



Version 9.0
Microsoft Exchange Module Guide

Edition

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Chapter 1

Activating and Configuring the RightFax Microsoft Exchange Module

The RightFax Microsoft Exchange Module acts as a communication link between the RightFax server and your Exchange server, allowing your users to use Microsoft Outlook to send, receive, and organize fax documents. Outbound e-mail messages addressed to the RightFax Microsoft Exchange Module are picked up by the RightFax server, which converts them into faxes and transmits them. Incoming faxes can be routed to an e-mail mailbox by specifying each RightFax user's mailbox information in Enterprise Fax Manager. The module can also provide notification of fax events via e-mail.

With the RightFax Microsoft Exchange Module, you can also synchronize your RightFax and Exchange user databases. This lets you administer both systems directly from your Exchange administration program and ensure that both Exchange and RightFax client information is consistently and correctly updated.

The RightFax Microsoft Exchange Module is comprised of several components that allow two-way communication between the Exchange and RightFax servers:

- One or more RightFax modules are enabled on the RightFax server and can be configured from Enterprise Fax Manager (see [“Adding and Configuring the RightFax Microsoft Exchange Module Service”](#) on page 6).

- The RightFax Connector is an Exchange service that handles all communication between the Exchange and RightFax servers as well as user database synchronization. The RightFax Connector consists of connector objects and the RightFax connector service and is configurable from the Exchange Admin program (see [“Configuring the RightFax Connector for Microsoft Exchange 5.5”](#) on page 15).
- Outlook forms allow Microsoft Outlook clients to create and send faxes from a RightFax form built into and launched directly from Outlook. Outlook forms also let clients receive new faxes into a form that includes a built in fax viewer. Advanced forms can be installed on each client workstation separately or a simplified form can be made available to all Outlook clients without a separate installation on each workstation. When you install the advanced Outlook form, a custom fax button is also added to the Outlook toolbar that lets users easily create and address new faxes.
- Active Directory support for Exchange 2000 and 2003, allow for unified administration of both the Exchange and RightFax servers.

Before You Activate the RightFax Microsoft Exchange Module

The RightFax Microsoft Exchange Module supports the following versions of Microsoft Exchange only:

- Microsoft Exchange 2000 SP3
- Microsoft Exchange 2003

One of these versions (upgraded to the appropriate service pack if necessary) must be installed on a network server that meets or exceeds Microsoft's minimum hardware requirements.

Before activating the RightFax Microsoft Exchange Module on the RightFax server, log on to the RightFax server using an ID with local administrative rights. If you do not, the installation and configuration will fail.

Installing the RightFax Microsoft Exchange Module

The files required by the RightFax Microsoft Exchange Module are installed on all RightFax servers during the server installation. However, the RightFax Microsoft Exchange Module must be licensed and activated before its functionality will be enabled.

To activate the RightFax Microsoft Exchange Module, you must have licensed a RightFax server type that includes this module, or purchased and licensed this module separately. For information on activating new components on the RightFax server, refer to the *RightFax Installation Guide*.

After the RightFax Microsoft Exchange Module has been activated on the RightFax server, you must add and configure the RightFax Gateway for Microsoft Exchange service (described in the next section).

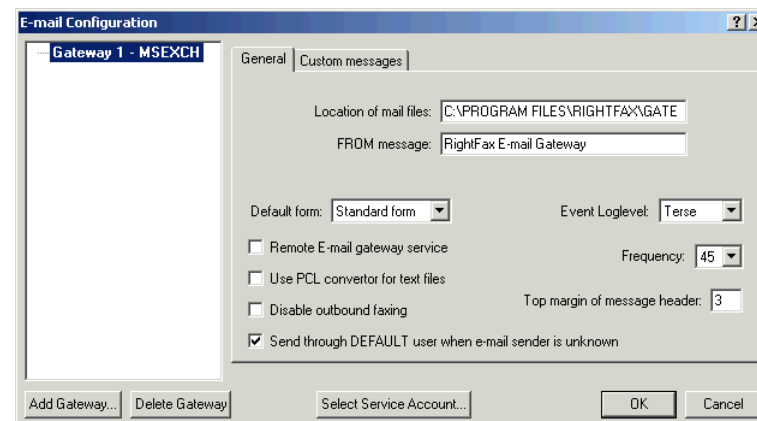
Adding and Configuring the RightFax Microsoft Exchange Module Service

After your RightFax server has had the RightFax Microsoft Exchange Module functionality enabled, open Windows Control Panel and run the E-mail Gateway configuration program. (If you already have one or more e-mail gateways configured, you can open the E-mail Gateway configuration program by double-clicking the RightFax E-mail Gateway service in Enterprise Fax Manager.)

To add a new gateway, click **Add Gateway**. Select **Microsoft Exchange** from the list of gateways and then click **Select**. Because RightFax allows you to install multiple e-mail gateways, each installed gateway is listed in the tree in the left pane. Click each gateway in the list to view its configuration options. Each e-mail gateway you add must be separately configured to work with your Exchange server and your network environment.

Configuring the options on the General tab

Figure 1.1 The General Tab on the E-mail Configuration Dialog Box



Because RightFax allows you to install multiple e-mail gateways, each installed gateway is listed in the left pane. Click **MSEXCH** to view the Gateway for Microsoft Exchange configuration options.

Location of mail files The Gateway for Microsoft Exchange creates In and Out subfolders under the folder you specify here. The In folder is where the gateway will place incoming mail-bound faxes for delivery to the Exchange server. The Out folder is where the gateway will look for outgoing fax-bound mail messages for delivery to the RightFax server.

You must specify a folder on the Exchange server. You can specify any folder on the Exchange server; however, by default, the gateway connector service account (described on [page 9](#)) looks for the In and Out folders in the connector install folder, Program Files\RightFax\RFaxGate.

FROM message Enter a descriptive name that will appear in the **From** field of all inbound documents sent to Exchange from the RightFax server.

Default form If you have installed Outlook fax forms for your Outlook clients (see [“Installing the RightFax Forms for Outlook”](#) on [page 23](#)), select the form you want Outlook users to see when opening received fax messages.

Remote E-mail gateway service Allows the e-mail gateway processes to execute on a remote computer rather than on the local computer. (It also prevents the e-mail gateway service from being started by the RightFax server, so do not select this check box if you don't intend to run the gateway remotely.) For more information on running the gateway remotely see [“Running the RightFax Microsoft Exchange Module Remotely”](#) on [page 9](#).

Use PCL convertor for text files Uses the RightFax PCL conversion engine when converting e-mail messages to fax format. This conversion method usually produces more accurate fax images of ASCII text than RightFax's native document conversion engine. If you notice that e-mail messages are not converting to fax format as accurately as you expect, clear this check box to return to using the native document conversion engine.

Disable outbound faxing Prevents Outlook clients from sending mail messages to fax addresses. When you select this option, the Gateway for Microsoft Exchange will only serve to route received faxes and notifications to Outlook clients.

Send through DEFAULT user when e-mail sender is unknown Assigns fax ownership to the RightFax “Default” user ID when a fax is sent from an Outlook client who does not have a RightFax user ID. If this option is not selected, faxes sent from Outlook clients that have no matching RightFax user ID will not be sent.

Event Loglevel Select the level of information logged in the Application Event Log under the service name “RightFax E-mail Gateway Module.” The **Terse** setting records critical errors only.

Verbose records all significant events and is most useful for tracking and resolving problems. Note that if you leave this value set to **Verbose** for long periods of time, the Event Log can become full which may prevent new events from being logged.



Note Information written to the Application Event Log is valuable in tracking down problems. If you have a problem that can be duplicated, set the LogLevel for all RightFax server applications to **Verbose**, then go through the steps to duplicate the problem. The data stored in the Application Event Log may help you resolve the problem.

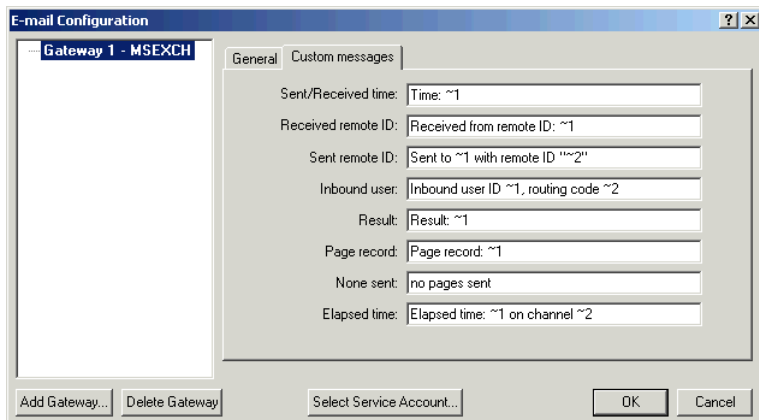
Frequency Sets the interval, in seconds, between checks to the mail system and the RightFax system for work to do (such as received faxes to route or e-mail to convert to faxes). Decreasing this value is not recommended as it may unnecessarily increase the load on the fax server.

Top margin of message header Enter the number of lines to add to the top margin of mail messages when converting to fax format. Adding a few lines to the top margin may prevent some plain paper fax machines from cutting off the top of the message headers.

Configuring the options on the Custom Messages tab

When a fax is received as an e-mail attachment and when an e-mail notification about the status of a fax is received, the received mail message includes one or more customizable messages providing information about the status of the fax. To customize the text of these messages, click the **Custom Messages** tab.

Figure 1.2 The Custom Messages Tab



Each message lets you combine text with one or more variables. Each message has its own available variables, described in the following table.

