



Version 9.0
Administrator's Guide

Edition

Information in this document applies to version 9.0 of the RightFax Administrator's Guide.

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Chapter 1

Introduction

About the RightFax System

The RightFax system is a comprehensive network fax solution for creating, sending, receiving, and managing faxes directly from a user's desktop computer. RightFax features and intuitive design make faxing as easy as printing to a network printer.

A user can enhance the fax by adding a cover page, overlaying a form, attaching documents, and inserting graphics.

FaxUtil is the RightFax mailbox where users create, view, print, and manage faxes. With FaxUtil, users can forward, route, and delete faxes. They can view other users' fax mailboxes and delegate views into their personal fax mailboxes.

The RightFax fax server manages network print queues assigned to faxing, converts outgoing faxes, schedules outgoing faxes, and routes incoming faxes. Routing can be optimized with Intelligent Least-cost Routing™ rules. The server consists of several services that run on one server computer or several networked computers to distribute heavy workloads.

Similarly, RightFax fax board services can be installed on remote servers to distribute the workload across several computers and to provide expanded channel capacity and system redundancy.

A RightFax e-mail gateway acts as a communication link between the RightFax server and an e-mail server. With an e-mail gateway, the user's customary e-mail client software can serve as the fax

client. RightFax includes e-mail gateways for Novell GroupWise and SMTP/POP3. Advanced gateways for Microsoft Exchange and Lotus Notes are available as separate modules.

Using This Guide

The *RightFax Administrator's Guide* is designed for RightFax administrators who will be installing and configuring the RightFax software on both client and server computers. This guide assumes you have knowledge of the Windows NT® and Windows 98, Windows 2000, or Windows XP operating systems, as well as knowledge of networking systems and your own organization's network.

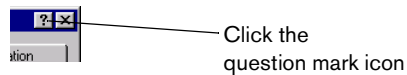
Other Resources for RightFax Users

Because your RightFax servers can support dozens, hundreds, or even thousands of fax users, RightFax has designed its end-user documentation to be thorough, easy-to-use, and easily accessible.

In addition to the user's guides, quick reference cards give you quick and easy access to the most common fax management features of the FaxUtil, Microsoft Exchange, Lotus Notes, and Web Client fax client applications. These useful cards are compact and can be easily distributed throughout even the largest organizations.

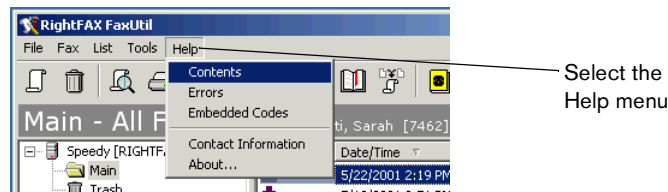
Getting Help Online

Most of the RightFax windows and dialog boxes include context-sensitive help. Typically, this help describes each field and option in a dialog box. This context-sensitive help can be launched from the question mark icon in the title bar of a dialog box.



- Click this icon, and then click any option on the dialog box to view its definition.
- Or, press F1 to view a definition.

Online help for tasks or conceptual topics also is available. View this help by selecting the **Help** menu. You can browse the help for a topic or use the index to look up key words and terms.

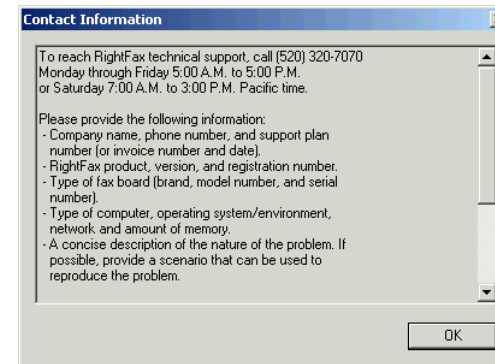


The RightFax Web site offers the latest product information. Updated documentation, a searchable customer support knowledgebase, software downloads, and the latest product offerings are all online at www.captaris.com/rightfax.

Editing Contact Information in FaxUtil

In the FaxUtil **Help** menu, users can select **Contact Information**, and a dialog box opens that lists RightFax technical support contact information.

Figure 1.1 The Contact Information Dialog Box



This contact information appears in English with RightFax contact information, but you can edit the text to provide customized information. To do so, edit the text file `Contact.txt` located in the `\RightFax\Bin` folder on the RightFax server. You can enter 24 lines of text and up to 59 characters per line.

Captaris Training Services

RightFax training gives you the skills to optimize your RightFax solution. Our comprehensive technical, administrative, and user training programs produce full utilization and understanding of RightFax products. Regular classes are held at the state-of-the-art RightFax Training Center in Tucson, Arizona, throughout the year, or you can choose the convenience of training at one of our regional locations. Training materials and computer-based training tools are also available. For more information on RightFax training, please

visit our Web site at www.captaris.com/training, or call us at (520) 320-7098 and let us help you develop a customized training plan for your organization.

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Support Sales and Administration: (520) 320-7000

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Captaris Implementation Services

Captaris Implementation Services offers a team of highly skilled engineers who are experts in the deployment, implementation, and integration of RightFax solutions. Implementation services include installation and configuration, upgrades, configuration review, and advanced integration services. Whether it's through remote dial-in, an on-site implementation, or a combination of both, the Implementation Services team can quickly integrate RightFax solutions with your existing applications.

Customer Support

Your *Customer Support Guide* includes detailed information about the support options available to RightFax customers. Please fill out the *RightFax Software Warranty & Registration Card* and return it immediately. If you have questions of a technical nature, contact your organization's RightFax administrator or network administrator before calling the RightFax customer support department. On the RightFax Web site, a database of customer support knowledge contains a wealth of information on installing, configuring, and maintaining RightFax software.

Chapter 2

Understanding the RightFax Servers

Thank you for choosing RightFax fax server software. With this comprehensive network fax solution, you can create, send, receive, and manage faxes directly from your desktop computer, saving time, money, and manpower. The RightFax system features and intuitive design make faxing as easy as printing to a network printer. Administrators will find that because it is a native Windows NT service, RightFax is easy to install, configure, and manage. RightFax offers the following versions of its fax server software:

- RightFax Business Server
- RightFax Enterprise Server
- RightFax Enterprise or Business Server with the Integration Module
- RightFax Satellite Server

RightFax Business Server

This RightFax server supports unlimited user accounts, It includes one fax channel, and is expandable to 30 fax channels.

RightFax Enterprise Server

This RightFax server supports unlimited user accounts. It includes three WorkServers and one fax channel, expandable to support unlimited fax channels. This server includes the RightFax Web Client™ and the OCR Router™, OCR Converter™, Docs-on-Demand™, and TeleConnect™ modules.

The Enterprise server is also available as a product suite that includes the RightFax Enterprise server, plus the Gateway for Microsoft® Exchange, the Gateway for Lotus Notes®, the Document Management Connector™, and the SNMP Alerting™, and PDF modules.

RightFax Server with the Integration Module

The RightFax server and the RightFax Integration Module enable applications for information exchange. The Integration Module integrates RightFax with applications on mainframe, mid-range, and local area network host systems.

- The RightFax Small Business Integration Module can be installed on the RightFax Business and Enterprise servers.
- The RightFax Enterprise Integration Module can be installed on the Enterprise server.

RightFax Satellite Server

This RightFax server supports up to 15 user accounts. It includes two WorkServers and two fax channels.

How RightFax Works

RightFax is comprised of these basic components:

- Fax image files
- Fax database (SQL)
- Fax server services
- Fax client programs

Before configuring RightFax for your particular network installation, you should understand the function of each component.

Fax image files

All sent and received faxes are stored as compressed graphic image files (CCITT Group III format) in the RightFax\Image folder. Fax image files are assigned file names by the RightFax server and these file names are directly referenced by the RightFax SQL database.

Each individual page of a fax is saved as a separate file. All files associated with a single fax will have the same file name, but different file extensions will indicate the page number. File extensions for RightFax image files are numeric, starting with number 301, indicating the first page of the fax. The file extension increments by 1 for each subsequent page of the fax.



Warning If you re-name RightFax image files, they will not be recognized by the RightFax server.

A typical fax consumes 35 Kb, though some can be as large as 150 Kb or as small as 5 Kb per page. Because fax images can consume a large amount of disk space, you should dedicate at

least 500 Mb of storage to your RightFax server. More space may be required depending on the number of faxes sent and received, and how frequently old faxes are deleted.



Note RightFax monitors the amount of free disk space on the server and will shut down certain processing elements when available disk space falls below 50 Mb. When sufficient disk space is restored, fax processing continues automatically.

Fax database

RightFax uses a SQL database to manage RightFax system objects (such as users, groups, and printers) and to organize, track, and route faxes. RightFax provides some database management and diagnostic utilities. Third-party and custom SQL utilities can also be applied to the RightFax database. For more information on the RightFax database and applicable SQL database management tools, see [Chapter 26, "Working with the RightFax Database and Administrative Utilities"](#).

Fax server services

The RightFax fax server consists of several services: the RightFax Server module, RightFax WorkServer modules, RightFax RPC Server module, RightFax Database module, RightFax Queue Handler, RightFax BoardServer module and, optionally, the e-mail gateway and integration modules. In most cases, all the services run on the same machine so that the Server module can automatically start and stop the programs as necessary. However, the RightFax WorkServer and BoardServer modules can run on different computers to redistribute heavy workloads.

The RightFax Server Module

Manages the network print queues assigned to faxing, controls the conversion of outgoing faxes, and works with the BoardServer module to schedule outgoing faxes and route incoming faxes.

The RightFax WorkServer Module

Performs one or more functions on behalf of the RightFax Server module. It periodically asks the RightFax database if its services have been requested, executes requested tasks, and notifies the database when tasks are complete. You can configure multiple WorkServer modules to handle processor-intensive tasks such as print-to-fax file conversions. For example, one WorkServer can convert PCL-5 print files into fax images, while another WorkServer separately handles automatic printing of incoming faxes.

The RightFax DocTransport Module

Lets you configure the methods by which RightFax will be able to transmit documents. This module lets you configure fax boards for conventional fax transmission, as well as set up RightFax for SMS messaging, Fax-over-IP, DOCplus, and Eicon fax boards.

The RightFax BoardServer Module

Acts as an interpreter between the fax boards and the Server module. It handles requests to schedule outgoing faxes for transmission and informs the Server module when a new fax has been received and needs to be processed. Multiple BoardServer modules can be installed on remote servers to distribute the workload across several machines and provide expanded channel capacity and system redundancy.

The RightFax Database Module

This is the fax database manager. It accesses the SQL fax database to provide client programs with the information used in fax transactions including deleting, forwarding, creating, viewing, and printing faxes.

The RightFax RPC Module

Acts as an interpreter between the RightFax client programs and the fax database on the server.

The RightFax Queue Handler

Monitors the HPFAX print queue for inbound jobs and directs them to RightFax for processing.

RightFax client programs

FaxUtil

FaxUtil is RightFax's Windows-based client application. With FaxUtil, users can view, print, and manage their faxes.

RightFax Web Access

RightFax Web Access is RightFax's browser-based client application. It includes all the functionality of FaxUtil, but can be accessed by users from any compatible Web browser.

Enterprise Fax Manager

Enterprise Fax Manager is the primary RightFax administrator application. With Enterprise Fax Manager, the RightFax administrator can manage users, groups, printers, least-cost routing, and the general functions of the fax system.

Enterprise Fax Manager Web Edition

Enterprise Fax Manager Web Edition is a browser-based RightFax management tool. It includes all the functionality of Enterprise Fax manager, but can be accessed from any compatible Web browser.

Installing the RightFax Server

For information and instructions on installing the RightFax server software, refer to the *RightFax Installation Guide*.

■ ■ ■

Chapter 3

Configuring the RightFax Server Module

The RightFax Server module manages the network print queues assigned to faxing, controls the conversion of outgoing faxes, and works with the RightFax BoardServer module to schedule outgoing faxes and route inbound faxes. You can configure the RightFax Server module to customize global fax settings, inbound fax routing, and notifications about document processing and server status.

Although the default configuration of the RightFax Server module allows you to send and receive fax documents, you should configure it to meet the needs of your enterprise immediately after installing the RightFax server software.

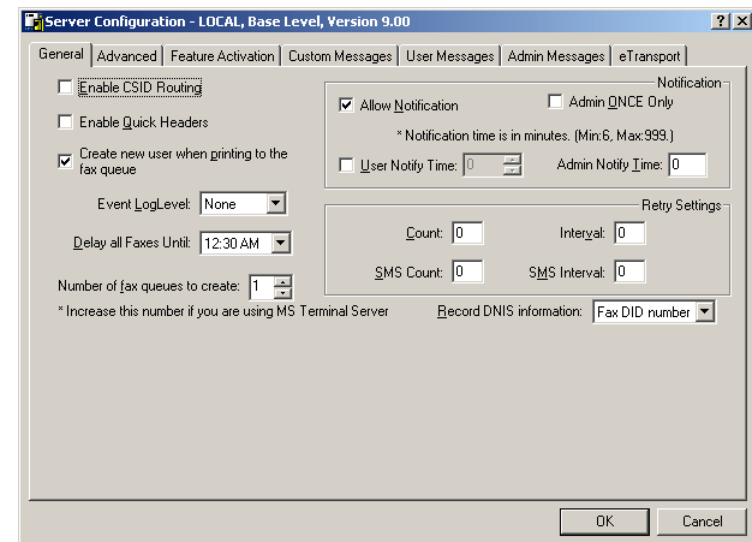
To configure the RightFax Server module

1. On the RightFax server, select **Start > Programs > Enterprise Fax Manager**. This runs Enterprise Fax Manager, the RightFax server administration tool. For more information on Enterprise Fax Manager, see [Chapter 7, “Managing Fax Servers with Enterprise Fax Manager”](#).
2. Click the name of the RightFax server to configure in the tree in the left pane of the Enterprise Fax Manager window. A list of services appears at the lower-right pane of the window.
3. In the **Service Name** list, double-click **RightFax Server Module. The Server Configuration** dialog box opens.

The rest of this chapter explains each of the options in this dialog box.

Configuring the General Tab

Figure 3.1 The Server Configuration Dialog Box General Tab



Enable CSID Routing Enables automatic inbound routing using CSID (caller subscriber identification). CSID data is information about the calling party sent to the fax board by the phone company. The CSID is different for each caller, and can be anything from a phone number to a company name.

For CSID routing to work, you must create a CSID routing table that lists RightFax routing codes and the CSIDs to be routed to them. For more information on CSID routing and creating a CSID routing table see [“Configuring CSID Routing”](#) on [page 213](#).

Enable Quick Headers Allows a second line to be added below the TTI line (the line listing the date, time, page number, total pages, and fax ID at the very top of each fax page). After the quick header is enabled, you can customize the text in the BoardServer module (see [“Quick Header Format”](#) on [page 59](#)). If this check box is selected, quick headers will be applied to all outgoing faxes.



Note *Intel® Dialogic® fax boards do not support the Quick Header feature.*

Create New User when Printing to the Fax Queue

Assigns a new RightFax user ID to network users who print to the fax queue but don't have a RightFax user ID. RightFax uses the “Default” user ID as a template when creating new users.

Event LogLevel Specify the level of information logged in the Application Event Log under the service name “RightFax Server Module.” You can select the following options:

- **None.** No information is saved.
- **Terse.** Records critical errors only.
- **Normal.** Records errors and major events only.
- **Verbose.** Records all significant events and is most useful for tracking and resolving problems.



Caution *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.*

Delay All Faxes Until Specify the time of day after which all faxes sent by users without RightFax administrative access will be sent. To not delay faxes, select “None set.”

Forced delays can also be set for groups of RightFax users. For more information on groups, see [Chapter 9, “Creating Groups of Users”](#).

Number of Fax Queues to Create Specify the number of fax print queues to create to allow multiple users to send simultaneous print-to-fax jobs with Windows Terminal Server. This is the maximum number of sessions that can simultaneously access the RightFax print queue. The number of queues you specify depends on the number of fax users supported by Terminal Server. Specify as many print queues as necessary to prevent sessions from hanging in the print queue.

If you are *not* supporting multiple sessions on a Windows Terminal Server, this option should be set to “1.”

Record DNIS Information Specify where to store DNIS (dialed number identification service) information for each incoming fax. DNIS is specially encoded data that may be included with your incoming calls as a service provided by your phone company. RightFax fax records do not include a field dedicated to storing DNIS information, so you must use one of three existing fields:

- Select “Fax DID number” to save DNIS information where the originating phone number is saved.
- Select “Billing code 1” to save DNIS information in the fax Billing Code 1 field.
- Select “Billing code 2” to save DNIS information in the fax Billing Code 2 field.
- Select “Don't record” to discard DNIS information.



Note Because it overwrites any data in the location you specify, DNIS information should be saved to a field that is not used by your RightFax system.

Notification settings

Notification settings can be changed without stopping and re-starting the RightFax services.

Allow Notification Enables fax notifications to be sent to RightFax users. When this check box is selected, users receive notification messages based on the notification options specified in FaxUtil.

Admin Once Only Notifies the group administrator and alternate administrator of their users' unviewed faxes one time only.

User Notify Time Specify the length of time in minutes that the server will attempt to notify a user of an unviewed fax before it notifies the user's group administrator.

Admin Notify Time Specify the length of time in minutes that the server will notify a user's group administrator of unviewed faxes.



Note By default, the RightFax server sends periodic notifications to users every five minutes. To re-define this interval, add a REG_DWORD value called `Notify_Freq` to `HKEY_LOCAL_MACHINE\Software\RightFax\FaxServer` and set the value data to the number of minutes you want there to be between notifications.

Retry settings

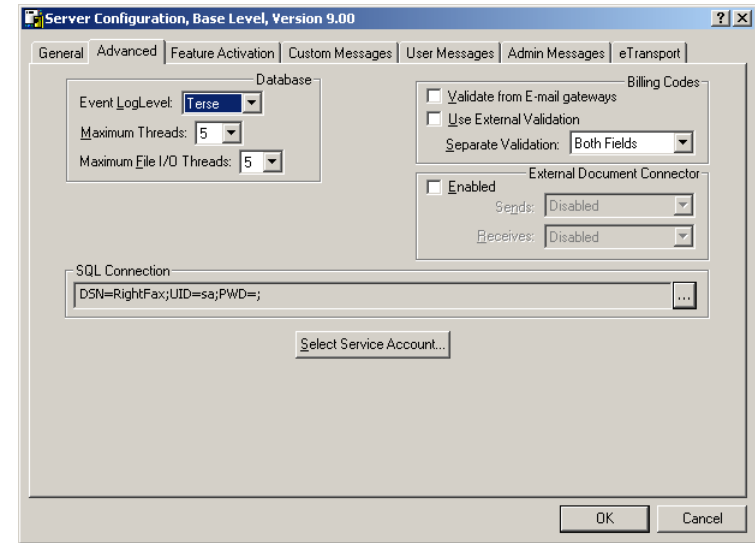
Count Specify the number of times (including the first attempt) an outgoing fax transmission will be attempted after it encounters a non-fatal error (for example, a busy signal).

Interval Specify the minimum delay in minutes before a failed fax transmission is rescheduled to send.

If a fax has not been successfully sent after the specified number of retries, it will be saved in the sender's FaxUtil mailbox with the status message: "ED:Fax Number Busy." ("ED" stands for "Error, Transmission Dropped"). The sender can force RightFax to manually retry sending the fax by clicking the fax and press CTRL+K ("kick" the fax).

Configuring the Advanced Tab

Figure 3.2 The Server Configuration Dialog Box Advanced Tab



Database settings

Event LogLevel Specify the level of information logged in the Application Event Log under the name "RightFax Database Module." You can select the following options:

- **None.** No information is saved.
- **Terse.** Records critical errors only.
- **Normal.** Records errors and major events only.
- **Verbose.** Records all significant events and is most useful for tracking and resolving problems.



Caution 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.

Maximum Threads Sets the number of database I/O threads reserved to service client requests.

The RightFax Database module can respond to database requests from multiple clients and multiple protocols at the same time. The efficiency of this process depends on the number of database I/O threads available. Because each thread uses resources (file handles, CPU time, and memory), you should never increase the number of threads to more than 10. If a database request occurs when all the threads are busy, the request will wait in line to be serviced.

Maximum File I/O Threads Sets the number of file I/O threads reserved to service client requests.

The RightFax Database module can respond to file I/O requests from multiple clients and multiple protocols at the same time. The efficiency of this process depends on the number of file I/O threads available. Because each thread uses resources (file handles, CPU time, and memory), setting this value too high will deplete the server's resources for other tasks. If a file I/O request occurs when all the threads are busy, the request will wait in line to be serviced.

Billing code settings

Billing code settings can be changed without stopping and restarting the RightFax services.

Validate from E-mail Gateways Validates all billing codes added to fax-bound e-mail messages. If a billing code cannot be validated, the fax will not send and the user will receive notification that the fax did not send due to an invalid billing code. If this check box is *not* selected, billing codes may be added to fax-bound e-mail messages but will not be validated prior to sending (in other words, any billing code will be accepted).

Use External Validation Tells RightFax to use an external program to verify billing codes on outbound faxes. This gives the user the ability to validate faxes based on several different criteria, not just billing codes. To work, a program must be written with the

RightFax API to perform the verification of billing codes. For information on downloading and using the RightFax API, visit the Captaris implementation services Web site at www.captaris.com/implementation_services.

Separate Validation Customizes the way in which required billing codes are validated against the RightFax database. Selecting "Both Fields" requires both **Billing Code 1** and **Billing Code 2** fields contain valid codes. "Field 1 or Field 2" requires either of the billing code fields to contain a valid code, but not necessarily both. "Field 1 Only" requires only the **Billing Code 1** field contain a valid code. "Field 2 Only" requires only the **Billing Code 2** field contain a valid code.

External document connector

The external document connector settings are used for integrations between RightFax and third-party systems. These settings should only be set by following the instructions for integrating with a third-party system.

Click to clear the **Enabled** check box to disable and prevent the external document connector from writing large amounts of unused data to the server hard drive.

SQL Connection

This field displays the connection string that defines the RightFax server's connection to the SQL database. You can make changes to the SQL connection by clicking the [...] button on the right. For more information on changing and editing the connection to the RightFax database on the SQL server, see "[Changing the Connection to the SQL Server](#)" on [page 269](#).

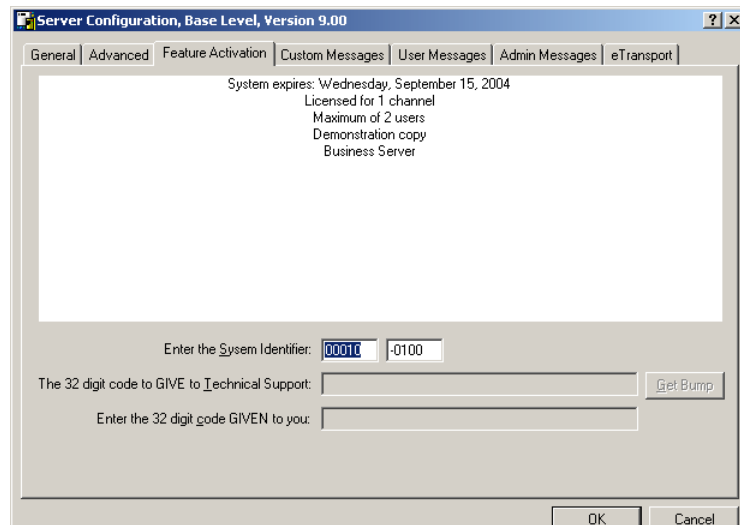
Select Service Account Click this button to select a service account for the RightFax Server and RightFax Database services. Specifying an account for these services is only required if you want to connect to the SQL database using NT authentication. Enabling NT authentication to the SQL server requires additional

configuration. For instructions on configuring network authentication to the SQL server, see “[Configuring NT authentication to the SQL server](#)” on page 270.

Configuring the Feature Activation Tab

The **Feature Activation** tab is used to view and modify the number of fax channels, users, and RightFax modules that you have licensed. This tab can also be used to re-activate a copy of RightFax when the usage timer has expired.

Figure 3.3 The Server Configuration Dialog Box Feature Activation Tab

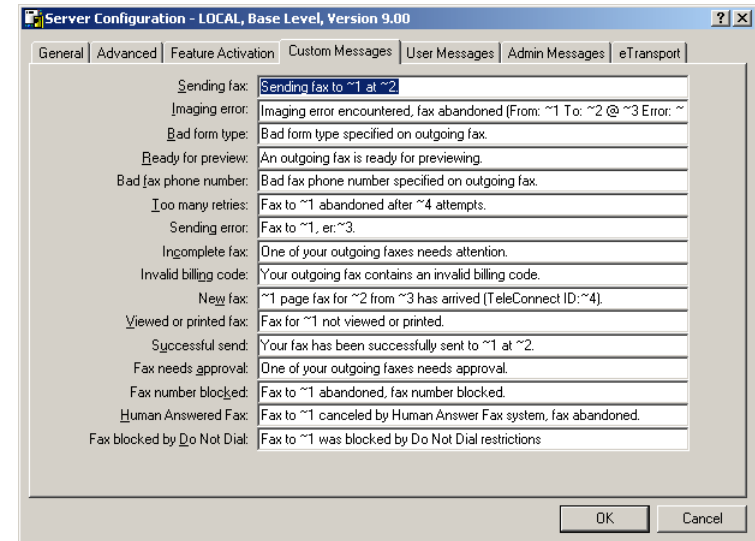


To license additional channels, users, and RightFax components, you must obtain bump codes from Captaris by calling RightFax customer support. For more information on using bump codes to upgrade your server, add additional fax channels, and add new RightFax components, refer to the *RightFax Installation Guide*.

Configuring the Custom Messages Tab

These options let you customize the text of messages that are sent for fax status notifications for users (described on page 111).

Figure 3.4 The Server Configuration Dialog Box Custom Messages Tab



Notification messages can contain a combination of text and variable data. Each message has its own available data variable options, described in the following table.

Table 3a Notification Message Options

| Notification message | Variable options | When used |
|----------------------|---------------------------------------|---|
| Bad fax phone number | ~1 = User ID ~2 = Fax phone number | The fax number contains invalid characters. |
| Bad form type | ~1 = User ID | A bad form was specified. |

Table 3a Notification Message Options (Continued)

| Notification message | Variable options | When used |
|----------------------------|--|--|
| Fax blocked by Do Not Dial | ~1 = Recipient's name ~2 = Recipient's fax number ~3 = Fax error code ~4 = Sender's user ID ~5 = Billing code 1 ~6 = Billing code 2 ~7 = Recipient's company ~8 = An HTML link to the fax on the WebUtil client (if applicable) | A fax was not sent because the destination fax number was blocked by the Do Not Dial feature. (described on page 174.) |
| Fax needs approval | ~1 = User ID ~2 = Recipient's name ~3 = Recipient's fax number | One of the sender's outgoing faxes needs approval. |
| Fax number blocked | ~1 = Recipient's name ~2 = Recipient's fax number ~3 = Fax error code ~4 = Number of retries ~5 = Billing code 1 ~6 = Billing code 2 ~7 = URL link to the fax on the RightFax server (this option can only be used with a RightFax e-mail gateway) | The recipient's fax number is blocked by the RightFax BoardServer. Fax numbers can be blocked using the following options: Dialing rules. The call blocking Windows Registry entry on the BoardServer. |
| Human Answered Fax | ~1 = Recipient's name ~2 = Recipient's fax number ~3 = Fax error code ~4 = Number of retries ~5 = User ID | The fax was canceled (not accepted) by the recipient when the recipient responded to the RightFax voice prompt. |
| Imaging error | ~1 = User ID ~2 = Recipient's name ~3 = Recipient's fax number ~4 = Error encountered | The server cannot generate a fax image. |

Table 3a Notification Message Options (Continued)

| Notification message | Variable options | When used |
|----------------------|---|---|
| Incomplete fax | ~1 = User ID ~2 = Unique ID of the fax | The sender did not complete all of the required fax information fields. |
| Invalid billing code | ~1 = User ID ~2 = Billing code 1 ~3 = Billing code 2 | The sender did not provide a valid billing code. |
| New fax | ~1 = Number of pages received ~2 = User ID ~3 = Received remote ID ~4 = TeleConnect ID ~5 = Unique ID of fax ~6 = URL link to the fax on the RightFax server (this option can only be used with a RightFax e-mail gateway) | A new fax was received. |
| Ready for preview | ~1 = User ID ~2 = Recipient's name ~3 = Recipient's fax number ~4 = Billing code 1 ~5 = Billing code 2 | The fax was held for preview and is now ready. |
| Sending error | ~1 = Recipient's name ~2 = Recipient's fax number ~3 = Fax error code ~4 = Number of retries ~5 = User ID ~6 = Billing code 1 ~7 = Billing code 2 ~8 = Recipient's company | The fax could not be sent. |

Table 3a Notification Message Options (Continued)

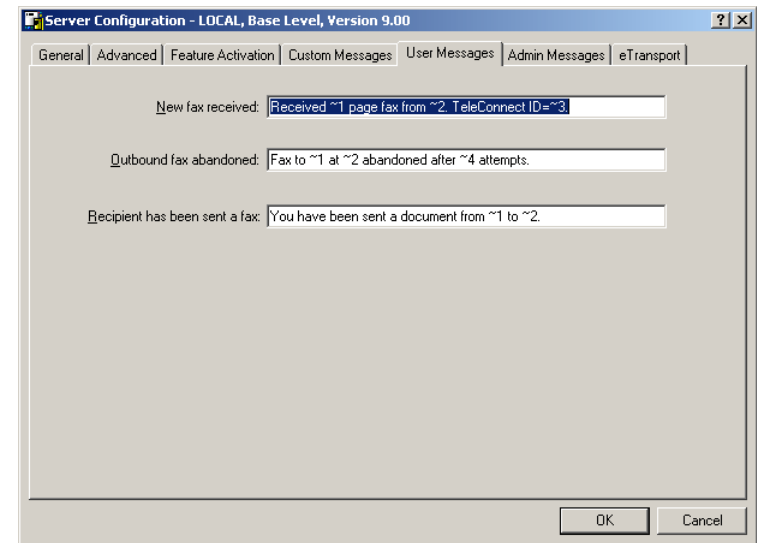
| Notification message | Variable options | When used |
|-----------------------|--|--|
| Sending fax | ~1 = Recipient's name ~2 = Recipient's fax number ~3 = User ID ~4 = Recipient's company | The fax starts to send or is still sending after a few minutes. |
| Successful send | ~1 = Recipient's name ~2 = Recipient's fax number ~3 = Recipient's company ~4 = URL link to the fax on the RightFax server (this option can only be used with a RightFax e-mail gateway) | The fax transmission was successful. |
| Too many retries | ~1 = Recipient's name ~2 = Recipient's fax number ~3 = Fax error code ~4 = Number of retries ~5 = User ID ~6 = Billing code 1 ~7 = Billing code 2 ~8 = Recipient's company ~9 = URL link to the fax on the RightFax server (this option can only be used with a RightFax e-mail gateway) | The fax was abandoned after the maximum number of send attempts. |
| Viewed or printed fax | ~1 = User ID | A received fax has not been viewed or printed. |

To return a notification message to the default setting, select the text, delete it, and then click **OK**. The next time you open the dialog box, the default message will be listed.

Configuring the User Messages Tab

These options let you customize the text of SMS or pager messages that are sent for fax status notifications for users (described on [page 107](#)). For more information on configuring SMS and pager notifications, see [Chapter 15, "Adding SMS and Pager Services"](#).

Figure 3.5 The Server Configuration Dialog Box User Messages Tab



For each message type, enter the custom message text you want. Some messages also let you add variables that are specific to the event you are being notified of. Each pager alert has its own set of available variables, described in the following table.

Table 3b User Message variables

| Alert | Variables | When used |
|-------------------------------|---|--|
| New fax received | ~1 = Page count ~2 = CSID or ANI of sender ~3 = TeleConnect ID ~4 = CSID ~5 = ANI | Sent to a RightFax user when a new fax is received. |
| Outgoing fax abandoned | ~1 = Recipient's name ~2 = Recipient's fax number ~3 = Short error description (last attempt) ~4 = Send attempts ~5 = Owner ID ~6 = Billing code 1 ~7 = Billing code 2 ~8 = Recipient's company ~6 = URL link to the fax on the RightFax server (requires the Gateway for Microsoft Exchange) | Sent to a RightFax user whose outbound fax has failed to send for any reason. |
| Recipient has been sent a fax | ~1 = From name ~2 = To name | Sent to the fax recipient to notify that a fax has been sent from the RightFax server. The fax recipient notification address is entered by the RightFax client user when creating a new outbound fax. |

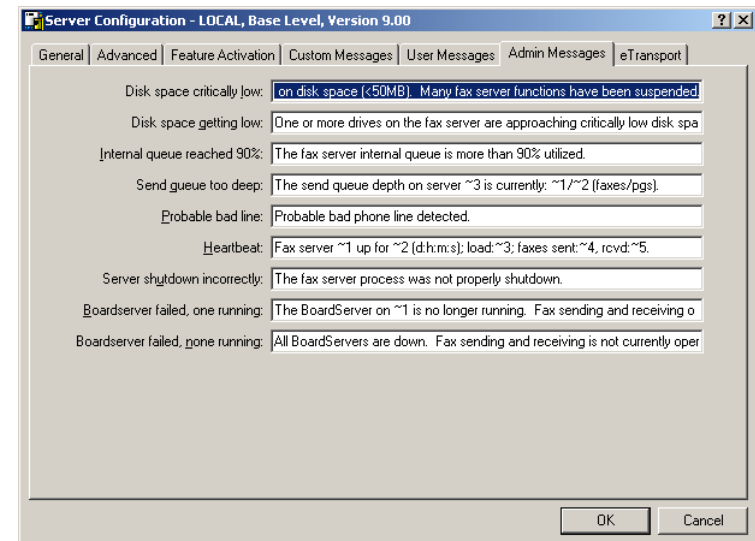
To return a notification message to the default setting, select the text, delete it, and then click **OK**. The next time you open the dialog box, the default message will be listed.

Configuring the Admin Messages Tab

These options let you customize the text of SMS or pager administrative alerts (described on [page 108](#)). For more information on configuring SMS and pager notifications in RightFax, see [Chapter 15, "Adding SMS and Pager Services"](#).

RightFax Enterprise versions 8.7 and higher include a more comprehensive Alerting and Monitoring service that lets you select from hundreds of server statistics to monitor and define the event thresholds, alert types, and alert messages to send. For more information on the RightFax Alerting and Monitoring service, see [Chapter 16, "Using the Alerting and Monitoring Service"](#).

Figure 3.6 The Server Configuration Dialog Box Admin Messages Tab



For each message type, enter the custom message text you want. Some messages also let you add variables that are specific to the event you are being notified of. Each pager alert has its own set of available variables, described in the following table.

Table 3c Admin Message Settings

| Alert | Default message | Variables |
|----------------------------------|---|--|
| BoardServer failed, none running | All BoardServers are down. Fax sending and receiving is not currently operating. | None |
| BoardServer failed, one running | The BoardServer on ~1 is no longer running. Fax sending and receiving operations are functioning on other BoardServers. | ~1 = BoardServer machine |
| Disk space critically low | One or more drives on the fax server are critically low on disk space (<50MB). Many fax server functions have been suspended. | None |
| Disk space getting low | One or more drives on the fax server are approaching critically low disk space (<150MB). | None |
| Heartbeat (periodic status) | Fax server ~1 up for ~2 (d:h:m:s); load:~3; faxes sent:~4, rcvd:~5. | ~1 = Fax server name ~2 = Up time (dd:hh:mm:ss) ~3 = Fax server internal queue usage ~4 = Total faxes sent since install date ~5 = Total faxes received since install date |

Table 3c Admin Message Settings (Continued)

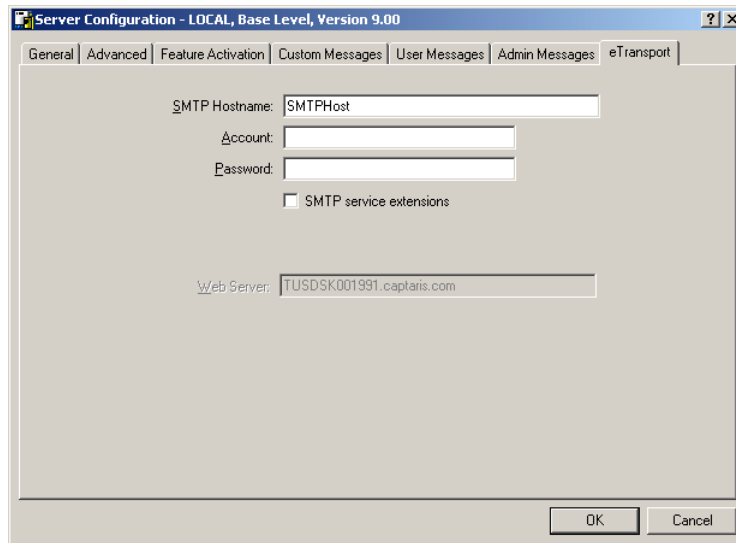
| Alert | Default message | Variables |
|-----------------------------|--|--|
| Internal queue reached 90% | The fax server internal queue is more than 90% utilized. | None |
| Probable bad line | Probable bad phone line detected. | None |
| Send queue too deep | The send queue depth on server ~3 is currently: ~1/~2 (faxes/pgs). | ~1 = Queue depth (faxes) ~2 = Queue depth (pages) ~3 = BoardServer machine |
| Server shutdown incorrectly | The fax server process was not properly shut down. | ~1 = Fax server name |

To return a notification message to the default setting, select the text, delete it, and then click **OK**. The next time you open the dialog box, the default message will be listed.

Configuring the eTransport Tab

The eTransport options configure the server to send outbound fax documents to e-mail addresses in addition to fax numbers.

Figure 3.7 The Server Configuration Dialog Box eTransport Tab



SMTP Hostname Enter the name of the SMTP mail server to which outbound documents sent to e-mail addresses via the RightFax client applications will be sent. If no SMTP mail server is specified here, RightFax users using the FaxUtil client will not have the option to address fax documents to an e-mail address.

Account If the SMTP mail server requires an account name in order to gain access, enter the account name in this box.

Password Enter the password for the account name that you entered in the **Account Name** box.

SMTP service extensions If the SMTP mail server uses SMTP service extensions, select this check box. SMTP service extensions start an SMTP session by issuing the EHLO command instead of the HELO command.

Web Server Enter the Internet host name of the machine running the IIS server that the RightFax SecureDocs module is installed on. This field is required if you have installed the RightFax SecureDocs Module. For more information on this option and configuring RightFax for certified document delivery, refer to the *RightFax SecureDocs Module Guide*.

Web Site Enter the name of the folder on the IIS server that contains the certified document delivery Web site. This field is required if you have installed the SecureDocs Module. For more information on this option and configuring the RightFax server for certified document delivery, refer to the *RightFax SecureDocs Module Guide*.

Starting and Stopping the RightFax Server

The RightFax server is comprised of several services, called “modules.” These are:

- Server module
- BoardServer module
- Database module
- Queue Handler
- RPC Server module
- WorkServer module
- Integration module (optional)
- E-mail Gateway module (optional)

These services are configured and started during installation. You should only need to stop and start RightFax services during server or network maintenance.

Starting or stopping the RightFax server requires starting or stopping the separate processes. There are two ways to start or stop the processes.

Starting the Server Using the Services Program

In Windows Control Panel, start the Services program. In the list of services, you will see several RightFax modules. To start the RightFax server, click the RightFax BoardServer module and click **Start**. Next, click the RightFax Server module and click **Start**. This will start the RightFax Database module, RightFax Server module, and the RightFax WorkServer modules.

Starting the Server at a Command Prompt

In a command prompt window at any prompt, enter the following command:

```
net start serviceshortname
```

(for example, net start rfserver)



Note You should never start the RightFax Database module, WorkServer modules, or E-mail Gateway modules directly. They must be started by the RightFax Server module.

Stopping the RightFax Server

To stop the RightFax server from Windows Control Panel, click **Stop** on the RightFax Server module and the RightFax BoardServer module services.

To stop the RightFax server from a command prompt, type the following:

```
net stop serviceshortname
```

(for example, net stop rfboard)

Understanding the Services

The following table describes each RightFax service and tells whether the service is started automatically or manually by Windows NT on startup. Note that if the startup is automatic, it can be stopped and started as needed.

Table 3d RightFax Services

| Service name | Short name | Startup | Description |
|--------------------------------|------------|---------|--|
| RightFax BoardServer module | RFBOARD | Auto | The communication link between RightFax and the fax hardware. |
| RightFax Database module | RFDB | Manual | A multi-threaded module that handles communication between the database files (located in the RightFax\Database folder) and the fax clients. |
| RightFax E-mail Gateway module | RFEMAIL | Manual | The communication bridge to an optional e-mail gateway. |
| RightFax Paging module | RFPAGE | Auto | Monitors RightFax for pager notification events and handles communication between RightFax and the SMS or pager services. |
| RightFax Integration module | RFPROD | Auto | Allows applications on a mainframe to send custom faxes through the fax server. |
| RightFax Queue Handler | RFQUEUE | Auto | Monitors the RightFax print queue for jobs to be forwarded to the server for fax conversion. |

Table 3d RightFax Services (Continued)

| Service name | Short name | Startup | Description |
|-----------------------------|------------|---------|--|
| RightFax RPC Server module | RFRPC | Auto | The communication bridge to fax clients that use IPX, SPX or TCP/IP via remote procedure calls. |
| RightFax Server module | RFSERVER | Auto | The bridge between all other RightFax services. Also responsible for stopping and starting the WorkServer, Database, and e-mail gateway modules. |
| RightFax WorkServer modules | RFWORK# | Manual | One or more modules responsible for RightFax's most processor-intensive functions such as cover sheet generation, PCL5-to-fax conversion, and optical character recognition. |

When the Event Queue of a RightFax server reaches 90 percent, the server will suspend certain functions. At 90 percent, all new outbound and inbound faxes will be held (temporarily set aside) while the server processes the existing workload. After the Event Queue falls to 75 percent, these held faxes will be scheduled for processing along with all new fax traffic.

This internal workload regulation is handled by the Fax Server module and cannot be overridden. If the fax server is consistently reaching the 90 percent capacity level, you should consider upgrading the fax server's system resources and/or fax channels.

■ ■ ■

Understanding the Fax Server Internal Event Queue

The Fax Server module is responsible for queueing and monitoring each of the fax server internal processes, which are collectively called the "Event Queue." The status of the Event Queue is measured as a percentage of server resources that are occupied with Fax Server module functions (such as sending and routing faxes).

The Event Queue is represented as the ratio of fax traffic volume to server resources. The higher the traffic volume, the higher this number will be. The Event Queue status is displayed in Enterprise Fax Manager when you open and select a RightFax server.

Chapter 4

Configuring the WorkServer Modules

Each RightFax WorkServer module performs one or more processor-intensive functions on behalf of the RightFax Server module. They regularly query the Database module for jobs to be serviced, execute those tasks, and notify the database when finished.

Several product integrations, such as Xerox and Hewlett-Packard, that let you scan and fax documents directly from the supported device, can be enabled through the RightFax WorkServers. Additional product integrations, including an advanced Xerox integration, Sharp, and others, are now available or will soon be available for download from the Captaris Web site.

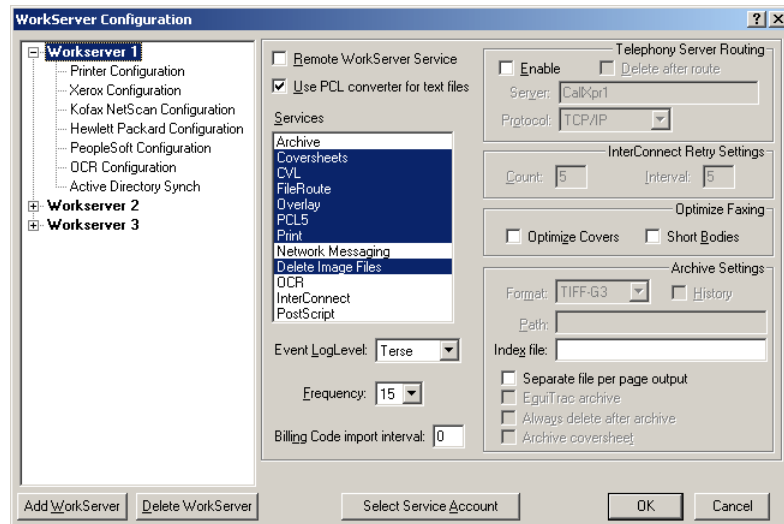
Although the default configuration of the RightFax WorkServer modules allows you to send and receive fax documents, you should configure the WorkServer modules to meet the needs of your enterprise immediately after installing the RightFax server software.

To configure the RightFax WorkServer modules

1. On the RightFax server, select **Start > Programs > Enterprise Fax Manager**. This runs Enterprise Fax Manager, the RightFax server administration tool. For more information on Enterprise Fax Manager, see [Chapter 7, “Managing Fax Servers with Enterprise Fax Manager”](#).
2. Click the name of the RightFax server to configure in the tree in the left pane of the Enterprise Fax Manager window. A list of services appears at the lower-right pane of the window.
3. In the **Service Name** list, double-click **RightFax WorkServer1 Module**. The **WorkServer Configuration** dialog box opens.

The rest of this chapter explains each of the options in this dialog box.

Figure 4.1 The WorkServer Configuration Dialog Box



Each WorkServer is configured separately. To configure a WorkServer, click the WorkServer number or one of its configuration options in the left pane.

Remote WorkServer Service Tells RightFax that this WorkServer will execute on a separate Windows NT machine on the network. If this check box is selected, the WorkServer service will not be started automatically by the RightFax Server service. For more information on running WorkServers remotely, see [“Installing WorkServers on Remote Computers”](#) on [page 46](#).

Use PCL Converters for Text Files Uses the RightFax Printer Control Language (PCL) conversion engine when converting PCL files and ASCII text files to fax format. This conversion usually produces more accurate fax images of PCL and ASCII text files than the RightFax native document conversion engine. If you notice

that PCL or ASCII text files are not converting to fax format as accurately as you expect, click to clear this check box to return to using the RightFax native document conversion engine.

Services Specify the tasks that the selected WorkServer will perform. Only selected services will be performed by the selected WorkServer. The following table lists each WorkServer service and its function.

Table 4a WorkServer Services

| Service | Function |
|--------------------|--|
| Archive | Archive sent faxes. |
| Cover sheets | Create cover sheets. |
| CVL | Handle faxes with multiple LIBDOC or LIBDOC2 and ADDDOC embedded codes. |
| Delete Image Files | Delete fax image files. |
| FileRoute | Route received faxes to network folders. |
| InterConnect | Route received faxes to another RightFax server. |
| Network Messaging | Network broadcast notifications. <i>Important If you are using Windows 2003 and wish to use Network Broadcast notifications, you must open the Control Panel and enable the Messenger service, which is disabled by default.</i> |
| OCR | Optical Character Recognition (requires the RightFax OCR Converter or OCR Router module). |
| Overlay | Overlay faxes with forms. |
| PCL5 | PCL5-to-fax conversion. |
| PostScript | PostScript-to-fax conversion (requires the RightFax PDF or SecureDocs module). |
| Print | Handle requests for both on-demand and automatic fax printing. |

You can assign a single task to multiple WorkServers or dedicate a WorkServer to one task only. How you configure your WorkServers depends on your organization's needs and fax server workload. In most cases, the default task does not need to be changed.

Event LogLevel Specify the level of information logged in the Application Event Log under the service name "RightFax WorkServer Module." You can select the following options:

- **None.** No information is saved.
- **Terse.** Records critical errors only.
- **Normal.** Records errors and major events only.
- **Verbose.** Records all significant events and is most useful for tracking and resolving problems.



Caution *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.*

Frequency Specify how often, in seconds, the WorkServer will query the Database module for new requests. If you only have one WorkServer module, 5 to 10 seconds is an appropriate setting. However, if you run multiple WorkServers, a lower frequency (for example, 15) will prevent requests from overloading the Database module. This prevents the WorkServers from keeping the Database module so busy that clients cannot be serviced in a timely manner.

Billing Code Import Interval The interval in minutes that the WorkServer will check for a new billing code delta file (used to query billing codes from external billing code source). At each interval, the WorkServer checks for a file called Codechg.csv in its own (the WorkServer) folder. If the file exists, the WorkServer imports the additions, changes, and deletions specified in the file. For more information on using billing codes from an external source, "[Importing Billing Codes](#)" on [page 139](#).

Telephony server routing

Enable Allows the RightFax system to integrate with your enterprise telephony server system. For information on custom integrations with your fax server, refer to your telephony server documentation.

Server Specify the name of the telephony server on your network to integrate with the RightFax server.

Protocol Select the network protocol to use for communicating between the RightFax and telephony servers.

InterConnect retry settings

RightFax InterConnect allows faxes received on one RightFax Enterprise server to be automatically routed to a fax mailbox of the same name on a different RightFax Enterprise server on the same network. With InterConnect, interoffice faxes can be sent via the network that links the RightFax Enterprise servers in each office, rather than via the phone lines, saving time and potential long distance phone charges. For more information on configuring InterConnect routing see "[RightFax InterConnect](#)" on [page 175](#).

These settings will only be available if you have selected "InterConnect" under **Services** (described in "[Services](#)" on [page 32](#).)

Count Specify the number of times the originating fax server will attempt to forward the fax to the destination fax server when it encounters a non-fatal error (e.g., server temporarily down).

Interval Specify the time delay, in minutes, between retries.

Optimize faxing

Short Covers Makes fax cover sheets only as long as the cover sheet text requires (ignoring any blank space at the end of the cover sheet), potentially reducing transmission times. This may produce a partial page on some destination fax machines.

If this check box is not selected, cover sheets will be padded to fill an entire page.

Short Bodies Makes each page in the body of the fax only as long as the text requires (ignoring any blank space at the end of pages), potentially reducing transmission times. This may produce partial pages on some destination fax machines.

If this check box is not selected, each fax page will be padded to fill an entire page.

Archive settings

RightFax can save a copy of each user's outbound faxes. This fax "archive" feature is useful for tracking and storing all of your organization's outbound faxes or for integrating RightFax with image tracking software systems.

Archived faxes are saved in a network folder that you specify and can include an optional fax history file and archive log entry. Archived faxes are saved using unique file names generated by RightFax with a file extension corresponding to the file format used for the archive.

Each fax is archived individually upon completion, whether or not the fax was successfully sent. A fax will be archived one time for each recipient, so one fax sent to a group of ten recipients will be archived as ten separate faxes.

Each RightFax user is individually configured for fax archiving. To enable fax archiving for a user, select the **Archive Sent Faxes** check box in the **User Permissions** tab of the **User Edit** dialog box in Enterprise Fax Manager (see "[Archive Sent Faxes](#)" on [page 103](#).) Also, in order to archive sent faxes, at least one of the WorkServers must have "Archive" selected under **Services** (see "[Services](#)" on [page 32](#).) For each WorkServer that will manage archiving, you must also complete the archive settings here.

Format Specify the file format used when archiving faxes. The file format you should choose depends on how you plan to use the archived faxes. By default, files are archived in a multi-page TIFF-G3 format with Group III data compression.

History Includes each fax's transmission history with the archived fax image. The fax history is a separate ASCII file saved in the archive folder using the same file name as the fax but with the extension .trx.

Path Specify the folder, in UNC format, where archived faxes will be stored. The WorkServer will create the specified path if it doesn't already exist.

The path can be customized using special variables that are replaced in the path name each time a fax is archived. Using variables in the path name lets you archive faxes to separate folders

based on the sender, the date, the fax destination, or any combination of these. The following table lists each of the archive path variables and their definitions.

Table 4b Archive Path Macros

| Variable | Definition |
|----------|--|
| ~1 | Date (YYYYMMDD) |
| ~2 | Day of the week (SUN-SAT) |
| ~3 | Month (JAN-DEC) |
| ~4 | Year (YYYY) |
| ~5 | Day of the month (DD) |
| ~6 | Month as decimal (01–12) |
| ~7 | User ID (up to 11 characters in 8.3 FAT format) |
| ~8 | Week as decimal (00–51) |
| ~9 | Billing Code #1 (up to 11 characters in 8.3 FAT format) |
| ~0 | Billing Code #2 (up to 11 characters in 8.3 FAT format) |
| ~A | Remote ID (left to right, up to 11 characters in 8.3 FAT format) |
| ~B | Remote ID (right to left, up to 11 characters in 8.3 FAT format) |
| ~C | Group ID (up to 11 characters in 8.3 FAT format) |

Example For example, this path:

```
\\Faxserver\Archive\~C\~7\~3~4
```

might look like this after variable replacement:

```
\\Faxserver\Archive\DEVELOPM.ENT\JDoe\JAN1999
```

In this example, all of the faxes sent by user ID “JDoe” in the “Development” group will be stored in a unique archive folder, organized into separate subfolders each month.

The total path length, after variable replacement, cannot exceed 128 characters. If you do not enter a path, no faxes will be archived.

Index file Specify the UNC path and file name of the file where all archive events will be logged. The index is a comma-delimited ASCII file. Each index entry appears on a separate line and includes 24 data fields. The following table lists all of the fields for each index entry in the order the fields appear.

Table 4c Index File Fields

| Field | Type | Length | Definition |
|---------------|---------|--------|--|
| Owner_ID | String | 21 | User ID of the fax “owner” |
| To_FaxNum | String | 31 | Recipient's fax number |
| To_ContactNum | String | 31 | Recipient's phone number |
| To_Name | String | 59 | Recipient's name |
| To_Company | String | 59 | Recipient's company name |
| To_CityState | String | 59 | Recipient's city and state |
| From_Name | String | 59 | Sender's name |
| From_PhoneNum | String | 31 | Sender's phone number |
| Billinfo1 | String | 15 | Billing code 1 |
| Billinfo2 | String | 15 | Billing code 2 |
| FaxDIDNum | String | 31 | DID routing number |
| OperatorNum | String | 31 | Organization's general phone number |
| GeneralFaxNum | String | 31 | Organization's general fax number |
| RemotelD | String | 21 | Received remote ID |
| Send_Time | Integer | N/A | Total time on fax board, in seconds |
| Fax_Status | Integer | N/A | A number corresponding to the fax's last reported status (see “ Table C8: Fax Status Fields (FaxStat) ” on page 318) |

Table 4c Index File Fields (Continued)

| Field | Type | Length | Definition |
|---------------|---------|--------|---|
| Fax_Termstat | Integer | N/A | A number corresponding to the fax's last reported transmission status (see "Table C9: Termination Status Field (TermStat)" on page 319) |
| NumPages | Integer | N/A | Includes optional cover sheet, if any |
| FineMode | Integer | N/A | 0=normal, 1=fine |
| Received | Integer | N/A | 0=sent, 1=received |
| FaxDate | String | 10 | Date the fax record was last modified (mm/dd/yyyy) |
| FaxTime | String | 5 | Time fax record last modified (hh:mm) |
| UniqueID | String | 15 | Unique ID for the fax assigned by RightFax server |
| Archived_Name | String | 256 | File name used for the image archive |
| NewLine | N/A | N/A | (CR-LF combination record separator) |

Because this log file is dynamic, if you plan to use a third-party application to access the log information you must make sure the file is opened in shared mode. Also, no third-party application should be granted write access, and should not be configured so as to keep the log file open for more than 10 to 20 seconds. The optimal method for third-party access is to make a copy of the log file, and then access data from the copy.

If no log file name is specified, RightFax will not log archive events.

Separate file per page output Archives each page of each fax as a separate TIFF file (i.e., a five-page fax will be archived as five separate files). This check box will only be available if you have selected "TIFF-G3" or "TIFF-G4" in the **Format** box (see ["Format"](#) on page 34.)

EquiTrac Archive Logs all successfully sent faxes to a file called RightFax.txt in the WorkServer folder. The EquiTrac Archive log is a comma-delimited ASCII file. Each log entry appears on a separate line and includes nine data fields. The following table lists all of the fields for each log entry in the order the fields appear.

Table 4d EquiTrac Archive Log Fields

| Field | Maximum length or format |
|---------------------------|-------------------------------|
| RightFax user ID | 21 characters |
| Phone number dialed | 31 characters |
| BillInfo1 | 15 characters |
| BillInfo2 | 15 characters |
| Fax transmission duration | hh:mm:ss |
| Number of pages in fax | ### |
| Fax error code | Always 32, indicating success |
| Fax date | mm/dd/yy |
| Fax time | hh:mm |

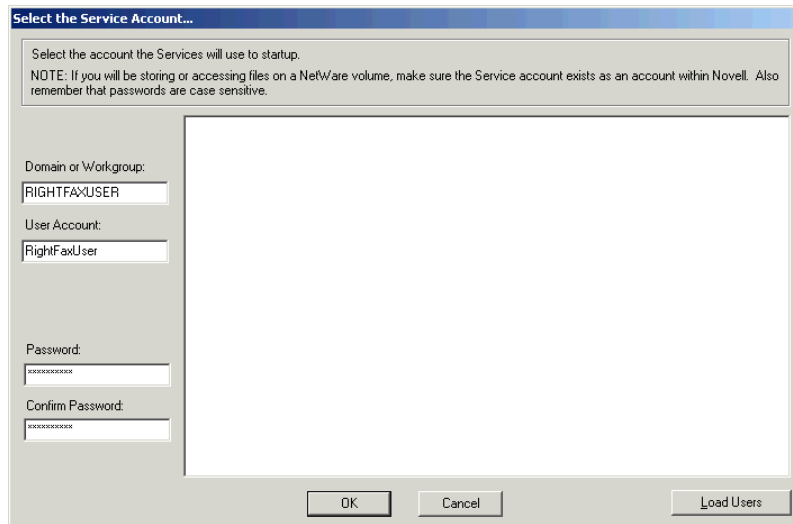
Always Delete After Archive Removes all archived faxes from the user's FaxUtil mailbox.

Selecting a Service Account

All RightFax WorkServers log on to the network as services using a Windows NT user account that you specify. This user account must have access to all the network resources required by the tasks (services) managed by your WorkServer modules. This

account is initially selected during the RightFax installation. To change the WorkServer module service account, click **Select Service Account**. The **Select Service Account** dialog box opens.

Figure 4.2 The Select the 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 automatically 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.



Warning If you manually type a name in the *Domain or Workgroup* field that is longer than 15 characters, you may encounter errors in services performed by the WorkServer. To avoid this, you should select the user by clicking the *Load Users* button when the desired user account resides on a domain whose name is longer than 15 characters.



Note If you will be storing or accessing files on a NetWare volume, you must make sure the WorkServers' service accounts also exist as accounts within Novell.

Adding and Deleting WorkServers

By default, three WorkServer modules are installed on the RightFax server. Two WorkServer modules are devoted to the most frequent tasks, and one is dedicated to network messaging and deleting image files only. This default setup is optimal for most RightFax configurations. However, changing the default configuration may be necessary, depending on your fax server usage. For example, if the server is used primarily for broadcast faxing, WorkServer #3 can be configured to perform the greater than average load of PCL5 conversions, instead of the unnecessary network notification function.

Here are some additional reasons for adding more WorkServers:

- If running OCR (Optical Character Recognition), either for routing or conversion purposes, you may want to dedicate a separate WorkServer to performing this processor intensive task.
- If the majority of your conversions are PostScript, you may want to dedicate a separate WorkServer to this task.
- If you do a great deal of fax printing, you may want to dedicate a separate WorkServer to performing this task as well.

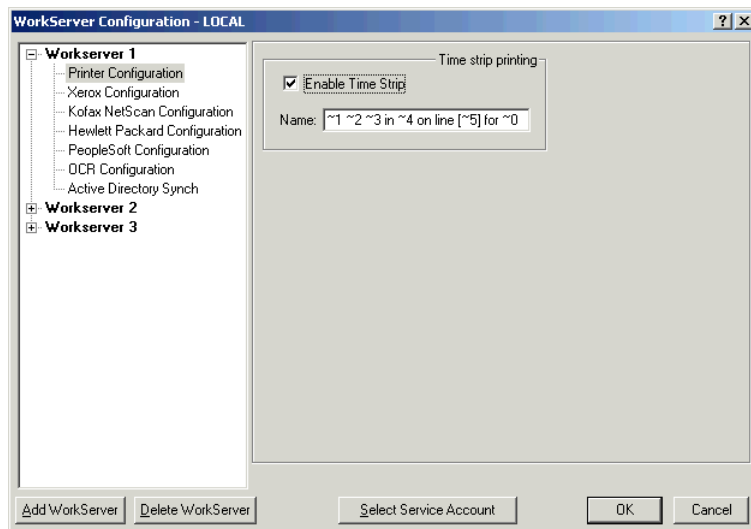
To add a new WorkServer, click **Add WorkServer**. To delete an existing WorkServer, click the WorkServer to remove and click **Delete WorkServer**. When you delete a WorkServer, the other WorkServers will arrange themselves so they remain sequential. For example, if you delete WorkServer #1, WorkServer #2 will move to the WorkServer #1 position and WorkServer #3 will move to the WorkServer #2 position.

Printing a Time Strip on Faxes

The WorkServer module can print a time strip at the top of every fax that is printed to a network printer. The time strip can include the time of arrival of received faxes, elapsed transmission time, time printed, and the fax image file name.

Click **Printer Configuration** under the selected WorkServer.

Figure 4.3 The WorkServer Printer Configuration Dialog Box



Enable Time Strip Enables printing a time strip at the top of every fax that is printed to a network printer.



Note Although the time strip is printed as black text by default, RightFax can print the time strip on the first page of each fax as white text on a black background. This can be useful for manually sorting through printed faxes. To enable the reversed time strip feature, edit the Windows registry. Add a REG_DWORD value called *PrintTimeReverse* to HKEY_LOCAL_MACHINE\Software\RightFax\Workserver and set the value data to 1.

Name Specify what information to print in the Time Strip. The Time Strip can contain any combination of text and variables. The following table lists each of the variable options that can be used in this box.

Table 4e Time Strip Macros

| Macro | Definition |
|-------|---|
| ~1 | The word "Sent" or "Received" |
| ~2 | Last transmission/receive date (MM/DD/YYYY) |
| ~3 | Last transmission/receive time (HH:MM) |
| ~4 | Last connection duration |
| ~5 | Last channel used |
| ~6 | WorkServer number |
| ~7 | Image file name |
| ~8 | Date and time printed (MM/DD/YYYY HH:MM) |
| ~9 | Unique ID |
| ~0 | RightFax user ID |
| ~A | Remote ID |
| ~B | Name of the fax recipient |
| ~C | Fax number of the fax recipient |
| ~D | Company name of the fax recipient |
| ~E | Last transmission/receive date (YYYY/MM/DD) |
| ~F | Date and time printed (YYYY/MM/DD HH:MM) |

Example The entry **Fax ~1: ~2 ~3** might produce this text at the top of a printed fax: **Fax received: 01/05/99 10:42.**

Xerox Configuration

RightFax lets you connect to Xerox Document Centres and WorkCentre Pros on your network to allow users to scan and send faxes directly from these Xerox machines.

The **Xerox Configuration** section in the WorkServer module exists only to support Xerox integrations installed prior to RightFax version 8.7. Upgrading the RightFax server to version 8.7 will not affect any existing Xerox integrations and no changes need to be made to the settings in this section of the WorkServer module.

RightFax versions 8.7 and higher support an improved Xerox integration that allows features such as secure document transmission and certified document delivery. If you are configuring a new Xerox integration, or if you want to upgrade an existing Xerox integration to use these new features, refer to the *RightFax Xerox Integration Guide* which is provided in PDF format on your server installation CD.

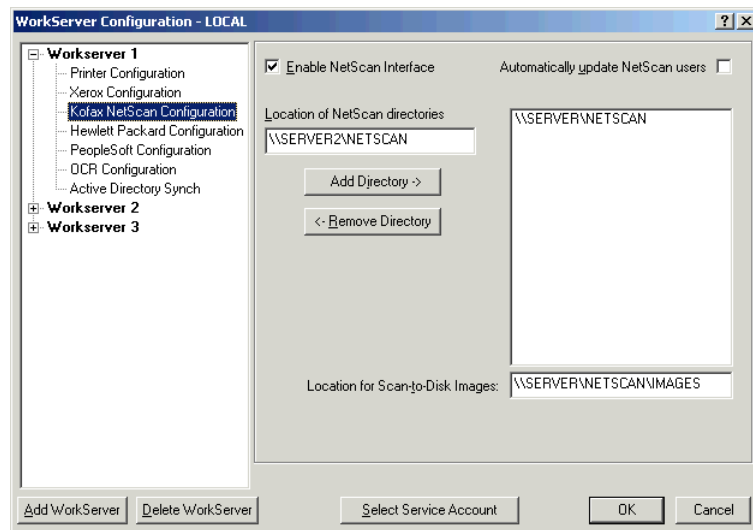
Configuring Kofax NetScan

RightFax can be configured to work in conjunction with the Kofax NetScan network integration tool for scanners. Using the Kofax NetScan, you can scan documents directly into the FaxUtil mailbox of any RightFax user on your network. This makes it convenient to fax printed pages when no electronic version is available.

Scanned images appear in the selected FaxUtil mailbox with the message "Info not complete." Images can then be faxed by double-clicking the image in FaxUtil and completing the required boxes in the **Fax Information** dialog box. For information on FaxUtil, refer to the FaxUtil online help. For information on using the **Fax Information** dialog box see ["Using the Fax Information Dialog Box"](#) on [page 226](#).

In order to integrate RightFax with the Kofax NetScan, at least one WorkServer must have the Kofax integration enabled. Each WorkServer is separately configured for Kofax NetScan integration. Click Kofax NetScan Configuration under the selected WorkServer.

Figure 4.4 The WorkServer Kofax NetScan Configuration Dialog Box



Enable NetScan Interface Enables RightFax integration with a Kofax NetScan. Communication and integration with the Kofax NetScan will only be handled by the WorkServers with this check box selected.

Automatically Update NetScan Users Updates NetScan users with the latest list of RightFax users every six hours or every time the RightFax Server module is restarted. If this check box is not selected, the NetScan can only be updated by selecting **Synchronize External Systems** from the **Utility** menu in Enterprise Fax Manager (see [“Synchronizing the RightFax Server with External Systems”](#) on page 96).

Location of NetScan Directories Specify the UNC path to the folders that RightFax will monitor for new NetScan images. To add a directory, type the UNC path in the **Location of NetScan Directories** box and click **Add Directory**. To remove a directory, click the directory and click **Remove Directory**.

Location for Scan-to-Disk Images Specify the UNC path to the folder where images that are scanned to disk from the Kofax NetScan will be saved.

For more information about configuring the Kofax NetScan for RightFax integration, refer to your NetScan documentation.

Configuring Hewlett-Packard ScanJet

RightFax can be configured to work in conjunction with HP ScanJet 5si network scanner. After RightFax is configured, you can scan and fax documents directly from the ScanJet, making it convenient to fax printed pages when no electronic version is available.

To send a fax, enter fax numbers directly into the ScanJet or select from a predefined list of numbers. The ScanJet scans the image, and then sends it to RightFax along with the specified fax number. RightFax then sends the fax, saving a copy in your FaxUtil mailbox for reference. Faxes can also be sent to any FaxUtil mailbox on the network.

Configuring the HP ScanJet

Use the ScanJet configuration utility to specify the folder where fax images will be placed and to set up user accounts. User accounts on the ScanJet should duplicate your RightFax user accounts. RightFax assumes that the display names on the ScanJet match the

RightFax user IDs. All faxes sent by ScanJet users that do not have a matching RightFax user ID will be sent by the “Default” RightFax user ID.



Note During fax transmission, no fax status file is written back to the ScanJet. To prevent fax status errors, the notification feature of the ScanJet software must be disabled using the ScanJet Fax Transmission Advanced Options.

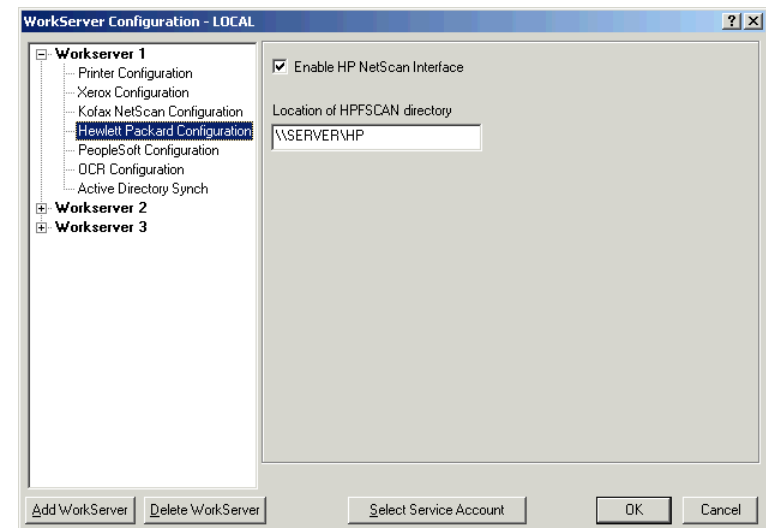
Set the Fax File Format to “TIFF-G4.” This is the only available file format supported by RightFax. Note that the following ScanJet options are also not used by RightFax:

- ECM
- Maximum Transmission Speed
- Superfine Resolution

Configuring RightFax

In order to integrate RightFax with the HP ScanJet 5, at least one WorkServer must have the HP ScanJet integration enabled. Each WorkServer is separately configured for HP ScanJet integration. Click HP NetScan Configuration under the selected WorkServer.

Figure 4.5 The WorkServer Hewlett Packard Configuration Dialog Box



Enable HP NetScan Interface Enables RightFax integration with HP network scanners. Communication and integration with HP network scanners will only be handled by the WorkServers with this check box selected.

Location of HPFSCAN Directory Specify the UNC path to the location of the HPfscan directory (the directory where fax images created by the ScanJet are stored). If this directory is located on the RightFax server, specify a local path instead. Do not include the HPfscan directory name itself because the WorkServer automatically appends it to the path. Be sure that the service

account that the WorkServer logs into the Windows NT server with (see “[Selecting a Service Account](#)” on [page 36](#)) has full rights to the HPfscan directory.

Specifying billing codes

If a pre-programmed fax destination on the ScanJet includes a “bill-back code,” that code will be entered in the RightFax **Billing Code 1** field. To add billing codes to manual fax destinations, enter the billing codes in the fax number field on the ScanJet using this format:

*FaxNum*BillingCode1*BillingCode2*

where *FaxNum* is the destination fax number, *BillingCode1* is the optional first billing code, and *BillingCode2* is the optional second billing code.

Configuring Hewlett-Packard Digital Senders

Your RightFax server can be integrated with one or more HP 9100C and 8100C Digital Sender machines and HP 9000 and 9550 MFPs on your network, allowing users to scan printed documents for fax transmission. Faxes can be scanned and faxed directly to the intended recipient or scanned and placed in the user's RightFax mailbox for review before transmission.

For information on configuring the Digital Sender for fax functionality, refer to the *RightFax Administrator's Guide* for the HP 9100C and HP 8100C. An additional document entitled *HP 9100C Digital Sender, How to Configure it for Faxing* is available from Hewlett-Packard.

Overview

Users scan and transmit documents from the HP Digital Sender. The HP Digital Sender is controlled by a service, called the Digital Sender Service, installed on the network. The Digital Sender service points to a folder called the “Fax Workarea” on the network.

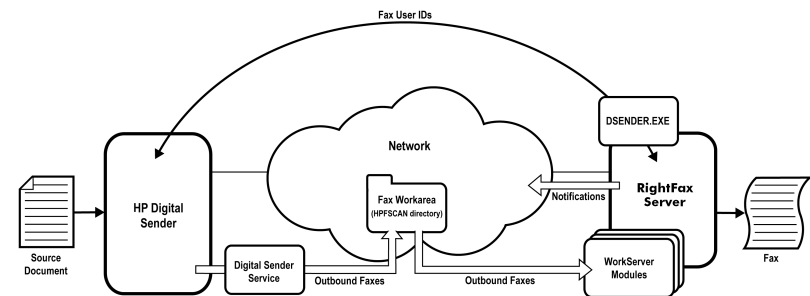
When a user logs on to the Digital Sender and transmits a fax, the Digital Sender places the fax image in the Fax Workarea folder. In RightFax, the folder is referred to as the “HPFSCAN” folder.

You can configure one or more WorkServers to monitor the HPFSCAN folder for outbound faxes. When a WorkServer finds a fax in the HPFSCAN folder, it passes it to the fax server for transmission. RightFax then returns transmission confirmation or other notifications to the sender over the network using its built-in notification system.

A utility provided by RightFax, DSender.exe, uploads RightFax user IDs to the Digital Sender so that each user of the Digital Sender is recognized by the RightFax server, which can then apply that user's specific fax transmission and notification options.

This diagram illustrates how all of the elements in this integration work together.

Figure 4.6 Digital Sender and RightFax



Installing the Digital Sender Service

To configure an HP 9100C or HP 8100C Digital Sender on your network to work with RightFax, first install the Digital Sender Service on any NT server on your network. During the installation, you will be prompted for a network fax server type and the path to the Fax Workarea. For the network fax server, select the “RightFax”

option. For the Fax Workarea, you can specify any folder on the network accessible by both the Digital Sender Service and the RightFax WorkServer service.

For more information on installing and configuring the Digital Sender service, refer to the documentation from Hewlett-Packard.

Enabling fax functionality on the Digital Sender

Once the Digital Sender Service is installed on your network, you must enable fax functionality on each HP 9100C or HP 8100C Digital Sender on your network and supply the location of the Digital Sender Service. The HP JetAdmin utility lets you select each Digital Sender on your network and set these options.

For more information on configuring your Digital Senders using the JetAdmin utility, refer to the documentation from Hewlett-Packard.

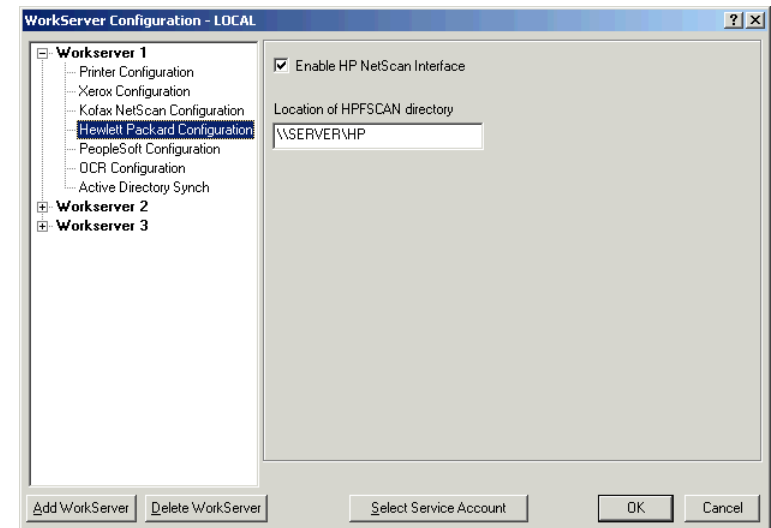
Configuring the RightFax WorkServers

RightFax uses its WorkServers to scan the Fax Workarea for outgoing faxes left by the Digital Sender and deliver those faxes to the fax server for transmission. The Fax Workarea will only be monitored by WorkServers that have been configured to do so, so you must follow these steps for each WorkServer that will handle this process. Note that, in RightFax, the Fax Workarea is referred to as the HPFSCAN folder for compatibility with other network scan devices.

To configure the WorkServer

1. Open Enterprise Fax Manager and select the RightFax server and WorkServer that will process faxes from the Digital Sender. The **WorkServer Configuration** dialog box opens.
2. Select **Hewlett Packard Configuration** in the WorkServer tree on the left.

Figure 4.7 The Hewlett Packard Configuration option



3. Select the **Enable HP NetScan Interface** check box.
4. Under **Location of HPFSCAN Directory**, enter the path to the Fax Workarea you configured when you installed the Digital Sender service (described earlier.)
5. Repeat steps 2 through 4 for each WorkServer you want to dedicate to picking up faxes from the Digital Senders.
6. Click **OK** to save your changes for this WorkServer.

Exporting RightFax users to the Digital Sender

Because RightFax uses the IDs used to log on to the Digital Sender for personalized fax transmission options and fax notifications, it is important that each Digital Sender on your network has a list of user IDs that correspond to your RightFax user IDs.

RightFax includes an administrative utility, DSender.exe, that synchronizes user IDs between RightFax and the Digital Senders on your network. For information on the RightFax administrative utilities, see [“Using the RightFax Administrative Utilities”](#) on [page 272](#). For information on running DSender.exe, see [“Running DSender.exe”](#) on [page 276](#).

Configuring fax notifications

All notifications of fax transmission status are returned directly to the sender using the notification method configured for that user in RightFax. Do not enable or select any notification options for the Digital Sender in the HP JetAdmin configuration utility.

If the user logs on to the Digital Sender using an ID that RightFax does not recognize, the fax will be transmitted using the default RightFax user ID. In this case, notifications will be sent to the default user as well.

For information on configuring fax notifications for users in RightFax, see [“Notification About Received Faxes”](#) on [page 112](#).

Faxing from the Digital Sender

Once RightFax and the Digital Sender have been properly configured, users can scan and fax documents directly from the Digital Sender.

To send a fax from the Digital Sender

1. Place the document face up on the Digital Sender Automatic Document Feeder or face down on the scanner flatbed.
2. Press the button pointing to the **Fax** option. If your Digital Sender does not allow guest users, you must first enter or select your user name and password. These should be the same as your RightFax user ID and password.
3. Type the fax number to send to and press ENTER. Repeat for each destination fax number. You can enter as many fax numbers as you want. To send the fax directly to your own RightFax mailbox for review before actually sending it, enter a single space as the fax number.
4. If there is a **Billing** field, enter up to four characters for a billing code.



Note Four digits is the maximum number that the HP Digital Sender will send to the RightFax server.

5. Select your RightFax user ID in the **Notify** field. This will already be filled in if your Digital Sender does not allow guest users.
6. When you are ready to send the fax, press the green Send button on the Digital Sender to scan the document and transmit your fax to the RightFax server.
7. Once all the pages have been scanned, press the Back button to finish. If guest users are not allowed, press the red Logout button to finish. The RightFax server will send your fax to all the destinations you specified and send notification back to the user who sent the fax.

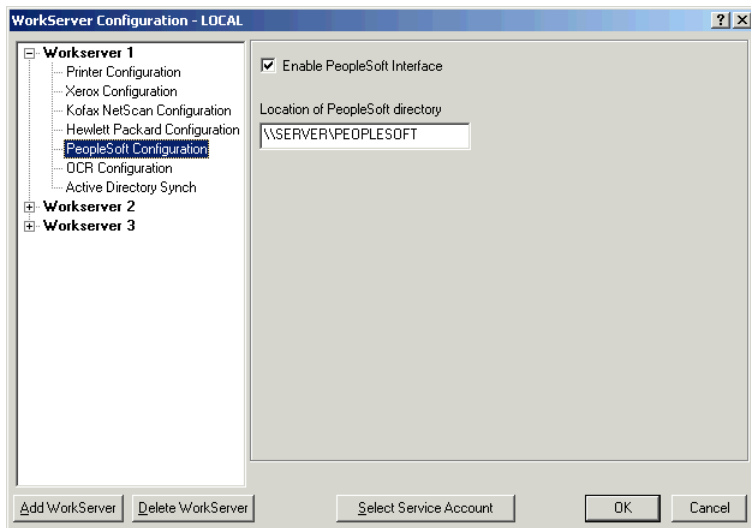
Configuring PeopleSoft

PeopleSoft is an application for enterprise resource planning that lets companies manage multiple resources from one integrated platform. To use PeopleSoft with the RightFax server, you must purchase a separate license. PeopleSoft must be used with the RightFax Enterprise or Business Integration Module.

RightFax queries PeopleSoft for outgoing faxes, overriding the PeopleSoft built-in ObjectFax server. This lets you combine the benefits of RightFax least-cost routing and load balancing features with your PeopleSoft platform.

To configure RightFax to work with PeopleSoft, at least one WorkServer must have the PeopleSoft integration enabled. Each WorkServer is separately configured for PeopleSoft integration. Click **PeopleSoft Configuration** under the selected WorkServer.

Figure 4.8 The WorkServer PeopleSoft Configuration Dialog Box



Enable PeopleSoft Interface Enables RightFax integration with PeopleSoft. Communication and integration with the PeopleSoft system will be handled by the WorkServers with this check box selected.

Location of PeopleSoft directory Specify the UNC path to the folder where PeopleSoft stores its outgoing fax jobs. The service account for this WorkServer (see [“Selecting a Service Account”](#) on page 36) must have read and write access to this folder.

Configuring OCR Document Conversion

RightFax gives you several options for specifying the layout of documents for the OCR Converter to convert. As a general rule, the more accurately you specify the layout of a document to OCR, the more accurate the conversion to text will be. Conversely, any documents that do not conform to the specifics you enter may not convert as accurately as if no specifics were given.

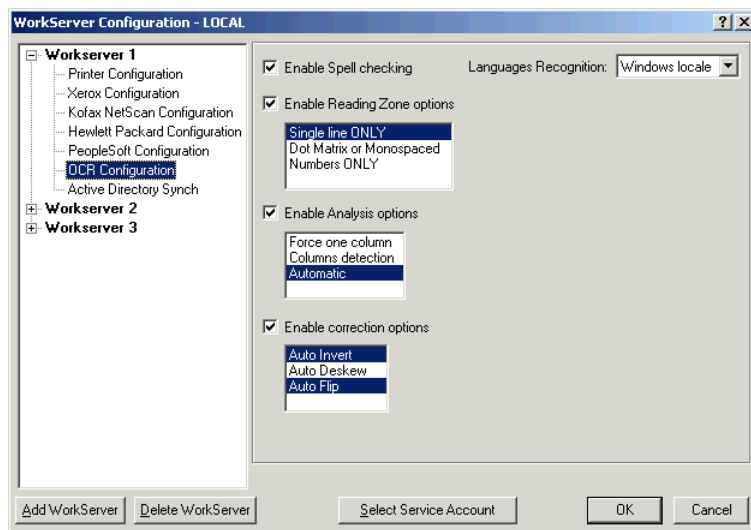


Note To use OCR, the RightFax OCR Converter or OCR Router software must be licensed and installed.

If you frequently receive and OCR only one type of document, it may be a good idea to specify the document layout here. However, if you receive and OCR many varied types of documents, it may be a good idea to disable these options. Some experimentation may be necessary to determine the combination of options that provides your organization with the best OCR conversions.

WorkServers that have the OCR service selected (see “Services” on page 32) can have additional OCR options configured. Click **OCR Configuration** under the selected WorkServer.

Figure 4.9 The WorkServer OCR Configuration Dialog Box



Enable Spell Checking Compares converted text to a built-in spell checker in order to improve accuracy. Words that are not found by the spell checker are converted to the word that most closely matches.

Languages Recognition Specify the language of incoming faxes. Select “Windows Locale” to use the default Windows language setting.

Enable Reading Zone Options Specify how the fax images to convert are expected to look. After this option is enabled, you can select any or all of the listed options. Select “Single Line Only” if the expected fax image will consist of one line of text only. Select “Dot Matrix or Monospaced” if the expected fax image will consist

of dot matrix characters and/or contain monospaced lines. Select “Numbers Only” if the expected fax image will contain numbers but no text.

Enable Analysis Options Specify the column layout of the fax images to convert. After this option is enabled, you can select any or all of the listed options. Select “Force 1 Column” if the expected fax image will consist of one column of text only. Select “Columns Detection” if the expected fax image will consist of text formatted into multiple columns. Select “Automatic” if the expected fax image will contain one or more columns of text.

Enable Correction Options Detects and corrects text orientation problems prior to converting the image to text. After this option is enabled, you can select any or all of the listed options. Select “Auto Invert” if some or all of the expected fax image will be displayed as light characters on a dark background. Select “Auto Deskew” to detect and correct when the fax image has been pulled skewed through a fax machine. Select “Auto Flip” to detect and correct when the fax image has been transmitted either sideways or upside down.

Configuring Active Directory Synchronization

RightFax servers installed on computers running Microsoft Windows 2000 or Windows XP have the ability to read user data from Active Directory. For information on configuring the WorkServers to perform Active Directory synchronization, see [Chapter 6, “Enabling Active Directory User Synchronization”](#).

Installing WorkServers on Remote Computers

The RightFax server lets you install and operate remote WorkServers (WorkServers running on computers other than the RightFax server). This lets you transfer selected processor-intensive functions to other machines, freeing up resources on your RightFax server.

Running remote WorkServers should only be considered for systems with 24 or more fax channels in high volume fax broadcast situations. Three or four properly configured WorkServers installed locally on the RightFax server are sufficient to handle the fax load in most other installations.



