.
 5. Read and accept the license agreement, and then click **Next**.
 6. The **Preview Requirements for selected features** list shows third-party software that is installed (OK), will be installed automatically (Must Install), or will require your input during installation (Requires Info). Click **Next**.
 7. If you have shut down all remote RightFax services, or do not use remote RightFax servers, select the **I have shutdown all remote services** check box, and then click **Next**.
 8. RightFax requires the following TCP ports: 10520, 10521, and 10522 (RPC (API and clients)), 10062 (DocTransport), 34001, 34987, and 34988 (Remoting), and 36363 (Licensing). To prevent other applications from using these ports, click **Reserve ports**, and then click **Next**.
- Note** Third-party programs that use these ports will not work with RightFax.
9. To apply your upgrade settings and install required third-party software, click **Apply**.
 10. On the **Ready to install** page, click **Next**, and then click **Apply**.

Setup installs the upgrades. This will take several minutes.

11. On the **Ready to configure** page, click **Next**.
12. Setup upgrades your existing RightFax database to version 16 EP6.

Before continuing, verify a functional database backup. If your server is joined to a RightFax Shared Services environment, also verify that all RightFax services and applications on all other computers joined to the environment are stopped and closed. Review the information on the **Database upgrade required** page and select the **The database has been backed up** check box.

13. Click **Next**, and then click **Apply**.
14. On the **RightFax Activation** page, click **Launch Licensing Utility**. For more information, see [Activating RightFax on page 15](#).
15. To complete Setup, click **Apply**, and then click **Finish**.

Running a silent RightFax server upgrade

You can perform a silent (or unattended) upgrade of the RightFax server. During the installation the server must be connected to the Internet in order to activate it.

To perform an unattended upgrade of the RightFax server

- Ensure that the server is connected to the Internet. This is required for activation.

At the command prompt, enter the command as shown in the following example. Include a valid email address for a system administrator in your organization.

```
setup.exe /Unattended=true  
/Email=name@address.com /allowShutdown=true
```

Updating the RightFax Connect URL

If you are upgrading a RightFax Server that sends faxes via RightFax Connect and the faxes are sent and received via a proxy server, then you must update the URL on the proxy server.

To change the URL for RightFax Connect

- On the proxy server, update the URL to **rfcessaging.opentext.com**.

Chapter 10: Adding features and fax channels

You can easily expand and extend the functionality of your RightFax server by upgrading your RightFax server license, adding fax channels and user licenses, or by enabling new components.

Most of these additions to your fax server can be made without installing or re-installing software. After purchasing the appropriate license, you can add new functionality by activating it in the OpenText Product Licensing Utility.

Checking for installed components

The different types of RightFax servers are installed with different numbers of licensed fax channels and users, and different optional components enabled. For information about available server options, see the *RightFax Administrator Guide*.

To view a list of the fax channels, users, and components that have been enabled on the server

1. Log on the RightFax server as an administrator.
2. In EFM, in the left pane, expand the server, and then click **Services**.
3. In the list of services in the right pane, double-click **RightFax Server Module**.
4. In the **Server Configuration** window, click the **Feature Activation** tab, and then click **Product Licensing Utility**.

5. Under **Product Features** see the number of licensed fax channels and users, and enabled components.

Activating RightFax components

Use these procedures to activate RightFax Server and newly purchased RightFax components, such as an upgraded server license, added channels, added user licenses, or an evaluation copy. After purchasing the appropriate license, you will receive an activation code called a SUID (System Unique ID or System ID).

If your RightFax server has internet access, use the server to activate the components. If it does not, use another computer that does. That computer must also have access to the RightFax server or to a removable storage medium, such as a compact disc or a CompactFlash drive.

Before you begin, find the SUID (System Unique ID or System ID) on the OpenText packing slip attached to the email confirming your order.

To activate RightFax components from a RightFax server with Internet access

1. Log on the RightFax server as an administrator.
2. In EFM, in the left pane, expand the server, and then click **Services**.
3. In the list of services in the right pane, double-click **RightFax**

Server Module.

4. In the **Server Configuration** window, click the **Feature Activation** tab, and then click **Product Licensing Utility**.
5. Under **Product Features** see the number of licensed fax channels and users, and enabled components.
6. Click **Activate**.
7. Type an email address and the new SUID, and then click **Activate**.
8. If activation is successful, the RightFax license agreement appears. To continue, click **Accept**.
9. Review your new license summary. When finished, click **Close**. If you experience problems with activation, call the RightFax product support group at (520) 320-7070.

To activate RightFax components from another computer with Internet access

1. Log on to the RightFax server as an administrator.
2. On the RightFax server,
 - a. In EFM, in the left pane, expand the server, and then click **Services**.
In the list of services in the right pane, double-click **RightFax Server Module**.
 - b. In the **Server Configuration** window, click the **Feature Activation** tab, and then click **Product Licensing Utility**.
 - c. Copy and save the characters next to **Activation String**, and then take the activation string to the computer that has Internet access
3. On the computer with Internet access,

- a. Open the following webpage:
<https://activation.captaris.com/registration/registration.aspx>.
- b. Enter your e-mail address and the activation string, and select RightFax from the product list. When finished, click **Next**
- c. Enter the information requested at the System Information page and click **Next**.
- d. Enter optional contact information at the next two pages and click **Next**.
- e. To process your license and generate a license file, click **Finish**. If successful, click the **Download License Activation File** link. Save this file (RightFax.XML) to a removable storage medium or otherwise make it available to the RightFax server. Return to the RightFax server.

4. On the RightFax server,
 - a. On the toolbar of the **Product Licensing Utility**, click **Import**. Click [...] next to the **License File** box to browse to the location of the RightFax.XML file. When finished, click **OK**.
 - b. When prompted to overwrite your existing license, click **Backup existing license**, and then click **Yes**.
 - c. Review your new license summary. When finished, click **Close**. If you experience problems with activation, call the RightFax product support group at (520) 320-7070.

Licensing Brooktrout SR140 channels

Contact RightFax Technical Support to activate your SR140 channels. The license key is included with the purchase of the SR140 channels.

Chapter 11: Installing RightFax database schemas

The RightFax databases can reside on your organization's Microsoft SQL Server. If you do not want the RightFax Setup program to install the databases, this section provides the SQL scripts for the database administrator.

Installing a RightFax server database schema

Locate the scripts in the folder RightFax\SQLScripts. Run the scripts in the following sequence.

1. 030_CreateTables.sql.
2. 040_FillTables.sql
3. 050_Globalization*.sql. Run the script for the required language.
4. 060_CreateFunctions.sql.
5. 070_CreateStoredProcs.sql.
6. 071_FreeDBSpace_SQL2KPlus.sql.
7. 080_CreateViews.sql.
8. 090_InsertEventsEnums.sql.
9. Hotfix_all.sql.
10. 501_Files.sql.
11. 502_Analytics.sql.

Installing a RightFax image database schema

The image database stores fax images in a SQL database instead of the RightFax\Image folder.

Note The image database schema must be installed in its own database.

Locate the scripts in the folder RightFax\SQLScripts.

- Run the script 501_Files.sql.

Installing a RightFax Archive database schema

The archive database stores archived faxes for the RightFaxArchive Module.

Locate the scripts in the folder RightFax\SQLScripts.

- Run the script Archive.sql.

Installing a RightFax Analytics database schema

The analytics database stores data for the RightFax Analytics Module.

Locate the scripts in the folder RightFax\SQLScripts.

- Run the script 502_Analytics.sql.