Table 1a E-mail Gateway Custom Message Settings

Notification message	Variables
Sent/Received time	~1 = Date (in Windows locale format) and time (HH:MM)
Received remote ID	~1 = Remote ID
Sent remote ID	~1 = The destination fax number ~2 = The destination remote ID

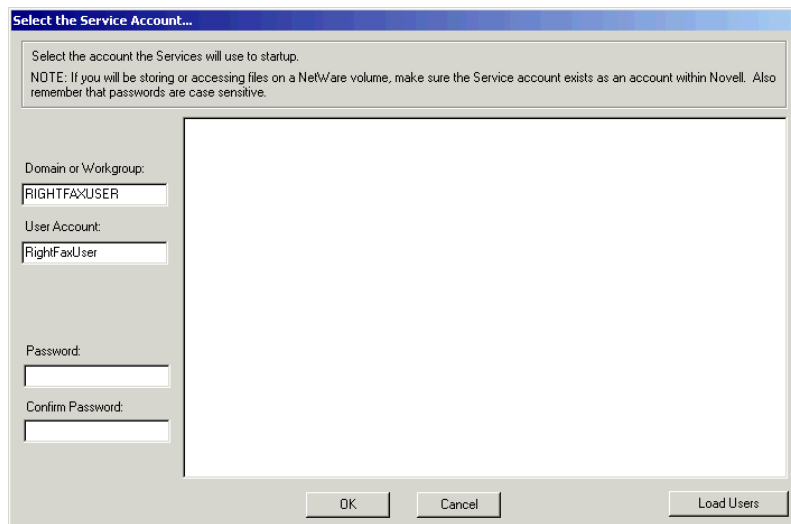
Table 1a E-mail Gateway Custom Message Settings (Continued)

Notification message	Variables
Inbound user	~1 = The RightFax user ID of the fax recipient ~2 = The fax recipient's routing code
Result	~1 = The result code and any accompanying text as reported by the fax board (These codes and messages may differ depending on your fax board type)
Page record	~1 = The range of page numbers successfully sent or received
None sent	None.
Elapsed time	~1 = The total time that the fax spent being processed by the fax board displayed (MM:SS) ~2 = The fax channel used to send or receive the fax.

Selecting a service account

The RightFax Gateway for Microsoft Exchange logs on to the network as a service using a Windows user account that you specify. To change the gateway service account, click **Select Service Account**. This opens the **Select Service Account** dialog box.

Figure 1.3 The Select Service Account Dialog Box



Enter the new service account in the **Domain or Workgroup** and **User Account** boxes. You can also click **Load Users** to scan for and list all user accounts on the network, and then click a user account in the list to fill in the **Domain or Workgroup** and **User Account** boxes. Enter the case-sensitive password for the selected user account in both the **Password** and **Confirm Password** boxes. Click **OK** to apply the new service account.

Starting and stopping the gateway service

After installing the Gateway for Microsoft Exchange, a new service called "RightFax E-mail Gateway Module" is created. If the gateway is running on the fax server, the service is set to "Manual" and is

automatically started and stopped by the RightFax Server service and you should not stop the RightFax E-mail Gateway Module service manually. If the gateway is running on a remote machine (see "[Running the RightFax Microsoft Exchange Module Remotely](#)" on [page 9](#)) you must start and stop the RightFax E-mail Gateway Module service manually.

Running the RightFax Microsoft Exchange Module Remotely

By default, the RightFax Microsoft Exchange Module service runs on the RightFax server. You may choose to run the E-mail Gateway Module service on a different machine if:

- You want to decrease the workload on the RightFax server.
- You anticipate a high volume of gateway traffic and don't want the added workload to interfere with the routine operation of the RightFax server.

To run the RightFax E-mail Gateway Module service remotely

1. On the RightFax server, run the E-mail Gateway module configuration program from Windows Control Panel.
2. Click **Add Gateway**. Select **Microsoft Exchange** and click **Select**.
3. Highlight the new gateway in the pane on the left and select the **Remote E-mail gateway service** option.
4. Set the **Location of mail files** option to the UNC path of the RightFax\Gateway folder (for example \\RFSERVER\C\$\Program Files\RightFax\Gateway).

5. Click **Select Service Account** and make a note of the domain and user account used by your gateways. For security purposes, the password for the user account will not be displayed, but you must have this information as well as the password for use later in these steps.
6. Click **Cancel** to close the **Service Account** dialog box, and then click **OK** to save and close the **E-mail Configuration** dialog box.
7. Add the gateway user account you noted above to the Administrators group on both the RightFax server and the remote E-mail Gateway computer.
8. Log on to the remote E-mail Gateway computer using the E-mail Gateway service account user name and password.
9. Map a drive to the administrative share for the drive on which the RightFax server is installed (for example, \\RFSERVER\C\$).
10. Open a command prompt and change to the RightFax\Bin folder on the drive you mapped and enter the following command:


```
addsrv gateway# "RightFax Remote Gateway# Module"
"\\RFSERVER\C$\Program Files\RightFax\Gateway
\EXCHGateway.exe"
```

Where # is the number of the E-mail Gateway you added on the RightFax server, and *RFSERVER\C\$* is the name of the administrative share on the RightFax server. When complete, the message "Create Service Success" appears. Close the command prompt window.
11. Open Windows Control Panel, select **Administrative Tools**, and start the **Services** program.
12. In the list of services, double-click "RightFax Remote Gateway# Module" (Where # is the E-mail Gateway number). This opens the **Properties** dialog box.
13. Under **Startup Type**, select **Automatic**.
14. Under **Log on as**, select **This account** and then click the browse button to open a dialog box listing available user accounts.
15. Open a list of user IDs on the E-mail Gateway service account domain, and then double-click the E-mail Gateway service account user ID you noted earlier. Click **OK** to return to the **Services** dialog box.
16. In the **Password** and **Confirm Password** boxes, type the password for the selected service account. Click **OK**, and then click **Close**.
17. Close Windows Control Panel.
18. Open the registry editor and navigate to


```
HKEY_LOCAL_MACHINE\System\CurrentControlSet
\Services\GATEWAY#
```

Where # is the number of the E-mail Gateway.
19. From the **Edit** menu, select **New**, and then select **String Value**. Type **AppParameters** and press ENTER to name the new registry key.
20. Double-click the new AppParameters key to open the **Edit String** dialog box. In the **String** box, enter:


```
-fRFSERVER -sgateway# -L\RFSERVER\C$\
Progra~1\RightFax
```

where *RFSERVER* is the name of the RightFax server, # is the E-mail Gateway number, and *\RFSERVER\C\$\Progra~1\RightFax* is the UNC path to the RightFax folder on the RightFax server. (The short name format is required.)
21. In the registry editor, navigate to HKEY_CLASSES_ROOT and add a new key called RightFax.
22. Under the RightFax key, add a new key called Server.

23. Add a new string value to the Server key called Path. In the **Data** value box enter the UNC path to the RightFax\Shared files folder on the RightFax server (for example, \\RFSERVER\C\$\Program Files\RightFax\Shared files).
24. Close the registry editor.
25. Run the **Services** program from Windows Control Panel
26. Select the "RightFax Remote Gateway# Module" service. If the service is running, click **Stop**. When the service is stopped, click **Start**. RightFax will now begin using the remote E-mail Gateway service.

Troubleshooting the RightFax Microsoft Exchange Module

If you experience problems with your RightFax Microsoft Exchange Module service, you should first check for errors in the Application log of the Windows Event Viewer. To open the Event Viewer, select **Start > Programs > Administrative Tools > Event Viewer**. In the Event Viewer, select **Application** from the **Log** menu to open the Application log. E-mail gateway-related problems will appear on the log in the **Source** column as "RightFax E-mail Gateway Module." Double-click the entry for a description of the error.

The information saved to the Event log is determined by the **LogLevel** setting in the RightFax E-mail Gateway configuration program (described on [page 7](#)). With the log level set to **Terse**, only critical errors will be recorded. Log levels **Normal** and **Verbose** record more information that may help track down problems.

Running the RightFax Microsoft Exchange Module service in a command prompt window will also give a very detailed account of what is happening with the gateway.

To run the gateway in a command window

1. Stop the RightFax E-mail Gateway Module service.
2. Open a command prompt window.
3. Change to the RightFax\Gateway folder on the RightFax server and enter this command:

```
exchgateway -d -1 -sgateway#
```

Where # is the number of the e-mail gateway. This number is zero-based, so your first e-mail gateway is referred to as "gateway," your second e-mail gateway is referred to as "gateway1," and so on. To confirm the gateway number, open the Windows registry and check the Gateway keys under HKEY_LOCAL_MACHINE\SOFTWARE\RightFax\Gateways.

Example exchgateway -d -1 -sgateway

When running the e-mail gateway in a command window, you must set the window properties to allow you to scroll backwards some distance. To set the command window to sufficient size, click the MS-DOS icon in the top left of the command window. Click **Properties** to open the **Command Prompt Properties** dialog box. Click the **Layout** tab, and then set **Screen Buffer Size** height to 2000.

Resolving error messages

Error 2140 starting service or logging into Exchange

Ensure that the appropriate Windows NT account is being used. Open the Services program in Control Panel. Highlight **RightFax E-mail Gateway** and click **Startup**. The **Account** box should display an account name. If not, start the gateway with an account that has administrative access. The default is RIGHTFAXUSER. Log off and back on using this account.

Error 53

This is a Windows NT networking error which indicates that the UNC name which was specified for the **Location of Mail Files** in the gateway configuration is an invalid network path. If the specified path is correct and valid, it may be that the account being used to start the E-mail Gateway Module service does not have access rights to that folder.

Error 85 The local device is already in use

This is a Windows NT networking error stating that the drive to which RightFax is trying to connect the UNC name that was specified for the **Location of Mail Files**, or **API Files** is already assigned.

Faxes are going out, but no e-mail notifications are being sent

Normally, users who send faxes via mail do not have a RightFax account and the faxes will be routed through the RightFax Default fax mailbox. When a fax goes out, RightFax tries to notify the user of the fax status. Since the fax went through the Default fax mailbox, RightFax will try to notify the network user Default, thus the notification never reaches the sender.

Cannot access inbound/outbound folder

The folder entered as the **Location of In/Out Directories** box on the **RightFax Connector** dialog box is invalid (see [“In/Out Directories”](#) on [page 17](#)). The path specified may not exist, may be misspelled, may not use proper UNC naming conventions, or the user account specified for the RightFax Connector Service may not have administrative access to the specified folder.

Error resolving destination mailbox: *MailBoxName*

An incoming fax from the RightFax server could not be converted correctly. This is usually due to the user's **Routing Info** box in Enterprise Fax Manager not matching a display name of an Exchange mailbox. Make sure the user's RightFax user ID matches an Exchange user's Display Name.

■ ■ ■

Chapter 2

Installing the RightFax Connector



Note These instructions apply to both versions 2000 and 2003 of the Microsoft Exchange server. Throughout this chapter, instructions that pertain to either version of Exchange will refer to Exchange 200x.