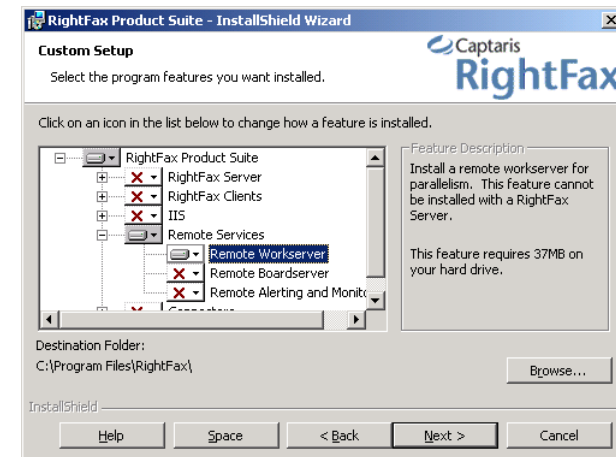
Warning After you install a remote WorkServer, you cannot delete any WorkServers from your RightFax configuration. This will disrupt the order of the services and the remaining WorkServers may fail to function as expected.

To install a RightFax WorkServer on a remote computer

1. Make sure that the remote WorkServer you are installing and the RightFax server it will be pointing to are the same version. You cannot configure a remote WorkServer to work with a lower version RightFax server.
2. If you have not already done so, create a share of the RightFax folder on the fax server computer named "RightFax". You must add at least one NT account that has both read and write access to this share.
3. Log on to the remote computer using an NT account with read and write access to the shared RightFax folder on the fax server.
4. 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.
5. In the menu of install options, select the option to install the RightFax product suite. The RightFax install wizard opens.
6. 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**.
7. Enter your name, organization name, and your product serial number when prompted. Your product serial number is printed on a label attached to the product box. Click **Next**.
8. On the **Setup Type** screen, select **Custom** and then click **Next**.

9. Expand the tree of install components. Remove the install option for all components except **Remote Workserver** under **Remote Services**. Click **Next**.

Figure 4.10 The Remote WorkServer install option



10. When prompted for a RightFax server name, enter the name of the server that you want to connect to. Click **Next**.
11. Click **Install**. When the installation is complete, the new WorkServer will be displayed in the list of WorkServers in the RightFax WorkServer configuration application on the RightFax server (described earlier in this chapter).

Changing the remote WorkServer's service account

When it is installed, the remote WorkServer uses the same service account information as the WorkServers on the RightFax server. If this is a local administrative account on the RightFax server, the remote WorkServer service may not be able to log on to the network. If so, you must change the service account used by the remote WorkServer so that it has administrative permissions to the computer on which it is installed. To change the WorkServer's service account on the remote computer, open Windows Control

Panel and select **Administrative Tools > Services**. The WorkServer is listed in the services as **RightFax WorkServer Module**. Double-click the service name to open its configuration dialog. You can specify a new service account name on the **Log On** tab. You must repeat this procedure locally at the WorkServer before the changes will take effect.

■ ■ ■

Chapter 5

Configuring the DocTransport and BoardServer Modules

The RightFax DocTransport module lets you configure the methods by which RightFax will be able to transmit documents. This module lets you configure fax boards for conventional fax transmission, as well as set up RightFax for SMS messaging, Fax-over-IP, DOCplus, and Eicon fax boards.

The RightFax BoardServer module acts as an interpreter between the fax board drivers and the RightFax Server module for conventional fax transmission. It handles requests to schedule outgoing faxes for transmission and informs the Server module when a new fax has been received and needs to be processed. The BoardServer module can only be configured from within the DocTransport module which oversees its functions.

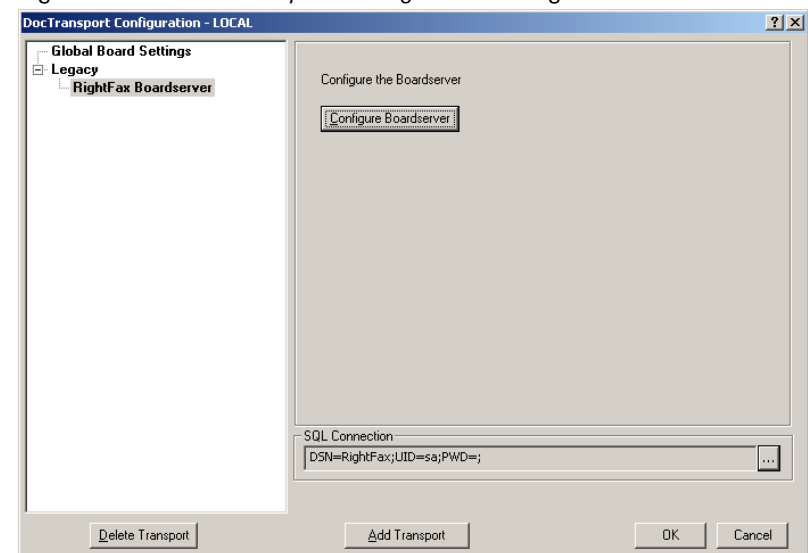
Both the DocTransport module and BoardServer modules must be properly configured to allow the RightFax server to send and receive documents.

Configuring the RightFax DocTransport Module

1. On the RightFax server, select **Start > Programs > Enterprise Fax Manager**.
2. In the Enterprise Fax Manager application, click the name of the RightFax server to configure in the tree in the left pane. A list of services appears at the lower-right pane of the window.

3. In the **Service Name** list, double-click **RightFax DocTransport Module**. The **Transport Configuration** dialog box opens.

Figure 5.1 The *DocTransport Configuration* dialog box



Adding transport methods

By default, the DocTransport module includes the RightFax BoardServer module set up as a transport method. With the BoardServer module, you can configure most supported fax boards for conventional fax transmission and receipt. You can also add the following transport methods.

Table 5a Additional transport methods

| Transport method | Description |
|----------------------------|---|
| Eicon Diva Server | Required if you will be installing any of the following Eicon fax boards: <ul style="list-style-type: none"> • Eicon Diva Server BRI-2M • Eicon Diva Server 4BRI-8M • Eicon Diva Server PRI/E1/T1 • Eicon Diva Server PRI/E1-30 |
| T.37 Fax over IP | Required if you will be creating administrative dialing rules that route faxes to T.37-compatible fax machines. <p>Note You must configure the gateway if you plan to send faxes directly to IP addresses and wish to collect route codes.</p> |
| DOCplus | Required if you will be sending faxes via Xpedite's fax broadcast service. |
| SMS Via Push Proxy Gateway | Required if you install and plan to use the Push Proxy Gateway. The <i>RightFax Push Proxy Gateway Guide</i> provides configuration information for this transport type. |

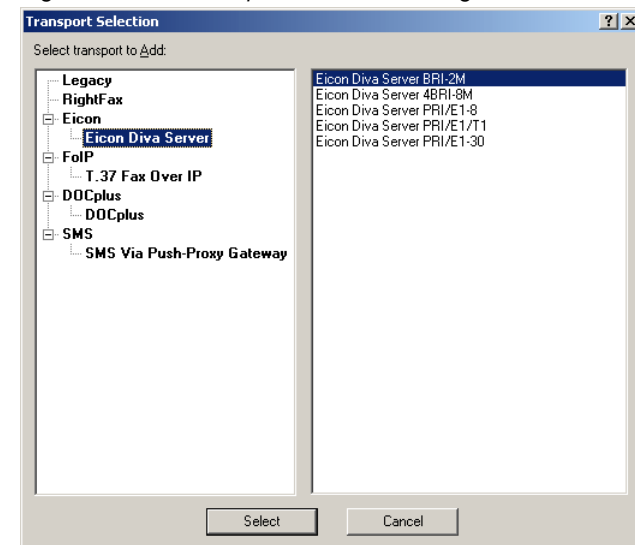
If your RightFax configuration does not include any of these transport methods, you will need to configure only the RightFax BoardServer module to properly match your fax board configuration. To open the BoardServer configuration program, select **RightFax Boardserver** under **Legacy** on the pane on the

left side of the **DocTransport Configuration** dialog box, and then click the **Configure Boardserver** button. For information on configuring the RightFax BoardServer module, see [“Configuring the RightFax BoardServer”](#) on page 53.

To add one or more of the optional transport methods to the DocTransport module

1. Click the **Add Transport** button. This opens the **Transport Selection** dialog box.

Figure 5.2 The *Transport Selection* dialog box



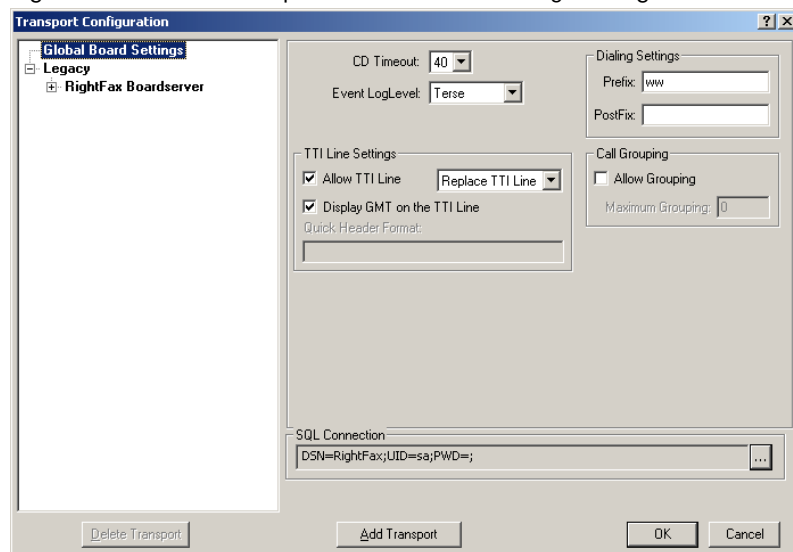
2. Expand the tree in the left pane and select the transport method to add.
3. If you select either **Eicon Diva Server** you must select a specific fax board in the right pane.
4. Click **Select** to add the new transport method.
5. Repeat these steps for each optional transport method you want to add.

- After you have added all of the transport methods you will be using, each must be properly configured for your system. The rest of this chapter describes how to configure each of the transport options in the DocTransport module.

Configuring DocTransport global board settings

Global board settings in the DocTransport module are global settings that apply only to the transport methods enabled in DocTransport, except the **Dialing Settings** and **Call Grouping** options which apply to all fax boards, including those configured in the BoardServer module. RightFax will use these settings regardless of the transport method, fax board, or channel in use. To configure global board settings, select **Global Board Settings** in the left pane. The rest of this section describes the options on this screen.

Figure 5.3 The DocTransport *Global Board Settings* configuration



CD Timeout Specify the length of time, in seconds, that the RightFax server will wait for a fax answer tone (CED tone) from a remote fax machine when sending a fax.

Event LogLevel Specify the level of information logged in the Application Event Log under the service name "RightFax BoardServer Module." You can select the following options:

- **None.** No information is saved.
- **Terse.** Records critical errors only.
- **Normal.** Records errors and major events only.
- **Verbose.** Records all significant events and is most useful for tracking and resolving problems.



Caution 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.

Allow TTI Line The transmit terminal information (TTI) line is a line of text that prints at the top of each received fax page. The TTI line includes the transmitting fax machine, the date and time of the transmission, the fax page number, and the total page count.

Follow these steps to optionally add your organization's name to the TTI line:

1. Open Windows Control Panel and run the RightFax BoardServer application.
2. Click on each fax channel for each fax board listed in the left pane.
3. Type the desired company name in the **Fax ID** box.
4. Repeat these steps on all RightFax servers and Remote BoardServer computers.

Select this option to place a TTI line at the top of every page of a fax. The date format in your TTI line is a function of the international or regional settings of Windows NT as installed on the fax server.

If this check box is selected, you must also specify how the TTI line should be placed on the fax page.

- Select **Overlay TTI Line** to add the TTI line text to add any existing text or image on the first line of the fax. Note that this can obscure the TTI information. With Brooktrout fax boards, this option functions the same as inserting the TTI line.
- Select **Replace TTI Line** to replace any existing text or image on the first line of the fax with the TTI line. This erases existing fax data from the first line but ensures that the overall length of the fax stays the same.
- Select **Insert TTI Line** to add a new line to the top of the fax page for the TTI information. This retains any fax data on the first line but increases the length of the fax by one line.

Display GMT on the TTI Line Displays the local time relative to Greenwich Mean Time (GMT). If this option is *not* selected, the TTI line will display the local time at the fax's place of origin.

Quick Header Format Specify heading text to include under the TTI line on outbound faxes. Quick headers must be enabled in the **General** tab of the RightFax Server module **Configuration** dialog box (see ["Enable Quick Headers"](#) on [page 20](#)).



Note *Intel Dialogic fax boards do not support the quick header feature.*

The quick header line can be customized using special macros that are replaced in the quick header of each fax.

Table 5b Quick header macros

| Macro | Definition |
|-------|--|
| ~1 | To-name field (59 characters maximum) |
| ~2 | Shortened to-name (23 characters maximum) |
| ~3 | To-contact number field (31 characters maximum) |
| ~4 | To-company field (59 characters maximum) |
| ~5 | Shortened to-company field (23 characters maximum) |
| ~6 | BillInfo1 field (15 characters maximum) |
| ~7 | BillInfo2 field (15 characters maximum) |
| ~8 | Unique ID (15 characters maximum) |

Example For example, the setting Please deliver to: ~2 at ~5 might appear in a fax Quick Header as Please deliver to: Jane Doe at Acme, Inc.

Dialing settings Some phone systems require certain characters be dialed in order to access or provide information to the system. The RightFax server supports the following dialing string characters (characters are not case sensitive).

Table 5c Supported Dialing Characters

| Character | Description |
|-----------|---|
| 0–9 | Phone digits. |
| ! | Hook-flash signal. |
| # | [#] (pound) button on touch-tone phone. |
| * | [*] (star) button on touch-tone phone. |
| , (comma) | One second pause. |

Table 5c Supported Dialing Characters (Continued)

| Character | Description |
|-----------|--|
| F | Replaced in the dial string by the user's domestic Auto Billing Code entry. |
| G | Replaced in the dial string by the user's international Auto Billing Code entry. |
| I | Five second pause. |
| P | Pulse dialing mode. |
| T | Tone dialing mode (default). |
| W | Wait up to 15 seconds for a dial tone. |
| { | Causes dialing prefix to not be prepended. |
| } | Causes dialing postfix to not be appended. |

Prefix Specify one or more dialing characters to add to the beginning of every outbound fax number dialed by RightFax.

Postfix Specify one or more dialing characters to add to the end of every outbound fax number dialed by RightFax.

Allow Grouping When a fax is placed in the fax queue, Call Grouping checks the queue for another fax going to the same number. If another fax to the same number is scheduled, it keeps the line open and transmits the second fax, saving the time and money of redialing and reconnecting a second time.

The RightFax Call Grouping feature is only available for use with Brooktrout fax boards.

This option enables the Call Grouping feature for all Brooktrout fax boards.

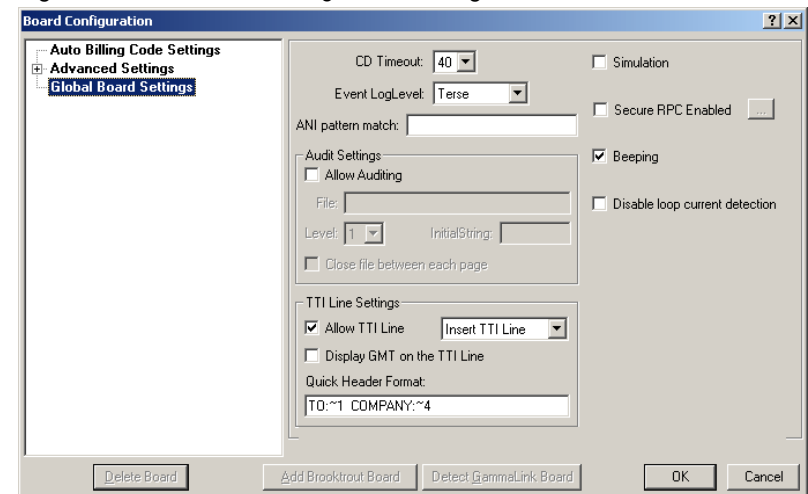
Maximum Grouping Specify the maximum number of pages (1–256) that RightFax will send to one phone number before hanging up and sending another set of faxes.

Configuring the RightFax BoardServer

The RightFax BoardServer module must be configured if you will be using any Brooktrout fax boards or Intel Dialogic fax boards.

In the **DocTransport Configuration** dialog box, expand the **Legacy** option and select **RightFax Boardserver**. Click the **Configure Boardserver** button. This opens the **Board Configuration** dialog box.

Figure 5.4 The *Board Configuration* dialog box



Adding one or more fax boards

You must specify all of the fax boards that are installed in this computer.

To add a Brooktrout fax board, click the **Add Brooktrout** button. This opens a list of all supported Brooktrout boards. Click the board type to add and click **Select**. The new board will be added to the list of boards in the left pane. If you have more than one Brooktrout fax board installed, repeat for each board. If you select a digital fax board that requires additional digital configuration, you will be prompted to run the RightFax Digital Configuration Wizard.

To run the Digital Configuration Wizard, click **Next**. For a description of each option in the Digital Configuration Wizard, click the **[?]** button in the top-right corner and then click on the option to define.

To automatically detect installed Gammalink fax boards, click the **Detect Gammalink Board** button. All installed Gammalink fax boards will be detected and added to the list of boards.

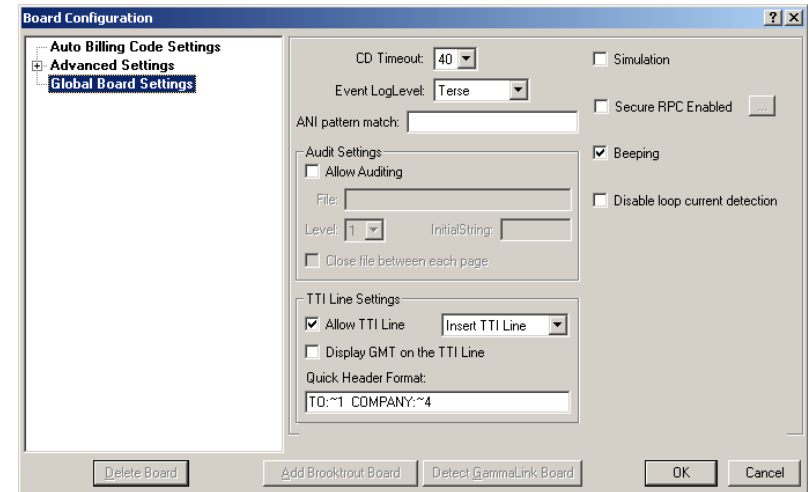
Each fax board you add will appear in the list in the left pane of the **Board Configuration** dialog box. After you have added all of your fax boards to this list, you must configure global board settings (which apply to all installed fax boards), individual board settings, and settings for each individual fax channel (the phone lines that come in and out of the boards).

Configuring BoardServer global board settings

Global board settings in the BoardServer module are global settings that apply to all of the fax boards and channels configured in the BoardServer module. RightFax will use these settings

regardless of the fax board or fax channel in use. To configure global fax board settings, select **Global Board Settings** in the left pane. The rest of this section describes the options on this screen.

Figure 5.5 The BoardServer *Global Board Settings* configuration



CD Timeout Specify the length of time, in seconds, that the RightFax server will wait for a fax answer tone (CED tone) from a remote fax machine when sending a fax.

Event LogLevel Specify the level of information logged in the Application Event Log under the service name “RightFax BoardServer Module.” You can select the following options:

- **None.** No information is saved.
- **Terse.** Records critical errors only.
- **Normal.** Records errors and major events only.
- **Verbose.** Records all significant events and is most useful for tracking and resolving problems.



Caution 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.

ANI Pattern Match Specify the pattern of the dialing party information string that will be received during incoming calls.

RightFax collects information about the dialing party's phone number for display in FaxUtil and for CSID routing (if used). However, some organizations receive additional information (such as ANI or DNIS) along with the caller's phone number. This box specifies the pattern of the extra data so that it can be removed prior to display or routing.

The ANI matching pattern is defined using these symbols.

Table 5d ANI Pattern Matching Symbols

| Symbol | Definition |
|------------|---|
| * | Matches one or more "star" characters in the source string. |
| # | Matches one or more "pound" characters in the source string. |
| X | Matches one or more digits belonging to the ANI number. |
| Y | Matches one or more digits belonging to the DNIS number. |
| Z | Matches one or more digits which are discarded. |
| 0-9 A-D | Valid phone digits (literal digits). Separate literal digits from max-modifiers with a space. |

A digit can be added after any of these symbols to specify the exact number of characters to expect.

Example For example, the "2" in the pattern x2*y indicates that the pattern will contain a maximum of two ANI digits at the beginning of the string.

Here are some examples of **ANI Pattern Match** settings and the strings they match:

| Setting | Matches |
|----------|------------------------|
| 1x10*y | 1xxxxxxxxx***...yyy... |
| x2z*y2 9 | xxzzz...***...yy9 |
| x#1z | xxx...#zzz... |

Allow Auditing Tells the BoardServer module to record a log of all incoming and outgoing faxes.

File Specify the path and file name of the log file to use. If the file does not exist, RightFax will create it when it logs the first entry. To output the log file directly to a network printer, enter the printer port instead of a file name. If you output to a network printer, you must also select the **Close File Between Each Page** check box.

Level Specify the level of information to include in the log. There are four levels of detail. Level 1 prints a single line summary of each fax event, Level 2 prints a detailed description of each fax event, Level 3 outputs a comma-delimited file, and Level 4 outputs a tab-delimited file.

If you set **Level** to “3,” each fax event will be saved to a comma-delimited file. Each log entry appears on a separate line and includes 15 data fields. The following table lists all of the fields for each log entry in the order the fields appear.

Table 5e Audit Log Level 3 Field Descriptions

| Field name | Type/format | Length | Description |
|----------------|--------------|--------|--|
| Direction | String | 1 | Sent/received flag (“S” or “R”) |
| Date sent | MM/DD/YYYY | 10 | Date that the call was initiated |
| Time sent | HH:MM | 5 | Time that the call was initiated |
| Channel | Numeric | 2 | Channel used by RightFax (0–32) |
| Duration | Numeric | 5 | Total transmission time in seconds |
| Phone number | Alphanumeric | 31 | Sent faxes: Fax number dialed Received faxes: Routing code (DID or DTMF) used |
| Remote ID | String | 49 | Remote fax machine ID |
| Result | String | 59 | Result of the fax transmission |
| Page count | String | 79 | Number of pages transmitted |
| Contact number | String | 31 | Sent faxes only: The recipient's voice number |
| Contact name | String | 59 | Sent faxes only: The recipient's name. |

Table 5e Audit Log Level 3 Field Descriptions (Continued)

| Field name | Type/format | Length | Description |
|----------------|-------------|--------|---|
| Company name | String | 59 | Sent faxes only: The recipient's company name |
| User ID | String | 21 | Sent faxes only: RightFax user ID of the sender |
| Billing code 1 | String | 15 | Sent faxes only: Billing code 1 |
| Billing code 2 | String | 15 | Sent faxes only: Billing code 2 |

If you set **Level** to “4,” a new file is created each hour containing that hour's fax events. Because a separate file is created for each hour's fax events, do not specify a file name in the **File** box. You can optionally specify a path to a folder where the log files, which are given default names, will be saved.

Each log entry appears on a separate line and includes 28 data fields. The following table lists all of the fields for each log entry in the order the fields appear.

Table 5f Audit Log Level 4 Field Descriptions

| Field name | Type | Length | Description |
|------------|----------|--------|---------------------------------------|
| Direction | String | 1 | Sent/received flag (“S” or “R”). |
| Date sent | YYYYMMDD | 8 | Date that the call was initiated. |
| Time sent | HHMM | 4 | Time that the call was initiated. |
| Channel | Numeric | 5 | Channel used by RightFax. |
| Duration | Numeric | 5 | Total transmission time (in seconds). |

Table 5f Audit Log Level 4 Field Descriptions (Continued)

| Field name | Type | Length | Description |
|---------------------|---------|--------|---|
| Phone number | String | 127 | Fax number dialed. |
| Remote ID | String | 47 | CSID of recipient fax machine. |
| Good pages | Numeric | 5 | Number of pages transmitted successfully. |
| Page count | Numeric | 5 | Total number of pages in the fax. |
| Board type | Numeric | 1 | Type of fax board used to send the fax 0 = Brooktrout 1 = GammaLink |
| BT call status | Numeric | 5 | Brooktrout call result status value (unused for GammaLink channels). |
| BT call line status | Numeric | 5 | Brooktrout call result line status value (unused for GammaLink channels). |
| BT fax status | Numeric | 5 | Brooktrout fax result status value (=32606 if GammaLink channel used). |
| BT fax line status | Numeric | 5 | Brooktrout fax result line status value (GammaLink result code if previous value equals 32606). |

Table 5f Audit Log Level 4 Field Descriptions (Continued)

| Field name | Type | Length | Description |
|------------------|---------|--------|--|
| CDR flags | Numeric | 4 | Hex value of CDR flags 0x0001 = PartialRetry 0x0002 = SchedRemote 0x0004 = SendForRemote 0x0008 = Has_ANI 0x0010 = Had_AOC 0x0020 = Had_ISDNCauseVal |
| AOC value 1 | Numeric | 9 | AOC data value #1 (only valid if indicated by flags). |
| AOC value 2 | Numeric | 9 | AOC data value #2 (only valid if indicated by flags). |
| AOC value 3 | Numeric | 9 | AOC data value #3 (only valid if indicated by flags). |
| ISDN cause value | String | 5 | ISDN call setup cause value (only valid if indicated by flags). |
| Sender ID | String | 21 | RightFax user ID of the sender. |
| To name | String | 59 | The recipient's name. |
| From name | String | 59 | Name of sender (descriptive name, not the ID). |
| Contact number | String | 31 | The recipient's voice number. |
| Company name | String | 59 | The recipient's company name. |
| Billing code 1 | String | 15 | Billing code 1. |
| Billing code 2 | String | 15 | Billing code 2. |

Table 5f Audit Log Level 4 Field Descriptions (Continued)

| Field name | Type | Length | Description |
|---------------|--------|--------|--|
| Secure CSID | String | 21 | CSID match code for secure send operation. |
| Unique ID | String | 15 | Assigned unique ID for fax job. |
| Source server | String | 47 | Source server IP address or name. |

InitialString This is a text message that will be included in the audit file at the beginning of every page.

This line can contain control codes that can be used to convey page formatting or other information to the application reading the file. To add control codes to this string, use the following notation.

Table 5g InitialString Control Codes

| Notation | Example | Represents |
|----------|---------|---|
| \x## | \x1b | Hexadecimal character values |
| \### | \027 | Decimal character values |
| ^x | ^[| ASCII representation of a control character |

Close File Between Each Page Closes the log file after each entry. This allows you to output the log to a network printer.

Allow TTI Line The transmit terminal information (TTI) line is a line of text that prints at the top of each received fax page. The TTI line includes the transmitting fax machine, the date and time of the

transmission, the fax page number, and the total page count. Follow these steps to optionally add your organization's name to the TTI line:

1. Open Windows Control Panel and run the RightFax BoardServer application.
2. Click on each fax channel for each fax board listed in the left pane.
3. Type the desired company name in the **Fax ID** box.
4. Repeat these steps on all RightFax servers and Remote BoardServer computers.

Select this option to place a TTI line at the top of every page of a fax. The date format in your TTI line is a function of the international or regional settings of Windows NT as installed on the fax server.

If this check box is selected, you must also specify how the TTI line should be placed on the fax page.

- Select **Overlay TTI Line** to add the TTI line text to add any existing text or image on the first line of the fax. Note that this can obscure the TTI information. With Brooktrout fax boards, this option functions the same as inserting the TTI line.
- Select **Replace TTI Line** to replace any existing text or image on the first line of the fax with the TTI line. This erases existing fax data from the first line but ensures that the overall length of the fax stays the same.
- Select **Insert TTI Line** to add a new line to the top of the fax page for the TTI information. This retains any fax data on the first line but increases the length of the fax by one line.

Display GMT on the TTI Line Displays the local time relative to Greenwich Mean Time (GMT). If this option is *not* selected, the TTI line will display the local time at the fax's place of origin.

Quick Header Format Specify heading text to include under the TTI line on outbound faxes. Quick headers must be enabled in the **General** tab of the RightFax Server module **Configuration** dialog box (see “[Enable Quick Headers](#)” on [page 20](#)).



Note *Intel Dialogic fax boards do not support the quick header feature.*

The quick header line can be customized using special macros that are replaced in the quick header of each fax.

Table 5h Quick header macros

| Macro | Definition |
|-------|--|
| ~1 | To-name field (59 characters maximum) |
| ~2 | Shortened to-name (23 characters maximum) |
| ~3 | To-contact number field (31 characters maximum) |
| ~4 | To-company field (59 characters maximum) |
| ~5 | Shortened to-company field (23 characters maximum) |
| ~6 | BillInfo1 field (15 characters maximum) |
| ~7 | BillInfo2 field (15 characters maximum) |
| ~8 | Unique ID (15 characters maximum) |

Example For example, the setting Please deliver to: ~2 at ~5 might appear in a fax Quick Header as Please deliver to: Jane Doe at Acme, Inc.

Simulation Disables any currently configured fax channels but allows simulated fax sending. Outgoing faxes will appear to send but will not. Simulation mode can be used with no fax boards installed.

Secure RPC Enabled Encrypts the data exchanged between multiple RightFax BoardServer modules or between a RightFax BoardServer module and the FaxStat program. Any BoardServer

service on any other RightFax server communicating with this server must be started using a valid account and password rather than a local system account.

If you select this option, you must specify a user account that the BoardServer service can use for authentication to and from other BoardServer modules on the network. To specify a user account, click the [...] button to the right of this option and enter a login name and password.

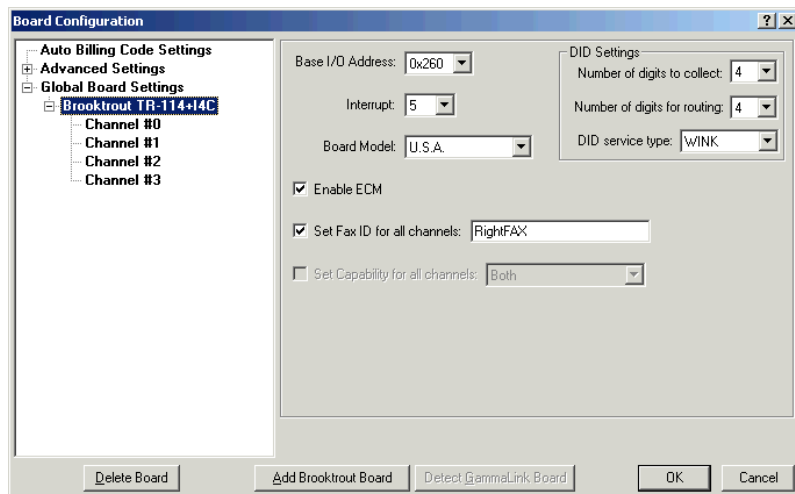
Beeping Tells the computer in which the fax boards are installed to beep each time a call is placed or received.

Disable Loop Current Detection Disables the fax transmission error correction feature of Brooktrout fax boards. Select this check box if error correction is causing excessive fax transmission failures.

Configuring analog Brooktrout fax boards

After you have added a new Brooktrout fax board, it must be configured to work with RightFax. To configure the board, click the board name in the Board/Channel list in the left pane.

Figure 5.6 Brooktrout Board Configuration



Base I/O Address The I/O address of the first channel on the board. This value must match the physical I/O address set on the fax board. For information on setting the I/O address on your fax board, refer to the documentation included with the board.

Interrupt The interrupt setting used for all Brooktrout fax boards in the computer. Make sure the selected interrupt does not conflict with other hardware in the system.

Board Model Specify the nationality type of fax board installed. This may or may not be the country in which you reside.

Disable Loop Current Detection Disables the fax transmission error correction feature of Brooktrout fax boards. Select this check box if error correction is causing excessive fax transmission failures.

Set Fax ID for All Channels You can specify a fax ID for all the channels on this fax board. The fax ID is transmitted by each channel on this fax board to remote fax machines. Usually, this is set to your company name or general fax number. To specify a unique fax ID for each channel, see [“Configuring Brooktrout fax channels”](#) on [page 61](#).

Set Capability for All Channels Sets the same capability (dial-only, answer-only, or both) for all the channels on the fax board. To specify the capability of each channel separately, see [“Configuring Brooktrout fax channels”](#) on [page 61](#).

DID settings Direct Inward Dial (DID) is a phone line service that allows inbound fax routing based on the phone number that was used to dial in to your fax server. The fax board reads a set number of digits from the phone line and compares these digits to each RightFax user's routing code. If a match is made, the fax can be successfully routed.

These settings will only affect DID-capable fax boards.

Number of Digits to Collect Specify the number of digits being sent to you by the phone company during incoming calls. This value is fixed and maintained by your phone company when your DID service is installed. If you are not sure how many digits are being forwarded, contact your telephone service provider.

Number of Digits for Routing Specify the number of received digits to use for DID routing. This is the number of digits in each RightFax user's routing code. This value can be equal to, but not greater than, the **Number of Digits to Collect** setting.

DID Service Type Specify the type of DID service (WINK or IMMEDIATE). This setting is determined by the phone company when your DID service is installed. If you are not sure how to set this option, contact your telephone service provider.

Configuring digital Brooktrout fax boards

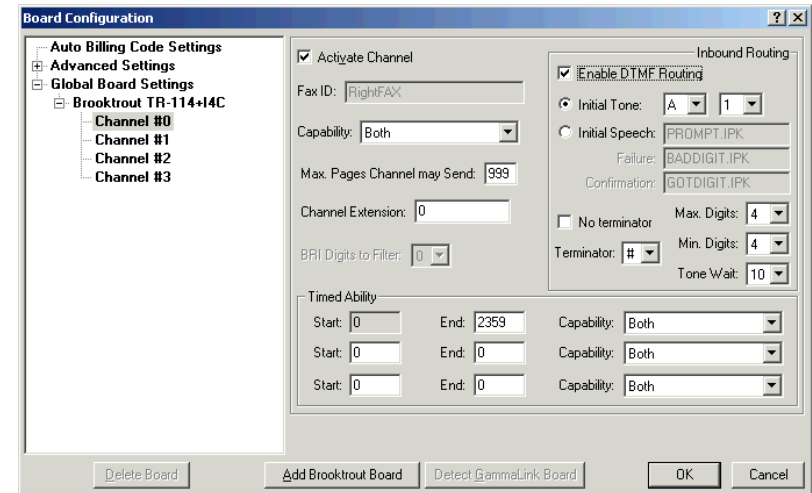
After you have set up digital fax boards in the BoardServer configuration program, you must configure the RightFax server to recognize your network interface cards. When you add a digital Brooktrout fax board in the BoardServer configuration program, a new option, “Digital Configuration,” appears at the top of the tree in the left pane. Click this option to run the digital configuration wizard. Complete each entry in the wizard for your network interface card.

For a description of any option in the wizard, click the [?] icon in the top right corner of the dialog box, and then click the box you want help with. Options that are unavailable either do not apply to the board type or settings you have selected, or those settings are not optional.

Configuring Brooktrout fax channels

Each fax channel on a Brooktrout fax board can be individually configured. To configure a channel, click the channel number in the Board/Channel list.

Figure 5.7 Brooktrout Channel Configuration Dialog Box



Activate Channel Activates this channel for use by RightFax. To deactivate the channel, click to clear this check box.



Caution If you install two TR1034 fax boards in one computer, all 24 fax channels must be activated on the first board before any fax channels on the second board will function. This is because disabling any fax channels on a TR1034 fax board automatically disables all subsequent TR1034 channels. For example, if you have two fractional T1 lines with 12 channels plugged into the first TR1034 board and 12 channels plugged into the second board, the T1 status LED on the second board will not light and its fax channels will not be accessible by RightFax.

Enable ECM Enables CCITT error correction mode when sending faxes. Error correction can improve fax quality on a noisy phone line but can also increase the time it takes to send faxes.

Fax ID Specify the fax ID for this channel only. The fax ID is transmitted to remote fax machines to identify the sender. Usually, this is set to your company name or general fax number. This box will not be available if you selected the **Set Fax ID for all Channels** check box when configuring the Brooktrout board (see [“Configuring analog Brooktrout fax boards”](#) on page 60).

Capability Sets the capability (dial-only, answer-only, or both) for this channel. This box will not be available if you selected the **Set Capability for all Channels** check box when configuring the Brooktrout board (see [“Configuring analog Brooktrout fax boards”](#) on page 60).

Max. Pages This Channel May Send Sets the maximum number of pages per fax that can be sent by this channel, from 0 to 999 (up to 1000 pages per fax). This lets you reserve channels for smaller faxes.

Channel Extension Assigns a routing code to all incoming faxes on this channel if no routing information is specified. Because DID, T1 with DNIS, and ISDN telephone lines require routing codes, this setting only applies to loop-start lines and T1 lines without DNIS. The **Channel Extension** is also used when DTMF routing is enabled on the line but the caller does not enter a routing code.

Timed ability This feature changes the capability (send-only, answer-only, or both) of the fax channel at defined times. For example, you can set a channel to answer-only during business hours, and then switch it to both dial and answer after hours so it can be used for broadcast faxing in the evening.

You can define up to three time periods. Times are indicated in 24 hour military time (“0000” represents midnight, “1200” represents noon, and “1730” represents 5:30 p.m.).

Start Specify the beginning of the time period. The first time period always has its **Start** time set to “0000” (midnight).

End Specify the end of the time period. You must always specify the end time of the last time period as “2359”.

Capability Sets the capability (dial-only, answer-only, or both) for this time period.

Inbound routing These settings all apply if you will be using DTMF routing. DTMF routing is a method for routing faxes directly to an individual based on the routing code entered manually by the caller.

Enable DTMF Routing Enables DTMF inbound routing for this channel.

Initial Tone Prompts callers to enter a routing code for the fax by playing a tone. When this option is selected, you must also select the tone to play and the duration of the tone in seconds. For information on the available tones, refer to your Brooktrout documentation.

Initial Speech Prompts callers to enter a routing code for the fax by playing a voice prompt. This requires a special voice module license for your Brooktrout board.

When this option is selected, you must also specify the file of the voice prompt. The default file, Prompt.ipk is located in the RightFax\RFBoard folder. This prompt file can be played or re-recorded via telephone.

To play the voice prompt for review, go to a command prompt on the server and enter this command:

```
\rfboard\voice -p -cPhoneNum prompt.ipk
```

where *PhoneNum* is the phone number the Brooktrout board will dial to play back the prompt.

The board will dial the phone number you specified. When you answer the phone, it will play the message. Hang up when the playback is complete.

To record a new voice prompt

1. Save a backup copy of the old Prompt.ipk file.
2. From a command prompt on the server, enter this command:

```
\rfboard\voice -r -cphonenum -u0 prompt.ipk
```

where *phonenum* is the phone number the Brooktrout board will dial to initiate the recording.
3. The board will dial the phone number you specified. When you answer the phone, it will begin recording your message. Press the [#] key (pound key) when you are done.

Failure Specify the file to play when a caller does not enter enough DTMF digits to route the fax. The default file, Baddigit.ipk is located in the RightFax\RFBoard folder. This prompt file can be played or re-recorded via telephone. For information on playing and recording voice prompts, see “Initial Speech” on page 62.

Confirmation Specify the file to play when a caller has correctly entered DTMF digits for routing. The default file, Gotdigit.ipk is located in the RightFax\RFBoard folder. This prompt file can be played or re-recorded via telephone. For information on playing and recording voice prompts see “Initial Speech” on page 62.

No Terminator Tells RightFax to accept the DTMF code entered by the caller as soon as the correct number of digits have been entered. No additional terminator key needs to be pressed.

Terminator Specify the key (on the phone) that the caller must press when finished entering DTMF digits. This is necessary when the **Max. Digits** and **Min. Digits** are *not* set to the same value. Because in this case the routing code can be a variable number of digits, the caller must provide some indication of when he has finished entering DTMF digits.

Max. Digits Specify the maximum number of DTMF digits that can be entered by the caller.

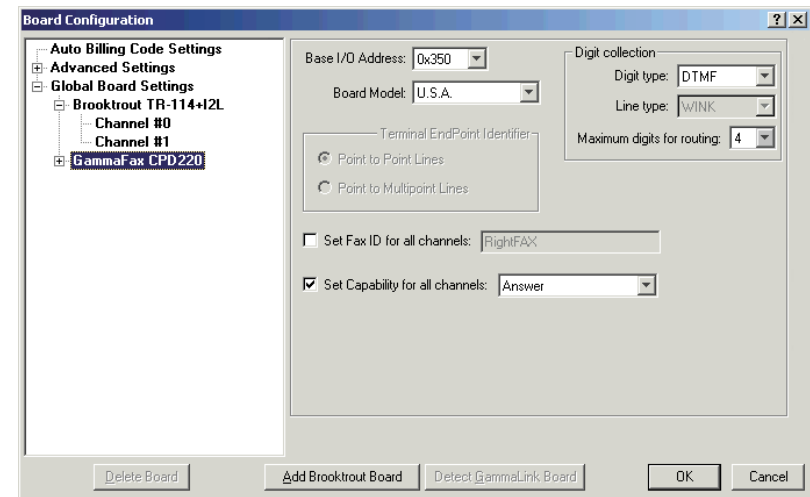
Min. Digits Specify the minimum number of DTMF digits that can be entered by the caller.

Tone Wait Specify the length of time in seconds to wait after the prompt is played for the caller to enter a routing code. If you have specified a terminator key (described previously), the caller must enter the code and the terminator in this length of time.

Configuring GammaLink fax boards

After you have added a new GammaLink fax board, it must be configured to work with RightFax. To configure the board, click the board name in the Board/Channel list.

Figure 5.8 GammaLink Board Configuration Dialog Box



Base I/O Address The I/O address of the first channel on the board. This value must match the physical I/O address set on the fax board. For information on setting the I/O address on your fax board, refer to the documentation included with the board.

Board Model Specify the nationality type of fax board installed. This may or may not be the country in which you reside.

Set Fax ID for All Channels Enable and specify a fax ID for all the channels on this fax board. The fax ID is transmitted by each channel on this fax board to remote fax machines. Usually, this is

set to your company name or general fax number. You can also specify separate fax IDs for each separate channel (see [“Configuring GammaLink fax channels”](#) on page 64).

Set Capability for All Channels Sets the same capability (dial-only, answer-only, or both) for all the channels on the fax board. You can also specify the capability of each channel separately (see [“Configuring GammaLink fax channels”](#) on page 64).

Terminal endpoint identifier The terminal endpoint identifier is required if you have installed GammaLink ISDN-BRI fax boards. Check with your phone company on the type of BRI line you have installed. Although the CPi/200-BRI board supports both point-to-point (PTP) and point-to-multipoint (PTMP), the CPi/200-BRI board cannot be used on a shared BRI line.

Point-to-Point Lines Tells RightFax to answer all incoming calls with the BRI fax board. This is the most common connection type, used when there is only one BRI device on the line.

Point-to-Multipoint Lines Allows RightFax to support up to eight devices on one BRI line. This connection type is used when multiple devices share the same BRI line.

Digit Type Specify the type of digits (touch-tone or pulse) that will be delivered to the board from the phone company or your PBX. In most cases, this should be set to DTMF. If you're not sure what to enter here, contact your telephone company or PBX administrator.

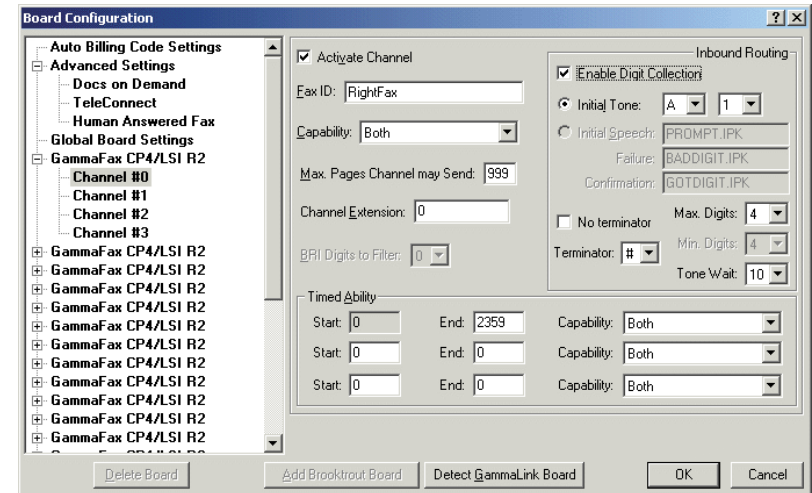
Line Type Specify the type of line service. For GammaLink boards, you must click “WINK.”

Maximum Digits for Routing Specify the number of received digits to use for DID routing. This is the number of digits in each RightFax user's routing code.

Configuring GammaLink fax channels

Each fax channel on your GammaLink fax board can be individually configured. To configure a channel, click the channel number in the Board/Channel list.

Figure 5.9 GammaLink Channel Configuration Dialog Box



Activate Channel Activates this channel for use by RightFax. Click to clear this check box to deactivate the channel.

Fax ID Specify the fax ID for this channel only. The fax ID is transmitted to remote fax machines to identify the sender. Usually, this is set to your company name or general fax number. This box will not be available if you checked the **Set Fax ID for all Channels** check box when configuring the GammaLink board (see [“Configuring GammaLink fax boards”](#) on page 63).

Capability Sets the capability (dial-only, answer-only, or both) for this channel only.

Max. Pages Channel may Send Sets the maximum number of pages per fax that can be sent by this channel, from 0 to 999 (up to 1000 pages per fax). This lets you reserve channels for smaller size faxes only.

Channel Extension Assigns a routing code to all incoming faxes on this channel if no routing information is specified. Because DID, T1 with DNIS, and ISDN telephone lines require routing codes, this setting only applies to loop-start lines and T1 lines without DNIS. The **Channel Extension** is also used when DTMF routing is enabled on the line but the caller does not enter a routing code.

BRI Digits to Filter Specify the number of digits to remove from the incoming ISDN phone number to leave only the necessary routing code. This parameter is only necessary if you have installed GammaLink ISDN-BRI fax boards.

Timed ability This feature changes the capability (send-only, answer-only, or both) of the fax channel at specified times. For example, you can set a channel to answer-only during business hours, and then switch it to both dial and answer after hours so it can be used for broadcast faxing in the evening.

You can define up to three time periods. Times are indicated in 24 hour military time (i.e., "0000" represents midnight, "1200" represents noon, and "1730" represents 5:30 p.m.).

Start Specify the beginning of the time period. The first time period always has its Start time set to "0000" (midnight).

End Specify the end of the time period. You must always specify the end time of the last time period as "2359."

Capability Sets the capability (dial-only, answer-only, or both) for this time period.

Inbound routing These settings apply if you will be routing incoming faxes based on special digits that are received with the call (for example, DTMF, DID, or digital).

Enable Digit Collection Enables digit collection for this channel regardless of the type of signaling (DTMF, DID, or digital). You should not select this check box if no routing digits are being passed.

Initial Tone Prompts callers to enter a routing code for the fax by playing a tone. When this option is selected, you must also select the tone to play and the duration of the tone in seconds. For information on the available tones, refer to your GammaLink documentation.

No Terminator Tells RightFax to accept a DTMF code entered by the caller as soon as the correct number of digits have been entered. No additional terminator key needs to be pressed.

Terminator Specify the key (on the phone) that the caller must press when finished entering DTMF digits. This is necessary when the **Max. Digits** and **Min. Digits** are not set to the same value. Because in this case the routing code can be a variable number of digits, the caller must provide some indication of when he has finished entering DTMF digits.

Max. Digits Specify the maximum number of digits that can be entered by the caller.

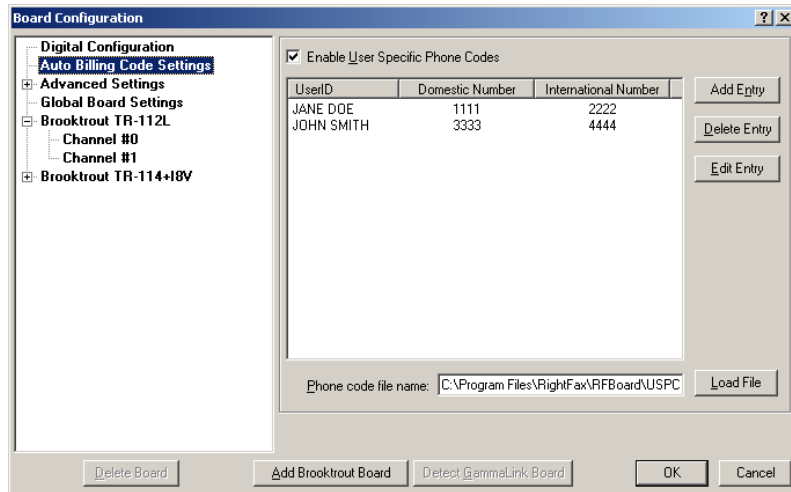
Min. Digits Specify the minimum number of digits that can be entered by the caller.

Tone Wait Specify the length of time in seconds to wait after the prompt is played for the caller to enter a routing code. If you have specified a terminator character (described previously), then the caller must enter the code and the terminator in this length of time.

Configuring automated billing codes

This feature automatically applies billing codes to outbound faxes based on the user ID of the sender. To configure automatic billing codes, click **Auto Billing Code Settings** in the left pane.

Figure 5.10 GammaLink Channel Configuration Dialog Box



Enable User Specific Phone Codes Enables the Automatic Billing Codes feature.

To assign domestic and international phone codes to specific RightFax users, you must create a list of RightFax users and their phone codes.

Click **Add Entry** to add a new entry to the list. This opens a dialog box asking you to enter a RightFax user ID and that user's domestic and international long distance phone codes. When you click **OK** to close the dialog box, the new entry is immediately displayed in the **Board Configuration** dialog box.

To edit an entry, click the entry in the list and click **Edit Entry**. To delete an entry, click the entry and click **Delete Entry**.

To load a list of RightFax user IDs and phone codes from a file, type the path and file name in the **Phone Codes File Name** box and click **Load File**. The file name you specify must be a tab-delimited ASCII file. Each entry in this file must include the RightFax user ID, domestic phone code, and international phone code. Individual entries are separated by a carriage return

Example

| | | |
|--------|------|------|
| JDoe | 1345 | 0345 |
| JSmith | 1678 | 0678 |
| BJones | 1111 | 0111 |

After you load the file, any additions, deletions, and editing changes you make in the **Board Configuration** dialog box will be saved.

To distinguish international and domestic long distance calls

After you have created a list of RightFax users and their phone codes, you must specify dialing rules that tell RightFax when to dial those codes.

When creating dialing rules, the character "F" added to the dial string will be replaced with the user's domestic phone code. The character "G" added to the dial string will be replaced with the user's international phone code.

Example For example, for international calls, you might create a dialing rule like this:

| Pattern | Append |
|---------|--------|
| 011+ | wGii |

This tells RightFax that if the first three digits of an outgoing fax number are "011" (the international dialing prefix) then wait for a dial tone (w), look up the user's international billing code and dial it (G), and then wait 10 seconds before dialing the number (ii).

For more information on creating dialing rules in RightFax, see ["Adding dialing rules" on page 164](#).

Configuring the Human Answered Fax feature in the advanced settings

The Advanced Settings on the BoardServer configuration dialog box apply to the Docs-on-Demand and TeleConnect optional modules and to the Human Answered Fax feature. Refer to the *RightFax Docs-on-Demand Guide* or *RightFax TeleConnect Guide* for installation and configuration instructions for these products.

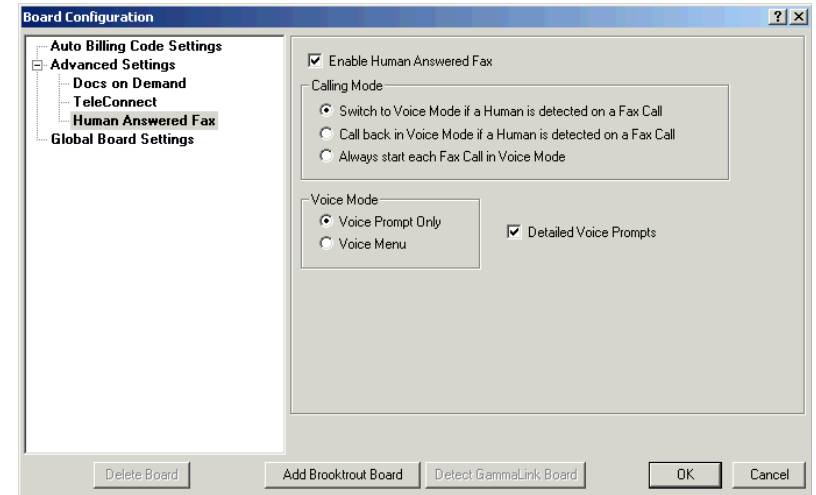
The Human Answered Fax feature detects when an outbound fax call is answered by a person, rather than a fax machine, and then provides an automated voice message informing the recipient that a fax is being sent. The recipient is then offered one or more options for receiving the fax.

Because it uses digital voice prompts, the Human Answered Fax feature requires that you have installed at least one Brooktrout fax board with licensed voice capability. For information on voice-compatible Brooktrout fax boards, refer to your fax board documentation or contact your Brooktrout fax board distributor.

The Human Answered Fax feature uses voice files located in the RFBBoard\Voices\Dir folder on the RightFax server. Voice files are saved as Dialogic OKI32 files (.vox files). These files can be played or modified using any sound editor that supports the Dialogic OKI32 file format.

To enable and configure the Human Answered Fax feature, expand **Advanced Settings**, and then click **Human Answered Fax** in the list in the left pane.

Figure 5.11 The *Human Answered Fax Configuration* dialog box



Enable Human Answered Fax Enables the Human Answered Fax feature.

Calling Mode Select one of the following options:

- **Switch to Voice Mode if a Human is detected on a Fax Call.** This option causes the RightFax server to switch from fax transmission mode to voice mode as soon as a human voice is detected. If a fax machine is detected, the fax will be sent.
- **Call back in Voice Mode if a Human is detected on a Fax Call.** This option causes the RightFax server to hang up when a human voice is detected and immediately call back in voice mode. If a fax machine is detected on either call, the fax will be sent.
- **Always start each Fax Call in Voice Mode.** This option causes the RightFax server to initiate all outbound fax calls in voice mode. If you select this option, you should also select **Voice Prompt Only** under **Voice Mode**. This is because if a fax machine picks up the call, RightFax will always send the fax after a short delay, whereas if you select the **Voice Menu** option, RightFax will wait indefinitely for a response from the call recipient, and the fax will never be sent.

Voice Mode Select one of the following options:

- **Voice Prompt Only.** This option plays a voice prompt to the call recipient and then waits for a fax tone before transmitting. The voice prompt is a message informing the call recipient that this is an incoming fax. The voice prompt used by the RightFax server can be either simple or detailed.
- **Voice Menu.** This option plays a voice prompt followed by a menu of options for the call recipient. The voice prompt used by the RightFax server can be either simple or detailed.

If the voice menu is enabled, the call recipient will first hear either the simple or detailed voice prompt (depending on which you have enabled). The prompt will be followed by the file HAF_MainMenu.vox, which says "To receive this fax press 1 or stay on the line. To Cancel this fax press 9."

- If the call recipient presses 1, the file HAF_PressStart.vox plays saying "Please Press Start on your Fax machine To Receive your Documents" and the fax server will attempt to send the fax.
- If the call recipient presses 9, the file HAF_Cancelled.vox plays saying "This Fax Has Been Cancelled. We apologize for any Inconvenience" and the fax will not be sent.
- If the caller does not press 1 or 9 within 10 seconds, the menu will automatically play the file HAF_PressStart.vox prompting the call recipient to start the fax machine, then the fax server will attempt to send the fax.

Detailed Voice Prompts The Human Answered Fax feature provides two types of voice prompt: a simple voice prompt and a detailed voice prompt.

The simple voice prompt plays the file HAF_Thisisafax.vox which says "This is a fax," followed by HAF_PressStart.vox which says "Please press start on your fax machine to receive your documents."

The detailed voice prompt combines several separate voice files to create a unique message that says "This is an *n* page fax." If you select the **Detailed Voice Prompts** option in the **Human Answered Fax** tab of the **Board Configuration** dialog box (described on [page 68](#)), the RightFax server will use the detailed voice prompt.

The detailed voice prompt always includes the number of pages in the fax and uses the appropriate a/an article to match the number of pages. The detailed voice prompt can include "...from [*company name*]" at the end of the prompt if a file called HAF_Source.vox is located in the \Voices folder. This file is not provided with the RightFax server software, so you must create this file if you want your organization name identified as the source of the fax. The

detailed voice prompt then plays HAF_PressStart.vox which says "Please press start on your fax machine to receive your documents."

Translating the voice files

If you will be using the Human Answered Fax feature with a language other than English, follow these guidelines when configuring Human Answered Fax (described on [page 67](#)):

- Record a new translated version of the file HAF_ThisisaFax.vox that will inform the call recipient that a fax transmission is being attempted.
- Select **Voice Prompt Only** under **Voice Mode**.
- Do not select the option **Detailed Voice Prompts**.



Note *Captaris recommends using the simple voice prompt without the menu when translating the Human Answered Fax voice files to languages other than English. Because both the menu and the detailed voice prompt are generated by playing several separate voice files in sequence, simply translating the individual files may result in improper syntax. For descriptions of all of the voice files in the RfBoard\Voices\Dir folder on the RightFax server, refer to the TeleConnect User's Guide.*

Adding data to the ISDN string

You can add data to the calling party number field of the ISDN string for each fax sent from the RightFax server. This data can be captured by some PBX systems for billing purposes. Before implementing this feature, verify that the PBX system can accept the data. If it does not, the PBX will reject the call.

To enable this feature, edit the Windows registry. Navigate to the subkey HKEY_LOCAL_MACHINE\Software\RightFax\Boardserver. Add the REG_DWORD registry value UseISDNCallingParty.

The data options for the string are described in the following table.

Table 5i ISDN Data String Options

| Data | Value |
|--|-------|
| Fax number dialed. | 1 |
| RightFax user ID of the sender. | 2 |
| The recipient's voice number. | 3 |
| The recipient's name. | 4 |
| The recipient's company name. | 5 |
| Billing code 1. | 6 |
| Billing code 2. | 7 |
| Assigned unique ID for fax job. | 8 |
| CSID match code for secure send operation. | 9 |
| Name of the sender. | 10 |
| Source server IP address or name. | 11 |

Defining an RTI line

The RTI (Receipt Terminal Information) line is a line of text that can be printed at the bottom of each received fax page. The RTI line includes information about the fax that supplements the TTI line such as the total number of pages received, the name of the fax server that received the fax, and the sender's caller ID. You can enable or disable the RTI line, specify the information you want it to include, specify the font size, and specify where on the fax page to print the line.

To enable this feature, edit the registry. Navigate to the subkey HKEY_LOCAL_MACHINE\Software\RightFax\FaxServer and add the registry values described in the following table.

After adding the registry values, stop and start the RightFax server for the settings to take effect.

Table 5j RTI Line Registry Entries

| Entry | Data type | Values | Description |
|--------------------------|---------------|--|--|
| ReceiveStamp FontSize | REG_ DWORD | Any decimal number (default 14) | Font size for the RTI line text. |
| ReceiveStamp Format | REG_SZ | Text and variables (see "Table 5k: ReceiveStamp Format Variables" on page 70.) | The text to print. This can include one or more variables from "Table 5k: ReceiveStampForma t Variables" on page 70. |
| ReceiveStamp Location | REG_SZ | TOP BOTTOM (default) LEFT RIGHT | Location on page to print the RTI line. |
| StampReceived Pages | REG_SZ | ON OFF (default) | Enable or disable the RTI line. The value for this entry must be ON to enable the RTI line. |

The following table lists the variables that can be included in your RTI line text.

Table 5k ReceiveStampFormat Variables

| Variable | Definition |
|----------|--|
| ~1 | The current page number. |
| ~2 | The total number of fax pages received. |
| ~3 | The date and time that the fax was received (as reported by the fax server). |

Table 5k ReceiveStampFormat Variables (Continued)

| Variable | Definition |
|----------|---|
| ~4 | The name of the fax server that received the fax (up to 30 characters). |
| ~5 | The number of the fax channel that received the fax. |
| ~6 | The fax recipient's DID number. |
| ~7 | The fax sender's caller subscriber ID (CSID). |
| ~8 | Duration of the fax transmission in minutes and seconds. |
| ~9 | The fax recipient's RightFax user ID (if applicable). |
| ~0 | The fax recipient's RightFax user name (if applicable). |
| ~A | The unique ID assigned to the fax by the fax server. This variable is case-sensitive. |
| ~B | The current date formatted as a two-digit year followed by three digits for the absolute day of the year. For example, "00001" means January 1, 2000. This variable is case-sensitive. |
| ~C | The total page count on the fax server. The number is reset each day at midnight and then increments by one for each received fax page. This variable is case-sensitive. |

Example The following value entered for the ReceiveStampFormat entry ...

Page ~1 of ~2 received on ~3 on server ~4.

... might print as:

Page 4 of 4 received on 02-01-01 12:11:59 [US Mountain Standard Time] on server RIGHTFAX.

Running BoardServer services on remote computers

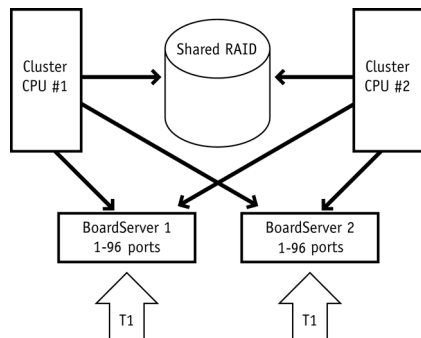
With the RightFax Enterprise server, you can install and run multiple BoardServer modules simultaneously on the local and one or more remote computers. This distributes the workload of the RightFax server across several computers and provides expanded channel capacity and system redundancy.

When the RightFax server is configured to run one or more BoardServer modules remotely, the workload of faxing is divided between multiple computers. The RightFax server computer can remain dedicated to database management and WorkServer operations, while the remote BoardServer computers handle all the work relating to sending and receiving faxes.

Because the fax boards can be distributed between several computers, your ability to expand your system's fax channel capacity is virtually unlimited using remote BoardServer modules.

Also, running remote BoardServer modules allows for system redundancy. If a hardware or phone line failure occurs, fax traffic can be automatically routed to other available BoardServer modules quickly and with no interruption of service. In addition, remote BoardServer modules let you make the most out of redundant hardware in clustered server configurations, as in the following diagram.

Figure 5.12 Remote BoardServer Modules in a Clustered Environment



The ability to install multiple BoardServer modules is available in RightFax Enterprise servers only.

To install the BoardServer service on a Remote Computer

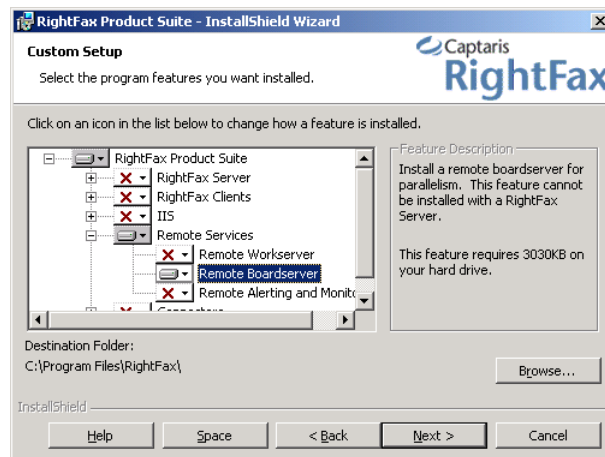


Important Because they are not located on your RightFax server computer, remote BoardServer modules cannot prevent you from exceeding your RightFax channel licenses. You must manage the number of activated channels across all the BoardServer modules, and do not attempt to activate more channels than your organization has licensed. The RightFax Server module service will shut down if the total number of channels on all BoardServer modules exceeds your total number of channel licenses.

1. If you have not already done so, create a share of the RightFax folder on the fax server computer named "RightFax". You must add at least one NT account that has both read and write access to this share.
2. Install the fax boards that the BoardServer module will control into the remote BoardServer computer. This computer must conform to the same hardware and software specifications as a RightFax server (described in the *RightFax Installation Guide*).
3. Log on to the remote computer using an NT account with read and write access to the shared RightFax folder on the fax server. This account must also have permission to modify the registry of the RightFax server
4. 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.
5. In the menu of install options, select the option to install the RightFax product suite. The RightFax install wizard opens.
6. 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**.

7. Enter your name, organization name, and your product serial number when prompted. Your product serial number is printed on a label attached to the product box. Click **Next**.
8. On the **Setup Type** screen, select **Custom** and then click **Next**.
9. Expand the tree of install components. Remove the install option for all components except **Remote Boardserver** under **Remote Services**. Click **Next**.

Figure 5.13 The Remote BoardServer install option



10. When prompted for a RightFax server name, enter the name of the server that you want to connect to. Click **Next**.
11. Click **Install**.
12. When the installation is complete, install the fax board drivers according to the instructions in the *RightFax Installation Guide*.
13. Finally, complete the BoardServer configuration program according to the instructions in this chapter.

Troubleshooting the BoardServer module

To help track errors, all RightFax server modules can be configured to record a detailed log of program information in the Application EventLog. When a problem occurs, this should be your first source of information. Each entry will be attributed to the RightFax Server module, RightFax Database module, RightFax BoardServer module, or RightFax WorkServer module.

Error 2140 when starting the BoardServer service with Brooktrout fax boards

1. Confirm that the base I/O address and the interrupt in the Board section of the BoardServer configuration program match the physical settings on the board.
2. If the address and interrupt are configured correctly, confirm that there are no other system conflicts with those addresses.



Note The *RightFax BoardServer* module must be stopped for this test to work.

From a command line on the RightFax server, change to the RightFax\RFBoard folder and enter this command:

type faxinit.cfg

A line appears for each fax channel listing the channel's address. If the addresses do not match the ones you have entered in the BoardServer configuration program, edit the text file and fix them. After this is done, enter this command at the RightFax\RFBoard prompt:

faxinit faxinit.cfg

If the addresses are not successfully found, then they are probably conflicting with something else on your system.

3. If all of the addresses are found and you are still getting a 2140 error when starting the BoardServer module, there is probably an interrupt conflict. Confirm that the interrupt on the board matches the interrupt setting in the BoardServer configuration program. If it does, try another interrupt setting. To do this, first change the interrupt in the BoardServer configuration, and then shut down the Windows NT server, turn off the computer, and change the interrupt jumper on the fax board to match the BoardServer configuration. Restart the system and try to restart the service. Repeat this procedure trying different settings until the service starts successfully.

The BoardServer service is set to manual

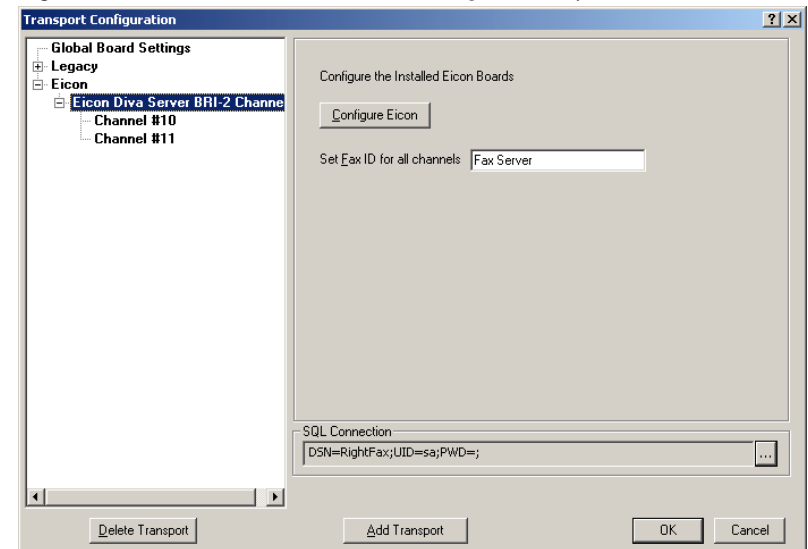
The BoardServer module is normally configured as an automatic service. If it encounters problems starting (such as configuration errors), the BoardServer service sets itself to manual. To reset the BoardServer service to automatic, fix the cause of the problem, and then restart the BoardServer module manually. On successful startup, the BoardServer module will reset itself to automatic.

Configuring Eicon Fax Boards

Eicon fax boards must be added in the DocTransport module and then configured using the board configuration tool provided by Eicon. Eicon Diva Server version 7.5 must be installed on the RightFax server or remote BoardServer computer where the Eicon boards are installed. Each Eicon board that you have added to DocTransport must be configured separately.

After you have specified the installed Eicon fax boards in DocTransport (described in [“Adding transport methods”](#) on [page 50](#)), expand the **Eicon** option in the list in the left pane and select an Eicon board in the list. This displays a set of Eicon configuration options.

Figure 5.14 The *Eicon Diva Server Configuration* options



Configure Eicon Click this button to run the fax board configuration program provided by Eicon. For information on how to complete the Eicon configuration settings, refer to the documentation provided with your Eicon hardware.

Set Fax ID for all Channels You can specify a fax ID for all the channels on this fax board. The fax ID is transmitted by each channel to the receiving fax machine. Usually, this is set to your company name or general fax number.

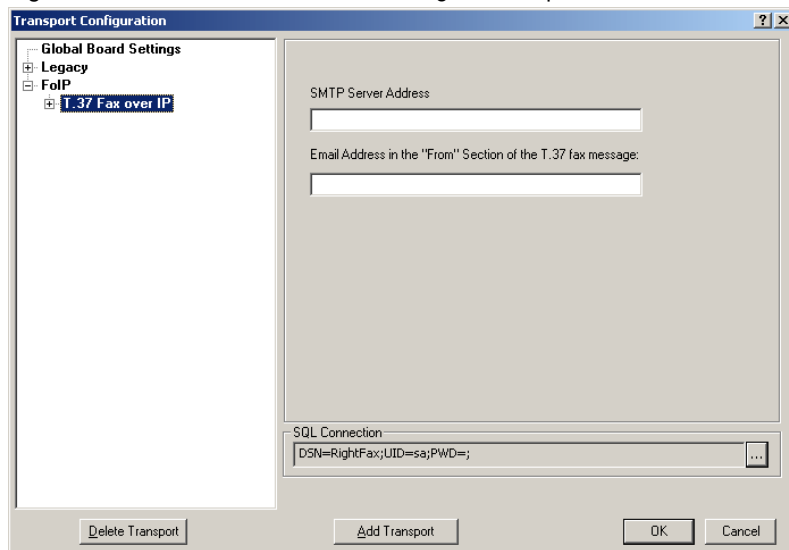
Configuring T.37 Fax over IP

T.37 fax over IP is a fax transmission protocol that allows faxes to be transmitted to T.37-compatible devices over IP, rather than dedicated fax channels. The fax is packaged as an e-mail message with a TIFF attachment and then sent over IP via an SMTP server. This message is automatically interpreted as a fax by the receiving device, which then prints it.

To send documents using fax over IP, you must create dialing rules that route the documents based on the fax numbers or e-mail addresses entered by your RightFax client for outbound faxes. For information on how to configure a dialing rule to route to a fax over IP destination, see [page 170](#).

After you have added the T.37 Fax over IP transport method in DocTransport (described in [“Adding transport methods”](#) on [page 50](#)), expand the **FoIP** option in the list in the left pane and select **T.37 Fax over IP**. This displays the fax over IP configuration options.

Figure 5.15 The *T.37 Fax over IP Configuration* options



SMTP Server Address By default, fax over IP messages will be sent via the SMTP server that you specified during the RightFax server installation. If you did not specify an SMTP server name during installation, enter the name of the SMTP server on your network that will transmit fax-over-IP messages.

Email Address in the “From” Section of the T.37 fax message Enter the e-mail address that will be transmitted to the receiving T.37-compatible device.

Configuring DOCplus Connectivity

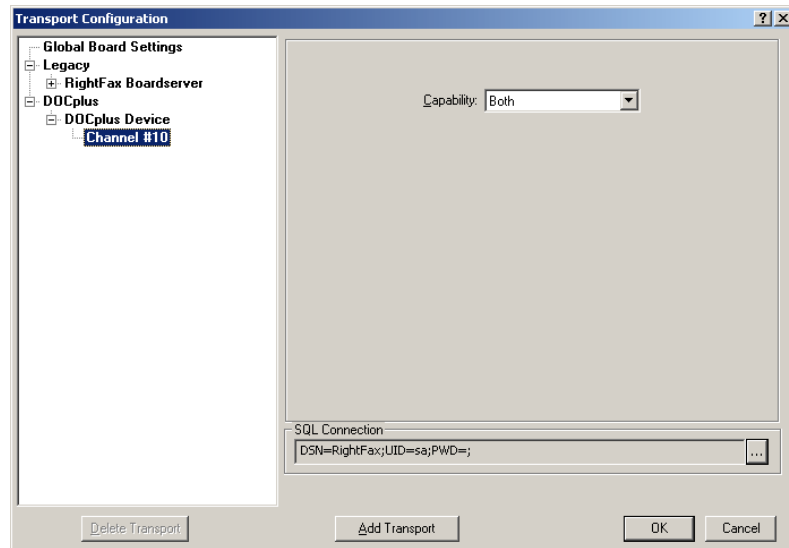
DOCplus is a fax transmission service provided by Xpedite (www.xpedite.com) that lets you forward fax images to an Xpedite server for transmission via their fax channels. This feature is most useful if you want to send a large volume of faxes in a short period of time or need to send more faxes than your fax channel capacity can efficiently manage.

To send documents via DOCplus, you must create dialing rules that route the documents based on the fax numbers or e-mail addresses entered by your RightFax client for outbound faxes. You must also create one or more DOCplus accounts in Enterprise Fax Manager. For information on how to configure a dialing rule to route to Xpedite using a DOCplus account, see [page 170](#). For information on creating DOCplus accounts in Enterprise Fax Manager, refer to the Enterprise Fax Manager online help.

Each DOCplus channel that you have added to DocTransport must be configured separately. After you have added the DOCplus transport method in DocTransport (described in [“Adding transport](#)

methods" on page 50), expand the **DOCplus** option in the list and click the channel number. This displays the DOCplus configuration options.

Figure 5.16 The *DOCplus Configuration* options



Capability This option defines how the selected channel will be used to communicate with Xpedite. Select one of these options:

- **Send.** The channel will be dedicated to sending fax documents to Xpedite.
- **Status.** The channel will be dedicated to receiving status information about faxes from Xpedite.

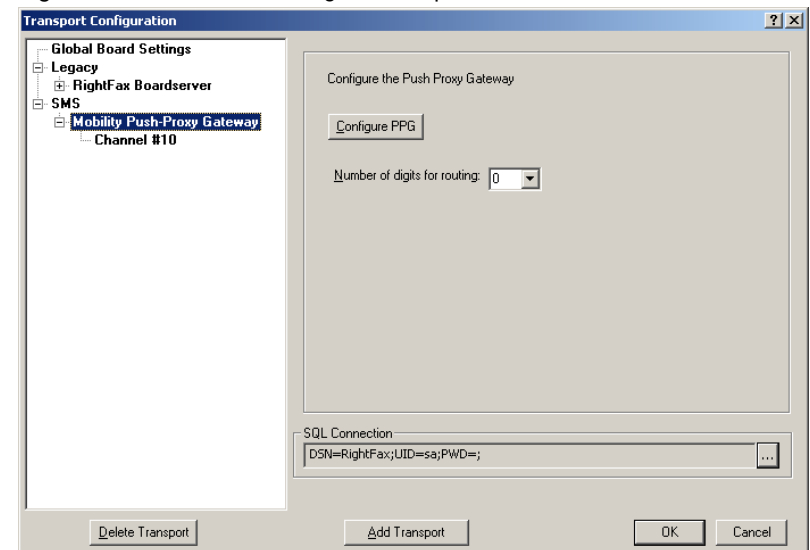
Configuring SMS via the Push-Proxy Gateway

Short message service (SMS) is a communication protocol that lets you send and receive short text messages to and from SMS-compatible devices such as a cell phone. The RightFax server can be configured to send fax notifications and alerts to SMS

numbers. RightFax clients can also send and receive SMS messages. Because SMS is a text-only protocol, sent SMS messages include only the notes added to the fax cover sheet. You can also create dialing rules that automatically route outbound faxes to SMS numbers. SMS functionality requires that you have installed the RightFax Push-Proxy Gateway on the server running the DocTransport service.

After you have added the SMS transport method in DocTransport (described in "Adding transport methods" on page 50), expand the **SMS** option in the list in the left pane and select **Mobility Push-Proxy Gateway**. This displays the SMS configuration options.

Figure 5.17 The *SMS Configuration* options



Configure PPG Runs the Push-Proxy Gateway configuration program. For information on completing these configuration options, refer to the *RightFax Push-Proxy Gateway Guide*.

Number of Digits for Routing When the RightFax server receives an incoming SMS message, it can route the message to one or more mailboxes. Each RightFax mailbox (user ID) has a unique routing code. SMS mailboxes should be configured to use routing codes based on the phone number that the message was sent to, typically the last three or four digits of the number. Enter the number of digits that will be read from the end of the receiving phone number that will be used for routing SMS messages.

■ ■ ■

Chapter 6

Enabling Active Directory User Synchronization

Each RightFax server maintains a database of users. This database defines each user's RightFax-specific contact information, logon information, preferences, and permissions. In most cases, each user in your organization must have a unique record in the RightFax user database in order to send and receive documents via the RightFax server.

RightFax servers installed on computers running Microsoft Windows 2000 or Windows XP have the ability to read user data from Active Directory. User data can be synchronized in real time or at definable intervals. User synchronization is one direction only, meaning that RightFax user properties are updated by Active Directory, but Active Directory user properties are not updated by RightFax.

To enable Active Directory user synchronization on your RightFax servers, you need to complete the following basic steps:

1. Update the Active Directory Schema and Configuration ([page 77](#)).
2. Configure the RightFax WorkServers to perform user synchronization ([page 80](#)).
3. Customize the synchronization profile ([page 81](#)).

Each of these procedures is described in detail in the sections that follow. The instructions in this chapter are written for administrators who are familiar with Active Directory terminology and the tools used to manage and edit Active Directory. Copies of all of the XML files used to update the Active Directory Schema and Configuration can be found at www.rightfax.com/schemas.

Updating the Active Directory Schema and Configuration

To synchronize Active Directory and RightFax users, each of your RightFax servers must be published in Active Directory. RightFax includes a wizard that updates the Active Directory Schema and Configuration with the RightFax classes and other objects required for synchronization.

The following table lists each of the classes that are added by RightFax to the Active Directory Schema and the attributes and definitions for each class.

Table 6a Classes Added by RightFax to the Active Directory Schema

| Class | Definition | Attributes | Definition |
|--------------------------------|------------------------------------|---------------------------------|--|
| captarisSync Object | Individual mapped user attributes | captarisSync CustomAction | Custom VBScript to execute during synchronization |
| | | captarisSync FilterAction | VBScript used for filtering |
| | | captarisSync RightFax Attribute | The RightFax user attribute |
| | | captarisSync WindowsAttribute | The corresponding Active Directory user attribute |
| captarisSync SchemaObject | RightFax user attributes | captarisSync FieldType | Field type (string, Boolean, etc.) |
| | | captarisSync VBSField | VBScript map to individual RightFax user attribute |
| captaris SyncProfile Container | Container for captarisSync Objects | captarisSync ProfileModifiable | Flag indicating whether or not the container is modifiable |
| | | captarisSync ProfileParent | Attributes (if any) inherited from parent class |

In addition to the classes added to the Active Directory Schema, RightFax adds the RightFax user database schema and two default RightFax synchronization profiles to the Active Directory Configuration. The RightFax user database schema is a list of RightFax user database fields that are available for mapping. The

two default synchronization profiles can be used to begin synchronizing RightFax to Active Directory right away or as templates for creating your own custom synchronization profile. For information on creating a custom synchronization profile, see [“Configure Profiles” on page 81](#).

Once the Schema is updated, Active Directory will replicate it across all of your domains. However, the Configuration update is domain-specific and must be run from at least one RightFax server in each domain. For this reason, it is recommended that you complete the RightFax Active Directory configuration wizard on all RightFax servers that will be synchronized from Active Directory. Incremental disk storage required for all installed Active Directory objects on full replicas is approximately 80 KB.



Warning *Once the Active Directory Schema has been updated by RightFax, do not manually delete the RightFax classes that were added. Doing so will cause irreparable damage to your domain controller.*

Active Directory synchronization is performed by one or more RightFax WorkServer modules. The service account used by the each WorkServer module that performs Active Directory synchronization must be able to read from Active Directory, including the **CN=Captaris Inc,CN=Services,CN=Configuration** container and all desired user object containers. In addition, to be able to run the wizard that publishes RightFax to Active Directory (described below), the service account used by each WorkServer must be configured as an Active Directory Schema Administrator and Domain Administrator. For information on setting up WorkServer service accounts, see [“Selecting a Service Account” on page 36](#).

To update the Active Directory Schema and Configuration

1. On the RightFax server, select **Start > Programs > Enterprise Fax Manager**. This runs Enterprise Fax Manager, the RightFax server administration tool. For more information on Enterprise Fax Manager, see [Chapter 7, “Managing Fax Servers with Enterprise Fax Manager”](#).
2. Click the name of the RightFax server to configure in the tree in the left pane of the Enterprise Fax Manager window. A list of services appears at the lower-right pane of the window.
3. In the **Service Name** list, double-click **RightFax WorkServer1 Module**. The **WorkServer Configuration** dialog box opens.
4. In the tree in the left pane of the dialog box, under **Workserver 1**, click **Active Directory Synch**. This opens a list of Active Directory synchronization options.
5. Select the option **Enable Active Directory Synchronization**. This runs the RightFax Active Directory configuration wizard.
6. From the **Welcome** page, click **Next**. The **Schema Configuration Check** page opens. The options in this page let you check your Active Directory Schema for the required RightFax classes and update the schema with the RightFax classes if necessary.
7. Click **Check Schema**. If the RightFax classes have already been added to the Active Directory Schema, “OK” appears in the **Status** box. The schema does not need to be updated. Click **Next** to continue running the RightFax Active Directory configuration wizard or click **Cancel** to exit.

If the RightFax classes have not yet been added to the Schema, “Update needed” appears in the **Status** box.

8. Click **Update Schema**. When the update is complete, “OK” appears in the **Status** box.

After the Schema is updated, you can click **Review Schema Updates** to view the XML file that was used to update the Schema. This XML file is called CaptarisSynchSchema.xml and is located in the RightFax\Shared Files folder on the RightFax server.

9. Click **Next** to open the **Configuration Check** page. The options in this page let you check and update your Active Directory Configuration with the RightFax user database schema and default profiles.
10. Select the file SyncConfig.xml and click **Check & Update Config**. When the update is complete, “OK” appears in the **Status** box. Repeat for the files SyncProfile1.xml and SyncProfile2.xml.

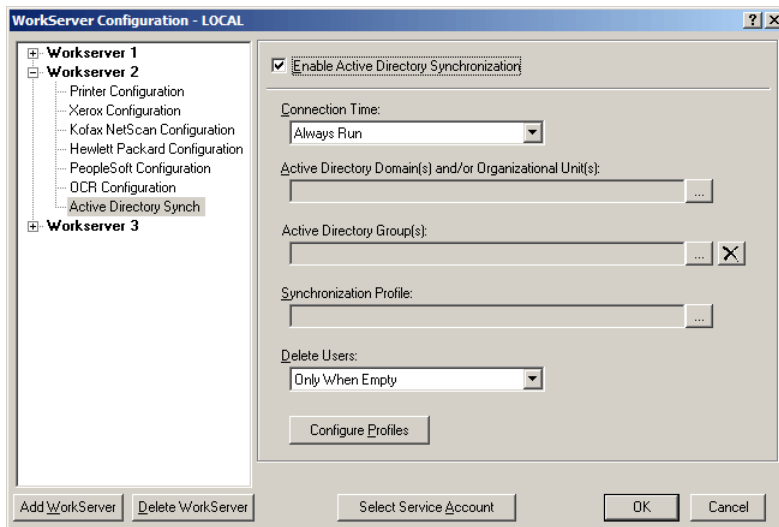
After each configuration is updated, you can click **Review Config Updates** to view the XML files that were used to update the configuration.

11. Click **Next** to open the **Verification** page. Select the option **Disable Distinguished Name Availability verification** only if you have previously synchronized the RightFax and Active Directory databases. Click **Start**. The RightFax Active Directory configuration wizard will run three tests to verify that the RightFax server is ready for Active Directory synchronization. If any of the verification tests fail, a message will appear that describes the problem. For information on resolving verification failures, see [“Troubleshooting Active Directory Synchronization” on page 87](#).
12. Click **Next**. A message will verify that you have successfully updated Active Directory for RightFax user synchronization. Click **Finish** to exit the wizard. The wizard will close and return you to the **WorkServer Configuration Active Directory Synch** dialog box. The next section discusses each of the options in this dialog box.

Configuring the RightFax WorkServers to Perform User Synchronization

Each RightFax server that will be performing user synchronization must have one or more WorkServers configured to enable Active Directory synchronization. After you have completed the RightFax Active Directory configuration wizard (page 77), the **WorkServer Configuration** dialog box opens. Complete this dialog box according to your needs, and then click **OK** to save the WorkServer configuration.

Table 6b The WorkServer Configuration Active Directory Synch dialog



Enable Active Directory Synchronization Select this check box to enable Active Directory user synchronization on this RightFax server. When you select this option, the RightFax Active Directory configuration wizard will run (described on page 77). It is



Note You can force RightFax to immediately synchronize with Active Directory by stopping and restarting the WorkServers that have Active Directory synchronization enabled. For information on stopping and starting the RightFax WorkServers, see “Starting and stopping services” on page 96.

Connection Time Select the interval at which user synchronization events will occur. Select the option **Always Run** to update user information continuously (RightFax will check about once every five minutes), or select an interval appropriate to your needs.

Active Directory Domain(s) and/or Organizational Unit(s) Click the [...] button to open a list of parent domains, child domains, and organizational units in your organization’s Active Directory forest. Select the Active Directory domains and organizational units from which you want to synchronize this RightFax server. You may select any one or all of the domains and organizational units in the list. Click **OK**.

Active Directory Group(s) Click the [...] button to open a list of Active Directory groups. You can select as many groups as you want for synchronization, but only those groups that are also members of the domains and organizational units you specified in the **Active Directory Domain(s) and/or Organizational Unit(s)** field will be synchronized. Click **OK**.

Synchronization Profile Click the [...] button to open a list of available synchronization profiles. Select **Default Exchange Profile** only if you are running Exchange 2000 on your network. Select **Default Windows Profile** if you are not running Exchange 2000.

You can also create your own custom synchronization profiles (described in the next section). If you have created a custom profile, it will be displayed in the profiles list.

Delete Users This setting determines what happens to a RightFax user account when the synchronized user account is deleted from Active Directory.

- **Never.** The RightFax user account and all faxes in the user's RightFax mailbox will be retained.
- **Only When Empty.** The RightFax user account will be deleted only if there are no faxes in the user's RightFax mailbox.
- **Always.** The RightFax user account will be deleted regardless of whether or not there are faxes in the user's RightFax mailbox. Any faxes that are in the user's mailbox will be permanently deleted from the server.



Important *If the WorkServer is stopped and restarted, the Active Directory synchronization history, which records which user accounts have already been synchronized, will be lost. If this happens, these automatic deletion functions will fail because the user accounts will no longer be recognized as synchronized.*

Configure Profiles Click this button to open a Microsoft Management Console (MMC) snap-in for RightFax user synchronization that allows you to create custom synchronization profiles. For more information on creating custom profiles, see [“Customizing the Synchronization Profile”](#) on [page 81](#).

Customizing the Synchronization Profile

A synchronization profile is an Active Directory Configuration object that contains a list of Active Directory user attributes and the RightFax user attributes to which they will be mapped. In addition to direct Active Directory-to-RightFax attribute mappings, both the synchronization profile and the individual attribute mappings it contains let you include your own custom VBScript code to be executed before, during, or after synchronization. This lets you create a customized profile that allows complete automation of your RightFax user database.

RightFax publishes two default synchronization profiles to Active Directory: the Default Windows Profile and the Default Exchange Profile. These profiles are identical except the Default Exchange Profile includes one additional attribute mapping that is specific to Exchange 2000. The following table lists the attribute mappings included with these default profiles.

Table 6c Default Synchronization Profile Attribute Mappings

| Windows attribute | RightFax attribute | Description |
|---------------------------|------------------------|---|
| company | rfaxDefaultTo Company | The To Company name that will be used on the user's fax cover sheets by default. |
| facsimileTelephone Number | rfaxDIDNumber | The last four digits of the user's personal fax number used to route incoming faxes. |
| facsimileTelephone Number | rfaxPersonal FaxNumber | The return fax number that will be used on the user's fax cover sheets by default. |

Table 6c Default Synchronization Profile Attribute Mappings (Continued)

| Windows attribute | RightFax attribute | Description |
|----------------------|----------------------------|---|
| legacyExchangeDN | rfaxRouteInfo | The user's Exchange distinguished name, used for routing received faxes into the user's Exchange inbox (Default Exchange Profile only). By default, all new users will have the routing file format set to TIFF-G3. To override this, remove the line objUser.RouteFormat=2 from the Custom Code tab. The routing file format for new users will be that defined for the RightFax Default user ID (described on page 100). |
| msExchVoiceMailboxID | rfaxVoiceMailSubscriberID | The user's voice mailbox ID, used for routing faxes to a telephony server. |
| objectSid | rfaxAssociatedNTAccountSID | The user's Windows Secure ID (SID) used for automatic NT authentication. This attribute mapping also includes custom VBScript code that sets the user's Use NT Authentication attribute to true. |

The synchronization profile to use is specified in the **WorkServer Configuration** dialog box (see [“Synchronization Profile”](#) on [page 80](#)). You can use one of the default profiles installed by RightFax, or you can create your own custom synchronization profile.

Creating a custom synchronization profile

You can create a new empty synchronization profile, or you can base your custom profile on one of the defaults installed by RightFax. Because you cannot edit or delete the default profiles, you must create a new profile. However, the new profile can be designed to inherit the attributes from one of the default profiles.

To create a custom synchronization profile, complete the following steps:

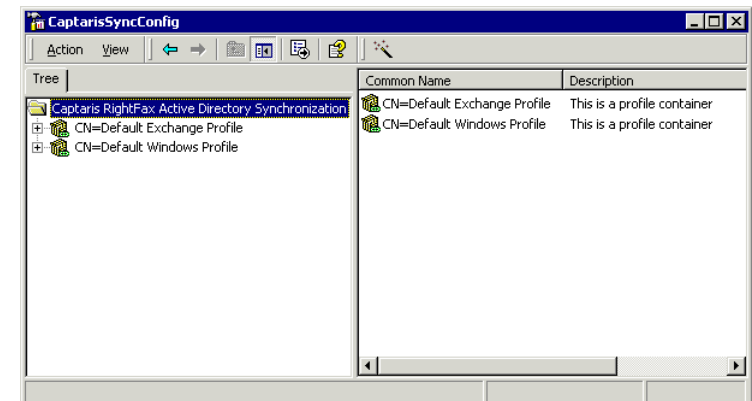
1. Create a new custom synchronization profile ([page 82](#)).
2. Add attribute mappings to the synchronization profile ([page 85](#)).

The rest of this section describes these procedures.

To create a new custom synchronization profile

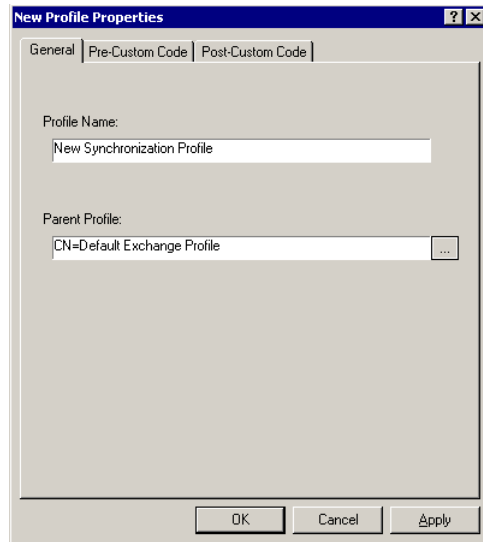
1. Open the **WorkServer Configuration** dialog box, select **Active Directory Synch** in the tree in the left pane of the window, and then click the **Configure Profiles** button. The **CaptarisSynchConfig** window opens.

Figure 6.1 The CaptarisSynchConfig Window



2. Right-click **Captaris RightFax Active Directory Synchronization** at the top of the tree in the left pane of the window, and then select **New > Profile** from the shortcut menu. The **New Profile Properties** dialog box opens.

Figure 6.2 The New Profile Properties Dialog Box General Tab



3. In the **Profile Name** box, type a name for the new profile.

Note Once you add a new profile, the profile name cannot be changed.

4. If you want the new profile to inherit the attribute mappings from an existing profile, click the [...] button next to the **Parent Profile** box and select the profile whose attribute mappings you want to inherit. Otherwise, leave this box empty. If you want to inherit the attribute mappings from one of the RightFax default profiles, select **Default Exchange Profile** as the parent profile only if you are running Exchange 2000 on your network.

Note The new profile will inherit all of the attribute mappings from the parent profile but will not inherit any pre-custom or post-custom VBScript code. If you want your new profile to include custom VBScript code, you must enter the code separately regardless of the parent profile's custom code.

5. To add custom VBScript code to be executed *before* all of the profile's attribute mappings are executed, click the **Pre-Custom Code** tab. To add custom VBScript code to be executed *after* all of the profile's attribute mappings are executed, click the **Post-Custom Code** tab.

Pre-custom code is always executed before the profile's individual attributes are synchronized, but the changes it makes can be overridden during the attribute synchronization process. Post-custom code is always applied (it cannot be overridden during the attribute synchronization process), but it may not necessarily be executed (for example, if the synchronization process is cancelled for an individual user or for all remaining users during synchronization.) You can add both pre-custom code and post-custom code.

Type the custom VBScript code in the box provided.

Example The custom VBScript code in this example sets the permission to change fax cover sheets to true for all users in the “Sales” group:

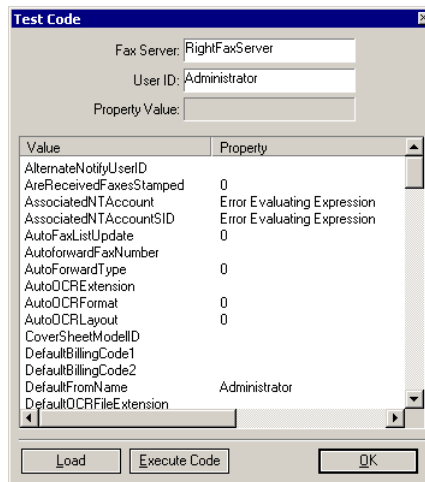
```
If (objUser.MemberOfGroupID = "Sales") Then
objUser.IsAbleToChangeCoversheets = 1
End If
```

If this code is entered in the **Pre-Custom Code** tab, all users in the “Sales” group will have the permission to change cover sheets set to true before attribute synchronization begins. However, this permission can be changed during synchronization.

If this code is entered in the **Post-Custom Code** tab, all users in the “Sales” group will have the permission to change cover sheets set to true after attribute synchronization, but only if synchronization is not cancelled.

- To test your custom code, click **Test Code**. The **Test Code** dialog box opens.

Figure 6.3 The Test Code Dialog Box



- In the **Fax Server** box, enter the name of a fax server on your network.
- In the **User ID** box, enter the name of a user on the fax server you specified.
- Click **Load**. If there are errors in your VBScript code, debugging information will appear. Otherwise, you will see a list of all of the user attributes for the user ID you specified, including the current settings.



Note If an attribute value reports “Error Evaluating Expression,” the attribute is set to a binary value that cannot be displayed.

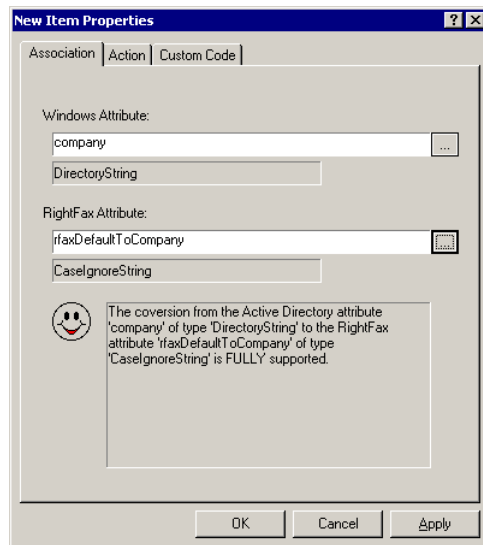
- Click **Execute Code** to update the list of attributes to reflect your custom code. This function is for testing purposes only and does not actually change user settings on the fax server. Click **OK** when you are done testing the code.
- When you have completed all of the tabs in the **New Profile Properties** dialog box, click **OK** to save the new profile. You can now add, edit, and delete attribute mappings to create your customized synchronization profile.

Once you have created a custom profile, be sure to specify the new profile name in the **WorkServer Configuration** dialog box (see “[Synchronization Profile](#)” on [page 80](#)).

To add attribute mappings to the synchronization profile

1. In the CaptarisSynchConfig window, right-click your custom synchronization profile in the tree in the left side of the window, and then select **New > Item** from the shortcut menu. The **New Item Properties** dialog box opens.
2. Complete the **Association** tab.

Figure 6.4 The New Item Properties Dialog Box Association Tab



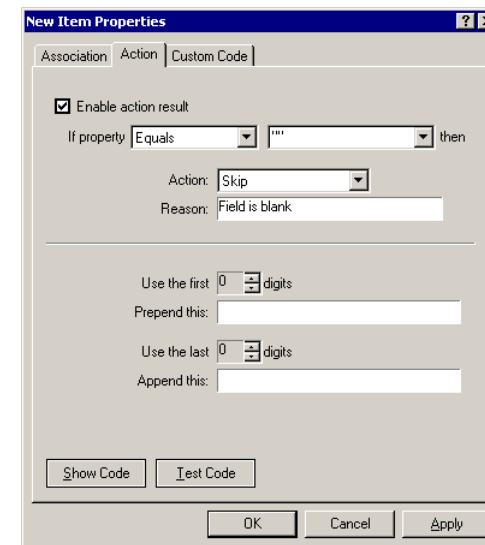
Windows Attribute. The Windows user attribute to map. Click the [...] button to open a list of Windows user attributes, and double-click the attribute you want.

RightFax Attribute. The corresponding RightFax user attribute to map. Click the [...] button to open a list of RightFax user attributes, and double-click the attribute you want.

After you select an attribute in each of these boxes, the attribute data types (string, Boolean, etc.) will be compared. The dialog box will display a report about the compatibility of the two attributes. In order to synchronize correctly, the two attributes must have compatible data types.

3. Complete the **Action** tab. This tab includes several options that let you evaluate attributes, perform actions based on their values, and modify their values for synchronization.

Figure 6.5 The New Item Properties Dialog Box Action Tab



Enable Action Result. Select this check box to enable actions based on an if/then condition.

If/Then Conditional. In the first box, select the if/then condition. In the second box, enter or select the attribute data to be evaluated.

Note *String data must be enclosed in quotes.*



Action. Select the action to take when the if/then condition is true.

- **Skip.** Skips synchronization of the property, but continues with the synchronization of the user.
- **Abort.** The user will not be synchronized at all. Synchronization will continue with the next user.
- **Delete.** Skip synchronization for this user. If the user already exists in RightFax, delete the user.

Reason. Each time an action is applied, RightFax makes an entry in the Windows Event Log. The text you enter in this box is the text that will be entered in the Event Log.

Use the first *n* digits. Use only the first *n* characters in the attribute data.

Prepend this. Enter text that will be added to the beginning of the data.

Use the last *n* digits. Use only the last *n* characters in the attribute data.

Append this. Enter text that will be added to the end of the data.

Show Code. When you complete the options in this dialog box, the required VBScript is generated. Click this button to view the VBScript for the options you have specified.

Test Code. Click this button to test your action result code. The **Test Code** dialog box opens.

Figure 6.6 The Test Code Dialog Box

| Value | Property |
|-------------------------|-----------------------------|
| AlternateNotifyUserID | |
| AreReceivedFaxesStamped | 0 |
| AssociatedNTAccount | Error Evaluating Expression |
| AssociatedNTAccountSID | Error Evaluating Expression |
| AutoFaxListUpdate | 0 |
| AutoForwardFaxNumber | |
| AutoForwardType | 0 |
| AutoOCRExtension | |
| AutoOCRFormat | 0 |
| AutoOCRLayout | 0 |
| CoverSheetModellD | |
| DefaultBillingCode1 | |
| DefaultBillingCode2 | |
| DefaultFromName | Administrator |
| DefaultOCRFileExtension | |

In the **Fax Server** box, enter the name of a fax server on your network. In the **User ID** box, enter the name of a user on the fax server you specified. In the **Property Value** box, enter the data to test. Click **Load**. This opens a list of all of the user attributes for the user ID you specified, including the current settings.

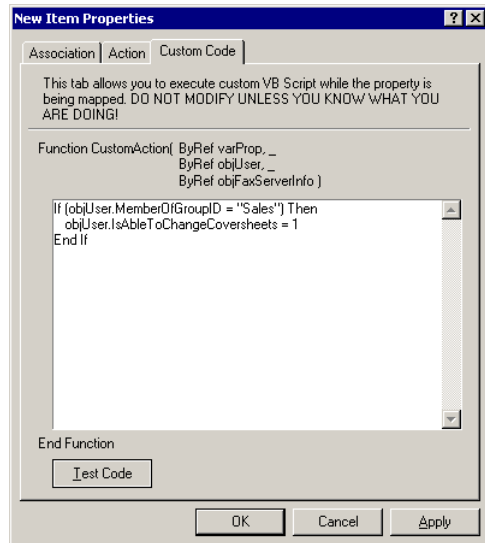
Note If an attribute value reports "Error Evaluating Expression," the attribute is set to a binary value that cannot be displayed.

Click **Execute Code** to update the list of attributes to reflect your action result code. This function is for testing purposes only and does not actually change user settings on the fax server. Click **OK** when you are done testing the code.



- Complete the **Custom Code** tab by adding custom VBScript code to be executed while the attribute is mapped.

Figure 6.7 The New Item Properties Dialog Box Custom Code Tab



Type the custom VBScript code in the box provided.

Example The custom VBScript code in this example sets the permission to change fax cover sheets to true only if the user is a member of the “Sales” group:

```
If (objUser.MemberOfGroupID = "Sales") Then
objUser.IsAbleToChangeCoversheets = 1
End If
```

To test your custom code, click **Test Code**. For a description of testing custom VBScript code, see [“Test Code. Click this button to test your action result code. The Test Code dialog box opens.”](#) on [page 86](#).

- When you have completed all of the tabs in the **New Item Properties** dialog box, click **OK** to save the new item. Repeat for each synchronization item you want in your custom profile.

Troubleshooting Active Directory Synchronization

When you run the RightFax Active Directory configuration wizard (described on [page 79](#)), three verification tests are run to confirm that your RightFax server is ready for Active Directory synchronization. If any of these tests fail, you may need to change one or more settings in RightFax to ensure that synchronization works.

If “Checking WorkServer account access rights” fails

The service account used by the WorkServer is not able to read information from Active Directory. Complete the RightFax Active Directory configuration wizard, and then, in the **WorkServer Configuration** dialog box, click **Select Service Account** and specify a service account that can read from Active Directory. Re-run the RightFax Active Directory configuration wizard to confirm that the problem is resolved.

If “Verifying distinguished name availability” fails

When RightFax users are synchronized from Active Directory, the RightFax **Distinguished Name** attribute is populated with the Windows Globally Unique ID (GUID). This message indicates that one or more RightFax users on this server have data in the **Distinguished Name** field. If you continue, this data will be overwritten during the first synchronization event.

If “Enabling Active Directory synchronization on WorkServer” fails

When the RightFax Active Directory configuration wizard updates your Active Directory Schema, it makes the changes directly to the Flexible Single Master Operation (FSMO) server. Depending on your organization’s Active Directory configuration, it may take some time for the Schema changes to be propagated to your RightFax server’s domain controller.

If you receive this message, it most likely indicates that the Schema changes have not yet been made to your local domain controller. If this is the case, you must wait until the Schema changes have had enough time to propagate across your organization, and then re-run the RightFax Active Directory configuration wizard to confirm that Schema changes are available.

■ ■ ■

Chapter 7

Managing Fax Servers with Enterprise Fax Manager

You can use the Enterprise Fax Manager application to administer multiple RightFax servers. With Enterprise Fax Manager, you can manage users, groups, signatures, forms, printers, billing codes, library documents, and more, for all RightFax servers from one application.

Enterprise Fax Manager (EFM) is a client application that can be run on any Windows 2000 or Windows XP Professional computer. It is installed as an optional component during the client installation (described in the *RightFax Installation Guide*.)



Note *Enterprise Fax Manager replaces RightFax's 16-bit administrative utility, FaxAdmin. If you are upgrading from an older version of RightFax, do not run FaxAdmin on any RightFax server version 6.0 or later.*

Enterprise Fax Manager is compatible with RightFax servers version 5.0 and later.

Starting Enterprise Fax Manager

After it has been installed, you can start Enterprise Fax Manager from the **Start > Programs** menu, or click **Enterprise Fax Manager** in the RightFax tray icon shortcut menu.

When you start Enterprise Fax Manager for the first time, it will attempt to log on under your network user ID. If you did not log on to the network as "Administrator," the **Login** dialog box opens. Enter a user ID and password with RightFax administrative access.

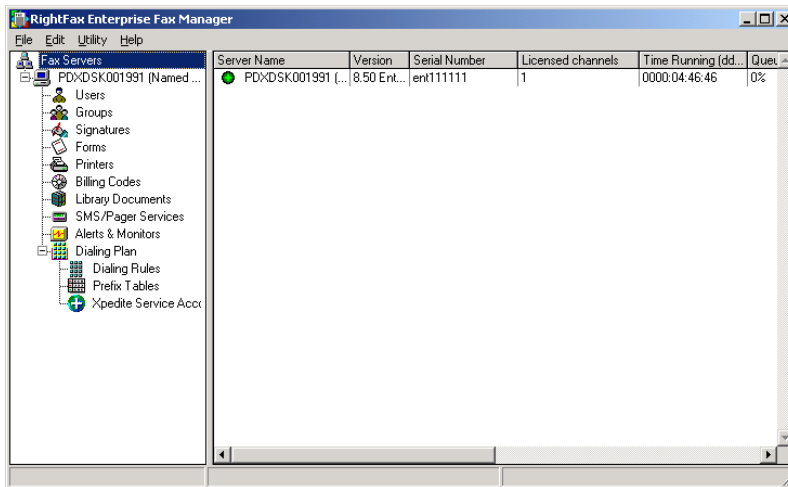
Quitting Enterprise Fax Manager

To quit Enterprise Fax Manager, on the **File** menu, click **Exit**. When you quit the program, all of your changes and additions are saved.

The Enterprise Fax Manager window

When you start Enterprise Fax Manager, the **Enterprise Fax Manager** window opens.

Figure 7.1 The Enterprise Fax Manager Window

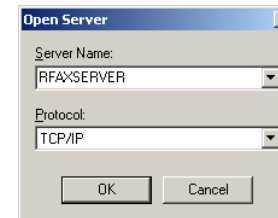


The left pane of the window, called the Fax Server Tree, contains the open RightFax servers and their administrative components (users, forms, printers, etc.). The right pane displays details of the selected component. Items listed on the right, such as individual users or library documents, are referred to as “objects.” Objects can be added, deleted, and modified according your needs. If you don't have a mouse, press F6 to switch the cursor between the left and right panes.

Opening RightFax servers

To display a fax server in the Fax Server Tree, press CTRL+O, or in the **File** menu, click **Open Server**. The **Open Server** dialog box appears.

Figure 7.2 The Open Server Dialog Box



In the **Server Name** box, type the name of the RightFax server to open. In the **Protocol** box, enter the network protocol used by that server.

After one or more RightFax servers have been opened in Enterprise Fax Manager, the servers will, by default, open each time you run the program. This default setting can be changed in **Preferences**, described later in this chapter.

To close a RightFax server, click the server name and on the **File** menu, click **Close Server**.

Refreshing data in the window

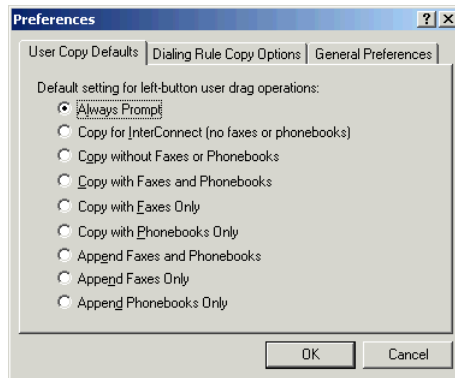
Users can create new library documents, forms, and signatures in their FaxUtil mailboxes while Enterprise Fax Manager is open. These new files will not appear in Enterprise Fax Manager until the view is refreshed. To refresh all objects, including objects added or modified since the last check, press F5 or on the **Edit** menu, click **Refresh**.

Setting Preferences

Enterprise Fax Manager has several customizable preferences. To view your preferences, on the **Edit** menu, click **Preferences**. The **Preferences** dialog box opens. The rest of this section describes the options in this dialog box.

The User Copy Defaults tab

Figure 7.3 User Copy Defaults



You can copy one or more users from one RightFax server to another by dragging and dropping selected users to another server in the Fax Server Tree. The options on the **User Copy Defaults** tab set the behavior of Enterprise Fax Manager when copying RightFax users from one server to another.

Always Prompt Display this list of options each time users are copied from one server to another. You must select a copy option before the users will be copied.

Copy for InterConnect (no faxes or phonebooks) Copies all user information, excluding faxes and phonebook entries, and then sets the user's **Routing Type** to InterConnect, pointing back to the server that the user was copied from.

Copy without Faxes or Phonebooks Copies all user information *excluding* faxes and phonebook entries.

Copy with Faxes and Phonebooks Copies all user information *including* faxes and phonebook entries. Duplicate users will receive all faxes in the source account, even if the same faxes already exist on the destination server, creating multiple copies of the same fax.

Copy with Faxes Only Copies all user information including faxes but not phonebook entries. Duplicate users will receive all faxes in the source account, even if the same faxes already exist on the destination server, creating multiple copies of the same fax.

Copy with Phonebooks Only Copies all user information including phonebook entries but not faxes.

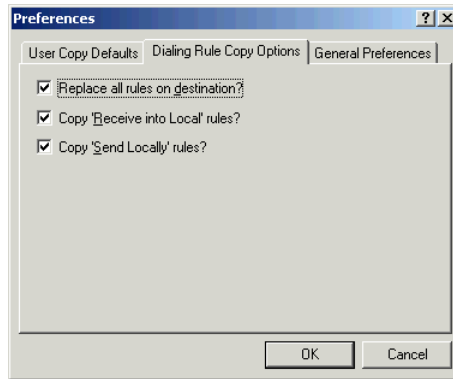
Append Faxes and Phonebooks Copies only information for duplicate user accounts. All faxes and phonebook entries from the source user account will be added to the destination user account. No other user information will be changed. Users on the destination server will receive all faxes in the source account, even if the same faxes already exist on the destination server, creating multiple copies of the same fax.

Append Faxes Only Copies only information for duplicate user accounts. All faxes from the source user account will be added to the destination user account. No other user information will be changed. Users on the destination server will receive all faxes in the source account, even if the same faxes already exist on the destination server, creating multiple copies of the same fax.

Append Phonebooks Only Copies only information for duplicate user accounts. All phonebook entries from the source user account will be added to the destination user account. No other user information will be changed.

The Dialing Rule Copy Options tab

Figure 7.4 Dialing Rule Copy Options



You can copy one or more dialing rules from one RightFax server to another by dragging and dropping rules to another server in the list. The options on the Dialing Rule Copy Options tab set the behavior of Enterprise Fax Manager when copying RightFax dialing rules from one server to another.

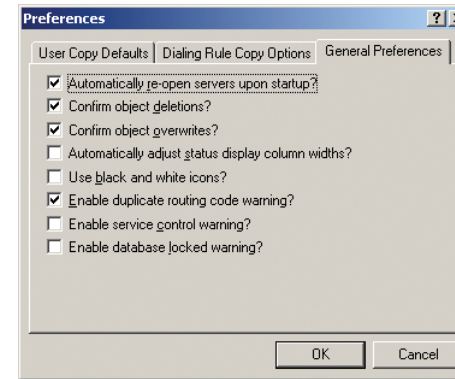
Replace all rules on destination Copies all dialing rules from the source server to the destination server, deleting any existing dialing rules.

Copy 'Receive into Local' rules Includes all dialing rules with the "Receive into local server" action when copying. If this check box is not selected, "Receive into local" rules will be ignored during the copy.

Copy 'Send Locally' rules Includes all dialing rules with the "Send locally" action when copying. If this check box is not selected, "Send locally" rules will be ignored during the copy.

The General Preferences tab

Figure 7.5 General Preferences



The options on the General Preferences tab set some general preferences for views and actions in Enterprise Fax Manager.

Automatically re-open servers upon startup Recalls which servers were open when the program was last quit and opens those servers again on startup. If this check box is not selected, you must reopen each RightFax server upon starting Enterprise Fax Manager.

Confirm object deletions Displays a confirmation dialog box each time you delete an object, such as a user or library document. If this check box is not selected, there will not be any confirmation prior to deleting objects. This is convenient if you are deleting many objects but makes it more likely that you will accidentally delete an object that you want to keep.

Confirm object overwrites Displays a confirmation dialog box each time you overwrite an object, such as by copying an object with the same name into the system. If this check box is not selected, there will not be any confirmation prior to overwriting objects.

Automatically adjust status display column width

Adjusts the widths of the columns in the Server Status and Services pane (see “Monitoring the Status of RightFax Servers and Services” on page 95) to fit the column’s contents. This option will not affect the column widths in any other Enterprise Fax Manager view. When this check box is selected, you can still manually adjust the column widths in the Server Status and Services pane, but they will resize each time the screen image is refreshed.

Use black and white icons Select this option if your monitor is set to high contrast black and white. This changes the Enterprise Fax Manager server status icons to colors that are can be read in this color mode.

Enable duplicate routing code warning Displays a warning message when a user is created that has a routing code that is the same as another existing user.

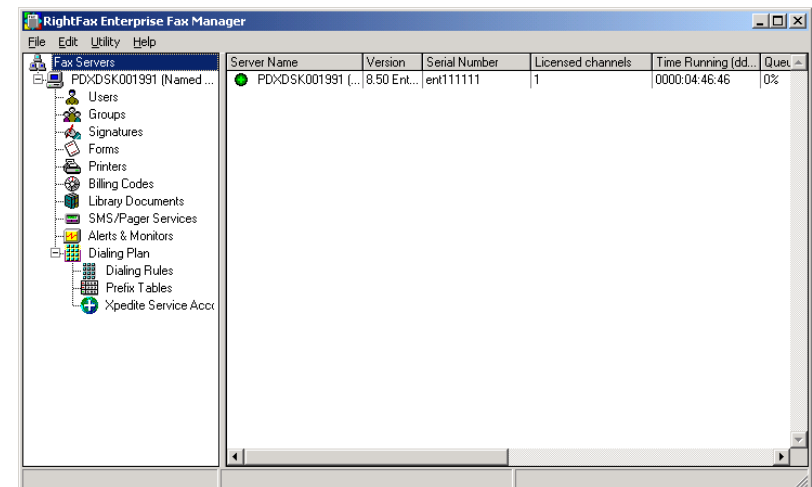
Enable service control warning Displays a warning message when you make any changes to the state of any of the RightFax services.

Enable database locked warning Displays a warning message when you attempt to access the database when it has been locked by certain database management tools.

Viewing RightFax Server Information

To view the status of all open RightFax servers, click **Fax Servers** at the top of the Fax Server Tree. A list of all open servers and the status of each server appears in the right pane of the window. This section describes each column in the right pane.

Figure 7.6 The Fax Server Tree



Server name

The Server Name column displays the name of each open RightFax server and network protocol. An icon to the left of the name indicates the status of the RightFax service. A green '+' indicates that all services are running normally. A yellow '!' indicates that one or more services are not running but that normal fax operations are available. A red '-' indicates that one or more services are not running and normal fax operations are not available.

Version

The Version column displays the RightFax server software version.

Serial number

The Serial Number column displays the serial number that was entered when the RightFax server was installed. You must provide this number when you contact Captaris RightFax customer support.

Time running

The Time Running column displays the length of time that has elapsed since the RightFax Server service was last started. Display is in the format DDDD:HH:MM:SS.

Queue usage

The Queue Usage column displays the percentage of the fax server's internal Event Queue that is currently in use. For more information on the RightFax Event Queue, see ["Understanding the Fax Server Internal Event Queue"](#) on [page 30](#).

Fax board availability index

The Fax Board Availability Index column displays a number that indicates the relative availability of the server's fax boards. The higher the number, the more available the server for sending faxes. RightFax uses this value when an outgoing fax number has two equally weighted dialing rules that send it to two different servers. In such a case, RightFax sends the fax via the server with the highest availability index.

Character set mode

This column displays the OEM or ANSI code page being used by the server. The code page determines the language character sets that are supported for fax conversion.

Working with Objects

Sorting objects

To sort the objects listed in Enterprise Fax Manager by column, double-click the column heading. The objects will sort in ascending order and an indicator will appear in the column heading. You can also click a column heading to alternately sort in ascending and descending order. Enterprise Fax Manager recalls how objects are sorted when you quit and restart the program.

Sorting columns

To move a column left or right, click the column heading and drag it left or right to its new position.

Selecting objects

To edit, delete, or otherwise work with an existing object, you must first select it in the list of objects displayed. Selected objects are highlighted.

To select an object, click it or use the UP ARROW and DOWN ARROW keys to move to the object and press the SPACEBAR to highlight it. To un-select an object, click it or press the SPACEBAR again. To select multiple objects, drag the mouse pointer down the objects while holding the left mouse button. If the desired objects are not all in a continuous group, click each object while holding down CTRL.

Before adding objects

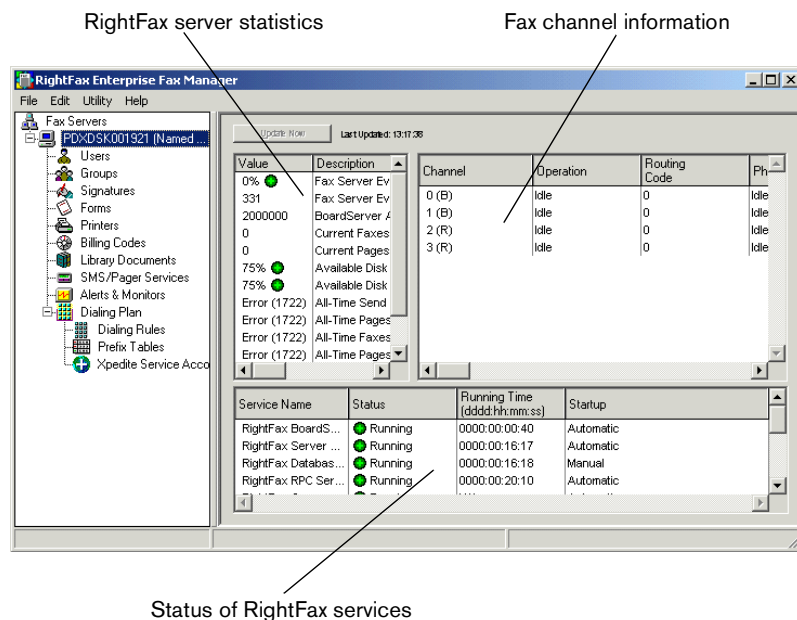
Before you begin adding objects to the RightFax system, it is important that you plan the structure and anticipate the needs of your network users. Consider whether you will divide your organization into groups, whether you would like each group or department to have its own cover sheet, and who will act as administrator or alternate administrator for the group. Determine a block of routing codes sufficient for the entire system and decide

upon any custom notification types desired. You should create new objects in RightFax only after you have carefully considered these issues.

Monitoring the Status of RightFax Servers and Services

Enterprise Fax Manager displays statistics and fax channel information and manages services on each RightFax server. To view and manage the status and services of each RightFax server, click the name of the server in the Fax Server Tree in the left pane.

Figure 7.7 Server Status and Statistics



Click **Update Now** to recompile and update the server statistics.

Understanding the server statistics

Statistics about the server are displayed in the upper-left corner in the right pane of the window.

Fax Server Event Queue Usage The percentage of the fax server's internal Event Queue currently in use. For more information on the RightFax Event Queue see [“Understanding the Fax Server Internal Event Queue”](#) on [page 30](#).

Fax Server Events Processed The total number of events processed by the fax server since the Server module was started.

BoardServer Availability Index The relative availability of the fax boards on the server. The higher the number, the more available the server for sending faxes. RightFax uses this value when an outgoing fax number has two equally weighted dialing rules that send it to two different servers. In such a case, RightFax sends the fax via the server with the highest Availability Index.

Current Faxes Queued for Sending The current number of outgoing faxes waiting to be sent.

Current Pages Queued for Sending The current number of outgoing fax pages waiting to be sent.

Available Disk Space for Fax Images The percentage of disk space on your RightFax server available for storing fax images.

Available Disk Space for Fax Database The percentage of disk space on your RightFax server available for storing fax database information.

All-Time Send Attempts The total number of faxes sent from this server since the **All-Time Counter Starting Date** (described later).

All-Time Pages Sent The total number of fax pages sent from this server since the **All-Time Counter Starting Date** (described later).



Note If you are running remote BoardServers, they can be displayed in Enterprise Fax Manager but will not include fax server data.

All-Time Faxes Received The total number of faxes received on this server since the **All-Time Counter Starting Date** (described later).

All-Time Pages Received The total number of fax pages received on this server since the **All-Time Counter Starting Date** (described later).

All-Time Counter Starting Date The starting date from which the “All-Time” statistics (described earlier) are calculated.



Tip All of the All-Time statistics will report an error message if you are running fax boards in simulation mode.

Monitoring fax channel information

Information about the fax channels on the server is displayed in the upper-right corner in the right pane of the window

Channel Each fax channel that is available on this RightFax server.

Operation The current operational status of each channel.

Routing Code The inbound routing code of this fax channel for incoming faxes.

User ID The destination user ID of this fax channel for incoming faxes.

Monitoring services

The lower-right pane of the window lists each RightFax service, its status (running or stopped), the length of time it has been running, and its startup method (manual or automatic). To monitor services on remote servers, you must have network administrative access to the server as well as RightFax administrative access.

Starting and stopping services

To start or stop a service, right-click the service to open a shortcut menu.

- Click **Start Service** to start the selected service.
- Click **Start all Services** to start all services in the appropriate sequence.
- Click **Stop Service** to stop the selected service.
- Click **Stop all Services** to stop all services.

Configuring services

To configure a service, double-click the service. Or, right-click the service to open a shortcut menu, and then click **Configure Service**.

- For information on configuring a RightFax Server, BoardServer, or WorkServer, refer to the appropriate chapter in this guide.
- For information on configuring the AutoReply service, see [Chapter 21, “Responding to Inbound Faxes with AutoReply”](#).
- For information on configuring the RightFax e-mail gateway, see [Chapter 25, “Using RightFax E-mail Gateways”](#) or refer to the *RightFax Gateway for Microsoft Exchange or RightFax Gateway for Lotus Notes Guide*.
- For information on configuring the RightFax Integration Module, refer to the *RightFax Integration Module Guide*.

Synchronizing the RightFax Server with External Systems

The RightFax WorkServer modules synchronize with external systems such as the Kofax NetScan user tables, library document catalogs, and import files for billing codes on a periodic, scheduled basis. You can force the server to synchronize immediately without changing the defined schedule.

On the **Utility** menu, click **Synchronize External Systems**.

Running Enterprise Fax Manager Web Edition

Enterprise Fax Manager Web Edition is a Web-based version of Enterprise Fax Manager that allows remote management of your RightFax servers from any Web browser. Enterprise Fax Manager Web Edition is included with all RightFax servers but must be installed separately on an IIS server on your network. For information on installing Enterprise Fax Manager Web Edition, refer to the *RightFax Installation Guide*.

To run Enterprise Fax Manager Web Edition



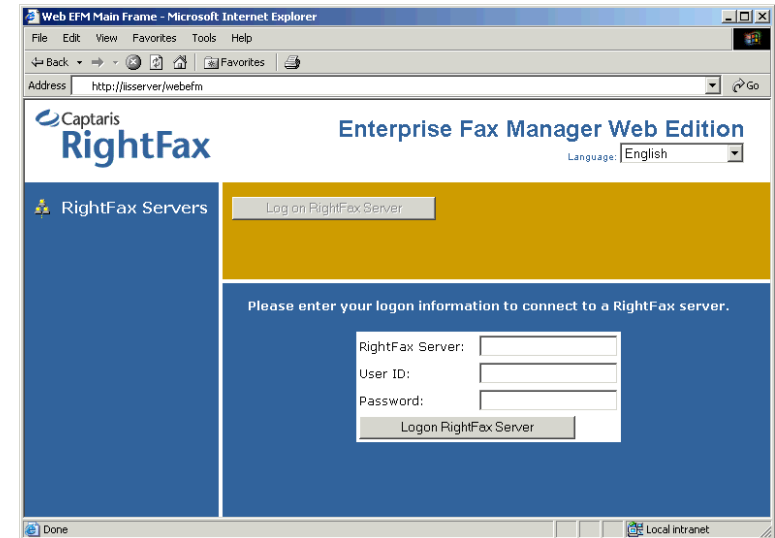
Note Enterprise Fax Manager Web Edition was developed and tested for use with Microsoft Internet Explorer version 6.0. Although it will run in other browsers, RightFax recommends using Internet Explorer version 6.0 or later for best results.

1. Open a Web browser and point the URL to the /webefm folder on the IIS server. For example:

http://server.domain.com/webefm

2. Unless your IIS server is configured to allow anonymous access, a dialog box will appear that prompts you to log on to the IIS server. Enter your logon information and click **OK**. The browser will prompt you for information to open a RightFax server.

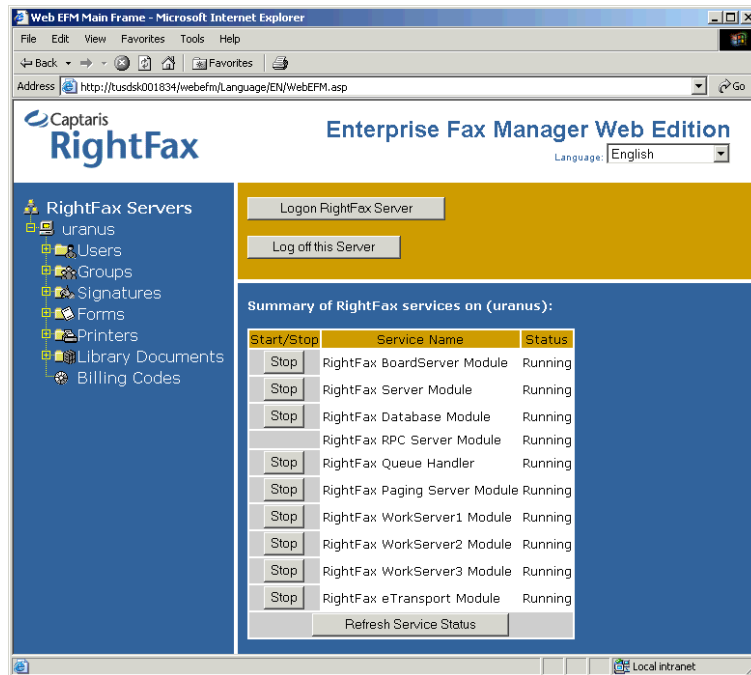
Figure 7.8 Opening a RightFax Server in Enterprise Fax Manager Web Edition



3. Enter the name of the RightFax server to open and a RightFax user ID and password that has administrative access to the RightFax server. Click **Logon RightFax Server**.

- The RightFax server you specified opens in the frame in the left side of the page.

Figure 7.9 Server Options in Enterprise Fax Manager Web Edition



Managing RightFax servers in Enterprise Fax Manager is similar to managing RightFax servers in Enterprise Fax Manager for Windows.

Throughout this guide, references to Enterprise Fax Manager will describe the Windows version of Enterprise Fax Manager and not the Web edition. However, in almost all cases, the instructions will apply to both versions.

Enabling Automatic Windows Authentication on IIS 6.0

Automatic Windows authentication is not enabled by default in Enterprise Fax Manager Web Edition installed on computers running Microsoft IIS 6.0. To enable Windows authentication, make the following changes on the Microsoft IIS server where Enterprise Fax Manager Web Edition is installed:

- Open the Authentication Methods configuration for WebEFM on the IIS server. Disable the **Anonymous access** option and enable the **Windows Integrated authentication** option.
- Open the file Web.config located in the WebEFM folder on the IIS server with any text editor. This is an XML file and must be changed using XML conventions. Locate the two authorization nodes in this file indicated with the tag <authorization>. The first authorization node is active and the second is commented out. Comment out the first authorization node and remove the comment tags from the second node. Save and exit Web.config.

Selecting a language

Enterprise Fax Manager Web Edition is available in the following languages:

- English
- French
- French-Canadian
- German
- Italian
- Portuguese
- Spanish

To change the language, select the language you want in the **Language** menu in the upper-right corner of the page.

■ ■ ■

Chapter 8

Creating RightFax Users

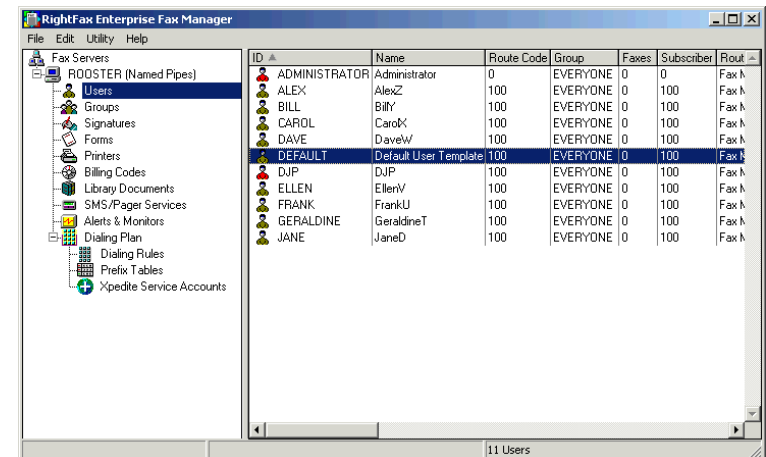
Each fax user must be assigned a user ID on their local RightFax server. The RightFax server uses the user ID to assign ownership to sent faxes and route received faxes to their intended recipients. You can customize each user's access to and usage of the system in the user profile.

Managing RightFax Users

Every RightFax user in your organization has a unique user ID and profile on a RightFax server. To add, edit, or delete RightFax user profiles, run Enterprise Fax Manager (see [“Starting Enterprise Fax Manager”](#) on [page 89](#)) and click **Users** under the RightFax server in the Fax Server Tree. The list of users appears in the right pane of the window.

Manager” on [page 89](#)) and click **Users** under the RightFax server in the Fax Server Tree. The list of users appears in the right pane of the window.

Figure 8.1 The RightFax Users List



The screenshot shows the RightFax Enterprise Fax Manager interface. On the left is a tree view with 'Users' selected under 'ROOSTER (Named Pipes)'. The main pane displays a table of users with the following columns: ID, Name, Route Code, Group, Faxes, Subscriber, and Route. The data is as follows:

| ID | Name | Route Code | Group | Faxes | Subscriber | Route |
|---------------|-----------------------|------------|----------|-------|------------|-------|
| ADMINISTRATOR | Administrator | 0 | EVERYONE | 0 | 0 | Fax h |
| ALEX | AlexZ | 100 | EVERYONE | 0 | 100 | Fax h |
| BILL | Billy | 100 | EVERYONE | 0 | 100 | Fax h |
| CAROL | CarolK | 100 | EVERYONE | 0 | 100 | Fax h |
| DAVE | DaveW | 100 | EVERYONE | 0 | 100 | Fax h |
| DEFAULT | Default User Template | 100 | EVERYONE | 0 | 100 | Fax h |
| DJP | DJP | 100 | EVERYONE | 0 | 100 | Fax h |
| ELLEN | EllenV | 100 | EVERYONE | 0 | 100 | Fax h |
| FRANK | FrankU | 100 | EVERYONE | 0 | 100 | Fax h |
| GERALDINE | GeraldineT | 100 | EVERYONE | 0 | 100 | Fax h |
| JANE | JaneD | 100 | EVERYONE | 0 | 100 | Fax h |

The status bar at the bottom indicates '11 Users'.

Each user ID is preceded by an icon.

- If the icon is red, the user has administrative access.
- If the icon is yellow, the user does not have administrative access.
- A dot indicates that the user is synchronized with another application, and editing changes should be made in that application only.

Understanding the default RightFax user

The “Default” user ID is included in the list of users on each RightFax server. The Default user ID is used as a template for creating new users. When you are configuring your RightFax users, edit the Default user to have the same attributes as the majority of your fax users. Never delete the Default user.



Note If you are using Active Directory synchronization to create new users (described in Chapter 6, “Enabling Active Directory User Synchronization”), the Active Directory synchronization profile settings will override settings in the Default user ID.

Adding a user

To add a new RightFax user, press INSERT or in the **Edit** menu, click **New**. The **User Edit** dialog box opens. To configure the user profile, see “Creating a User Profile” on page 101.

Figure 8.2 The User Edit dialog box

The new user will have the same attributes as the Default user ID, except for the **User ID**, **User Name**, **Password**, and **Distinguished Name** boxes. Because each RightFax user must have a unique user ID, you must enter a value in the **User ID** box to create the new user. All other boxes are optional. For information on completing each of the options in each tab see “Editing user properties” on page 101.

Deleting a user

To delete a user, select the user to delete and press DELETE or in the **Edit** menu, click **Delete**. By default, you will be prompted for confirmation that you want to delete the user.

Copying a user from one server to another

Using Enterprise Fax Manager you can copy one or more users from one RightFax server to another. Select the users you want to copy, and then drag the selection to another server. The amount of information copied is configured in the Enterprise Fax Manager **Preferences** dialog box (see [“Setting Preferences”](#) on page 91).

If you copy users from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (for example, features on version 8.7 servers will not be available on version 8.5 servers).

Editing user properties

To edit the properties of an existing user, run Enterprise Fax Manager, select the user to edit, and press ENTER or in the **Edit** menu, click **Edit**. You can also double-click the user. The **User Edit** dialog box opens.

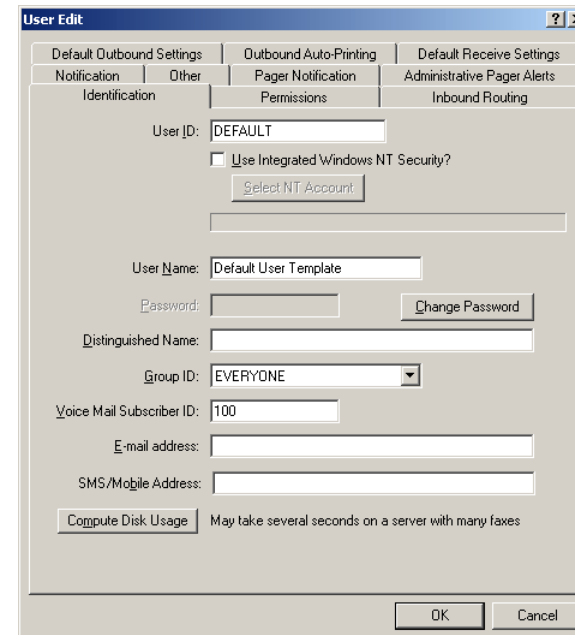
To make global editing changes to selected groups of users, you use the Moduser.exe editing utility (see [“Applying Changes to Multiple User Profiles”](#) on page 113).

Creating a User Profile

The user’s profile is defined in the **User Edit** dialog box. This section describes all the options in this dialog box.

The Identification tab

Figure 8.3 The User Edit Identification Tab



User ID The unique identifier used throughout the RightFax system to identify a user. In most cases, this ID should be the same as the user’s network login name. The ID can be 21 characters long.

Use Integrated Windows NT Security Each RightFax user ID can be linked to a Windows NT user account to take advantage of your network’s established Windows NT security system (see [“Using Windows NT Security Authentication”](#) on page 112). Click

Select NT Account to enter a domain and account name to link to the user. You can also select from a list of all user accounts in each domain.



Note *Do not enable Windows NT security authentication for RightFax users who have not upgraded to the 32-bit version of the RightFax client applications. Users with the Windows NT security authentication feature enabled will receive an error when opening any 16-bit RightFax client application.*

If you want this fax user to link to a Windows NT user account, select the **Use Integrated Windows NT Security** check box to allow the user account to be accessed *only* via Windows NT authentication. If a user's current Windows NT account is not linked to any RightFax user IDs, that user cannot manually enter the user ID and password for anyone with this check box selected when accessing client applications.

With this option, RightFax will authenticate the user based solely on his Windows NT account name and password, so the RightFax **Password** field will be disabled.

User Name This is a descriptive name to help the administrator identify users. If you will be adding user names with diacritical or other characters see ["Using International Character Sets"](#) on [page 235](#) for information about character sets and code pages on your RightFax server.

Password The password required by each user to access his personal FaxUtil mailbox and to gain access to the fax server settings in Enterprise Fax Manager. If you are creating a new user, you can enter a password.

To change a user's password, click **Change Password** and enter a new password. If you click **Change Password** and do not enter a new password, the password will be erased and the user will not be required to enter a password when accessing RightFax client applications

Distinguished Name The Microsoft Exchange distinguished name, used to confirm accurate RightFax and Exchange user synchronization.

Group ID The name of the RightFax group to which the user belongs. All users must belong to a group. For information on creating new groups, see ["Adding new groups"](#) on [page 116](#).

Voice Mail Subscriber ID Specify the mailbox number to use when routing faxes to a telephony server. This box is also used to assign TeleConnect mailbox numbers to RightFax accounts (requires the TeleConnect module, purchased separately).

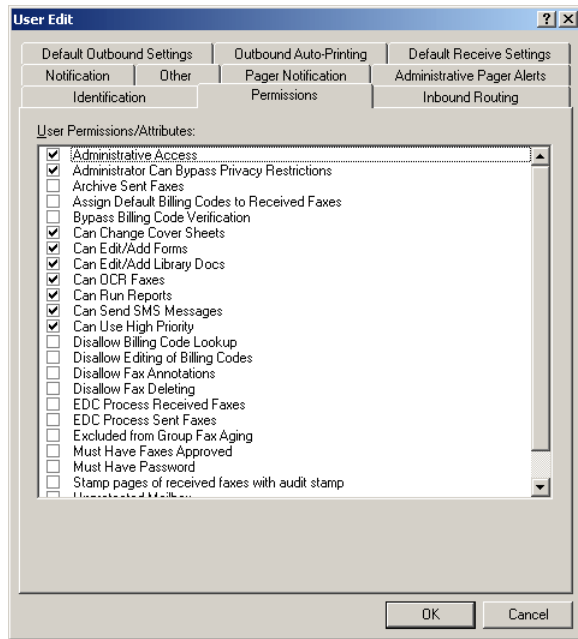
E-mail address Enter the user's e-mail address. This is required if the user will be sending documents to e-mail addresses in addition to fax addresses via the RightFax client applications.

SMS/Mobile Address Enter the user's SMS-capable cell phone number. This is the number to which SMS notifications about the user's sent and received faxes will be sent.

Compute Disk Usage Click to calculate the space on the server that is taken by this user's faxes.

The Permissions tab

Figure 8.4 The User Edit Permissions Tab



Administrative Access Gives users access to the administrative functions of RightFax. Without this permission, a user cannot open Enterprise Fax Manager or switch to another user's mailbox without the correct password. All administrators can run Enterprise Fax Manager and can switch to the mailboxes of users belonging to their administered groups. Administrators with this permission can not view any faxes other than their own without also having the **Administrator Can Bypass Privacy Restrictions** option also selected.

Administrator Can Bypass Privacy Restrictions Gives users that have the **Administrative Access** option selected the additional ability to view faxes in other users' mailboxes. Only an administrator that has this permission enabled can grant this permission to other users.

Archive Sent Faxes Archives outbound faxes according to the Archive options defined in the WorkServer configuration program (see [“Archive settings”](#) on page 34).

Assign Default Billing Codes to Received Faxes Assigns the user's default billing code settings (see [“Default Billing Codes”](#) on page 107) to all received faxes. This is most useful if you have set RightFax to require billing codes on received faxes (see [“Requiring billing codes on received faxes”](#) on page 140).

Bypass Billing Code Verification Allows the user to send faxes without supplying correct billing codes. This attribute will not exclude the user from having to supply other required fields in order to send faxes. This attribute is only effective if billing code verification is required system-wide.

Can Change Cover Sheets Lets the user change cover sheets. If this check box is not selected, the user will be restricted to using the cover sheet specified in the **Default Outbound Settings** tab (page 106).

Can Edit/Add Forms Lets the user use the **Store as Form** feature of FaxUtil to add new overlay forms to the RightFax system.

Can Edit/Add Library Docs Lets the user use the **Store in Library** feature of FaxUtil to add new library documents to the RightFax system.

Can OCR Faxes Allows the user to OCR faxes, either manually or automatically, as defined in FaxUtil. This attribute does not affect OCR routing and does not have to be enabled if OCR routing is being used. You must have licensed the RightFax OCR Conversion module for any OCR functions to be available.

Can Run Reports Lets the user create reports using the RightFax Fax Reporter utility. For more information see [Chapter 19, “Generating Reports of Fax Activity”](#).

Can Send SMS Messages Lets the user send documents to SMS addresses from within the RightFax client applications.

Can Use High Priority Lets the user send faxes using “high” priority. If disabled, the user is restricted to “normal” and “low” priorities.

Disallow Billing Code Lookup Prevents the user from viewing the list of valid billing codes. This requires the user to know at least one valid billing code.



Note You must check both *Disallow Billing Code Lookup* and *Disallow Editing of Billing Codes* to ensure that users will not be able to modify their default billing code settings.

Disallow Editing of Billing Codes Prevents the user from changing the default billing code settings for outgoing faxes. In addition, any billing codes specified in phonebook entries are ignored as are any <BILLINFO> embedded codes.

Disallow Fax Annotations Prevents the user from adding notes to faxes.

Disallow Fax Deleting Prevents the user from deleting faxes. This setting can be useful for persons doing manual fax routing. The restriction applies to the user and not the mailbox, so if the user switches mailboxes, he still cannot delete faxes.

EDC Process Received Faxes This setting is used with RightFax connectors that are purchased separately.

EDC Process Sent Faxes This setting is used with RightFax connectors that are purchased separately.

Excluded from Group Fax Aging Excludes the user from the automatic fax aging (image deletion) attributes of the group to which he belongs.

Must Have Faxes Approved Requires every fax sent by the user to be approved by a full, group, or alternate group administrator.

Must Have Password Requires the user to have a password. This does not restrict the user from changing his password.

Stamp Pages of Received Faxes with Audit Stamp Adds one line of text to the bottom of each received fax page listing total pages, date and time received, fax server used, inbound routing code used, CSID of sender, and transmission duration.

Unprotected Mailbox Allows all other RightFax users to view the fax documents in this user's mailbox. This does not affect the security of phonebook entries belonging to the user.

View First Page Only Restricts the user from viewing or printing anything but the first page of a received fax. This is useful when manual routing is employed. The restriction applies to the mailbox regardless of the permissions of the user viewing the mailbox. Faxes must be routed out of the restricted mailbox before subsequent pages can be viewed or printed.

The Inbound Routing tab

Figure 8.5 The User Edit Inbound Routing Tab

The screenshot shows the 'User Edit' dialog box with the 'Inbound Routing' tab selected. The dialog has several tabs: 'Outbound Auto-Printing', 'Default Receive Settings', 'Notification', 'Other', 'Pager Notification', 'Administrative Pager Alerts', 'Identification', 'Permissions', 'Inbound Routing', and 'Default Outbound Settings'. The 'Inbound Routing' tab contains the following fields:

- Routing Code (DID/DNIS number):** A text box containing '100'.
- Routing Type:** A dropdown menu set to 'Fax Mailbox'.
- File Format:** A dropdown menu set to 'DCX'.
- Routing Info:** A large text area with the placeholder text: 'Enter a routing info template used to create new users. ~1=Full Name; ~2=Network ID'.
- Received Fax Routing Form:** A dropdown menu set to 'System Default'.
- Delete after routing?**

At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

Routing Code (DID/DNIS Number) The routing code is a unique number that RightFax uses to route received faxes to the correct user. Enter the DTMF extension, DID phone number, or channel number you have assigned to this user. When a fax is received by the server, any routing information included is compared to each user's **Routing Code**. If a match is made, the fax is routed to the user's mailbox. For more information on routing faxes, see [Chapter 20, "Routing Inbound Faxes"](#).



Note *You must ensure that no routing code is used more than once. If you do use the same routing code more than once, only one of the persons to whom it is assigned will receive incoming faxes.*

Routing Type Specify where incoming faxes will be routed after they arrive in the user's fax mailbox. For more information on each of the routing types, see [Chapter 20, "Routing Inbound Faxes"](#).

File Format Choose the file format in which faxes will be delivered when routed.

Table 8a File Formats for Routed Faxes

| Format | Description |
|--------|--|
| DCX | DCX combines multiple PCX pages into a single file. It solves the multiple attachment problem of PCX files but maintains the large file size (average of 135 Kb per page). |
| GIF | GIF is graphics interchange format. This format is available for routing in Microsoft Exchange. |
| PCX | PCX produces a single page per file with an average fax page size of 135 Kb. It is useful for routing received faxes to DOS and Macintosh users because DOS and Macintosh have built-in capabilities to view PCX-formatted fax pages. This format is not recommended for Windows client applications, because PCX is a large format and users have to sift through multiple attachments when viewing multiple page faxes. |

Table 8a File Formats for Routed Faxes (Continued)

| Format | Description |
|---------------------|--|
| PDF | PDF is portable document format. |
| TIFF-G3/ TIFF-G4 | TIFF-G3 is a structured file type that is best for monochromatic images like fax pages (average of 35 Kb per page). Most e-mail systems have the ability to read TIFF-G3 files, and you can associate the RightFax Fax Viewer with TIFF-G3 files to view these faxes in <i>any</i> application. TIFF-G4 is a more compressed file format. |

Routing Info Specify how to route the fax to the correct destination for the **Routing Type** specified. If you route faxes to an e-mail mailbox, you must enter the e-mail address here. For information on the required **Routing Info** for each **Routing Type** see [Chapter 20, "Routing Inbound Faxes"](#).

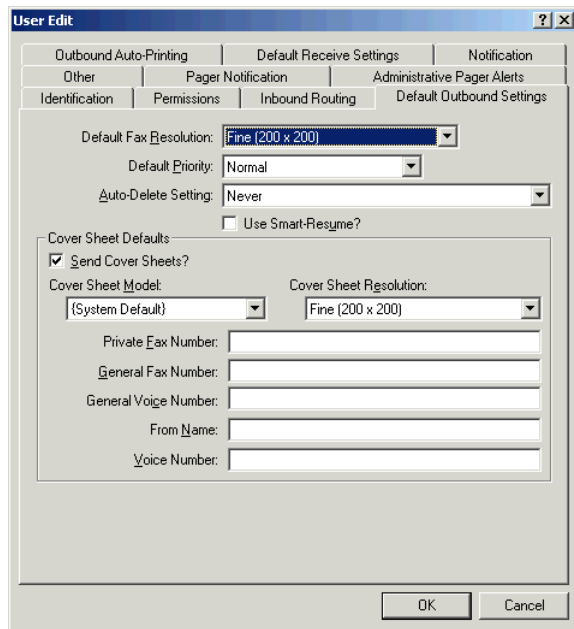
Received Fax Routing Form Specify the Outlook form you want to route incoming faxes to. Click "Default" to use the form set in the E-mail Gateway configuration program (described in the *RightFax Gateway for Microsoft Exchange Guide*). This list is only available if you have selected "Exchange Mailbox" as your **Routing Type**.

Delete After Routing Deletes received faxes from the user's FaxUtil mailbox after the fax has been successfully routed to the application specified in the **Routing Type** list.

If this check box is selected, notification of received faxes ([page 112](#)) will not work.

The Default Outbound Settings tab

Figure 8.6 The User Edit Default Outbound Settings Tab



Default Fax Resolution Specify the resolution of the users outbound faxes. Normal resolution (200×100 DPI) creates draft quality images and allows shorter transmission times. Fine resolution (200×200 DPI) is recommended for high quality printed documents and Optical Character Recognition (OCR). This setting affects the body of a fax, but not the cover sheet.

Default Priority Sets the priority at which all the user's faxes are responded to by the fax server unless specified otherwise in the **Fax Information** dialog box when the fax is created.

Auto-Delete Setting Specify when to delete sent faxes from the user's FaxUtil mailbox. Although this option saves disk space, automatically deleting sent faxes prevents the user from reviewing or forwarding sent faxes. Enabling automatic deletion does not affect the original document if it was created in another application.

If the user has the **Archive Sent Faxes** permission checked (page 103), or if they have enabled autoprinting of sent faxes in the RightFax FaxUtil client application, sent faxes will not be automatically deleted, even if this option is enabled.

Use Smart-Resume Allows the fax server to intelligently resend only the portion of a fax which failed to send. For example, if the connection is broken after 40 pages of a 50 page fax, normally all 50 pages have to be resent. By enabling Smart-Resume, the server will only resend the last 10 pages.

This option can also be set by fax users on a per-fax basis from the **Fax Information** dialog box (see "Using the Fax Information Dialog Box" on page 226).

Send Cover Sheets Allows the user to send cover sheets with faxes.

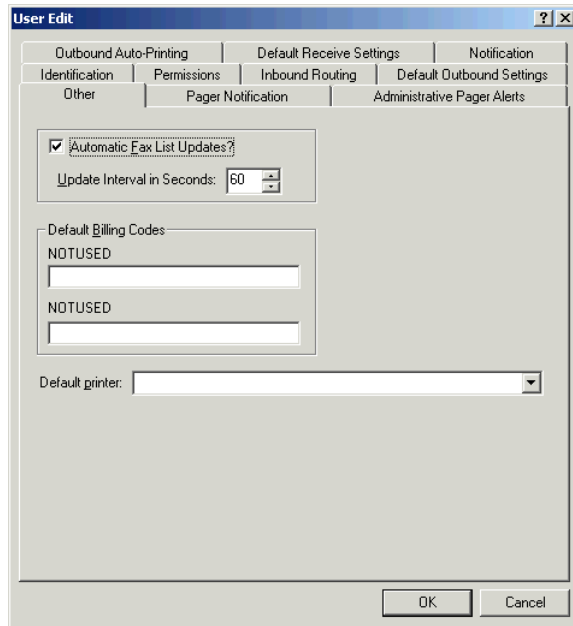
Cover Sheet Model Specify the default fax cover sheet file to use. The list displays the fax cover sheet files in the RightFax\FCS folder. Select **Default** to use the fax cover sheet specified for the user's group.

Cover Sheet Resolution Specify the resolution of the user's cover sheets. Normal resolution (200×100 DPI) creates draft quality cover sheets and allows shorter transmission times. Fine resolution (200×200 DPI) is recommended for high quality cover sheets and Optical Character Recognition (OCR). This setting affects the cover sheet only.

Sender Information Fields Specify the user's name, fax number, and phone number information as it will appear on fax cover sheets.

The Other tab

Figure 8.7 The User Edit Other Tab



Automatic Fax List Updates Configures the user's FaxUtil mailbox to automatically refresh (scan for new faxes).

Update Interval in Seconds Specify the interval at which automatic fax list updates will occur.

Default Billing Codes Specify the Billing Code #1 and Billing Code #2 settings that will appear in the **Fax Information** dialog box each time the user sends a fax.

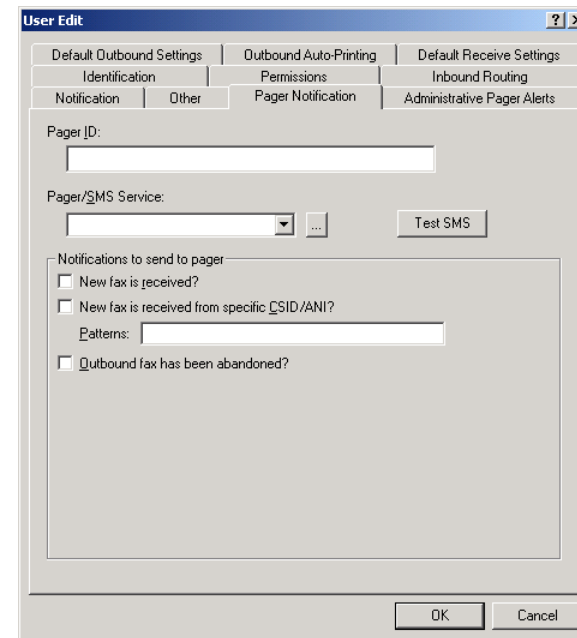
The Pager Notification tab

These settings let the fax server send SMS messages or pages to RightFax users to notify them about the status of sent and received faxes. This dialog box specifies the fax status messages to send to the user. The text of the status messages that will be sent can be

customized in the **User Messages** tab of the RightFax Server configuration program in Windows Control Panel (described on [page 25](#)).

Before completing this dialog box, you must configure a list of SMS and pager service types and providers. For information on configuring pager or SMS services, see [Chapter 15, "Adding SMS and Pager Services"](#).

Figure 8.8 The User Edit Pager Notification Tab



Pager ID Specify the user's pager ID. This is usually a numeric ID and is often the phone number for the pager.

Pager/SMS Service Select the pager or SMS service to use for delivering the notification. If you have not added and properly configured paging/SMS services for this user, you must do so before completing this dialog box (described in [Chapter 15, "Adding SMS and Pager Services"](#)).

Test SMS This button lets you send a test message to an SMS-capable device. To send a test SMS message, select an SMS service in the **Pager/SMS Service** box, type a phone number in the **Pager ID** box, and then click this button.

New Fax is Received Pages the user each time a new fax is received. If the TeleConnect module is installed, the RightFax server will include the TeleConnect ID with all notifications of incoming faxes. This lets users retrieve faxes without first requesting a fax list.

New Fax is Received from Specific CSID/ANI Pages the user each time a new fax is received from one or more specific senders that are specified in the **Patterns** box.

Patterns Lists the CSID or ANI numbers that, when received, will send a page alert to the user. Separate multiple numbers with semicolons.

Outbound Fax has been Abandoned Pages the user each time one of his outbound faxes fails to send for any reason.

The Administrative Pager Alerts tab

These settings let the fax server send SMS messages or pages to RightFax administrators to alert them of specific RightFax events. This dialog box specifies the RightFax server status messages to send to the user. The text of the alert messages that will be sent can be customized in the **Admin Messages** tab of the RightFax Server configuration program in Windows Control Panel (described on [page 26](#)).

RightFax Enterprise versions 8.7 and higher include a more comprehensive Alerting and Monitoring service that lets you select from hundreds of server statistics to monitor and define the event thresholds, alert types, and alert messages to send. For more information on the RightFax Alerting and Monitoring service, see [Chapter 16, "Using the Alerting and Monitoring Service"](#).

Before completing this dialog box, you must configure a list of SMS and pager service types and providers. For information on configuring pager or SMS services, see [Chapter 15, "Adding SMS and Pager Services"](#).

Figure 8.9 The User Edit Administrative Pager Alerts Tab

Pager ID Specify the user's pager ID. This is usually a numeric ID and is often the phone number for the pager.

Pager/SMS Service Select the pager or SMS service to use for delivering the alert message. If you have not added and properly configured paging/SMS services for this user, you must do so before completing this dialog box (described in [Chapter 15, "Adding SMS and Pager Services"](#)).

Test SMS This button lets you send a test message to an SMS-capable device. To send a test SMS message, select an SMS service in the **Pager/SMS Service** box, type a phone number in the **Pager ID** box, and then click this button.

Low Disk Space Free hard drive space on the RightFax server has fallen below 150 MB.

Critically Low Disk Space Free hard drive space on the RightFax server has fallen below 50 MB.

Send Queue too Deep The number of faxes or fax pages queued to send exceeds a fixed number. Enter the number of faxes to exceed in the **Faxes** box. Enter the number of fax pages to exceed in the **Pages** box.

Fax Server Event Queue Full The percentage of the fax server's internal Event Queue has reached 90%. For more information on the RightFax Event Queue see [“Understanding the Fax Server Internal Event Queue”](#) on page 30.

BoardServer Service Down One of the BoardServers has become unable to send or receive faxes.

All BoardServers Down All of the BoardServers have become unable to send or receive faxes.

Probable Line Failures An error or series of errors has indicated to the BoardServer that a phone line is not operating correctly.

Probable T1 Failure Multiple phone lines have failed in such a way that the BoardServer suspects a T1 line is not operating correctly.

Server improperly shut down The RightFax Server module was shut down unexpectedly. This may indicate that the operating system has failed or the server has lost power.

Periodic Server Heartbeat Sends a brief notification of the RightFax server's status, including statistics on fax activity. When you select this check box, you must also specify the **Heartbeat Interval**, in minutes.

Understanding the Alert Frequencies

After an alert is triggered, the problem causing the alert must be remedied within a set length of time before a fault of the same type will cause another alert. For example, this prevents free disk space fluctuating around 50 Mb from causing repeated alerts. If an alert condition persists, the alert will be repeated periodically. Different types of alerts have different delays and repeat intervals as listed in the following table.

Table 8b Pager Alert Frequencies

| Alert | Delay | Repeat interval |
|---|------------|-----------------|
| All BoardServers are down. | 10 minutes | 60 minutes |
| BoardServer send queue too deep. | 30 minutes | 90 minutes |
| Disk space is critically low (<50MB). | 10 minutes | 30 minutes |
| Disk space is getting low (<150MB). | 20 minutes | 60 minutes |
| Fax server internal queue has reached 90% utilization. | 30 minutes | 90 minutes |
| One or more BoardServers are down but one or others are still in service. | 10 minutes | 60 minutes |

Alerts that are not listed here are sent only once, when the alert condition occurs.

The Outbound Auto-Printing tab

Figure 8.10 The User Edit Outbound Auto-Printing Tab

Enable Automatic Printing of Sent Faxes Prints a copy of all sent faxes. If this check box is selected, you must also select a printer from the list of available printers. These are the printers that you have set up under **Printers** in Enterprise Fax Manager (see [“Adding a printer”](#) on page 130).

When to Print Specify whether to print successfully sent faxes, faxes that were not successfully sent, or both.

What to Print Specify whether to print the fax history, the fax cover sheet, and/or the fax body.

The Default Receive Settings tab

Figure 8.11 The User Edit Default Receive Settings Tab

Automatic Forwarding Options Forward the user's faxes to either a fax machine or another network user as soon as they are received. Specify the fax number or RightFax user ID to forward to.

Automatic Printing Options Automatically print received faxes. Select a printer from the list of available printers. These are the printers that you have set up under **Printers** in Enterprise Fax Manager (see [“Adding a printer”](#) on page 130). Click a print resolution in the **Resolution** list.

Automatic OCR Options Convert all received faxes to text using OCR (optical character recognition). This option requires the RightFax OCR Converter module. Enter a three-letter file extension for the output file in the **Extension** box.

In the **Format** list, click the text format used to interpret your fax pages. “ASCII” produces a plain text file. “Smart ASCII” approximates the original format. “RTF” (rich text format) preserves fonts and formatting but is only available for Windows clients.

In the **Layout** list, specify how you want the text to be formatted on the page. “WYSIWYG” (What You See Is What You Get) will try to read the fax in the layout it sees. If, for instance, RightFax sees that the fax has three columns, it will try to read the document in column style. “Left Justified” displays the text starting from the left margin of the fax.

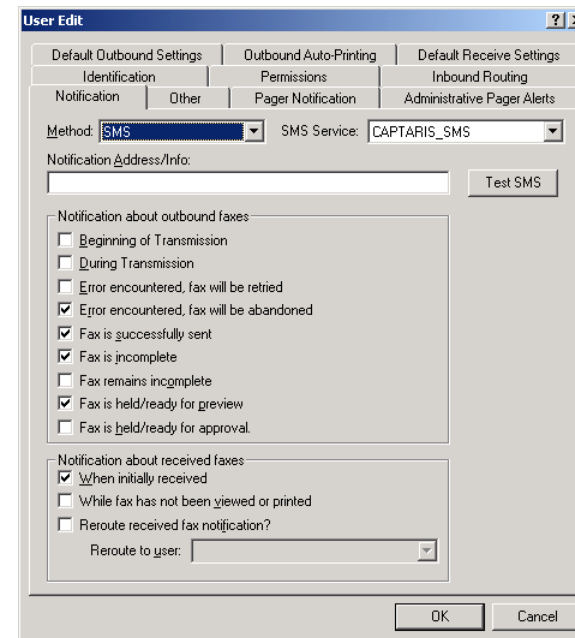
The Notification tab

These settings let you configure the fax server to notify RightFax users about the status of sent and received faxes via e-mail or SMS text messaging. The text of the status messages that will be sent can be customized in the **Custom Messages** tab of the RightFax Server configuration program in Windows Control Panel (described on [page 23](#)).

If you want to send notifications via SMS text messaging, you must configure a list of SMS service types and providers before completing this dialog box. For information on configuring SMS services, see [Chapter 15, “Adding SMS and Pager Services”](#).

If you want to use Network Broadcast notifications and are using Windows 2003, you must open the Control Panel and enable the Messenger service, which is disabled by default.

Figure 8.12 The User Edit *Notification* Tab



Method Select the notification method for the user.

- **Use Group's Method.** Uses the notification method defined for the group to which the user belongs (described on [page 116](#)).
- **SMS.** Sends the notification to an SMS capable device. If you select this option, you must select an SMS service in the **SMS Service** box.
- **E-mail Systems.** Sends the notification to the user's e-mail box. (Notes and Exchange notifications require you to purchase and license a separate module.) You must specify the e-mail address of the user in the **Notification Address/Info** box.
- **Custom notification methods.** These can be created using the RightFax API. Information on the RightFax API can be found at www.captaris.com.com/implementation_services.



Note *If you are routing inbound faxes to an e-mail gateway or other destination on your network and you have selected the Delete After Routing check box ([page 105](#)), no notifications for received faxes will be sent.*

SMS Service Select the SMS service to use for delivering the notification. If you have not added and properly configured an SMS service, you must do so before completing this dialog box (described in [Chapter 15, "Adding SMS and Pager Services"](#)).

Test SMS This button lets you send a test message to an SMS-capable device. To send a test SMS message, select an SMS service in the **SMS Service** box, type a phone number in the **Notification Address/Info** box, and then click this button.

Notification Address/Info Specify the user's e-mail address for e-mail notification, or other information necessary for sending fax notifications of the type selected in the **Notification Method** list.

Notification About Outbound Faxes Specify the events for outbound faxes for which the user will receive notification.

Notification About Received Faxes Specify the events for received faxes for which the user will receive notification. If you select the check box **Reroute Received Fax Notification**, you must also select a RightFax user ID to route to from the list.

Using Windows NT Security Authentication

RightFax Enterprise servers can take advantage of your network's established Windows NT security system by linking each RightFax user ID to a Windows NT user account. When logging on to client applications that require authentication (such as Enterprise Fax Manager and FaxUtil), RightFax attempts the Windows NT account name and password with which you are currently logged on. If the current Windows NT account name and password have been linked to a RightFax user ID, that RightFax ID is used to log on. If no RightFax user account is linked, a dialog box opens prompting you to manually enter your RightFax user name and password.

Each user's link status is displayed under the **NT Account Link Status** column in the user list in Enterprise Fax Manager. The status "N/A" means that the user is not required to log on via Windows NT authentication. "No NT Account Assigned" means that the user is required to log on via Windows NT authentication but is not linked to a Windows NT account. (This user will be allowed to log on manually.) "NT Account Assigned" means that the user is required to log on via Windows NT authentication and is linked to a Windows NT account. This RightFax ID can only be accessed when the user is logged on to Windows NT with the linked account.

Linking RightFax user IDs to Windows NT accounts

RightFax Enterprise server provides several methods for linking one or more RightFax user IDs to existing Windows NT accounts. To link users to NT accounts, you must have administrative rights in the domain where the accounts reside.

To link a RightFax user ID

1. Edit the user properties in Enterprise Fax Manager.
2. Click the **Identification** tab.
3. Select the **Use Integrated Windows NT Security** option.
4. Click **Select NT Account**.
5. Type or select the Windows NT domain and account names to link and click **OK**. The linked domain and account name will be listed under the RightFax user ID in the **Identification** tab.



Note You can only use the Windows NT account lookup feature when you are running Enterprise Fax Manager on the RightFax server or a Windows NT workstation.

To automatically link one or multiple existing RightFax User IDs

1. In the Enterprise Fax Manager user list, select one or more RightFax users.
2. Right-click any selected user to open a shortcut menu, and select **Enable NT Authentication and Link** from the pop-up menu.

RightFax links each selected user ID to the matching Windows NT account in the domain to which you are currently logged on. If there is no matching Windows NT account name in the current domain, no link is created.

To automatically link all new user IDs

Because all new RightFax user IDs created in Enterprise Fax Manager use the default user ID as a template, you can configure the default user ID so that all new user IDs automatically link to Windows NT accounts.

1. In Enterprise Fax Manager, edit the default user ID.
2. Click the **Identification** tab and select the **Use Integrated Windows NT Security** option. Click **OK**.

For each new user ID you create in Enterprise Fax Manager, RightFax will link the user ID to the matching Windows NT account in the domain you are currently logged on to. If there is no matching Windows NT account name in the current domain, no link is created.

Applying Changes to Multiple User Profiles

RightFax includes two administrative utilities, ChgUser.exe and ModUser.exe, that you can use to change user attributes for multiple users at one time.

- For information on the RightFax administrative utilities, see [“Using the RightFax Administrative Utilities”](#) on [page 272](#).
- For information on running ChgUser.exe, see [“Running ChgUser.exe”](#) on [page 273](#).
- For information on running ModUser.exe, see [“Running ModUser.exe”](#) on [page 282](#).

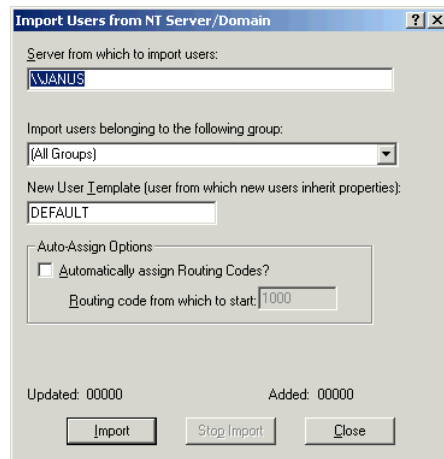
Importing Users

To simplify the process of setting up all your network users in the RightFax server, you can import users into the fax server from your network or from an ASCII file.

To import users from a Windows NT network

1. In Enterprise Fax Manager, on the **Utility** menu, click **Import Users from NT Domain**. The **Import Users from NT Server/Domain** dialog box opens.

Figure 8.13 The Import Users from NT Server/Domain Dialog Box



2. Enter the computer name of the Primary Domain Controller (PDC) or Backup Domain Controller (BDC) from which the users will be imported.
3. Select the group to import.
4. Specify the RightFax user ID to use as a template (usually Default).
5. If you want to automatically assign a routing code to each user, select the **Automatically Assign Routing Codes** check box, and then enter the starting code. The first imported user will receive the starting routing code and each additional user's routing code will increment by one. If the system increments to a routing code that already exists, it will be skipped.
6. When you have completed the dialog box, click **Import** to begin.

Importing users from a file

RightFax includes an administrative utility, ImpUser.exe, that imports users from a comma-delimited ASCII file.

- For information on the RightFax administrative utilities, see [“Using the RightFax Administrative Utilities”](#) on page 272.
- For information on running ImpUser.exe, see [“Running ImpUser.exe”](#) on page 279.

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Chapter 9

Creating Groups of Users

You can create groups of users to which you can assign a common administrator, alternate administrator, fax options, and fax cover sheet. You can use groups to subdivide your organization and manage the fax server system more efficiently. For example, you can create separate Marketing and Sales groups on the fax server. Instead of having one administrator responsible for all fax users in your organization, you can assign fax administrators to the Marketing and Sales departments.

Groups can also play an important role in when notifying users of new faxes. If a user does not respond to his notification by viewing or printing a new fax within a specified time, the group administrator will be alerted to the fax and can then print the fax or forward it to someone else.