After you have installed and configured the RightFax Microsoft Exchange Module, you must install and configure the RightFax Connector. This is the Exchange service that handles all communication between the Exchange and one or more RightFax servers. The connector object is indicated in bold in the following description:



The RightFax Connector for Microsoft Exchange is made up of several files that direct the fax process through Exchange 200x:

- RFaxgate.exe is the main connector service.
- RFax_in.dll performs inbound fax information processing.
- RFax_out.dll performs outbound fax information processing.
- ExchSnap.dll handles fax configuration in Exchange System Manager.

Installing the RightFax Connector on Microsoft Exchange 200x Servers

To install the RightFax Connector for Microsoft Exchange, you must be logged on to the Exchange server with an account that is a member of all of the following Exchange groups:

- Enterprise Admins
- Schema Admins
- Domain Admins

To install the RightFax Connector for Microsoft Exchange 200x

1. Log on to the Exchange server.
2. Insert the RightFax server CD. If AutoRun is enabled, a menu of install options appears. If AutoRun is not enabled, browse the CD and run AutoRun.exe.
3. In the menu of install options, select the option to install the RightFax product suite. The RightFax install wizard opens.
4. Click **Next** at the opening screen to view the RightFax license agreement. You must accept the license agreement in order to continue the installation. Click **Next**.
5. Enter your name, organization name, and your product serial number when prompted. Click **Next**.

6. On the **Setup Type** screen, select **Custom** and then click **Next**.
7. On the **Setup Features** screen, remove all install options *except* the option **Exchange 2000/2003 Connector** under the **Connectors** group. Click **Next**. This will start the RightFax Connector setup wizard.
8. Click **Next** after reading the initial **Information** screen to open the **Installation Options** screen.
9. Select **Complete** or **Custom**, and then click **Next**.



Note If you want to install the connector to a folder other than the default folder `Program Files\RightFax\RFaxGate`, or if you want to install the MMC Administrative Tool (described on [page 14](#)) only, you must select the **Custom** option.

10. Click **Next** on each of the **Install Options** screens. In most cases, accepting the default settings on these screens is recommended. When prompted, click **Install**.
11. The Exchange 200x schema must be updated in order to proceed with the install. If this is necessary, you will be prompted to begin updating the schema. This process may take a few minutes or as long as several hours, depending on the size of your Active Directory domain.

A message may appear indicating that the install is unable to add the connector object. Click **Retry** to check the progress of the update. If the update is still in progress, the message will reappear. If the update is complete, the message will close and the install will continue.
12. If the setup program detects multiple Exchange 200x servers on your network, you will be prompted to select the server to install the connector on. Select the server you want, and then click **Next**.
13. Click **Finish** to complete the install.
14. When the install is complete, run the **Services** application in Windows Control Panel and start the **RightFax Connector** service.

To Configure the RightFax server to work with the connector

After the connector software has been installed, follow these steps to configure the RightFax server:

1. On the RightFax server, run Enterprise Fax Manager.
2. Open the RightFax server that has the RightFax Microsoft Exchange Module installed and double-click **RightFax E-mail Gateway Module** in the list of services. This opens the **E-mail Configuration** dialog box. Click the **General** tab.
3. In the **Location of mail files** box, enter the location of the message transfer directory you specified during the connector installation. If you accepted the default folder location during the connector installation on the Exchange server, this is the `ExchServer\Program Files\RightFax\RFaxGate` folder.

Configuring the RightFax Connector for Microsoft Exchange 200x

After the connector is installed, you can customize the connector configuration settings in the Exchange System Manager using the MMC Administrative Tool.



Note You can install the MMC Administrative Tool for the RightFax Connector on any computer that has Exchange System Manager installed. To install the MMC Administrative Tool only, run the installation program for the RightFax Connector for Exchange 200x (described on [page 13](#)), select the **Custom** option, and then select only the **MMC Administrative Tool** option from the list of components.

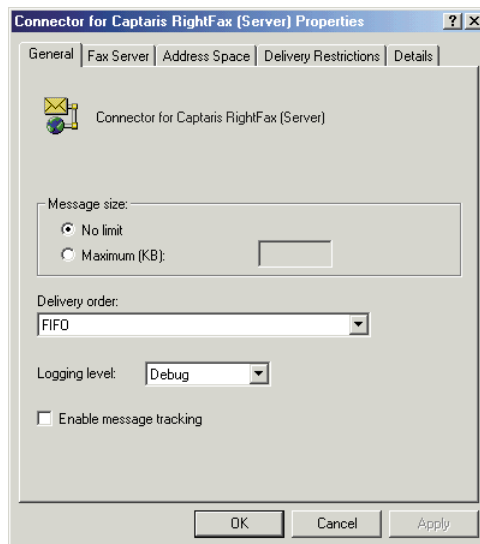
To configure the RightFax Connector for Microsoft Exchange 200x

1. Run the Exchange System Manager program.
2. Navigate to **Connectors**, right-click **Connector for Captaris RightFax**, and then select **Properties** in the shortcut menu.

The rest of this section describes each of the options in this dialog box.

The General tab

Figure 2.1 The Connector for Captaris RightFax Properties General Tab



Message size Select **No limit** to accept all messages from the fax server regardless of the file size of the message. Select **Maximum (KB)** to specify the maximum file size of messages that the Exchange server will pass to the fax server. Enter the maximum file size in kilobytes. Messages that exceed this file size will not be forwarded to the fax server.

Delivery order Select the sequence that the Exchange Message Transfer Agent (MTA) will use when delivering mail to the connector:

- **FIFO.** The MTA delivers messages to the connector on a first-in first-out (FIFO) basis.
- **Priority.** The MTA delivers messages marked with a high priority first.
- **Size.** The MTA delivers messages that are smallest first.

Logging level Select the level of information that will be logged in the Application Event Log under the service name “RightFax E-mail Gateway Module.” **Normal** records critical errors only. **Debug** records all significant events and is most useful for tracking and resolving problems.

If you leave this option set to **Debug** for long periods of time, the Event Log can become full very quickly, which will prevent new events from being logged.

Enable message tracking Select this option to write a tracking event in the Exchange Message Tracking Log for each fax message successfully sent to or received from the fax server.

For received faxes, the Message Tracking Log records:

- The unique ID of the fax, assigned by the fax server.
- The caller service identification (CSID) of the sending fax machine.
- The object distinguished name of the fax recipient.

For sent faxes, the Message Tracking Log records:

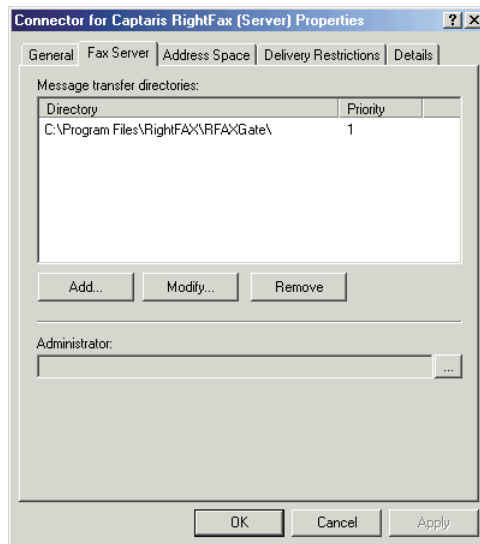
- The Exchange ID of the sender.
- The destination address for the fax.
- The message transfer system identification (MTS-ID) assigned by the connector.

When message tracking is enabled, you can force all faxes sent via the connector to use the last 15 digits of the MTS-ID as the unique ID of the fax. This will help you locate faxes on the fax server that

have been identified in the Exchange Message Tracking Log. To enable this feature, edit the Windows registry. Navigate to HKEY_LOCAL_MACHINE\Software\RightFax\Gateway\Gateway#. Next, add the registry value class DWORD and the value "UseMTSID." Set its value to hexadecimal "0x1" by entering 1 in the DWORD editor.

The Fax Server tab

Figure 2.2 The Connector for Captaris RightFax Properties Fax Server Tab



Message transfer directories Message transfer directories store the mail messages that are being routed to the fax server and the fax images that are being routed to the Exchange server. You must specify one message transfer directory for each fax server that the Exchange 200x connector will communicate with. The message transfer directory must be a local folder on the Exchange server, and it must be specified as a standard path (for example, C:\Program Files\RightFax\RFaxGate). Each RightFax server with the RightFax Microsoft Exchange Module installed is configured to

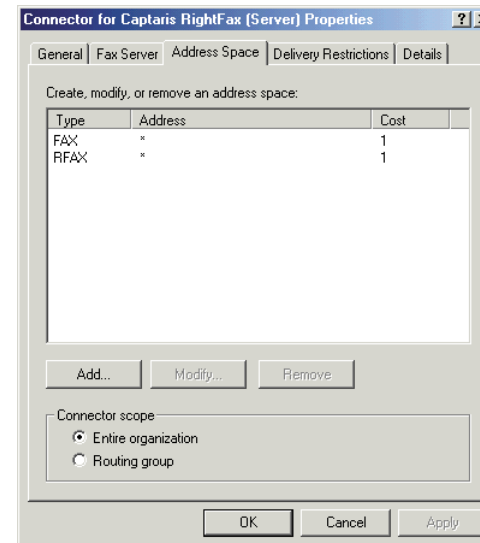
communicate with one message transfer directory (see [“To Configure the RightFax server to work with the connector”](#) on page 14).

Each message transfer directory is assigned a priority. The RightFax connector will always use the message transfer directory with the lowest priority setting. If a directory can't be found, it will use the next lowest. If two directories have the same priority, the connector will alternate directories.

Administrator Select an Exchange Admin account that will receive undeliverable inbound fax messages and notification of synchronization events.