Managing Groups

To add, edit, or delete groups of RightFax users, run Enterprise Fax Manager (see “[Starting Enterprise Fax Manager](#)” on [page 89](#)) and click **Groups** under the appropriate RightFax server in the left pane of the window. If groups have been defined, the list of groups appears in the right pane.

Figure 9.1 The Server Groups List

| ID | Members | Admin | Alt. Admin | Group Route Code | Cover Sheet File | Viewed Age | |
|------------|---------|---------------|------------|------------------|------------------|------------|--|
| ACCOUNTING | 0 | | | 0 | | 0 | |
| EVERYONE | 12 | ADMINISTRATOR | | 0 | | 0 | |
| MARKETING | 0 | | | 0 | | 0 | |
| R&D | 0 | | | 0 | | 0 | |
| SALES | 0 | | | 0 | | 0 | |

Adding new groups

To create a new group, press **INSERT** or select **New** from the **Edit** menu. The **Group Edit** dialog box opens. Because each RightFax group must have a unique group ID, you must enter a value in the group ID box. All other boxes are optional. For information on completing each of the options on each tab see [“Editing Group Properties”](#) on page 116.

Deleting groups

To delete a group, select the group to delete and press **DELETE** or select **Delete** from the **Edit** menu. By default, you will be prompted for confirmation that you want to delete the group.

Copying groups from one server to another

In Enterprise Fax Manager, you can copy one or more groups from one RightFax server to another. Select the groups you want to copy, and then drag the selection to another server.

If you copy groups from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported on the older server (for example, features on version 8.5 servers will not be available on version 8.0 servers).

Editing Group Properties

To edit the properties of an existing group, run Enterprise Fax Manager, select the group to edit and press **ENTER**, or select **Edit** from the **Edit** menu. You can also double-click the group. The **Group Edit** dialog box opens.

The Basic Information tab

Figure 9.2 The Group Edit Basic Information Tab

Group ID The unique ID for this group.

Administrator Specify the user ID of the person who will be the administrator of this group. The administrator has access to all the mailboxes in the group and receives alerts when a user has not printed or viewed a fax before the time specified in **User Notify Time** in the RightFax Server configuration program expires (see [“User Notify Time”](#) on page 21).

Alternate Administrator Specify the user ID of the person who will be the alternate administrator of this group. The alternate administrator will have access to all the mailboxes in this group and will receive messages about faxes belonging to group members if the user and the administrator have not printed or viewed a fax in the designated interval.

Cover Sheet Model Specify the default fax cover sheet for the group. The list displays the fax cover sheet files in the RightFax\FCS folder. Selecting “Default” uses the cover sheet file FCS.pcl.

Notification Type Specify the default notification method for the group.

Days to keep deleted fax records Specify the number of days to keep records of deleted faxes in the RightFax database. If set to 0 (zero), deleted fax records will never be automatically purged by the fax server.

All faxes must have cover sheets Requires all users in the group to use a cover sheet on outbound faxes.

All faxes must be held for preview All the faxes for users in the group will be held for preview before they are sent. Users must view the faxes and verify that they should be sent.

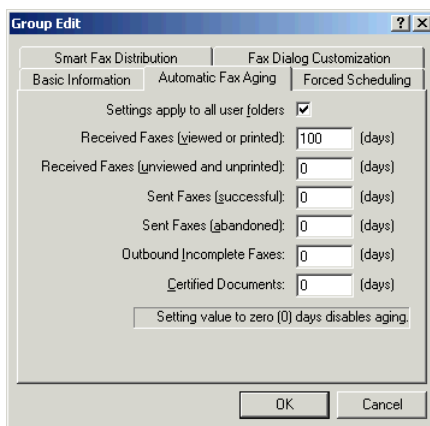
The Automatic Fax Aging tab

With automatic fax aging, you can specify the number of days after the date a fax is sent or received that it will be deleted from a user's FaxUtil mailbox. Automatic fax aging is only available if you have a RightFax Enterprise or Satellite server.

Automatic fax aging does not remove the fax records from the RightFax database, so you can still run reports about the faxes.

You can also perform manual fax aging with the Faxage.exe program (see ["Running FaxAge.exe"](#) on [page 277](#)).

Figure 9.3 The Group Edit Automatic Fax Aging Tab



For each type of fax, enter the number of days the fax will remain before it is deleted. To specify that faxes should not be deleted, enter 0 (zero).

To apply these settings to all the users' folders except Trash, select the check box **Settings apply to all user folders**. To disable fax aging, click to clear the check box.

The Forced Scheduling tab

Forced scheduling controls fax traffic volume on the basis of user groups. You can restrict the total number of pages or total number of faxes that are sent simultaneously by all users in the group and limit these restrictions to a specific time period.

For example, if you have 50 sales representatives, each sending 100 faxes every hour, all of your fax channels may be continuously busy processing their faxes. This could delay more important faxes from other departments, as well as block incoming faxes. With Forced Scheduling, you can restrict the members of the Sales group to sending no more than 20 pages at a time between the hours of 8 A.M. and 5 P.M. and delay any faxes over that limit until 6 P.M.

This feature restricts only simultaneously scheduled faxes. It does not restrict the total number of faxes or fax pages that can be sent during the specified time period. If a fax exceeds the maximum limit and is delayed until a later time, it can be rescheduled at any time by selecting **Fax > Forward to New Number** in FaxUtil.

Figure 9.4 The Group Edit Forced Scheduling Tab

The screenshot shows the 'Group Edit' dialog box with the 'Forced Scheduling' tab selected. The 'Enabled?' checkbox is checked. Below it are five input fields: 'Maximum Concurrent Pages' (100), 'Maximum Concurrent Faxes' (0), 'Starting Time (HHMM)' (0000), 'Ending Time (HHMM)' (0000), and 'Delay Until Time (HHMM)' (0000). The dialog has 'OK' and 'Cancel' buttons at the bottom.

Enabled Enables the Forced Scheduling feature.

Maximum Concurrent Pages Specify the maximum number of fax pages that can be scheduled at one time by all the users in the group.

Maximum Concurrent Faxes Specify the maximum number of faxes that can be scheduled at one time by all the users in the group.

Starting/Ending Time The starting and ending times for the period that the restriction applies. This is written in 24-hour HHMM format. For example, to set the restriction from 8:00 A.M. to 5:30 P.M., set the **Starting Time** to 0800, and set the **Ending Time** to 1730.

If during this time period any faxes exceed the limits you specify, those faxes will be delayed until the time you specify in the **Delay Until Time** box.

Delay Until Time The time at which delayed faxes will be sent. This is written in 24-hour HHMM format. For example, to send delayed faxes at 6:00 P.M., enter 1800.

If the **Delay Until Time** falls between the **Starting** and **Ending** times, automatically delayed faxes will never be sent. This is because delayed faxes, by definition, cannot be sent between your **Starting** and **Ending** times. In such a case, delayed faxes will be continuously bumped to the next day at that same time.

The Smart Fax Distribution tab

With smart fax distribution, a group routing code is created and all faxes received by the group are distributed systematically between all the users in that group.

Figure 9.5 The Group Edit Smart Fax Distribution Tab

The screenshot shows the 'Group Edit' dialog box with the 'Smart Fax Distribution' tab selected. The 'Enabled?' checkbox is checked. Below it are three fields: 'Routing Code' (1111), 'Distribution Type' (Linear), and 'Member Refusal Allowed?' (checked). The dialog has 'OK' and 'Cancel' buttons at the bottom.

Enabled Enables smart fax distribution for this group.

Routing Code Assigns a routing code to the group.

Distribution Type Specify either linear or balanced distribution. With linear distribution, faxes are distributed to each group member in succession. With balanced distribution, faxes distribution is

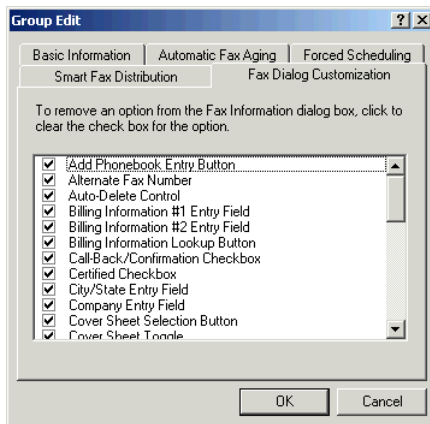
determined by each user's processing rate. If one user is faster at processing faxes than another, the faster user is distributed faxes at a faster pace.

Member Refusal Allowed Lets users take themselves temporarily out of the distribution loop. When this check box is selected, users can refuse faxes by running FaxUtil and selecting **Tools > Refuse Distributions**.

The Fax Dialog Customization Tab

This group of check boxes lets you customize the appearance of the **Fax Information** dialog box (the dialog box used to create and address outgoing faxes) for the users in this group. This is useful for removing options that do not apply to or should not be changed by these users.

Figure 9.6 The Group Edit Fax Dialog Customization Tab



The following table lists each of the checkboxes on this dialog box, and the tab and option on the **Fax Information** dialog box that each checkbox represents. For more information on the options in the **Fax Information** dialog box, see [Chapter 22, "Creating, Sending, and Deleting Faxes"](#).

Table 9a Fax Dialog Customization Checkboxes

| Checkbox | Fax Information dialog box tab | Option |
|------------------------------------|--------------------------------|--|
| Acquire Attachments from Scanner | Attachments | Scanner button (scanner icon) |
| Add Phonebook Entry Button | Main | Add Entry button |
| Alternate Body Attachment Checkbox | Attachments | Ability to display Alt. Body column in Selected Attachments list |
| Alternate Fax Number | Main | Alt. Fax Number text box |
| Auto-Delete Control | More Options | Automatic Deletion selection box |
| Billing Information #1 Entry Field | Main | Billing Code 1 text box (title may vary) |
| Billing Information #2 Entry Field | Main | Billing Code 2 text box (title may vary) |
| Billing Information Lookup Button | Main | Lookup button |
| Browse for File Attachment | Attachments | Browse button (folder icon) |
| Certified Checkbox | Main | Use certified delivery checkbox |
| City/State Entry Field | Main | City/State text box |
| Comments Text | Cover Sheet Notes | Comments for your Records text box |

Table 9a Fax Dialog Customization Checkboxes (Continued)

| Checkbox | Fax Information dialog box tab | Option |
|---|--------------------------------|--|
| Company Entry Field | Main | Company text box |
| Cover Sheet Selection Button | More Options | Cover Sheet File selection box |
| Cover Sheet Toggle | Main | Use cover sheet text box |
| Delay Send Controls | Main | Delay send checkbox and time/date fields |
| Form Type Selection | More Options | Use form checkbox and selection list |
| From Name Entry Field | More Options | Name text box |
| From Phone Number Entry Field | More Options | Voice Number text box |
| General Fax Number Entry Field | More Options | Company Fax Number text box |
| General Voice Number Entry Field | More Options | Company Voice Number text box |
| Library Document/ Attachments Selection | Attachments | Available Attachments library document list and File Attach button (paper clip icon) |
| 'More Options' Tab | More Options | All tab contents |
| Native Attach Document Checkbox | Attachments | Native column in Selected Attachments list |
| 'Notes' Button/Tab | Cover Sheet Notes | All tab contents |
| Notes Text | Cover Sheet Notes | Notes to be Placed on the Cover Sheet text box |
| PDF Options | Main | PDF Options button (next to Create PDF image checkbox) |

Table 9a Fax Dialog Customization Checkboxes (Continued)

| Checkbox | Fax Information dialog box tab | Option |
|--------------------------------------|--------------------------------|--|
| Phonebook Import Main Menu Option | Main | Phonebook button |
| Phonebook Selection Button | Main | Phonebook button |
| Preview Checkbox | Main | Hold for preview checkbox |
| Priority Checkbox | More Options | Priority selection box |
| Private Fax Number Entry Field | N/A | Phonebook Import option on the Tools menu in FaxUtil. |
| Recipient Type Field | Main | Down arrow button next to the Fax number text box that lets users select the E-mail address option |
| Secure Send/Recipient Fax ID Control | More Options | Recipient Fax ID text box |
| Smart-Resume Checkbox | Main | Use smart-resume checkbox |
| Transmission Quality Control | Main | Fine mode checkbox |
| Use PDF Checkbox | Main | Create PDF image checkbox |
| Voice Number Entry Field | Main | Voice Number text box |

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Chapter 10

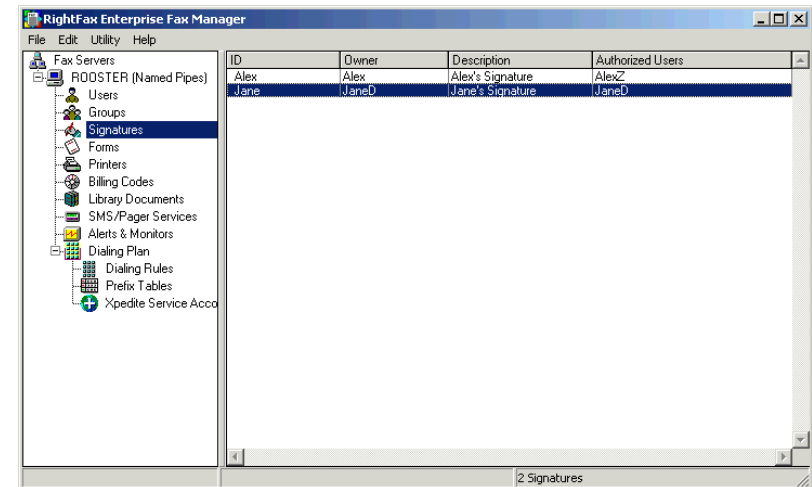
Creating Signatures

RightFax can personalize users' outbound faxes with graphic images of their signatures. Signature images are created in FaxUtil and stored in the RightFax\SIG folder on the server. Enterprise Fax Manager catalogs all the signatures and maintains the file names, descriptions, and authorized user information.

Managing Signature Files

To edit or delete signature files, run Enterprise Fax Manager (see [“Starting Enterprise Fax Manager”](#) on [page 89](#)) and click **Signatures** under the desired RightFax server in the Fax Server Tree.

Figure 10.1 The Server Signatures List



You must create a new signature file in order for it to appear as an object in Enterprise Fax Manager. New signature files are created from the FaxUtil mailbox (see [“Creating a New Signature File”](#) on page 123).

Deleting signatures

To delete a signature, select the signature to delete and press DELETE or select **Delete** from the **Edit** menu. By default, you will be prompted for confirmation that you want to delete the signature.

Deleting the signature's reference in Enterprise Fax Manager does not delete the signature file itself. A second confirmation dialog box will ask you if you want to delete the file as well.

Copying signatures from one server to another

Enterprise Fax Manager can easily copy one or more signatures from one RightFax server to another. Select the signatures you want to copy, and then drag the selection onto another server.

If you copy signature files from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (in other words, features on version 8.0 servers will not be available on version 7.0 servers).

Editing Signature File Properties

To edit the properties of an existing signature, run Enterprise Fax Manager, select the signature to edit and press ENTER or select **Edit** from the **Edit** menu. You can also double-click the signature. The **Edit Signature** dialog box opens.

Figure 10.2 The Edit Signatures Dialog Box

Signature Code The name the signature that will be displayed in Enterprise Fax Manager.

Owner's User ID The user ID of the owner of the signature file.

Description A description of the signature file for easy reference in Enterprise Fax Manager.

Image File Name The name of the signature image file. This file name is automatically generated and stored in the RightFax\SIG folder on the RightFax server when the signature file is created. If this box contains an invalid file name, RightFax will not be able to use the signature image.

Authorized Users Up to three RightFax user IDs or group IDs who are authorized to use this signature in addition to the owner of the signature.

Creating a New Signature File

Only users with RightFax administrative access can create signature files. Signature files are created from a fax in a your FaxUtil mailbox. You can scan a signature into your mailbox or fax a signed document to yourself. After the document arrives in your FaxUtil mailbox, follow these steps to create a signature file:

1. In FaxUtil, double-click the fax to view it using the RightFax Fax Viewer.
2. Using the **Select** tool in the Fax Viewer toolbar, click the signature.

Figure 10.3 The Select tool



3. Select **Store** from the **Fax** menu, and then select **Make Signature**. The **Edit Signature** dialog box opens.

Enter an ID for the signature in the **Signature Code** box. This must be unique, as it will be the identifying code Enterprise Fax Manager displays in the ID column when viewing the list of signatures. Enter the owner's user ID and a description of the signature. In the **Authorized Users** boxes, list up to three RightFax user IDs or group IDs who are authorized to use this signature in addition to the owner of the signature.

Adding a Signature to a Fax

Signature files are inserted into fax-bound documents using the <SIGNATURE> embedded code. For information on using this and other embedded codes see [Appendix A, "RightFax Embedded Codes"](#).

Controlling signature placement

Signature images are positioned so that the left-middle point of the signature aligns with the left-middle point of the <SIGNATURE> embedded code in the document. RightFax supports a Windows registry entry that modifies the vertical alignment of new signatures created on the client workstation where the registry value is present.

Table 10a Windows Registry Entry for Vertical Placement of Signature

| Category | Value |
|----------|--|
| Key | HKEY_CURRENT_USER\Software\RightFax Client\VWR32 |
| Value | SignaturePositionPercent |
| Type | DWORD |
| Data | 0–100 (default 35) |

Increasing the data for this value causes all newly created signatures to be shifted upwards by a percentage of the height of the signature image (the actual distance depends on the height of the signature). Decreasing the data causes signatures to shift down an equal distance.

This registry value only affects signatures when they are initially created. If you change the data for this value, you will need to recreate each signature that you want the new setting applied to.

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Chapter 11

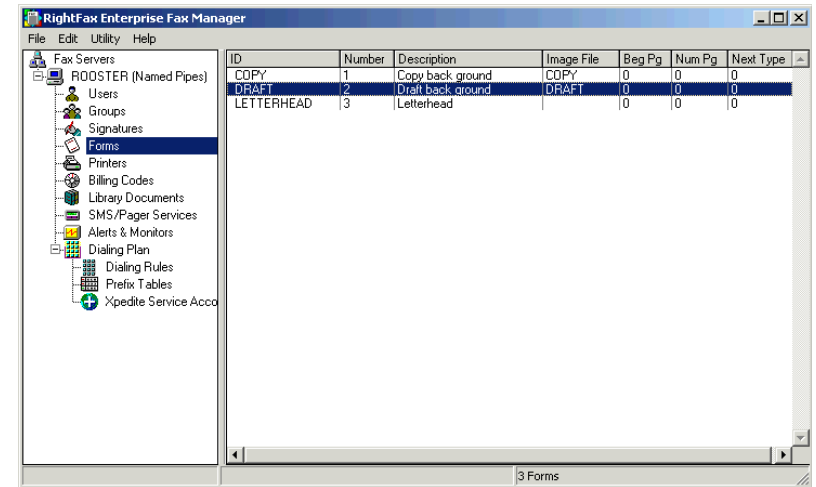
Creating Overlay Forms

Overlay forms are fax image files that RightFax can superimpose over outgoing faxes. These “forms” are typically replicas of documents that your organization uses (for example, company letterhead) and give your faxes the appearance of being printed on the form prior to faxing.

Managing Overlay Form Files

To edit or delete forms, run Enterprise Fax Manager (see [“Starting Enterprise Fax Manager”](#) on [page 89](#)) and click **Forms** under the RightFax server in the Fax Server Tree.

Figure 11.1 The Forms List



The screenshot shows the RightFax Enterprise Fax Manager interface. On the left is a tree view with 'Forms' selected. The main pane displays a table with the following data:

| ID | Number | Description | Image File | Beg Pg | Num Pg | Next Type |
|------------|--------|-------------------|------------|--------|--------|-----------|
| COPY | 1 | Copy back ground | COPY | 0 | 0 | 0 |
| DRAFT | 2 | Draft back ground | DRAFT | 0 | 0 | 0 |
| LETTERHEAD | 3 | Letterhead | | 0 | 0 | 0 |

You must create a new form file in order for it to appear as an object in Enterprise Fax Manager. New form files are created from the FaxUtil mailbox (see [“Creating a New Overlay Form”](#) on [page 127](#)).

Deleting a form

To delete a form, select the form to delete and press **DELETE**, or select **Delete** from the **Edit** menu. You will be prompted for confirmation that you want to delete the form. Deleting the form's reference in Enterprise Fax Manager does not delete the form file itself. A second confirmation dialog box will ask you if you want to delete the file as well.

Copying forms from one server to another

In Enterprise Fax Manager, you can copy one or more forms from one RightFax server to another. Select the forms you want to copy, and then drag the selection to another server.

If you copy overlay forms from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (for example, features on version 8.5 servers will not be available on version 8.0 servers).

Editing Form File Properties

To edit the properties of an existing form, run Enterprise Fax Manager, select the form to edit and press **ENTER**, or select **Edit** in the **Edit** menu. You can also double-click the form. The **Edit Form** dialog box opens.

Figure 11.2 The Edit Form Dialog Box

Form Number The number that identifies the form. This is assigned by RightFax when the form is created.

Form ID This is a unique name that identifies the form.

Description This is a description of the form file for easy reference in Enterprise Fax Manager.

Start Page Specifies the first page of the body of the fax document onto which the form will be placed. The page numbers you specify are absolute, so if the start page for a form is set to 3 and you apply it to a document that only has two pages, none of the document pages will include the form.



Note *Overlay forms are never placed on fax cover sheets. If you enter 1 in the Start Page box, the form will appear on the first page of the body of the fax following the cover sheet.*

Number of Pages The number of fax pages that will be overlaid with the form. To overlay each page of the fax with the form, enter 0 (zero).

Next Form Number Specifies the second form to use, if you want to use two overlay forms in one fax (i.e., different forms for the first page and all subsequent pages of your company letterhead). Specify the form number of the next form file. For more information on using two overlay forms in a single fax, see [“Using Two Overlay Forms in One Fax”](#) on [page 128](#).

Image File Name The name of the form image file. This is automatically generated and stored in the RightFax\Papers folder on the RightFax server when the form file is created. If this box contains an invalid file name, RightFax will not be able to use the form image.

Secure Form Restricts the form to specific groups or users. To secure a form, select the **Secure Form** check box. In the **Authorized Group or User** list, click the users or groups authorized to use the form.

Creating a New Overlay Form

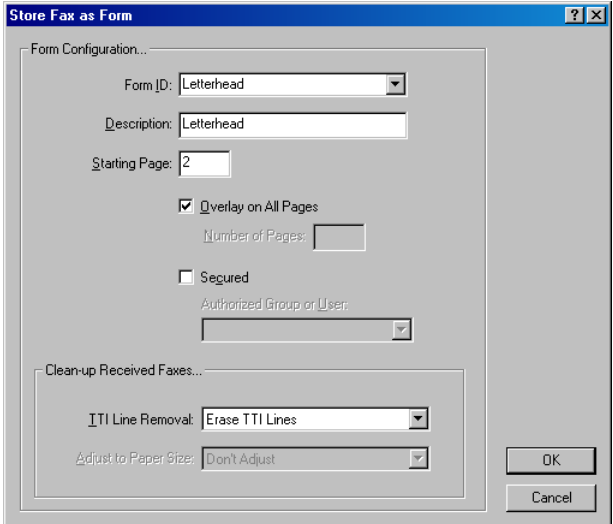
To create new overlay forms in FaxUtil, you must be assigned permission in your user profile (see [“The Permissions tab”](#) on [page 103](#)).

Form files are created from a faxes in your FaxUtil mailbox. You should always create forms using fine resolution. To set fine resolution as the default in FaxUtil, select **Tools > Options**, and the **Options** dialog box opens. On the **Sending** tab, select the **Use Fine Mode** check box.

To create a new overlay form

1. Create the form image in a word processor or any other application that lets you print to the RightFax fax printer. Send the fax image to your FaxUtil mailbox.
2. Run FaxUtil and click the form in the list of received faxes.
3. Select **Fax > Store as Form**, and the **Store Fax as Form** dialog box opens.

Figure 11.3 The Store Fax as Form Dialog Box



4. In the **Form ID** box, enter a unique ID for the form. The remaining boxes are the same as those in the **Edit Form** dialog box (see [“Editing Form File Properties”](#) on [page 126](#)).
5. When you have completed the dialog box, click **OK**. The new form will now appear in the **Forms** list in Enterprise Fax Manager.

Using Two Overlay Forms in One Fax

You can configure two overlay forms to appear in a fax. For example, page 1 of the fax may include company letterhead, and pages 2, 3, 4, and 5 may include an invoice form.

After the two forms have been configured following these instructions, then each time you add the first form to an outgoing fax, it will automatically be followed by the second form because they are linked.

To configure two forms for use in a single fax document

1. Create two forms according to the instructions in [“Creating a New Overlay Form”](#) on [page 127](#).
2. Run Enterprise Fax Manager and edit the properties of the first of the two forms (described on [page 126](#)).
3. In the **Edit Form** dialog box, in the **Start Page** box, enter the page number that you want the first form to initially appear on. In most cases, this value will be set to 1.



Note *Overlay forms are never placed on fax cover sheets. If you enter 1 in the **Start Page** box, the form will appear on the first page of the body of the fax, following the cover sheet.*

4. In the **Number of Pages** box, enter the number of pages on which you want the first form to appear. If the first form will only be used on the first page, enter 1.
5. In the **Next Form Number** box, enter the form number of the second form to use. Click **OK** to close the **Edit Form** dialog box.
6. Edit the properties of the second of the two forms.
7. In the **Edit Form** dialog box, in the **Start Page** box, enter the page number that you want the second form to appear on. In most cases, this value will be set to 2.

8. In the **Number of Pages** box, enter the number of pages on which you want the second form to appear. If you want the second form to appear on all subsequent pages, enter 0 (zero).
9. Click **OK** to close the **Edit Form** dialog box.

Adding an Overlay Form to a Fax

Overlay forms are inserted into fax-bound documents using the `<FORMTYPE>` embedded code or by specifying the form to use in the **Fax Information** dialog box. For information on the **Fax Information** dialog box, see [“Using the Fax Information Dialog Box”](#) on [page 226](#).

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Chapter 12

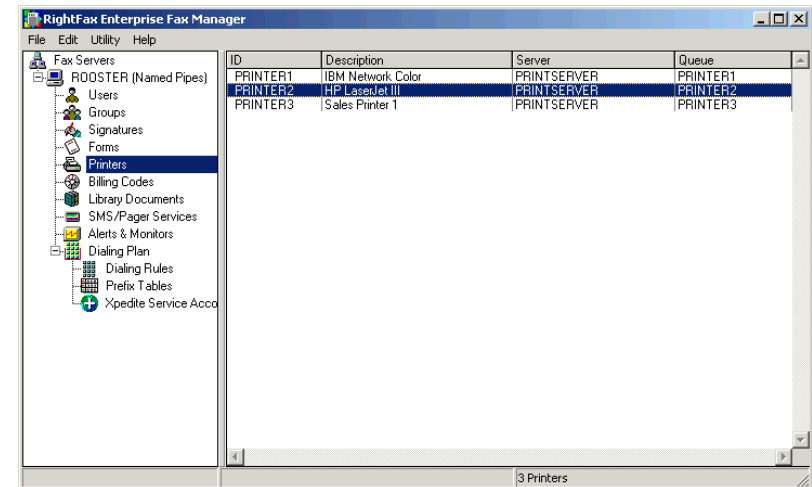
Connecting Printers and Scanners

You can define an unlimited number of network printers in RightFax and make them available for automatic printing of faxes and other automated network print functions. Printers can be added individually or imported in groups from your network. The printers you configure here are not the printers and print-to-fax devices that allow RightFax users to fax documents from native applications. Rather, these are the printers available to RightFax for automatically printing sent and received faxes.

Managing Printers

To add, edit, or delete printers on the RightFax server, run Enterprise Fax Manager (see [“Starting Enterprise Fax Manager” on page 89](#)) and click **Printers** under the desired RightFax server in the Fax Server Tree.

Figure 12.1 The Printers List



Adding a printer

To add a new printer to RightFax, press INSERT or select **New** from the **Edit** menu. The **Edit Network Printer** dialog box opens. For information on completing each of the options in this dialog box see [“Editing Printer Properties”](#) on [page 130](#).

Deleting a printer

To delete a printer, select the printer to delete and press DELETE or select **Delete** from the **Edit** menu. By default, you will be prompted for confirmation that you want to delete the printer.

Copying printers from one server to another

Using Enterprise Fax Manager you can easily copy one or more printers from one RightFax server to another. Select the printers you want to copy, and then drag the selection to another server.

If you copy printers from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (for example, features on version 8.5 servers will not be available on version 8.0 servers).

Editing Printer Properties

To edit the properties of an existing printer, run Enterprise Fax Manager, select the printer to edit and press ENTER, or select **Edit** from the **Edit** menu. You can also double-click the printer. The **Edit Network Printer** dialog box opens.

Figure 12.2 The Edit Network Printer Dialog Box

Printer ID The identifier RightFax will use for this printer. This ID should match the printer's network ID to avoid confusion.

Description This is a description of the form file for easy reference in Enterprise Fax Manager. If this box is completed, users will see both the **Printer ID** and **Description** in the **Print** dialog box. If this box is not completed, only the **Printer ID** will be displayed.

Printer Type Sets the printer driver used by the fax server to format faxes printed to this printer. Choose the one that most closely corresponds to your printer. If your laser printer supports both PostScript and PCL5, choose one of the HP LaserJet types rather than PostScript for faster printing.

Direct TCP/IP Printing Allows faxes to be printed directly to an IP port on a printer using the LPR, a TCP/IP utility.

Server Name Indicates on which file server the queue exists. If the queue is in NDS, this should be the value at the top of the tree.

Queue Name Differs depending on your network operating system. On NetWare 3.x, the **Queue Name** should contain the Bindery name of the queue, i.e. "LASER1." On LAN Server and Windows NT networks, **Queue Name** should contain the share name of the queue. On NetWare 4.x servers that are using NDS, **Queue Name** should contain the Distinguished Name of the queue object, i.e. "LASER1.SALES.ACME."

Default Paper Size Sets how the fax server will scale a fax page to fit onto the printable area of a laser printer. This also sets what size paper to select. "None" will not scale the image at all which can result in some portion of the page being truncated. "Fit Letter" causes the fax page to be scaled to fit onto the printable area of U.S. letter size paper (8.5 × 11 in.). "Fit Legal" scales the page to fit onto the printable area of U.S. legal size paper (8.5 × 14 in.). "Fit Letter/Legal" scales the fax to fit on letter size paper if it is 12.5 inches or less, otherwise it will be scaled to fit legal size paper. This last option is useful for firms receiving faxes in a mix of letter and legal sizes and where dual-bin laser printers are used. In such cases, the laser printer will select the appropriate size paper, letter or legal, to correspond to the size of the fax page. "Fit A4" scales the fax to fit onto the printable area of A4 size paper (210 × 297 mm). "Fit A4/Legal" is identical to Fit Letter/Legal, except that the printer will choose between A4 and Legal paper trays.



Note All laser printers have an unprintable margin area. RightFax takes this into account when scaling and fits the full fax page within the printable region. The result is a small (5%) reduction in the page image when printed on a laser printer. Because fax pages have no unprintable regions, this scaling is necessary to prevent portions of the fax from being lost during printing.

Default Paper Source Determines which paper tray selection command RightFax will send to the printer. If the **Default Paper Size** is set to "Fit Letter/Legal" or "Fit A4/Legal," it is recommended that this value be set to "None." Otherwise the automatic selection of paper trays will not work.

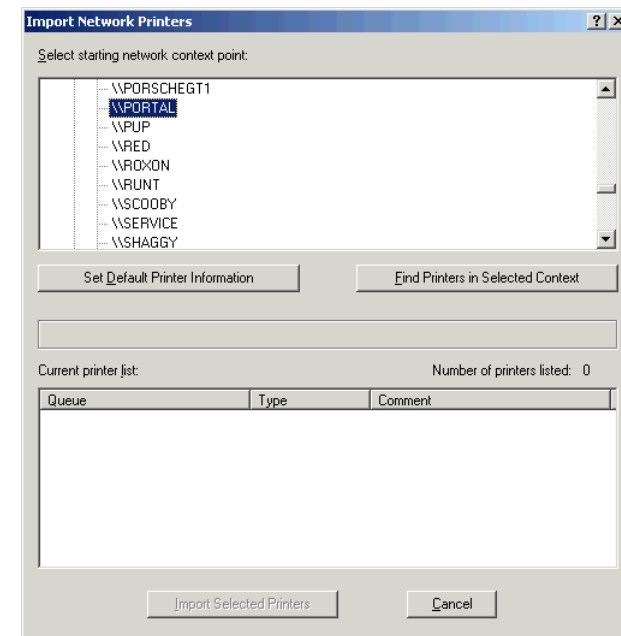
Importing Printers into RightFax

You can import printers from your network into RightFax in groups or you can import all printers.

To import printers

1. In Enterprise Fax Manager, in the **Utility** menu, select **Import Printers from Network**. The **Import Network Printers** dialog box opens.

Figure 12.3 The Import Network Printers Dialog Box



2. Select the network context to import from.
3. Before importing printers, you can specify the characteristics of printers for which to search. You can set the printer driver, paper size, paper type, and whether the printer is set to print to an IP port. Click **Set Default Printer Information**.

4. To search for printers, click **Find Printers in Selected Context**. Depending on the size of the network, this scan can take several minutes. To cancel the search, click **Stop Loading**.
5. The list of available printers appears in the **Current printer list**. Click to select the printers to import, and then click **Import Selected Printers**.

Configuring RightFax to Automatically Print Faxes

Each RightFax user profile can be configured to automatically print sent or received faxes. Before you can configure automatic printing for users, you must set up at least one network printer in Enterprise Fax Manager. For information on adding and configuring network printers see “Adding a printer” on page 130.



Note The ability to automatically print sent and received faxes can also be configured by individual users in the FaxUtil client application.

To configure a user to automatically print sent and received faxes, select **Users** in Enterprise Fax Manager and double-click the user ID to edit. Automatically printing sent faxes is configured in the **Outbound Auto-Printing** tab (page 110) and automatically printing received faxes is configured in the **Default Receive Settings** tab (page 110).

Using Scanners with RightFax

If you need to fax a document that has already been printed, you can use either a local or network scanner to scan the document directly into RightFax for fax transmission.

Using a desktop scanner

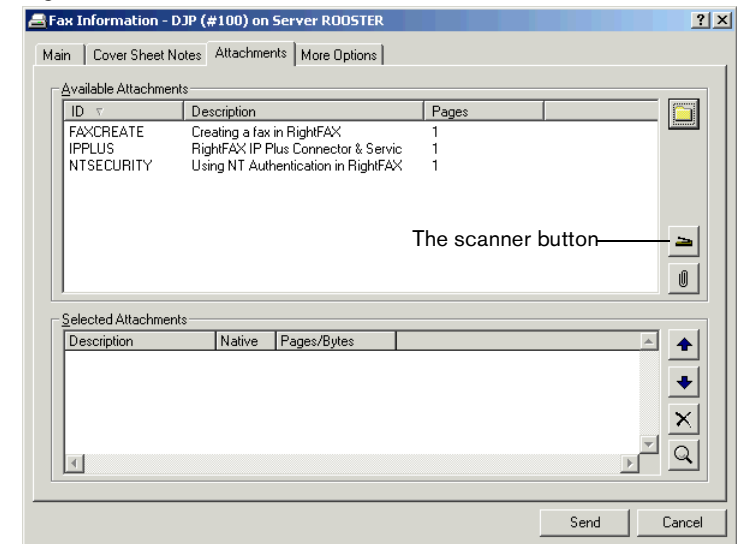
RightFax can scan documents for fax transmission from any TWAIN32-compliant scanner connected to your computer. To make your local scanner available in RightFax, install the scanner,

its drivers, and the TWAIN32 drivers according to the installation instructions provided with the scanner. RightFax automatically detects the TWAIN32 drivers and makes the scanner available when creating a fax document.

To scan a document for fax transmission

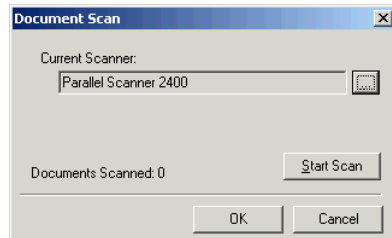
1. Open the **Fax Information** dialog box using any of the methods provided by your RightFax client installation. For information on opening the **Fax Information** dialog box for creating, addressing, and sending fax documents, see [Chapter 22](#), “Creating, Sending, and Deleting Faxes”.
2. In the **Fax Information** dialog box, click the **Attachments** tab.

Figure 12.4 The Scanner Button



3. Click the scanner button on the right side of the **Available Attachments** list. The **Document Scan** dialog box opens.

Figure 12.5 The Document Scan Dialog Box



4. Select the scanner to use in the **Current Scanner** box and click **Start Scan**. RightFax opens the scanner's control dialogs. Place the document(s) to scan on the scanner bed and complete the dialog(s) that appear according to the instructions for scanning documents provided with your scanner.

When the document has been scanned, it will appear in the **Selected Attachments** list in the **Fax Information** dialog box.

Using the Kofax NetScan

RightFax integrates with the Kofax NetScan network scanner (page 39). For more information about configuring these two products to work together, refer to your NetScan documentation.

Using Hewlett-Packard Network Scanners

Hewlett-Packard network scanners allows users to scan documents and images into the RightFax system without requiring a scanner attached directly to a client workstation. For more information about Hewlett-Packard scanners, see “Configuring Hewlett-Packard ScanJet” on page 40, and “Configuring Hewlett-Packard Digital Senders” on page 42.

The Standalone Fax Connector

The Standalone Fax Connector uses a stand-alone fax machine to send faxes through the RightFax server. This makes least-cost routing, automatic retries, and other RightFax features available to conventional fax machines throughout your organization.



Note This feature works with Brooktrout fax boards only and works best with TR114 boards with a licensed voice module. Voice prompts for the Standalone Fax Connector are available at <ftp://ftp.rightfax.com/rightfax/general>.

Each fax machine connects to the RightFax server on a specific channel or DID extension via a phone line or PBX. When a fax is sent, it is redirected to the RightFax server for processing and transmission. The user is prompted with voice (requiring Brooktrout TR114 series fax board with licensed voice option) or tones to enter the destination fax number and other required fax recipient information.

Connecting a stand-alone fax machine to the RightFax server

There are several ways to connect a stand-alone fax machine to your RightFax server. In each case, a RightFax user ID is created to host the Standalone Fax Connector and is assigned a unique **Routing Code** value (called the “extension”). The user then dials into this extension from the fax machine (exactly how this is accomplished depends on your phone system) in order to access the RightFax server.

To enable stand-alone fax machine support

1. On the RightFax server, run Enterprise Fax Manager and create a new user. In the **Routing Code** box, enter an extension that will be dedicated to the Standalone Fax Connector. For information on creating a new user, see [“Adding a user”](#) on [page 100](#).
2. On the RightFax server, run Regedt32.exe.
3. Under HKEY_LOCAL_MACHINE\Software\RightFax\BoardServer, add a new key named “SFC”.
4. Open the SFC key and add a new value named “Extensions” and set the data type to REG_MULTI_SZ.
5. In the **Multi-String Editor** dialog box, enter the extension that will be dedicated to the Standalone Fax Connector. Separate multiple entries with a carriage return.
6. In the SFC key, add another new value named “Change” and set the data type to REG_DWORD.
7. In the **DWORD Editor** dialog box, set the data to “1” hex. This forces the BoardServer to read the Extensions value.

After it reads the list of extensions, the BoardServer sets the Change value to “0” hex. When you make a change to the Extensions value in this key, you must set the Change value back to “1” hex to force the BoardServer to re-read the new data.

Using the Standalone Fax Connector

After the Standalone Fax Connector has been enabled, users can access it from any fax machine that can dial in to the extension you have dedicated. Users have the option of dialing their intended recipients directly or entering the ID of a phonebook entry that then dials the recipient(s) listed in that entry. Add individual or group phonebook entries under the user ID that you have designated for the Standalone Fax Connector and assign each entry a numeric ID.

To send a fax using the Standalone Fax Connector

1. Dial the Standalone Fax Connector extension. This number must be listed in the Extensions value in the SFC key in the Windows registry on the fax server. Depending on your Brooktrout fax board configuration, either a tone or voice message will prompt you for the destination fax number.
2. To manually enter a destination fax number, enter the fax number and billing codes using this format:

FaxNumber*billInfo1*billInfo2#

Separate the fax number and billing codes using the asterisk [*] key and press the pound [#] key when you are done. If billing codes are not required, they can be left out of the dial string, but you must include a fax number and end by pressing the pound [#] key.

To use a phonebook entry, enter the numeric ID of the phonebook entry and press the pound [#] key.

3. Another tone or voice prompt will instruct you to begin transmitting the fax. Press the **Start** button on the fax machine. The fax machine will proceed to scan the pages and send the fax to the specified phone number or to the destination(s) in the phonebook entry.

■ ■ ■

Chapter 13

Creating Billing Codes

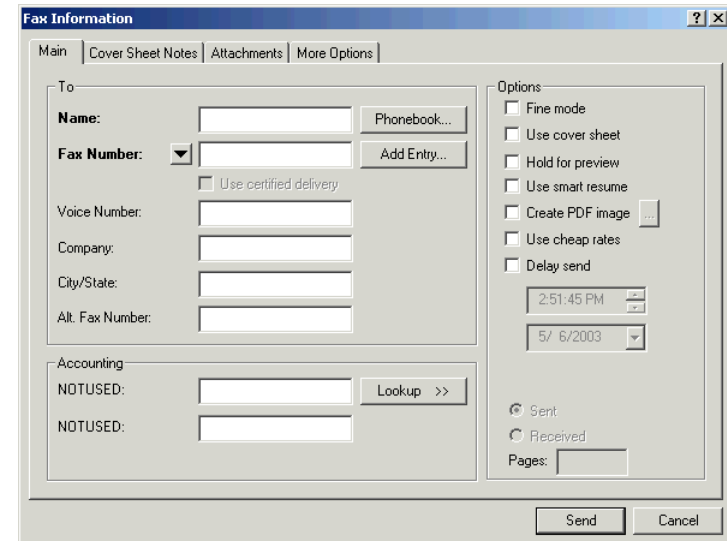
RightFax tracks and reports fax activity using billing codes. Users can be required to enter one or two codes for every fax before it can be sent or deleted. These codes can be validated internally against a master table or externally using a separate application (for example, an accounting program). To validate billing codes internally, you must create a list of valid billing codes in RightFax.

RightFax supports the use of two billing codes for each faxed document. These are referred to as “Billing Code 1” and “Billing Code 2.” Your organization can require both billing codes on faxes (such as one code for account number and one for a matter number), one billing code (to track the individual or department sending the fax, for example), or no billing codes.

Customizing the Names of Billing Code Fields

For users, the RightFax billing code fields appear in the Fax Information Dialog box. By default, the names of the billing code fields are “NOTUSED,” as shown in the following example.

Figure 13.1 Billing Code Fields



The screenshot shows the 'Fax Information' dialog box with the following fields and options:

- To:**
 - Name: [Text Field] Phonebook...
 - Fax Number: [Dropdown] [Text Field] Add Entry...
 - Use certified delivery
- Voice Number: [Text Field]
- Company: [Text Field]
- City/State: [Text Field]
- Alt. Fax Number: [Text Field]
- Accounting:**
 - NOTUSED: [Text Field] Lookup >>
 - NOTUSED: [Text Field]
- Options:**
 - Fine mode
 - Use cover sheet
 - Hold for preview
 - Use smart resume
 - Create PDF image ...
 - Use cheap rates
 - Delay send
 - Time: 2:51:45 PM
 - Date: 5/ 6/2003
 - Sent
 - Received
 - Pages: [Text Field]

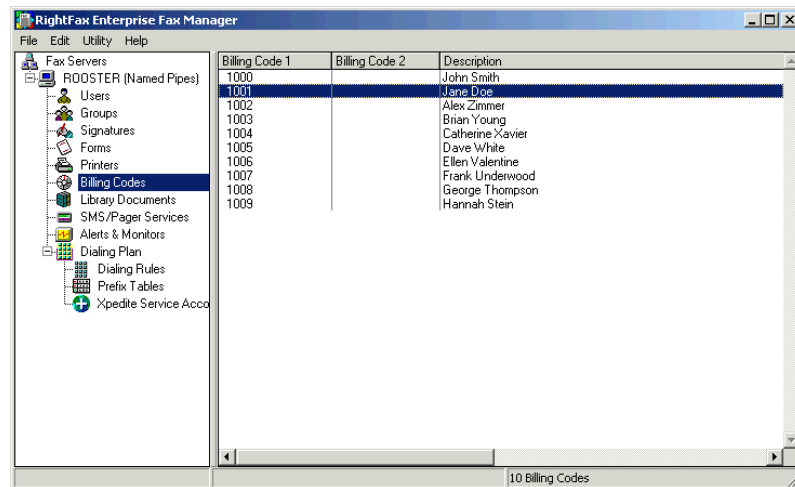
Buttons: Send, Cancel

To change these names to meet the needs of your organization, run Enterprise Fax Manager (see [“Starting Enterprise Fax Manager”](#) on page 89), select **Customize Cover Sheet Fields** from the **Utility** menu, and click the **Billing Codes** tab. Enter new descriptions for the Billing Code 1 and 2 fields in the description boxes. The new names will appear throughout your RightFax client applications.

Managing Billing Codes

You can create a list of billing codes that is used to validate the codes entered by fax users when sending faxes. To add, edit, or delete billing codes, run Enterprise Fax Manager and click **Billing Codes** under the desired RightFax server.

Figure 13.2 The Billing Codes List



Adding a billing code

To add a new billing code to RightFax, press **INSERT**, or select **New** from the **Edit** menu. The **Edit Billing Code** dialog box opens. For information on completing each of the options in this dialog box, see [“Editing Billing Code Properties”](#) on page 138.

Deleting a billing code

To delete a billing code, select the billing code to delete and press **DELETE**, or select **Delete** from the **Edit** menu.

Copying billing codes from one server to another

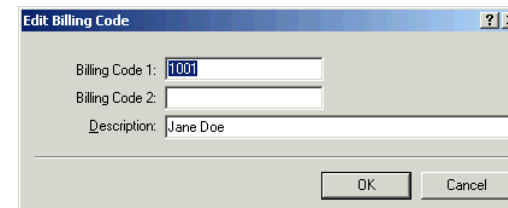
In Enterprise Fax Manager, you can copy one or more billing codes from one RightFax server to another. Select the billing codes you want to copy, and then drag the selection to another server.

If you copy billing codes from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (for example, features on version 8.5 servers will not be available on version 8.0 servers).

Editing Billing Code Properties

To edit the properties of an existing billing code, run Enterprise Fax Manager, select the billing code to edit and press **ENTER**, or select **Edit** from the **Edit** menu. You can also double-click the billing code. The **Edit Billing Code** dialog box opens.

Figure 13.3 The Edit Billing Code Dialog Box



Billing Code 1 and 2 Enter one or two billing codes.

Description Enter a descriptive name for the billing code.

Importing Billing Codes

You can import billing code records from an ASCII text file. This is most useful when systems such as EquiTrac or central databases are used to store a master set of billing codes. Such systems can be programmed to periodically generate a formatted ASCII file that the RightFax server will recognize and process. After such a system is configured, billing code maintenance can be fully automated.

Creating the billing code file

The ASCII billing codes file must be named `Codechg.csv` and must be located in the `RightFax\Worksrv` folder.

The file `Codechg.csv` must be formatted with one complete billing code record per line. The codes themselves cannot contain spaces, but descriptions can. For each record, the codes and description must be separated by commas. You can import new billing codes as well as specify deletions and changes to billing codes. Each billing code record must include a leading field that indicates the desired operation. The leading field (a single character followed by a comma in all cases) can be 'A' indicating an addition, 'C' indicating a change to an existing code, or 'D' indicating that a code should be deleted.

Format Operation,BillInfo1,BillInfo2,Description

Example A,Smith,9054,Harry Smith Inc.
C,Jones,5687,Bob Jones Corp.
D,Smith,2390

(A "delete" line need not contain a description, and any included description will be ignored.)

Configuring RightFax to import billing codes

To configure RightFax to import the ASCII billing code file, run the WorkServer configuration program, select the WorkServer in whose folder you saved the `Codechg.csv` file, and set a value in the **Billing Code Import Interval** field. This parameter determines the interval in minutes that the WorkServer should check for a new

billing code file. At every interval, the WorkServer checks for the file `Codechg.csv`, in its own folder. If the file exists, the WorkServer imports the additions, changes, and deletions specified in the file. After the entire file is processed, the WorkServer erases `Codechg.csv` so that it will not be picked up again at the next check.

The WorkServer also produces a log file, `Codechg.log`, that can be examined to see what codes were imported from the most recent `Codechg.csv`. The log file is overwritten each time an import is executed, so it will not grow indefinitely.

When writing the input file it is recommended that it not be initially named `Codechg.csv`. If it is, the WorkServer may attempt to open and process the file before you have finished building it. It is best to use a temporary name (such as `Codechg.***`) to build the file. After all lines have been written to the file, close it and re-name it to `Codechg.csv`.

Example A batch file can be created that automates this process, for example:

```
j:
cd \rfax\worksrv
getcodes codechg.***
ren codechg.*** codechg.csv
```

In this example, `GETCODES` is a program supplied by the user that creates an ASCII file of billing code changes in the required format.

Requiring and Validating Billing Codes

Requiring billing codes on sent faxes

After you have created a list of billing codes, you can require all users to enter one or both billing codes with each fax sent. To require the billing code fields be completed before a fax can be sent, run Enterprise Fax Manager, select **Customize Cover Sheet**

Fields from the **Utility** menu, and click the **Sending Required Fields** tab. Select either or both of the **First Billing Info** or **Second Billing Info** check boxes.

Fields that you have marked as required will appear bold in the **Fax Information** dialog box.

Requiring billing codes on received faxes

You can also use billing codes to track information about your received faxes. When you require billing codes on received faxes, the recipient will not be able to delete the fax until the required billing codes have been assigned. To require billing codes on received faxes, run Enterprise Fax Manager, select **Customize Cover Sheet Fields** from the **Utility** menu, and click the **Receive Required Fields** tab. Check either or both the **First Billing Info** or **Second Billing Info** fields.

Users can manually assign billing codes to their received faxes by double-clicking the fax in FaxUtil to open the RightFax viewer and selecting **Assign From Information** in the **Fax** menu. A dialog box appears with fields for entering the necessary billing code information.

Configuring billing code validation

You can configure the RightFax server to validate billing codes against the billing code list in the RightFax server. If a supplied billing code does not match one in your list, it will be rejected and the fax will not send. To configure RightFax to validate billing codes, run Enterprise Fax Manager, select **Customize Cover Sheet Fields** from the **Utility** menu, and click the **Billing Codes** tab. Check the **Verify Billing Codes for Sent and Received Faxes** option.



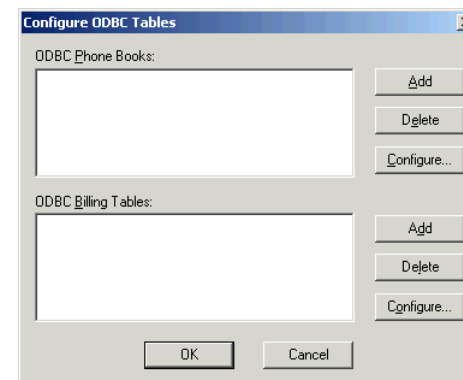
Note Validating billing codes against an external application requires you to create a custom utility using the RightFax API. For information on customizing your RightFax system with the RightFax API, visit the API section of our Web site at www.captaris.com/implementation_services or contact Captaris for implementation services.

Accessing ODBC Billing Codes

You can integrate billing codes from an external ODBC source for use in all of your users' outbound faxes. The ODBC source can be created and configured using the ODBC configuration program. Each client workstation must be configured individually to access these billing codes.

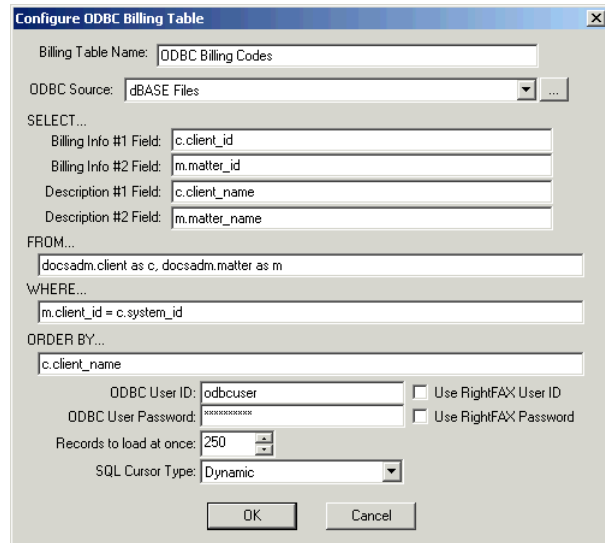
Click the RightFax tray icon in the Windows taskbar. In the shortcut menu, select **ODBC Configuration**. The **Configure ODBC Tables** dialog box opens.

Figure 13.4 The Configure ODBC Tables Dialog Box



Under **ODBC Billing Tables**, click **Add**. The **Configure ODBC Billing Table** dialog box opens.

Figure 13.5 The Configure ODBC Billing Table Dialog Box



Complete each of the boxes according to your ODBC database specifications.

Billing Table Name This is a descriptive name for this billing codes table.

ODBC Source The name of your ODBC billing codes data source.

ODBC Field Names Relates the fields of the ODBC database to the standard RightFax billing code fields. This is done with simple SQL query statements.

ODBC User ID and Password These are the ID and password to access the ODBC database. If the ID and password match those used to log into RightFax, you can check those boxes instead.

Records to Load at Once Limits the number of records displayed at one time during billing code lookup by entering the limit in this box.

SQL Cursor Type Selects an SQL cursor type. In most cases, this option should be set to “Dynamic.”

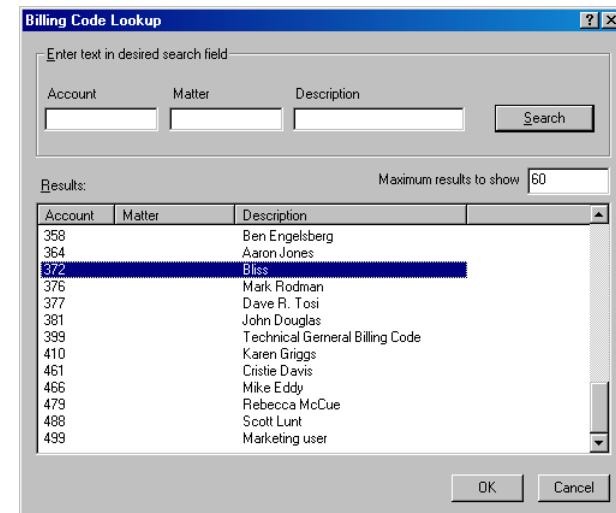
Querying an ODBC billing code list

After you have configured the necessary ODBC information on a user’s workstation, that user can access ODBC billing codes when sending faxes.

To look up ODBC billing codes

1. In the **Fax Information** dialog box, click **Lookup** to select RightFax billing codes or a specific ODBC billing code table.
2. Select the ODBC billing code table you created. This opens a list of the ODBC billing codes.

Figure 13.6 The Billing Table Lookup Dialog Box



3. If you limited the number of records displayed at one time in the **Records to Load at Once** box in the **Configure ODBC Billing Table** dialog box, you will see only the specified number of records (or fewer). To view the previous or next batch of codes, click the arrows on the right side of the list.
4. Click the billing code information you want, and click **OK** to enter it in the **Fax Information** dialog box.

■ ■ ■

Chapter 14

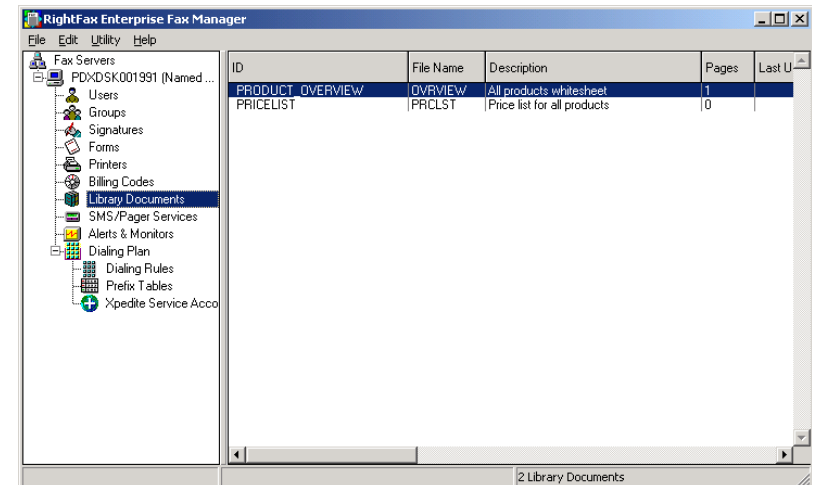
Creating Library Documents

You can store frequently faxed documents (such as company literature, credit applications, or employment forms) in a fax document library for easy retrieval. Library documents are stored in the RightFax\Image folder on the RightFax server formatted for fax transmission. This allows your most frequently faxed documents to be sent as quickly with a minimum of system resources.

Managing Library Documents

To edit or delete library documents, run Enterprise Fax Manager (see [“Starting Enterprise Fax Manager”](#) on [page 89](#)) and click **Library Documents** under the desired RightFax server in the Fax Server Tree.

Figure 14.1 The Library Documents List



The screenshot shows the 'RightFax Enterprise Fax Manager' application window. On the left is a tree view with 'Library Documents' selected. The main pane displays a table with the following data:

| ID | File Name | Description | Pages | Last U |
|------------------|-----------|-----------------------------|-------|--------|
| PRODUCT_OVERVIEW | DVRVIEW | All products whitesheet | 1 | |
| PRICELIST | PRCLST | Price list for all products | 0 | |

The status bar at the bottom right of the window indicates '2 Library Documents'.

You must create a new library document in order for it to appear as an object in Enterprise Fax Manager. New library documents are created from the FaxUtil mailbox (see “[Creating a New Library Document](#)” on page 145).

Deleting a library document

To delete a library document, select the document to delete and press DELETE, or select **Delete** from the **Edit** menu. By default, you will be prompted for confirmation that you want to delete the library document.

Deleting the library document's reference in Enterprise Fax Manager does not delete the document file itself. A second confirmation dialog box will ask you if you want to delete the file as well.

Copying library documents from one server to another

In Enterprise Fax Manager you can copy one or more library documents from one RightFax server to another. Select the library documents you want to copy, and then drag the selection to another server.

If you copy library documents from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (in other words, features on version 8.5 servers will not be available on version 8.0 servers).

Library document usage statistics

Enterprise Fax Manager keeps a record of each time a library document is sent via Fax-on-Demand, the Web, or local area network, and displays the totals in the right pane of the Enterprise Fax Manager window. To reset these counters back to zero, click the library documents to reset and select **Reset Usage Counts** in the **Edit** menu.

Editing Library Document Properties

To edit the properties of an existing library document, run Enterprise Fax Manager, select the document to edit and press ENTER, or select **Edit** in the **Edit** menu. You can also double-click the library document. The **Edit Library Document** dialog box opens.

Figure 14.2 The Edit Library Document Dialog Box

Document ID This is a unique code that identifies the library document. If you want the library document to be available via the Web or Fax-on-Demand (described in the *RightFax Docs-on-Demand Guide*), you must assign a numeric document ID.

Description This is a descriptive name for the library document.

Image File Name The name of the library document file. This is generated automatically when the library document is created and should typically never need to be changed. All library document files are saved in the RightFax\Image folder on the RightFax server.

Pages The number of pages in the document.

Accessible via LAN Makes the library document available on the local area network for faxing from client workstations.

Accessible via Web Makes the library document available to users via your Web site using Web Fax Tools.

Accessible via FOD Makes the library document available to users via touch tone phone using Fax on Demand.

Include in Catalog Includes this document in the Fax on Demand catalog of available faxes.

Request Password The numeric password that is required by Fax on Demand when users request this document.

Activation Date The date that the library document becomes available for use. Click to select the check box and select the activation date. To make the library document available immediately, do not select this option.

Expiration Date The date that you want the library document to become unavailable for use. Click to select the check box and select the expiration date. If you do not select this option, the library document will available indefinitely.

Creating a New Library Document

To add new library documents in FaxUtil, you must be assigned permission in your user profile (see [“The Permissions tab”](#) on [page 103](#)).

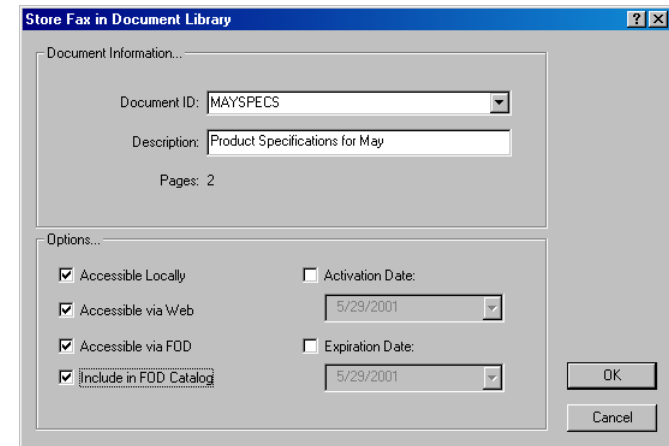
Library documents are created from a fax in your FaxUtil mailbox. You should always create library documents using **Fine** resolution. To set fine resolution as the default in FaxUtil, select **Tools > Options**, and the **Options** dialog box opens. On the **Sending** tab, select the **Use Fine Mode** check box.

To create a new library document

1. Create the document in a word processor or other application that lets you print to the RightFax fax printer. Send the fax image to your FaxUtil mailbox.
2. Run FaxUtil and click the document in the list of received faxes.

3. In the **Fax** menu, click **Store in Library**. The **Store Fax in Document Library** dialog box opens.

Figure 14.3 The Store Fax in Document Library Dialog Box



4. Specify a **Document ID** and **Description** for the new library document. These fields and the remaining options are the same as the **Edit Library Document** dialog box ([page 144](#)).
5. When you have completed the dialog box, click **OK**. The new document will now appear in the **Library Documents** list in Enterprise Fax Manager.

Automating the creation of new library documents

You can also automate the creation of new library documents using the <NEWLIB> and <NEWLIB2> embedded codes. For information on using these and other embedded codes see [Appendix A, “RightFax Embedded Codes”](#).

Faxing a Library Document

Library documents are sent as attachments to faxes. To attach a library document, you have the following options:

- When creating a new fax in FaxUtil, in the **Fax Information** dialog box, click the **Attachments** tab and select the library documents to include.
- When creating a new fax using the **Quick Fax/Broadcast** command from the tray icon, click the **Attachments** tab and select the library documents to include.
- You can also add library documents to fax-bound documents using the <LIBDOC> and <LIBDOC2> embedded codes. For information on using these and other embedded codes see [Appendix A, "RightFax Embedded Codes"](#).

■ ■ ■

Chapter 15

Adding SMS and Pager Services

You can configure the RightFax server to send e-mail, pager messages, or SMS messages to fax users and administrators to alert or notify them of specific RightFax events. To send these alerts and notifications from RightFax, you must create a list of available services and providers.

If you will be configuring SMS notifications, you must have installed and configured the RightFax Push-Proxy Gateway. The RightFax Push-Proxy Gateway is installed as an optional component on the RightFax server. If you did not select the Push-Proxy Gateway option when you ran the RightFax server installation, it must be installed now.

To install the RightFax Push-Proxy Gateway

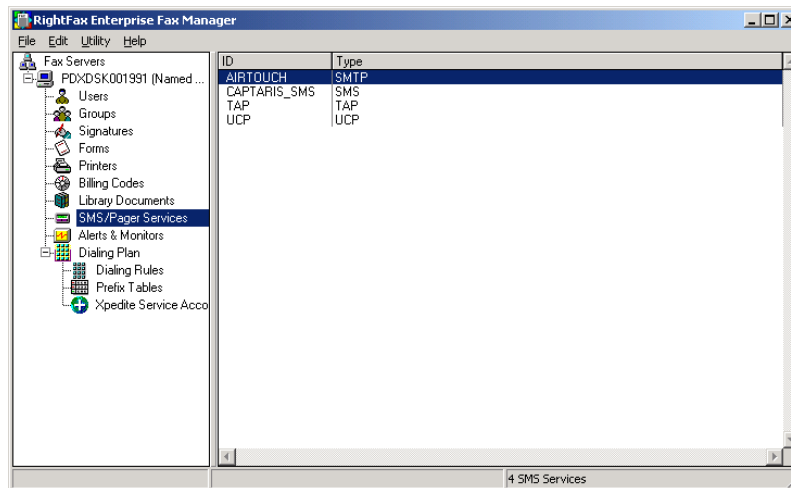
1. Run Add/Remove Programs from Windows Control Panel, highlight **RightFax Product Suite**, and then click **Change**.
2. Click **Next** at the opening screen. This opens a list of installation options. Select **Modify** and click **Next**.
3. On the **Setup Features** screen, expand the **RightFax Server** category and select **Push Proxy Gateway** for install. Click **Next**.
4. Complete the Installation Wizard according to the instructions in the *RightFax Installation Guide*.
5. When you are prompted to reboot the computer, click **Yes**.
6. After the computer restarts, select **Start > Programs > Enterprise Fax Manager**.
7. In the Enterprise Fax Manager application, click the name of the RightFax server to configure in the tree in the left pane. A list of services appears at the lower-right pane of the window.
8. In the **Service Name** list, double-click **RightFax DocTransport Module**. The **Transport Configuration** dialog box opens. (The DocTransport configuration program is described more thoroughly in [Chapter 5, "Configuring the DocTransport and BoardServer Modules"](#)).
9. Click the **Add Transport** button. In the **Select Transport** dialog box, select the option **SMS Via Push-Proxy Gateway** in the left pane and then click **Select**. This will add SMS functionality to the RightFax server.
10. Close the DocTransport configuration program and select **Start > Programs > Enterprise Fax Manager**.
11. In the Enterprise Fax Manager application, select **Dialing Rules** under the local fax server in the left pane.
12. Press [INSERT] to add a new dialing rule. Click the **Destination** tab and select **SMS** in the **Send Via Transport** box.
13. Close Enterprise Fax Manager.

After it is installed, the Push-Proxy Gateway must be configured for your organization's specific needs. For information on configuring the RightFax Push Proxy Gateway, refer to the *RightFax Push-Proxy Gateway Guide*.

Managing SMS and Pager Services

You must create a pager service configuration for each type of pager service your users subscribe to. To add, edit, or delete pager services, run Enterprise Fax Manager and click **SMS/Pager Services** under the desired RightFax server in the Fax Server Tree.

Figure 15.1 The SMS/Pager Services List



Adding SMS and pager services

To add a new pager service to RightFax, press **INSERT** or select **New** from the **Edit** menu. The **Edit SMS/Pager Service Definition** dialog box opens. For information on completing the options in this dialog box, see [“Editing SMS and Pager Service Properties”](#) on [page 149](#).

After you have created a list of SMS and pager services, you can configure fax user notifications and administrative alerts. Fax status notifications and how they will be delivered are configured individually for each RightFax user (described on [page 107](#)). A default notification method can also be configured for groups, (described on [page 116](#)). Fax server status alerts for administrators can be configured for individual administrative users (described on [page 108](#)), or you can use the RightFax Alerting and Monitoring service to create and customize a list of server statistics to monitor and alert on (described in [Chapter 16, “Using the Alerting and Monitoring Service”](#)).

Users can be paged via SMTP e-mail (requiring Internet connectivity), via TAP or UCP protocols (requiring any TAPI-compatible or AT-compatible modem), or send SMS messages (requiring the Captaris Push-Proxy Gateway).

Deleting SMS or pager services

To delete a pager service, select the service to delete and press **DELETE**, or select **Delete** from the **Edit** menu.

Copying SMS and pager services from one server to another

In Enterprise Fax Manager, you can copy one or more pager services from one RightFax server to another. Select the pager services to copy, and then drag the selection to another server.

If you copy pager services from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (in other words, features on version 8.5 servers will not be available on version 8.0 servers).

Editing SMS and Pager Service Properties

To edit the properties of an existing service, select the pager service to edit and press ENTER, or select **Edit** from the **Edit** menu. You can also double-click the service. Each type of service you add has different configuration settings. The sections that follow describe each type of service and the required configuration options.

Configuring SMTP services

Figure 15.2 SMTP service configuration



The screenshot shows a dialog box titled "Edit SMS/Pager Service Definition". It contains the following fields and controls:

- Service ID: SMTP SERVICE
- Service Type: SMTP (dropdown menu)
- SMTP Server: SMTPSERVER.MYCOMPANY.COM
- SMTP Sender Address: MyAddress@MyCompany.com
- Buttons: OK, Cancel

Service ID This is a descriptive ID for the service provider or type of service. When you edit and change the service ID of a listed pager service, Enterprise Fax Manager creates a copy of the service with the new name, rather than re-naming the service.

Service Type Select **SMTP** as the service type.

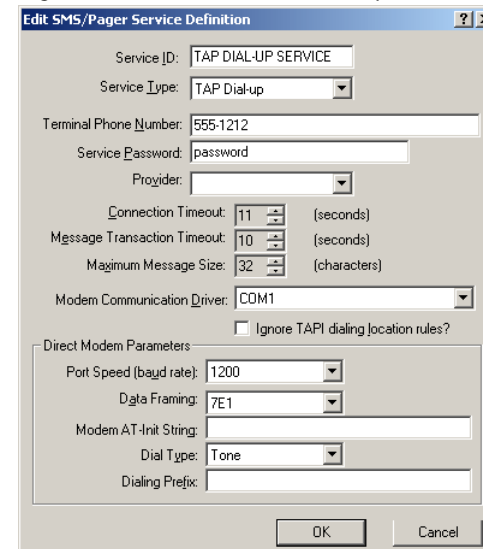
SMTP Server The name of your service provider's SMTP server.

SMTP Sender Address This is an SMTP mail address from which the page will be sent. Some SMTP message servers *require* the sender's SMTP address in order to process transactions.

Configuring TAP and UCP Dial-up services

Tap-Dial-up and UCP Dial-up both have the same configuration options.

Figure 15.3 TAP and UCP Dial-up service configuration



The screenshot shows a dialog box titled "Edit SMS/Pager Service Definition". It contains the following fields and controls:

- Service ID: TAP DIAL-UP SERVICE
- Service Type: TAP Dial-up (dropdown menu)
- Terminal Phone Number: 555-1212
- Service Password: password
- Provider: (dropdown menu)
- Connection Timeout: 11 (seconds) (spinners)
- Message Transaction Timeout: 10 (seconds) (spinners)
- Maximum Message Size: 32 (characters) (spinners)
- Modem Communication Driver: COM1 (dropdown menu)
- Ignore TAPI dialing location rules?
- Direct Modem Parameters:
 - Port Speed (baud rate): 1200 (dropdown menu)
 - Data Framing: 7E1 (dropdown menu)
 - Modem AT-Init String: (text field)
 - Dial Type: Tone (dropdown menu)
 - Dialing Prefix: (text field)
- Buttons: OK, Cancel

Service ID This is a descriptive ID for the service provider or type of service. When you edit and change the service ID of a listed pager service, Enterprise Fax Manager creates a copy of the service with the new name, rather than re-naming the service.

Service Type Select **TAP Dial-up** or **UCP Dial-up** as the service type.

Terminal Phone Number This is your service provider's modem phone number (for TAP and UCP messaging only).

Service Password The password your service provider requires to access their TAP or UCP messaging systems (if any).

Provider Specify the specific provider for your UCP or TAP service. If your provider is not listed here, select "None."

Connection Timeout The length of time, in seconds, for RightFax to successfully connect to the TAP or UCP messaging system. If a timeout occurs, RightFax will abandon the call and no message will be sent.

Message Transaction Timeout The length of time, in seconds, for RightFax to successfully send the message to the TAP or UCP messaging system. If a timeout occurs, RightFax will abandon the call and no message will be sent.

Maximum Message Size The maximum number of characters allowed by your service provider for pager or SMS messages.

Modem Communication Driver Specify the COM port for the modem on the RightFax server. If you have installed one or more TAPI modems on your RightFax server, you can select from those modems as well. If you select a TAPI modem, the **Direct Modem Parameters** settings (described later) will be unavailable because those settings will be taken from your TAPI modem configuration on the RightFax server.

Ignore TAPI Dialing Location Rules Ignores any specified dialing location rules (such as add 9 to dial out) if you have specified a TAPI modem in the **Modem Communication Driver** box (described earlier).

Direct Modem Parameters These parameters are configured according to your modem type and phone system dialing requirements. If your pager or SMS service provider recommends a baud rate for connecting to their TAP or UCP systems, enter the baud rate in the **Port Speed** box.

Configuring SMS services

Figure 15.4 SMS service configuration

Service ID This is a descriptive ID for the service provider or type of service. When you edit and change the service ID of a listed pager service, Enterprise Fax Manager creates a copy of the service with the new name, rather than re-naming the service.

Service Type Select **SMS** as the service type.

PPG Host (IP or Name) Use the default value for the PPG Host.

PPG Port Number Use the default value for the PPG Port Number.

Logging SMS and Pager Alerts

SMS and pager alerts are logged in the NT Event Log with a special event identifier. The purpose of this identifier is to allow Windows NT monitoring systems to identify when an alert has

occurred without monitoring the contents of the event entry. To filter on these events, filter for Source = "RightFax Server Module" and Category = "Administrative Alert."

At least one person must be set up to receive an alert of each type to cause this logging to occur. If no users are set up to receive alerts, then none will be logged in the NT Event Log using the special event identifier.

■ ■ ■

Using the Alerting and Monitoring Service

The RightFax Alerting and Monitoring service lets you monitor a set of server statistics that you define in Enterprise Fax Manager and receive alerts relating to those statistics. To use the RightFax Alerting and Monitoring service, you must first install and configure the service, and then define the statistics to monitor and their alert thresholds.

Installing the Alerting and Monitoring Service

The Alerting service is automatically installed and enabled on all RightFax Enterprise servers version 8.7 and higher. For information on enabling the Alerting module on other types of RightFax server, contact the Captaris RightFax support department.

Installing the Alerting and Monitoring service on remote computers

Because the RightFax Alerting service is designed to provide information about and send alerts relating to the RightFax server, you may choose to run the Alerting service on a computer other than the RightFax server. When the Alerting service is installed on a remote computer, it will continue to operate and send alerts even if the RightFax server shuts down or experiences other problems.

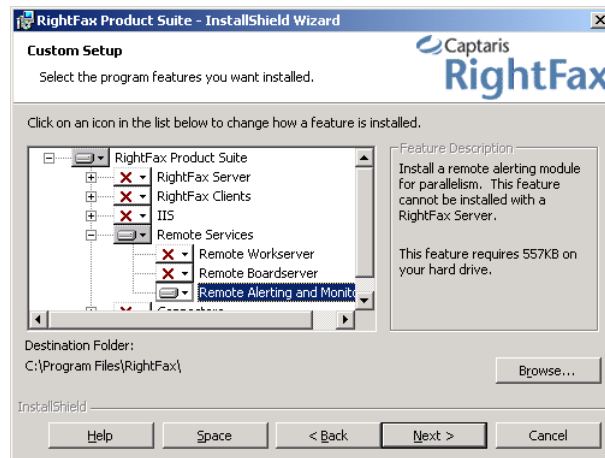
When the Alerting service is installed on a remote computer, all of the configuration for the service and the individual alerts is managed on the RightFax server that the service will be monitoring. No additional configuration on the remote computer is required.

To install the RightFax Alerting service on a remote computer

1. Make sure that the Alerting service is installed and enabled on the RightFax server that you will be monitoring. In addition, you must create a share of the Program Files\RightFax folder on the RightFax server that is accessible by the computer that will be running the remote service. If either of these requirements are not met, the remote installation will fail.
2. Log on to the remote computer using an ID with Windows administrative access.
3. 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.
4. In the menu of install options, select the option to install the RightFax product suite. The RightFax install wizard opens.
5. 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**.

6. Enter your name, organization name, and your product serial number when prompted. Your product serial number is printed on a label attached to the product box. Click **Next**.
7. On the **Setup Type** screen, select **Custom** and then click **Next**.
8. Expand the tree of install components. Remove the install option for all components except **Remote Alerting and Monitoring** under **Remote Services**. Click **Next**.

Figure 16.1 The Remote Alerting and Monitoring install option



9. When prompted for a RightFax server name, enter the name of the server that you want to monitor. Click **Next**.
10. Click **Install**. Because the remote alerting service pulls all of its configuration information from the specified RightFax server, no additional configuration is required on the remote computer.
11. The Alerting and Monitoring service will appear in Enterprise Fax Manager after it has been configured (described in the next section.)

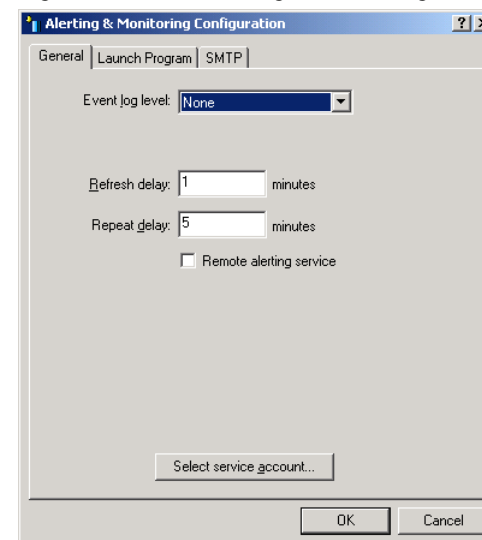
Configuring the RightFax Alerting Service

To configure the Alerting and Monitoring service, open Windows Control Panel and double-click **RightFax Alerting Monitoring**. The **Alerting & Monitoring Configuration** dialog box opens.

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

The Alerting and Monitoring Configuration General Tab

Figure 16.2 The Alerting & Monitoring Configuration General tab



Event log level Specify the level of information logged in the Application Event Log under the service name “RightFax Alerting Module.” You can select the following options:

- **None.** No information is saved.
- **Terse.** Records critical errors only.
- **Normal.** Records errors and major events only.
- **Verbose.** Records all significant events and is most useful for tracking and resolving problems.



Caution 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.

Refresh delay Specify the frequency, in minutes, that the Alerting service will poll the RightFax server for statistics.

Repeat delay Specify the frequency, in minutes, that alerts will be sent when statistic thresholds are met.

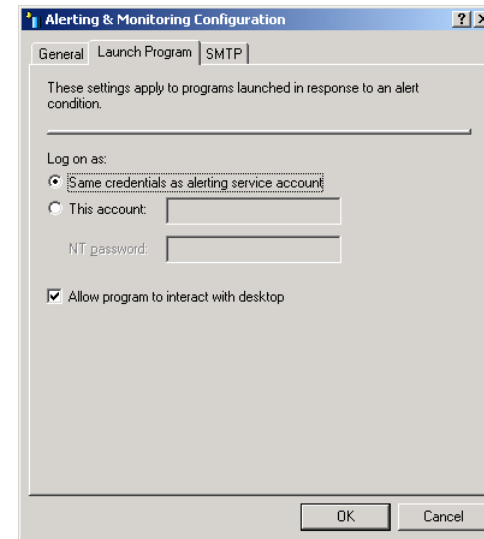
Remote alerting service This option indicates that the Alerting service will operate on a computer separate from the RightFax server. If you select this option, the Alerting service will not be started automatically by the Server module. For more information on installing and running the Alerting service remotely, see [“Installing the Alerting and Monitoring service on remote computers”](#) on page 153.

Select service account The RightFax Alerting service logs on to the network by default using the local system account. Click this button to optionally specify a different Windows user account for the service to use. If you want the Alerting service to authenticate to the RightFax server using NT authentication, you must select a Windows user account that has a corresponding RightFax user with NT authentication enabled.

When you select this option, the **Select service account** dialog box opens. For information on how to complete the options on this dialog box, see [“Selecting a Service Account”](#) on page 36.

The Alerting and Monitoring Configuration Launch Program Tab

Figure 16.3 The Alerting & Monitoring Configuration Launch Program tab



The RightFax Alerting service lets you optionally run a program (such as a batch file or other process) when thresholds for monitored statistics are reached. The options on this tab let you configure how these programs will be launched by the Alerting service.

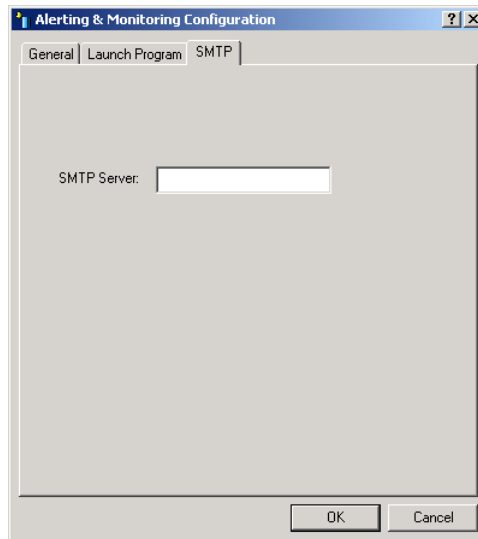
Log on as Programs launched by the Alerting service require a Windows user account in order to access the network. Select one of the following options:

- **Same credentials as alerting service account.** Programs launched by the Alerting service will use the same user account information as the Alerting service.
- **This account.** Specify a Windows user account other than that used by the Alerting service. If you select this option, you must also enter the password for the specified user account in the **NT password** box.

Allow program to interact with desktop Specifies whether the program launched will be accessible from the Windows desktop and usable by whomever is logged on when the service is started.

The Alerting and Monitoring Configuration SMTP Tab

Figure 16.4 The Alerting & Monitoring Configuration SMTP tab

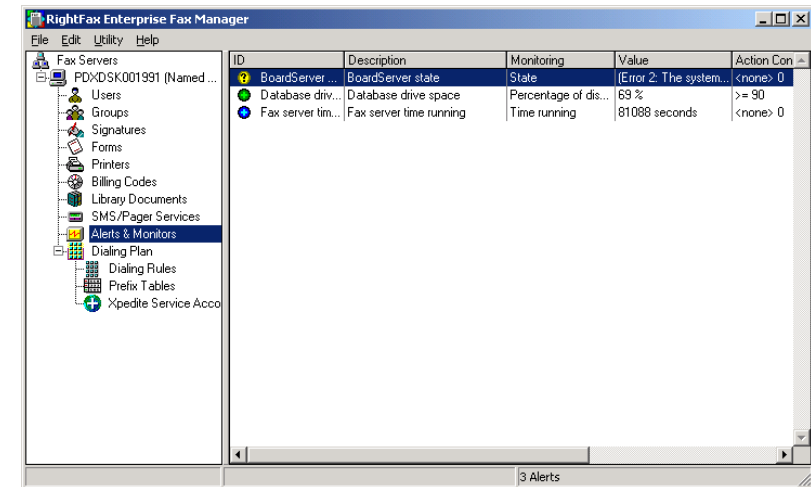


The RightFax Alerting service lets you optionally deliver alerts as e-mail messages via SMTP when thresholds for monitored statistics are reached. In the **SMTP Server** box, enter the name of the SMTP server that will transport these alerts. The e-mail addresses to which alerts will be sent are configured for each individual alert in Enterprise Fax Manager (described in the next section).

Defining the Statistics to Monitor and their Alert Thresholds

To create, edit, or delete individual alerts, run Enterprise Fax Manager (see “[Starting Enterprise Fax Manager](#)” on [page 89](#)) and click **Alerts & Monitors** under the desired RightFax server in the Fax Server Tree.

Figure 16.5 The Alerts and Monitors List



The alerts and monitors that you create are displayed when you click **Alerts & Monitors** in Enterprise Fax Manager. Each monitor is preceded by a colored icon to indicate its current status. These icons are:

- **Yellow.** Indicates an error retrieving the value of the statistic.
- **Blue.** Indicates that the statistic is being monitored but no alert has been set.
- **Green.** Indicates that the statistic that has an associated alert condition, but the condition has not been met.
- **Red.** Indicates that the statistic that has an associated alert condition, and the condition has been met.

The current value for the statistic you are monitoring is displayed in the **Value** column. Not all monitored statistics can be configured to deliver an alert. Monitored statistics that are configured to deliver alerts are indicated by a green icon in the **ID** column. Statistics that cannot be configured to deliver an alert are indicated by a blue icon. Statistics that cannot be determined due to failure of the monitored service or other problems are indicated by a yellow icon.

Adding new alerts

To create a new alert, press INSERT or select **New** from the **Edit** menu. The **Alert Properties** dialog box opens. For information on completing each of the options on each tab see [“Editing Alert Properties”](#) on page 157.

Deleting alerts

To delete an alert, select the alert to delete and press DELETE or select **Delete** from the **Edit** menu. You will be prompted for confirmation that you want to delete the alert.

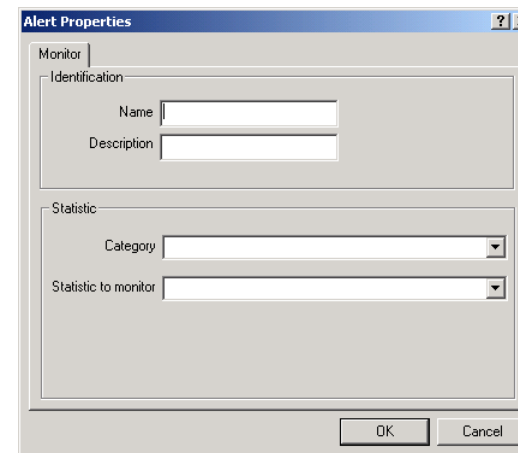
Copying alerts from one server to another

In Enterprise Fax Manager, you can copy one or more alerts from one RightFax server to another. Select the alerts you want to copy, and then drag the selection to another server in the Fax Server Tree. If you copy alerts from a new RightFax server version to an earlier server version, you will lose any configuration data that is not supported on the older server.

Editing Alert Properties

To edit the properties of an existing alert, run Enterprise Fax Manager, select the alert to edit and press ENTER, or select **Edit** from the **Edit** menu. You can also double-click the alert. The **Alert Properties** dialog box opens.

Figure 16.6 The Alert Properties Monitor Tab



Some of the statistics that you configure in this dialog box do not support alerts. These statistics can be configured entirely on the **Monitor** tab. If you select a statistic for which an alert can be configured, two additional tabs, **Actions** and **Message**, will appear on this dialog box. These tabs are described later in this section.

Name This is the name of the alert that will appear under the **ID** column in Enterprise Fax Manager.

Description This is the alert description that will appear under the **Description** column in Enterprise Fax Manager.

Category Alerts are divided into several categories. The statistics that you can monitor (selected in the **Statistics to monitor** box) will differ depending on the category you select. Select from the following options:

- **Fax Server.** Statistics related to activity and events on the RightFax server.
- **Database.** Statistics related to the RightFax database.
- **Workserver.** Statistics related to WorkServers and the processes they control.
- **Gateway.** Statistics related to e-mail gateways.
- **Local BoardServer.** Statistics related to the BoardServer service on the RightFax server.
- **All BoardServers.** Statistics related to the local BoardServer and any remote BoardServer services.
- **RPC Server.** Statistics related to the RPC server which coordinates communication between the RightFax server and other resources on the network.
- **Paging Server.** Statistics related to the paging server used to send notifications via SMS and pages.

Statistic to monitor Select the statistic you want to monitor. The statistics that you can monitor will differ depending on the category you select. For a description of each statistic in this list, see [Appendix F, "Alerting and Monitoring Statistics"](#). Depending on the statistic you select, additional options may appear below the **Statistic to monitor** box. These additional options must be

completed in order to correctly define the statistic. For a definition of these options, click the **[?]** icon in the title bar and then click on the option to define.



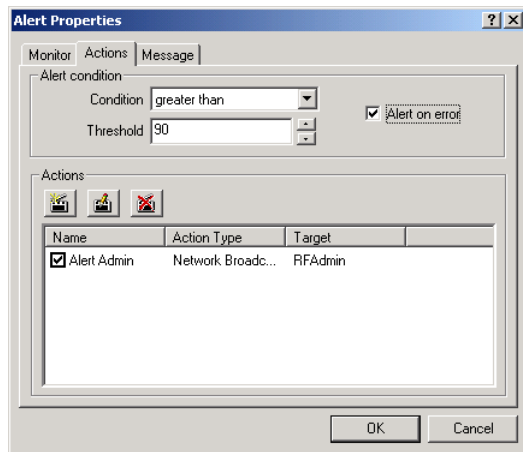
Caution Alerting statistics that allow you to specify a fax channel number require that you start numbering from 1. This differs from the BoardServer configuration which starts numbering channels with 0 (zero). If you want to monitor the first fax channel, you must specify channel 1, even though it is numbered as channel 0 in the BoardServer. If you specify channel 0 in the alerting statistics to monitor, it will be changed automatically to channel 1.

The Actions tab

When you select a statistic on the **Monitor** tab for which an alert can be generated, two additional tabs will appear on the **Alert Properties** dialog box: **Actions** and **Message**. See [Appendix F, "Alerting and Monitoring Statistics"](#) for a list of statistics that support alerts. You must complete the options on both of these tabs in order to generate an alert.

The options on the **Actions** tab let you define the conditions and thresholds under which an alert will be generated, as well as the alert action to take when a statistic's threshold is met.

Figure 16.7 The Alerting Properties Actions tab



Condition Select the operator by which the threshold value will be evaluated.

Threshold Specify a threshold value. An alert will be generated only if the condition you select meets this threshold value.

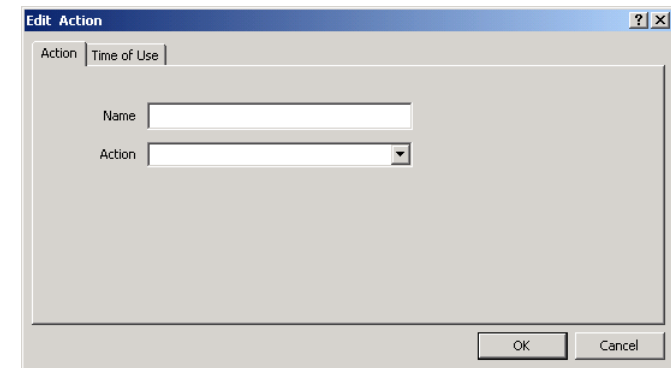
Alert on error If this option is selected, an alert will be generated if the value for the statistic cannot be generated due to errors or other problems with the RightFax service being polled.

Actions The options in this group box let you create, edit, and delete alert actions that will be taken when the statistic threshold is met. You can configure multiple actions for each alert. Follow these steps to create a new alert action:

To create a new alert action

1. Click the **New Action** button in the **Actions** group box. This opens the **Action** tab of the **Edit Action** dialog box.

Figure 16.8 The Edit Action dialog box Action tab



2. In the **Name** box, type a name for the alert to create.

3. In the **Action** box, select the type of alert to send. Alerts can be sent using these four methods:
 - **Network Broadcast.** The network will pop up a message on the specified users computer.
 - **Program.** The RightFax Alerting service lets you optionally run a program (such as a batch file or other process) when thresholds for monitored statistics are reached. A specified program will be launched.
 - **SMS.** A message will be sent to an SMS-capable device such as a cell phone or PDA.
 - **SMTP.** An e-mail message will be sent to a specified user via an SMTP server.

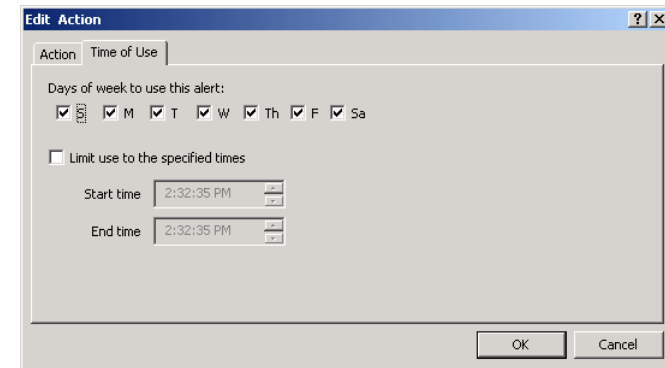


Important *If you are using Windows 2003 and wish to use Network Broadcast notifications, you must open the Control Panel and enable the Messenger service, which is disabled by default.*

Depending on the type of alert action you select, additional options will appear below the **Action** box. These additional options must be completed for the alert to successfully send. For a definition of each of these options, click the **[?]** icon in the title bar and then click on the option to define.

4. When all of the options on the **Action** tab have been completed, click the **Time of Use** tab.

Figure 16.9 The Edit Action Time of Use tab

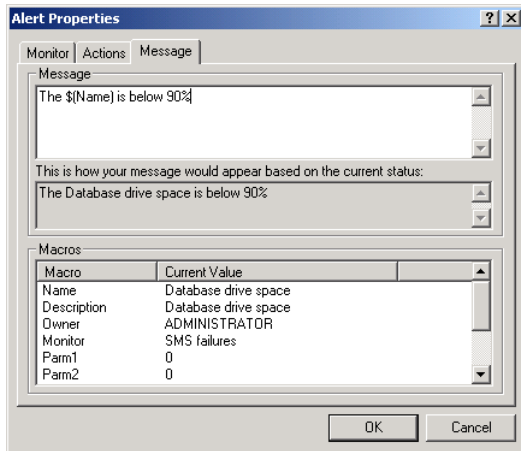


5. To limit the alert to occur only on specific days, select the active days under **Days of the week to use this alert**.
6. If you want to limit the alert to occur only at specific times, select the **Limit use to the specified time** option, and then select a start and end time.
7. Click **OK** to save the alert. The new alert will appear in the list of alerts on the **Actions** tab of the **Alert Properties** dialog box.
8. To enable the alert, click the check box next to the alert name in the list of alerts.

The Message tab

The **Message** tab on the **Alert Properties** dialog box only appears if a statistic you select in the **Statistic to monitor** box supports alerts. See [Appendix F, “Alerting and Monitoring Statistics”](#) for a list of statistics that support alerts. The options on this tab let you define the message text of the alert that will be sent.

Figure 16.10 The Alerting Properties Message tab



Message Enter the message text of the alert. You can use any combination of text and macros from the **Macros** list. An example of the alert message will be displayed in the box below this option.

Macros This is a list of macros that can be included in your message text. To add a macro to the message, place the cursor in the **Message** box where you want the macro text to appear and then double-click the macro in this list.

■ ■ ■

Chapter 17

Creating Dialing Rules and Least-Cost Routing Plans

Dialing rules allow precise control of outbound faxing by specifying rules and restrictions over how faxes are sent, according to their destination fax numbers. For example, using dialing rules, all faxes to a certain area code can be sent via WAN to another RightFax server in your organization at that area code to be sent as a local call, saving long-distance charges. As another example, all international faxes can be restricted to send only at times of day when rates are lowest.

RightFax Intelligent Least-Cost Routing™ (LCR) routes outbound faxes between servers on a wide-area network (WAN) in order to minimize long distance and other telephone charges. Intelligent Least-Cost Routing is comprised of several RightFax components: dialing rules, load balancing, prefix tables, InterConnect, and testing tools.

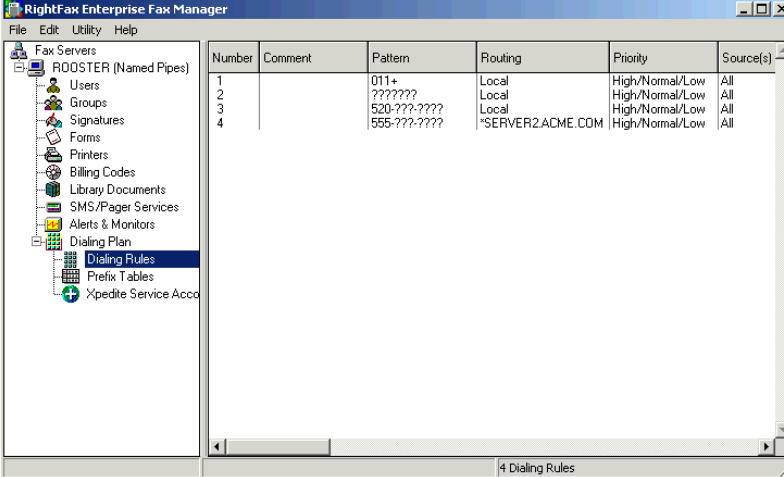
Because servers can be in different locations or serve groups with varying needs, dialing rules are server-specific. If you have multiple RightFax servers, you must create an appropriate list of dialing rules for each server.

Managing Dialing Rules

When creating a dialing rule, you specify the fax number (or, using wildcards, a number pattern) and then attach rules and restrictions to faxes whose destination fax number matches that pattern. In cases where one fax number matches multiple dialing rule patterns, the fax server weighs each rule according to how closely it matches the fax number, and then sends the fax according to the rule with the greatest weight.

To add, edit, or delete dialing rules in RightFax, run Enterprise Fax Manager and click **Dialing Rules** under the desired RightFax server in the Fax Server Tree.

Figure 17.1 The Dialing Rules List



| Number | Comment | Pattern | Routing | Priority | Source(s) |
|--------|---------|---------------|-------------------|-----------------|-----------|
| 1 | | 011+ | Local | High/Normal/Low | All |
| 2 | | ??????? | Local | High/Normal/Low | All |
| 3 | | 520-???:-???? | Local | High/Normal/Low | All |
| 4 | | 955-???:-???? | *SERVER2.ACME.COM | High/Normal/Low | All |

Deleting dialing rules

To delete a dialing rule, select the rule to delete and press **DELETE**, or select **Delete** from the **Edit** menu.

Copying dialing rules from one server to another

In Enterprise Fax Manager, you can copy one or more dialing rules from one RightFax server to another. Select the rules you want to copy, and then drag the selection to another server. The amount of information copied is configured in the Enterprise Fax Manager **Preferences** dialog box (see [“Setting Preferences”](#) on page 91).

If you copy dialing rules from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (for example, features on version 8.5 servers will not be available on version 8.0 servers).

Saving dialing rules

Changes you make to dialing rules are not automatically saved when you quit Enterprise Fax Manager. If you have unsaved dialing rules, an asterisk appears next to the Dialing Plan icon in the server tree. To save changes or additions to your dialing rules, press **CTRL+S** or select **Save Dialing Plan** from the **File** menu.



Important If you are using an Intel Dialogic series fax board, you must do the following before creating or modifying the dialing rules:

- Stop the Boardserver.
- Open the Dialogic Configuration Manager and stop the Intel Dialogic System Service.
- Create or modify the dialing rules.
- Restart the Boardserver.

Adding dialing rules

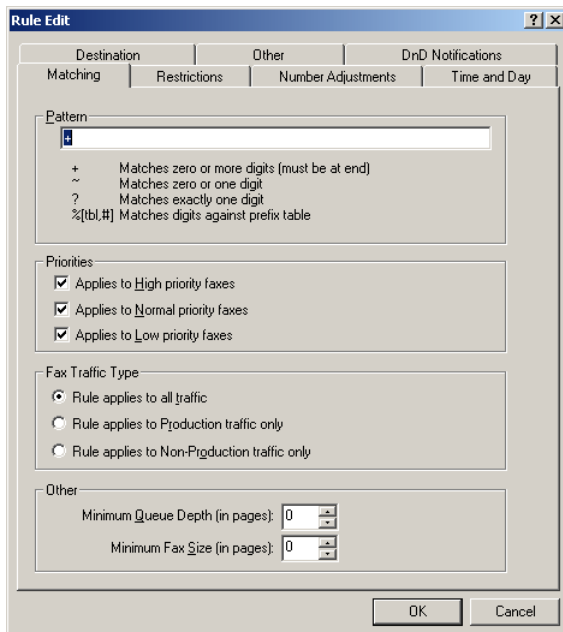
To add a new dialing rule, press **INSERT** or select **New** from the **Edit** menu. The **Rule Edit** dialog box opens. For information on completing each of the options in this dialog box, see [“Editing Dialing Rules”](#) on page 165.

Editing Dialing Rules

To edit the properties of an existing dialing rule, run Enterprise Fax Manager, select the rule to edit and press ENTER, or select **Edit** from the **Edit** menu. You can also double-click the dialing rule. The **Rule Edit** dialog box opens.

The Matching tab

Figure 17.2 The Rule Edit Matching Tab



Pattern The destination fax number or number pattern that the dialing rule will apply to. RightFax ignores any hyphens, parentheses, or spaces in the pattern string. The pattern can include the digits 0–9, as well as the pound [#] and asterisk [*] keys.

You can use wildcards to define variables in the number pattern and thereby specify a range of numbers that the rule will apply to. The following table lists each wildcard that can be used in the **Pattern** box and its definition.

Table 17a Dialing Rule Pattern Wildcards

| Wildcard | Definition | Examples |
|--------------|--|---|
| + | Matches zero or more digits; must always appear at the end of number string. | “+” matches any fax number entered. “415+” matches any number that begins with 415, including 415-320-7000, 415-4455, and 4151. |
| ~ | Matches zero or one digit; can be placed anywhere in the number string. | “~415+” matches any number beginning with 415 or [digit]415 including 415-320-7000, 415-3222, 1-415-320-7000, and 2415. “~~415+” matches 1-415-320-7000, 9-1-415-320-7000, and 415-320-7000. |
| ? | Matches exactly one digit. | “415-320-7???” matches any number that starts with 415-320 and has its final four digits between 7000 and 7999. “415-???-????” matches any number within the area code 415. |
| %[tableID,#] | Matches digits defined in a prefix table to the number of digits specified (see “Managing Prefix Tables” on page 172). | “415-%[EAST,3]+” matches all numbers that begin with 415 and have a three-digit prefix defined in the prefix table “EAST.” |

Wildcards decrease the weight of a pattern match because they are always less specific than an exact match. For example, the fax number 520-320-7000 matches the pattern "520-320-700?" and "520+", but will always be matched with the first rule because it is more specific.

Priorities Restricts rule matching by the priority assigned by the user to the fax. Only faxes with the priority levels selected here will be considered for this rule. Matching based on priority can be useful when doing fax broadcasts or other large volume faxing. It can also be useful for universal redirection of faxes (e.g., send all high priority faxes from Server2 instead of Server1).

Fax Traffic Type Apply the dialing rule based on whether the fax was generated by the RightFax Integration Module. You can restrict the rule to production faxes only, non-production faxes only, or apply the rule to all faxes.

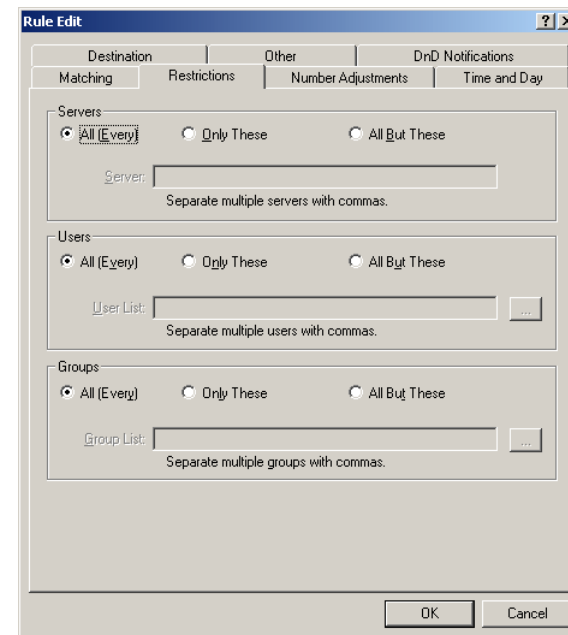
Minimum Queue Depth Specify the number of fax pages that must be waiting in the server's queue before this rule will be considered. This lets you define a dialing rule that can offload outgoing fax traffic to another server when the load on the current server gets too high.

Minimum Fax Size Specify the minimum number of pages a fax must be before this rule will be considered. This lets you define a dialing rule that can offload very large faxes to another server, leaving the local server free to send only smaller faxes.

The Restrictions tab

Each dialing rule can be restricted to specific servers, users, or groups in your organization.

Figure 17.3 The Rule Edit Restrictions Tab



You have the following options:

- To apply the rule regardless of the origin of the fax, click **All (Every)**.
- To apply the rule to only the IDs you specify, click **Only These**. Enter one or more names of the servers, users, or groups to which the rule applies. Separate multiple entries with commas.
- To apply the rule in all cases except the IDs you specify, click **All But These**. Enter one or more names of the servers, users, or groups that are exempt from the rule. Separate multiple entries with commas.

The Number Adjustments tab

The Number Adjustments tab specifies how fax numbers that match the dialing rule should be modified in order to properly send from the specified destination.

Figure 17.4 The Rule Edit Number Adjustments Tab

These options let you add or remove digits from the beginning or end of the destination fax number. This can be used to automatically add a “1” to long distance calls or to add a “9” if

necessary to get an outside line. It can also be used to add a user’s long distance billing code, or to remove all but the last four digits of a number for internal routing.



Note RightFax can specify a global dialing prefix for all outbound faxes in your Global Board Settings (see “Configuring BoardServer global board settings” on page 54). If your organization requires a dialing prefix for all outgoing calls, you should specify the prefix there and not here in the dialing rules.

You can append or prepend any combination of dialable digits. You can also include special dialing characters that have special meaning to RightFax. The following table lists the dialable characters and their definitions (characters are not case-sensitive).

Table 17b Dialing Characters Supported by Dialing Rules

| Character | Definition |
|-----------|--|
| 0–9 | Dialable phone digits. |
| ! | Hook-flash signal. |
| # | Pound button on phone. |
| * | Asterisk button on phone. |
| , (comma) | 1-second pause (you can combine several of these characters to increase the length of the pause). |
| A | Replaced in the dial string by the fax’s Billing Code 1 value. |
| B | Replaced in the dial string by the fax’s Billing Code 2 value. |
| C | Replaced in the dial string by the fax’s ToContactNum value (the recipient’s voice number). |
| D | Replaced in the dial string by the fax’s ToName value (the recipient’s name). Any undialable characters in this field will be discarded. |

Table 17b Dialing Characters Supported by Dialing Rules (Continued)

| Character | Definition |
|-----------|---|
| E | Replaced in the dial string by the fax's ToCompany value (the recipient's company name). Any undialable characters in this field will be discarded. |
| F | Replaced in the dial string by the user's domestic long distance Auto Billing Code (see "Configuring automated billing codes" on page 66). |
| G | Replaced in the dial string by the user's international long distance Auto Billing Code (see "Configuring automated billing codes" on page 66). |
| I | 5-second pause (you can combine several of these characters to increase the length of the pause). |
| P | Pulse dialing mode. |
| T | Tone dialing mode (default). |
| W | Wait up to 15 seconds for a dial tone. |
| { | Do not prepend the dialing prefix. |
| } | Do not append the dialing postfix. |

The Time and Day tab

The Time and Day tab let you specify the time periods for each day of the week that the rule will be applied. This can be used to take advantage of special off peak phone rates or to balance fax loads between servers at the times when your fax traffic is the highest.

Figure 17.5 The Rule Edit Time of Day Tab

For each day of the week, enter the time period when the rule will apply using 24-hour military notation (i.e., "07" for 7:00 a.m. and "19" for 7:00 p.m.). Do not specify minutes. The rule will apply throughout the last hour in the range. For example, when you specify the time range "06–18," the rule will apply from 6:00 a.m. until 6:59:59 p.m.

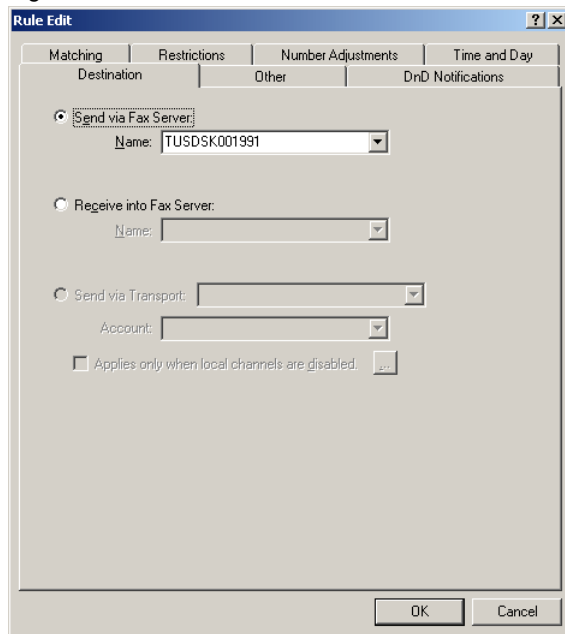
If you leave a box blank, the rule will not be in effect during that day. To apply a rule at all times, enter "00–23" next to each day.

Quick Sets These buttons let you quickly apply the most common time restriction settings.

The Destination tab

The Destination tab specifies where in your organization faxes matching the dialing rule pattern should be routed prior to dialing the destination fax number.

Figure 17.6 The Rule Edit Destination Tab



Send via Fax Server Causes the fax to be routed to any RightFax server (including the local server) on your network for transmission. When you select this option, you must also specify the destination server name and network protocol to use for routing.

When a fax is routed to another RightFax server on the network, the destination fax number is reevaluated against the dialing rules on the new server. The new server then transmits or forwards the fax according to its own rules. Be careful not to create dialing rules on two or more servers that would result in the servers looping one fax between them. If this occurs, RightFax will send the fax after ten loops.

Receive into Fax Server Causes the fax to be routed to a RightFax server (including the local server) on the network and delivered as an inbound fax. This allows you to define “intra-office” routing rules that let RightFax users in your organization send faxes to each other across different fax servers on the network. When you select this option, you must also specify the destination server name and network protocol to use for routing. If the fax number does not match a routing code on the receiving RightFax server, the fax will be routed to the Default user ID on that server.

Send via Transport This option lets you select one of the transport methods that you added and configured in the RightFax DocTransport module (described in [Chapter 5, “Configuring the DocTransport and BoardServer Modules”](#)) as the fax destination, rather than a specific RightFax server. In order to select a transport

method in this box, the transport must have been added in the DocTransport module. You can select from the following transport methods:

- **FOIP.** The fax will be transmitted via your SMTP server to a T.37-compatible device. T.37 fax over IP is a fax transmission protocol that allows faxes to be transmitted to T.37-compatible devices over IP, rather than dedicated fax channels. The fax is packaged as an e-mail message with a TIFF attachment and then sent over IP via an SMTP server. This message is automatically interpreted as a fax by the receiving device, which then prints it.

To specify the e-mail address of the destination T.37-compatible device, click the **Number Adjustments** tab (described on [page 167](#)), strip all of the digits from the destination fax number, and then prepend the destination e-mail address.

- **SMS.** The fax will be routed to an SMS number. When a fax is sent to an SMS device, only the cover page notes are transmitted.

To specify the destination SMS number, click the **Number Adjustments** tab (described on [page 167](#)), strip all of the digits from the destination fax number, and then prepend the desired SMS number.

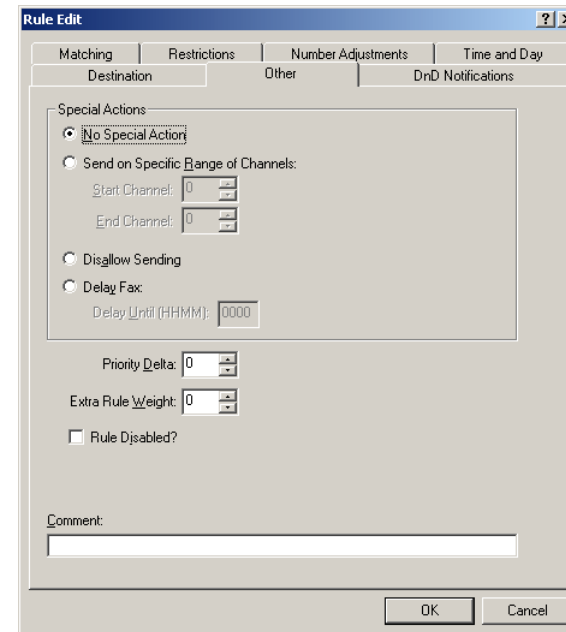
- **DOCplus.** DOCplus is a fax transmission service provided by Xpedite (www.xpedite.com) that lets you forward fax images to an Xpedite server for transmission via their fax channels. This feature is most useful if you want to send a large volume of faxes in a short period of time or need to send more faxes than your fax channel capacity can efficiently manage.

If you select this option, you must also specify a DOCplus account in the **Account** field. Select one of the Xpedite accounts that you have configured in Enterprise Fax Manager.

Applies Only when Local Channels are Disabled Causes the rule to be in effect only when the fax server has detected that all fax channels are disabled.

The Other tab

Figure 17.7 The Rule Edit Other Tab



No Special Action Processes the fax without delay on any available channel.

Send on Specific Range of Channels Sends the fax only on the channels you specify. The channel range specified here will override any channel restriction placed on a specific fax using the <CHANNEL> embedded code. This parameter is not transferred with the fax if it is routed to another fax server for sending.

Disallow Sending Prevents faxes from sending based on certain attributes such as the number pattern, time of day, or sender. The user will get the message "Fax blocked from dialing phone number." To retry sending the fax, the user must "kick" the fax (described in the FaxUtil online help).

Delay Fax Prevents the fax from sending until a specified time of day. If the specified time is earlier than the time the fax is received, the fax will send at that time on the next day. Specify the **Delay Until** time using military notation (0000–2359).



Note *Intelligent Least-Cost Routing rules are evaluated one time. If transmission is delayed by the Delay Fax setting, then other settings for the rule will not be evaluated.*

Priority Delta Set dialing rules to adjust a fax's priority setting (low, normal, or high). Priority is rated on a three-point scale: low priority ≤ 1 , normal priority = 2, high priority ≥ 3 . Using the priority delta, you can add or subtract points from all faxes that match the dialing rule pattern to adjust their priority up or down.

Extra Rule Weight Add additional weight to the dialing rule. When a fax number matches two or more dialing rules, RightFax “weighs” each rule according to how closely it matches the dialed number and uses the rule with the highest weight. This setting adds extra weight to the rule so it can be selected over another rule that has a better pattern match.

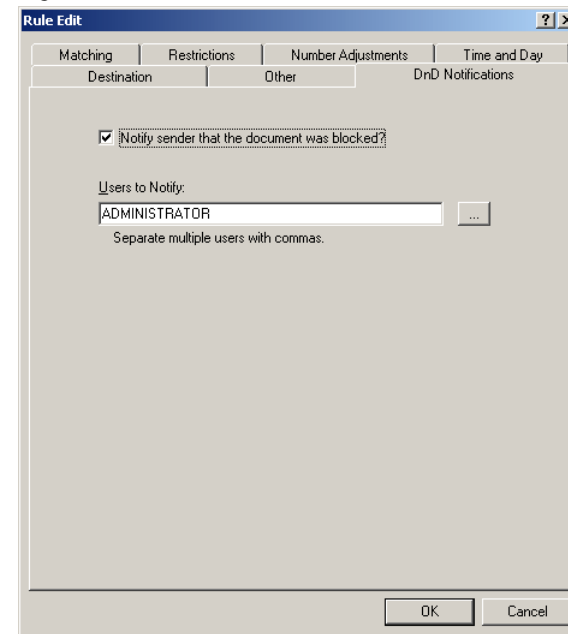
Dialing rule pattern characters are weighted as follows: digit match (0–9) = 10 points, + (plus) = 0 points, ? (question mark) = 5 points, ~ (tilde) = 4 points.

Rule Disabled Removes the dialing rule from consideration by the fax server. To enable the dialing rule, click to clear the check box.

Comment Optionally enter a descriptive comment for the dialing rule.

The DnD Notifications tab

Figure 17.8 The Rule Edit DnD Notifications Tab



Notify sender that the document was blocked Select this option if you want the sender to be notified after attempting to send a fax to a number that has been blocked.

Users to Notify Specify the RightFax user IDs to which notifications will be sent. If you want to specify multiple user IDs, separate ID's with a comma. You can also select user IDs from a list of all user IDs on the local server by clicking the [...] button. To select multiple users from this list, press CTRL and click on each user ID you want.

Example of dialing rules in use

A company with RightFax servers in New York and Seattle adds the following dialing rules on the New York server:

206-???-????

Remove first three digits and send via Seattle server

206-820-50??

Remove first six digits and receive into Seattle server

When someone in New York sends a fax to 206-820-7000 (faxing to a customer in Seattle) the server will route the fax to the Seattle server which then sends it via a local call. However when someone in New York sends a fax to a co-worker in Seattle at 206-820-5065, the server will consider the fax a "received fax" and will route it to the appropriate internal fax mailbox (5065).

Load Balancing

Load balancing is the process of dividing your outgoing fax traffic across multiple RightFax BoardServers, each fax being routed to the BoardServer with the most available fax channels.

To do this, create multiple dialing rules with the same number pattern, each routing the fax to a different BoardServer computer. Because the number patterns are the same, each rule will be assigned the same "weight." When multiple rules match a fax number with equal weight, RightFax directs the fax to the BoardServer with the most available fax channels. If none of the servers have outbound fax channels available, the fax will be directed to the BoardServer that will have a channel available the soonest.



Important Outbound faxes are always sent to the BoardServer with the most assigned fax channels before the dialing rules that determine load balancing are processed. For this reason, you should include all load balancing dialing rules on all fax servers and remote BoardServer computers. This will ensure that your load balancing rules operate even if one or more BoardServer computers fail.

The load balancing feature is only available in RightFax Enterprise servers.

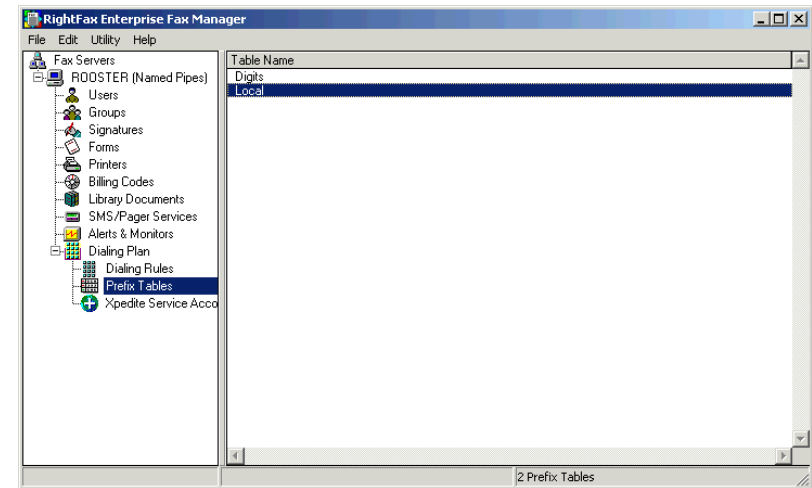
Managing Prefix Tables

You can store and organize groups of numbers such as dialing prefixes and area codes in prefix tables. These tables are used when creating dialing rules to represent a range of numbers, rather than creating a separate rule for each number pattern.

For example, a prefix table can be created that contains all of the area codes in a major metropolitan area. Using this prefix table, you can create a single dialing rule that addresses all of these area codes, rather than creating a separate rule for each area code.

To add, edit, or delete prefix tables in RightFax, run Enterprise Fax Manager and click **Prefix Tables** under the desired server in the server list.

Figure 17.9 The Prefix Tables List



Adding prefix tables

To add a new prefix table, press **INSERT** or select **New** from the **Edit** menu. The **Prefix Table Edit** dialog box opens. For information on completing each of the options in this dialog box see [“Editing Prefix Tables”](#) on [page 173](#).

Deleting prefix tables

To delete a prefix table, select the table to delete and press **DELETE**, or select **Delete** from the **Edit** menu.

Copying prefix tables from one server to another

In Enterprise Fax Manager, you can copy one or more prefix tables from one RightFax server to another. Select the tables you want to copy, and then drag the selection to another server. The amount of information copied is configured in the Enterprise Fax Manager **Preferences** dialog box (see [“Setting Preferences”](#) on [page 91](#)).

If you copy users from a new RightFax server version to an earlier server version, you will lose configuration data that is not supported by the older server (in other words, features on version 8.5 servers will not be available on version 8.0 servers).

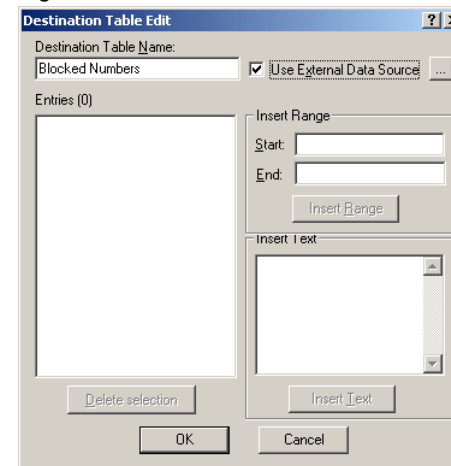
Saving prefix tables

Changes you make to prefix tables are not automatically saved when you quit Enterprise Fax Manager. If you have unsaved prefix tables, an asterisk appears next to the Dialing Plan icon in the server tree. To save changes or additions to your prefix tables, press **CTRL+S** or select **Save Dialing Plan** from the **File** menu.

Editing Prefix Tables

To edit the properties of an existing prefix table, run Enterprise Fax Manager, select the table to edit and press **ENTER** or select **Edit** from the **Edit** menu. You can also double-click the prefix table. The **Destination Table Edit** dialog box opens.

Figure 17.10 The *Destination Table Edit* dialog box



In the **Destination Table Name** field, enter a name for the table, and then type the entries you want in the **Entries** box. All the entries in a prefix table must be the same length. Entries can only include the digits 0–9, pound [#], and asterisk [*].

Check the **Use External Data Source** option to use a list of numbers from a SQL database. For more information about using this feature refer to the next section, [“Setting up Do not Dial lists from a database”](#).

If the prefix table will contain a range of numbers, enter the starting and ending numbers in the series under **Insert Range** and click the **Insert Range** button. All the numbers in the range you specify will appear in the list.

Setting up Do not Dial lists from a database

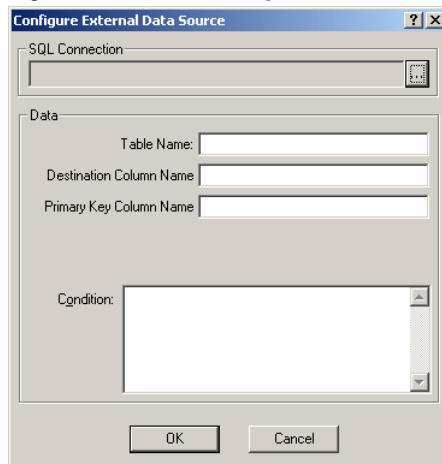
If your organization maintains a database containing lists of phone numbers that should not be dialed, you can link the prefix table directly to this database and then set up a dialing rule that will prevent these numbers from receiving fax transmissions.

Before you can set up a Do not Dial list, you must configure the database containing the numbers to block as an ODBC data source. Refer to the documentation for your server's operating system for information on configuring a new ODBC data source.

After you have set up the ODBC data source for the database containing the numbers to block, follow these steps to set up Do not Dial rules.

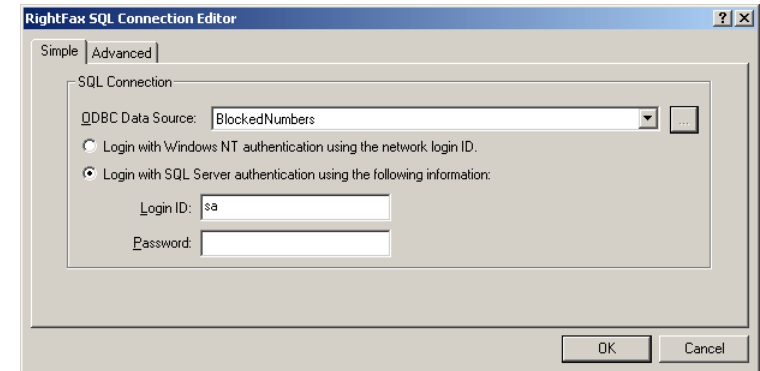
1. In Enterprise Fax Manager, create a new prefix table.
2. Enter a name for the table, select the option **Use External Data Source**, and then click the [...] button. This opens the **Configure External Data Source** dialog box.

Figure 17.11 The *Configure External Data Source* dialog box



3. Click the [...] button next to the **SQL Connection** box to configure the ODBC data source. This opens the **RightFax SQL Connection Editor** dialog box.

Figure 17.12 The *RightFax SQL Connection Editor* dialog box



4. Click the [...] button next to the **ODBC Data Source** box and select the ODBC data source you created for the Do not Dial list.
5. Specify the login information required to access the database and then click **OK**. This will return you to the **Configure External Data Source** dialog box with the connection information entered in the **SQL Connection** field.
6. In the **Table Name** field, enter the name of the table that contains the phone numbers to block.
7. In the **Destination Column Name** field, enter the name of the table column specific to the phone numbers.
8. In the **Primary Key Column Name** field, enter the name of the primary key column for the table you specified in the **Table Name** field.

9. In the **Condition** field, enter any SQL script that you might want to use to limit the range of phone numbers in the database. For example, you could enter a query for a field called “Block Number” set to true. This would limit the range of blocked phone numbers to only those for whom a separate field in the table called “Block Number” is set to true.
10. Click **OK**. The **Destination Table Edit** dialog box reopens with all of the phone numbers from the database listed in the **Entries** box. The entries in the box are dynamic and will be automatically updated as you make changes to the database that you are linked to. There is no need to update this list after it has been set up. Click **OK** to save the table.
11. In Enterprise Fax Manager, create a new dialing rule.
12. On the **Matching** tab, enter the information for the new prefix table in the **Pattern** field using the following syntax:


```
%[PrefixTable,#]
```

Where *PrefixTable* is the name of the prefix table you just created and *#* is the number of digits in each phone number entry. This should not be entered as a digit, but instead you should enter the number of pound symbols equal to the length of the phone numbers in your database.

Example %[BlockedNumbers,#####]
13. Click the **Other** tab and select the option **Disallow Sending**.
14. Click **OK** to save the dialing rule.

reference all in square brackets. For example, the following dialing rule correctly references the prefix table *Region1* for the three-digit dialing prefix:

```
520-%[Region1,3]-????
```

RightFax InterConnect

InterConnect is a feature that routes faxes from one RightFax server to another. This allows multiple RightFax servers to accept incoming faxes for the same users and then forward the faxes to the server on which the user’s account exists.

For information on enabling and configuring InterConnect, see “[RightFax InterConnect](#)” on [page 216](#)).

Testing Dialing Rules and Fax Routes

Because Intelligent Least-Cost Routing involves many variables that could conflict with one another, RightFax includes diagnostic tools for testing and confirming your fax routing scheme.

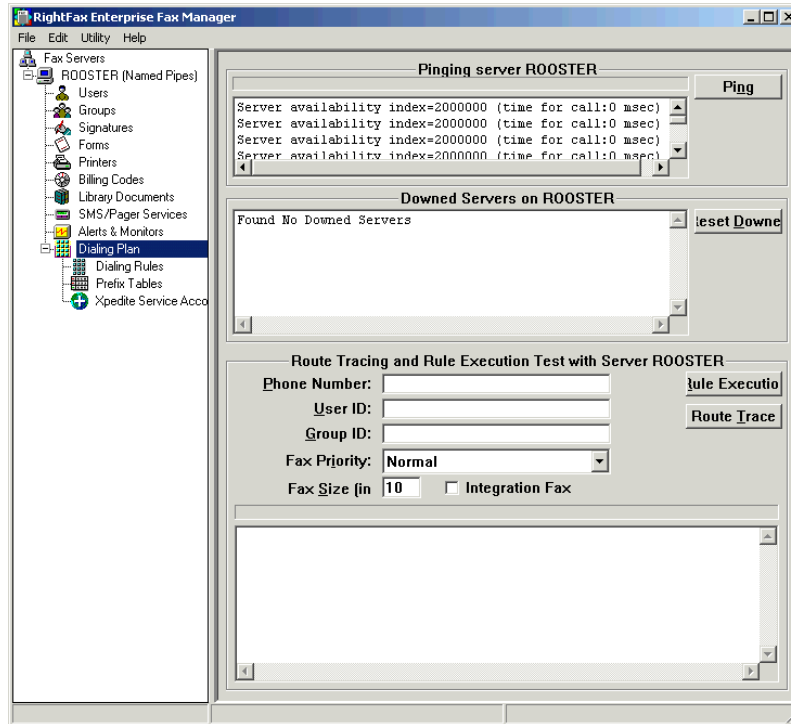
Referencing Prefix Tables in Dialing Rules

Prefix tables are referenced in the **Pattern** setting of dialing rules ([page 165](#)). This allows a single dialing rule to successfully match groups of otherwise unrelated numbers.

In the **Pattern** box in the **Rule Edit** dialog box, replace the digits referenced by the prefix table with a percent sign (%) followed by the name of the prefix table, a comma, and the number of digits to

To run the tests, run Enterprise Fax Manager and click **Dialing Plan** under the server you want to test.

Figure 17.13 Diagnostic Tools for Testing Least-Cost Routing Rules



Pinging a server

By pinging a server, you can test communications with a selected RightFax server using a particular protocol. To run this test, click **Ping**.

The amount of time it takes information packets to make a round trip between machines will display in seconds as “time for call.” The current sever load will display as “server availability index.” The higher the index value, the greater the server availability.

Tracing the route of a fax

You can test the dialing rules you have constructed using real fax numbers without actually sending a fax. This test will show where the fax will be sent from, such as a specific server or a connector in your system. This test will *not* indicate if the fax is delayed or if the transmission is unsuccessful based on dialing rules. For this level of detail, use the rule execution test.

To run this test, enter a fax telephone number in the **Phone Number** box. You can also enter a specific user ID, group ID, fax priority, and fax size to test how each effects the fax routing.

If the dialing rule applies to production faxes, click to select **Integration Fax**. Production faxing is implemented with the optional Integration Module.

Click **Route Trace** to start the test.

As the fax number passes one or more servers, the dialog box will display which rules are being used, how the fax number is manipulated along the way, the number of hops, or jumps, from server to server, and the time it takes to route between servers. The time between servers does not include the time to transfer image data. That additional time will depend on the size, resolution, and density of the fax.

Executing rules

Like tracing the route of a fax, you can test the dialing rules you have constructed using real fax numbers without actually sending a fax. Using the rule execution test, you can obtain more detailed information about dialing rules on a server.

To run this test, enter a fax telephone number in the **Phone Number** box. You can also enter a specific user ID, group ID, fax priority, and fax size to test how each effects the route and execution of the rule.

If the dialing rule applies to production faxes, click to select **Integration Fax**. Production faxing is implemented with the optional Integration Module.

Click **Test** to start the test.

As the fax is routed, the dialog box displays each dialing rule against which the fax number is compared and provides information about the match weights and server availability.

Viewing disabled rules

The **Downed Servers** list displays any rules that are disabled due to downed RightFax servers and the error that caused the rule to be disabled.

To refresh the list of downed servers, click **Reset Downed**.

Call Blocking

By default, the BoardServer module blocks all calls going out to numbers beginning with 911 (the standard emergency number throughout the United States). The numbers blocked by the BoardServer can be changed by adding the following REG_MULTI_SZ key to the Windows registry on the BoardServer machine: HKEY_LOCAL_MACHINE\Software\RightFax\BoardServer\BlockedNumbers. Add the number prefix(es) to block one number per line.

Non-numeric prefix characters will be ignored when the comparison is made, so that a dialed number “,,911” will still match “911” correctly and be blocked. When a RightFax user’s outgoing fax is blocked by this feature, it’s error status will be displayed as “Scheduling Failed.”

BoardServer call blocking can be disabled by adding the following REG_DWORD key to Windows registry on the BoardServer machine: HKEY_LOCAL_MACHINE\Software\RightFax\BoardServer\BlockingFlags. Set this value to “2” to disable all call blocking at the BoardServer level.

Least-Cost Routing Examples

Scenario 1: Using LCR (a simple example)

PDQ Company has a RightFax server in New York City (“NYSERVER”) and one in Tucson (“TSNSERVER”) and wants to save money using Intelligent Least-Cost Routing. PDQ has determined that it would be cheaper to send New York faxes bound for Tucson and Southern Arizona numbers via TSNSERVER. It adds this rule to NYSERVER:

520+
Send via fax server TSNSERVER. Use TCP/IP protocol.

Scenario 2: Using dialing prefix tables

PDQ Company wants to make sure that Southern Arizona calls outside of Tucson are dialed correctly from TSNSERVER. The 458 prefix requires a ‘1’ be prepended onto the number. Also, the 520 area code should not be used. It adds this rule to TSNSERVER:

458+
Send via local fax server. Prepend 1.
520-458+
Send via local fax server. Strip 3 digits from beginning. Prepend 1.

Actually there are more prefixes that could be dialed in Southern Arizona, but it would be cumbersome to add rules for each one. PDQ determines that there are three prefixes (458, 459, 652) in the 520 area code that function this way. PDQ creates a prefix table named SOUTHAZ and includes these three prefixes. It can then use these two rules on TSNSERVER to cover all of Southern Arizona outside Tucson:

%[SOUTHAZ,3]+
Send via local fax server. Prepend 1.
520-%[SOUTHAZ,3]+
Send via local fax server. Strip 3 digits from beginning. Prepend 1.

Scenario 3: Distinguishing '+' wildcard rules from other local numbers

The system administrator for NYSERVER now finds that faxes bound for internal four-digit PBX numbers in New York beginning with "520" are inadvertently being routed out to Tucson. In addition, New York just added a prefix for the Tri-State area of "520" (requiring a 1 be dialed first from the PDQ office) and those calls are going to Tucson, too. To correct this situation, the administrator adds these two rules to NYSERVER:

520?

Send via local fax server

520-????

Send via local fax server. Prepend 1

These two rules intercept 520 calls that would otherwise match the "520+" rule in Scenario #2. These rules would match the local destination numbers more specifically and therefore be weighted more heavily.

Scenario 4: Stripping unnecessary digits

The PDQ system administrator for NYSERVER has also noticed that recent transfers from the Tucson site are still used to using the long distance carrier from there. They are always putting a '1' on the beginning of ten digit long distance numbers. Because the PDQ New York long distance carrier does not require it, she adds this rule to NYSERVER to strip the '1':

1-???-???-????

Send via local fax server. Strip 1 beginning digit.

Scenario 5: Using LCR (an advanced example)

PDQ Company opens a sales office in Los Angeles with a new RightFax server ("LASERVER"). PDQ has worked a deal with the local phone companies in L.A. such that all calls in the local L.A./Orange County area are at a special low rate. A similar deal was worked for the New York metro area. This means PDQ can

save money by routing all LA faxes to the LASERVER and all NY faxes to the NYSERVER. However, because of charges related to the TCP/IP connection between L.A. and N.Y., it is still cheaper to send faxes during off-peak periods to L.A. and N.Y. via direct long distance dialing.

PDQ would first set up four prefix tables: an LA area code ("LAACODE") table and an LA area code+prefix table ("LAPREFIX") on NYSERVER, and a NY area code ("NYACODE") table and a NY area code+prefix table ("NYPREFIX") on LASERVER.

LAACODE and NYACODE each contain a list of area codes that match the cut-rate phone numbers in their respective regional areas. LAPREFIX and NYPREFIX match numbers in area codes where the whole area code was not part of the cut-rate deal and thus only certain prefixes are eligible.

NYSERVER would then have these two rules:

%[LAACODE,3]+

Time of day set to peak times. Send via fax server LASERVER.

TCP/IP protocol

1%[LAPREFIX,6]+

Time of day set to peak times. Send via fax server LASERVER.

TCP/IP protocol

LASERVER would have a matching set of rules referencing NYACODE and NYPREFIX and routing to NYSERVER. Peak times must be specified because it is still cheaper to send in the evening and at night via long distance.

In addition, a local rule is required on both the NYSERVER and LASERVER to strip off the unnecessary area code. PDQ adds this rule on NYSERVER:

212+

Send via local fax server. Strip 3 digits

A similar rule would be necessary for LASERVER as well.

To enable Intelligent Least-Cost Routing for TSNSERVER to NY and LA, a copy of each of the four prefix tables and each of the dialing rules would be entered on TSNSERVER.

Scenario 6: Boosting priority

PDQ Company is expanding and the load on the RightFax servers is increasing. PDQ decides to boost the priority of faxes from certain high priority Groups and Users on LASERVER to ensure that their faxes are sent quickly. This rule is added to LASERVER:

+
Restricted only to Users: SALESMGR,CFO and to Group: TOPDOGS. Priority Delta +1.

Scenario 7: International routing

PDQ Company expands into the international market. Their first overseas site is London which has a RightFax server installed ("UKSERVER"). All faxes from LA, NY, and Tucson bound for England need to be routed to UKSERVER. This rule is added to each of these servers:

011-44+
Send via fax server UKSERVER. Use TCP/IP protocol.

Rules would need to be placed on UKSERVER to "normalize" the phone numbers for England (such as stripping area codes or adding digits if necessary).

Scenario 8: Load balancing

PDQ adds another RightFax server to its expanding NY site ("NYSERVER2"). Also, usage data indicates that during peak times, faxes on NYSERVER are taking, on average, several minutes longer to be sent than those on NYSERVER2. Upon analysis, PDQ finds that the users of NYSERVER are sending many more faxes than the users on NYSERVER2.

By entering these two rules on each server, new outgoing faxes on each server will be routed to the one with the least load:

+
Send via local fax server

+
Send via fax server NYSERVER2 (or NYSERVER). Use TCP/IP protocol

Because each rule is weighted the same, RightFax load balances between the two servers.

Scenario 9: Backup servers

PDQ Company's system administrator for LASERVER hears about the new NYSERVER2 in New York and decides to make use of the additional server by replicating all the dialing rules on LASERVER for NYSERVER but this time referring them to NYSERVER2. This leads to a guaranteed path of Intelligent Least-Cost Routing should one or the other of the N.Y. servers fail for any reason.

■ ■ ■

Chapter 18

Creating Fax Cover Sheets

Fax cover sheets are saved as template files on the RightFax server. Cover sheet files can include both text and graphics, customized to your organization's needs, and you can create multiple cover sheet files, each for specific departmental use or for use with different types of fax documents.

Fax cover sheet files can include special codes (called “cover sheet codes”) that will display the recipient's name and other contact information for both the sender and the recipient when the cover sheet is generated.

You can create the following types of cover sheets:

- HTML (described on [page 181](#))
- Microsoft Word (described on [page 183](#))
- PCL (described on [page 185](#))



Note *PCL cover sheets should not be used on RightFax servers running Windows 2000 or Windows XP. This is because Windows 2000 and Windows XP manage native printer fonts differently from other versions of Windows, and cover sheet codes in PCL cover sheets may be improperly converted by the fax server and may generate imaging errors.*

RightFax cover sheet files may not be longer than one page. Any cover sheet information that appears on subsequent pages will be ignored. As a general rule, fax cover sheets should include

information about the sender and intended recipient as well as information about your organization (such as logo, address, and phone number).

All RightFax cover sheet files are stored in the RightFax\FCS folder on the fax server. This folder contains sample fax cover sheets that you can either modify or refer to as examples in creating your own custom cover sheet files.

Creating an HTML Cover Sheet

HTML cover sheets can be created using an HTML or text editor. RightFax supports both HTML and meta-HTML (single-file multi-part MIME HTML) cover sheet files. Both HTML and meta-HTML files may include any text and graphics that are supported by these file types.

Graphic images in HTML cover sheets must be referenced using absolute paths, not relative paths. This is because the cover sheet file is processed and generated by the RightFax server in a location separate from the RightFax\FCS folder where the cover sheet file is stored, so images with relative path references will not be found. This rule does not apply to meta-HTML cover sheets, because meta-HTML embeds graphic images.

Because information on the cover sheet about the sender and intended recipient varies with each fax document, these variable elements are included as special cover sheet codes (see [“Using HTML cover sheet codes”](#) on [page 182](#)) that are replaced with the correct information when the cover sheet is generated.

HTML cover sheet files must use either the extension .htm or .mht (for meta-HTML files). Files with the extension .html will not be recognized by the RightFax server. When you have completed the HTML cover sheet file, copy it to the RightFax\FCS folder on the RightFax server. Because the cover sheet file name is the name users will see when they select cover sheets, it is recommended that you use descriptive file names for all cover sheet files.

Using HTML cover sheet codes

Cover sheet codes are used when you want the fax cover sheet to display information that can vary between fax documents (such as the recipient's name and the number of pages). When a cover sheet is generated by the RightFax server, the cover sheet codes are replaced by the data they represent. In HTML cover sheets, all cover sheet codes are surrounded by braces { }.

Table 18a Cover Sheet Codes for HTML Cover Sheets (Continued)

| Code | Maximum characters | Description |
|-----------------|--------------------|--|
| {CCTEXT} | 69 | All the listed recipients of a fax (including CC and BCC recipients) in this format: Name,FaxNum;Name,Faxnum;... You can include up to 21 {CCTEXT} codes on a cover sheet, each code representing one line of recipients up to 69 characters long. Include one {CCTEXT} code on each line that should contain recipients. The cover sheet will only list the number of recipients for which space is provided. |
| {DATEONLY} | Variable | The date that the fax cover sheet was generated. The date format is determined by the default date format on the RightFax server. |
| {EMAILADDRESS} | Variable | The sender's e-mail address. This is the e-mail address that is entered in the RightFax user properties (described on page 101). |
| {FAXDIDNUM} | 31 | The sender's fax number. |
| {FROMNAME} | 59 | The sender's name. |
| {FROMPHONENUM} | 31 | The sender's phone number. |
| {GENERALFAXNUM} | 31 | The general fax number for the sender's organization. |
| {NOTETEXT} | Variable | The notes added to the fax when it was addressed. |
| {NUMPAGES} | Variable | The number of pages in the fax body, not including the cover sheet. To include the cover sheet in the page count, use the {NUMPAGEESC} code. |

Table 18a Cover Sheet Codes for HTML Cover Sheets

| Code | Maximum characters | Description |
|-------------|--------------------|--------------------------|
| {BILLINFO1} | 15 | Billing code 1 (if any). |
| {BILLINFO2} | 15 | Billing code 2 (if any). |

Table 18a Cover Sheet Codes for HTML Cover Sheets (Continued)

| Code | Maximum characters | Description |
|----------------|--------------------|--|
| {NUMPAGESC} | Variable | The number of pages in the fax <i>including</i> the cover sheet. To exclude the cover sheet in the page count, use the {NUMPAGES} code. |
| {OPERATORNUM} | 31 | The general phone number for the sender's organization. |
| {ROUTEINFO} | Variable | The routing information entered in the user profile of the user creating the fax (described on page 105). |
| {TIMEONLY} | Variable | The time that the fax cover sheet was generated. The time format is determined by the default time format on the RightFax server. |
| {TOCITYSTATE} | 59 | The recipient's city and state. |
| {TOCOMPANY} | 59 | The recipient's organization name. |
| {TOCONTACTNUM} | 31 | The recipient's phone number. |
| {TOFAXNUM} | 31 | The recipient's fax number. |
| {TONAME} | 59 | The recipient's name. |
| {UNIQUEID} | 16 | The unique ID assigned to the outgoing fax. |
| {WHENFAXED} | Variable | The date and time the document was generated by the fax server. This is different from the time it was actually faxed to its destination, which is recorded on the TTI line on each fax page. The time the fax was processed by the fax server can be very different from the time it is actually sent, especially if you are using the RightFax Delay Send feature. |

Creating a Microsoft Word Cover Sheet

If you have Microsoft Word installed on your RightFax server for server-side application conversion (described in [Chapter 24, "Implementing Server-Side Application Conversion"](#)), you can create and use cover sheets in the native Word document format, rather than storing them in PCL5 format.

If you use Microsoft Word to create your cover sheets, you can store the cover sheets in their native Word (.DOC) format instead of printing to a PCL file ([page 186](#)).



Note *In order to perform native Word document cover sheet generation, you must have correctly installed and configured Microsoft Word on the RightFax server ([page 250](#)).*

Word documents stored in the RightFax\FCS folder on the fax server can be selected just like other PCL formatted cover sheet files and will be converted to fax format using server-side application conversion.

Cover sheets stored in the native Word format are easier to update than PCL cover sheet files and support all language character sets supported by Word and Windows NT, including Hebrew. Also, unlike PCL cover sheets, native Word cover sheet codes can use any TrueType font in addition to native printer fonts. Native Word cover sheets can take slightly longer to convert to fax format than PCL files, and this will be exaggerated if the server running Word has insufficient RAM.

Fax cover sheets must be only one page long. All pages after page one are ignored when the cover sheet is generated. Cover sheets should include general information about your organization (such as logo, address, and phone number) and display information about the sender and intended recipient. Because information about the sender and recipient are variables, these elements are inserted as special cover sheet codes (described in the next section), which are replaced with the correct information at the time the cover sheet is generated.

Using Microsoft Word cover sheet codes

Cover sheet codes are used as placeholders for the information that varies between faxes (such as the recipient's name, and the number of pages). When a RightFax cover sheet is generated for an outbound fax, the cover sheet codes are replaced in the fax image by the information they represent.

Cover sheet codes in native Word cover sheets are inserted as Word DocVariable fields. Unlike cover sheet codes in PCL cover sheets, native Word cover sheet codes can be any TrueType or native printer font.

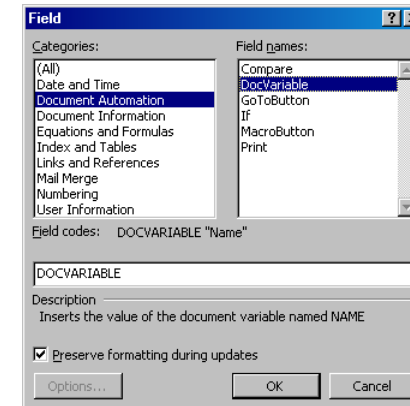


Note Although double-byte characters added to the text of a Microsoft Word cover sheet will convert correctly, double-byte characters inserted into DocVariable fields on Microsoft Word cover sheets will not.

To insert a DocVariable field

1. In your Word cover sheet, position the cursor where you want to place the cover sheet code and select **Field** from the **Insert** menu. The **Field** dialog box opens.

Figure 18.1 The Field Dialog Box in Microsoft Word



Note The DocVariable field will not appear in your document unless you have selected Field Codes in the View tab of the Word Options dialog box.

2. Click **Document Automation**, and click **DocVariable** under **Field Names**. This displays DOCVARIABLE in the **Field Codes** field.
3. Add the cover sheet code to the variable in the format:

DOCVARIABLE *code*

Where *code* is one of the supported cover sheet codes listed in the following table. For example, the following cover sheet code displays the destination fax number:

DOCVARIABLE ToFaxNum

- Click **OK** to insert the code.

Table 18b Native Word Document Cover Sheet Codes

| Variable name | Description |
|---------------|---|
| BillInfo1 | The first billing code assigned to the fax |
| BillInfo2 | The second billing code assigned to the fax |
| CCText | The carbon copy (cc) recipient list for the fax. Use one CCText code only to display all of your cc recipients |
| EmailAddress | The sender's e-mail address. This is the e-mail address that is entered in the RightFax user properties (described on page 101). |
| FaxDate | The date and time the fax was originally created, as opposed to the time of the send attempt |
| FaxDIDNum | The sender's direct fax number |
| FaxSendDate | The date and time the fax was scheduled to send, (if the fax was time-delayed) |
| FromName | The sender's name |
| FromPhone | The sender's personal voice number |
| GeneralFaxNum | The general fax number for the sender's organization. |
| NoteText | Cover sheet notes. Use one NoteText code only to display all of your note text, even if your cover sheet notes are comprised of multiple <NOTE> embedded codes (page 294). If your cover sheet displays only one line of note text, place a carriage return immediately after the DOCVARIABLE code. |
| NumPages | Number of pages in the fax, excluding the cover page |

Table 18b Native Word Document Cover Sheet Codes (Continued)

| Variable name | Description |
|---------------|--|
| NumPagesC | Number of pages in the fax, including the cover page |
| OperatorNum | The general phone number for the sender's organization. |
| RoutelInfo | The routing information entered in the user profile of the user creating the fax (described on page 105). |
| ToCityState | Recipient location |
| ToCompany | Recipient company name |
| ToContactNum | Recipient voice phone number |
| ToFaxNum | Destination fax number |
| ToName | Recipient name |
| UniqueID | The unique ID assigned to the fax |
| UserID | RightFax user ID of fax sender |
| UserName | RightFax User Name of fax sender |



Note If you place cover sheet codes in a Word text box, and the text box is not large enough to fit all of the text that replaces the codes, any extra text will be truncated on the cover sheet. You can fix this by increasing the size of the text box.

Creating a PCL Cover Sheet

RightFax cover sheets can be created in any application that has the ability to print to a PCL5 file. Fax cover sheets may only be one page in length and should include general information about your organization (such as logo, address, and phone number) and display information about the sender and intended recipient. Because information about the sender and recipient are variables, these elements are inserted as special cover sheet codes (see

“Using HTML cover sheet codes” on page 182) which are replaced with the correct information at the time the cover sheet is generated.



Note All fax cover sheets created on Windows 2000 machines should be created and edited using HTML or MS Word cover sheets only. Because Windows 2000 treats native printer fonts differently from other versions of Windows, cover sheet codes in PCL cover sheets are improperly converted by the fax server and may generate an imaging error.

To print to a PCL5 file, select an HP III, HP 4 or compatible printer driver and select the “Print to file” option in your application’s **Print** dialog box. The file must have the extension .pcl and must be saved in the RightFax\FCS folder on the RightFax server. You should use as descriptive a file name as possible because the file name of the PCL5 file is what your users will see when they change cover sheets.

Modifying the sample PCL cover sheet

RightFax is shipped with sample cover sheet files and the source documents they were created from. You can edit these source files to include your organization name and logo, rather than create a new cover sheet. Using Microsoft Word for Windows 6.0 or later, open the FCS.doc file in the RightFax\FCS\PCL_Source folder, make any desired changes, and print the modified cover sheet to a file in the RightFax\FCS folder with the extension .pcl.



Note If you have trouble modifying the sample cover sheet and are using Microsoft Word 97 or later, select **Options** in the **Tools** menu and click the **Compatibility** tab. Select “Microsoft Word 6.0” in the **Recommend Options For** field.

Using PCL cover sheet codes

Cover sheet codes are special codes that represent information that can vary from fax to fax (such as recipient name, and the number of pages). When a RightFax cover sheet is generated for an outbound fax, the cover sheet codes are replaced in the fax image by the information they represent.

Example If Jane Doe sends a fax using a cover sheet that contains the line
From: <FROMNAME>, then the cover sheet will contain this text when it is generated and added to the fax:

From: Jane Doe

Although you can use any font in the text of your cover sheets, cover sheet codes *must always* use a native printer font. This is because when the cover sheet document is printed to PCL5 format, all other font types are converted to graphic images. Only native printer fonts are stored in the .pcl file that the cover sheet is generated from in their original text format. And it is this text in the .pcl file that is replaced on the fax image. If you do not use native printer fonts for your cover sheet codes, the codes themselves will appear on the cover sheet instead of being replaced by the information they represent. All cover sheet codes are surrounded by angle brackets (< >), which must also use the same native printer font.

Table 18c Cover Sheet Codes for PCL Cover Sheets

| Code | Maximum Characters | Description |
|-------------|--------------------|--------------------------|
| <BILLINFO1> | 15 | Billing code 1 (if any). |
| <BILLINFO2> | 15 | Billing code 2 (if any). |

Table 18c Cover Sheet Codes for PCL Cover Sheets (Continued)

| Code | Maximum Characters | Description |
|-----------------------------------|--------------------|--|
| <CCTEXT> | 69 | All the listed recipients of a fax (including CC and BCC recipients) in this format: Name,FaxNum;Name,Faxnum;... You can include up to 21 {CCTEXT} codes on a cover sheet, each code representing one line of recipients up to 69 characters long. Include one {CCTEXT} code on each line that should contain recipients. The cover sheet will only list the number of recipients for which space is provided. |
| <DATEONLY> | Variable | The date that the fax cover sheet was generated. The date format is determined by the default date format on the RightFax server. |
| <EMAILADDRESS> <EMAIL_ADDRESS> | Variable | The sender's e-mail address. This is the e-mail address that is entered in the RightFax user properties (described on page 102). |
| <FAXDIDNUM> | 31 | The sender's fax number. |
| <FROMNAME> <FROM_NAME> | 59 | The sender's name. |
| <FROMPHONENUM> <FROM_PHONENUM> | 31 | The sender's phone number. |
| <GENERALFAXNUM> | 31 | The general fax number for the sender's organization. |

Table 18c Cover Sheet Codes for PCL Cover Sheets (Continued)

| Code | Maximum Characters | Description |
|---------------|--------------------|--|
| <NOTETEXT> | 69 | The notes added to the fax when it was addressed. You can include up to 21 <NOTETEXT> codes on a cover sheet, each code representing one line of notes up to 69 characters long. Include one <NOTETEXT> code on each line that you want notes to be listed on. The cover sheet will only include as much note text as there is space allotted for. If the notes for a fax are shorter than the space provided by <NOTETEXT> codes, the remaining lines will be filled with blanks. |
| <NUMPAGES> | Variable | The number of pages in the fax body, not including the cover sheet. To include the cover sheet in the page count, use the <NUMPAGEESC> code. |
| <NUMPAGEESC> | Variable | The number of pages in the fax <i>including</i> the cover sheet. To exclude the cover sheet in the page count, use the <NUMPAGES> code. |
| <OPERATORNUM> | 31 | The general phone number for the sender's organization. |
| <ROUTEINFO> | Variable | The routing information entered in the user profile of the user creating the fax (described on page 105). |

Table 18c Cover Sheet Codes for PCL Cover Sheets (Continued)

| Code | Maximum Characters | Description |
|---------------------------------------|--------------------|--|
| <TIMEONLY> | Variable | The time that the fax cover sheet was generated. The time format is determined by the default time format on the RightFax server. |
| <TOCITYSTATE> <TO_CITYSTATE> | 59 | The recipient's city and state. |
| <TOCOMPANY> <TO_COMPANY> | 59 | The recipient's organization name. |
| <TOCONTACTNUM> <TO_CONTACTNUM> | 31 | The recipient's phone number. |
| <TOFAXNUM> <TO_FAXNUM> | 31 | The recipient's fax number. |
| <TONAME> <TO_NAME> | 59 | The recipient's name. |
| <UNIQUEID> | 16 | The unique ID assigned to the outgoing fax. |
| <WHENFAXED> <WHEN_FAXED> <DATE> | Variable | The date and time the document was generated by the fax server. This is different from the time it was actually faxed to its destination, which is recorded on the TTI line on each fax page. The time the fax was processed by the fax server can be very different from the time it is actually sent, especially if you are using the RightFax Delay Send feature. |

Selecting a Cover Sheet File to Use

Although you can create any number of custom cover sheet files, the default cover sheet is the FCS.pcl file in the RightFax\FCS folder. This is the cover sheet that is used if no other cover sheet file is specified. RightFax includes a sample FCS.pcl file that can be modified or replaced with a new cover sheet file customized for your organization.

If your organization has several fax cover sheets for different types of faxes, users who have been assigned the appropriate permissions can specify which cover sheet to use for each fax they send. In addition, you can specify a default cover sheet for each user or each group of users.

To change cover sheets, a user must be assigned permission to do so.

To assign a user permission to change cover sheets

1. Run Enterprise Fax Manager (see ["Starting Enterprise Fax Manager"](#) on page 89).
2. Click **Users** under the appropriate server and double-click the user ID to modify.
3. Click the **Permissions** tab and select the **Can Change Cover Sheets** check box.

To specify a cover sheet on a fax

When a user is entering the fax addressing information in the **Fax Information** dialog box ([page 226](#)), a check box in the lower left lets the user specify whether or not to include a fax cover sheet. The cover sheet is included only with the current fax.

Users can include the <FCSFILE> code in documents (see [Appendix A, "RightFax Embedded Codes"](#)) which specifies a cover sheet file to use for that document.

Changing a user's default cover sheet

To assign a new default cover sheet to a specific user, run Enterprise Fax Manager (see “Starting Enterprise Fax Manager” on page 89), click **Users** under the appropriate server, double-click the user ID to modify, and click the **Default Outbound Settings** tab. Under **Cover Sheet Defaults**, select the **Send Cover Sheets** check box, and select the cover sheet file to use in the **Cover Sheet Model** box.

Changing a group's default cover sheet

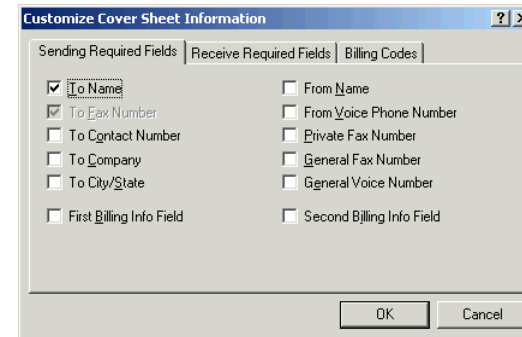
To assign a default cover sheet to a RightFax group, run Enterprise Fax Manager (see “Starting Enterprise Fax Manager” on page 89), click **Groups** under the appropriate server, double-click the group ID to modify, and click the **Basic Information** tab. Select the cover sheet file to use in the **Cover Sheet Model** box.

Requiring Cover Sheet Fields

To transmit an outgoing fax, information about the recipient must be completed in the **Fax Information** dialog box. The RightFax administrator can specify how much information the user must complete before the fax will send. To set the required fields, run Enterprise Fax Manager (see “Starting Enterprise Fax Manager” on

page 89) and select **Customize Cover Sheet Fields** from the **Utility** menu. The **Customize Cover Sheet Information** dialog box opens.

Figure 18.2 Required Fields for Outbound Faxes



Select the check box next to each field you want to require. The **To Fax Number** option is required in order to send the fax, so it cannot be cleared. If all of the required fields on an outgoing fax are not completed, the fax will remain in a user's FaxUtil mailbox with the status “Info Not Complete.”

Requiring cover sheet fields on received faxes

You can specify required fields for received faxes. This allows you to require that the fax recipient include billing codes or other fields for billing records.

In the **Customize Cover Sheet Information** dialog box, click the **Receive Required Fields** tab. Select the check box next to each field that you want to require.

If a fax arrives that does not include all required fields, the recipient will not be able to delete the received fax without completing the specified fields.

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Chapter 19

Generating Reports of Fax Activity

The RightFax database stores detailed information about each sent and received fax. The Fax Reporter administrative utility organizes and presents this information for reporting and billing. With Fax Reporter you can:

- Create fax information reports from new and existing data sets.
- Save data sets as Microsoft Access (.mdb) files.
- Export reports to other file formats including HTML, Word, Excel, text, Rich Text Format (RTF), and e-mail through MAPI or Exchange.
- Generate graphs or lists of fax information.
- Preview reports before printing.

Fax Reporter can be run from the RightFax server or from a client workstation.

You can install Fax Reporter as an optional administrative utility, and it includes components of Crystal Reports 8.0. If you have installed other software that uses a different version of this software, a conflict may occur. For information on installing the administrative utilities, refer to the *RightFax Installation Guide*.

To generate a fax report

To generate a fax report with Fax Reporter, complete the following steps:

1. Run Fax Reporter ([page 192](#))
2. Create a data set ([page 192](#))
3. Print the report ([page 193](#))

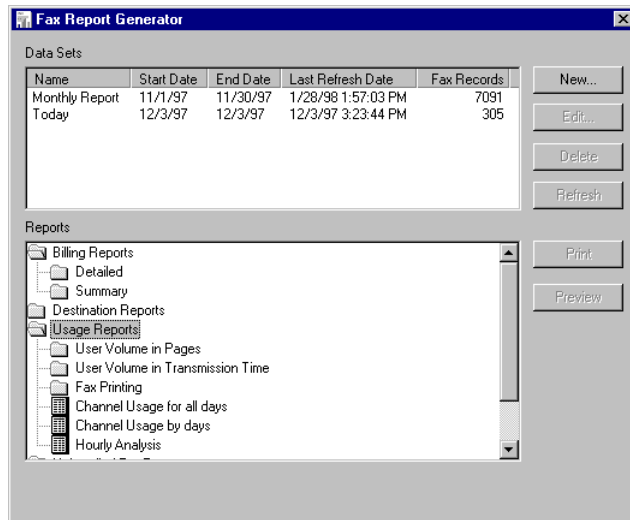
With Fax Reporter, you also can:

- Export fax data to another file format ([page 204](#))
- Export fax data to a text file ([page 204](#))
- Run Fax Reporter from a command line ([page 205](#))
- Design your own reports ([page 205](#))

Running Fax Reporter

To run Fax Reporter, select **Start > Programs > Fax Reporter**. The **Fax Report Generator** dialog box opens.

Figure 19.1 The Fax Report Generator Dialog Box



Note Although any user can run Fax Reporter, the user must be granted the *Can Run Reports* permission in his or her RightFax user profile in order to access report data from the specified server.

A list of data sets appears in the **Data Sets** list. A data set is a set of fax data for a selected period of time.

A list of report formats appears in the **Reports** list. Report formats define the type and format of data that is generated from the selected data set. Report formats are organized in folders, and each report format is indicated by a black and white report icon. Double-click a folder to open it.

Creating Data Sets

A data set is a set of fax data for a selected period of time. You can create two types of data sets: dynamic and absolute.

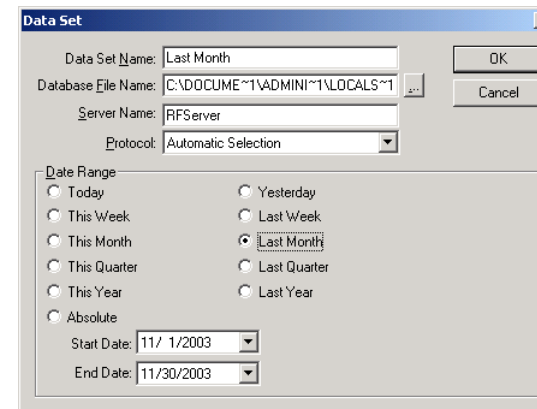
A dynamic data set represents data captured during a relative time range. For example, a data set representing “last month” can be created that collects fax data for the past calendar month from the date of creation. This data set can then be refreshed at any time and new data will be collected for the last calendar month from the date of the refresh.

An absolute data set represents an absolute date range, from a fixed start date to a fixed end date.

Creating a new data set

To create a new data set, open the **Fax Report Generator** dialog box and click **New**. The **Data Set** dialog box opens.

Figure 19.2 The Data Set Dialog Box



Data Set Name A descriptive name for the new data set.

Database File Name The path and file name of the data set. This is saved as a Microsoft Access database.

Server Name The name of the RightFax server to retrieve the data from.

Protocol The network protocol for communication with the RightFax server.

Date Range The range of dates for which to collect data. When you select an option, the represented date range appears in the **Start Date** and **End Date** boxes. If you select **Absolute**, specify the date range in the **Start Date** and **End Date** boxes.

Refreshing a data set

To refresh an existing data set, click the name of the data set in the **Fax Report Generator** dialog box and click **Refresh**. New data will be collected with today as the starting point.

Editing a data set

To edit an existing data set, click the name of the data set in the **Fax Report Generator** dialog box and click **Edit**. The **Data Set** dialog box opens. You can change any of the options in this dialog box. Click **OK** to save your changes.

Deleting a data set

To delete a data set, click the name of the data set to remove in the **Fax Report Generator** dialog box and click **Delete**.

Printing a Fax Report

After you have created a data set, follow these steps to print a fax report.

1. In the **Fax Report Generator** dialog box, select the data set. If necessary, click **Refresh** to update the data.
2. In the **Reports** list, select the report format. Report formats are organized in folders. Double-click a folder to open it. Each report format is indicated by a black and white report icon. Select a report format.

The following categories of report formats are available:

- “[Analysis reports](#)” (described on [page 194](#))
- “[Inbound fax reports](#)” (described on [page 195](#))
- “[Outbound fax reports](#)” (described on [page 196](#))
- “[Production inbound fax reports](#)” (described on [page 201](#))
- “[Production outbound fax reports](#)” (described on [page 202](#))

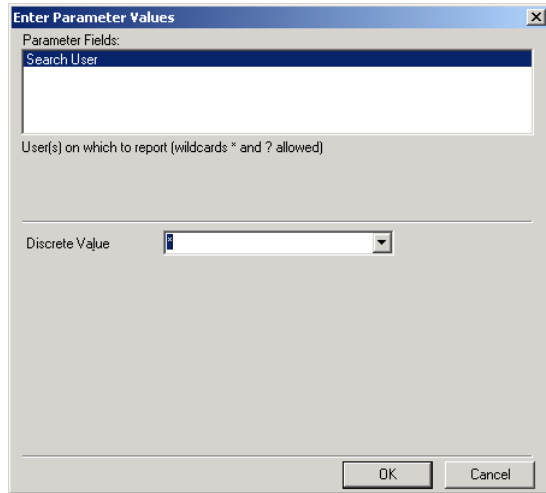


Caution You must select a report format in this list. If you select a folder, no report will be generated.

3. You have the following options:
 - To print the report, click **Print**.
 - To preview the report on your monitor, click **Preview**. To print the report after previewing it, click **Printer** in the **Preview** window (this option appears only if the computer is connected to a printer).

4. Depending on the type of report you select, the **Enter Parameter Values** dialog box may open:

Figure 19.3 The Enter Parameter Values dialog box



5. In the **Discrete Value** box enter a range for the parameter type highlighted in the **Parameter Fields** list. The parameter type on which you can of users on which to run the report. You can use the standard wildcards * and ? to define a user set. The * character represents any number of characters. The ? character represents any single character. The * character entered in this box by default will run the report on all users.

Analysis reports

Analysis reports provide data about the utilization of the RightFax server and fax board service.

Table 19a Analysis Reports

| Report | Description | File name |
|--------------------------------|--|--------------|
| Channel usage, detailed report | <p>The detailed report lists the usage of the fax channels on each board server for each day of the reporting period.</p> <p>For each fax channel, the report shows:</p> <ul style="list-style-type: none"> • Total minutes. • Receive minutes. • Send minutes. • Utilization percentage. <p>For each BoardServer, the report shows:</p> <ul style="list-style-type: none"> • Total minutes. • Total receive minutes. • Total send minutes. <p>For all BoardServers for each day, the report shows:</p> <ul style="list-style-type: none"> • Overall total minutes. • Overall total receive minutes. • Overall total send minutes. <p>For all BoardServers and all days in the reporting period, the report shows:</p> <ul style="list-style-type: none"> • Overall total minutes. • Overall total receive minutes. • Overall total send minutes. | Chanuse2.rpt |

Table 19a Analysis Reports (Continued)

| Report | Description | File name |
|-------------------------------|---|--------------|
| Channel usage, summary report | <p>The summary report lists the usage of the fax channels on each board server.</p> <p>For each fax channel, the report shows:</p> <ul style="list-style-type: none"> • Total minutes. • Receive minutes. • Send minutes. • Utilization percentage. <p>For each board server, the report shows:</p> <ul style="list-style-type: none"> • Total minutes. • Total receive minutes. • Total send minutes. <p>For all board servers, the report shows:</p> <ul style="list-style-type: none"> • Overall total minutes. • Overall total receive minutes. • Overall total send minutes. | Chanuse1.rpt |
| Fax printing, by user | By user | Print1.rpt |
| Fax printing, by group | By group | Print2.rpt |
| Time of day usage | <p>This report shows the usage of the outbound fax channels on a BoardServer.</p> <p>For each hour of the day during the reporting period, the report shows the average number of minutes used for outbound faxing. It shows the utilization percentage of the channel compared to all the fax channels on the BoardServer.</p> <p>You are prompted to enter the number of the outbound fax channel on which to report.</p> <p>The report shows the overall total number of minutes for all channels on the BoardServer.</p> | Toduse1.rpt |

Inbound fax reports

Inbound fax reports provide data about faxes that are received by the RightFax server.

Table 19b Inbound Fax Reports

| Report | Description | File name |
|---|--|------------|
| User volume in pages, all users | <p>For each RightFax user ID, the report shows:</p> <ul style="list-style-type: none"> • Date. • Number of pages received that day. • Total number of pages received for all days. <p>The report shows the overall total pages received for all users.</p> | Usage6.rpt |
| User volume in pages, top 10 users | <p>This report lists the 10 RightFax users who received the most faxes during the reporting period. For each of the top 10 RightFax user IDs, the report shows:</p> <ul style="list-style-type: none"> • Date. • Number of pages received that day. • Total number of pages received for all days. <p>The report shows the overall total pages received for the top 10 users. The report also provides a bar chart of the top 10 users' received faxes.</p> | Usage2.rpt |
| User volume in transmission time, all users | <p>For each RightFax user ID, the report shows:</p> <ul style="list-style-type: none"> • Date. • Number of minutes of transmission time for the user's received faxes that day. • Total number of minutes of transmission time for the user's received faxes for all days. <p>The report shows the overall number of minutes of transmission receipt time for all users.</p> | Usage8.rpt |

Table 19b Inbound Fax Reports (Continued)

| Report | Description | File name |
|--|---|------------|
| User volume in transmission time, top 10 users | <p>This report lists the 10 RightFax users whose received faxes used the most transmission time during the reporting period. For each of the top 10 RightFax user IDs, the report shows:</p> <ul style="list-style-type: none"> • Date. • Number of minutes of transmission time for the user's received faxes that day. • Total number of minutes of transmission time for all days. <p>The report shows the overall number of minutes of transmission receipt time for the top 10 users. The report also provides a bar chart of the top 10 users' transmission receipt times.</p> | Usage4.rpt |
| Unviewed/unprinted faxes | <p>For the RightFax user you specify, the report shows:</p> <ul style="list-style-type: none"> • Date and time the fax was received. • Sender's name, if available. • Name or telephone number of the sending fax machine (remote ID). • Status • Number of pages received. • Total number of faxes received. • Total number of pages received for all days. <p>For all users, the report shows the overall total pages received.</p> <p>You are prompted to enter a RightFax user ID.</p> | New1.rpt |

Outbound fax reports

Outbound fax reports provide data about faxes that are transmitted from the RightFax server.