The Address Space tab

Figure 2.3 The Connector for Captaris RightFax Properties Address Space Tab



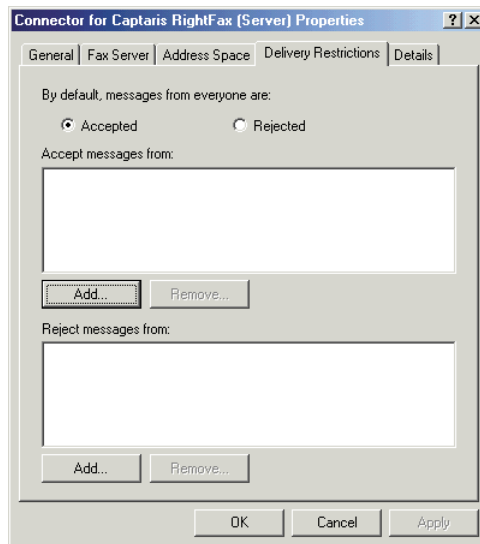
Create, modify, or remove an address space This is a list of the Exchange address spaces that will be routed to the fax server. All messages within the address spaces specified here will

be routed to the fax server. By default, messages with the FAX and RFAX address types (described on [page 29](#)) will be routed to the fax server by the connector.

Connector scope Select **Entire organization** to enable the connector for all servers on your network. Select **Routing group** to enable the connector only for servers in the local routing group.

The Delivery Restrictions tab

Figure 2.4 The Connector for Captaris RightFax Properties Delivery Restrictions Tab



By default, messages from everyone are Click **Accepted** to accept fax-bound messages from all sources. If you select this option, you will still be able to reject messages from specified sources. You should select this option if you intend to accept messages from all but a few sources. Specify the exceptions in the **Reject messages from** box.

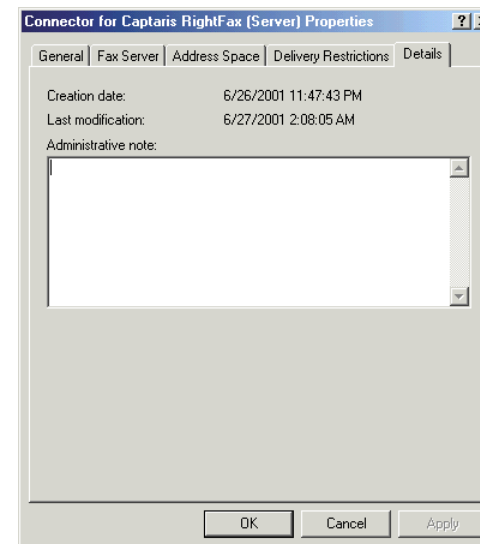
Click **Rejected** to reject fax-bound messages from all sources. If you select this option, you can still accept messages from specified sources. You should select this option if you intend to accept messages from only a few sources. Specify the exceptions in the **Accept messages from** box.

Accept messages from This is a list of senders from whom messages will be accepted. You may want to add Exchange users to this list if you select **Rejected** as the default for all users. If so, the connector will only accept messages from users listed here.

Reject messages from This is a list of senders from whom messages will be rejected. You may want to add Exchange users to this list if you select **Accepted** as the default for all users. If so, the connector will accept messages from all users except those listed here.

The Details tab

Figure 2.5 The Connector for Captaris RightFax Properties Details Tab



Administrative note Add an optional note, up to 1024 characters.

User Synchronization Between the Exchange and RightFax Servers

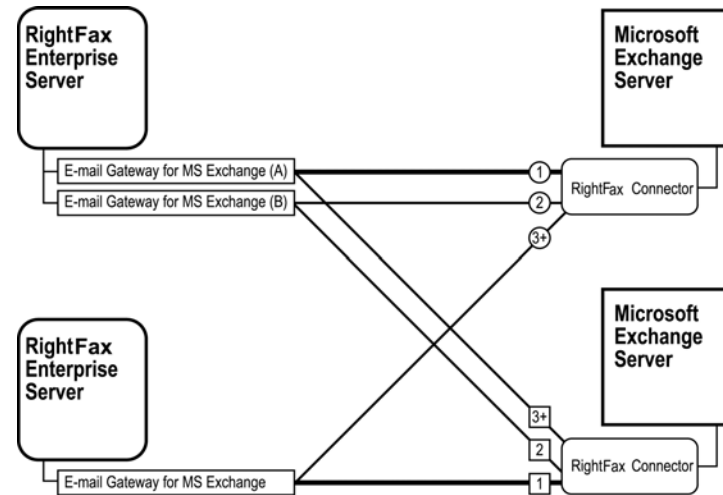
All database synchronization between RightFax and Exchange is managed through Microsoft Active Directory. For information on publishing RightFax servers to Active Directory, refer to the *RightFax Administrator's Guide*.

Configuring the Connector to Work with Multiple Exchange Modules

Only one RightFax connector can be installed on each Exchange 200x server, although each connector can communicate with multiple RightFax modules through the specified message transfer directories (described on [page 16](#)). Each connector/gateway connection is assigned a priority. The connector will always use the message transfer directory with the lowest priority setting. If a message transfer directory can't be found, it will use the next lowest. If two message transfer directories have the same priority, the connector will alternate between them.

The following diagram illustrates the use of connection priorities to create redundancy in a multiple RightFax/Exchange 200x server environment.

Figure 2.6 RightFax/Exchange 200x Server Redundancy



Server redundancy is enabled by assigning multiple message transfer directories (one per installed gateway) to a single connector and assigning each a different priority level. For information on configuring message transfer directories in the RightFax connector for Microsoft Exchange, see ["Message transfer directories"](#) on [page 16](#).

Installing the Connector for Exchange 200x on a Windows 200x Cluster



Important The Connector for Microsoft Exchange 200x requires that your cluster environment be configured as Active-Passive. It will not function in an Active-Active Cluster configuration.

Installing the Connector for Exchange 200x on a Windows 200x cluster requires these basic steps:

1. Create the mail directories ([page 19](#)).
2. Install the connector on the primary node ([page 19](#)).
3. Install the connector on the secondary node ([page 19](#)).
4. Create the RFAXGATE resource ([page 20](#)).
5. Create the file share resource ([page 20](#)).
6. Change the mail directory paths ([page 20](#)).
7. Modify the Windows Registry ([page 20](#)).
8. Test communication between the two servers ([page 21](#)).

Creating the mail directories

1. From the root of the cluster shared drive, create a new folder named RFaxGate. Add two subfolders to this folder named RFaxGate\In and RFaxGate\Out.
2. Right-click the RFaxGate folder and select **Sharing** from the shortcut menu. This opens the **Properties** dialog box with the **Sharing** tab displayed.
3. Select **Share this folder** and type "RFAXGATE" in the **Share name** box.
4. Click **Permissions**, and then click **Add**.
5. Select the service account used by the Exchange e-mail gateway service and click **Add**. Click **OK**.

6. Select the service account you added and allow full control. Click **OK** to return to the **Properties** dialog box.
7. Select the **Security** tab and click **Add**.
8. Select the service account used by the Exchange e-mail gateway service and click **Add**. Click **OK**.
9. Select the service account you added and allow full control.
10. Click **Advanced**.
11. Check the **Reset permissions on all child objects and enable propagation of inheritable permissions** check box and click **OK**.
12. Close the **Permissions** dialog box.

Installing the connector on the primary node



Important You must be working at the Exchange console for the connector to install properly. Connecting remotely to the server will result in an "unknown error" message and the installation will fail.

1. Log on to the primary node using an account that is a member of the Domain Admins, Enterprise Admins, and Schema Admins groups.
2. Install the Exchange 200x connector according to the instructions in "[Installing the RightFax Connector on Microsoft Exchange 200x Servers](#)" ([page 13](#)).

Installing the connector on the secondary node

1. Fail over to the secondary node.
2. Install the Exchange 200x connector on the secondary node according to the instructions in "[Installing the RightFax Connector on Microsoft Exchange 200x Servers](#)" ([page 13](#)).

Creating the RFAXGATE resource

1. Fail back to the primary node.
2. Run Cluster Administrator and open the Exchange cluster group.
3. Right-click **Resources**, and then select **New > Resource**. The Generic Resource wizard opens.
4. In the **Name** box, enter **RFSERVER**.
5. In the **Description** box, enter **RightFax Exchange Connector**.
6. Set **Resource Type** to **Generic Service**.
7. Select the Exchange group.
8. In the **Possible Owners** box, enter the names of both nodes in the cluster by selecting them and clicking **Add**.
9. In the **Resource Dependencies** box, add the MS Information Store, MS MTA, and MS System Attendant resources.
10. Click **Finish** to add the resource to the group.

Creating the file share resource

1. Right-click **Resources**, and then select **New > Resource**. The Generic Resource wizard opens.
2. In the **Name** box, enter **RFaxShare**.
3. In the **Description** box, enter **RightFax File Share for Connector**.
4. Set **Resource Type** to **File Share**.
5. Select the Exchange group.
6. In the **Possible Owners** box, enter the names of both nodes in the cluster by selecting them and clicking **Add**.
7. In the **Resource Dependencies** box, add the Cluster Name and Physical Disk resources.

8. In the **Generic File Share Parameters** box, enter the path to the RFaxGate folder you created on the virtual drive. Be sure to use RFAXGATE as the share name.
9. Click **Finish** to add the resource to the group.

Changing the mail directory paths

1. Open the Exchange System Manager.
2. For each node, open the Exchange Connector's **Properties** window and click the **Fax Server** tab.
3. Change the directory path from C:\Program Files\RightFax\RFaxGate to \\ClusterName\RFAXGATE on both connectors.
4. Change the **Location of mail files** path to the RFaxGate folder on the cluster shared drive.
5. For the second node *only*, remove the FAX* and RFAX* namespaces.
6. Click **OK** to re-set the gateway.

Modifying the Windows Registry

When the Exchange Connectors are installed on the cluster nodes, they each point to different MTS queues. The registry needs to be modified to point them both to the correct queue.

1. Open the Windows Registry on the secondary node.
2. Navigate to HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\RFaxGate\Parameters.

3. Replace the computer name of the secondary node (delimited by brackets) with the computer name of the primary node for the following registry values:
 - ADSConnector
 - ADsPath
 - CommonName



Important Do not change the settings for HomeDSA.

4. Re-start the Exchange connector.

Testing communication between the two servers

1. Ensure that the Exchange connector service on the active node and the gateway service on the RightFax server are running.
2. On the active node, navigate to the virtual drive where you created the RFAXGATE file share.
3. Open the In and the Out folders in separate windows and set each view to **Details**.
4. Each folder should contain a file called Pulse.txt.
5. Check the “modified” time and date of each Pulse.txt file and compare them to the actual server time. The time and date of both Pulse.txt files should always be within one minute of the server because they should automatically update every 45 seconds.
 - If Pulse.txt in the In folder is not updating, ensure that the RightFax Connector service on the Exchange server is running.
 - If Pulse.txt in the Out folder is not updating, ensure that the E-mail Gateway service on the RightFax server is running.
 - If both Pulse.txt files are updating properly, send a test fax through the Exchange gateway.

■ ■ ■

Chapter 3

Configuring Outlook Users to Send and Receive Faxes

The RightFax Microsoft Exchange Module supports these versions of Microsoft Outlook:

- Outlook 2000 SP3
- Outlook XP base version and SP12

Sending an Outlook mail message to a fax number is similar to sending e-mail, except the message must be specially addressed. Text entered in the **Subject** field in an Outlook mail message will appear in the “Notes” section of the cover sheet. Text entered in the body of the e-mail will appear as the body of the fax. Attached files will be converted to fax images and added to the fax (see [Appendix B, “File Formats that Convert to Fax Format”](#)). Unsupported file attachments cannot be converted and will be ignored.



Important UTF-8 encoding (unicode) is required for the Euro symbol and some other special characters to appear properly in RightFax documents created in Microsoft Outlook. To support documents with these characters, Microsoft Outlook must be configured for UTF-8 encoding. Refer to the documentation for Microsoft Outlook for information on enabling UTF-8 encoding.

Installing the RightFax Forms for Outlook

RightFax provides custom forms for your Microsoft Outlook users that expand and simplify the process of sending and receiving faxes with Outlook. Features such as an embedded fax viewer and billing code lookup tables allow Outlook to act as a truly unified messaging client for your users.

RightFax includes two types of Outlook forms: an advanced (full-featured) form and a standard form that includes fewer features.



Note Both the standard and advanced Outlook fax forms require Microsoft Outlook 98 or higher be running on the client workstation.

With the standard form, users can:

- Enter billing information.
- Send a cover sheet.
- Specify conversion options for PowerPoint, Excel, and Visio documents.
- Elect to preview a fax before sending, request a callback, and use smart-resume.
- Specify the resolution of the fax image.

The advanced form includes the same features, and users can:

- Select defaults for conversion options, cover sheets, and other sending information.
- Preview and select library documents to attach to the fax.
- Preview and select fax overlay forms.
- Look up billing codes.

Preview forms can be installed so that users can preview faxes in Outlook before sending them. The advanced preview form displays the fax in the RightFax viewer. The standard form utilizes the default viewer defined for the file type.

The forms can be installed and configured (“published”) for all Outlook clients at one time. To use the advanced form, it is also necessary to install and configure each client individually.

To install the forms to all Outlook client computers

Repeat the following steps for each form you want installed.

1. Ensure that your Exchange server has an Organizational Forms Library configured. Run the Exchange System Manager. Select **Public Folders** and then click the **Action** button and select **View System Folders** from the menu. Select the system folder **EFORMS REGISTRY**. If an Organization Forms Library is not listed, add one by right-clicking **EFORMS REGISTRY**, and then selecting **New > Organizational Form** from the shortcut menu.
2. Open the **Permissions** settings for the Organizational Forms Library and set the administrator who is installing the RightFax forms as the Owner of the Forms Library.
3. Close the **Permissions** dialog box.

4. Double-click the file name for the form to install. The following table lists all of the available forms.

Table 3a File Names for Exchange Forms on the RightFax Server

Form	Language	File name
Standard form	English	FormEN.oft
	French	FormFR.oft
	French-Canadian	FormFC.oft
	German	FormGR.oft
	Italian	FormIT.oft
	Portuguese	FormPR.oft
	Spanish	FormSP.oft
Standard preview form	English	FormENp.oft
	French	FormFRp.oft
	French-Canadian	FormFCp.oft
	German	FormGRp.oft
	Italian	FormITp.oft
	Portuguese	FormPRp.oft
	Spanish	FormSPp.oft

5. When prompted, click **Enable Macros**. This opens the form.
6. On the **Tools** menu, click **Forms** and then click **Publish Form As**. This opens the **Publish Form** dialog box.
7. In the **Look In** box, select **Organization Forms Library**.

- In the **Display Name** box, type a descriptive name for the form, such as the names shown in the following table. The name will appear in the **Form Name** box. Verify the message class for the form, as shown in this table.

Table 3b Display Names and Message Classes for Exchange Forms on the RightFax Server

Form	Display name	Message class
Standard form	RightFax	IPM.Note.RightFax
Standard preview form	RightFax Preview	IPM.Note.RightFax.Preview

- Click **Publish**.

Installing the advanced fax form on a client computer

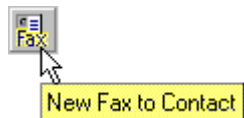
The advanced RightFax form for Outlook is installed on each individual Outlook client computer as a component of the RightFax client installation (described in the *RightFax Installation Guide*).

The Outlook Fax Extension

The Outlook Fax Extension is installed as part of the advanced fax form installation. The extension adds a menu command and button to Outlook so that users can quickly address and send faxes. It also provides a command for viewing the status of faxes.

A button, **New Fax to Contact**, is added to the Outlook tool bar.

Figure 3.1 The New Fax to Contact Button



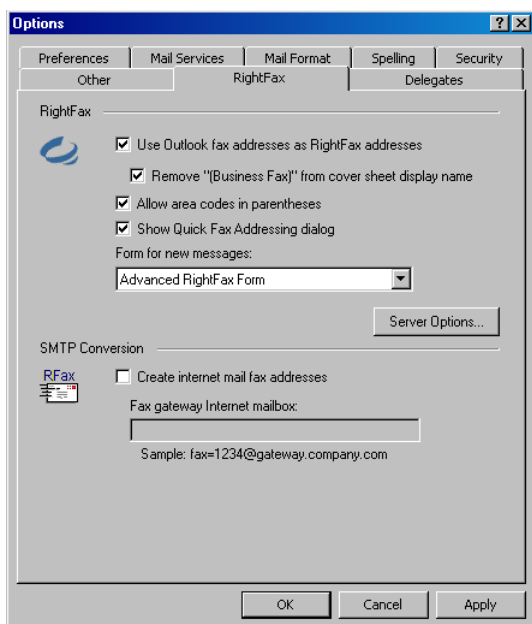
When the user clicks this button, a **Quick Fax Addressing** dialog box may appear depending on the user's RightFax configuration in Outlook (see "[Configuring the Outlook Fax Extension](#)" on page 26). This dialog box lets the user easily enter the necessary fax addressing information. After the addressing dialog box is completed, the fax form opens allowing the user to supply the body of the fax message, attach files or library documents, and specify any desired fax transmission options.

The extension adds the menu command **Realtime Fax Status** to the **Actions** menu so that users can view the status of the faxes stored in the RightFax mailbox. This is useful for users who want to check the status of faxes sent to or from Outlook. When this command is selected, a dialog box appears listing the folders and faxes in your mailbox. Click a folder name to view the faxes it contains. To view or delete the fax, right-click the fax entry to open a shortcut menu, and then select the appropriate menu option. Right-click in the fax list and select **Refresh List** to view the most current status of each fax.

Configuring the Outlook Fax Extension

The Outlook Fax Extension must be configured on each Outlook client computer. On the client computer in Outlook, navigate to the **Tools** menu and select **Options**. The **Options** dialog box opens. Select the **RightFax** tab.

Figure 3.2 The RightFax Extension Tab



Use Outlook fax addresses as RightFax addresses

Enables the gateway to send messages to Contacts who have a fax number only in the **Business Fax** field of their Contact information. If this check box is not selected, RightFax-specific fax addresses must be used in the **Business Fax** field.

Remove “(Business Fax)” from cover sheet display name

When faxing to Outlook clients, the name of the Contact information field where the fax number was retrieved (the **Business Fax** field) is automatically appended by Outlook to the fax recipient’s name. For example, your Outlook Contacts may receive faxes addressed like this:

Jane Doe (Business Fax)

Select this check box to automatically remove this text from your fax cover sheets, leaving only the recipient’s name in the **To:** field.

Allow area codes in parentheses Prevents Outlook from automatically converting numbers below 299 inside parentheses in fax-bound mail addresses to escape characters. If you are going to send faxes via the RightFax Microsoft Exchange Module to area codes below 299, this check box *must* be selected.



Note Checking **Allow area codes in parentheses** will prevent you from adding special characters to e-mail addresses using escape codes.

Show Quick Fax Addressing dialog When this option is selected, a **Quick Fax Addressing** dialog box will appear each time you create a new fax in Outlook. This dialog box lets you enter fax addressing information, which is then formatted automatically in the **To** line of your Outlook message.

Form for new messages Specifies which Outlook form to open when you create a new fax. You can select the Outlook standard message form, or, if you have installed RightFax forms (see [“Installing the RightFax Forms for Outlook”](#) on [page 23](#)), you can select the advanced form.

Server options Click this button to open a dialog that lets you specify the name of the RightFax server to connect to and your login information.

Create internet mail fax addresses If you use the Outlook client with the SMTP/POP3 e-mail gateway instead of the RightFax Microsoft Exchange Module, selecting this check box tells Outlook to create SMTP/POP3 compatible fax addresses instead of

Exchange formatted addresses. When this option is enabled, you must also enter the Internet mail address of the RightFax SMTP e-mail gateway. For example, if fax messages sent to the SMTP/POP3 gateway should be formatted as:

fax=555-1212/pn=Jane.Doe@faxgateway.company.com

then this field must read:

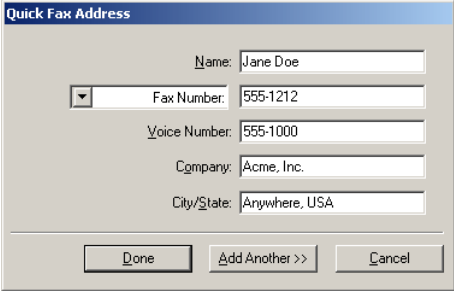
faxgateway.company.com

Because this feature uses IETF addressing convention, you must have the option **Use IETF Fax Addressing** checked in your SMTP/POP3 **E-mail Configuration** dialog box (described in the *RightFax Administrator's Guide*)

Sending Faxes

When users open one of the two RightFax forms to send a fax (such as by clicking the **New Fax to Contact**, button to open the Advanced form, described on [page 25](#)), the **Quick Fax Address** dialog box opens.