Table 19c Outbound Fax Reports

| Report | Description | File name |
|---------|---|--------------------------|
| Billing | <p>RightFax supports the use of two billing codes for each faxed document. These are referred to as "Billing Code 1" and "Billing Code 2," or you can assign unique names to the fields.</p> <p>Detailed</p> <p>The detailed report lists faxes sorted by billing code 1.</p> <ul style="list-style-type: none"> • By billing info 1 • By billing info 2 • By billing info 1 - billing info 2 • Date the fax was sent. • Number of pages in the fax. • Name of the recipient. • Fax number of the recipient. • Caller Subscriber Identification (CSID) from the recipient fax machine. • RightFax user ID of the person who sent the fax. <p>For all faxes, the report shows the overall total pages sent.</p> <p>Summary</p> <ul style="list-style-type: none"> • By billing info 1 • By billing info 2 • By billing info 1 - billing info 2 | Bill1.rpt - Bill6.rpt |

Table 19c Outbound Fax Reports (Continued)

| Report | Description | File name |
|----------------------------|---|-----------|
| Destination, by fax number | <p>This report lists faxes sent to a specific fax number. For each fax number, the report shows:</p> <ul style="list-style-type: none"> • RightFax user ID of the person who sent the fax. • The user group of which the user is a member. • Date the fax was sent. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax. • Number of pages in the fax. • Unique ID of the fax, as assigned by the fax server. <p>For all faxes, the report shows the overall total pages sent.</p> <p>You will be prompted to enter a fax number.</p> | Dest1.rpt |

Table 19c Outbound Fax Reports (Continued)

| Report | Description | File name |
|---------------------------|--|-----------|
| Destination, by remote ID | <p>This report lists faxes sent to a specific recipient fax machine. For each fax machine, the report shows:</p> <ul style="list-style-type: none"> • RightFax user ID of the person who sent the fax. • The user group of which the user is a member. • Date the fax was sent. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax. • Number of pages in the fax. • Unique ID of the fax, as assigned by the fax server. <p>For all faxes, the report shows the overall total pages sent.</p> <p>You will be prompted to enter a remote ID, which is the name or telephone number of the recipient fax machine.</p> | Dest4.rpt |

Table 19c Outbound Fax Reports (Continued)

| Report | Description | File name |
|----------------------------|---|-----------|
| Destination, by to-company | <p>This report lists faxes sent to a specific recipient company. For each company, the report shows:</p> <ul style="list-style-type: none"> • RightFax user ID of the person who sent the fax. • The user group of which the user is a member. • Date the fax was sent. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax. • Number of pages in the fax. • Unique ID of the fax, as assigned by the fax server. <p>For all faxes, the report shows the overall total pages sent.</p> <p>You will be prompted to enter a company name.</p> | Dest3.rpt |

Table 19c Outbound Fax Reports (Continued)

| Report | Description | File name |
|-------------------------|--|-----------|
| Destination, by to-name | <p>This report lists faxes sent to a specific recipient. For each recipient, the report shows:</p> <ul style="list-style-type: none"> • RightFax user ID of the person who sent the fax. • The user group of which the user is a member. • Date the fax was sent. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax. • Number of pages in the fax. • Unique ID of the fax, as assigned by the fax server. <p>For all faxes, the report shows the overall total pages sent.</p> <p>You will be prompted to enter the name of a recipient.</p> | Dest2.rpt |

Table 19c Outbound Fax Reports (Continued)

| Report | Description | File name |
|---------------------|--|---|
| Fax lists, detailed | <p>Detailed (with histories)</p> <ul style="list-style-type: none"> • All faxes • Completed faxes only <p>For each RightFax user ID, the report shows:</p> <ul style="list-style-type: none"> • Date and time the fax was sent. • RightFax user ID of the person who sent the fax. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Estimated cost based on transmission time and standard rates. • Status of the fax transmission • Number of pages in the fax. • Length of time of the transmission. • Transmission history, which consists of: <ul style="list-style-type: none"> • event date and time • off hook time • Name or telephone number of the recipient fax machine (remote ID). • fax channel used for the transmission • number of pages transmitted • board result <p>Total for the user: pages faxed and cost You will be prompted to enter a RightFax user ID or phone cost.</p> | <p>Userhst1.rpt Userhst2.rpt</p> |

Table 19c Outbound Fax Reports (Continued)

| Report | Description | File name |
|-------------------------------------|---|-----------|
| Fax lists, summary, all faxes | <p>This report lists all faxes that the fax server attempted to send. For each fax, the report shows:</p> <ul style="list-style-type: none"> • Date and time the fax was sent. • RightFax user ID of the person who sent the fax. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. <p>For all faxes, the report shows the overall total pages sent.</p> | User1.rpt |
| Fax lists, summary, completed faxes | <p>This report lists all faxes that were successfully sent. For each fax, the report shows:</p> <ul style="list-style-type: none"> • Date and time the fax was sent. • RightFax user ID of the person who sent the fax. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. <p>For all faxes, the report shows the overall total pages sent.</p> | User2.rpt |

Table 19c Outbound Fax Reports (Continued)

| Report | Description | File name |
|---|--|------------|
| User volume in pages, all users | <p>For each RightFax user ID, the report shows:</p> <ul style="list-style-type: none"> • Date. • Number of pages sent that day. • Total number of pages sent for all days. <p>The report shows the overall total pages sent for all users.</p> | Usage5.rpt |
| User volume in pages, top 10 users | <p>This report lists the 10 RightFax users who sent the most faxes during the reporting period. For each of the top 10 RightFax user IDs, the report shows:</p> <ul style="list-style-type: none"> • Date. • Number of pages sent that day. • Total number of pages sent for all days. <p>The report shows the overall total pages sent for the top 10 users. The report also provides a bar chart of the top 10 users' sent faxes.</p> | Usage1.rpt |
| User volume in transmission time, all users | <p>For each RightFax user ID, the report shows:</p> <ul style="list-style-type: none"> • Date. • Number of minutes of transmission time for the user's sent faxes that day. • Total number of minutes of transmission time for the user's sent faxes for all days. <p>The report shows the overall number of minutes of transmission time for all users' sent faxes.</p> | Usage7.rpt |

Table 19c Outbound Fax Reports (Continued)

| Report | Description | File name |
|--|---|------------|
| User volume in transmission time, top 10 users | <p>This report lists the 10 RightFax users whose sent faxes used the most transmission time during the reporting period. For each of the top 10 RightFax user IDs, the report shows:</p> <ul style="list-style-type: none"> • Date. • Number of minutes of transmission time for the user's sent faxes that day. • Total number of minutes of transmission time for all days. <p>The report shows the overall number of minutes of transmission send time for the top 10 users. The report also provides a bar chart of the top 10 users' transmission send times.</p> | Usage3.rpt |

Production inbound fax reports

The production inbound fax reports are designed for use with the RightFax Integration Module.

Table 19d Production Inbound Fax Reports

| Report | Description | File name |
|---------|---|---------------|
| By user | <p>For each RightFax user ID, the report shows:</p> <ul style="list-style-type: none"> • Unique ID of the received fax, as assigned by the fax server. • Date and time the fax was received. • Status of the fax (viewed or printed). • DID number that the fax was sent to. • Name or telephone number of the sending fax machine (remote ID). • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. • Overall total number of fax pages received by the user. <p>For all users, the report shows the overall total pages received.</p> | Autoinusr.rpt |

Table 19d Production Inbound Fax Reports (Continued)

| Report | Description | File name |
|--------------|---|--------------|
| By day | <p>For each day, the report shows:</p> <ul style="list-style-type: none"> • RightFax user ID. • Date and time the fax was received. • Status of the fax (viewed or printed). • DID number that the fax was sent to. • Name or telephone number of the sending fax machine (remote ID). • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. <p>For the day, the report shows the total pages received. For all users, the report shows the overall total pages received during the reporting period.</p> | Autointm.rpt |
| By remote ID | <p>For each sending fax machine, the report shows:</p> <ul style="list-style-type: none"> • Name or telephone number of the sending fax machine (remote ID). • RightFax user ID of the user who received the fax. • Date and time the fax was received. • Status of the fax (viewed or printed). • DID number that the fax was sent to. • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. • Overall total number of fax pages received by the user. <p>For each sending fax machine, the report shows the total pages received. For all received faxes, the report shows the overall total pages received.</p> | Autoinid.rpt |

Production outbound fax reports

The production outbound fax reports are designed for use with the RightFax Integration Module.

Table 19e Production Outbound Fax Reports

| Report | Description | File name |
|---------|---|--------------|
| By user | <p>For each RightFax user, the report shows:</p> <ul style="list-style-type: none"> • RightFax user ID of the person who sent the fax. • Unique ID of the sent fax, as assigned by the fax server. • Date and time the fax was sent. • Date and time the fax was received by the recipient. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. <p>For each user, the report shows the number of pages sent. The report also shows the overall total number of pages sent during the reporting period.</p> | Autouser.rpt |

Table 19e Production Outbound Fax Reports (Continued)

| Report | Description | File name |
|--------|---|--------------|
| By day | <p>For each day, the report shows:</p> <ul style="list-style-type: none"> • Unique ID of the sent fax, as assigned by the fax server. • Date and time the fax was sent. • Date and time the fax was transmitted. • RightFax user ID of the person who sent the fax. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. <p>For each user, the report shows the number of pages sent. The report also shows the overall total number of pages sent during the reporting period.</p> | Autotime.rpt |

Table 19e Production Outbound Fax Reports (Continued)

| Report | Description | File name |
|--------------|---|------------|
| By unique ID | <p>For each sent fax, the report shows:</p> <ul style="list-style-type: none"> • Unique ID of the sent fax, as assigned by the fax server. • Date and time the fax was sent. • Date and time the fax was transmitted. • RightFax user ID of the person who sent the fax. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. <p>The report shows the overall total pages sent during the reporting period.</p> | Autoid.rpt |

Table 19e Production Outbound Fax Reports (Continued)

| Report | Description | File name |
|-----------------------|--|--------------|
| Failed faxes, by user | <p>For each sent fax that failed in transmission, the report shows:</p> <ul style="list-style-type: none"> • RightFax user ID of the person who attempted to send the fax. • Unique ID of the fax, as assigned by the fax server. • The initial date and time that the server attempted to send the fax. • The final date and time that the server attempted to send the fax. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or phone number of the recipient fax machine (remote ID). • Status of the fax transmission. • Length of time of the attempted transmission. <p>For each user, the report shows the number of pages sent. The report also shows the overall total number of pages sent during the reporting period.</p> | Autofail.rpt |

Table 19e Production Outbound Fax Reports (Continued)

| Report | Description | File name |
|---------------------------|--|--------------|
| Successful faxes, by user | <p>For each sent fax that was transmitted, the report shows:</p> <ul style="list-style-type: none"> • RightFax user ID of the person who sent the fax. • Unique ID of the fax, as assigned by the fax server. • The initial date and time that the fax server attempted to send the fax. • The date and time that the fax was transmitted. • Name of the recipient. • Name of the recipient company. • Fax number of the recipient. • Name or telephone number of the recipient fax machine (remote ID). • Status of the fax transmission. • Number of pages in the fax. • Length of time of the transmission. <p>For each user, the report shows the number of pages sent. The report also shows the overall total number of pages sent during the reporting period.</p> | Autosucc.rpt |

Exporting Fax Information to Another File Format

Follow these steps to export fax information to a specific file format on disk or to a MAPI address:

1. In the **Fax Report Generator** dialog box, select the data set. If necessary, click **Refresh** to update the existing fax data.
2. In the **Reports** list, select the report format. Report formats are organized in folders. Double-click a folder to open it. Each report format is indicated by a black and white report icon. If you select a folder (as opposed to a report format file) no report will be generated.
3. Click **Preview**, and the report appears in the **Preview** window.
4. Click **Export** in the toolbar to display the **Export** dialog box.
5. Choose the desired **Format** and **Destination**.
6. Click **OK**.

Exporting Fax Data to a Text File

In addition to the Fax Reporter utility, RightFax includes an administrative utility, FaxDump.exe, that outputs ASCII text files of fax data that you can import into other databases to produce reports. For information on running FaxDump.exe, see [“Running FaxDump.exe”](#) on [page 278](#).

Running Fax Reporter from a Command Line

You can run the Fax Reporter utility from a command line. The utility FaxRpt2.exe is located in the RightFax\FaxRpt2 folder on the RightFax server.

Syntax `faxrpt2 -uuserID -ppassword -ndataset -oprinter -rformat [-v] [-1] [-2]`

Table 19f Fax Reporter Command Line Options

| Option | Description |
|------------|---|
| -1 | Preview the report (print to the screen). |
| -2 | Turn off automatic refresh of the data set. |
| -ndataset | The data set for the report, for example -nmonthly. |
| -oprinter | The printer where the report should print. |
| -ppassword | The password for the user ID that will log on to the RightFax server. |
| -rformat | The name of the report format to use, for example -rchanuse2.rpt. The report formats must be located in the folder RightFax\AdmUtils\Faxrpt2\Reports. |
| -uuserID | The user ID to log on to the RightFax server. |
| -v | Verbose. If errors occur while the report is being generated, the process will stop and RightFax will display the error that was encountered. |

Example `faxrpt2 -uadministrator -pmypassword -nmonthly -ohpprinter -ruse2.rpt [-v]`

Creating Custom Reports

Fax Reporter can be extended with your own custom-designed reports. Custom reports can be created using the Crystal Reports product from Business Objects (www.businessobjects.com). You can create custom reports from scratch or modify one of the provided reports.

Understanding the file format of data sets

In order to create custom reports, you must first know where the data is located in the generated data sets. Fax Reporter data sets are Access 2000 databases. Each database contains several tables, each with unique fields. For a complete description of each table in the Fax Reporter data set and all of the fields in each table, see [Appendix B, "Fax Reporter Data"](#).

Adding custom reports to Fax Reporter

To add a custom report to Fax Reporter, create a text file called FaxRpt2.ini in the same folder that the FaxRpt2.exe program is located (the default location is C:\Program Files\RightFax\AdmUtils\FaxRpt2\Reports). List each report in the FaxRpt2.ini file using the following format:

```
[Custom-#]  
Name=ReportName  
File=FileName
```

Where the # parameter in the [Custom-#] header is the number of the entry in the file, *ReportName* is the descriptive name for the report that will be displayed in the Fax Reporter dialog box, and *FileName* is the path and file name of the report definition file.

Sample FaxRpt2.ini file:

```
[Custom-1]
Name=Acme Usage Report
File=X:\FaxRpt2\Custom1.Rpt
[Custom-2]
Name=Acme Analysis Report
File=X:\FaxRpt2\Custom2.rpt
[Custom-3]
Name=Bob's special report
File=Custom3.rpt
```

Custom reports are only read when Fax Reporter is started. If the .ini file is changed, Fax Reporter must be re-started in order to detect the changes.

■ ■ ■

Chapter 20

Routing Inbound Faxes

The RightFax server provides several methods for routing received faxes to their intended recipients in your organization. The routing method you choose will be based primarily on the type of telephone service you use.

To route faxes to users, you assign a unique “routing code” to each user. RightFax attempts to match information received with the fax (such as digits dialed by or separately entered by the fax sender) to one of your users' routing codes. This user is then determined to be the intended fax recipient.

After RightFax has determined who should receive an incoming fax, you then have several options for how that fax should be delivered (for example, to the FaxUtil mailbox or attached to an e-mail message).

Configuring DID/DNIS Routing

Direct Inward Dial (DID) lines support inbound phone service only, and Dialed Number Identification Service (DNIS) supports bi-directional faxing. These two methods are considered the most accurate for fax routing.

A DID/DNIS interface assigns multiple telephone numbers to a single pair of wires (a telephone trunk). Often these numbers are sequential and all contain the same prefix. For example, a single DID/DNIS line may have 20 numbers associated with it ranging

from 555-1001 to 555-1020. Your phone company will forward any or all of these dialed numbers to your system along with the call. RightFax then uses these included numbers to route faxes to the proper recipients.

Each RightFax user is assigned a personal fax mailbox that is assigned a DID/DNIS number (routing code). When a call comes in with a valid DID/DNIS number, the fax is placed in the corresponding user's fax mailbox.

Routing codes should be assigned to users in accordance with the number of DID/DNIS digits for which your services are configured. For example, if you have a set of DID/DNIS numbers of 555-1001 through 555-1020, and your phone service is configured to forward the last four digits of the dialed number, then you would assign the routing codes 1001 through 1020 to your users. If you have three digit service, then you would assign the routing codes 001 through 020 to your users.

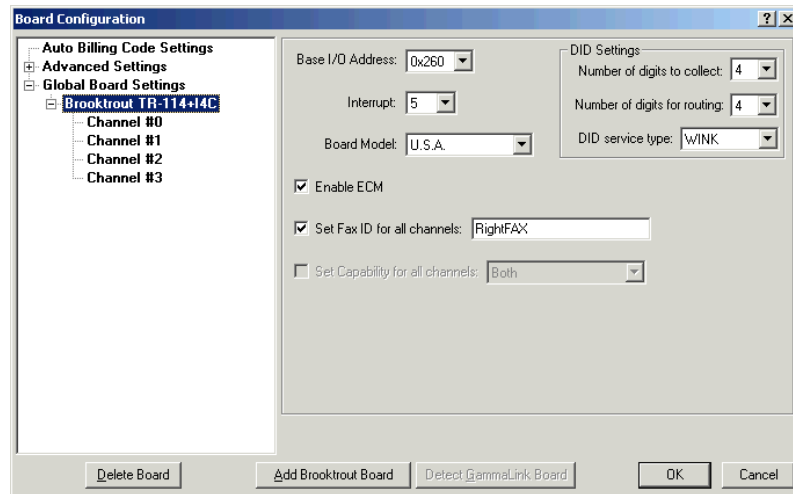
Configuring RightFax for DID/DNIS routing

Each fax board must be configured for DID/DNIS routing separately. To configure the RightFax server and fax board(s) for DID/DNIS routing, run the RightFax BoardServer configuration program.

Configuring Brooktrout boards

For Brooktrout fax boards, click the board name listed under **Global Board Settings**.

Figure 20.1 The Brooktrout Global Board Settings Dialog Box



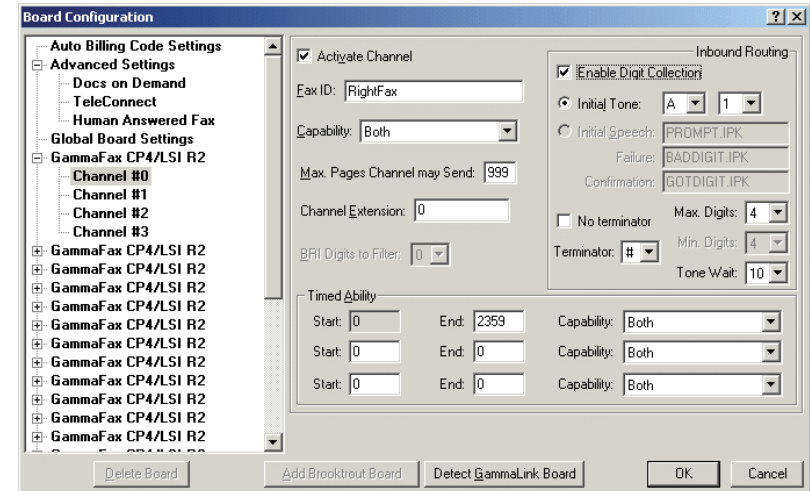
In the **Number of Digits to Collect** box, enter the number of dialed digits that will be forwarded to the system by the phone company. In the **Number of Digits for Routing** box, enter the number of collected digits that you will use when assigning routing codes to users. In the **DID Service Type** box, enter the type of service that the phone company provides, either "Immediate" or "Wink."

Configuring GammaLink boards

For GammaLink fax boards, click the board name listed under **Global Board Settings**. Under **Digit Collection**, set **Maximum Digits for Routing** to the number of dialed digits that will be

forwarded to the system by the phone company. Then, for each channel listed under the GammaLink fax boards, click the channel number.

Figure 20.2 GammaLink Channel Settings Dialog Box



Check **Enable Digit Collection**. Select **Initial Tone** and set it to "A" and "0" (zero). Check **No Terminator** and set **Max Digits** to the number of dialed digits that will be forwarded to the system by the phone company. Repeat this configuration for each GammaLink fax channel.

Configuring user routing information

To assign a DID/DNIS routing code to a user, edit the user profile in Enterprise Fax Manager (see ["Editing user properties" on page 101](#)), click the **Inbound Routing** tab, and enter the user's DID/DNIS phone extension in the **Routing Code** box. The number you enter here must have the exact number of digits that you specified in the **Number of Digits for Routing** box when configuring the fax boards.

Configuring DTMF Routing

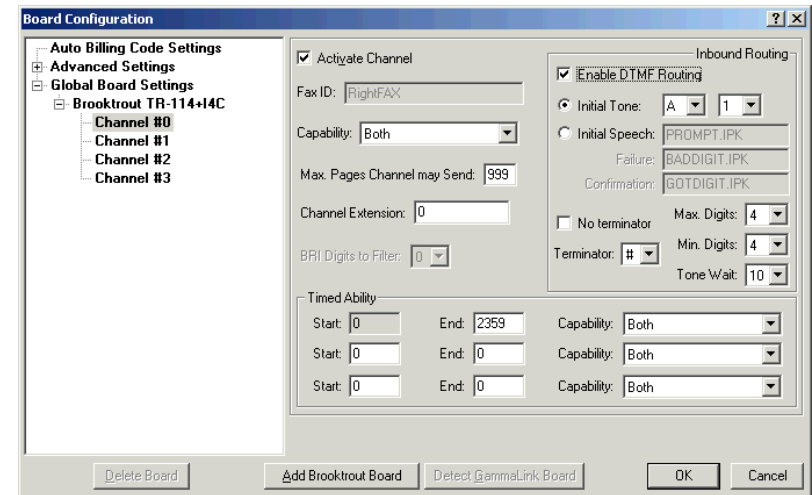
Unlike DID/DNIS routing, DTMF uses Plain Old Telephone Service (POTS) with a single phone number assigned to each phone line. The person sending the fax dials this number and the call connects normally. However, before the fax transmission starts, the fax board prompts the caller with a tone or voice prompt to enter a routing code for the fax they are sending.

If the caller enters a valid routing code (one that is assigned to a RightFax user) the fax is placed in that user's mailbox. If the caller does not enter a code before a certain amount of time has elapsed, or if the code does not correspond to a valid RightFax mailbox, the fax is placed in the mailbox that corresponds to the **Channel Extension** setting for the channel it arrived on (or to the administrator of the Everyone group if no channel extension match is found).

Configuring RightFax for DTMF routing

Each fax channel must be configured for DTMF routing separately. To configure the RightFax server and fax board(s) for DTMF routing, run the RightFax BoardServer configuration program. Click each channel number under the fax boards.

Figure 20.3 Brooktrout Channel Settings Dialog Box



1. Under **Inbound Routing**, select the **Enable DTMF Routing** check box.
2. Click **Initial Tone** or **Initial Speech** (speech is only available with Brooktrout fax boards) and configure the tone or speech parameters.
3. Select the **No Terminator** check box if you don't want to require the caller to press [#] or [*] after entering the routing code. If you want to require the caller to press [#] or [*] after entering the routing code, select the terminator character you want in the **Terminator** box.

4. In the **Max. Digits** box, enter the maximum number of digits the caller must enter for a valid DTMF routing code. In the **Min. Digits** box, enter the minimum number of digits the caller must enter for a valid DTMF routing code.
5. In the **Tone Wait** box, enter the length of time (in seconds) after the prompt for the caller to enter the routing code.

Configuring user routing information

To assign a DTMF routing code to a user, edit the user profile in Enterprise Fax Manager (see [“Editing user properties” on page 101](#)), click the **Inbound Routing** tab, and enter the user's DTMF code in the **Routing Code** box. The digits entered here correspond directly to the digits entered by the caller when prompted. Although each user must have a unique DTMF routing code, the assigned codes can be of variable length.

Configuring OCR Routing

The RightFax OCR Routing module uses optical character recognition technology to convert the cover page of a received fax from a graphic format to text format, and then scans the text for recognized words and phrases. Each word or phrase on the cover page is compared to a custom routing table containing possible recipient names. If a match is found, the fax will be associated with a RightFax user ID and routed to that user. If no match is found, the fax remains by default in the OCR central mailbox (described in the next section).

For OCR routing, no special user configuration is required. OCR is only performed on printed text and will not work on handwriting.

OCR routing is an excellent backup for other routing methods. With other routing methods, mailboxes can be configured that receive all “lost” faxes where the intended recipient cannot be determined. These lost fax mailboxes can be configured for OCR routing to optimize automatic inbound routing. However, because

large organizations usually have several members with the same or very similar names, OCR routing is not recommended as a primary routing method.

To use OCR routing, you must first install the RightFax OCR Routing module. For information on installing this module, refer to the *RightFax OCR Routing Guide*. In the WorkServer configuration program, add the OCR function to at least one of the WorkServers (see [“Services” on page 32](#)).

Configuring the central mailbox

In order to route OCR'd faxes to their intended recipients, the faxes must arrive in one or more “central” mailboxes. These are fax mailboxes that all incoming faxes go to, get OCR'd, and from there are routed to users' mailboxes.

For *multiple* central mailboxes, each mailbox should have a routing code that corresponds to a channel extension set up in the BoardServer (see [“Configuring Channel Routing” on page 211](#)). Usually, however, one mailbox performing OCR routing is sufficient. To configure a single central mailbox, edit the mailbox owner's user profile in Enterprise Fax Manager, click the **Inbound Routing** tab, and enter “0” (zero) in the **Routing Code** box. This will cause all incoming faxes to route into that mailbox by default.

For each central mailbox you create, edit the user profile of the mailbox in Enterprise Fax Manager, click the **Inbound Routing** tab, and select “OCR” in the **Routing Type** box and then enter the file name of the routing table (Route.txt recommended) to use in the **Routing Info** box. This tells the mailbox to perform OCR on each received fax and route accordingly.



Warning Only the central mailbox should have its *Routing Type* set to OCR. Do not set each RightFax user mailbox to OCR or they will attempt to reroute all received faxes, potentially creating endless routing loops.

Creating a routing table for OCR routing

On the RightFax server, create an ASCII file called Route.txt in the RightFax\Worksrv folder. The Route.txt file is the OCR routing table. Each line must contain a separate entry using this format:

```
UserID MatchingText  
UserID MatchingText
```

...

where *UserID* is the RightFax user ID to route to and *MatchingText* is the text that, when found, will route the fax to that user. The user ID and matching text must be separated by a single space, and the matching text may contain spaces and other special characters.

Here is an example of a short OCR routing table:

```
ADJ Aaron  
ADJ Aaron Jones  
BDS Bill Street  
DRR David Renner  
DRR Renner
```

The matching text must be matched exactly in order to route the fax. In this example, a match on the word “Jones,” if not preceded by “Aaron,” would *not* be routed.



Note Because OCR routing requires an exact match between the OCR routing table and the OCR'd text, you should remove any blank spaces at the end of the OCR routing table entries. If the matching text includes trailing spaces, those spaces will be required as part of the text to match.

Because RightFax scans the routing table from top to bottom, routing the fax to the first match, the order in which you list user IDs may be important. You may want to place the highest priority user IDs (executive management, for example) at the top of the list so they will be sure to receive their faxes even if matching text conflicts exist with other users on the network. This, however, also increases their likelihood of receiving misrouted faxes.

Creating alternate routing tables

In cases where you have set up multiple OCR central mailboxes, you can specify a different routing table file name for each mailbox. This lets each central mailbox use a separate routing table for maximum routing accuracy.

To specify the file name for the routing table of the central mailbox, edit the user profile for the mailbox in Enterprise Fax Manager, click the **Inbound Routing** tab, and type the file name in the **Routing Info** box. The new routing table file must be located in the RightFax\Worksrv folder.

When you specify a routing table file name in the central mailbox's **Routing Info** box, you can also specify a RightFax user ID to which unmatched faxes will route. After the file name, type a comma followed by the RightFax user ID of the user who will receive unmatched faxes.

Example If you have set up a special OCR central mailbox that only receives and routes faxes to the Sales department, you can specify a routing table called Sales.txt and have all unmatched faxes route to Jane Doe the sales manager (RightFax user ID, JANED) by entering this line in the **Routing Info** box of the Sales central mailbox: SALES.TXT,JANED.

Configuring Channel Routing

With channel routing, faxes are routed based on the phone line on which they are received. This can work well if you have, for example, four departments and four incoming fax lines (channels). Each department uses a unique fax number, and all faxes to that department are delivered to a single fax mailbox. Each of the members of the department can check the department mailbox for faxes, the faxes can be directed to a printer located in the department, or the faxes can be routed manually or via OCR routing to the intended recipient.

Channel routing with digital fax boards

Channel routing cannot be used with Intel Dialogic digital fax boards.

To implement channel routing with other digital fax boards, edit the Windows registry entry `HKEY_LOCAL_MACHINE\Software\RightFax\BoardServer`. Create the `REG_DWORD` entry **DoDigitalChanRoute** and set the value to 1.

After creating the entry, configure the routing with the following instructions.

Configuring RightFax for channel routing

Each fax channel must be configured for channel routing separately. To configure the RightFax server and fax boards for channel routing, run the RightFax BoardServer configuration program.

Click each channel number under the fax board names. For each channel, set the **Channel Extension** to a number between 1 and 99. This setting will correspond to the Routing Code of the mailbox that is to receive all faxes coming in on this channel. You can also set two or more channels to the same Routing Extension if you want a single mailbox to receive faxes from multiple channels.

Configuring recipient mailboxes

To assign channel extensions to mailboxes, edit the user profile for each recipient mailbox in Enterprise Fax Manager. Click the **Inbound Routing** tab and enter the **Channel Extension** setting of the channel that you want to receive faxes from in the **Routing Code** box.

Configuring ANI Routing

ANI (Automatic Number Identification) is a service provided by telephone service providers. It precedes each incoming phone call with a series of digits that includes (among other things) the phone number dialing in. Although the ANI data format differs slightly from carrier to carrier, the basic format is:

KP+I+7(or 10)digits+ST

where *KP* is the key pulse, *I* is an information digit, *7(or 10) digits* is the calling party station directory number, and *ST* is a start signal.

RightFax can use ANI information to route inbound faxes to a user mailbox based on the phone number that the fax originated from. Using ANI routing, all faxes from a certain phone number can be routed to a specific recipient. Similarly, all faxes originating from a specific area code or telephone number prefix can be routed to a specific recipient. This routing method can be useful to sales departments for routing faxes according to sales territories.

ANI routing is not available with analog fax boards.

Configuring RightFax for ANI routing

To route faxes with ANI routing, the faxes must arrive in one central mailbox. From this mailbox, the faxes will be routed.

To configure a central mailbox, create a RightFax user in Enterprise Fax Manager that should receive the faxes for routing (described in [Chapter 8, "Creating RightFax Users"](#)). In the **Inbound Routing** tab, in the **Routing Type** box, select **ANI**. The **Routing Info** box should be left blank.

Also, because the ANI data you receive from your service provider probably includes extra informational digits, you must specify the pattern of the ANI digits so that the extra digits can be removed prior to ANI routing. To specify this pattern, open the RightFax BoardServer service in Enterprise Fax Manager and select **Global**

Board Settings. In the **ANI Pattern Matching** box, enter the pattern of ANI data you receive using the symbols in the following table.

Table 20a ANI Pattern Symbols

| Symbol | Represents |
|------------------------------|---|
| * | Matches one or more asterisk characters in the source string. |
| # | Matches one or more pound characters in the source string. |
| X | Matches one or more digits belonging to the ANI number. (This is the only number sequence that will be used for ANI routing, all other information is ignored.) |
| Y | Matches one or more digits belonging to the DNIS number. |
| Z | Matches one or more extraneous digits which are discarded. |
| Max. Modifier (1–9) | A digit that represents a maximum character match for any of these symbols described here. (For example, “x2*y” will match x***...yyy... or xx***...yyy....) |
| Literal Digits (0–9 and A–D) | Valid phone digits. (Separate literal digits from Max. Modifiers with a space.) |

Example 1x10*y = 1xxxxxxxxx***...yyy...
 x2z*y2 2 = xxzzz...***...yy2

Finally, on the RightFax server, create an ASCII file called Ani.tbl in the RightFax\Bin folder. This file is the ANI routing table. Each line must contain a separate entry using this format:

RoutingCode ANIString

Where *RoutingCode* is the routing code setting of the user to route to and *ANIString* is the ANI data represented by ‘X’ characters in the ANI pattern match. The ANI string and routing code must be separated by a single space. Here is an example of a short ANI routing table:

```
1001 15205551212
1002 15205552345
1003 15205550982
1004 15203201000
```

Creating alternate routing tables

You can set up multiple central mailboxes for ANI routing.

Example You could set up a mailbox that receives and routes faxes to the Sales department. Create a central mailbox for Sales, and specify a routing table called Sales.tbl.

To specify the routing table for the mailbox, edit the user profile for the mailbox in Enterprise Fax Manager, click the **Inbound Routing** tab, and type the file name in the **Routing Info** box. The custom routing table files must be located in the RightFax\Bin folder.

Configuring CSID Routing

CSID (caller subscriber identification) routing routes inbound faxes to a specific mailbox based on the ID of the sending device. Using CSID routing, faxes sent from a specific fax number can be routed to a specific recipient.

This method relies on data from the sending device, which may or may not include a fax phone number. The CSID may be the company name or other data, and it may be impossible to match with data in RightFax. For this reason, CSID routing can be an unreliable method of routing.

CSID routing precludes some other routing types like DTMF and channel routing. However, routing types that occur after arriving in a fax mailbox (like OCR routing) can still be used. If an ID for the

sending device is not transmitted or cannot be determined, the fax is placed in the mailbox that corresponds to the **Channel Extension** setting for the channel it arrived on (or to the administrator of the Everyone group if no channel extension match is found).

Configuring RightFax for CSID routing

To configure RightFax for CSID routing, run the RightFax Server configuration program. Click the **General** tab and select **Enable CSID Routing**.

On the RightFax server, create an ASCII file called CSID.tbl in the RightFax\Bin folder. The CSID.tbl file is the CSID routing table. Each line must contain a separate entry using this format:

RoutingCode CSID

where *RoutingCode* is the routing code setting of the user to route to, and *CSID* is the CSID information (either text or a phone number) that, when sent, will route to that user. The routing code and CSID must be separated by a single space. The CSID text can contain spaces and other special characters. Here is an example of a short CSID routing table:

```
1001 520*
1002 Acme, Inc.
1003 RIGHTFAX
```

The asterisk (*) wildcard character can be used to represent any unspecified characters at the end of the CSID string. This wildcard can only be used at the end of the CSID string in the CSID.tbl file, and all characters preceding the wildcard must match the incoming CSID exactly for routing to be successful. In the preceding example, all incoming faxes with CSIDs that indicate they originated from area code 520 will be routed to the RightFax user with the routing code 1001.

Configuring Delivery Methods for Users

After you have configured a routing method for your organization, you have several options for the delivery method to the user. The delivery method is configured individually for each RightFax user.

To assign a delivery method to a user

1. Run Enterprise Fax Manager (see [“Starting Enterprise Fax Manager”](#) on page 89), and click **Users** under the RightFax server in the Fax Server Tree. The list of users appears in the right pane of the window.
2. Double-click a user to edit the user's profile. The **User Edit** dialog box opens.
3. Click the **Inbound Routing** tab, and select the delivery method in the **Routing Type** box. You have the following delivery options:
 - [“Fax mailbox”](#) (page 214)
 - [“E-mail”](#) (page 214)
 - [“Network directory”](#) (page 215)
 - [“OCR”](#) (page 216)
 - [“RightFax InterConnect”](#) (page 216)
 - [“TRS NetComm message server”](#) (page 216)
 - [“Telephony server”](#) (page 216)

Fax mailbox

When you select this routing type, incoming faxes will be routed to the user's FaxUtil mailbox.

E-mail

When you select this routing type, incoming faxes are forwarded to the user as an e-mail message. If you select this option, you must also provide the necessary routing information in the **Routing Info** box so that RightFax can find the correct e-mail mailbox. For

information on routing faxes to an e-mail mailbox see “[Receiving Faxes via E-mail](#)” on [page 262](#), or refer to the documentation included with the RightFax e-mail gateway module.

Network directory

When you select this routing type, incoming faxes will be sent to a network folder that you specify. If you select this option, you must type the path to the folder in the **Routing Info** box and/or choose from several macros as to how you would like the faxes stored (such as by month, day, or billing code).

Example The following entry in the **Routing Info** box would route faxes to the RightFax\Faxin folder on the \SYS volume of the FILESERV file server:

```
\\fileserv\sys\rightfax\xfaxin
```

In this example, the RightFax fax server would have to be attached to FILESERV with sufficient privileges to write to the Faxin folder. RightFax will create any specified folders, assuming it has the necessary network access privileges.

The destination path can also specify one or more folder macros that cause unique or descriptive folders to be created dynamically. The following table lists the available folder macros.

Table 20b Dynamic Folder Generation Macros

| Macro | Definition |
|-------|---|
| ~1 | Date (YYYYMMDD) |
| ~2 | Day of the week (SUN–SAT) |
| ~3 | Month (JAN–DEC) |
| ~4 | Year (YYYY) |
| ~5 | Day of the month (DD) |
| ~6 | Month as decimal (01–12) |
| ~7 | User ID (truncated to 11 characters) |
| ~8 | Week of year as decimal (00–51) |
| ~9 | Billing Code 1 (truncated to 11 characters) |
| ~0 | Billing Code 2 (truncated to 11 characters) |
| ~A | Remote ID (left to right, truncated to 11 characters) |
| ~B | Remote ID (right to left, truncated to 11 characters) |

Example Entering \\FILESERV\SYS\RIGHTFAX\~1 will cause the fax server to create a folder \\FILESERV\SYS\RIGHTFAX\20020101 when storing a fax received on January 1, 2002.

The file name stored in this folder is a unique name assigned by the RightFax server and cannot be changed. The total length of the path, after macro replacement, cannot exceed 128 characters.



Note Only received faxes will be routed to a network folder using this method. If a sent fax is forwarded or routed from one RightFax user to another RightFax user with a network routing destination specified, the fax will appear in the recipient’s fax mailbox, but will not appear in the specified network folder.

OCR

When you select this routing type, incoming faxes will be OCR'd for recognizable character strings, compared to a table of RightFax user IDs and matching strings, and, when a match is found, routed to the appropriate user. No additional routing information is necessary if you plan to use the default OCR routing table Route.txt.

This routing type requires RightFax OCR Routing module, purchased separately.

RightFax InterConnect

When you select this routing type, incoming faxes will be redirected from one RightFax server to another. In the **Routing Info** box, enter the destination RightFax server name. The InterConnect service must be enabled on at least one of the receiving RightFax server's WorkServers, and the RightFax user account (user ID) of the fax recipient must exist on both RightFax servers.

Auto-printing, auto-OCR, and auto-forwarding are not available with this routing type, because they are performed by the destination fax server only. This routing type requires the RightFax Enterprise server.



Note By default, faxes routed from one RightFax server to another RightFax server in a different time zone will have the time and date stamp from the originating server. To change this so that faxes have the time and date of the receiving server, add a REG_DWORD value called InterconnectSetTZ to HKEY_LOCAL_MACHINE\Software\RightFax\WorkServer\WorkSrv# (the number of the WorkServer performing Interconnect) and set the value data to 1.

TRS NetComm message server

When you select this routing type, incoming faxes will be routed to your organization's TRS NetComm message server. No additional routing information is necessary.

Telephony server

RightFax can route incoming faxes to a telephony server mailbox. In the **Routing Info** box, enter the telephony server routing information using this format:

(NP: or TCP:)server/source/password/destination

Where NP: or TCP: represents the network protocol, either named pipes or TCP/IP.

Distributing Faxes to a Group of Users

Smart Fax Distribution is a method of distributing received faxes between all the members of a user group. This can be useful, for example, if you want to distribute all incoming purchase orders among all members of your order entry group for processing.

With Smart Fax Distribution, the user group that will share the faxes is assigned a **Routing Code**. Faxes that are routed to the group ID are then distributed between the group members (using each individual's configured routing method) either round-robin or according to each user's ability to process the faxes.

To configure Smart Fax Distribution for user groups, see "[The Smart Fax Distribution tab](#)" on [page 118](#).

Assigning Unique ID Numbers to Fax File Names and Routing to a Network Folder

Faxes stored in a network folder can be assigned unique ID numbers, and the ID numbers can be used as the file names. By default, RightFax generates and assigns unique ID numbers to each fax it receives. You can specify an alternative ID number scheme if you want to store faxes on a network folder. For example, you can specify an ID that consists of the server name, date, and page count.

This unique ID number is printed on the fax page in the receipt terminal information (RTI) line.

To assign unique IDs, complete the following tasks:

1. Format the unique ID (page 217)
2. Configure RightFax to use the unique ID as the file name (page 217)
3. Configure RightFax to create a separate file for each fax page (page 217)
4. Specify the users whose faxes should be routed to the folder (page 217)

Formatting the unique ID

Enable the RTI line and define the unique ID that should print on each page by specifying the format in the RTI line. To do this, see “Defining an RTI line” on page 69.

You can include any text and variables in the RTI line, however the line that prints is limited to 15 characters.



Caution The variable ~A (the unique ID assigned by RightFax) should not be used, because the unique ID of the fax will be changed to reflect the RTI line value.

Configuring RightFax to use the unique ID as the file name

1. Create a registry entry that instructs RightFax to use the unique ID as the file name for the fax.

In HKEY_LOCAL_MACHINE\Software\RightFax\FaxServer, add the registry value UseReceiveStampUnique with the data type REG_DWORD and value of 1.

2. Add the registry entry to each WorkServer key in HKEY_LOCAL_MACHINE\Software\RightFax\WorkServer.

Configuring RightFax to create a separate file for each fax page

Follow these steps on each server in order to route received faxes to a network folder.

1. In Enterprise Fax Manager, select the server.
2. In the **Service Name** list, double-click **RightFax WorkServer# Module**. The **WorkServer Configuration** dialog box opens.
3. Under **Services**, select **FileRoute**, and click to clear the selection of **Archive**.
4. Under **Archive Settings**, select the **Separate File Per Page Output** check box.
5. Repeat these steps for each WorkServer that you want to handle file routing.

Specifying the users whose faxes should be routed to the network folder

Follow these steps for each user whose faxes should be routed to the network folder.

1. In Enterprise Fax Manager, edit each user whose received faxes should be routed. In the **User Edit** dialog box, click the **Permissions** tab. Select the check box **Stamp Pages of Received Faxes with Audit Stamp**.
2. Click the **Inbound Routing** tab. In the **Routing Type** box, select **Network Directory**.
3. In the **File Format** box, select TIFF (G3-1D) or TIFF (G4).
4. In the **Routing Info** box, type the name of the folder where the faxes will be saved.

■ ■ ■

Chapter 21

Responding to Inbound Faxes with AutoReply

The AutoReply service monitors one or more RightFax mailboxes for inbound faxes, and it faxes replies to the sender (based on each sender's caller service identification (CSID) number). If no valid CSID number is included with the inbound fax, the fax can be automatically printed or forwarded to another RightFax mailbox so that a reply can be sent manually.

The faxed reply is fully customizable. You can format the reply to include personalized messages, relevant fax addressing information, your organization's logo or other graphic images, and a copy of the cover page from the received fax being replied to.

Before You Begin

The AutoReply service should be installed using an operating system that can read and write to the Windows registry—Windows 2000 or Windows 2003. To create a service, the person installing it must have administrative rights to the computer.

For each user that will be monitored for automatic replies, inbound routing should not be set to delete after routing, or AutoReply will fail. To change this setting, see [“Editing user properties”](#) on [page 101](#).

The AutoReply fax is sent from one user account in RightFax. It is recommended that you create a unique user ID from which all AutoReply faxes will be sent. To create a user ID, [“Creating a User Profile”](#) on [page 101](#).

To format the fax that is sent as a reply, see [“Customizing the Reply Fax”](#) on [page 222](#).

Installing the AutoReply Service

The AutoReply service can be installed on RightFax client computers either from the RightFax software CD or from the client install network file share (both described in the *RightFax Installation Guide*.) On the **Setup Features** screen in the Install Wizard, expand the **RightFax Clients** heading in the components tree and select the **AutoReply Client** component to install. Complete the installation according to the instructions in the *RightFax Installation Guide*.

To configure the AutoReply service

1. On the RightFax server, open a view of the RightFax\AutoReply folder and run ARWizard.exe. This starts the AutoReply wizard.
2. In the **Add/Remove RightFax Server** window, click **Set up and configure a new RightFax server**. Click **Next**.

3. In the **Choose RightFax Server** window, specify the server that AutoReply will monitor. Enter the log on user ID and password. Click **Connect** to connect to the server, and then click **Next**.
4. In the **Choose an AutoReply User** window, enter the RightFax user ID from which reply faxes will be sent. For each server, you can specify just one user ID from which all reply faxes will be sent. Click **Next**.
5. In the **Select Monitored Users** window, create a list of users to monitor for the AutoReply service. In the **Available users** list, click one or more users, and then click **Add**. The users appear in the **Monitored users** list. When you have created the list, click **Next**.

6. In the **Edit Monitored Users** window, choose the AutoReply response for the monitored users. To create one method of response for all users, in the **Select the monitored user ID** box, click **Default**. Or, choose a user and the responses for that user.

You have the following options for AutoReply responses.

Table 21a AutoReply Responses

| Response | Enter this |
|---|---|
| Route the received fax to another user after an AutoReply is sent. | The user ID where the fax should be routed. |
| Route the received fax to another user if an AutoReply cannot be sent. (If no valid CSID number is included with the received fax, an AutoReply cannot be sent.) | The user ID where the fax should be routed. |
| Print the received fax if an AutoReply cannot be sent. (If no valid CSID number is included with the received fax, an AutoReply cannot be sent.) | The printer ID for the printer where the fax should print. (Enter a printer ID defined in Enterprise Fax Manager.) |

When finished, click **Next**.

7. In the **Enter File Names** window, enter the location of the file to use for formatting the AutoReply fax. A sample file called `Format.ini` is available in the `RightFax\AutoReply\Samples` folder. It is recommended that you modify this sample file to fit your organization's needs. (To format the AutoReply fax, see ["Customizing the Reply Fax"](#) on page 222.) Click **Next**.
8. Click **Finish**.

Managing AutoReply from a Remote Computer

You can manage AutoReply from a computer that is remote from the server. To do so, first install the AutoReply configuration program on the remote computer. Next, run the configuration program on the remote computer.

Installing AutoReply on a remote computer

This process installs the AutoReply wizard and configuration programs to the local computer in the RightFax folder. It creates a shortcut in the **Start** menu to the programs you install.

On the remote computer, open a view of the RightFax\Autoreply folder on the RightFax server, and run Setup.exe. During the installation, you can choose to install the following components:

- The AutoReply configuration program, with which users can add and remove users and specify the location of the AutoReply fax format file.
- The AutoReply wizard, with which users can add and remove servers and configure the service.

To run the AutoReply configuration program

1. On the remote computer, open a view of the RightFax\Autoreply folder on the RightFax server and run ARConfig.exe. The **AutoReply Configuration** dialog box opens.
2. In the **Connection** tab, specify the server to connect to. Enter your log on user ID and password, and then click **Connect** to connect to the server.
3. In the **AutoReply User ID** tab, enter the RightFax user ID from which reply faxes will be sent. For each server, you can specify just one user ID from which all reply faxes will be sent.

4. In the **Monitored Users** tab, create a list of users to monitor for the AutoReply service. In the **Available users** list, click one or more users, and then click **Add**. The users appear in the **Monitored users** list.

In the **Monitored User Configuration** tab, choose the AutoReply response for the monitored users. To create one method of response for all users, in the **Select the monitored user ID** box, click **Default**. Or, choose a user and the responses for that user.

You have the following options for AutoReply responses

Table 21b AutoReply Responses

| Response | Enter this |
|---|---|
| Route the received fax to another user after an AutoReply is sent. | The user ID where the fax should be routed. |
| Route the received fax to another user if an AutoReply cannot be sent. (If no valid CSID number is included with the received fax, an AutoReply cannot be sent.) | The user ID where the fax should be routed. |
| Print the received fax if an AutoReply cannot be sent. (If no valid CSID number is included with the received fax, an AutoReply cannot be sent.) | The printer ID for the printer where the fax should print. (Enter a printer ID defined in Enterprise Fax Manager.) |

5. In the **Format File** tab, enter the location of the file to use for formatting the AutoReply fax. (To format the AutoReply fax, see [“Customizing the Reply Fax”](#) on page 222.)
6. Click **OK**.

Customizing the Reply Fax

You can specify the appearance of your reply fax. The appearance is defined in a text file.

The text file can have any file name and can be located in any folder accessible by the fax server. Specify the path and file name in the AutoReply configuration.

A sample file called Format.ini is available in the RightFax\AutoReply\Samples folder. It is recommended that you modify the sample file to fit your organization's needs. This file includes layout settings for a reply fax page.

The Format.ini file is divided into sections. The General section defines values that apply to the entire fax page. The Frame sections each define the location of a frame on the fax page and the contents of the frame. You can place an unlimited number of frames on a page..

Table 21c Options in the General Section

| Option | Value | Definition |
|------------|-------------------|---|
| Font | Name, Size | The default font that will be used for text if a font is not specified for a frame. |
| OutputSize | Letter, A4, Legal | The size of the page for the reply fax. |

Table 21d Options in the Frame Section

| Option | Value | Definition |
|----------------------|--------------------------|--|
| Area | Left, Top, Right, Bottom | The boundaries of the frame. The left and right values are measured from the left edge of the page. The top and bottom values are measured from the top edge of the page. For example, a frame that fills the lower-right quarter of a letter-size page might have this value: 4.25,5.5,8,10.5. |
| Border | Width | The width (in pixels) of the border to draw. Omit or set to zero for no border. |
| File | File name | The name of the file to include in the frame. This can be either a text file (if the Type option is set to Text) or graphic file (if the Type option is set to Graphic). For graphic files, monochrome bitmap files are recommended for best image rendering. To add variables to the text in a text file, see "Using variables in text" on page 223 . |
| Font | Name,Size,Style | The font that will be used for all text in this frame. Specify the name of the font, the point size, and (optionally) the style (Bold, Italic, or both). |
| Horizontal-Alignment | Left, Center, or Right | The horizontal alignment of the text or graphic within the frame. |

Table 21d Options in the Frame Section (Continued)

| Option | Value | Definition |
|--------------------|------------------------------|--|
| Text | Text | If you have set the Type option to Text, this option supplies the text that will appear. Note that this option supports a single line of text only. To include a longer text message, use the File option. To add variables to the text, “Using variables in text” on page 223 . |
| Type | Text, Graphic, or FaxPage | Each frame must be one of these types: Text frames display literal text from the Text option or text from a text file specified in the File option. Graphic frames display the graphic file specified in the File option, scaled to fill the frame. FaxPage frames display the first page of the fax that is being replied to, scaled to fit the frame. |
| Vertical-Alignment | Top, Center, Bottom, or Wrap | The vertical alignment of the text or graphic within the frame. The Wrap value should be used for unformatted text to wrap the text to fit within the boundaries of the frame. |

Using variables in text

Text in the format file and text included from an external file can contain one or more of the following variables.

For example, the text TO: Fax Sender at ~1 would appear in the reply fax as TO: Fax Sender at 520-555-0100.

Table 21e Text Variables

| Variable | Definition |
|----------|--|
| ~1 | Destination fax phone number. |
| ~2 | Number of pages in the received fax. |
| ~3 | Date and time the fax was received (the start of receipt). The date and time will appear as <code>Date Time [Timezone]</code> , where the <code>Date</code> and <code>Time</code> are formatted according to the Regional settings in Control Panel. |
| ~5 | Unique ID of the fax (assigned by the RightFax server). |

Troubleshooting the AutoReply Service

To troubleshoot the service, you can run AutoReply in a command window.

1. In Enterprise Fax Manager, stop the AutoReply service.
2. Open a command window such as the MS-DOS prompt.
3. Change to the RightFax\AutoReply folder.
4. Type **AutoReply** and press ENTER. The AutoReply executable does not include any command line switches.

■ ■ ■

Chapter 22

Creating, Sending, and Deleting Faxes

With the RightFax client applications, you can create and fax documents directly from your computer. You can create and send complex documents directly from a word processor or other business application, select and fax existing document files with the click of a button, or create a customized fax by combining files, library documents, addressing information, and your own notes from one convenient dialog box. With one of the RightFax e-mail gateway modules, you can also send e-mail messages as faxes.

To enable these features, you must first install the appropriate client applications on the client computer (described in the *RightFax Installation Guide*). Installing e-mail gateways and associated client software is described in the *RightFax Gateway for Microsoft Exchange Guide* and *RightFax Gateway for Lotus Notes Guide*.

For more information on using the FaxUtil client application and other RightFax fax client options, refer to the *FaxUtil Quick Reference Card* and the FaxUtil online help system. FaxUtil online help is installed with the FaxUtil client application.

Creating a Fax

RightFax provides users several convenient ways to create a new fax. The method you use to create a fax depends on the content of the fax.

Printing documents to the fax printer

You can fax any document directly within the application used to create the document. This can be useful, for example, if you want to write a letter using a word processor and then immediately send it as a fax. When the document is ready to be faxed, print it using the printer designated “RightFax Fax Printer.” The RightFax fax printer forwards your printed document to the RightFax server and opens the **Fax Information** dialog box, prompting you for addressing information (see “[Using the Fax Information Dialog Box](#)” on [page 226](#)). When you complete the required fax information boxes and click **Send**, the document will be sent as a fax to the destination you specify.

This feature is only available if the RightFax Print Driver component was selected during the RightFax client installation (described in the *RightFax Installation Guide*). Also, the application used must be able to print to a network printer.

Using the Send To function

Send To is a function built in to Windows operating systems that quickly copies a file to a selected destination. RightFax adds a **Fax Destination** command to the Send To shortcut menu that forwards the specified file to the RightFax server and opens the **Fax Information** dialog box, prompting you for addressing information (see “[Using the Fax Information Dialog Box](#)” on [page 226](#)).

To use this function, in Windows Explorer, open the folder that contains the file that you want to fax. Right-click the file to open a shortcut menu. Click **Send To**, and then click **File Destination via RightFax**. The **Fax Information** dialog box opens. Complete the required addressing boxes and specify any notes, additional files, or library documents you want to attach. Click **Send** to generate and send the fax.

The **Fax Destination via RightFax** command is installed when the RightFax Print Driver component is selected during the RightFax client installation (described in the *RightFax Installation Guide*). This feature only works with file formats that the RightFax server can convert to fax format (it will not work with executable files, for example). For a list of file formats that can be converted to fax format, see [Appendix D, "File Formats that Convert to Fax Format"](#).

Using the Quick Fax/Broadcast function

The Quick Fax/Broadcast feature creates a fax by combining files, library documents, addressing information, and your own notes from one convenient dialog box. Click the RightFax tray icon to open the tray icon shortcut menu, and then select **Quick Fax/Broadcast**. The **Fax Information** dialog box opens (see ["Using the Fax Information Dialog Box"](#) on page 226). Complete the required addressing boxes and specify any notes, files, or library documents you want to attach. Click **Send** to generate and send the fax.

The tray icon is installed when the RightFax Print Driver component is selected during the RightFax client installation (described in the *RightFax Installation Guide*).

Creating a new fax from your client application

RightFax supports several fax client applications in addition to its own FaxUtil client, including RightFax Web Access and SAPoffice for SAP R/3. Each of these client applications let you create a new fax. For information on creating faxes using the FaxUtil client, refer to the FaxUtil online help system installed with FaxUtil. For

information on creating faxes using other supported fax clients, refer to the documentation provided by RightFax for your specific client type.

Creating a fax in e-mail

If you have installed one or more RightFax e-mail gateway modules, you can create a fax as an e-mail message and fax it directly from your e-mail mailbox. For information on faxing from your e-mail client application, see [Chapter 25, "Using RightFax E-mail Gateways"](#), or refer to the *RightFax Gateway for Microsoft Exchange Guide* or *RightFax Gateway for Lotus Notes Guide*.

Using the Fax Information Dialog Box

To send a new fax, you must provide the RightFax server with fax addressing information (such as the destination fax number). When you print a document to the fax printer, or use the Send To or Quick Fax/Broadcast functions, or create a new fax in FaxUtil, RightFax opens the **Fax Information** dialog box. This dialog box prompts you for fax addressing information and also lets you attach files, library documents, and your own notes. The **Fax Information** dialog box also provides several options that let you control when and how the document is sent.

Boxes that appear in bold are required. If you send a fax before completing all the required boxes, the fax will remain in your FaxUtil mailbox with the status "Info Not Complete" until the required boxes are completed. In most cases, **To Name** and **Fax Number** are the only required boxes. The RightFax administrator can determine the required entries for users in Enterprise Fax Manager (see ["Requiring Cover Sheet Fields"](#) on page 189).

When you have completed all the required and optional entries, click **Send** to send the fax.

The Main tab

Figure 22.1 The Fax Information Dialog Box Main Tab

Under **To**, enter the name, phone number, and other addressing information for the intended fax recipient as you want it to appear on the fax cover sheet. Boxes in bold (such as **Fax Number**) must be completed before the fax can be sent. You must always complete the **Fax Number** box because RightFax uses this when connecting to the destination fax machine.



Note Hyphens, parentheses, and spaces can be typed in a destination fax number. You can also type the number without any spaces or separator characters.

You can choose to enter an e-mail address for your intended recipient instead of a fax number. To enter an e-mail address, click the arrow button next to the **Fax Number** box, and select **E-Mail Address** from the shortcut menu. Up to 62 characters can be entered for an e-mail address. Sending to an e-mail address allows several additional options including sending via certified delivery,

sending images in portable document format (PDF), and sending file attachments of any type, including file types that cannot be rendered as images (such as WAV files). For more information on sending a fax to an e-mail address, see [“Sending Documents to E-mail Addresses”](#) on page 231.

To select a fax destination from your RightFax phonebook, click **Phonebook**. The **Phonebook** dialog box opens, listing the individual and group entries in your RightFax phonebooks. Double-click a phonebook entry to add it to the **Current Recipients** list. You can add as many fax recipients to this list as you want. To add the fax addressing information entered under **To** as a new entry in your RightFax phonebook, click **Add Entry**. For more information on creating and using RightFax phonebooks and phonebook entries, see [“Using the RightFax Phonebook”](#) on page 237.

You can also specify up to two billing codes under **Accounting**. These codes can be used by the RightFax administrator to track who the fax was sent to or who sent the fax, depending on the needs of your organization. Click **Lookup** to view and select from a list of billing codes. For more information on using billing codes, see [Chapter 13, “Creating Billing Codes”](#).

Fine mode Select this check box to create the fax using 200×200 dots per inch (DPI) resolution. Using this resolution takes longer to generate and send the fax but produces a clearer fax image.

Use cover sheet Adds a cover sheet to the beginning of the fax. RightFax uses the cover sheet file specified by the RightFax administrator as your user or group default. If you have permission to change cover sheets in your RightFax user profile ([“The Permissions tab”](#) on page 103), you can select the cover sheet to use (see [“The More Options Tab”](#) on page 230).

Hold for preview You can examine the final version of the outgoing fax before you send it. The fax will be held in your FaxUtil mailbox with the status "Held for Preview" and can be viewed there. To send the fax after you have previewed it, click the fax in FaxUtil and select **Release** in the **Fax** menu.

Use smart resume Allows the fax server to intelligently re-send only the portion of a fax that failed to send. For example, if the connection is broken after 40 pages of a 50-page fax, normally all 50 pages have to be re-sent. By enabling Smart-Resume, the server will only re-send the last 10 pages.

Create PDF image When sending your document to an e-mail address, check this option to send a PDF file instead of a TIFF file (the image format used for faxes). This PDF file will be converted to black and white and cannot be edited unless the RightFax SecureDocs module is installed on your RightFax server.

If the RightFax SecureDocs module is installed, you can check this option when sending to either a fax number or an e-mail address. When sending to an e-mail address, the recipient will receive the PDF file as an attachment to the e-mail message. When sending to a fax number, the recipient receives a conventional fax image, but a PDF file is stored with the fax record on the server and can be viewed from your fax client application. With the SecureDocs module, PDF files are formatted in full color and the text of the PDF can be selected and edited (rich PDF). Also, when the RightFax SecureDocs module is installed, you can click the [...] button to open a list of additional PDF options. For information on creating rich PDFs and setting PDF options, refer to the *RightFax SecureDocs Module Guide*.

Use cheap rates Tells RightFax to delay sending the fax until a specified time (typically in the late evening when long distance rates are lower). The **Cheap Rates** time can be specified by selecting **Options** in the FaxUtil **Tools** menu, and then clicking the **Other Options** tab.

Delay send Tells RightFax to postpone the transmission of your fax to a later day or time. This lets you take advantage of off-peak phone rates or ensure that the fax recipient is available at the other end. If you select this check box, you must also specify a date and time to queue the fax for transmission. If you specify a time and date that has already passed, the fax will be sent as soon as possible.



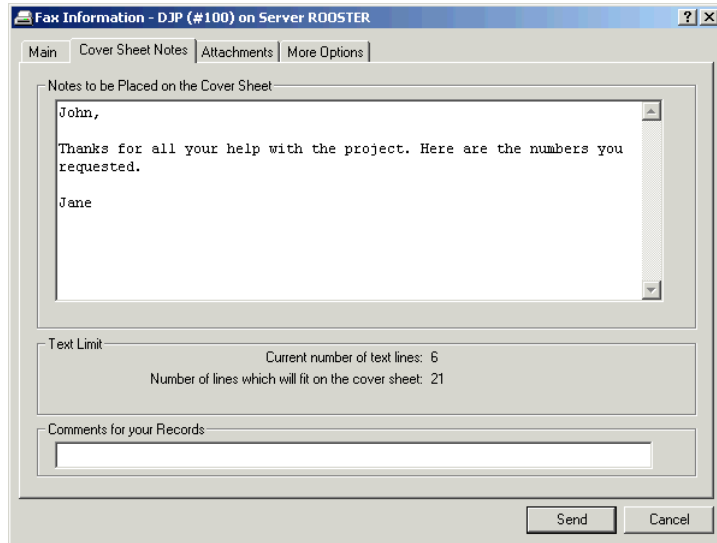
Note *The fax is queued at the time you specify, but will not actually be sent until it reaches the top of the queue. This can cause a delay between the time you specify and the time that the fax is actually sent.*

Thermal fax options When you send or receive a fax from a fax machine that is not connected to the network or to the RightFax server (such as a thermal fax machine), no record of the fax is stored on the RightFax server. In FaxUtil, you can record such a fax transmission on the RightFax server for tracking purposes. The **Sent**, **Received**, and **Pages** options in this dialog box let you specify information about the fax. These options are available when you select **Fax > Record Manual Fax** in FaxUtil. For more information on recording a manual fax, refer to the FaxUtil online help.

The Cover Sheet Notes tab

Click this tab to add notes or comments to the cover sheet.

Figure 22.2 The Fax Information Dialog Box Cover Sheet Notes Tab



In order for your notes to appear, the fax cover sheet used must include one or more <NOTE> cover sheet embedded codes. Each <NOTE> embedded code will display up to 69 characters of the message entered here and a cover sheet can include up to 21 <NOTE> embedded codes. For more information on cover sheets and the <NOTE> cover sheet embedded code, see [Chapter 18](#), “Creating Fax Cover Sheets”.

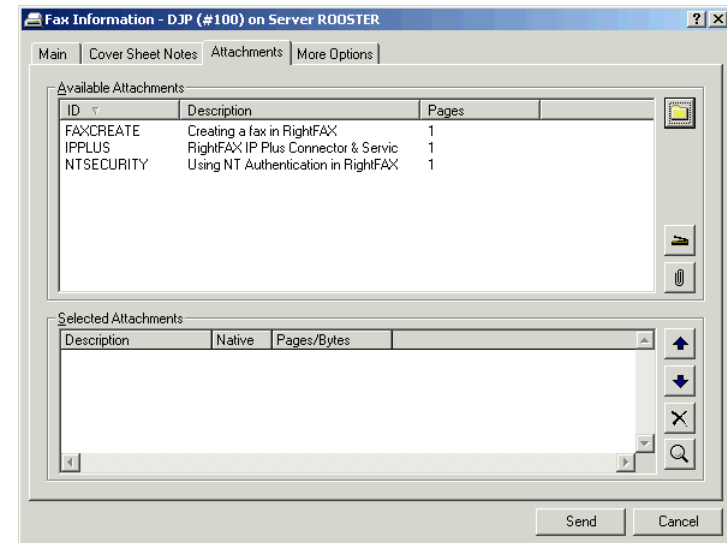
Notes to be Placed on the Cover Sheet Type the notes that you want to appear on your fax cover sheet. You can enter up to 21 lines.

Text Limit This displays the current number of lines in your note and the number of lines remaining. Although it is possible to enter more than 21 lines of text, only 21 can be displayed on the cover sheet. If you exceed 21 lines, the computer will beep and an error message will appear in this box.

Comments for your Records This is a comment for your own use only. This text is not sent to the fax recipient. Text you enter in this box will appear in your FaxUtil mailbox in the **Comments** column.

The Attachments tab

Figure 22.3 The Fax Information Dialog Box Attachments Tab



Available Attachments When sending a document to a fax address, you can attach two types of documents: library documents and documents in their native file format. Library documents are frequently faxed documents that your fax administrator has stored on the fax server. Native documents are electronic document files that you have saved on your local

computer or on a server (such as Microsoft Word DOC files). You can attach any of the native document file types supported by the RightFax native document conversion engine (described in [Appendix D, "File Formats that Convert to Fax Format"](#)), and you can attach as many files to a fax as you want.

This box lists all of the library documents stored on your fax server. Double-click a file to move it to the **Selected Attachments** list.

To attach a document file, click the file folder button to search for and select a document file. When you double-click the file name, it will appear in the **Selected Attachments** list.

Selected Attachments This box lists the library documents and native document files you have attached to the fax. Each of your attachments will be added to the fax in the order it is listed here. To move an attachment up or down, select the attachment and click the arrows. To remove an attachment, select it and click the **Delete** button [X]. To preview an attachment, double-click it.

If you are sending to an e-mail address and you have attached a native document file, a check box will appear next to the document in the **Native** column. Check this option to send the file in its native document format as a file attachment to the e-mail message, rather than rendering the document into a fax image. Using this option, you can attach files of any type, including file types that cannot be rendered as images (such as WAV files). For more information, see ["Sending Documents to E-mail Addresses"](#) on [page 231](#).

When sending a fax document to an e-mail recipient, this box also specifies one or more native document files to be the body text of your e-mail message. Right-click any of the column headers in this list and select **Advanced Columns** from the pop-up menu. This adds an **Alternate Body** column. Check the box in this column for each native document attachment you want to use as your e-mail

body. If you select multiple files, each file will be sent to your recipient, but the recipient will only see the first file that is supported by his e-mail client application.



Note Because most e-mail client applications support plain ASCII text files, these files can almost always be used as e-mail body text. Many e-mail client applications also support HTML and rich text format (RTF). If the file type you specify is not supported by your recipient's e-mail client application, it will be ignored.

The More Options Tab

Figure 22.4 The Fax Information Dialog Box More Options Tab

Recipient Fax ID Specify the exact remote fax ID of the intended recipient's fax machine or server. When this feature is enabled, the fax will not be sent unless the remote ID matches the ID specified. You can use the asterisk (*) and question mark (?) wildcards if you are not sure of the exact ID. Asterisks represent

zero or more characters or digits. Question marks represent exactly one digit or character each. This feature is supported for Brooktrout fax boards only.

Use Form Select this check box to add an overlay form to the fax. To specify the form file to use, click the arrow to open a list all available forms. For more information on forms, see [Chapter 11](#), “Creating Overlay Forms”.

Cover Sheet File If your user profile includes permission to change fax cover sheets, you can select a cover sheet in this list.

Priority Specify the priority that is assigned to the fax. Select low, normal, or high priority from the list. If you do not have the **Can Use High Priority** permission checked in your RightFax user profile (see “The Permissions tab” on [page 103](#)), the “High Priority” option will not appear here.

Automatic Deletion Specify when sent faxes should be automatically deleted from your FaxUtil mailbox.

From Enter your name, fax number, phone number, and other contact information. This information will appear on the fax cover sheet.

Sending Documents to E-mail Addresses

You can use the RightFax client applications to create and send a document to an e-mail address, rather than a fax number. Your recipient will receive your document as one or more file attachments to an e-mail message with the subject “E-Document.”

To use this feature, the fax administrator must give the RightFax server access to an SMTP server on the network (see “[Configuring the fax server to send documents to e-mail addresses](#)”, below). Also, in order to send any document to an e-mail address, a RightFax user must have a valid return e-mail address configured in the **E-mail address** box in the **Identification** tab of the **User Edit** dialog box (described on [page 101](#)).

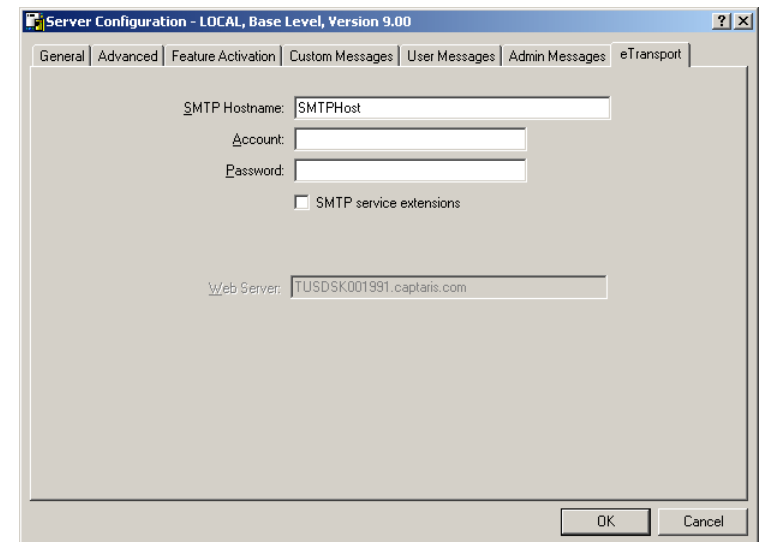
Configuring the fax server to send documents to e-mail addresses

To send documents to e-mail addresses in addition to fax numbers, you must specify an SMTP server on your network that the RightFax server can use to access the Internet.

To specify an SMTP server in RightFax

1. Run Enterprise Fax Manager (see “[Starting Enterprise Fax Manager](#)” on [page 89](#)).
2. Click the name of your RightFax server in the tree in the left pane. A list of services appears at the bottom of the Enterprise Fax Manager window.
3. Double-click **RightFax Server Module** in the **Service Name** column. The **Server Configuration** dialog box opens. Click the **eTransport** tab.

Figure 22.5 Configuring RightFax to Access an SMTP Server



4. In the **SMTP Hostname** box, enter the name of an SMTP mail server on your network where RightFax will send e-mail messages for transmission.



Note *The Web Server and Web Site options on this dialog box are required only for SecureDocs certified delivery. For information on these options, refer to the RightFax SecureDocs Module Guide.*

5. Click **OK**.

Sending documents to e-mail addresses

Sending a document to an e-mail address allows several additional options including sending via certified delivery, sending images in portable document format (PDF), and sending file attachments of any type, including file types that cannot be rendered as images (such as WAV files).

For information on sending documents to e-mail addresses using other fax client applications such as the RightFax Client for Microsoft Exchange, the RightFax Client for Lotus Notes, or the RightFax Web Client, refer to the documentation provided with your client software.

To specify an e-mail address as your document destination

1. In the **Fax Information** dialog box (described on [page 226](#)), click the **Main** tab.
2. Click the arrow button next to the **Fax Number** box and select **E-Mail Address** from the menu.
3. Enter the destination e-mail address. Up to 62 characters can be entered.

Sending documents in PDF format

When sending a document to an e-mail address, you can choose to send a portable document format (PDF) file, rather than a TIFF image file (the file format used for faxes). To send a PDF version of your document, select the **Create PDF image** option in the **Main** tab of the **Fax Information** dialog box (described on [page 227](#)).

When you send a PDF to an e-mail address, the recipient receives the PDF as an attachment to the e-mail message. When you send a PDF to a fax number, the recipient receives a fax image, but a PDF file is stored with the fax record on the RightFax server. This PDF file can be viewed from your fax client application.

When you send a document as a PDF, RightFax converts the document to a TIFF image, and then converts the TIFF image to PDF. The PDF image is black and white and can't be edited. To send a PDF that is rendered in color and can be edited, the fax administrator must install the RightFax SecureDocs module (sold separately).

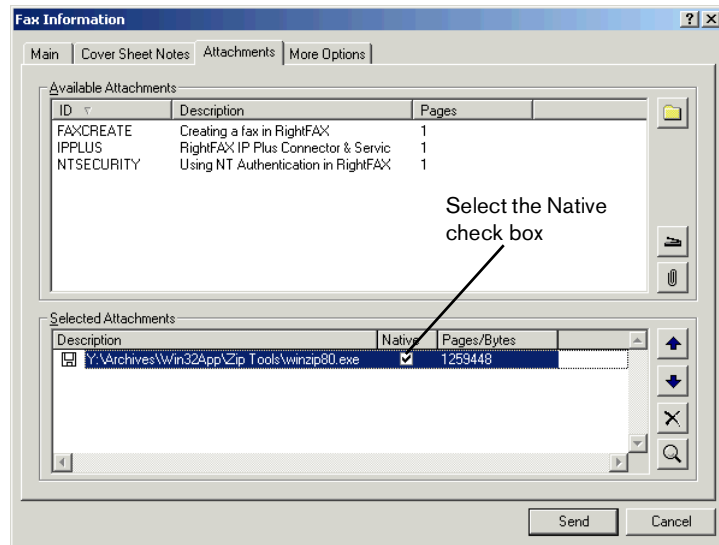
Attaching documents in their native file formats

When you send a document to an e-mail address, you can choose to leave file attachments in their native file format, rather than sending them in TIFF or PDF format. This lets you send file types that normally cannot be rendered into images, such as .exe, .wav, or zipped files.

To leave file attachments in their native format, select the **Native** check box next to the attachment in the **Attachments** tab of the **Fax Information** dialog box. For information on adding file

attachments to your outbound documents, see “[The Attachments tab](#)” on [page 229](#), or refer to the online help for your fax client application.

Figure 22.6 Sending a File Attachment in its Native Format



Using a file attachment as the body of your e-mail message

When you send a document to an e-mail address, the window in the recipient’s e-mail software where the text of e-mail messages normally appears (the body of the e-mail message) is blank. The document itself is stored with the e-mail message as a file attachment, along with any additional native file attachments you added. However, you can choose to specify one or more document files to use as the body of the e-mail message. These are called alternate body files. Alternate body files can be useful if you want to include a customized introductory message for the attached documents.

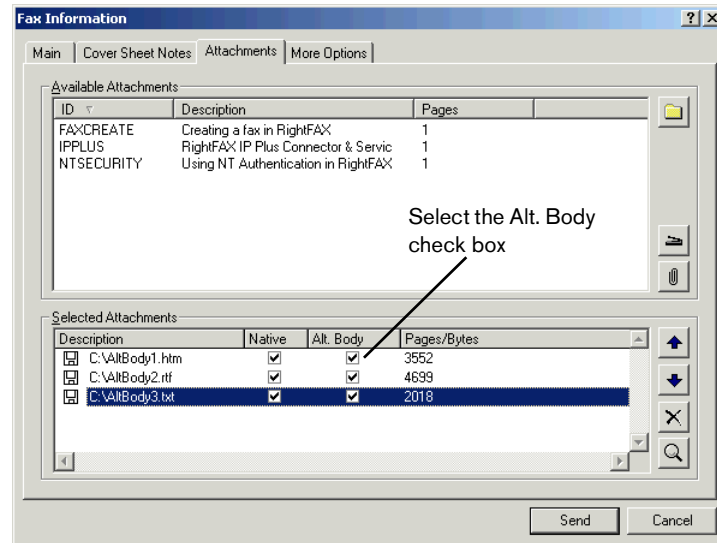
Because most e-mail software supports ASCII text files, these files can usually be used as alternate body files, although many e-mail software packages also support HTML and rich text format (RTF). If you select more than one alternate body file, your recipient’s e-mail software will display the first listed file with which it is compatible, ignoring any previous or remaining alternate body file attachments. For this reason, the order in which alternate body files are displayed in the **Selected Attachments** list is important. When attaching multiple alternate body files, it is recommended that you always list the least frequently supported alternate body file types (such as RTF) at the top of the **Selected Attachments** list.

To attach alternate body files

1. In the **Fax Information** dialog box (described on [page 226](#)), click the **Attachments** tab.
2. Attach the alternate body files you want to use by clicking the folder button and browsing for the files. Make sure that the alternate body files are listed with least frequently supported alternate body file types (such as RTF) at the top of the list.

- Right-click any of the column headers in the **Selected Attachments** list and select **Advanced Columns** in the shortcut menu. This adds an **Alt. Body** column to the **Selected Attachments** list.

Figure 22.7 Specifying a File Attachment as an Alternate Body File



- Select the **Alt. Body** check box for each alternate body file. (When you check this option, the check box in the **Native** column will also be selected.)



Note You can attach other files to your document in addition to alternate body files. File attachments that do not have the **Alt. Body** option selected will be sent as document attachments.

Using Embedded Codes

Embedded codes are special faxing instructions that you insert into documents created in other applications. 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 a document, type the code you want, along with any required parameters, between angle brackets. For example, an embedded code that provides the destination fax number is written like this:

```
<TOFAXNUM:555-1212>
```

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

Although you can use any fonts you want in the text of your documents, embedded codes *must always* use a native printer font. This is because when the document 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 document 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.

Embedded codes can be placed anywhere in the document that you will be faxing and can be used in any document that accepts text characters. Embedded codes cannot line wrap and any embedded code statement that is so long that it wraps to a second line will be ignored.

For a complete list of embedded code keywords, descriptions, and their correct syntax, see [Appendix A, “RightFax Embedded Codes”](#).

Using International Character Sets

The character set that is available when creating a document to fax depends on the PCL symbol set your computer is configured to use. The RightFax server translates the following PCL symbol sets:

- 8U (Roman-8)
- 10U (PC-8 Code Page 437)
- 12U (PC-850 Multilingual)
- 0N (ISO 8859/1 Latin 1)
- 19U (Windows 3.1 Latin 1)
- 9U (Windows 3.0 Latin 1)

The correct appearance of language characters in your fax depends on the symbol set used to create the characters and the ANSI code page used by the RightFax server. When a document is created, its characters are mapped to a code page that tells the computer what the characters should look like. It is these code pages that allow computers to generate both English and non-English text.



Note *Time strips are printed using the printer's available symbol set regardless of the code page in use on the server. 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.*

To ensure that the characters included on a fax or on a fax cover sheet appear as expected, the symbol set used by the originating computer must map accurately to the code page on the RightFax server. For this reason, all fax client computers should be configured to use the same code page as the RightFax server. If

not, some characters in your users' outgoing faxes may change during the conversion of the file to fax format. RightFax supports the following ANSI code pages:

- 1250 (Albanian, Croatia, Czech, Faeroese, Hungarian, Polish, Romanian, Serbian, Slovak, and Slovenian)
- 1251 (Byelorussian, Bulgarian, Russian, and Ukrainian)
- 1252 (Afrikaans, Basque, Catalan, Danish, Dutch (Standard and Belgium), English (US, Britain, Canada, New Zealand, Australian, Ireland, S.Africa), Finnish, French (Standard, Belgium, Switzerland, Canada, Luxem.), German (Standard, Swiss, Austrian, Luxem., Liechtenstein), Icelandic, Indonesian, Italian (Standard, Swiss), Norwegian (Bokmal, Nynorsk), Portuguese (Standard, Brazil), Spanish (Mexico, Traditional, Modern), and Swedish)
- 1253 (Greek)
- 1254 (Turkish)
- 1255 (Hebrew – limited support)
- 1257 (Estonian, Latvian, and Lithuanian)



Important *Although the RightFax user interface supports multiple languages and character sets, diacritical characters are not supported in the RightFax database. For example, a server named Barcelona/España will return a Server Not Responding error when a connection is attempted.*

Double-byte character support

Although the RightFax database does not store double-byte characters, these characters *are* supported by server-side application native document conversion. When you install and configure the appropriate language support options to Microsoft Word, Excel, and PowerPoint, RightFax will successfully convert double-byte documents to fax images. For more information on server-side application conversion, see [Chapter 24, "Implementing Server-Side Application Conversion"](#).



Note Although double-byte characters added to the text of a Microsoft Word cover sheet will convert correctly, double-byte characters inserted into DocVariable fields on Microsoft Word cover sheets will not. For more information on Microsoft Word cover sheets, see ["Creating a Microsoft Word Cover Sheet"](#) on page 183.

Monitoring Transmission Success and Failure

Use FaxUtil to monitor the transmission of your faxes.

A transmission is successful if the RightFax server made a connection, transmitted the information across the line, and received information from the target fax machine indicating that the fax information was received.

If a transmission attempt is not successful, the code "ER" (error-retry) and a brief error message appears in the **Status** column in the FaxUtil mailbox. After a set number of attempts (five by default), RightFax will stop trying, consider the transmission failed, and display the code "ED" (error-dropped) in the status column of FaxUtil. A message appears stating that the transmission failed. For a complete list and description of RightFax error messages, see [Appendix E, "Error and Status Messages"](#).

Fax Approval

RightFax can be configured to hold outbound faxes for approval by an administrator before sending. Only RightFax administrators, group administrators, and group alternate administrators can view and approve these faxes.

To require fax approval for a user

1. Edit the user profile in Enterprise Fax Manager (see ["Editing user properties"](#) on page 101).
2. On the **Permissions** tab, select the **Must Have Faxes Approved** check box.

To view a list of all faxes waiting for approval

1. Run FaxUtil.
2. On the **List** menu, click **Administrative Mode** to view the contents of all fax mailboxes for which you are an administrator.
3. On the **List** menu, click **Needing Approval** to display faxes waiting for approval.
4. To approve or disapprove a fax, click the fax and select **Approve Fax** or **Disapprove Fax** in the **File** menu. You can add a note (up to 450 characters) that will be stored with the date and your user ID in the fax history. You can also delete the fax rather than approve or disapprove it. If the fax is approved, it is immediately scheduled to send. If the fax is not approved, it is assigned a status of "ED: Approval Denied" in the original sender's FaxUtil mailbox.

■ ■ ■

Chapter 23

Creating Phonebooks and Broadcasting Faxes

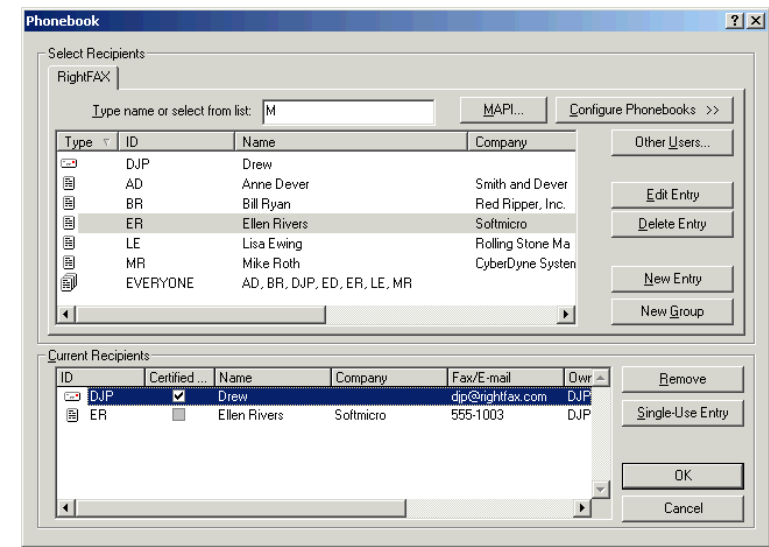
You can store information about your fax recipients in phonebooks. RightFax phonebooks store fax addressing information (such as name, fax number, and phone number) in a single location so you can easily apply all fax destination information when addressing an outgoing fax. You can also create group phonebook entries that contain fax addressing information for multiple fax recipients. RightFax users can choose to use the phonebook built in to the RightFax FaxUtil client or can link to existing ODBC, LDAP, or MAPI contact lists.