The *Quick Fax Address* dialog box



This dialog box lets the user enter all the required addressing information for one or more recipients. After adding one recipient, click **Add Another** to add additional recipients. If the RightFax server has been configured to send fax documents to e-mail addresses or SMS numbers, a drop-down list lets you select which of these delivery methods you want. Users can send a single

document to any combination of Fax, e-mail, and SMS recipients. E-mail recipients will receive an e-mail message with the body of the fax as a separate file attachment. SMS recipients will receive only the notes entered for the fax cover sheet.

After the information for all intended recipients is complete, click **Done**. The fax form opens, allowing the user to supply the body of the fax message, attach files or library documents, and specify any desired fax transmission options.

For instructions on entering this information, please refer to the *RightFax Client for Outlook Quick Reference Card* and the online help.



Note When sending faxes from Outlook, users can select fax recipients from the Outlook address book and Contacts list. In Outlook, recipient names can be 99 characters or longer, however the RightFax software cannot display a name that is more than 99 characters. Faxes will send successfully, however the recipient name will appear in distinguished name format in RightFax and on the fax cover sheet.

Sending faxes using the standard fax form

After it has been installed, all Outlook users can open the standard form. The standard form is similar to the advanced form but does not include the lookup options.

1. In Outlook, on the **Tools** menu, select **Forms**, and then click **Choose Form**.
2. In the Organizational Forms Library, double-click the display name defined for the standard form (such as "RightFax.") This opens the standard fax form for Outlook.

Figure 3.3 The Standard Fax Form in Outlook

For information on using the standard RightFax form for Outlook, please refer to the *RightFax Client for Outlook Quick Reference Card* and the online help provided with the form.

Sending faxes using the advanced fax form

In order for a user to open the advanced form, the form must have been installed separately on the client machine (see ["Installing the advanced fax form on a client computer"](#) on page 25).

There are several ways to use the advanced form to send a fax:

- Click **New Fax to Contact**.
- On the **Actions** menu, click **New Fax**.
- To generate and send a new fax to a Microsoft Outlook Contact, click **Contacts** in your Outlook Folder List, select the contacts to receive the fax, and then click **New Fax to Contact** on the tool bar.

The form opens, addressed with the name and fax number of the contact. The fax number is taken from the contact's **Business Fax** fields. If the **Business Fax** field is empty, the **Home Fax** field is used. If the **Home Fax** field is empty, the **Other Fax** field is used. If available, the contact's company, city, state, billing information, and voice number will also be included in the fax address for display on the cover sheet.

Figure 3.4 The Advanced Fax Form in Outlook

For information on using the advanced RightFax form for Outlook, please refer to the *RightFax Client for Microsoft Outlook Quick Reference Card* and the online help provided with the form.

Sending Faxes Using Certified Delivery

If you have the RightFax SecureDocs Module installed, users can send faxes from the Outlook Advanced form using Certified Delivery. When a document is sent via Certified Delivery, it is saved as a TIFF file on your organization's Certified Delivery Web server. The recipient is not sent the document directly. Instead, the recipient is sent an e-mail message with a link to the document on the Web server. For information on installing and using Certified Delivery, refer to the *RightFax SecureDocs Module Guide*.



Note *The Advanced Form for Outlook currently supports sending via Certified Delivery only. Sending via SecureDocs will be supported in future versions. The Advanced Outlook form includes a SecureDocs options button which opens a dialog box containing sending options for SecureDocs. These options are currently unused and will not affect how documents are sent with Certified Delivery.*

To send a document via Certified Delivery, the user must specify an e-mail address for the recipient instead of a fax number. The e-mail address can be entered in the **Fax Number/E-mail Address** box on the **Quick Fax Addressing** dialog box, or it can be entered in Outlook's **To:** or **Cc:** boxes.

In the **Quick Fax Addressing** dialog box, the user only needs to specify the recipient's name and e-mail address. After a name and e-mail address have been specified, the user must open the Advanced Outlook form and select the **Convert SMTP Addresses To SecureDocs Recipients** option. When this option is selected, the e-mail address specified in the **Quick Fax Addressing** dialog box will be converted to the proper format for sending via Certified Delivery.

If the user is not using the **Quick Fax Addressing** dialog box, the recipient's name and e-mail address must be entered in Outlook's **To:** or **Cc:** boxes using the following syntax:

[RFAX:Name@/SMTP=EmailAddress/SD]

Where *Name* is the recipient's display name and *EmailAddress* is the destination e-mail address. For example, to send a fax via Certified Delivery from Outlook to JaneDoe@Company.com, enter this address in the **To:** field:

[RFAX:Jane Doe@/SMTP=JaneDoe@Company.com/SD]

Documents sent to addresses formatted this way in Outlook will automatically be sent via Certified Delivery and the Advanced Outlook form is not required.

Manually Addressing Outlook Messages to Fax Destinations

To address a fax from Outlook, you can type all the fax information (name, fax number, etc.) in the **To:** field using one of two supported addressing formats, or create custom fax addresses in either your Personal Address Book or the Global Address List.

Using the FAX: addressing format

This is a simplified fax addressing type that lets users specify the destination name and fax number in the **To:** field in Outlook using the format:

[FAX:Name@FaxNumber]

For example, to send a fax from Outlook to Jane Doe at 555-1212, enter this address in the **To:** field:

[FAX:Jane Doe@555-1212]

Be sure to include the opening and closing square brackets.

You can restrict users' ability to use this addressing type in the RightFax Connector for Microsoft Exchange (see ["FAX Addresses"](#) on [page 16](#))

Using the RFAX: addressing format

This is an advanced fax addressing type supported by RightFax that lets users specify the destination name and fax number in the **To:** field in Outlook using the format:

```
[RFAX:Name@/FN=FaxNumber]
```

For example, to send a fax from Outlook to Jane Doe at 555-1212, enter this address in the **To:** field:

```
[RFAX:Jane Doe@/FN=555-1212]
```

Be sure to include the opening and closing square brackets.

You *must* include the recipient's name and fax number as in the previous example; however, with the RFAX addressing type, you can optionally include one or more additional parameters. The

following table lists all fax destination parameters supported for Outlook. These addressing parameters can appear in any order but must always be entered after the '@' symbol in the address.

Figure 3.5 RFAX Type Outlook Fax Addressing Parameters

Parameter	Definition	Example
/AN=	Billing code 1	/AN=1111
/CI=	Recipient city/state	/CI=Tucson, AZ
/CO=	Recipient company name	/CO=Acme, Inc.
/FN=	Destination fax number	/FN=555-1212
/MN=	Billing code 2	/MN=2222
/SMS	Send to an SMS number instead of a fax number (replaces the /FN parameter)	/SMS=555-1212
/VN=	Recipient voice number	/VN=555-4567

Example [RFAX:Jane Doe@/FN=555-1212/VN=555-4567
/CI=Tucson, AZ/CO=Acme Inc./AN=1111/MN=2222]

You can restrict users' ability to use this addressing type in the RightFax Connector for Microsoft Exchange (see ["RFAX Addresses"](#) on [page 16](#)).

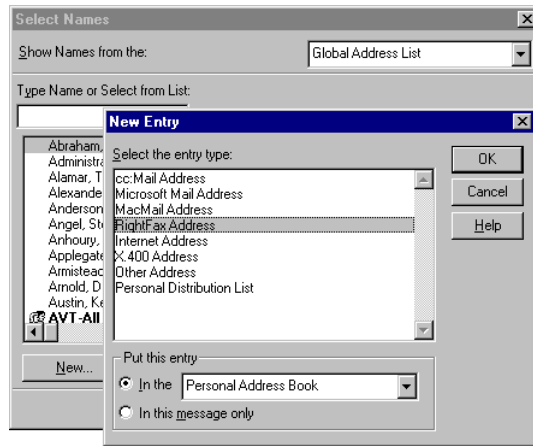
Adding fax entries to your personal address book or the global address list

If you have some fax contacts who you send to regularly, it may save time to add their fax addressing information to one of your phonebooks, rather than manually entering their fax destination each time.

To add fax address entries to a phonebook

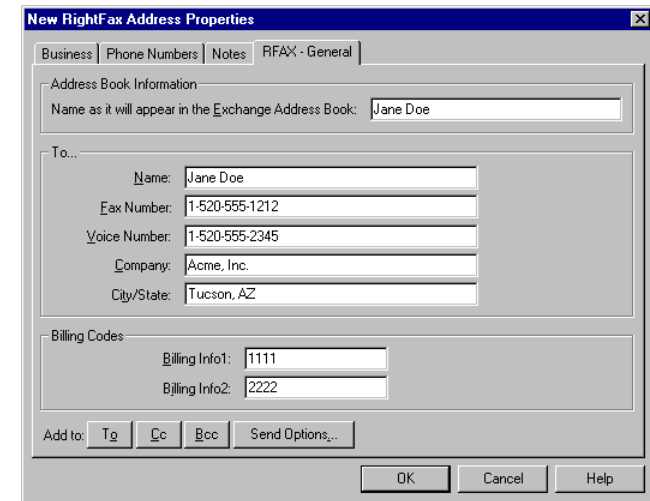
1. In Outlook, create a new message and click **To:**. This opens the **Select Names** dialog box. Click **New** to open the **New Entry** dialog box.

Figure 3.6 The New Entry Dialog Box in Outlook



2. From the list of templates, select **RightFax Address**, and then select the address book for the new entry. Click **OK**. This opens the **New RightFax Address Properties** dialog box.

Figure 3.7 The New RightFax Address Properties Dialog Box



3. Fill in the recipient's fax information. The name you enter under **Address Book Information** is the recipient's name as it will appear in your address book. It is not included on any sent faxes.
4. When you have entered all the recipient's fax information, click **OK** and complete the e-mail message. The new entry will now be available in the address book you specified.

Receiving Incoming Faxes via E-mail

The RightFax Microsoft Exchange Module lets RightFax users receive faxes as e-mail message attachments instead of (or in addition to) receiving them in their FaxUtil mailboxes.