Using phonebooks or other databases containing contact information, RightFax lets you send fax broadcasts. Fax broadcasting sends a single fax to multiple recipients without addressing each fax individually.

Using the RightFax Phonebook

The RightFax phonebook is a fax recipient database customized for each RightFax user. Because each user's phonebook is unique, all phonebook functions are managed from within the FaxUtil client application. To open your RightFax phonebook, run FaxUtil. Select **Tools > Phonebook**, or click the **Phonebook** button in the toolbar.

Figure 23.1 The RightFax Phonebook



For information on creating and managing individual and group RightFax phonebook entries, refer to the FaxUtil online help. For information on using phonebook entries to address outgoing faxes, see [“Using the Fax Information Dialog Box”](#) on [page 226](#).

Importing Entries Into the RightFax Phonebook

You can import entries into your personal phonebook from a specially formatted text file.

Creating a file to import

The file used to import phonebook entries is typically generated by an existing database of contact information. This must be an ASCII text file with each phonebook entry separated by a line break. Each entry is made up of one or more phonebook fields. The following table lists each of the valid phonebook entry fields in the order the fields appear in the file.

Table 23a Phonebook Fields

| Field name | Maximum length | Description |
|------------|----------------|---|
| ID | 17 | A unique ID used only to reference the phonebook entry. It never appears on the fax |
| Name | 59 | The recipient's name as it will appear on the fax cover sheet |
| Company | 59 | The recipient's company name as it will appear on the fax cover sheet |
| Address | 59 | The recipient's address as it will appear on the fax cover sheet |
| CityState | 59 | The recipient's city and state as they will appear on the fax cover sheet |

Table 23a Phonebook Fields (Continued)

| Field name | Maximum length | Description |
|------------|----------------|---|
| Fax1 | 31 | The recipient's primary fax number. This is used when dialing the fax destination and may appear on the fax cover sheet |
| Fax2 | 31 | The recipient's alternate fax number. This is used when dialing the fax destination and may appear on the fax cover sheet |
| Voice1 | 31 | The recipient's primary voice number as it will appear on the fax cover sheet |
| Voice2 | 31 | The recipient's alternate voice number as it will appear on the fax cover sheet |
| BillCode1 | 17 | A code associated with the recipient used for billing or tracking purposes. It never appears on the fax |
| BillCode2 | 17 | An additional code associated with the recipient used for billing or tracking purposes. It never appears on the fax |
| Notes | 128 | Any additional information about the recipient. This will not appear on the fax and is for your information only |

Each phonebook entry must contain the same fields listed in the same order. Individual fields can be separated with either commas, tabs, or spaces, and each field may or may not be surrounded by quotes. When importing the file, you will have an opportunity to specify the exact layout of the file.

In addition to the phonebook entries, the file to import must contain as its first line a “field specification” line. This line indicates which fields are included in each phonebook entry and in which order. The field specification line uses the same line layout as each of the phonebook entries but specifies the actual field names, as opposed to the data that will populate those fields.

Sample phonebook import files

Both of these sample files can be imported into your RightFax phonebook.

```
"ID";"Name";"Fax1";"Company";"CityState"  
"Bob";"Bob Jones";"444-3333";"Acme";"Tucson AZ"  
"Jane";"Jane Doe";"555-1212";"Ace";"Portland ME"
```

```
Name,Fax1,Voice1,Company,BillCode1,BillCode2  
Dave Smith,888-9999,299-1010,8051,0004  
John Brown,234-5678,789-0123,8051,0244
```

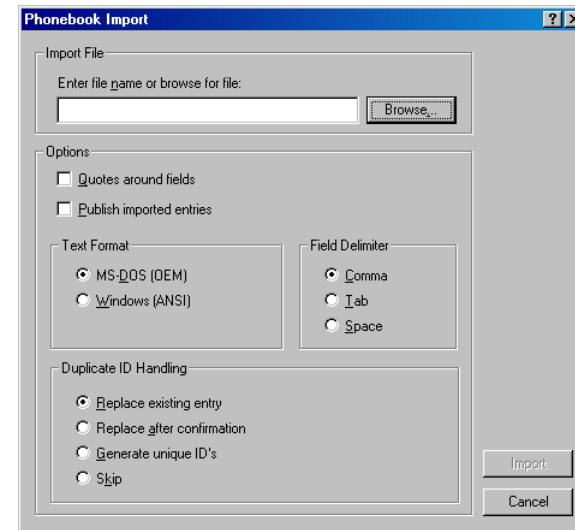
If any field is left empty or contains no data, the import will fail. Any unpopulated fields that you save to this file must be indicated with a blank space.

For information on outputting a properly formatted text file from your contact database, refer to the documentation for your contact database management application.

Using FaxUtil to import the phonebook entries

After you have created the text file to import from, run FaxUtil, and select **Phonebook Import** from the **Tools** menu. The **Phonebook Import** dialog box opens. Complete each box according to the format of the file you are importing. When all boxes are complete, click **Import** to import the entries.

Figure 23.2 The Phonebook Import Dialog Box



Import File Enter the path and file name of the text file to import. Click **Browse** to search for and select the file.

Quotes Around Fields Fields in the text file you import can be surrounded by, but do not require, quotes. If quotes *are* used, they must be used on *every* field in the file. You cannot mix fields with quotes and fields without quotes. Select this check box only if your data fields are surrounded by quotes.

Publish Imported Entries Select this check box to make each new imported entry published. Published entries can be accessed by other RightFax users; unpublished entries can be accessed only by you and the RightFax administrator.

Text Format Select the text mode of the file to import. If your text application doesn't specify whether it's using OEM or ANSI text, select OEM. If accented or other special characters do not import properly, re-import the file and select ANSI.

Field Delimiter Specify which type of character, a comma, tab, or space, is used to separate the individual fields in each phonebook entry in the file.

Duplicate ID Handling You have the following options for handling imported entries that contain IDs that already exist in your phonebook:

- **Replace Existing Entry** replaces any existing entry in the phonebook with the imported entry containing the duplicate ID.
- **Replace After Confirmation** replaces existing entries only if you agree to a confirmation prompt.
- **Generate Unique IDs** adds a number to the end of duplicated IDs in order to make the new ID unique.
- **Skip** ignores any entry in the import file with a duplicate ID.

Printing Each User's RightFax Phonebook Entries

RightFax includes an administrative utility, PhnPrint.exe, that lets RightFax administrators print the published and private phonebook entries of one or more RightFax users to a file or printer. For information on the RightFax administrative utilities, see ["Using the RightFax Administrative Utilities"](#) on page 272. For information on running PhnPrint.exe, see ["Running PhnPrint.exe"](#) on page 284.

Using MAPI Phonebooks

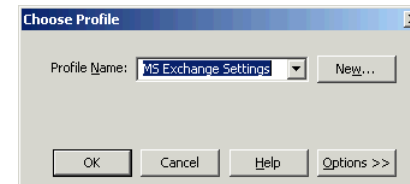
RightFax also integrates with MAPI-compliant contact lists such as Microsoft Exchange address lists and Outlook contact lists. In order to access MAPI contact lists, each client workstation must have MAPI installed.

MAPI address books and contact list profiles are created by Exchange, Outlook, and other MAPI-compliant applications. Because these profiles conform to a universal standard, you do not need to configure the MAPI-to-RightFax connection.

To select a recipient from a MAPI source

1. In the **Phonebook** dialog box, click **MAPI**. The **Choose Profile** dialog box opens.

Figure 23.3 The Choose Profile Dialog Box



2. Select the MAPI profile name in the **Profile Name** box, and then click **OK**. The **Enter Password** dialog box opens.
3. Enter your network user name, domain, and password, and then click **OK**. This will open the MAPI contact list.
4. Double-click each contact entry to add it to the **Fax Destinations** list. When you have all the contacts you want, click **OK**. The MAPI contacts will appear in the **Phonebook** dialog box in the **Current Recipients** list.

Using ODBC Phonebooks

RightFax can connect to an existing ODBC database in order to use your organization's existing contact database information for addressing faxes. This is especially useful for sending fax broadcasts to large numbers of recipients.

There are two parts to configuring ODBC connectivity: general ODBC configuration and RightFax-specific ODBC configuration. Each workstation must be configured individually for both types of ODBC information.

Configuring ODBC drivers on the client workstation

Because every database is different, this document cannot provide specific instructions for configuring the ODBC drivers on your workstations. Note the following guidelines:

- Verify that you have the 32-bit version of ODBC installed on your system by opening Windows Control Panel and running the ODBC program to display the **ODBC Data Source Administrator**.
- Note the user ID and password that is used to log on to the database or database server. You will use this ID and password in the RightFax ODBC configuration.
- After you have configured the drivers on your workstation, create a data source under a **User DSN** or **System DSN** in the **ODBC Data Source Administrator**.

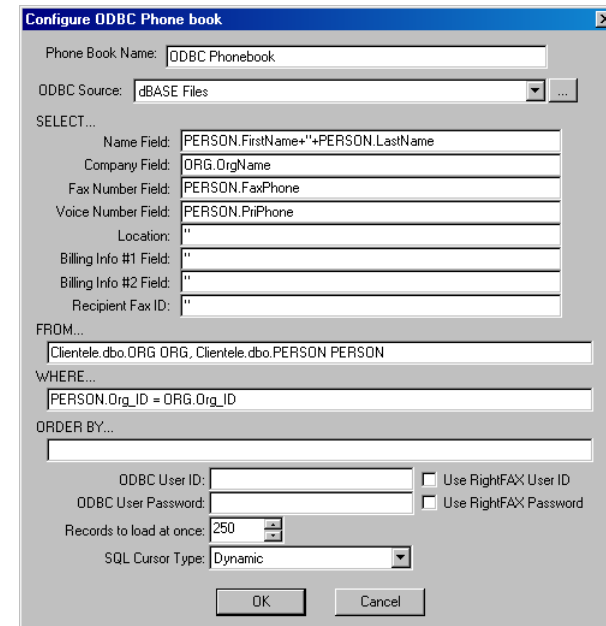
Configuring RightFax for ODBC connectivity

After the workstation has had ODBC drivers correctly installed, you must map the ODBC fax contact information to the corresponding fields in RightFax.

To configure ODBC in RightFax

1. Click the RightFax tray icon in the taskbar and select **ODBC Configuration**.
2. Click **Add** next to **ODBC Phonebooks** to create a new ODBC source. The **Configure ODBC Phonebook** dialog box opens.

Figure 23.4 The Configure ODBC Phonebook Dialog Box



3. In the **Phonebook Name** box, enter a descriptive name for this contact database.
4. In the **ODBC Source** box, enter the name under which this database appears in the **User DSN** tab of the ODBC program in Control Panel.

- Under **Select**, use simple SQL queries to relate ODBC database fields to each of the listed RightFax phonebook fields. Enter two single-quotes (") in any field you want to leave blank. If you are familiar with SQL code, you can create this information quickly and enter it in the **Select** boxes. If you are not familiar with SQL code, you should use a tool such as Microsoft Query to generate the SQL code for you, and then cut and paste the codes into the **Select** boxes.



Note SQL queries also let you combine multiple ODBC source fields in a single RightFax field. This is useful, for example, if your database contains separate fields for first, middle and last names. Because RightFax has only one "Name" field, each of these source fields should be combined into the single RightFax field.

- In the **From** and **Where** boxes, enter the SQL information specified by the query results.
- To presort the data, enter the necessary SQL data in the **Order** box, however this should not be necessary because RightFax can sort phonebook entries by column after it retrieves the data.
- Specify the **ODBC User ID** and **ODBC User Password** required to access the database information. If the ID and password match those used to log in to FaxUtil, you can select those check boxes instead.
- If you have a large database, limit the number of records loaded at one time in the **Records to Load at Once** box.

Using ODBC phonebooks to send faxes

After you have configured your ODBC information, you can access these contact records as phonebook entries when addressing faxes via the **Fax Information** dialog box (see ["Using the Fax Information Dialog Box"](#) on page 226).

Click **Phonebook** and select the **ODBC Phonebook** tab, and a list of contacts opens. If you limited the number of records displayed at one time, you will see only that number of records. To view the previous or next increment of records click the arrows on the far

right side of the table. Click one or more records and click **OK** to address the fax. The new fax will be sent to each of the specified recipients.

LDAP Phonebooks

RightFax allows users to connect to an existing LDAP database in order to use your organization's existing contact database information for addressing faxes. This is especially useful for sending fax broadcasts to large numbers of recipients. LDAP phonebooks are only accessible from Windows NT workstations.

Configuring RightFax for LDAP connectivity

In order for RightFax to work with your LDAP database, you must map the LDAP fax contact information to the corresponding fields in RightFax.

To configure LDAP in RightFax

1. Click the RightFax tray icon in the taskbar and select **LDAP Configuration**.
2. Click **Add** to create a new LDAP source. The **Configure LDAP Phonebook** dialog box opens.

Figure 23.5 The Configure LDAP Phonebook Dialog Box

The screenshot shows the 'Configure LDAP Phonebook' dialog box. It includes the following fields and options:

- Phone Book Name: LDAP Phonebook
- LDAP Server: ldap.acme.com
- IP Port: 389
- Attribute Mappings:
 - Name: First name + Last name
 - Company: company
 - Fax Number: Fax Number
 - Voice Number: Phone Number
 - Location: City + State + Zip
 - Billing Info #1: Billing Code 1
 - Billing Info #2: Billing Code 2
 - Recipient Fax ID:
- Base DN: o=acme, c=US
- Search Filter: cn=
- Records to load at once: 250
- Use Anonymous Access
- LDAP User ID: [empty]
- LDAP User Password: [empty]
- Use Fax User ID
- Use Fax Password

3. In the **Phonebook Name** box, enter a descriptive name for this contact database.
4. In the **LDAP Server** box, enter the name of the LDAP server. Specify the server's IP port in the **IP Port** box.
5. Under **Attribute Mappings**, map the LDAP fields that correspond to the listed RightFax fields. In addition, you can filter the number and type of entries returned to RightFax.
6. If you have a large database, limit the number of records loaded at one time in the **Records to Load at Once** box.

Using LDAP phonebooks to send faxes

After you have configured your LDAP information, you can access these contact records as phonebook entries when addressing faxes via the **Fax Information** dialog box (see [“Using the Fax Information Dialog Box”](#) on page 226).

Click **Phonebook** and select the LDAP database, and a list of contacts opens. If you limited the number of records displayed at one time, you will see only that number of records. To view the previous or next increment of records click the arrows on the far right side of the table. Click one or more records and click **OK** to address the fax. The new fax will be sent to each of the specified recipients.

Fax Broadcasting

You can send one fax to hundreds or thousands of recipients at once. This is called sending a “fax broadcast” or “fax broadcasting.”

The RightFax server provides three methods for sending a fax broadcast.

- Fax broadcasting from phonebooks.
- Fax broadcasting from a mail merge.
- Fax broadcasting from a database.

The method you choose for your fax broadcast should be determined by the nature of the fax broadcast as well as the source of the fax contact information.



Note When broadcasting the same document to a large number of people, it is generally better to store the fax as a library document. As a library document, the fax is already stored in TIFF G3 format and will not need to be converted again for faxing. If a fax is not saved as a library document and is broadcast to 500 recipients, the WorkServers will have to perform 500 separate PCL-to-TIFF G3 conversions.

Fax broadcasting from phonebooks

The easiest way to send a fax broadcast is to select **Quick Fax/Broadcast** from the RightFax tray icon, and then, in the **Fax Information** dialog box, click **Phonebook** to open your RightFax, ODBC, LDAP, or MAPI phonebook (as described earlier in this chapter). From each of these phonebooks you can specify multiple recipients for your fax. The biggest advantage of using phonebooks for fax broadcasts is convenience. After a phonebook is created, faxing to one or more contacts in the phonebook is as easy as clicking the desired contacts in the list.

Fax broadcasting from your RightFax or MAPI phonebook is most useful for small fax broadcasts to your personal contacts. This is because these phonebooks are typically used only for private contact management and exist separately from your organization's primary contact data source. Fax broadcasting from your ODBC or LDAP phonebook is better geared towards large fax broadcasts because these phonebooks can be dynamically linked to your organization's primary contact data source.

Using your phonebooks for fax broadcasts has some disadvantages. First, all recipients receive the same fax body pages. Although each cover page has the correct contact information, the body of the fax cannot be not customized to each recipient. Also, the fax broadcast must be specifically initiated by someone and the contacts to fax to specified manually.

Fax broadcasting from a mail merge

You can also send a fax broadcast using a mail merge from applications such as Microsoft Word or Microsoft Access. The benefit of a mail merge is that each individual fax can be personalized or customized to fit the recipient. The main drawback, however, is that each individual fax page must be converted from its native format to the TIFF-G3 format, which can slow down the rate at which faxes are sent and delay other fax server processes, especially during very large fax broadcasts.

To send a fax broadcast using mail merge, you must create a document in a native application that supports mail merges. This document must contain all necessary fax addressing information in the form of embedded codes (described in [Appendix A, "RightFax Embedded Codes"](#)). Each fax addressing embedded code then uses the mail merge variables instead of specific fax addressing information.

After the document is created, each mail merged version of the document must be printed as a separate print job to the RightFax print queue. Depending on the application you use to generate the mail merge document, you must create some type of macro that instructs the application to send each mail merge document as a separate print job.

In addition, you must print mail merge fax broadcasts to a RightFax printer that does not automatically prompt you for fax addressing information. To create a RightFax printer that does not automatically open the **Fax Information** dialog box, click the RightFax tray icon and select **Configuration**. Click **Create Fax Driver** and select **Create PCL-5 Fax Driver**. Enter a name for the printer and specify the fax server to which jobs should be sent. This new printer will be listed under **Fax Printers** in the **Configure Fax Printers** dialog box. Finally, move the new printer to the **Available Printers** list. This printer will still output to the fax server but will not prompt you for fax addressing information.

The following is an example of a mail merge document created in Microsoft Word (merge fields are shown as they would appear if the **Field Codes** option in the **View** menu in Word is enabled).

Figure 23.6 Sample Word Mail Merge Document

```
<FORMTYPE:letterhead><TONAME:{mergefield Name}>
<TOFAXNUM:{mergefield FaxNumber}>
<TOCOMPANY:{mergefield Company}>
{mergefield Name}
{mergefield Company}
{mergefield Address}
Dear {mergefield Name}
Thank you for remitting payment.
Sincerely,
Jane Doe, President
```

If this letter is merged with a list of ten names, Word will create a single document with ten copies of the letter, each separated by a section divider. Normally you could just print the new document and all ten sections would be output as a single print job to a network print queue. However, if you were to print the document this way to the RightFax fax printer, you would get one fax with ten

pages and it would be addressed to the person referenced by the last set of embedded fax codes. For Word to output ten separate print jobs, you can use this Word 97 macro.

Figure 23.7 Word 97 Macro for Outputting Ten Separate Print Jobs

```
Public Sub MAIN()
    Dim TotalSec, i, F$
    WordBasic.EndOfDocument
    TotalSec = WordBasic.SelInfo(2) - 1
    For i = 1 To TotalSec
        F$ = "S" + Str(i)
        WordBasic.FilePrint Type:=0, NumCopies:=1,
            Range:=3, From:=F$, To:=F$
    Next i
End Sub
```



Note *If you use a different word processor or a different version of Word, you will have to modify this macro to meet your application's specific requirements.*

This macro first counts the number of letters to print by jumping to the bottom and obtaining the current section number (subtracting one because there is always an extra section break inserted during the **Merge To New Document** operation). Next, the macro starts a loop, executing a print range from 1 through the total number of sections. Because the print range is prefixed with "S," the print command prints all of the specified section, no matter how many pages are in each section.

In the previous example, the Word document itself is broadcast. In some cases, however, you can want to send a RightFax library document to a group of people using a mail merge. This Word document could be used to fax broadcast only the library document "Promo1."

Figure 23.8 Sample Fax Broadcast Document in Word

```
<LIBDOC:Promo1><TONAME:{mergefield Name}>
<TOFAXNUM:{mergefield FaxNumber}>
<TOCOMPANY:{mergefield Company}>
<NOTE: This is the first cover sheet notes line>
<NOTE: This is the second.>
```

Then, using the Word print macro (see ["Figure 23.7: Word 97 Macro for Outputting Ten Separate Print Jobs"](#) on page 245), only the library document "Promo1" will be broadcast.

Fax broadcasting from a database

Fax broadcasting from a database uses the scripting power of your contact database with the faxing capabilities of RightFax. There are a virtually unlimited number of possible variations on this method.

The main benefit of fax broadcasting from a database is that the fax broadcast can be partially or completely automated depending on the database you use. You also have the added flexibility of sending the same document to all recipients, such as a library document, or customizing each document for each recipient. The drawback to this fax broadcasting method is that it can be highly complex and may require substantial programming in your database's scripting language.

The following figure shows how fax broadcasting can work with databases. This example is intended only to provide database administrators with the fundamental concept of database fax broadcasting. You must apply these concepts when developing a customized database fax broadcast in your own environment.

In the following example, FoxPro is used to send the library document "Promo1" to all contacts in Arizona and California. The database is named "MyList" and includes four fields: "name," "faxnum," "state," and "company." The RightFax fax printer is already linked or captured to LPT1.

Figure 23.9 Sample FoxPro Database Fax Broadcast

```
set talk off
Select * from MYLIST;
      where STATE=="AZ" or STATE=="CA"
      to table TEMP1
set printer to LPT1
set printer on
? "DUMMY TEXT TO FLUSH ANY DATA IN LPT BUFFER"
set printer off
set printer to
if (!used("TEMP1"))
      select 0
      use TEMP1
endif
select TEMP1
SCAN ALL
      set printer to LPT1
      set printer on
      ?? "<libdoc:PROMO1>"
      ?? "<toname:"+temp1.name+">"
      ?? "<tofaxnum:"+temp1.faxnum+">"
      ?? "<tocompany:"+temp1.company+">"
      ?? "<autodelete>"
      set printer off
      set printer to
ENDSCAN
```

■ ■ ■

Implementing Server-Side Application Conversion

By default, the RightFax server uses a built-in conversion engine to generate fax images from document file attachments. These are files passed to the RightFax server in their original format (such as Word, Excel, or PowerPoint) instead of first being converted to printer output. Document attachments are typically delivered to the RightFax server via one of the e-mail gateway modules (as mail message attachments) or via the Web Client.

While the RightFax built-in conversion engine has some advantages (such as being very fast and efficient), there are occasionally variances between the fax image it generates and the original document. In most cases these variances are minor and acceptable. However, if the conversion quality of faxed file attachments is unacceptably low, your RightFax WorkServers can be configured so that the applications associated with certain file formats are launched to allow for direct (and therefore more accurate) conversion by attachments' native applications. This is known as "server-side application conversion."



Note *Server-side application conversion is not used for documents that are printed directly from the native applications to the RightFax print-to-fax driver. This is because the conversion is handled by the native application on the client computer before it is sent to the RightFax server.*

Understanding Server-Side Application Conversion

Where possible, server-side application conversion supports multiple concurrent document conversions to save processing time and server resources. Also, blank pages are removed from the fax image to save on fax costs and channel resources.

Server-side application conversion is available when faxing from:

- Windows 98, Windows NT, Windows 2000, and Windows XP desktops using the Send To shortcut menu.
- Exchange, SMTP, and Lotus Notes e-mail gateways.
- Files attached with the <ADDDOC> embedded codes.
- The RightFax API and COM API.

Launching an application at the WorkServer each time a file attachment fax image is generated has some potential drawbacks. You should weigh these drawbacks against the benefits before configuring your RightFax server and remote WorkServer computers to perform server-side application conversion.

Full applications are much larger and more processor-intensive than the built-in RightFax conversion engine. You may need to upgrade the RightFax server memory or processing capacity to support server-side application conversion, especially if your organization generates a lot of faxes with attached files.

Also, most applications are not designed to be run completely without user intervention. Situations may arise in which an application stops while it waits for user input (such as waiting for a password). RightFax makes every attempt to prevent or bypass such occurrences but cannot guarantee it will prevent all such occurrences. If one or more faxes being processed through server-side application conversion fail to send, you should check that the application on the server is not stalled and waiting for attention.

Finally, documents containing objects that the server does not have access to (such as special fonts, links to files on other computers, macros, or templates) may generate unpredictable results, such as incorrect fax image output or conversion failure. To minimize this, install as many TrueType fonts, document templates, macros, and other components used by your organization to the computer or computers that provides server-side application conversion.

If server-side application conversion does not succeed in creating a fax image, RightFax will use its built-in conversion engine to create the fax.

Configuring Server-Side Application Conversion

Server-side application conversion is performed by these applications on their associated file types when installed on the RightFax server and remote WorkServers:

- Microsoft Word, versions 97 through XP.
- Microsoft Excel, versions 97 through XP.
- Microsoft PowerPoint, versions 97 through XP.
- Lotus Word Pro release 9.
- Visio versions 4, 5, and 2000.



Note *RightFax does not support server-side application conversion by the Office 95 and earlier versions of Word, Excel, and PowerPoint. Although you can convert attached files created on the Office 95 and earlier versions, you must install the Office 97 or later version on your server to perform the conversions.*

To enable the RightFax server to perform server-side application conversion, install the applications on the RightFax server and any computers running remote WorkServers (see [“Installing WorkServers on Remote Computers”](#) on page 46). RightFax detects when one of the supported file types is passed to the server as a file attachment and launches the appropriate application on the WorkServer computer to convert the file.

To configure automatic timeout on a failed conversion

If, for any reason, server-side application conversion fails, you can configure RightFax to automatically timeout, stop the conversion, and set the fax status to “conversion failed.”

1. On the RightFax server, stop all WorkServer services.
2. Edit the Windows Registry on the RightFax server.

3. For each WorkServer number (\Worksvr#) add a REG_DWORD value called KillServiceTimeout to HKEY_LOCAL_MACHINE\Software\RightFax\Workserver\Worksvr# and set the data value to the length of time you want server-side application conversion to attempt conversion before timing out, in milliseconds (i.e., set the data value to 600000 for 10 minutes).
4. Restart the services.

To have the WorkServers recover after being stopped by this new feature, open the Windows Control Panel and select **Administrative Tools > Services > RightFax WorkServer** and go to the **Recovery** tab to select the service's response to the shutdown.

Installing and Configuring Office Applications

On each of your RightFax servers and any other computers where RightFax WorkServers will be executed, follow these guidelines to install the Microsoft Office Word, Excel, and PowerPoint applications (versions 97 through 2003), for server-side application conversion.

1. If you have already installed Word, Excel, or PowerPoint on the RightFax server, uninstall those applications using Add/Remove Programs in Control Panel.
2. If you are installing Office XP applications, the security for macros in Office XP must be set to the lowest setting.
3. On the RightFax server, insert the Office installation CD and run Setup.exe. During the installation, select the following options.

Table 24a Installing Office

| Installation option | Select this |
|---------------------|---------------------|
| Destination folder | Default destination |
| Installation type | Custom installation |

Table 24a Installing Office (Continued)

| Installation option | Select this |
|---|---|
| Components to install | Excel Word PowerPoint Office Tools Converters and Filters |
| Office Tools | Microsoft TrueType fonts |
| Converters and Filters Text Converters | Select all of the options except converters for use with Lotus Notes |
| Graphics Filters | Select all |
| Microsoft Excel | Select the Microsoft Excel program files, spreadsheet converters, and Help |
| Spreadsheet Converters | Select all |
| Microsoft Word | Select the Microsoft Word program files, text converters, and Help |
| Text Converters | Select all |
| Microsoft PowerPoint | Select the Microsoft PowerPoint program files, presentation translators, and Help |

4. When the installation is complete, restart Windows.
5. If you have installed Microsoft Office 2003, you must activate the software either through the Internet or by calling Microsoft. In addition, each Office 2003 application that you have installed must be launched on the server and then closed so that any additional setup requirements at the user profile level can be completed. Both of these steps must be completed for Office 2003 or server-side application conversion will fail.

6. Microsoft recommends that you re-install the latest service pack for your Windows software after installing any Office applications. After this final step is complete, your Office applications may require some configuration to ensure that server-side application conversion works properly. Refer to the following pages for information:
- “Configuring Word” (described on [page 250](#)).
 - “Configuring Excel” (described on [page 250](#)).
 - “Configuring PowerPoint” (described on [page 250](#)).

Configuring Word

Running the Exchange Events service on the RightFax server will cause server-side application conversion through Word to fail. If you must run Exchange Server on the same computer as your RightFax server, you must disable the Exchange Events service.

Server-side application conversion through Word 97–2003 converts these file types:

- Word for Windows (versions 2, 6, 7, 97, 1J, 5J, 97–2003)
- RTF (rich text format)
- Word for DOS (versions 4, 5, and 6)
- Word for Macintosh (versions 3, 4, 5, 6, and 97)

Password-protected Word files will not be converted with the exception of Outlook or Lotus Notes file attachments where the Outlook or Notes client has had the correct password provided in the Document Conversion options (described in the *RightFax Gateway for Microsoft Exchange Guide* and *RightFax Gateway for Lotus Notes Guide*.)

Configuring Excel

Server-side application conversion renders whatever print area is defined in the Excel Workbook.

Server-side application conversion through Excel 97–XP converts these file types:

- Excel for Windows (versions 3, 4, 5, and 97–2003)
- Excel Workbook (versions 3 and 4)
- Excel for Macintosh (versions 4 and 5)
- Excel Workbook for Macintosh (version 4)

Password-protected Excel files will not be converted with the exception of Microsoft Outlook or Lotus Notes file attachments where the Outlook or Notes client has had the correct password provided in the Document Conversion options (described in the *RightFax Gateway for Microsoft Exchange Guide* and *RightFax Gateway for Lotus Notes Guide*.)

Configuring PowerPoint

Server-side application conversion through PowerPoint 97–2003 converts these file types:

- PowerPoint for Windows (versions 3, 4, 7, and 95–2003)
- PowerPoint for Macintosh (versions 3, 4, B3, and B4)

Print options for creating the fax images are set by the user in each PowerPoint presentation, using the **Print** tab in the **PowerPoint Options** dialog box.

You can force server-side application conversion to output all PowerPoint files using the same print settings and page layout (regardless of the settings on individual workstations). In the

Windows registry, create the following DWORD entries in HKEY_LOCAL_MACHINE\Software\RightFax\WorkServer\WorkSrv# (where WorkSrv# is the WorkServer number to modify.)

Table 24b PowerPoint Override Registry Values

| Value | SettingAlert type |
|-----------------------------|--|
| PowerPoint_ForceFitToPage | 0=Use setting from file 1=Force "Scale to fit paper" |
| PowerPoint_ForceFrameSlides | 0=Use setting from file 1=Force "Frame slides" |
| PowerPoint_ForceOutputType | 1=Slides 2=Handouts (2 slides per page) 3=Handouts (3 slides per page) 4=Handouts (6 slides per page) 5=Notes page 6=Outline view |

Installing Lotus Word Pro

On each of your RightFax servers and any other computers where RightFax WorkServers will be executed, follow these guidelines to install Lotus Word Pro for server-side application conversion.

During the installation, select the following options. From the opening screen select **Install**. (Do not select **Quick Install**.)

Table 24c Installing Lotus Word Pro

| Installation option | Select this |
|--------------------------------------|---|
| Destination folder | Default destination |
| SmartSuite applications to install | Word Pro |
| Install options | Customize features – manual install |
| SmartSuite applications to customize | Customize Word Pro, and select Word Pro Program Files and TrueType fonts. |
| Language tools | Clear all options |

Table 24c Installing Lotus Word Pro (Continued)

| Installation option | Select this |
|---------------------|-----------------------|
| SmartMasters | Clear all options |
| Filters to install | Select all filters |
| Program folder | Default folder |
| Extras | Do not install Extras |

When the installation is complete, restart Windows.

Installing Visio

RightFax supports Visio versions 4.x, 5.x, and 2000.

On each of your RightFax servers and any other computers where RightFax WorkServers will be executed, follow these guidelines to install Visio for server-side application conversion.

During the installation, select the following options.

Table 24d Installing Visio

| Installation option | Select this |
|---------------------|-----------------------------------|
| Setup type | Custom/Complete |
| Destination folder | Default destination |
| Select components | Program files and graphic filters |

When the installation is complete, restart Windows.

Controlling Server-Side Application Conversion

To control how and when server-side application conversion is used for specific document types, edit the Windows registry and add the REG_MULTI_SZ registry value "NativeDocControl" in HKEY_LOCAL_MACHINE\Software\RightFax\WorkServer\WorkSrv# (where # is the WorkServer number to modify.)

The setting for this value is one or more lines each controlling a specific document type in the format:

DocType,Action

Where *DocType* is the type of document to control, and *Action* specifies how the document type should be handled. The following tables list DocTypes and actions you can specify.

Table 24e NativeDocControl Document Types

| DocType | Description | Application used to convert |
|------------|---------------------------------|-----------------------------|
| 1-2-3 | Lotus 1-2-3 – through version 8 | Excel 97–2000 |
| AmiPro | AmiPro – all versions | Word 97–2000 |
| Excel | Excel 97 and later | Excel 97–XP |
| PDF | Portable document format | Adobe Acrobat |
| HTML | Hypertext markup language | Internet Explorer |
| PowerPoint | PowerPoint 97 and later | PowerPoint 97–XP |
| RTF | Rich text files | Word 97–XP |
| Word | Word 97 and later | Word 97–XP |
| WordPro | Word Pro – all versions | Word Pro |
| WPC | WordPerfect version 5 | Word 97–XP |

Table 24f NativeDocControl Actions

| Value | Action |
|-------|---|
| 1 | Attempt to convert the document using the native application on the server. If this fails because the application is not installed, because the application cannot be started, or because the application returns an error, then attempt to convert the document using the built-in RightFax conversion engine. |
| 2 | Only attempt to convert the document using the native application on the server. If this fails for any reason, abort the fax. |
| 3 | Attempt to convert the document using the built-in RightFax conversion engine. If this fails for any reason, abort the fax. |
| 4 | Do not attempt to convert this type document. Conversion will fail. |
| 5 | Attempt to convert the document using the built-in RightFax conversion engine. If this fails, attempt conversion with the native application. |

Example NativeDocControl value setting:

WPC,2
Word,3
RTF,5

■ ■ ■

Chapter 25

Using RightFax E-mail Gateways

The RightFax server includes e-mail gateways for Novell GroupWise and SMTP/POP3. Advanced gateways for Microsoft Exchange and Lotus Notes are available as separate, optional modules.

Each RightFax e-mail gateway acts as a communication link between the RightFax server and your e-mail server. This lets you use your e-mail client software as a fax client system as well.



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

E-mail messages addressed to the RightFax e-mail gateway 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 gateway can also provide notification of fax events via e-mail.

By combining an e-mail gateway with the RightFax Web Client, the e-mail notification of a received fax can include the URL for the fax on the RightFax server. Within the e-mail message, the user clicks the link, and the fax image opens in the RightFax Web Client. This feature is known as Web Delivery.

By linking the Web Client to the e-mail gateway, faxes are stored only on the RightFax server. To implement this feature, see the *RightFax Web Client Guide*.



Important Required information for outbound faxes (described in “Requiring Cover Sheet Fields” on page 189) does not apply to faxes sent via the e-mail gateways. If you have configured RightFax to require that the To Name field be completed before a fax can be sent, faxes may still be transmitted via the e-mail gateways without a recipient name specified.

Installing the E-mail Gateway Software

The Novell GroupWise and SMTP/POP3 e-mail gateways are installed when you run the RightFax server installation. However, these mail servers require some configuration to work with the gateway software. After the mail server has been properly configured, you must add and configure the e-mail gateway on the RightFax server (described on page 256).



Important If you will be storing or accessing mail files on a Novell NetWare volume, make sure that the account the RightFax e-mail gateway service exists as a user in Novell. By default, the account used by the RightFax e-mail gateway service is the same account used by the RightFax WorkServer modules (defined in the RightFax WorkServer configuration in Enterprise Fax Manager).

Configuring GroupWise gateway installations

For GroupWise installations, you must install the GroupWise API gateway (available separately from Novell) and the Message Transfer Agent before installing the RightFax e-mail gateway. If you are not running an NLM version of GroupWise, the Message Transfer Agent may be referred to as the GroupWise Message Server.



Warning *RightFax is designed for use with the GroupWise API gateway. Do not use the GroupWise SMTP gateway.*

After the GroupWise API gateway software is installed, follow these steps to create and configure the API gateway within your GroupWise domain:

1. Make sure that the GroupWise API gateway NLM is running.
2. Run the GroupWise Admin program and select your GroupWise domain.

3. Click **Create**, then select **GroupWise Gateway**. The gateway configuration dialog box opens.

Figure 25.1 The GroupWise Configuration Dialog Box

4. Select **Gateway** to create a new gateway.
5. In the **Gateway Name** box, type **rfaxgate**.
6. In the **Gateway Home Directory** box, enter the API folder.
7. In the **Version** box, enter **4.X**.
8. In the **Gateway Type** box, enter **API**.

Once the API gateway has been created, the RightFax e-mail gateway looks in the gateway home folder for a file called API.exe to confirm that it has found the GroupWise API folder. If your version of GroupWise did not automatically create this file, you must create the file manually. From a command prompt, change to your GroupWise API home folder and type:

copy con api.exe

and then press ENTER ENTER CTRL+Z ENTER

The GroupWise API gateway and Message Transfer Agent must run continuously in order for your GroupWise e-mail gateway to operate. The computer on which they are installed should not be turned off and must always be logged on to your network.

Configuring SMTP/POP3 gateway installations

For SMTP/POP3 installations, an SMTP server must be accessible by the computer running the RightFax e-mail gateway. However, it is not necessary to install it on the same computer as the RightFax server or the gateway.



Warning *The RightFax e-mail gateway is not designed for use with the GroupWise SMTP gateway. Use the Groupwise API (described on page 254).*

You must create a new POP3 mailbox specifically for use by the gateway. The gateway will periodically check this mailbox for fax-bound e-mail messages to forward to the fax server. Several common configurations for routing fax-bound e-mail messages to this mailbox are outlined in the following sections. Although the configurations vary, the goal is always the same—to route outgoing fax-bound e-mail messages to the mailbox on the SMTP server specified in the **POP3 Mailbox Name** box in the **E-mail Configuration** dialog box (see “[Adding and Configuring E-mail Gateways](#)” on page 256).



Note *The RightFax e-mail gateway for SMTP/POP3 can be set to recognize one of two addressing schemes for specifying outgoing fax information like the fax number and recipient name (see “[Using the RightFax addressing scheme](#)” on page 260). In the examples that follow, the RightFax addressing scheme is used.*

Dedicated domain for fax-bound e-mail messages

This is typically the easiest configuration for e-mail users to understand and for SMTP/POP3 mail client software to access. E-mail users send all fax-bound mail messages to a specific domain

(e.g., faxgate.company.com) and specify the pertinent fax information as the mailbox portion of the mail address (left of the @ symbol). For example:

```
/fax=555-1212/name=Jane Doe@faxgate.company.com
```

Create a domain on your SMTP/POP3 mail server that will be dedicated to receiving fax-bound mail messages. All mail messages received at this domain must be placed in the POP3 mailbox specified in the **POP3 Mailbox Name** box in the **E-mail Configuration** dialog box. The RightFax e-mail gateway will periodically check this mailbox for outgoing messages. If the messages contain valid fax addresses, they will be routed to the RightFax server for transmission.

A new MX (mail exchanger) entry in the DNS server may be required to tell other computers what mail server handles messages for the new domain.

Mailbox pattern-matching routing

This addressing scheme has the advantage of not requiring a new mail domain; however, e-mail users may not find it as intuitive as the dedicated domain method ([page 255](#)).

Many mail servers allow messages with addresses that match a specific pattern to route to a particular mailbox. For example, the pattern “fax=*” (meaning any mailbox that starts with text “fax=”) can be defined to route matching addresses to the e-mail gateway’s POP3 mailbox on the SMTP server. An address matching this pattern might look like this:

```
/fax=555-1212/name=Jane Doe@company.com
```

Simple mailbox with description-area fax information

Note *This configuration is not compatible with the IETF addressing scheme. If your SMTP server requires that you use this addressing method, you must use the RightFax addressing scheme ([page 260](#)).*

Some SMTP mail servers allow very few configuration and routing options. In these cases, fax-bound e-mail messages can be addressed directly to the e-mail gateway's POP3 mailbox. Fax destination information is specified in the description-area of the address string, using the same method used to provide descriptive names for standard e-mail addresses. For example:

"/name=Jane/fax=5551212/" <faxgate@company.com>

The information in quotes is not interpreted as part of the address. It is treated as descriptive information only. The e-mail message is routed directly to the "faxgate" mailbox on the SMTP mail server. In this example, the name of the mailbox specified in the POP3 **Mailbox Name** box in the **E-mail Configuration** dialog box (where the gateway checks for outgoing faxes) is "faxgate." When destination fax information is not found as part of the address, the RightFax e-mail gateway scans the descriptive information.

Although this method requires little configuration at the mail server, many e-mail client programs make it difficult to add descriptive information to an e-mail address, often misinterpreting it as part of the mail destination address.

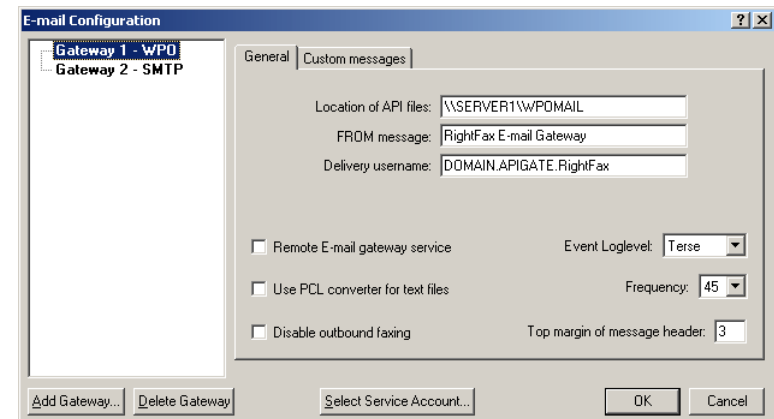
Adding and Configuring E-mail Gateways

To add or configure an e-mail gateway, run the E-mail Gateway configuration program.

- If you did not add an e-mail gateway during the RightFax server installation, you can open the E-mail Gateway configuration program from Windows Control Panel.
- 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.

The **E-mail Configuration** dialog box opens.

Figure 25.2 The E-mail Configuration Dialog Box General Tab



To add a new gateway, click **Add Gateway** and select the type of gateway to add. Because RightFax allows you to install multiple e-mail gateways, each installed gateway is listed in the tree on the left. Click each gateway in the list to view its configuration options.

The **E-mail Configuration** dialog box will show different options on the **General** tab depending on the gateway you are configuring. For a description of each setting in the **E-mail Configuration** dialog box, click the **[?]** icon in the top right corner of the dialog box, and then click the element you want defined.

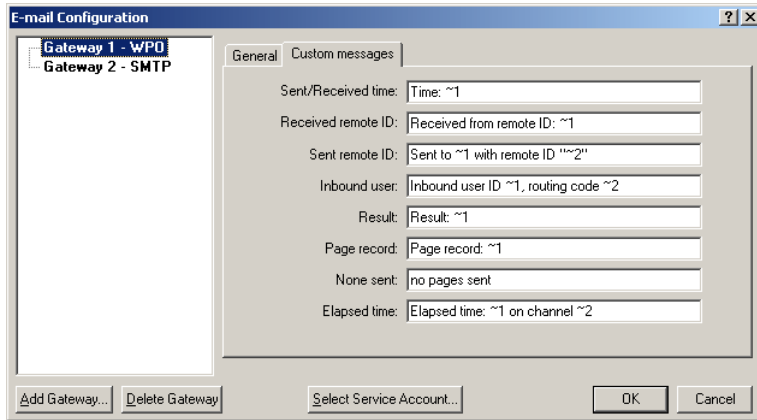


Tip Select **Use PCL converter for text files** if you plan to use embedded codes in your faxes.

Custom messages

When a fax is received as an e-mail attachment or when an e-mail fax status notification is received, a header is included in the mail message that provides details about the fax. To customize the text of these header messages, click the **Custom Messages** tab.

Figure 25.3 The E-mail Configuration Dialog Box Custom Messages Tab



The options on this tab are the same for all e-mail gateways. Each message combines text with one or more variables and each has its own available variable options, described in the following table.

Table 25a E-mail Gateway Custom Message Settings

| Notification message | Variable options |
|----------------------|---|
| 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 |
| Inbound user | ~1 = The RightFax user ID of the fax recipient ~2 = The fax recipient's routing code |
| None sent | N/A |

Table 25a E-mail Gateway Custom Message Settings (Continued)

| Notification message | Variable options |
|----------------------|---|
| Page record | ~1 = The range of page numbers successfully sent or received |
| Received remote ID | ~1 = Remote ID |
| 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.) |
| Sent remote ID | ~1 = The destination fax number ~2 = The destination remote ID |
| Sent/Received time | ~1 = Date (in Windows locale format) and time (HH:MM) |

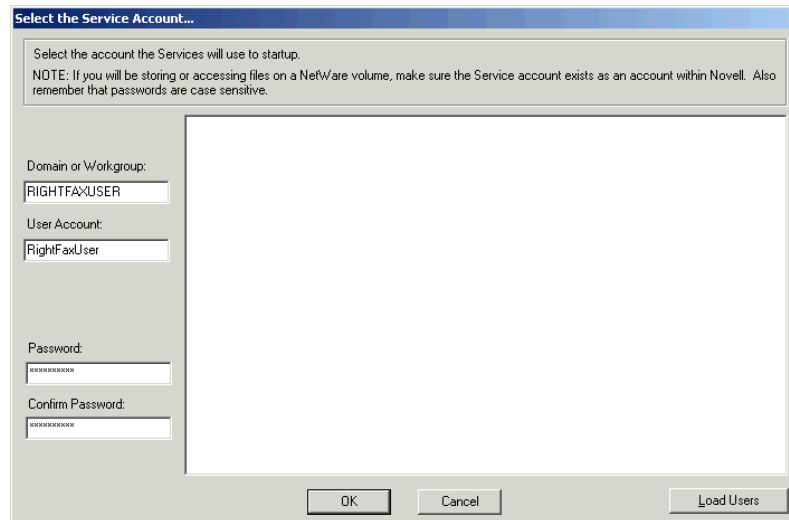
Select service account



Note If you will be storing or accessing files on a NetWare volume, you must make sure the Service Account also exists as an account within Novell.

All RightFax e-mail gateways log on to the network as a services using a Windows NT user account that you specify. To change the e-mail gateway service account, click **Select Service Account**. The **Select Service Account** dialog box opens.

Figure 25.4 The Select Service Account Dialog Box



This dialog box lists all the user accounts in a specified domain and select the user account that the e-mail gateway will use to log in to the server. Click **Load Users**. This lists each user account in all domains on the network. Click a user account in the list to automatically fill in the **Domain or Workgroup** and **User Account** boxes. Enter the 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, a new service called the RightFax E-mail Gateway Module is created. If the e-mail gateway is running on the same computer as the fax server, the service is set to "Manual" and is automatically started and stopped by the RightFax

Server service. You should not stop the RightFax E-mail Gateway Module service manually. However, if the e-mail gateway is running on a remote computer (see ["Running the E-mail Gateway Remotely"](#) on page 265), you must start and stop the gateway service manually.

SMTP/POP3 gateway registry settings

The following registry keys can be added to the Windows server registry to further configure your SMTP/POP3 gateway. The key types are specified for each entry and must be entered under the appropriate gateway number if more that one gateway is installed.

Table 25b Optional E-mail Gateway Registry Settings

| Registry key | Data type | Description |
|-----------------------|-----------|---|
| AllowDefaultUser | REG_DWORD | With fax-bound e-mail messages, the e-mail gateway attempts to match the sender's e-mail address with a RightFax user ID. If no match is found, a default RightFax user mailbox is used as the originator of the fax. With this registry key enabled, a value must be entered in the Default User Name box in the E-mail Gateway configuration in Enterprise Fax Manager (0=disabled, 1=enabled). |
| SkipEmpty Attachments | REG_DWORD | The gateway will scan the bodies of fax-bound mail attachments and discard empty ones. This registry key prevents blank fax pages from being sent (0=disabled, 1=enabled). |

Table 25b Optional E-mail Gateway Registry Settings (Continued)

| Registry key | Data type | Description |
|-------------------------|--------------|--|
| UseFilesforTemp Storage | REG_DWORD | Normally, the gateway processes fax-bound mail attachments using only available memory. With this registry key enabled, the gateway reserves drive space for this processing. This allows larger attachments to be processed but will slow the gateway's performance. Because Windows NT provides access to virtual memory, it should rarely be necessary to enable this option (0=disabled, 1=enabled). |
| ExtraHeaders | REG_MULTI_SZ | Text entered here will be added to the headers of all mail-bound faxes going to the SMTP server. |
| IncludeHeaders | REG_MULTI_SZ | Only the headers listed here will be added to the fax cover sheet Notes area. Leaving this blank will allow all headers to be included. Values in this entry are not case-sensitive. |
| ExcludeHeaders | REG_MULTI_SZ | Any headers listed here will be removed from the fax cover sheet Notes area. Values in this field are not case-sensitive. |

Sending a Fax from GroupWise

Sending a GroupWise message to a fax number is similar to sending e-mail, except the message must be specially addressed. Text entered in the **Subject** box in GroupWise will appear in the "Notes" section of the fax 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 appended to the fax. (For a list of

supported file types, see [Appendix D, "File Formats that Convert to Fax Format"](#).) Unsupported file attachments cannot be converted and will be ignored.

To send a GroupWise message as a fax

1. Create a new message in GroupWise.
2. In the **To** box, address the e-mail message to the GroupWise API gateway in this format:
APIGatewayName.{*FaxNum/Name,FaxNum/Name,...*}
 Where *FaxNum* is the destination fax number and *Name* is the name of the recipient as you want it to appear on the fax cover sheet. For example:
 rfxgate.{555-1212/Bob Smith}
 To send the message to multiple fax destinations, separate fax number/name objects with a comma. For example:
 rfxgate.{555-1212/Bob Smith,555-4321/John Doe}
3. Compose and send the e-mail message normally. The e-mail gateway will recognize the message as going to a fax destination and will forward it to RightFax for sending.

Sending a Fax via SMTP/POP3

Sending a SMTP/POP3 message to a fax number is similar to sending e-mail, except the message must be specially addressed. Text entered in the **Subject** box will appear in the "Notes" section of the fax 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 appended to the fax. (For a list of supported file types, see [Appendix D, "File Formats that Convert to Fax Format"](#).) Unsupported file attachments cannot be converted and will be ignored.

The RightFax e-mail gateway looks for fax-bound e-mail messages in a dedicated POP3 mailbox on the SMTP mail server. Fax destination information must be included somewhere in the address of each message. The SMTP/POP3 gateway supports two addressing formats: a RightFax-specific format, and another format recently proposed by the Internet Engineering Taskforce (IETF). Which addressing scheme the gateway will recognize is specified in the SMTP/POP3 **E-mail Configuration** dialog box (see [“Adding and Configuring E-mail Gateways”](#) on [page 256](#)).



Important For the SMTP gateway to correctly display characters such as the Euro symbol in the subject line and body text of the received e-mail message, the client application must send data to the RightFax server using UTF-8 encoding. UTF-8 encoding must be configured as a system setting on each client computer that uses the SMTP gateway.

Using the RightFax addressing scheme

The RightFax addressing scheme allows a great deal of flexibility in how fax-bound e-mail messages are addressed. In all cases, faxes must be addressed in such a way that they are forwarded to a mailbox that has been dedicated to RightFax. How fax-bound messages are routed to this mailbox depends on how you configured the SMTP server (see [“Configuring SMTP/POP3 gateway installations”](#) on [page 255](#)). In addition, the name and fax

number for the recipient must be included as part of the address. Use these rules to address fax messages using the RightFax addressing scheme:

- The first forward-slash encountered in the address indicates the beginning of the fax destination information.
- Each element of fax information (such as name and fax number) is separated by a forward-slash.
- Addressing elements can appear in any order (i.e., the fax number can come either before or after the name).
- Addressing elements cannot be separated by the RightFax mailbox address itself.
- A fax recipient name and destination fax number are required. If either element is not found, the message will be discarded.
- The last element of fax information must be terminated by either a forward-slash (/), an '@' symbol, or the end of the line. This allows any character to be part of a fax information element, including spaces.

If a special character is required as part of a fax information element, it can be specified by using a percent symbol (%) followed by the ASCII value of the character expressed in hexadecimal. For example, the space character has the ASCII value of 32, which is written as 20 in hexadecimal, so a space can be represented as '%20'. This encoding is only required if the special characters needed cause problems for your mail system.

The following table lists all fax destination elements supported by the RightFax addressing scheme. Only the fax number and name elements are required. Except for the fax number, all of these addressing elements are used only for display on the fax cover sheet.

Table 25c RightFax Scheme Addressing Elements

| Element | Definition | Example |
|---------|------------------------|------------------|
| /bi1= | Billing code 1 | /bi1=1111 |
| /bi2= | Billing code 2 | /bi2=2222 |
| /city= | Recipient city, state | /city=Tucson, AZ |
| /com= | Recipient company name | /com=Acme, Inc. |
| /fax= | Destination fax number | /fax=555-1212 |
| /name= | Recipient name | /name=Jane Doe |
| /voice= | Recipient voice number | /voice=555-4567 |

Examples /name=Jane/fax=555-1212@faxgate.company.com
 /fax=5551212/name=Jane/com=Acme@faxgate.acme.com
 faxgate@company.com/name=Jane/fax=555-1212
 /name=Jane%20Doe/fax=5551212/faxgate@company.com

Using the IETF addressing scheme

The IETF addressing scheme requires faxes be addressed in such a way that they are forwarded to a mailbox that has been dedicated to RightFax. How fax-bound messages are routed to this mailbox depends on how you configured the SMTP server see “[Configuring SMTP/POP3 gateway installations](#)” on [page 255](#). In addition, the

name and fax number for the recipient must be included as part of the address. Use these rules to address fax messages using the IETF addressing scheme:

- Only the portion of the address to the left of the domain name (everything to the left of the '@' sign) is significant to the fax destination.
- The address must begin with the fax destination number.
- The fax number can be followed by one or more optional keywords that provide additional fax information.

The following table lists supported keywords for the IETF addressing scheme.

Table 25d IETF Scheme Addressing Elements

| Element | Definition | Example |
|----------|--|--|
| /dd.bi1= | Billing code 1 | /dd.bi1=1111 |
| /dd.bi2= | Billing code 2 | /dd.bi2=2222 |
| /fax= | Recipient fax number | /fax=555-1212 |
| /g= | Recipient first (given) name | /g=Jane |
| /i= | Recipient middle initial | /g=M |
| /o= | Recipient company name | /o=Acme, Inc. |
| /pn= | Recipient name (separate first, middle, and last name with a period) | /pn=Jane /pn=Jane.Doe /pn=Jane.M.Doe |
| /s= | Recipient last name (surname) | /s=Doe |

Any invalid keywords included in the address will be ignored.

Example fax=555-1212@faxgate.company.com
 /fax=555-1212/pn=Jane.Doe@faxgate.company.com
 fax=5551212/g=Jane/s=Doe/o=Acme@
 faxgate.acme.com

Receiving Faxes via E-mail

With the RightFax e-mail gateways, RightFax users can 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 25.5 The User Edit Dialog Box Inbound Routing Tab

2. In the **Routing Type** box, click your e-mail gateway type.

3. In the **File Format** box, click the file format RightFax will use for the fax attachment. For information on each fax image format, see [“File Format”](#) on [page 105](#).



Important If you will be routing faxes to Microsoft Outlook mailboxes and your users have the Advanced Outlook form installed, you must select **TIFF** as the file type for routing. The Outlook Advanced forms do not support other file types.

4. The **Routing Info** box setting depends on the type of e-mail gateway you have installed.
 - For GroupWise installations, enter the domain, post office, and GroupWise account name for the user in the format *domain.mailpo.user*. For example: gwmail.gwmailpo.jdoe.
 - For SMTP/POP3 installations, enter the user's SMTP e-mail address (e.g., user@company.com). For example: jdoe@acme.com.
5. Select the **Delete After Routing** check box only if you want to delete the fax from the user's FaxUtil mailbox after it is routed to e-mail. If RightFax cannot route a fax to the destination e-mail mailbox, it will leave the fax in the user's FaxUtil mailbox regardless of how this option is set.

Associating fax attachments with the RightFax Fax Viewer

The best way to view a fax that has been delivered as an e-mail attachment is to associate it with the RightFax Fax Viewer. When you associate received faxes with the RightFax Fax Viewer, they will open when you double-click the attachments in your mail messages.

To associate your fax images with the Fax Viewer

1. In Windows 98 and Windows NT, run Windows Explorer.
2. In the **View** menu, select **Options**. The **Options** dialog box opens. Click the **File Types** tab.

3. Scroll through the list of file types until you find the type you selected for fax routing (TIF, PCX, or DCX). Double-click the file type to open the **Edit File Type** dialog box. In the **Actions** list, click **Open**, and then click **Edit**. The **Editing action for type** dialog box opens.
4. In the **Application used to perform action** box, enter the complete path to the file WFaxVw32.exe located on the RightFax server in the folder: Program Files\RightFax\Shared Files.

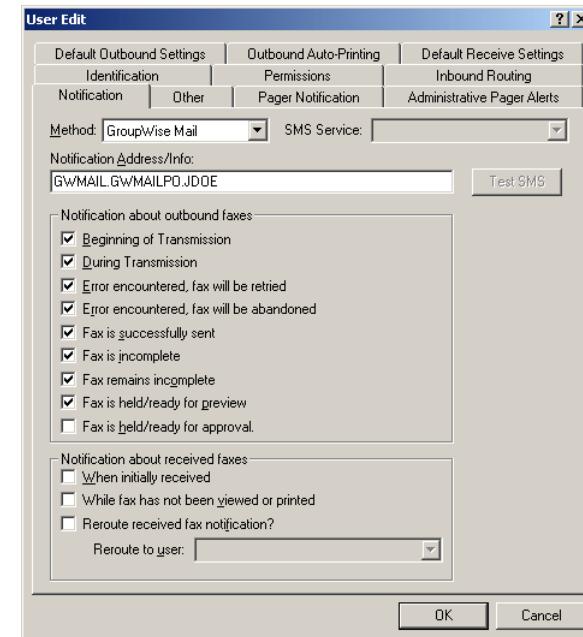
E-mail Notification of Received Faxes

The RightFax e-mail gateways can be used to notify users of received faxes whether or not the installed gateway is configured to 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 25.6 The User Edit Dialog Box Notification Tab



2. In the **Notification Method** box, click your e-mail gateway type.

3. The **Notification Address/Info** setting depends on the type of e-mail gateway you have installed.

- For GroupWise installations, enter the domain, post office, and GroupWise account name for the user in the format `[domain].[mailpo].[user]`. For example: `gwmail.gwmailpo.jdoe`.
- For SMTP/POP3 installations, enter the user's SMTP e-mail address (e.g., `user@company.com`). For example: `jdoe@acme.com`.

The notification method can be configured for a user group by editing the group ID properties in Enterprise Fax Manager and setting the group **Notification Type** to the option that corresponds to your e-mail gateway type.

Embedded Codes in 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 will be included in your fax. Embedded codes can be written in either upper or lower case.

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

The RightFax e-mail gateways support the following embedded codes. For descriptions and examples of each embedded code, see [Appendix A, "RightFax Embedded Codes"](#).

- ATDATE
- ATTIME
- CHANNEL
- COVER
- DELETE
- DELETEALL
- FCSFILE
- FINE
- FROMFAXNUM
- FROMGENFAXNUM
- FROMGENPHONE
- FROMNAME
- FROMPHONE
- IGNORE
- LIBDOC (Same as LIBDOC2 in e-mail gateways)
- LIBDOC2
- NOCOVER
- NORMAL
- PREVIEW
- PRIORITY
- SAVE

Running the E-mail Gateway Remotely

By default, each e-mail gateway installs and runs directly on the RightFax server. However, there are some situations in which it is beneficial to run the e-mail gateway on a different computer on your network. You might not, for example, want to increase the workload on your fax server. Or, you may anticipate a very high volume of gateway traffic and don't want the added workload to interfere with the routine operation of your fax server.

To run the gateway remotely

1. Select the RightFax E-mail Gateway configuration in Enterprise Fax Manager. The **E-mail Configuration** dialog box opens.
2. Select the **Remote E-mail Gateway Service** check box to enable remote operation.
3. On the remote computer where you want to run the gateway, map a drive to the RightFax folder on the RightFax server. In a command prompt window, switch to the Gateway folder on that drive.

4. To run the e-mail gateway, enter the command for your gateway from the following table.

Table 25e Commands Required to Run Each E-mail Gateway from the Command Prompt

| E-mail gateway type | Command |
|---------------------|---|
| Novell Groupwise | <code>wpogateway -lpath -fdatabase -sgatewayn</code> |
| SMTP server | <code>smtpgateway -lpath -fdatabase -sgatewayn</code> |

Where *path* is the directory path to the RightFax files, *database* is the name of the server containing the fax database, and *n* 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," your third e-mail gateway is referred to as "gateway2," 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 `smtpgateway -lr: -rfaxserv -sgateway`

This example starts the Remote Gateway service process from R:, which is mapped to the RightFax folder on the fax server. The process will look for the RightFax Database Module on the server "rfaxserv."

Troubleshooting the E-mail Gateways

If you experience problems with your RightFax E-mail Gateway Module service, you should first check for errors in the Application log of the Windows NT 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 amount and type of information saved to the Event log is determined by the **LogLevel** setting in the RightFax E-mail Gateway configuration in Enterprise Fax Manager. With the log level set to terse, only critical errors will be recorded. Log levels normal and verbose record more information which may help track down problems.

Running the gateway in a command prompt window will also give a very detailed report of gateway events. To run the gateway in a command window, first make sure that the RightFax E-mail Gateway Module service is stopped (for information on stopping the RightFax services, see "[Starting and stopping services](#)" on [page 96](#).) Open a command prompt window and change to the RightFax\Gateway folder. To run the gateway, enter the command for your gateway from the following table.

Table 25f Commands Required to Run Each E-mail Gateway from the Command Prompt

| E-mail gateway type | Command |
|---------------------|--|
| Novell Groupwise | <code>wpogateway -d -1 -sgatewayn</code> |
| SMTP server | <code>smtpgateway -d -1 -sgatewayn</code> |

Where n 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," your third e-mail gateway is referred to as "gateway2," 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 If you are running the SMTP gateway and it is your only e-mail gateway, enter: `smtpgateway -d -1 -sgateway`

When running the e-mail gateway in a command window, you must set the window properties to allow you to scroll back many lines. 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."

Error 2140 Starting Service

Error 2140 is a generic Windows NT error stating that the service did not start. Check the Event Viewer Application log, under the **Source** column "RightFax E-mail Gateway Module" for more details.

Error 53

This is a Windows NT networking error which indicates that the UNC name that 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 and the user is set up to receive notification via e-mail

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. Because the fax went through the Default fax mailbox, RightFax will try to notify the network user Default, thus the notification never reaches the sender.

No faxes are going out of mail

One or all of the GroupWise components are not running. The folders API_IN and API_OUT may not have been created when the GroupWise API gateway was installed. Also, the UNC name you gave as the Location of the mail files, may be misspelled or the E-mail Gateway Module service account does not have access. This can be tested by running this at the command prompt of the fax server when logged on using the selected account:

```
dir \\[servername]\mail\wpdomain\wpgate\api40
```

Error 2140 Starting Service

When the GroupWise gateway starts, it looks for a file called API.exe to confirm that it has found the correct GroupWise API folder. This file may not exist in the GroupWise API gateway folder. Manually creating a file called API.exe will fix this problem. Create this file from a command prompt by switching to the GroupWise API folder and type:

```
copy con api.exe
```

and then press ENTER ENTER CTRL+Z ENTER

Error 80 Unable to access the GroupWise API directory

The file API.exe exists in the RightFax temporary folder. If this is the case, delete the file from the RightFax temporary folder.

■ ■ ■

Chapter 26

Working with the RightFax Database and Administrative Utilities

RightFax stores all of its data, including information on faxes, users, and dialing rules in a SQL database (although fax images are stored separately as graphic files in the RightFax\Image folder). This database may be installed directly on the RightFax server, or can be installed on an existing SQL server. You select where the SQL database is to be installed when you install the RightFax server software.

The MSDE SQL server that is provided with RightFax includes all of the SQL functionality required by the RightFax software. However, this version of SQL does not include all of the tools and administrative capabilities as the full version.

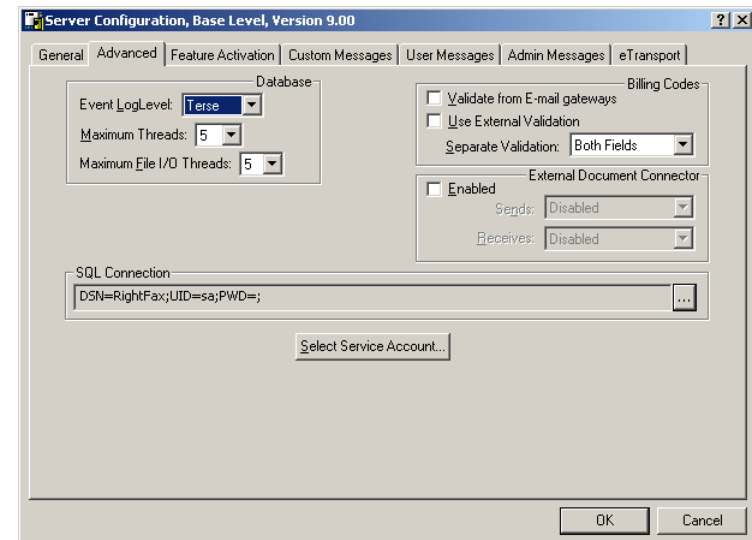
It is strongly recommended that you do not make any changes directly to the RightFax SQL database. A complete schema of the RightFax database can be viewed using SQL Administrator. An image of the schema is also available in the Docs folder on RightFax installation CD in the file RightFax Database Schema.pdf.

Changing the Connection to the SQL Server

RightFax creates and links to a SQL database during installation. However, the SQL database connection can be modified if at any time you need to make changes to your existing SQL installation.

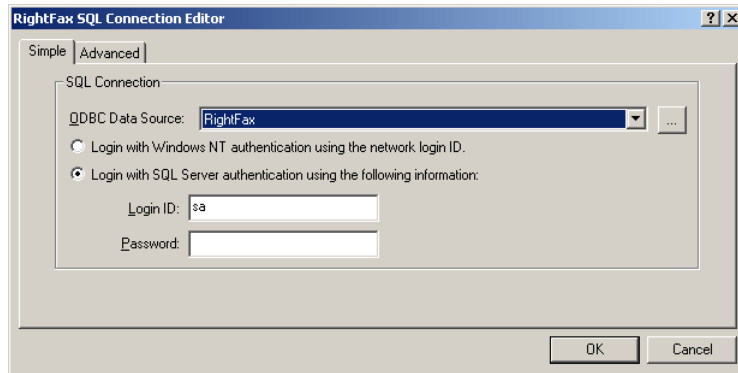
To view your current SQL connection information, run the RightFax Server Configuration program from Windows Control Panel and click the **Advanced** tab. The SQL connection string is displayed in the **SQL Connection** box.

Figure 26.1 The Server Configuration *Advanced* tab



To edit the SQL connection, click the [...] button to the right of this box. This opens the **RightFax SQL Connection Editor** dialog box.

Figure 26.2 The RightFax SQL Connection Editor *Simple* tab



ODBC Data Source Use the drop-down button to select new a data source name (DSN). The DSN defines the fax server's connection to the SQL server.

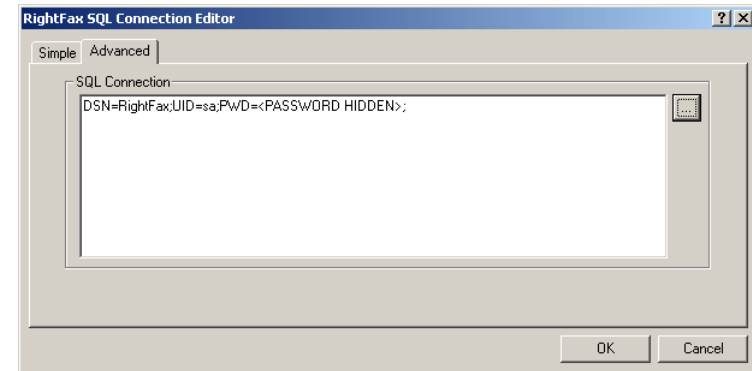
During installation, the fax server automatically creates a system DSN called "RightFax." If you have created a new system DSN to define the database connection, you can select it here.

You can also click the [...] button to open a list of available DSNs. The fax server requires a system DSN which must be properly configured to point to the SQL server where the fax database is installed.

Login with Windows NT authentication using the network login ID Select this option if you want the fax server to log on to the SQL server using NT network authentication. For information on configuring network authentication to the SQL server, see the following section "[Configuring NT authentication to the SQL server](#)".

Login with SQL Server authentication using the following information Select this option to log on to the SQL server using a SQL user account. Enter the SQL login ID and password.

Figure 26.3 The RightFax SQL Connection Editor *Advanced* tab



The **Advanced** tab on this dialog box displays an editable connection string that defines the server's connection to the SQL database. You can manually configure the SQL connection here, however, unless you are familiar with the syntax of connection strings, it is recommended that you instead use the options on the **Simple** tab to make any changes to your server's SQL connection.

Configuring NT authentication to the SQL server

The RightFax server can be configured to authenticate to the SQL server using the server's network login ID.

To configure the RightFax server to use NT authentication on the SQL server

1. Run the RightFax Server Configuration program from Windows Control Panel and click the **Advanced** tab.
2. Click the [...] button to the right of the **SQL Connection** box. This opens the **RightFax SQL Connection Editor** dialog box.

3. On the **Simple** tab, click the [...] button to the right of the **ODBC Data Source** box. This opens the **RightFax SQL Connection Editor** dialog box. This opens the Windows **ODBC Data Source Administrator** program.
4. Click the **System DSN** tab, highlight the **RightFax DSN**, and click **Configure**. This runs the **Microsoft SQL Server DSN Configuration** wizard.
5. On the first screen, click **Next**.
6. On the second screen, select the option **With Windows NT authentication using the network Login ID**. No additional settings are required in this wizard.
7. Continue clicking **Next** until the **Microsoft SQL Server DSN Configuration** wizard is complete and closed, then close the **ODBC Data Source Administrator** program.
8. In the **RightFax SQL Connection Editor** dialog box, select the option **Login with Windows NT authentication using the network login ID**, and then click the **Select Service Account** button.
9. Enter or select a user account for the RightFax server to use when authenticating to the SQL server. This account must exist on the SQL server and have full read/write access. Click **OK**.
10. Click **OK** to save and exit the RightFax Server Configuration program.

Backing up the Database

The RightFax server does not include any SQL utilities designed to back up or restore the RightFax database. Several SQL backup and maintenance utilities are available commercially and it is strongly recommended that you use one of these utilities for creating frequent and regular backup copies of the RightFax database.

Purging Deleted Fax Records from the Database

RightFax stores records of all faxes, even if users have deleted the faxes from their fax mailboxes. When a user deletes a fax, the fax image is deleted, but the fax record is saved and marked as belonging to a deleted fax. This is how the fax server is able to run reports on fax activity even when the fax images have been deleted.

Removing deleted fax records from the database is called “purging.” To keep the fax database to a manageable size, RightFax purges deleted fax records after a set length of time. The length of time fax records of deleted faxes are saved before being purged can be customized for each RightFax group.

To change the length of time RightFax keeps deleted fax records

1. Run Enterprise Fax Manager and click **Groups**.
2. Select the group ID to modify.
3. Click the **Basic Information** tab.
4. In the **Days to Keep Deleted Fax Records** box, enter the number of days to keep deleted fax records.

Database Consistency Checking

Captaris recommends that you periodically examine the fax database for errors. Several administrative tools are available that let you perform periodic database maintenance tasks. All of the utilities described in this section are installed with the RightFax Administrative Utilities. For information on installing the RightFax Administrative Utilities, refer to the *RightFax Installation Guide*.



Warning You must shut down all of the RightFax services before executing any of these database diagnostic tools.

Running Orphan.exe

Orphan.exe searches the RightFax server for fax image files that do not have any references in the RightFax database. The image files are called “orphans” because RightFax has no record of their existence and cannot access them. Using Orphan.exe, orphan image files can be deleted from the server, or their records can be restored in the RightFax database.

Orphan.exe is located in the RightFax\Database folder on the RightFax server. The fax server must not be running when executing this utility.

Syntax `orphan -fcomputer -ipath -uuserID [-a] [-n] [-z]`

Table 26a Orphan.exe Command Line Options

| Option | Function |
|------------|---|
| -a | Restore all orphan image files to a specified RightFax user. Requires the -f and -u options. |
| -fcomputer | Specify the name of the RightFax computer that contains the user ID that will be assigned the recovered fax images. |
| -ipath | Specify the full path to the RightFax\Image folder. |
| -n | Skip all prompts. |
| -uuserID | Specify the RightFax user ID that will be assigned the recovered fax images. |
| -z | Erase orphan file images from the disk. |

Example `orphan -fjanescmputer -ic:\program files\righfax\image -ujanedoe -a`

Running Server Diagnostics

RightFax includes a command line diagnostic utility, RFDiag.exe, that displays information about the RightFax server on which RFDiag.exe is run. For information on running RFDiag.exe, see “Running RFDiag.exe” on page 285.

Purging Faxes from Users' Fax Mailboxes

RightFax includes a feature called automatic fax aging that you can use to delete fax images from users' fax mailboxes after a certain length of time. This can prevent older fax images from occupying too much hard drive space on your server. Automatic fax aging is only available if you have a RightFax Enterprise or Satellite server. This feature is configured separately for each group (see “The Automatic Fax Aging tab” on page 117). Individual users can be excluded from automatic fax aging by checking the **Excluded from Group Fax Aging** permission in their RightFax user profiles (page 104).

RightFax also includes a command line utility, FaxAge.exe, that purges fax records from users' mailboxes. For information on running FaxAge.exe, see “Running FaxAge.exe” on page 277.

Using the RightFax Administrative Utilities

RightFax includes several administrative utilities that are installed separately from the RightFax server installation. It is strongly recommended that you install the administrative utilities on the RightFax server immediately after installing the server software. For information and instructions on installing the RightFax Administrative utilities, see the *RightFax Installation Guide*. All of the RightFax administrative utilities are installed in the RightFax\AdmUtils folder or one of its subfolders on the RightFax server.

The following table lists each of the RightFax administrative utilities, and includes links to more complete documentation on each utility.

Table 26b The RightFax Administrative Utilities

| Utility | Description |
|--------------|--|
| ChgUser.exe | Changes RightFax privileges and options for all users or groups of users at once (see “Running ChgUser.exe” on page 273). |
| DSender.exe | Uploads RightFax user IDs to the HP 9100C Digital Sender so that RightFax can apply users' specific fax transmission and notification options (see “Running DSender.exe” on page 276). |
| FaxAge.exe | Deletes faxes from RightFax users' mailboxes after a fixed interval (see “Running FaxAge.exe” on page 277). |
| FaxDump.exe | Outputs fax data in text format for import into other databases (see “Running FaxDump.exe” on page 278). |
| Fax Reporter | Organizes and presents data from your RightFax database for reporting and billing purposes (see “Running Fax Reporter” on page 192). |
| FaxStat.exe | Remotely monitors any RightFax server on the network (see “Running FaxStat.exe” on page 279). |
| ImpUser.exe | Imports users from a comma-delimited ASCII file (see “Running ImpUser.exe” on page 279). |
| ModUser.exe | Changes user settings for multiple RightFax users (see “Running ModUser.exe” on page 282). |
| ODBCSync.exe | Imports user, printer, and billing code information from an ODBC source (see “Running ODBCSync.exe” on page 284). |

Table 26b The RightFax Administrative Utilities (Continued)

| Utility | Description |
|--------------|--|
| Perl | Installs the Perl scripting language for use with the RightFax Integration Module. For more information, refer to the <i>RightFax Integration Module Guide</i> . |
| PhnPrint.exe | Prints the published and private phonebook entries of one or more RightFax users (see “Running PhnPrint.exe” on page 284). |
| RFDiag.exe | Displays diagnostic information about the RightFax server (see “Running RFDiag.exe” on page 285). |
| ServSync.exe | Compares database objects on two RightFax servers. (see “Running ServSync.exe” on page 286). |

Running ChgUser.exe

ChgUser.exe is a command line utility that changes RightFax permissions and options for multiple users at once. ChgUser.exe is located in the RightFax\AdmUtils folder on the RightFax server.

Syntax `chguser [options] [keywords]`

Table 26c ChgUser.exe Command Line Options

| Option | Function |
|------------------------|---|
| <code>-1 number</code> | Specify default fax number for users |
| <code>-2 number</code> | Specify default voice number for users |
| <code>-3</code> | Display a user list with ID, name, and routing code |
| <code>-4</code> | Reset all user names to match user IDs |
| <code>-6</code> | Display a tab-delimited user list with ID, name, routing code, and group ID |

Table 26c ChgUser.exe Command Line Options (Continued)

| Option | Function |
|--------------------|--|
| -7option | Set auto-print options for users using the following: b = Print fax body c = Print fax cover sheet t = Print transmission history f = Print for failed faxes only s = Print for successful faxes only |
| -aprinterID | Specify the printer ID to which received faxes should be automatically printed |
| -bprinterID | Specify the printer ID to which sent faxes should be automatically printed |
| -cfile | Specify the cover sheet file (i.e. FCS.pcl) for users |
| -d | Turn on Debug mode |
| -fserver | Specify the name of RightFax server |
| -ggroupID | Name of group in which to place users. The group ID must already exist |
| -iDIDnum | Specify a routing code for the users |
| -luserID | User ID to log in to the RightFax server |
| -mVMSID | Specify a voice mail subscriber ID for the users |

Table 26c ChgUser.exe Command Line Options (Continued)

| Option | Function |
|-----------------------|--|
| -nsend,receive | Sets sent and received fax notifications. Separate send and receive values with a comma (i.e., -n0x80,0x00) Values for send are: 0x01 = Send "Info incomplete" message once 0x02 = Send "Info incomplete" message periodically 0x04 = Send "Sending..." message once only 0x08 = Send "Sending..." message periodically 0x10 = Send "Error, will be retried" messages 0x20 = Send "Successful send" messages 0x40 = Send "Error, will be aborted" messages 0x80 = Do not notify about faxes held for preview Values for receive are: 0x00 = Do not send messages for received faxes 0x01 = Send new fax message once only 0x02 = Send new fax message periodically To enable multiple notifications, add the values of all desired notification options. For example, to enable send options 0x01, 0x10, and 0x40, use the value 0x51. |
| -opassword | Password for the user ID used to log in to the RightFax server. To use NT authentication, leave this blank |
| -pprinterID | Specify the ID of the default printer for users |

Table 26c ChgUser.exe Command Line Options (Continued)

| Option | Function |
|--------------------|---|
| -r <i>type</i> | Specify routing types for users using the following: RF = RightFax mailbox GW = GroupWise OCR = Optical Character Recognition CX = Telephony Server EXCH = MS Exchange NOTE = Notes XRT = RightFax Interconnect TRS = TRS NetComm Server SMTP = SMTP mail FILE = network folder Add "+" to the end of the routing type to delete the original file after routing (e.g., "-rSMTP+") |
| -s <i>format</i> | Fax file routing format using the following: PCX = PCX format DCX = DCX format G3 = TIFF-G3 format G4 = TIFF-G4 format PDF = PDF format GIF = GIF format |
| -t <i>protocol</i> | Force protocol to specific type (rather than assigning automatically) using the following: n = Named Pipes s = SPX t = TCP/IP x = IPX |
| -u <i>userIDs</i> | Comma delimited list of users to change |
| -v | Display current values for users |
| -x | Delete the users specified with the -u command line option (required) |

Table 26d ChgUser.exe Keywords

| Keyword | Function |
|-------------------------------------|--|
| admin/ noadmin | Enables/disables administrative privileges |
| allowocr/ noallowocr | Enables/disables the permission to OCR faxes |
| archive/ noarchive | Enables/disables archiving of all sent faxes |
| auditstamprecv/ noauditstamprecv | Enables/disables the Stamp Pages of Received Faxes With Audit Stamp permission |
| autoforwardfax | Enables the autoforward feature to a fax machine. Use Noautoforward to disable the autoforward feature Note If this feature has never been enabled in the user configuration in Enterprise Fax Manager, no fax machine information will exist and this feature will not work |
| autoforwarduser | Enables the autoforward feature to a RightFax user. Use Noautoforward to disable the autoforward feature Note If this feature has never been enabled in the user configuration in Enterprise Fax Manager, no user ID information will exist and this feature will not work |
| autoprint/ noautoprint | Enables/disables automatic printing of received faxes. Use -7 and -A options to set printer ID and autoprint options |
| billcodeedit/ nobillcodeedit | Enables/disables changing of default billing code settings |
| billcodelookup/ nobillcodelookup | Enables/disables ability to select billing codes by ID |

Table 26d ChgUser.exe Keywords (Continued)

| Keyword | Function |
|--|--|
| bodyfine/ bodynormal | Sets resolution of fax body to fine or normal |
| bypassbillcodeverify/ nobypassbillcodeverify | Enables/disables permission to bypass billing code verification |
| coverfine/ covernormal | Sets resolution of fax cover sheet to fine or normal |
| coverpage/ nocoverpage | Enables/disables sending a cover page with every fax. Use -C option to set cover sheet file |
| defaultbc/ nodefaultbc | Enables/disables the Assign Default Billing Codes to Received Faxes permission |
| deleteaftersent/ deletealways/ deletenever | Specifies Autodelete setting for when to delete sent faxes from the FaxUtil mailbox |
| emptytrash/ noemptytrash | Enables/disables the user's option to automatically empty the use the Trash folder when exiting FaxUtil |
| highp/ nohighp | Enables/disables the availability of High Priority for user |
| noautoforward | Disables the autoforward feature |
| nontsecurity | Disables the Use NT authentication feature |
| protected/ unprotected | Sets user mailbox to protected (requires password) or unprotected (does not require password) |
| sautoprint/ nosautoprint | Enables/disables automatic printing of sent faxes. Use -7 and -B options to set printer ID and autoprint options |

Table 26d ChgUser.exe Keywords (Continued)

| Keyword | Function |
|-------------------------------|---|
| smartresume/ nosmartresume | Enables/disables the Smart-Resume feature |
| usetrash/ nousetrash | Enables/disables the user's option to use the Trash folder when deleting faxes in FaxUtil |



Note Unless you use the *-u* option to specify individual RightFax user IDs, ChgUser commands will be applied to all RightFax user IDs.

Example chguser -frfserver -v
 chguser -frfserver -ubob,fred noadmin
 chguser -frfserver2 -v -alaser4 autoprint

Running DSender.exe

DSender.exe is a command line utility that synchronizes user IDs between RightFax and an HP Digital Senders on your network. You can either import your RightFax user IDs to each Digital Sender or export the User IDs on each Digital Sender to RightFax (up to a maximum of 1,024 user IDs). The method you choose depends on

which system already contains the most comprehensive user ID list. DSender.exe is located in the RightFax\AdmUtils folder on the RightFax server.



Important User synchronization with DSender.exe is not dynamic. If new users are added, you will need to re-run the DSender.exe utility to synchronize the user lists.