To configure a user to receive faxes in e-mail

1. In Enterprise Fax Manager, double-click the user to open the **User Edit** dialog box, and then click the **Inbound Routing** tab.

Figure 3.8 The Inbound Routing Tab

The screenshot shows the 'User Edit' dialog box with the 'Inbound Routing' tab selected. The fields are as follows:

- Routing Code (DID/DNIS number):** 5555
- Routing Type:** Microsoft Exchange
- File Format:** TIFF (G3-1D)
- Routing Info:** JANE DOE
- Received Fax Routing Form:** Advanced Outlook Form
- Delete after routing?**

2. In the **Routing Type** box, select "Microsoft Exchange."
3. In the **File Format** list, click "TIFF-G3" as the format RightFax will use for the fax attachment.

4. In the **Routing Info** box, enter the Outlook user's Display Name, Alias, or Distinguished Name. To prevent possible duplication, the Distinguished Name is recommended. If you are synchronizing users with Outlook, you *must* enter the user's Outlook Distinguished Name
5. If you have installed Outlook forms (see ["Installing the RightFax Forms for Outlook"](#) on page 23), select the form you want to route incoming faxes to in the **Received Fax Routing Form** box. Select **Default** to use the form set in the e-mail gateway configuration in Enterprise Fax Manager (see ["Adding and Configuring the RightFax Microsoft Exchange Module Service"](#) on page 6).
6. Select the **Delete After Routing** check box only if you want to delete the fax from the user's RightFax mailbox after it is routed to Exchange. If RightFax cannot route a fax to the destination e-mail mailbox, it will leave the fax in the user's RightFax mailbox regardless of how this option is set.

Breaking up large faxes

Some Exchange servers define a maximum file size for inbound messages. By default, if a fax image attached to an inbound mail message exceeds this maximum file size, an error is logged and the message is not sent.

In order to bypass this limit, RightFax can be configured to automatically break fax images into multiple files and send them as separate mail messages. To do this, add a new DWORD Windows registry entry "MaxMessageSize" under HKEY_LOCAL_MACHINE \Software\RightFax\Gateway\Gateway#. Set the value of this key to the maximum file size in Kb. Any faxes that exceed this size will automatically be divided into multiple faxes and multiple mail messages.

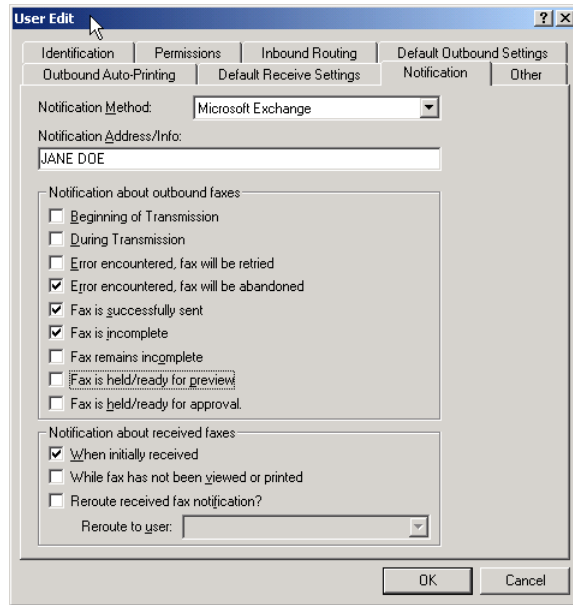
E-mail Notification of Received Faxes

The RightFax Microsoft Exchange Module can be used for *notification* of received faxes whether or not the gateway is configured to actually send and receive faxes.

To configure a user to receive fax notification in e-mail

1. In Enterprise Fax Manager, double-click the user to open the **User Edit** dialog box, and then click the **Notification** tab.

Figure 3.9 The Notification Tab



2. In the **Notification Method** list, click **Microsoft Exchange**.
3. In the **Notification Address/Info** box, enter the Outlook user's Display Name or Alias. Click **OK** to save the new notification settings.

Group notification

The notification method can be configured for an entire RightFax group by editing the group ID properties in Enterprise Fax Manager and setting the group **Notification Type** to Microsoft Exchange.

Customizing the subject lines of Exchange user notifications

The subject line of each user notification message in Exchange can be customized by adding a Windows registry setting to the fax server. For each message to customize, add a new string registry entry under HKEY_LOCAL_MACHINE\Software\RightFax\Gateway\Gateway#. The following table lists each registry entry, the type of notification the message applies to, and its default text value. Some values let you include variables as part of the string. In each case the variable and its definition is listed.

Table 3c Custom Exchange Subject Line Registry Settings

Registry key	Defines the subject line of	Default value
ExchangeMsgs_0	Received Outlook messages that contain newly received faxes	A new fax has arrived from ~1 (Part ~2 of ~3). ~1 = CSID of originating fax machine ~2 = Part of the fax (if fax is broken into multiple parts) ~3 = Total fax parts (if fax is broken into multiple parts) ~4 = The number of the fax channel that received the fax ~5 = The unique ID of the fax, assigned by the RightFax server ~6 = ANI information
ExchangeMsgs_1	Notification that a sent fax had an incorrect fax address	Your fax has not been sent because the addressing information was incorrect.

Table 3c Custom Exchange Subject Line Registry Settings (Continued)

Registry key	Defines the subject line of	Default value
ExchangeMsgs_2	Notification that a sent fax had an invalid fax address	Valid fax destination information could not be found in your mail message. The message has been discarded.
ExchangeMsgs_3	Notification that a sent fax had an invalid e-mail address	The gateway was unable to validate the e-mail address of the message sender. The message has been discarded.
ExchangeMsgs_4	Notification that a sent fax was not sent due to an error during processing	An error occurred while trying to process your message. Please try again or contact your system administrator. The message has been discarded.
ExchangeMsgs_5	Notification that a sent fax was not sent due to an error during transmission	An error occurred while trying to send your message. Please try again or contact your system administrator. The message has been discarded.
ExchangeMsgs_6	Notification that a sent fax marked for preview is ready to view	Your fax to ~1 is ready for previewing. ~1 = Recipient's name
ExchangeMsgs_7	Notification that a sent fax has not been sent	Your fax has not been sent.
ExchangeMsgs_8	Notification that a sent fax had no body content	There is no message body.

Including the Fax ID in the E-mail Notification

The e-mail notification of a received fax in Microsoft Outlook can include the unique ID of the fax. The unique ID appears in the subject line of the e-mail. To change the format of the unique ID, see the chapter on routing inbound faxes in the *RightFax Administrator's Guide*.

To configure e-mail notification messages to include the fax ID

For the unique ID of the fax to appear in e-mail notification messages, you must modify the notification messages on the RightFax server.

1. In Enterprise Fax Manager, select the RightFax server to modify.
2. Under **Service Name**, double-click **RightFax Server Module**. The **Server Configuration** dialog box opens.
3. On the **Custom Messages** tab, modify the **New Fax** message. Type a message that includes the ~5 variable, which is the unique ID of the fax. The maximum length of a notification message is 200 characters.

For example, enter the message **A new fax has arrived. Fax ID ~5**.

Embedded Codes in E-mail Messages

Embedded codes are special faxing instructions that you insert directly into fax-bound documents such as e-mail messages. You can use embedded codes to include fax cover sheet information, attach library documents, add billing information, and more.

To add an embedded code to an e-mail message, type the code you want, along with any required parameters, between angle brackets. For example, an embedded code that tells RightFax to send a library document called "PriceSheet" is written as:

```
<LIBDOC:PRICESHEET>
```

RightFax removes all embedded codes from the mail message when it converts it to fax form so they don't appear in your final fax. If you type an embedded code incorrectly, it will be ignored by RightFax and included in your fax. Embedded codes may be written in either upper or lower case.

Embedded codes must always use a native printer font. This is because when the mail message is converted to PCL5 format, all other font types are encoded as graphic images. Only native printer fonts are stored in the PCL file that the fax is generated from in their original text format. And it is this text in the PCL file that is replaced. If you do not use native printer fonts for your embedded codes, the codes themselves will appear in the instead of being replaced by the information or instruction they represent. All embedded codes are surrounded by angle brackets (<>) which must also use the same native printer font.



Note *Windows 200x may add unexpected spacing or other characters to embedded code strings even when using a native printer font. For embedded codes in documents on Windows 200x machines, RightFax recommends using the "Courier" native printer font only.*

Embedded codes can appear anywhere in the body of the mail message (they will not work in the **Address** or **Subject** fields). Embedded codes cannot line wrap and any embedded code that is so long that it wraps to a second line will be ignored.

For a description and example of each e-mail compatible embedded code see "[E-mail Compatible Embedded Codes](#)" on [page 37](#).

■ ■ ■

Appendix A

E-mail Compatible Embedded Codes

Embedded codes are special faxing instructions that you insert directly into fax-bound e-mail messages. You can use embedded codes to include fax cover sheet information, attach library documents, specify a time to send the fax, and more.

To add an embedded code to an e-mail message, type the code you want, along with any required parameters, between angle brackets. For example, an embedded code that tells RightFax to include the library document "Priceguide" along with the text of the e-mail is written as:

```
<LIBDOC2:PRICEGUIDE>
```

RightFax removes all embedded codes from the e-mail message when it converts it to fax form, so they don't appear in your final fax. If you type an embedded code incorrectly, it will be ignored by RightFax and will be included in your fax. Embedded codes may be written in either upper or lower case and embedded codes always work the same way regardless of the e-mail application used to create the document.

Although you can use any fonts you want in the text of your e-mail messages, embedded codes *must always* use a native printer font. This is because when the file is converted to PCL5 format, all other font types are encoded as graphic images. Only native printer fonts are stored in the PCL file in their original text format. It is this text in the PCL file that is replaced. If you do not use native printer fonts for your embedded codes, the codes themselves will appear in the

instead of being replaced by the information or instruction they represent. All embedded codes are surrounded by angle brackets (<>) which must also use the same native printer font.



Note *Windows 200x may add unexpected spacing or other characters to embedded code strings even when using a native printer font. For embedded codes in documents on Windows 200x machines, RightFax recommends using the "Courier" native printer font only.*

Embedded codes can be placed anywhere in the e-mail message that you will be faxing. They cannot line wrap and any embedded code statement that is so long that it wraps to a second line will be ignored.

This appendix lists only embedded codes that are recognized by the e-mail gateways. RightFax supports several additional embedded codes when faxes are generated from native applications. For a complete list of embedded codes supported by RightFax, please refer to the *RightFax Administrator's Guide*.

ATDATE**Format** <ATDATE:date>

Schedules the fax to send on a specific date. Dates can be expressed as relative or absolute. Relative dates give the number of days from today's date. For example, "+7" represents one week from today. Absolute dates specify the exact date to send the fax. Absolute dates must be written in one of these formats: MM/DD/YY, MM-DD-YY, or MM-DD-YYYY.

If no send time is specified with the ATTIME code (described later), the send time defaults to "now" (the current time of processing). For example, if a fax is sent to the queue at 3:30 p.m. and it contains only an <ATDATE:+1> code, it will automatically be scheduled to send at 3:30 p.m. tomorrow.

Maximum field length: 10 characters

Example <ATDATE:9-15-99>
<ATDATE:+2>**ATTIME****Format** <ATTIME:time>

Schedules the fax to send at a specific time. The time can be relative or absolute.

Relative time is the number of hours or minutes from the current time. For example, "+2" is two hours from now.

Absolute times are entered in either 12-hour or 24-hour format. A colon separating hours and minutes is optional, and an "a" or "p" can be used to indicate A.M. or P.M. The fax server does not send the fax at exactly the minute specified. Rather, the fax becomes eligible for scheduling within 15 minutes of the specified time.

Specifying a time between the current time and midnight will schedule the fax to send today. Specifying a time earlier than the current time will schedule the fax tomorrow.

Maximum field length: 9 characters

Example <RFSAP_ATTIME:10:00p>
<RFSAPAT_TIME:+2>**BILLINFO1****Format** <BILLINFO1:code>

Assigns a billing code to the fax. The billing code will be sent but it will not be validated by RightFax.

Maximum field length: 15 characters

Example <BILLINFO1:4444>**BILLINFO2****Format** <BILLINFO2:code>

Assigns a second billing code to the fax. The billing code will be sent but it will not be validated by RightFax.

Maximum field length: 15 characters

Example <BILLINFO2:5555>**CHANNEL****Format** <CHANNEL:channel#>

Sends the fax only on the specified channel of the fax board. Specify a number corresponding to the channel to use. Set the channel number to 0 (zero) to use any available channel.

This code is useful if your organization uses one channel for priority faxing, and you want the fax to go out right away. You can also use this code to limit fax broadcasts to one channel only, leaving the other channels free for priority faxing.

Maximum field length: N/A

Example <CHANNEL:3>

COVER

Format <COVER>

Automatically generates a RightFax cover sheet for the fax containing the code. If the user sending the fax containing this code is configured to automatically generate a cover sheet, only one cover sheet will be generated.

Unless a cover sheet file name is specified using the <FCSFILE> embedded code (see “[FCSFILE](#)” on [page 39](#)), this code will automatically use the default cover sheet file.

Maximum field length: N/A

DELETE

Format <DELETE>

Deletes the fax from the user’s FaxUtil mailbox after it has been successfully sent. This code overrides the default RightFax auto-delete setting.

Maximum field length: N/A

DELETEALL

Format <DELETEALL>

Deletes all faxes from the user’s FaxUtil mailbox after the fax has been sent, whether or not the send was successful. This code overrides the default RightFax auto-delete setting.

Maximum field length: N/A

FCSFILE

Format <FCSFILE:file name>

Uses the specified file as the RightFax-generated cover sheet. The cover sheet file must exist in the RightFax\FCS folder on the RightFax server and must end with the extension .pcl. Do not specify a directory path.

Maximum field length: 12 characters

Example <FCSFILE:MYCOVER1.PCL>

FINE

Format <FINE>

Converts the body of the fax using “fine” resolution (200 × 200 DPI). Fine resolution is recommended for faxes with detailed graphics and faxes that will be OCRed. This code overrides the default fax resolution set in the user’s FaxUtil mailbox.

Maximum field length: N/A

FROMFAXNUM

Format <FROMFAXNUM:faxnumber>

Specifies the sender’s fax number on the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Maximum field length: 31 characters

Example <FROMFAXNUM:(520)555-1 234>

FROMGENFAXNUM

Format <FROMGENFAXNUM:faxnumber>

Specifies the company’s general fax number to be placed on the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Maximum field length: 31 characters

Example <FROMGENFAXNUM:(520)555-2345>

FROMGENPHONE

Format <FROMGENPHONE:phonenumber>

Specifies the company's general phone number to be placed on the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Maximum field length: 31 characters

Example <FROMGENPHONE:(520)555-3456>

FROMPHONE

Format <FROMPHONE:phonenumber>

Specifies the sender's phone number to be placed on the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Maximum field length: 31 characters

Example <FROMPHONE:(520)555-4567>

IGNORE

Format <IGNORE>

Causes all subsequent embedded codes to be ignored.

Maximum field length: N/A

LIBDOC

Format <LIBDOC:documentID>

Sends the specified RightFax library document *in addition* to sending the document containing the code. Multiple library documents may be specified, each as a separate LIBDOC code. When used with e-mail gateways, this embedded code functions exactly the same as LIBDOC2.

Maximum field length: 21 characters

Example <LIBDOC:INFOPACK1>

LIBDOC2

Format <LIBDOC2:documentID>

Sends the specified RightFax library document *in addition* to sending the document containing the code. Multiple library documents may be specified, each as a separate LIBDOC2 code. When used with e-mail gateways, this embedded code functions exactly the same as LIBDOC.

Maximum field length: 21 characters

Example <LIBDOC2:INFOPACK1>

NOCOVER

Format <NOCOVER>

Turns off automatic RightFax cover sheet generation for the document containing this code.

Maximum field length: N/A

NORMAL

Format <NORMAL>

Converts the body of the fax using "normal" resolution (100 × 100 DPI). Normal resolution faxes can be transmitted much faster than fine resolution faxes, saving time and phone charges. This code overrides the default fax resolution set in the user's FaxUtil mailbox.

Maximum field length: N/A

PREVIEW

Format <PREVIEW>

Holds the fax for preview in your FaxUtil mailbox. You must view the fax in FaxUtil and select **Release** from the **File** menu before it will send.

Maximum field length: N/A

PRIORITY

Format <PRIORITY:priority>

Sets the priority of the outgoing fax. Allowed settings are: Low (L), Normal (N), and High (H). If a user specifies high priority and does not have the “Can use high priority” permission, the fax will automatically be sent with “normal” priority.

Maximum field length: N/A

Examples<PRIORITY:HIGH>
<PRIORITY:N>

SAVE

Format <SAVE>

Instructs RightFax to not delete the fax image from the user’s FaxUtil mailbox after being sent. This overrides any default auto-delete setting.

Maximum field length: N/A

■ ■ ■

Appendix B

File Formats that Convert to Fax Format

The following table lists the software applications and document file formats that can be converted to faxes by the built-in conversion engine on the RightFax server. Only these file types can be converted from their native format by sending as file attachments to a fax message or by using the Send To function in Windows.

Table B1 Supported Document File Formats

Application or file format	Supported versions
ANSI text (7 & 8 bit)	All versions
ASCII text (7 & 8 bit)	All versions
Binary group 3 fax	All versions
BMP (including RLE, ICO, CUR, and OS/2 DIB & OS/2 Warp)	Windows versions
CDR (if TIFF image is embedded in it)	Corel Draw versions 2.0 through 9.0
DCX (multi-page PCX)	Microsoft Fax
DRW (Micrografx Designer)	Version 3.1
DRW (Micrografx Draw)	Versions through 4.0
EPS	If TIFF image is embedded
Freelance for Windows	Version 1.0, 2.0, 96, 97, and Millennium

Table B1 Supported Document File Formats (Continued)

Application or file format	Supported versions
GIF	Compuserve
HTML	Versions through 3.0
JPEG (includes EXIF)	All versions
Lotus 1-2-3 (DOS & Windows)	Versions through 5.0
Lotus 1-2-3 (OS/2)	Versions through 2.0
Lotus 1-2-3 Charts (DOS & Windows)	Versions through 5.0
Lotus 1-2-3 Charts (OS/2)	Versions through 2.0
Lotus 1-2-3 for SmartSuite	SmartSuite 97, Millennium, and Millennium 9.6
Lotus AMI/AMI Professional	Versions through 3.1
Lotus Symphony	Versions 1.0, 1.1, and 2.0
Microsoft Binder	Version 7.0, Binder 97
Microsoft Excel Charts	Versions 2.x through 7.0
Microsoft Excel for Macintosh	Versions 3.0 through 4.0, 98, and 2001
Microsoft Excel for Windows	Versions 2.2 through 2002

Table B1 Supported Document File Formats (Continued)

Application or file format	Supported versions
Microsoft Multiplan	Version 4.0
Microsoft PowerPoint for Macintosh	Version 4.0, 98, and 2001
Microsoft PowerPoint for Windows	Versions through 2002
Microsoft Rich Text Format (RTF)	All versions
Microsoft Windows Works	Versions through 4.0
Microsoft Word for DOS	Versions through 6.0
Microsoft Word for Macintosh	Versions 4.0 through 2001
Microsoft Word for Windows	Versions through 2002
Microsoft WordPad	All versions
Microsoft Works for DOS	Versions through 2.0
Microsoft Works for Macintosh	Versions through 2.0
Microsoft Works for Windows	Versions through 4.0
Microsoft Write	Versions through 3.0
Novell WordPerfect for DOS	Versions through 6.1
Novell WordPerfect for Macintosh	Versions 1.02 through 3.0
Novell WordPerfect for Windows	Versions through 7.0
PCX bitmap	PC Paintbrush
PICT1 and PICT2 (Raster)	Macintosh standard
QuattroPro for DOS	Versions through 5.0
QuattroPro for Windows	Versions through 10
TIFF	Versions through 6
TIFF CCITT Group 3 & 4	Fax Systems
Unicode Text	All versions

Table B1 Supported Document File Formats (Continued)

Application or file format	Supported versions
UUEncode	No specific version
WordPerfect Graphics (WPG and WPG2)	Versions through 2.0
ZIP	PKWARE versions through 2.04g

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