Syntax `dsender -idigsender [-aaccount] -ppassword -ffaxserver [-userID] [-t{n|s|t}] [-1] [-s] [-z]`

Table 26e DSender.exe Command Line Options

| Option | Function |
|-------------|--|
| -idigsender | Specifies the IP address of the Digital Sender. |
| -aaccount | The account name used to log on to the Digital Sender. Default account name is "ADMINISTRATOR". |
| -ppassword | The password for the account name used to log on to the Digital Sender. |
| -ffaxserver | The name of the RightFax server to synchronize. |
| -userID | Specifies the user ID to use as the model when creating new users (usually set to "DEFAULT"). |
| -tprotocol | Force network protocol to specific type (rather than assigning automatically) using the following: n = Named pipes (default) s = SPX t = TCP/IP |
| -1 | Copies user IDs from the HP Digital Sender to RightFax. The default setting is to copy user IDs from RightFax to the HP Digital Sender. |
| -s | Disallows synching of the ADMINISTRATOR account. |
| -z | Deletes existing unmatched users from the destination system. |

Example `dsender -i38.2.54.156 -pmypassword -frfserver -tt -z`

This example logs on to the Digital Sender at IP address 38.2.54.156 using the user name "administrator" and the password "joshua." It then copies the user IDs from the RightFax server "RFaxServ" to that Digital Sender using the TCP/IP protocol and leaves the "Administrator" user ID on the Digital Sender unchanged.

Running FaxAge.exe

FaxAge.exe is a command line utility that deletes faxes from RightFax users' mailboxes. FaxAge.exe is located in the RightFax\AdmUtils folder on the RightFax server.



Important The fax server must be running when executing this utility.

Syntax `faxage -fserver -auserID -ofile [-dvalue] [-emm/dd/yyyy] [-llevel] [-ppassword] [-q] [-smm/dd/yyyy] [-t{n|s|t|x}] [-uuserIDs] [-wfolder] [-y] [-z]`

Table 26f FaxAge.exe Command Line Options

| Option | Function |
|----------|---|
| -auserID | The RightFax user ID to use when logging in to the RightFax server. A password can be required using the -p option. |
| -dvalue | Specifies which faxes should be deleted: 1 = only received faxes 2 = only sent faxes 3 = all faxes (default) 4 = only viewed or printed faxes 5 = only printed faxes 6 = only non-approved faxes 7 = only approved faxes |

Table 26f FaxAge.exe Command Line Options (Continued)

| Option | Function |
|---------------------|--|
| -emm/dd/yyyy | Specifies the ending date of the date range to delete. This can also be specified as a day offset, i.e., -e-30 (default is 12/31/2010). Note You must use the 4-digit year format or the date may be read incorrectly. |
| -fserver | Specifies the name of RightFax server. |
| -llevel | Information level 0 or 1 (default is 0). |
| -ofile | Output file listing all deleted faxes. If the file already exists, the new file list will be appended to the end. |
| -ppassword | The RightFax password for the user ID specified with the -a option. To use NT authentication, leave this option blank. |
| -q | Prints a table containing field definitions for information levels. This options overrides all other options and causes the program to do nothing else. |
| -smm/dd/yyyy | Specifies the starting date of the date range to delete. This can also be specified as a day offset, i.e., -s-30 (default is 01/01/1980). Note You must use the 4-digit year format or the date may be read incorrectly. |
| -tprotocol | Forces protocol to specific type (rather than assigning automatically) using the following: n = Named Pipes (default) s = SPX t = TCP/IP x = IPX |
| -userIDs | Comma delimited list of users (default is all users). |
| -wfolder | Name of folder in which to restrict the deletions (default is all folders). |

Table 26f FaxAge.exe Command Line Options (Continued)

| Option | Function |
|-----------|--|
| -y | Skips any verification questions. |
| -z | Without this parameter, no deletions will occur. |

Example faxage -frfserver -administrator -odump.out -d2
-s01/01/2004 -z

Running FaxDump.exe

FaxDump.exe is a command line utility that outputs ASCII text files of fax data that you can import into other databases to produce reports. The text file prints one complete fax record per line. Quotes surround string data, and all fields are separated by commas (this can be customized using the -d option). FaxDump can report eight levels of information. For definitions of the fields included in each fax record for each of these information levels, see [Appendix C, "FaxDump.exe Data Fields"](#). FaxDump.exe is located in the RightFax\AdmUtils folder on the RightFax server.

Syntax faxdump -fserver -userid -ofile {-ggroupID|-userid}
[-1] [-dascii] [-emm/dd/yyyy] [-h] [-i{s|f|a}] [-llevel]
[-ppassword] [-q] [-smm/dd/yyyy] [-t{n|s|t|x}]

Table 26g FaxDump.exe Command Line Options

| Option | Function |
|----------------|--|
| -1 | Fields that contain a delimiter (see the -d option) will not include quotation marks. |
| -userid | The RightFax user ID to use when logging in to the RightFax server. A password can be required using the -p option. |
| -dASCII | The ASCII value (in decimal) of the character to use as a delimiter for FaxDump output. By default, this is set to comma (ASCII 44). |

Table 26g FaxDump.exe Command Line Options (Continued)

| Option | Function |
|---------------------|--|
| -emm/dd/yyyy | The ending date of the date range to report on. This can be specified as a day offset, i.e, -e-30 (default is 12/31/2010). |
| -fserver | The name of RightFax server that contains the fax information to output. |
| -ggroupID | The RightFax group ID for a group of users on which to report. |
| -h | Prints field headers in the first line of the output file. |
| -ioption | <p> Ignores faxes of the specified type using one of the following options:</p> <p>s = Ignore successfully transmitted faxes</p> <p>f = Ignore failed faxes</p> <p>a = Ignore all failed fax history records</p> |
| -llevel | Information level 0–7 (default is 0). See Appendix C, “FaxDump.exe Data Fields” for details on the available information levels. |
| -ofile | Name of the ASCII file to output. |
| -ppassword | The RightFax password for the user ID specified with the -a option. To use NT authentication, leave this option blank. |
| -q | Prints a table containing the definitions of the fields in each information level. If you select this option, any other specified options will be ignored. |
| -smm/dd/yyyy | The starting date of the date range to report on. This can also be specified as a day offset, i.e, -S-30 (default is 01/01/1980). |

Table 26g FaxDump.exe Command Line Options (Continued)

| Option | Function |
|-------------------|---|
| -tprotocol | <p>Force the protocol used to communicate with the RightFax server to a specific type (rather than assigning automatically) using the following:</p> <p>n = Named pipes (default)</p> <p>s = SPX</p> <p>t = TCP/IP</p> <p>x = IPX</p> |
| -uuserIDs | Comma delimited list of users to include (default is all users). |

Example faxdump -frfserver -administrator -odump.out -l2 -s01/01/2002 -e01/31/2004

Running FaxStat.exe

FaxStat.exe is a Windows-based utility that monitors the fax database, BoardServer, server status, WorkServer, e-mail gateways, and RPC server status on any RightFax server. FaxStat.exe is located in the RightFax\AdmUtils folder on the RightFax server.

Running ImpUser.exe

ImpUser.exe is a command line utility that imports users into RightFax from a comma-delimited ASCII file. ImpUser.exe is located in the RightFax\AdmUtils folder on the RightFax server.

To import user IDs from a file, you must create a comma-delimited ASCII file containing all of the user records to import. Each individual user record must appear on a separate line and must

contain 22 fields. The following table lists each of these fields in the order the fields must appear (use quotation marks around any field that contains an embedded comma).

Table 26h ImpUser.exe Import File Required Fields

| Field | Maximum length | Description |
|-------------------|----------------|---|
| User ID | 21 | Unique RightFax user ID (If a user with this ID already exists, the existing user will be changed) |
| User name | 29 | Descriptive user name |
| Password | 11 | Password used to access FaxUtil and administrative functions |
| Group | 21 | The user's group ID. The group must already exist |
| Routing code | 7 | Unique routing code for the user |
| Cover sheet | 12 | File name (no path) of default cover sheet file in RightFax\FCS folder. The file name must end with .pcl. Leave blank to use group's default cover sheet |
| Permissions flags | 31 | Characters that specify assigned user permissions (see "Table 26i: ImpUser.exe Import File Permissions Flags" on page 281) |
| Notification type | 2 | Notification type for received faxes: 0 = Use group's type 1–9 = Custom type 12 = GroupWise 14 = CallXpress 16 = Notes 17 = Exchange 18 = SMTP |

Table 26h ImpUser.exe Import File Required Fields (Continued)

| Field | Maximum length | Description |
|--------------------|----------------|--|
| Routing info | 99 | Routing information formatted as <i>Type:Info</i> or <i>+Type:Info</i> where <i>Type</i> must be one of the following: RF, CC, MS, FILE, OCR, GW, NOTES, RFIC, TRS, CX3, or EXCH; and where <i>Info</i> is the address for the specified type. <i>+Type:Info</i> is identical but enables the Delete After Routing option |
| Routing format | 4 | File format to use when routing. Must be one of the following: PCX, DCX, TIFF-G3, or TIFF-G4 |
| Subscriber ID | 7 | Voice mail subscriber ID, if telephony system routing is enabled |
| From name | 59 | Default 'From Name' for cover sheet |
| From phone | 31 | Default 'From Voice Number' for cover sheet |
| DID fax num | 31 | Default 'DID Fax Number' for cover sheet |
| General fax | 31 | Default 'General Fax Number' for cover sheet |
| Operator num | 31 | Default 'Operator Voice Number' for cover sheet |
| Distinguished name | 79 | The Microsoft Exchange distinguished name, used to confirm accurate RightFax/Exchange user synchronization |

Table 26h ImpUser.exe Import File Required Fields (Continued)

| Field | Maximum length | Description |
|------------------------|----------------|--|
| Default billing code 1 | 15 | Default Billing Code 1 setting |
| Default billing code 2 | 15 | Default Billing Code 2 setting |
| Pager notify | 99 | User pager notification formatted as <i>Service:PagerID</i> where <i>Service</i> is one of the defined pager services on the fax server, and <i>PagerID</i> is the pager number |
| Pager alert | 99 | Administrator pager notification formatted as <i>Service:PagerID</i> where <i>Service</i> is one of the defined pager services on the fax server, and <i>PagerID</i> is the pager number |
| Pager flags | 31 | Characters that specify pager notification events (see “Table 26j: Impuser.exe Import File Pager Flags” on page 281) |

The following table lists user permission flags that can be used in the import file. A plus (+) or minus (-) sign must follow each character to indicate whether to add or remove the permission.

Table 26i ImpUser.exe Import File Permissions Flags

| Flag | Function |
|------|----------------------------------|
| a± | Administrative access |
| b± | Bypass billing code verification |
| c± | Can change cover sheet |
| d± | Disallow fax deleting |

Table 26i ImpUser.exe Import File Permissions Flags (Continued)

| Flag | Function |
|------|----------------------------------|
| f± | Can add/update forms |
| h± | Can use high priority |
| i± | Cannot search billing codes |
| l± | Can add/update library documents |
| m± | Must have password |
| o± | Can OCR faxes |
| r± | Can run reports |
| s± | Sent fax archiving |
| u± | Unprotected mailbox |
| v± | View first page only |

The following table lists pager flags that can be used in the import file. A plus (+) or minus (-) sign must follow each character to indicate whether to add or remove the alert.

Table 26j Impuser.exe Import File Pager Flags

| Flag | Function |
|--------------------|--|
| a± | All BoardServer services down |
| b± | BoardServer service down |
| c± | Critically low disk space |
| e± | Server Event Queue full |
| h± <i>interval</i> | Periodic server heartbeat. Specify heartbeat interval in minutes |
| i± | Server improperly started |
| l± | Low disk space |
| n± | New fax received |
| o± | Outbound fax has been abandoned |

Table 26j Impuser.exe Import File Pager Flags (Continued)

| Flag | Function |
|-----------------------|--|
| p± | Probable line failure |
| q± <i>faxes-pages</i> | Send queue too deep. Specify fax and page maximum depths |

After you have created the ASCII file to import, run the ImpUser.exe command line utility.



Important *The fax server must be running when executing this utility.*

Syntax `impuser -ffaxserver -uuserID -ppassword -isourcefile -nsource [-dtemplateID] [-ggroupname] [-ooutputfile] [-r][-tprotocol] [-1]`

Table 26k ImpUser.exe Command Line Options

| Option | Function |
|----------------------|--|
| -d <i>templateID</i> | Specifies the RightFax user ID to use as a template for imported users' settings. If not specified, uses the Default RightFax user ID. |
| -ffaxserver | Specifies the name of a fax server to import to. |
| -g <i>groupname</i> | Specifies the name of a Windows NT group from which to import. If not specified, imports all users in the domain. |
| -isourcefile | Specifies the name of the file to import. |
| -nsource | Specifies the name of the Windows NT server to import the Windows NT domain accounts from. |
| -o <i>outputfile</i> | Outputs the user list to a file rather than importing directly to RightFax. This file can then be edited and re-imported. |
| -ppassword | The RightFax password for the user ID specified with the -u option. To use NT authentication, leave this option blank. |

Table 26k ImpUser.exe Command Line Options (Continued)

| Option | Function |
|--------------------|---|
| -t <i>protocol</i> | Forces protocol to specific type (rather than assigning automatically) using the following: n = Named Pipes s = SPX t = TCP/IP |
| -u <i>userID</i> | The RightFax user ID to use when logging in to the RightFax server. A password can be required using the -p option. |
| -1 | Imports from an Omtool Userdb.dat file. |

Example `impuser -frfserver -ujanedoe -ppassword -iuserfile.txt -nsourceserver -tt`

When you execute this command, users from the specified ASCII file will be imported as fax users. If an imported user ID already exists, that user's record will be updated based on the data from the file. If a user ID does not already exist, it will be added.

Running ModUser.exe

ModUser.exe is a Windows-based utility available only with RightFax Enterprise servers that changes RightFax permissions and options for multiple users at once. You must have RightFax administrative privileges to run ModUser.exe. ModUser.exe can be run from any workstation on your network; however, if you will be using ModUser's Windows NT user import function, you must be at a computer running Windows NT 4.0, Windows 2000, or Windows XP. ModUser.exe is located in the RightFax\AdmUtils folder on the RightFax server.

Once it is installed, you can run ModUser.exe by selecting the **Captaris Modify User** option in the **Programs** list in the Windows **Start** menu. When prompted for a server name, enter the name of the RightFax server you want to modify, and then click **Next**.

Choose the network protocol for the server and click **Next**. Finally, enter your RightFax administrator user ID and password, and then click **Finish**. The **Modify User** window opens.

Figure 26.4 The Modify User Dialog Box

| ID | Username | Group | Routing type | Default printer | General fax |
|---------------|-----------------------|----------|--------------|-----------------|-------------|
| ADMINISTRATOR | Administrator | EVERYONE | FAX Mailbox | | |
| ALEX | AlexZ | EVERYONE | FAX Mailbox | | |
| BILL | Billy | EVERYONE | FAX Mailbox | | |
| CAROL | CarolX | EVERYONE | FAX Mailbox | | |
| DAVE | DaveW | EVERYONE | FAX Mailbox | | |
| DEFAULT | Default User Template | EVERYONE | FAX Mailbox | | |
| DJP | DJP | EVERYONE | FAX Mailbox | | |
| ELLEN | EllenV | EVERYONE | FAX Mailbox | | |
| FRANK | FrankJ | EVERYONE | FAX Mailbox | | |
| GERALDINE | GeraldineT | EVERYONE | FAX Mailbox | | |
| JANE | JaneD | EVERYONE | FAX Mailbox | | |

This window lists each RightFax user on the server you selected. To make global changes that will affect a group of selected users, select the users you want by clicking the user IDs while holding

down either the SHIFT or CTRL key. When you have selected the users to edit, click **Edit** in the menu bar. The **User Information for Multiple Selections** dialog box opens.

Figure 26.5 The User Information for Multiple Selections Dialog Box

User Information for multiple selections

General Fax Number: <Multiple Selections> [OK]

General Voice Number: <Multiple Selections> [Cancel]

Member of Group: EVERYONE

Default cover sheet: (System Default)

Routing Type: FAX Mailbox

Default printer:

Autoprint Received faxes: Enable Printer:

Autoprint Sent faxes: Enable Printer:

Fax cover pages Successful faxes Failed faxes

Fax bodies Fax transmission histories

Administrative access Can change cover sheet

Must have Password Can use High priority

Archive sent faxes Can Edit/Add Forms

Unprotected mailbox Can Edit/Add Library Docs

Delete faxes after routing Can OCR Faxes

Fine mode cover pages Fine mode fax bodies

Enable Smart Resume Send cover sheet with fax

For each option, a black check mark indicates that the option is enabled for all selected users, a gray check mark indicates that the option is enabled for some users, and if there is no check mark, the option is disabled for all users.

For information on each of the options on this dialog box see [“Editing user properties”](#) on page 101.

When you have made the changes you want, click **OK** to return to the **Modify User** dialog box. Asterisks (*) appear next the users names to indicate that they have unsaved changes. You will be prompted to save all your changes when you close the **Modify User** dialog box. To immediately apply changes without quitting, select **Save Changes** from the **File** menu.

Running ODBCSync.exe

ODBCSync.exe is a command line utility that imports RightFax users, printers, and billing codes from an ODBC source. ODBCSync.exe uses a configuration file that you create to map ODBC fields to RightFax. ODBCSync.exe, a sample configuration file called ODBCDemo.ini, and a text file that documents the configuration file called ODBCSync.txt are all included in the RightFax\AdmUtils folder on the RightFax server.

Syntax `odbsync -ffaxserver [-o] [-t{n|s|t}]`

Table 26l ODBCSync.exe Command Line Options

| Option | Function |
|--------------------------|---|
| <code>-ffaxserver</code> | Specifies the name of a fax server to update. |
| <code>-o</code> | Overwrite any records that already exist on the server. |
| <code>-tprotocol</code> | Forces protocol to specific type (rather than assigning automatically) using the following: n = Named Pipes s = SPX t = TCP/IP |

Example `odbsync -frserver -tt -o ODBCImport.ini`

Running PhnPrint.exe

PhnPrint.exe is a command line utility that prints the published and private phonebook entries of one or more RightFax users to a file or printer. PhnPrint.exe is included in the RightFax\AdmUtils folder on the RightFax server.



Important *The fax server must be running when executing this utility.*

Syntax `phnprint -fserver -uuserIDs -ofile [-g{0|1}] [-lformat] [-ppasswords] [-q] [-t{n|t|s|x}]`

Table 26m PhnPrint.exe Command Line Options

| Option | Function |
|-------------------------|---|
| <code>-fserver</code> | Specify the name of RightFax server that contains the users whose phonebooks you want to print. |
| <code>-goption</code> | Optionally print phonebook groups from the specified users' phonebooks. Specify option 0 or 1 where: 0 = Include phonebook groups 1 = Do not include phonebook groups (default) |
| <code>-lformat</code> | Output format 0, 1, or 3 where: 0 = Multi-line format, designed to be printed for reference (default) 1 = Space-delimited format 3 = Tab-delimited format |
| <code>-ofile</code> | Output file listing phonebook entries for all specified users |
| <code>-ppassword</code> | Comma delimited list of passwords for specified users |
| <code>-q</code> | Lists the field definitions for all of the output formats. This option overrides all other options |

Table 26m PhnPrint.exe Command Line Options (Continued)

| Option | Function |
|------------|---|
| -tprotocol | Force protocol to specific type (rather than assigning automatically) using the following: n = Named Pipes (default) s = SPX t = TCP/IP x = IPX |
| -uuserIDs | Comma delimited list of users whose phonebooks you want to print |

Example phnprint -frfserver -ujaned,johns -odump.out
-psecret,password -g0 -l1



Note Because the last two lines in all of the output formats list the total number of entries, attempting to directly re-import the phonebook into RightFax will fail. To import the file back into RightFax, you must manually edit the file and delete the entry-count lines. The level 0 output format is designed for reference and cannot be used for importing phonebook entries from a file. When creating a file that will be imported back into RightFax, you must select output level 1 or 3.

Running RFDiag.exe

RFDiag.exe is a command line utility that displays information about the RightFax server on which RFDiag.exe is run. RFDiag.exe is included in the RightFax\AdmUtils folder on the RightFax server.



Important The fax server must be running when executing this utility.

Syntax rfdiag options

Table 26n RFDiag.exe Command Line Options

| Option | Function |
|--------|--|
| -all | Display all available configuration information. |
| -app | Display information about your Microsoft Office, Microsoft Exchange, and Lotus Notes applications, if any. |
| -brd | Display BoardServer configuration. |
| -dev | Display installed devices. |
| -dir | Display a summary of the contents of the RightFax subfolders. |
| -dir0 | List files in the RightFax folder. |
| -dir1 | List files in the RightFax\Bin folder. |
| -dir2 | List files in the RightFax\Image folder. |
| -dir3 | List files in the RightFax\Database folder. |
| -dir4 | List files in the RightFax\Outgoing folder. |
| -dir5 | List files in the RightFax\BFT folder. |
| -dir6 | List files in the RightFax\FCS folder. |
| -dir7 | List files in the RightFax\Sig folder. |
| -dir8 | List files in the RightFax\Papers folder. |
| -dir9 | List files in the RightFax\Boardsrv folder. |
| -hw | Display fax hardware configuration. |

Table 26n RFDiag.exe Command Line Options (Continued)

| Option | Function |
|--------|--|
| -net | Display network configuration. |
| -srv | Display fax server configuration. |
| -svc | Display installed services. |
| -sys | Display information about the fax server system configuration. |

Example rfdiag -all -dir3

Running ServSync.exe

ServSync.exe is a command line utility that compares one or more categories of information between two RightFax servers. ServSync.exe is included in the RightFax\AdmUtils folder on the RightFax server.



Important The fax server must be running when executing this utility.

Syntax `servsync -auserID server1[:{n|s|t}] [server2[:{n|s|t}]]
-c{b|f|g|p|u|*} [-spassword] [-v]`

Table 26o ServSync.exe Command Line Options

| Option | Function |
|--------------|--|
| -auserID | The user ID to use to log in to the RightFax server. |
| -spassword | Password for the user ID used to log in to the RightFax server. To use NT authentication, leave this option blank. |
| -ccategories | Categories of information to be compared using the following: b = Billing codes f = Forms g = Groups p = Printers u = Users * = All categories |
| :protocol | The network protocol to use to communicate to each of the RightFax servers using the following: n = Named Pipes (default) s = SPX t = TCP/IP |
| -v | Verbose output. This option gives you the most comprehensive comparison. |

Example `servsync rserver:t -aadministrator -spassword -c* -v`

■ ■ ■

Appendix A

RightFax Embedded Codes

Embedded codes are special faxing instructions that you insert directly into fax-bound documents. You can use embedded codes to address faxes, include fax cover sheet information, attach library documents, add billing information, insert your signature, and more.

To add an embedded code to a document, type the code you want, along with any required parameters, between angle brackets. For example, an embedded code that tells RightFax the destination fax number is written as:

```
<TOFAXNUM:555-1212>
```

The fax server removes all embedded codes from a document when it converts the document to fax form, so they don't appear in your final fax. Embedded codes can be written in either upper or lower case. If you type an embedded code incorrectly, it will not behave as expected and the embedded code text itself will appear in your fax.

Embedded codes can be placed anywhere in the document that you will be faxing, and can be used in any document that accepts text characters. Embedded codes cannot line wrap and any embedded code statement that is so long that it wraps to a second line will be ignored.

Embedded codes that are followed by this envelope icon (✉) are compatible with RightFax e-mail gateways.



Note *If you send faxes via an SMTP gateway and plan to use embedded codes, then you must select the **Use PCL converter for text files** option in your e-mail configuration.*

ADDDOC

Format <ADDDOC:file>

Adds a file to the end of the fax. The specified file is not deleted after conversion. This additional file can be in one of over 45 of the most popular IBM and Macintosh native application file formats. If you have licensed the RightFax PDF module, you can also attach PostScript and PDF files. For a complete list of supported formats, see [Appendix D, "File Formats that Convert to Fax Format"](#).

Specify the complete file path, including file name, extension, drive, and directory, and ensure that RightFax has access privileges. Captaris recommends using the UNC to specify the file location (instead of a drive letter), because the mapping or drive links may be different on the fax server and the computer where the fax originated.

More than one ADDDOC code can appear in a document. Each file will be appended in the sequence that the embedded code appears in the document.

Maximum field length: N/A.

Examples <adddoc:x:\bin\xyz.tif>
<adddoc:\\server8\sys\bin\xyz.tif>

ADDDOC2

Format <ADDDOC2:file>

Replaces the document it is found in with the specified file. The specified file is then deleted after it is faxed. This file can be in one of over 45 of the most popular IBM and Macintosh native application file formats. If you have licensed the RightFax PDF module, you can also attach PostScript and PDF files. For a complete list of supported formats, see [Appendix D, "File Formats that Convert to Fax Format"](#).

Specify the complete file path, including file name, extension, drive, and directory. Captaris recommends using the UNC to specify the file location (instead of a drive letter), because the mapping or drive links may be different on the fax server and the computer where the fax originated.

Maximum field length: N/A.

Examples <adddoc2:x:\bin\123.tif>
<adddoc2:\\server8\sys\bin\123.tif>

ADDDOC3

Format <ADDDOC3:file>

Adds another file to the end of the fax. The specified file will be deleted after conversion. This additional file can be in one of over 45 of the most popular IBM and Macintosh native application file formats. If you have licensed the RightFax PDF module, you can also attach PostScript and PDF files. For a complete list of supported formats, see [Appendix D, "File Formats that Convert to Fax Format"](#).

Specify the complete file path, including file name, extension, drive, and directory. Captaris recommends using the UNC to specify the file location (instead of a drive letter), because the mapping or drive links may be different on the fax server and the computer where the fax originated.

Maximum field length: N/A.

Examples <adddoc3:x:\bin\xyz.tif>
<adddoc3:\\server8\sys\bin\xyz.tif>

ADDDOC4

Format <ADDDOC4:file>

Replaces the document it is found in with the specified file. This file can be in one of over 45 of the most popular IBM and Macintosh native application file formats. If you have licensed the RightFax PDF module, you can also attach PostScript and PDF files. For a complete list of supported formats, see [Appendix D, "File Formats that Convert to Fax Format"](#).

Specify the complete file path, including file name, extension, drive, and directory. Captaris recommends using the UNC to specify the file location (instead of a drive letter), because the mapping or drive links may be different on the fax server and the computer where the fax originated.

Maximum field length: N/A.

Examples <adddoc4:x:\bin\xyz.tif>
<adddoc4:\\server8\sys\bin\xyz.tif>

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 (page 289), 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 be scheduled to send at 3:30 p.m. tomorrow.

Maximum field length: 10 characters

Examples<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. You can enter fractions of an hour in six-minute increments. Valid fractions of an hour are 0.1 through 0.9. You must enter at least one digit before and after the decimal point. For example, 1.5 and 0.3 are valid, and 1.50 and .3 are not valid.

Absolute time can be entered in 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

Examples<ATTIME:10:00p>
<ATTIME:+2>

BILLINFO1

Format <BILLINFO1:code>

Assigns a billing code to the fax. If the RightFax administrator has set up the system to require billing codes, you must enter a valid billing code or the fax will not be sent.

Maximum field length: 15 characters

Example <BILLINFO1:4444>

BILLINFO2

Format <BILLINFO2:code>

Assigns a second billing code to the fax. If the RightFax administrator has set up the system to require billing codes, you must enter a valid billing code or the fax will not be sent.

Maximum field length: 15 characters

Example <BILLINFO2:5555>

BREAK

Format <BREAK>

Breaks a single fax document into multiple faxes with multiple recipients. The break occurs at the point where the <BREAK> code is encountered. Each separate fax in the document must contain its own fax recipient information using the <TO_NAME> and <TO_FAXNUM> embedded codes.

When RightFax encounters the <BREAK> embedded code, it automatically flushes any existing print formatting information that was contained in the file’s print header. Because of this, the <BREAK> code should be used only with ASCII files that do not have print headers associated with them (such as batch files).

Maximum field length: N/A.

BROADCAST

Format <BROADCAST>

Fine-tunes the server for sending fax broadcasts to multiple recipients. Include this embedded code in the fax to eliminate unnecessary server processes and increase the speed at which a broadcast is sent. Using the <BROADCAST> code increases the interval at which the server polls for and returns status information. In addition, the server will not process requests for notification or automatic printing of sent faxes. However, the server will still automatically print failed faxes, if that option is selected.

Maximum field length: N/A.

CHANNEL

Format <CHANNEL:channel#>

Sends the fax only on the specified channel of the fax board. 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.

Although your server's first fax channel is listed as number 0 (zero) in the RightFax BoardServer module, a value of 0 in this embedded code indicates that the server should use any available channel. For this reason, any channel you specify in this embedded code must be numbered one higher than the channel as it is listed in the BoardServer (i.e., specify <CHANNEL:5> to use channel 4 as displayed in the RightFax BoardServer. The BoardServer's channel 4 is actually the fifth channel since channels begin numbering at zero.)

Maximum field length: N/A

Example <CHANNEL:3>

COMPLETEEVENT

Format <COMPLETEEVENT>

Enables complete events that can be serviced via the RightFax API. The new events are useful when writing code to send the status of the fax to a user, to a database, or to a host application.

Maximum field length: N/A.

COVER

Format <COVER>

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 ([page 291](#)), this code will 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 the fax from the user's FaxUtil mailbox after it has been sent, whether or not the send was successful. This code overrides the default RightFax auto-delete setting.

Maximum field length: N/A

DELETEFIRSTPAGE

Format <DELETEFIRSTPAGE>

Removes the first page of the fax. Use this code when you want to put all production embedded codes on the first page of a document, but not send that page to the recipient. This code is typically used when it is easier to add a page to the front of a document than to insert production embedded codes into the print stream coming from the host.

Maximum field length: N/A.

DELETELASTPAGE

Format <DELETELASTPAGE>

Removes the last page of the fax. Use this code when you want to put all production embedded codes on the last page of a document, but not send that page to the recipient. This code is typically used when it is easier to add a page to the end of a document than to insert production embedded codes into the print stream coming from the host.

Maximum field length: N/A.

FCSFILE

Format <FCSFILE:filename>

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). This is recommended only for faxes with detailed graphics or faxes that will be OCRed. This code overrides the default fax resolution set in the user’s FaxUtil mailbox.

Maximum field length: N/A

FORMTYPE

Format <FORMTYPE:formID>

Overlays the fax onto the specified RightFax form.

Maximum field length: 15 characters

Example <FORMTYPE:LETTERHEAD>

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)555-1234>

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>**FROMNAME****Format** <FROMNAME:name>

Specifies the sender's name 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: 59 characters

Example <FROMNAME:Jane Doe>**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 instead of sending the document containing the code. Multiple library documents can be specified, each as a separate LIBDOC code.



Important When used with e-mail gateways, this embedded code will function 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 can be specified, each as a separate LIBDOC2 code.

Maximum field length: 21 characters

Example <LIBDOC2:INFOPACK1>

NEWDEST

Format <NEWDEST>

Tells RightFax that you want to send this fax document to multiple recipients. The <NEWDEST> code must appear after each and every destination, including the last one. The <NEWDEST> code only allows the following codes to be repeated in a document:

- TO_NAME
- TO_FAXNUM
- TO_CONTACTNUM
- TO_COMPANY
- TO_CITYSTATE
- BILLINFO1
- BILLINFO2

If <NEWDEST> is not used, only the last occurrence of any of these embedded codes will take affect.

This code is not used to break one document into multiple faxes, but rather faxes one entire document to multiple recipients.

Maximum field length: N/A

Examples

```
<TO_NAME:JOHN><TO_FAXNUM:555-1234><NEWDEST>  
<TO_NAME:MARY><TO_FAXNUM:230-5000><NEWDEST>
```

NEWLIB

Format <NEWLIB:libdocID,description>

Automatically creates or updates a library document from the document containing the code. Specify a new or existing library document ID and description. If the specified document ID already exists, that library document will be replaced. If no matching document ID exists, a new library document will be created. The newly created library document will automatically be assigned LAN accessibility only.

Maximum field length: N/A.

Example <NEWLIB:novpricesheet,november_prices>

NEWLIB2

Format <NEWLIBW:libdocID,description,LFWC>

Automatically creates or updates a library document from the document containing the code. Specify a new or existing library document ID and description. If the specified document ID already exists, that library document will be replaced. If no matching document ID exists, a new library document will be created. In addition, you can assign accessibility attributes for each document. The library document will automatically be assigned accessibility rights based on the following flags:

- L = LAN
- F = Fax on Demand
- W = Web
- C = Catalog

Maximum field length: N/A.

Example <NEWLIBW:novpricesheet,november_prices,LFWC>

NOBODY

Format <NOBODY>

Tells RightFax to send only the cover sheet, and not include a fax body document. Any embedded codes in the document that are not used for the production of the cover sheet will be ignored.

Maximum field length: N/A

NOCOMPLETEEVENT**Format** <NOCOMPLETEEVENT>

Enables complete events, which can be serviced from the RightFax API. The new events are useful when writing code to send fax status to a database or host system.

Maximum field length: N/A.

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 (200×100 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

NOSMARTRESUME**Format** <NOSMARTRESUME>

Disables the Smart-resume feature.

Maximum field length: N/A

NOTE**Format** <NOTE:*text*>

Adds comments to your cover sheet. You can use as many as 21 <NOTE> codes in a single document if you want to enter multi-line comments. The comments will not be reformatted or line wrapped by RightFax.

Maximum field length: Up to 21 <NOTE> codes per document, each code having up to 69 characters.

Example <NOTE:THE QUICK BROWN FOX JUMPS OVER
THE>
<NOTE:LAZY DOG.>

NOTIFY_ERROR**Format** <NOTIFY_ERROR>

Notifies the sender when the fax is abandoned due to transmission errors using the **Notification Info** setting in the user’s RightFax user account.

Maximum field length: N/A

NOTIFY_OK**Format** <NOTIFY_OK>

Notifies the sender upon successful transmission of the fax using the **Notification Info** setting in the user’s RightFax user account.

Maximum field length: N/A

NOTIFY_RETRY**Format** <NOTIFY_RETRY>

Notifies the sender when a transmission error is encountered and the fax is being resent. This uses the **Notification Info** setting in the user’s RightFax user account.

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 be sent with “normal” priority.

Maximum field length: N/A

Examples<PRIORITY:HIGH>
<PRIORITY:N>
<PRIORITY:LOW>

RETRYCOUNT

Format <RETRYCOUNT:#>

Specifies the number of times the fax will be retried after encountering transmission errors (such as a busy signal or human answered line). A value of 0 (zero) tells the fax server to use the system defaults.

Maximum field length: 2 numeric digits

Example <RETRYCOUNT:3>

RETRYINTERVAL

Format <RETRYINTERVAL:#>

Specifies the length of time in minutes between retry attempts when transmission errors (such as a busy signal or human answered line) are encountered.

Maximum field length: 2 numeric digits

Example <RETRYINTERVAL:2>

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

SIGNATURE

Format <SIGNATURE:*signatureID*>

Specifies a signature image to place in the document. The signature will be inserted into the document at the exact location of the <SIGNATURE> embedded code. You can include an unlimited number of <SIGNATURE> codes in each document. If you are not listed as an authorized user of the signature file, the fax will be failed by the fax server. For information on creating and using signature files, see [Chapter 10, “Creating Signatures”](#).

Maximum field length: 21 characters

Example <SIGNATURE:BOB>

SMARTRESUME

Format <SMARTRESUME>

Enables the Smart-resume feature.

Maximum field length: N/A

TOALTFAXNUM**Format** <TOALTFAXNUM:faxnumber>

Specifies an alternate fax number that will be tried if the server is unable to send the document to the primary fax number see "TOFAXNUM" on [page 296](#).

Maximum field length: 31 characters

Example <TOALTFAXNUM:520-555-1212>**TOCITYSTATE****Format** <TOCITYSTATE:city, state>

Specifies the fax recipient's city and state information for display on the cover sheet. This code can include not only the city and state of the recipient, but the full street address as well.

Maximum field length: 59 characters

Example <TOCITYSTATE:TUCSON, AZ>**TOCOMPANY****Format** <TOCOMPANY:company>

Specifies the fax recipient's company name for display on the cover sheet.

Maximum field length: 59 characters

Example <TOCOMPANY:ACME, INC.>**TOCONTACTNUM****Format** <TOCONTACTNUM:phonenum>

Specifies the fax recipient's voice number for display on the cover sheet.

Maximum field length: 31 characters

Example <TOCONTACTNUM:520-555-1212>**TOFAXNUM****Format** <TOFAXNUM:faxnumber>

Specifies the fax recipient's fax number for dialing and also for display on the cover sheet.

Maximum field length: 31 characters

Example <TOFAXNUM:520-555-1212>**TONAME****Format** <TONAME:name>

Specifies the fax recipient's name for display on the cover sheet. If the name matches one of your individual or group RightFax phonebook entries, RightFax uses the corresponding fax addressing information to send the fax. To use an entry from another user's RightFax phonebook, use the syntax:

UserID!Entry

Only published entries of other RightFax users can be referenced this way.

Maximum field length: 59 characters

Example <TONAME:JANE DOE>**UNIQUEID****Format** <UNIQUEID:faxID>

Specifies a unique ID for the fax instead of having one automatically generated by RightFax. Custom unique IDs can be used for external document tracking systems.

Maximum field length: 15 characters

Example <UNIQUEID:XYZ120396>

■ ■ ■

Appendix B

Fax Reporter Data

The RightFax Fax Reporter is a utility that creates reports of fax activity from new and existing data sets and generate graphs and lists of fax information. Although it comes complete with several useful reports, Fax Reporter can be extended with your own custom designed reports. Custom reports can be created using Crystal Reports from Business Objects (www.businessobjects.com). You can create new reports or modify one of the RightFax reports.

In order to create custom reports, you must first know where the information you want is located in the generated data sets. Fax Reporter data sets are Access 97 databases. Each database contains several separate tables, each with its own separate fields. This appendix lists each of the tables included in the Fax Reporter data set and the data fields in each table, listed in the order they appear.

Table B1 Fax Reporter Data Set Tables

| Table name | Description | Refer to |
|--------------------|--|--------------------------|
| ApprovedHistory | Contains a record for every occurrence of a fax that is approved for sending. | page 298 |
| DisapprovedHistory | Contains a record for every occurrence of a fax that is disapproved for sending. | page 298 |

Table B1 Fax Reporter Data Set Tables (Continued)

| Table name | Description | Refer to |
|-----------------|---|--------------------------|
| FaxErrorStrings | Translates the FaxErrorCode field in the Faxes table to a readable string. | page 299 |
| Faxes | Contains the fax records. | page 299 |
| FaxServerInfo | Contains information about the fax server from which the data set was created. | page 304 |
| FaxStatStrings | Translates the FaxStatus field in the Faxes table to a readable string. | page 304 |
| History | Contains the history records for each fax. Each outbound fax has one history record for each send attempt. Each received fax has only one history record. | page 304 |
| NetFwdHistory | Contains a record for every occurrence of a fax being forwarded to another network user. This table does not record the occurrence of a fax being forwarded to a fax machine. | page 305 |

Table B1 Fax Reporter Data Set Tables (Continued)

| Table name | Description | Refer to |
|-----------------|--|--------------------------|
| OCRHistory | Contains a record for every occurrence of a user requesting that a fax be processed by the OCR engine. | page 306 |
| PrintHistory | Contains a record for every occurrence of a fax being printed to a network printer (either manually or automatically). | page 306 |
| RouteHistory | Contains a record for every occurrence of a fax being manually routed between users. | page 307 |
| TermStatStrings | Translates the TermStat field in the Faxes table to a readable string. | page 307 |

The ApprovedHistory table

Table B2 ApprovedHistory Table Field Descriptions

| Field name | Type | Size | Description |
|------------|---------------|------|---|
| FaxHandle | Number (Long) | 4 | The handle of the fax record to which the history belongs. This field serves as the foreign key for the ApprovedHistory table and should be used to join with the Faxes table |
| DateTime | Date/Time | 8 | The date and time the fax was approved |
| Flags | Number (Long) | 4 | A four-byte field where the bits are mapped to specific meanings. The API should be examined for details on the various bits and their meaning |

Table B2 ApprovedHistory Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|------------|------|------|---|
| ApproverID | Text | 21 | User ID indicating who approved the fax |
| Notes | Memo | 453 | Notes entered by the approver |

The DisapprovedHistory table

Table B3 DisapprovedHistory Table Field Descriptions

| Field name | Type | Size | Description |
|------------|---------------|------|--|
| FaxHandle | Number (Long) | 4 | The handle of the fax record to which the history belongs. This field serves as the foreign key for the DisapprovedHistory table and should be used to join with the Faxes table |
| DateTime | Date/Time | 8 | The date and time the fax was disapproved |
| Flags | Number (Long) | 4 | A four-byte field where the bits are mapped to specific meanings. The API should be examined for details on the various bits and their meaning |
| ApproverID | Text | 21 | User ID indicating who approved the fax |
| Notes | Memo | 453 | Notes entered by the disapprover |

The FaxErrorStrings table

Table B4 FaxErrorStrings Table Field Descriptions

| Field name | Type | Size | Description |
|----------------|---------------|------|---|
| FaxErrorCode | Number (Long) | 4 | The numeric value of the fax status. This field is the foreign key for this table and should be joined with the Faxes.FaxErrorCode field. |
| FaxErrorString | Text | 64 | The human readable description of the FaxErrorCode value. |

The Faxes table

Table B5 Faxes Table Field Descriptions

| Field name | Type | Size | Description |
|------------|---------------|------|---|
| FaxHandle | Number (Long) | 4 | Primary key for fax records. Fax handles are used by the fax server to identify faxes at any particular point in time. A fax handle can be reused over time, so do not expect two different data sets to have unique fax handles. |
| OwnerID | Text | 21 | ID of the owning fax server user who owns this fax. |
| GroupID | Text | 21 | Group ID to which the fax owner belongs. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|--------------|------|------|---|
| ToFaxNum | Text | 31 | Phone number to which to send the fax. This is usually only valid for outbound faxes, though it is possible for users to enter a value in this field on received faxes. This is not the final fax number dialed because the dialing plan on the fax server that ultimately sent the fax may have modified the number in some way. |
| ToContactNum | Text | 31 | Information field. This can be completed by the fax owner with any data. |
| ToName | Text | 59 | Information field. May be filled in by the fax owner with any data. |
| ToCompany | Text | 59 | Information field. This can be completed by the fax owner with any data. |
| ToCityState | Text | 59 | Information field. This can be completed by the fax owner with any data. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|--------------|------|------|--|
| FromName | Text | 50 | On outbound faxes not originated via an e-mail gateway, the field may be filled in by the fax owner with any data, though it usually contains the name of the owner/sender. On outbound faxes originated via e-mail, this field contains the e-mail address of the sender. The address is used by the fax server to send acknowledgments to the sender. On inbound faxes, this field is usually blank unless the user enters information manually. |
| FromPhoneNum | Text | 31 | Information field. This can be completed by the fax owner with any data. |
| BillInfo1 | Text | 15 | Information field. This can be completed by the fax owner with any data. This is one of the customizable billing fields. The actual description of the field can be obtained by examining the BillDesc1 field of the FaxServerInfo table. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|------------|------|------|---|
| BillInfo2 | Text | 15 | Information field. This can be completed by the fax owner with any data. This is one of the customizable billing fields. The actual description of the field can be obtained by examining the BillDesc1 field of the FaxServerInfo table. |
| UniqueID | Text | 15 | Information field. This field is usually generated by the fax server, though it can be modified/set via an API generated fax or a fax containing the <UNIQUEID:xxx> embedded code. While the field name implies uniqueness, none is guaranteed. |
| FaxDIDNum | Text | 31 | Information field. This can be completed by the fax owner with any data. On outbound faxes, this field usually contains the human readable private fax number of the sender/owner. |
| RemoteID | Text | 21 | The CSID of the last fax machine to which the fax was sent or the CSID of the machine from which the fax was received. CSIDs are not actually required to complete a fax transmission, so this field may be empty. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|------------------|---------------|------|---|
| EmailType | Number (Long) | 4 | Valid only on outbound faxes. If the fax was generated via a mail message this field contains a number that indicates what type of mail system originated the fax, else the field is null. Internally, the fax server uses this data so that a reply can be sent to the fax originator via the proper mail system (the FromName field contains the e-mail address of the fax sender when this value is non-null). |
| FaxDateTime | Date/Time | 8 | Date and time the fax was created (in local time). This field is fully year-2000 compliant. |
| FaxSend DateTime | Date/Time | 8 | If the fax was time-delayed by the owner, i.e. it was not sent ASAP, then this field contains the original date and time scheduled by the owner. If the fax was sent ASAP, then this field is null. |
| Priority | Number (Long) | 4 | Priority assigned to the fax by the owner. The values currently possible are: 0 (normal), 1 (low), or 2 (high). Additional values may be used in the future. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|--------------|---------------|------|---|
| FaxStatus | Number (Long) | 4 | The status of the fax at the time the data set was created/refreshed. The status value can be translated into a human readable form by joining with the FaxStatStrings table. To construct a query where only completed faxes are matched/used, select fax records where the FaxStatus equals six (6) or (9). |
| FaxErrorCode | Number (Long) | 4 | The current error associated with the fax. If this value is zero (0) then there is no current error associated with the fax. Because an outbound fax may be tried multiple times, there can be multiple, different errors. The History records can be used to get more detailed error values. |
| TermStat | Number (Long) | 4 | If a fax has a FaxStatus of value 6, 9, or 11, then the TermStat contains a "better" error than the FaxErrorCode with respect to any problem in dialing, sending, or receiving of the fax. The TermStat is not used when other errors occur, e.g. printing, OCR, etc. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|-------------|---------------|------|---|
| ElapsedTime | Number (Long) | 4 | Total number of seconds spent off-hook for this fax. For inbound faxes, this value is equal to the elapsed time in the related history record. For outbound faxes, this value is the total elapsed time of all send attempts. |
| Pages | Number (Long) | 4 | Number of pages in the fax. For outbound faxes, this value includes any optional cover sheet image. |
| Received | Yes/No | 1 | Set to Yes if this was a received/inbound fax, else set to No. |
| Deleted | Yes/No | 1 | Set to Yes (1) if this fax has been deleted by the user, else set to No. Deleted faxes are maintained in the fax server database until they are purged according to the purge aging date of the fax owner's group. |
| Viewed | Yes/No | 1 | Set to Yes (1) if the fax has been viewed by the owner. |
| Printed | Yes/No | 1 | Set to Yes (1) if the fax has been printed by the owner. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|-------------|--------|------|--|
| DoNotAudit | Yes/No | 1 | Set to Yes (1) if the fax should be ignored for billing purposes. The flag is set when a fax is forwarded between users on a network or when an outbound fax is used as a conduit for another operation like creating a library document. If this flag were not present, then a fax sent on behalf of a "client" might be counted twice if that same fax were forwarded to another network user. |
| NoCover | Yes/No | 1 | Set to Yes (1) if this fax does not have a cover sheet. |
| SmartResume | Yes/No | 1 | Set to Yes (1) if this fax has the Smart-Resume capability enabled. By itself, it doesn't mean that the fax had to retry during sending. |
| WasApproved | Yes/No | 1 | Set to Yes (1) if the fax needed approval and then was subsequently approved for sending. If a fax needing approval is disapproved, then this flag will not be set, the fax status will be set to FAXSTAT_DONE_ERROR and the fax error code will be set to FAXERROR_DISAPPROVED. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|---------------|--------|------|---|
| NeedsApproval | Yes/No | 1 | Set to Yes (1) if the fax needs approval before being sent. This flag is not cleared when the fax is approved or disapproved, so merely looking at this flag does not indicate which faxes are waiting for approval (the fax status field should be used for such purposes). |
| HasTrxNotes | Yes/No | 1 | Set to Yes (1) if the fax has a network-forward or route history record with embedded notes. This flag is normally used by FaxUtil so that it can flag the existence of the notes for the user. |
| BodyImage | Text | 14 | Contains the file name of the fax body images as stored in the fax server Image subfolder. The path is never included. An extension is not normally given and should be ignored if it exists (the extension is used to represent the page number). It is possible for a fax to not have a body image because: one has yet to be generated, the fax is really a binary file transfer record, the fax is a cover sheet only fax, or the fax record is a thermal fax record. |

Table B5 Faxes Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|------------|---------------|------|---|
| FcslImage | Text | 14 | Contains the file name of the fax cover sheet image as stored in the fax server Image subfolder. Neither the path nor the extension is ever included. A fax may not have a cover sheet image because: the fax is a received fax, the fax is a thermal fax record, the cover sheet has yet to be generated, the fax is really a binary file transfer, or the user didn't want a cover sheet generated. |
| Flags | Number (Long) | 4 | A four-byte field where the bits are mapped to specific meanings. The API should be examined for details on the various bits and their meaning. |
| FFRFlags | Number (Long) | 4 | A four-byte field where the bits are mapped to specific meanings. The API should be examined for details on the various bits and their meaning. |
| Folder | Number (Long) | 4 | The folder number in which the fax lives. There are a few predefined folder numbers. All other numbers are defined by the owner's folder definitions. The predefined folder numbers are: 0 (Main) and 0xFFFE (Trash). |

The FaxServerInfo table

Table B6 FaxServerInfo Table Field Descriptions

| Field name | Type | Size | Description |
|------------|------|------|---|
| ServerName | Text | 64 | The name of the fax server from which the data set was extracted. |
| BillDesc1 | Text | 15 | The field label for the Faxes.BillInfo1 field |
| BillDesc2 | Text | 15 | The field label for the Faxes.BillInfo2 field |

The FaxStatStrings table

Table B7 FaxStatStrings Table Field Descriptions

| Field name | Type | Size | Description |
|---------------|---------------|------|--|
| FaxStatus | Number (Long) | 4 | The numeric value of the fax status. This field is the foreign key for this table and should be joined with the Faxes.FaxStatus field. |
| FaxStatString | Text | 64 | The human readable description of the FaxStatus value. |

The History table

Table B8 History Table Field Descriptions

| Field name | Type | Size | Description |
|-----------------|---------------|------|--|
| FaxHandle | Number (Long) | 4 | The handle of the fax record to which the history belongs. This field serves as the foreign key for the History table and should be used to join with the Faxes table. |
| HstDateTime | Date/Time | 8 | The date and time of the phone line operation, e.g. the date and time the fax was received. |
| HstChannel Used | Number (Long) | 4 | The channel number (0..N) on which the send or receive event occurred. |
| HstServerUsed | Text | 47 | The name of the fax server where the phone event occurred. This is normally set to null indicating that the event occurred on the fax server on which the fax was created, but can be non-null when least cost routing or load balancing caused the event to occur on or through another fax server machine. |
| HstElapsedTime | Number (Long) | 4 | The number of seconds of off-hook phone time expended on this event. |
| HstGoodPages | Number (Long) | 4 | The number of pages successfully transferred by this event. |

Table B8 History Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|--------------------|---------------|------|--|
| HstRemotelD | Text | 21 | The CSID of the fax machine with which the fax server communicated. |
| HstBoardErr | Number (Long) | 4 | A board specific error code that gives details on what happened with this send or receive event. The HstBoardType can be used to decode the meaning of this field. |
| HstBoardErr String | Text | 74 | A human readable version of the HstBoardErr value. |
| HstSuccessful Send | Yes/No | 1 | Set to Yes (1) if this event represents a send attempt and the attempt was successful. This field is a board-dependent interpretation of the HstBoardErr value. The field allows one to easily filter queries on successful versus unsuccessful history events by using this simple field. |
| HstBoardType | Number (Long) | 4 | Indicates the type of board that executed this event. The possible values are: 0 (Brooktrout using older error reporting model); 1 (Gammalink); and 2 (Brooktrout using newer error reporting model). |

The NetFwdHistory table

Table B9 NetFwdHistory Table Field Descriptions

| Field name | Type | Size | Description |
|------------------|---------------|------|---|
| FaxHandle | Number (Long) | 4 | The handle of the fax record to which the history belongs. This field serves as the foreign key for the NetFwdHistory table and should be used to join with the Faxes table. |
| DateTime | Date/Time | 8 | The date and time the fax was forwarded. |
| Flags | Number (Long) | 4 | A four-byte field where the bits are mapped to specific meanings. The API should be examined for details on the various bits and their meaning. |
| Users | Text | 127 | A list of fax user IDs to whom the fax was forwarded. Multiple IDs are separated by commas. |
| PreviousOwner ID | Text | 21 | The ID of the fax user who forwarded the fax. |
| Notes | Text | 127 | Any notes about the forward operation. These notes might be generated by the server in the case of an automatic forwarding or may have been entered when a user manually forwarded a fax. |

The OCRHistory table

Table B10 OCRHistory Table Field Descriptions

| Field Name | Type | Size | Description |
|-------------|---------------|------|---|
| FaxHandle | Number (Long) | 4 | The handle of the fax record to which the history belongs. This field serves as the foreign key for the OCRHistory table and should be used to join with the Faxes table. |
| DateTime | Date/Time | 8 | The date and time the OCR was executed upon the fax. |
| ElapsedTime | Number (Long) | 4 | Total time in seconds to conduct the OCR operation. |
| Notes | Text | 127 | Information description about OCR operation. If an error occurred, then this field will usually contain a human readable explanation. |

The PrintHistory table

Table B11 PrintHistory Table Field Descriptions

| Field name | Type | Size | Description |
|------------|---------------|------|---|
| FaxHandle | Number (Long) | 4 | The handle of the fax record to which the history belongs. This field serves as the foreign key for the PrintHistory table and should be used to join with the Faxes table. |
| DateTime | Date/Time | 8 | The date and time the fax was printed. |

Table B11 PrintHistory Table Field Descriptions (Continued)

| Field name | Type | Size | Description |
|---------------|---------------|------|---|
| Flags | Number (Long) | 4 | A four-byte field where the bits are mapped to specific meanings. The API should be examined for details on the various bits and their meaning. |
| ElapsedTime | Number (Long) | 4 | Total time in seconds to decompress, format, and print fax page(s). |
| Error1 | Number (Long) | 4 | Error code if fax could not be printed (zero if successful). |
| PagesPrinted | Number (Long) | 4 | Number of pages printed (may be less than the number of pages in the fax). |
| CopiesPrinted | Number (Long) | 4 | Number of copies printed. |
| PrinterID | Text | 9 | Fax server printer ID to which the fax was printed. |
| Notes | Text | 127 | Information description about printing operation. If an error occurred, then this field will usually contain a human readable explanation. |

The RouteHistory table

Table B12 RouteHistory Table Field Descriptions

| Field name | Type | Size | Description |
|-----------------|---------------|------|---|
| FaxHandle | Number (Long) | 4 | The handle of the fax record to which the history belongs. This field serves as the foreign key for the RouteHistory table and should be used to join with the Faxes table. |
| DateTime | Date/Time | 8 | The date and time the fax was routed. |
| Flags | Number (Long) | 4 | A four-byte field where the bits are mapped to specific meanings. The API should be examined for details on the various bits and their meaning. |
| PreviousOwnerID | Text | 21 | The ID of the fax user who routed the fax. |
| Notes | Text | 127 | Any notes about the route operation. These notes might be generated by the server in the case of an automatic routing or may have been entered when a user manually routed a fax. |

The TermStatStrings table

Table B13 TermStatStrings Table Field Descriptions

| Field name | Type | Size | Description |
|----------------|---------------|------|---|
| TermStatValue | Number (Long) | 4 | The numeric value of the fax termination status. This field is the foreign key for this table and should be joined with the Faxes.TermStat field. |
| TermStatString | Text | 64 | The human readable description of the TermStat value. |

■ ■ ■

Appendix C

FaxDump.exe Data Fields

FaxDump.exe (see [“Running FaxDump.exe”](#) on [page 278](#)) is a RightFax utility that outputs ASCII text files of data about faxes that you can import into other databases to produce reports. The text file prints one complete fax record per line. Quotes surround fields in a string, and all fields are separated by commas by default (although this can be customized using the `-d` command line option).

This appendix describes the data fields in each fax record at each level of information, in the sequence they appear in the FaxDump text file.

Different data is available for sent and received faxes, depending on your system configuration. For example, cover sheet data (such as the recipient's name and address) is normally available for received faxes unless it is manually entered into the fax record after the fax is received. Data that is captured from inbound or outbound faxes is noted in the following tables.

Information level 0 data fields

Table C1 Level 0 Data Fields

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|---------------|---------|------|---------------------------------------|--|
| Owner_ID | String | 21 | Both | User ID of person who sent fax |
| To_FaxNum | String | 31 | Outbound | Destination fax number |
| To_ContactNum | String | 31 | Outbound | Destination phone number |
| To_Name | String | 59 | Outbound | Recipient's name |
| To_Company | String | 59 | Outbound | Recipient's company |
| To_CityState | String | 59 | Outbound | Recipient's address |
| From_Name | String | 59 | Outbound | Sender's name |
| From_PhoneNum | String | 31 | Outbound | Sender's phone number |
| BillInfo1 | String | 15 | Outbound | Billing code 1 |
| BillInfo2 | String | 15 | Outbound | Billing code 2 |
| FaxDIDNum | String | 31 | Both | Sender's or recipient's DID fax number, when available |
| OperatorNum | String | 31 | Outbound | Sender's company phone number |
| GeneralFaxNum | String | 31 | Outbound | Sender's general fax number |
| RemoteID | String | 21 | Both | Name/number of remote fax machine |
| Send_Time | Integer | 4 | Both | Total elapsed time on fax card, in seconds |
| Fax_Status | Integer | 2 | Both | See "Fax status fields (FaxStat)" on page 318 |
| Fax_TermStat | Integer | 4 | Both | See "Termination status fields (TermStat)" on page 319 |
| NumPages | Integer | 4 | Both | Includes cover sheet, if any |
| FineMode | Integer | 1 | Outbound | 0 = normal 1 = fine |
| Received | Integer | 1 | Both | 0 = sent 1 = received |

Table C1 Level 0 Data Fields (Continued)

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|------------|--------|------|---------------------------------------|--|
| FaxDate | String | 10 | Both | Date fax was sent or received (MM/DD/YYYY) |
| FaxTime | String | 5 | Both | Time fax was sent or received (HH:MM) |

Information level 1 data fields

Table C2 Level 1 Data Fields

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|---------------|---------|------|---------------------------------------|--|
| Owner_ID | String | 21 | Both | User ID of person who sent fax |
| To_FaxNum | String | 31 | Outbound | Destination fax number |
| To_ContactNum | String | 31 | Outbound | Destination phone number |
| To_Name | String | 59 | Outbound | Recipient's name |
| To_Company | String | 59 | Outbound | Recipient's company |
| To_CityState | String | 59 | Outbound | Recipient's address |
| From_Name | String | 59 | Outbound | Sender's name |
| From_PhoneNum | String | 31 | Outbound | Sender's phone number |
| BillInfo1 | String | 15 | Outbound | Billing code 1 |
| BillInfo2 | String | 15 | Outbound | Billing code 2 |
| FaxDIDNum | String | 31 | Both | Sender's or recipient's DID fax number, when available |
| OperatorNum | String | 31 | Outbound | Sender's company phone number |
| GeneralFaxNum | String | 31 | Outbound | Sender's general fax number |
| NumPages | Integer | 4 | Both | Includes cover sheet, if any |
| FineMode | Integer | 1 | Outbound | 0 = normal 1 = fine |

Table C2 Level 1 Data Fields (Continued)

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|--------------|---------|------|---------------------------------------|---|
| Received | Integer | 1 | Both | 0 = sent 1 = received |
| TotalTime | Integer | 4 | Both | Total elapsed time, in seconds, including all transmission attempt |
| FaxDate | String | 10 | Both | Date fax was sent or received (MM/DD/YYYY) |
| FaxTime | String | 5 | Both | Time fax was sent or received (HH:MM) |
| TrxLength | Integer | 4 | Both | Total elapsed time for transmission or receipt in seconds |
| Channel_Used | Integer | 4 | Both | Channel used to send or receive |
| Fax_TermStat | Integer | 4 | Both | See "Termination status fields (TermStat)" on page 319 |
| RemoteID | String | 21 | Both | Name/number of the remote fax machine |
| TrxDate | String | 10 | Both | Date the fax was submitted for transmission, regardless of the number of transmission attempts (MM/DD/YYYY) |
| TrxTime | String | 5 | Both | Time the fax was submitted for transmission, regardless of the number of transmission attempts (HH:MM) |
| Server_Used | String | 47 | Both | RightFax server name |

Information level 2 data fields

Table C3 Level 2 Data Fields

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|---------------|--------|------|---------------------------------------|--------------------------------|
| Owner_ID | String | 21 | Inbound | User ID of person who sent fax |
| To_FaxNum | String | 31 | Outbound | Destination fax number |
| To_ContactNum | String | 31 | Outbound | Destination phone number |
| To_Name | String | 59 | Outbound | Recipient's name |
| To_Company | String | 59 | Outbound | Recipient's company |

Table C3 Level 2 Data Fields (Continued)

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|---------------|---------|------|---------------------------------------|---|
| To_CityState | String | 59 | Outbound | Recipient's address |
| From_Name | String | 59 | Outbound | Sender's name |
| From_PhoneNum | String | 31 | Outbound | Sender's phone number |
| BillInfo1 | String | 15 | Outbound | Billing code 1 |
| BillInfo2 | String | 15 | Outbound | Billing code 2 |
| FaxDIDNum | String | 31 | Both | Sender's or recipient's DID fax number, when available |
| OperatorNum | String | 31 | Outbound | Sender's company phone number |
| GeneralFaxNum | String | 31 | Outbound | Sender's general fax number |
| Unique_ID | String | 15 | Inbound | Unique number assigned to the fax by RightFax |
| NumPages | Integer | 4 | Both | Includes cover sheet, if any |
| FineMode | Integer | 1 | Outbound | 0 = normal 1 = fine |
| Received | Integer | 1 | Both | 0 = sent 1 = received |
| TotalTime | Integer | 4 | Both | Total elapsed time on fax card, in seconds, including all transmission attempts |
| FaxDate | String | 10 | Both | Date fax was sent or received (MM/DD/YYYY) |
| FaxTime | String | 5 | Both | Time fax was sent or received (HH:MM) |
| TrxLength | Integer | 4 | Both | Total elapsed time for transmission or receipt in seconds |
| Channel_Used | Integer | 4 | Both | Channel used to send/receive |
| TermStat | Integer | 4 | Both | See "Termination status fields (TermStat)" on page 319 |
| RemoteID | String | 21 | Both | Name/number of the remote fax machine |
| TrxDate | String | 10 | Both | Date the fax was submitted for transmission, regardless of the number of transmission attempts (MM/DD/YYYY) |
| TrxTime | String | 5 | Both | Time the fax was submitted for transmission, regardless of the number of transmission attempts (HH:MM) |

Table C3 Level 2 Data Fields (Continued)

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|--------------|---------|------|---------------------------------------|---|
| BodyFileName | String | 8 | Both | File name of fax body image |
| FCSFileName | String | 8 | Outbound | File name of fax cover sheet |
| BodyUseCount | Integer | 4 | Both | Number of faxes linked to the body image file |
| GoodPages | Integer | 4 | Both | Number of pages successfully sent |
| Group | String | 21 | Both | Group ID of the fax owner |

Information level 3 data fields

Table C4 Level 3 Data Fields

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|--------------|---------|------|---------------------------------------|--|
| Owner_ID | String | 21 | Both | User ID of person who sent fax |
| To_FaxNum | String | 31 | Outbound | Destination fax number |
| To_Name | String | 59 | Outbound | Recipient's name |
| To_Company | String | 59 | Outbound | Recipient's company |
| BillInfo1 | String | 15 | Outbound | Billing code 1 |
| BillInfo2 | String | 15 | Outbound | Billing code 2 |
| RemotelD | String | 21 | Both | Name/number of remote fax machine |
| Send_Time | Integer | 4 | Both | Total elapsed time in seconds |
| Fax_Status | Integer | 2 | Both | See "Fax status fields (FaxStat)" on page 318 |
| Fax_TermStat | Integer | 4 | Both | See "Termination status fields (TermStat)" on page 319 |
| NumPages | Integer | 4 | Both | Includes cover sheet, if any |
| Received | Integer | 1 | Both | 0 = sent 1 = received |

Table C4 Level 3 Data Fields (Continued)

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|------------|--------|------|---------------------------------------|---|
| FaxDate | String | 10 | Both | Date fax was sent or received (MM/DD/YYYY) |
| FaxTime | String | 5 | Both | Time fax was sent or received (HH:MM) |
| Unique_ID | String | 15 | Inbound | Unique number assigned to the fax by RightFax |

Information level 5 data fields

Table C5 Level 5 Data Fields

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|--------------|---------|------|---------------------------------------|--|
| Owner_ID | String | 21 | Inbound | User ID of person who sent fax |
| Owner_Name | String | 29 | Both | User name of person who sent fax |
| Owner_DsName | String | 79 | Both | Distinguished name of person who sent fax |
| To_FaxNum | String | 31 | Outbound | Destination fax number |
| To_Name | String | 59 | Outbound | Recipient's name |
| To_Company | String | 59 | Outbound | Recipient's company |
| BillInfo1 | String | 15 | Outbound | Billing code 1 |
| BillInfo2 | String | 15 | Outbound | Billing code 2 |
| From_Name | String | 99 | Outbound | Sender's name as it appears on the cover sheet |
| RemotelD | String | 21 | Both | Name/number of remote fax machine |
| Send_Time | Integer | 4 | Both | Total elapsed time in seconds |
| Fax_Status | Integer | 2 | Both | See "Fax status fields (FaxStat)" on page 318 |
| Fax_TermStat | Integer | 4 | Both | See "Termination status fields (TermStat)" on page 319 |
| NumPages | Integer | 4 | Both | Includes optional cover sheet, if any |

Table C5 Level 5 Data Fields (Continued)

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|------------|---------|------|---------------------------------------|---|
| Received | Integer | 1 | Both | 0 = sent 1 = received |
| FaxDate | String | 10 | Both | Date fax was sent or received (MM/DD/YYYY) |
| FaxTime | String | 5 | Both | Time fax was sent or received (HH:MM) |
| Unique_ID | String | 15 | Inbound | Unique number assigned to the fax by RightFax |

Information level 6 data fields

Table C6 Level 6 Data Fields

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|--------------|---------|------|---------------------------------------|---|
| Owner_ID | String | 21 | Inbound | User ID of person who sent fax |
| Owner_Name | String | 29 | Both | User name of person who sent fax |
| Owner_DsName | String | 79 | Both | Distinguished name of person who sent fax |
| To_FaxNum | String | 31 | Outbound | Destination fax number |
| To_Name | String | 59 | Outbound | Recipient's name |
| To_Company | String | 59 | Outbound | Recipient's company |
| BillInfo1 | String | 15 | Outbound | Billing code 1 |
| BillInfo2 | String | 15 | Outbound | Billing code 2 |
| From_Name | String | 99 | Outbound | Sender's name as it appears on the cover sheet |
| RemotelD | String | 21 | Both | Name/number of remote fax machine |
| Send_Time | Integer | 4 | Both | Total elapsed time in seconds |
| Fax_Status | Integer | 2 | Both | See "Fax status fields (FaxStat)" on page 318 |
| Board_Error | Integer | 4 | Both | Error number, if any, generated by the fax board |

Table C6 Level 6 Data Fields (Continued)

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|----------------|---------|------|---------------------------------------|---|
| NumPages | Integer | 4 | Both | Includes optional cover sheet, if any |
| Received | Integer | 4 | Both | 0 = sent 1 = received |
| FaxDate | String | 10 | Both | Date fax was sent or received (MM/DD/YYYY) |
| FaxTime | String | 5 | Both | Time fax was sent or received (HH:MM) |
| Unique_ID | String | 15 | Inbound | Unique number assigned to the fax by RightFax |
| Sending_Server | String | 47 | Outbound | Name of the RightFax server that sent the fax |
| ByteCount | Integer | 4 | Both | Estimated disk space used by the fax image |

Information level 7 data fields

Table C7 Level 7 Data Fields

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|--------------|---------|------|---------------------------------------|--|
| Owner_ID | String | 21 | Inbound | User ID of person who sent fax |
| To_FaxNum | String | 31 | Outbound | Destination fax number |
| To_Name | String | 59 | Outbound | Recipient's name |
| To_Company | String | 59 | Outbound | Recipient's company |
| BillInfo1 | String | 15 | Outbound | Billing code 1 |
| BillInfo2 | String | 15 | Outbound | Billing code 2 |
| RemotelD | String | 21 | Both | Name/number of remote fax machine |
| Send_Time | Integer | 4 | Both | Total elapsed time on in seconds |
| Fax_Status | Integer | 2 | Both | See "Fax status fields (FaxStat)" on page 318 |
| Fax_TermStat | Integer | 4 | Both | See "Termination status fields (TermStat)" on page 319 |

Table C7 Level 7 Data Fields (Continued)

| Field name | Type | Size | Captured from inbound or outbound fax | Description |
|----------------|---------|------|---------------------------------------|---|
| Fax_Error_Code | Integer | 4 | Both | The RightFax error code, if any |
| NumPages | Integer | 4 | Both | Includes cover sheet, if any |
| Received | Integer | 1 | Both | 0 = sent 1 = received |
| FaxDate | String | 10 | Both | Date fax was sent or received (MM/DD/YYYY) |
| FaxTime | String | 5 | Both | Time fax was sent or received (HH:MM) |
| Unique_ID | String | 15 | Inbound | Unique number assigned to the fax by RightFax |
| FaxHandle | Integer | 4 | Both | Database handle of the fax |
| Viewed | Integer | 4 | Inbound | 0 = not viewed 1 = viewed |
| Deleted | Integer | 4 | Both | 0 = not deleted 1 = deleted |
| GroupID | String | 22 | Both | User's group ID |
| RouteCode | Integer | 4 | Both | User's routing code |

Fax status fields (FaxStat)

Table C8 Fax Status Fields (FaxStat)

| Value | Definition |
|-------|-----------------------------------|
| 1 | Fax needs cover sheet. |
| 2 | Fax needs conversion. |
| 3 | Fax needs to be sent. |
| 4 | Fax is in conversion. |
| 5 | Fax needs to be sent. |
| 6 | Fax is done sending or receiving. |

Table C8 Fax Status Fields (FaxStat)

| Value | Definition |
|--------------|--|
| 7 | Fax uses a manual fax cover sheet. |
| 8 | Fax is scheduled to be sent. |
| 9 | Fax is done sending or receiving. Errors were encountered. Will not be retried. |
| 10 | Fax is a duplicate of another fax. |
| 11 | Error encountered. Fax will be retried. |
| 12 | Sent or received fax needs user's attention (usually data must be entered on cover sheet). |
| 13 | Fax needs attachment. |
| 14 | Fax is held for preview. |
| 15 | Fax is in OCR conversion. |
| 16 | Fax is printing. |
| 17 | Fax is queued for printing. |
| 18 | Fax is queued for OCR conversion. |
| 19 | Fax is being validated. |
| 20 | Fax is awaiting approval. |

Termination status fields (TermStat)

Table C9 Termination Status Field (TermStat)

| Value | Definition |
|--------------|-----------------------------------|
| 1,2 | Line busy |
| 3 | Re-order busy signal |
| 8,9,25 | No answer |
| 16 | Human answered |
| 17 | A call was answered by RightFax |
| 18 | No dial tone |
| 19 | Special information tone detected |

Table C9 Termination Status Field (TermStat)

| Value | Definition |
|-----------------|------------------------------|
| 20 | No circuits available |
| 21 | Transmit/receive error |
| 22 | No loop current detected |
| 23 | Call collision |
| 24 | Dial no loop error |
| 26 | Group 2 fax machine detected |
| 28,34 | Dead line |
| 32 | Successful |
| Any other value | Unknown error |

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Appendix D

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 D1 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 D1 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 |
| Microsoft Multiplan | Version 4.0 |

Table D1 Supported Document File Formats (Continued)

| Application or file format | Supported versions |
|------------------------------------|---------------------------|
| 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 |

Table D1 Supported Document File Formats (Continued)

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

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Appendix E

Error and Status Messages

A new fax has arrived for (user ID) from remote ID: (remote ID)

Another user has designated you to be their alternate for notification and they have received a new fax.

A new fax has arrived for (user ID) which hasn't been viewed or printed

A member of the group for which you are the RightFax administrator or alternate administrator has received a fax and has not viewed or printed it within one hour of receipt.

A new fax has arrived from remote ID: (remote ID)

You have received a new fax. You will continue to be notified for one hour (or other period specified by your administrator). If you do not view or print the fax, your group's administrator will be notified. If he does not print the fax, your group's alternate administrator will be notified.

An outgoing fax is ready for previewing

The fax you requested be held for preview has been processed by RightFax and is waiting in your FaxUtil mailbox. You must select **Release** from the **File** menu to start the sending process.

Answer tone detected

RightFax could not connect with the remote (receiving) fax machine due to communication errors between it and RightFax.

Bad FCS information

Incorrect information was entered on the cover sheet (via the **Fax Information** screen or embedded codes).

Bad formtype

You have specified a form that does not exist or is corrupt in the **Fax Information** screen or through embedded codes.

Bad phone number

You entered an incorrect or nonexistent fax phone number.

Bad signature code

The signature code is not recognized as a valid signature identifier because it is corrupt or does not exist.

Call answered before one full ring

RightFax did not receive a normal length ring-back signal from the phone company's central office.

Can't access scans

RightFax can't access the documents you scanned with the scanner.

Carrier not detected

RightFax did not detect a dial tone when it tried to dial out.

Command time exceeded

This is a timing related error, possibly when the fax card waits for or sends a command (T30 protocol handshaking commands) and doesn't get a response within a required period of time.

Command time too short

This is a timing related error, possibly when the fax card waits for or sends a command (T30 protocol handshaking commands) and doesn't get a response within a given period of time.

Command timeout

This is a timing related error, possibly when the fax card waits for or sends a command (T30 protocol handshaking commands) and doesn't get a response within a given period of time.

Communications line failure

The fax card was unable to make a valid connection with the remote machine.

Conversion failed

RightFax was unable to convert your document to Group III format.

Dial failure or no dial tone

RightFax cannot detect a dial tone because there is a problem with the phone line or the fax card is configured incorrectly.

Duplicate

The fax is a duplicate. It has been forwarded to you by another user.

Equipment busy tone detected

The remote (receiving) fax machine's phone line is busy.

Fax blocked from dialing phone number

One or more dialing rules disallow sending faxes to the specified phone number.

Fax discarded

RightFax deleted your fax job. Contact your administrator.

Fax number busy

RightFax has tried to send your fax the required number of times (default=5 times) and each time the phone number was busy.

Fax to (name) abandoned, too many retries

RightFax will try to successfully send your fax a specified number of times (determined by the administrator) then stop trying. The default value is five tries.

Fax to (name), (error)

Your outgoing fax encountered the error listed. (See the error listed for more information.)

FCS create failed

The cover sheet of your fax could not be created due to a corrupt or incompatible cover sheet format.

Function not implemented

An operation was attempted that is not currently supported by your fax card software.

G2 fax machine

You have attempted to send a fax to a Group II machine, rather than a Group III machine.

Held for preview

You have specified in the **Fax Information** screen or through embedded codes that you want to preview this fax before sending it. You must select **Release** from the **File** menu in FaxUtil to start the sending process.

Human answered

RightFax detected an unknown sound after it dialed the fax number. The unknown sound could be a human voice, recording, or line noise.

Illegal line number

You have attempted to send a fax on a fax channel that does not exist.

Illegal option in call

This error could occur if an invalid parameter is given for one of several different commands, including: LOG, DEBUG, XFER, SEND.

Illegal parameter value

This error could occur if an invalid parameter is given for one of several different commands, including: LOG, DEBUG, XFER, SEND.

Illegal sig. use

You have included a signature in your fax that you are not authorized to use.

Imaging error encountered, fax abandoned

RightFax was unable to convert your document to Group III format for transmission.

In conversion

RightFax is converting your document to fax format for transmission.

In validation

The signature and/or billing codes in your fax are being validated against the RightFax database.

Info not complete

You have not completed all the required fields (in the **Fax Information** screen or through embedded codes) for RightFax to send the fax.

Initial processing

RightFax is checking your document for embedded codes and counting the number of pages in your fax.

Invalid billing code

You have entered a billing code that is incorrect or does not exist.

Invalid embedded code

You have included a misspelled or nonexistent embedded code in your fax.

Line in use

RightFax was not able to send your fax because there were no outgoing phone lines available.

Loop current detected

When RightFax attempts to go off-hook to send a fax, it finds that the phone is already off-hook. This can occur when two devices are sharing a phone line and attempt to use it at the same time. It might also be a fax card configuration error.

Loop current failed

The fax card did detect current on the line, but did not detect a valid value for Loop Current.

Loop current not detected

The fax card was looking for Loop Current before it attempted to dial the fax number, but didn't find any.

Network congestion detected

The network may be running inefficiently and causing traffic, or an invalid fax number may have been dialed.

Network high and dry (no ring)

The fax card does not detect any type of telephone interface available. This is a very serious error. Contact your RightFax administrator immediately.

No answer at fax #

The fax machine at the receiving end didn't answer or a wrong number was dialed.

No answer tone detected

The phone is ringing at the destination, but the fax machine is not answering within the specified time. This is especially prevalent in international calling when it can take up to a minute to connect to the remote station.

Non-G3 modem detected

RightFax has detected a non-Group III fax modem on the remote (receiving) fax machine, and cannot communicate with it.

OCR error

An error occurred while a document was being sent to or was at the Optical Character Recognition module of RightFax.

OCR in process

Your fax has been queued and is being processed by the OCR module.

OK

RightFax has successfully sent your fax over the phone lines. This does not guarantee successful receipt of the fax at its destination.

One of your outgoing faxes needs attention

You have not completed all the required fields in the **Fax Information** screen or through embedded codes for the fax to be sent.

P2 was not detected at the end of training

This is a training error indicating a performance problem with the fax server and the number of fax cards that it contains.

Phone line problems

There is a problem with the phone lines at the fax server.

Poor quality

There was too much line noise for the fax to be transmitted correctly. The fax may have been sent, but it may be difficult to read.

Printing

Your fax is printing.

Printing error

An error occurred while printing.

Protocol reject message

This is a generic protocol error code that could have several meanings. In general, your fax card is having difficulty talking to the remote fax machine because it is getting the signals it expected.

Protocol timeout

This is a generic protocol error code that could have several meanings. In general, your fax card is having difficulty talking to the remote fax machine because it is not getting the signals it expected in the appropriate time frame.

Queued for OCR

The fax has been queued and is waiting for the OCR module to convert it.

Queued for printing

The fax has been queued and is waiting to be printed.

Ringback signal detected

A ring-back signal was detected when it should not have been. This may be due to interrupting a call in process on a shared line, or could be caused by a lot of noise on a T1 phone line.

Ringback, but no answer tone

The phone rang at the destination, but it was never answered. This might be because the receiving fax machine is off-line or unable to receive faxes.

Ringback, then busy condition

The fax number dialed went off-hook and then went on-hook very quickly, generating a fast busy signal.

Scheduled for send

Your fax was successfully converted to the RightFax Group III format and is now being sent to the fax card to await sending. If you specified a date and time to send the fax, RightFax will wait to send it until then.

Scheduling failed

Your fax was converted correctly, but it couldn't be correctly queued to be sent.

Sending

RightFax is transmitting your fax.

Sending fax to (name) at (faxnumber)

Your fax is being sent to the name and fax number specified.

Sig needs authorization

You must be authorized to use the signature you have included in your fax.

Thermal record

You have recorded a fax that was sent or received on a conventional fax machine for database purposes only.

Training algorithm detected FSK

This training error indicates a performance problem with the fax server and the number of fax cards it contains.

Training algorithm found on PN

This training error indicates a performance problem with the fax server and the number of fax cards it contains.

Tx/Rx error

This transmission/reception error indicates that the receiving fax machine was experiencing difficulties or excessive line noise.

Unknown error

An error condition reported to RightFax from another device is not supported or not recognized.

Unknown error code

An error condition reported to RightFax from another device is not supported or not recognized.

Unknown status code

An unknown status code has been returned to RightFax from your fax card.

Voice response to call

RightFax detected a sound that it didn't expect after it dialed the fax number. The sound could be a human voice, recording, or line noise.

Waiting for conversion

RightFax is busy with another process and has queued your fax to be converted.

Waiting to be sent

The fax has not yet been scheduled for faxing.

Your fax has been successfully sent to (name) at (faxnumber)

Your fax was successfully sent over the phone lines. This does not guarantee successful receipt of the fax at its destination.

Your outgoing fax contains an invalid billing code

You have either not entered a required billing code, or entered one that does not exist.

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Appendix F

Alerting and Monitoring Statistics

The RightFax Alerting and Monitoring service (described in [Chapter 16, “Using the Alerting and Monitoring Service”](#)) lets you monitor and receive alerts about several statistics relating to your RightFax server. These statistics are divided into categories (described in [“Editing Alert Properties”](#) on [page 157](#)). This appendix lists each category (specified in the **Category** box on the **Alert Properties** dialog box), and the statistics you can select for each category (specified in the **Statistics to monitor** box on the **Alert Properties** dialog box).

Each category is listed below with its corresponding statistics, including the definition of each statistic and whether an alert can be generated for that statistic. The statistic categories listed in this appendix are:

- [“Fax Server Statistics”](#) ([page 329](#))
- [“Database Statistics”](#) ([page 330](#))
- [“Workserver Statistics”](#) ([page 332](#))
- [“Gateway Statistics”](#) ([page 333](#))
- [“Local BoardServer Statistics”](#) ([page 334](#))
- [“All BoardServers Statistics”](#) ([page 337](#))
- [“RPC Server Statistics”](#) ([page 338](#))
- [“Paging Server Statistics”](#) ([page 339](#))

Fax Server Statistics

Table F1 Statistics available for the Fax Server category

| Statistic | Description | Can trigger alert |
|-------------------------|--|-------------------|
| Newest activity index | The total number of activities since the RightFax Server module was last started. Activities can be viewed using FaxStat.exe (described on page 279). | No |
| Information version | A version number indicating the level of information being displayed for the fax server. | No |
| Time running | The length of time since the Fax Server service was last started. | No |
| Maximum events in queue | The current maximum size of the event queue (described on page 30). | No |
| Events in queue | The number of events waiting to be processed by the fax server. | No |

Table F1 Statistics available for the Fax Server category (Continued)

| Statistic | Description | Can trigger alert |
|--|---|-------------------|
| Events processed | The total number of events processed by the fax server since the Fax Server module was started. | No |
| Number of activity records | The total number of activity records currently stored by the RightFax Server module. Activities can be viewed using FaxStat.exe (described on page 279). | No |
| Percentage of disk space available on image drive | The percentage of free drive space on the drive used for storing fax images, | Yes |
| Percentage of disk space available on database drive | The percentage of free drive space on the drive used for storing the RightFax database, | Yes |
| Activity | The time and description of the specified activity number. | No |
| Total timed events by type | Total number of timed events in the Fax Server event queue (described on page 30). Specify the type of timed event in the Event Timer box. | No |
| Ticks remaining by type | Time remaining before the Fax Server module fires a specified timed event. Specify the type of timed event in the Event Timer box. | No |

Table F1 Statistics available for the Fax Server category (Continued)

| Statistic | Description | Can trigger alert |
|--|--|-------------------|
| Frequency of timed events by type | The frequency with which a timed event will be fired, measured in ticks. Specify the type of timed event in the Event Timer box. | No |
| Current frequency relative to original as percentage | For events whose timing is dynamically scalable depending on fax server activity, this is the current frequency measured as a percentage of the normal frequency. Specify the type of timed event in the Event Timer box. | No |

Database Statistics

Table F2 Statistics available for the Database category

| Statistic | Description | Can trigger alert |
|----------------------------|---|-------------------|
| Information version | A version number indicating the level of information being displayed for the RightFax database. | No |
| Number of database threads | Total number of threads that the Database module has managing database queries and changes. | No |
| Number of file I/O threads | Total number of threads that the Database module has managing files. | No |

Table F2 Statistics available for the Database category (Continued)

| Statistic | Description | Can trigger alert |
|-----------------------------------|--|-------------------|
| Time running | The length of time since the Database service was last started. | No |
| Database server thread info | This statistic is reserved for future use. | No |
| File I/O thread info | This statistic is reserved for future use. | No |
| Current Database operation | The current database activity by thread. | No |
| Last Database command | Last RightFax API command performed on the database by thread. | No |
| Number of Database read failures | The total number of errors that have occurred during the read process since the Database module was last started. | Yes |
| Number of Database write failures | The total number of errors that have occurred during the write process since the Database module was last started. | Yes |
| Client Database I/O type | This statistic is reserved for future use. | No |
| Total Database bytes read | The total number of bytes read from the database since the Database module was last started. | No |
| Total Database bytes written | The total number of bytes written to the database since the Database module was last started. | No |

Table F2 Statistics available for the Database category (Continued)

| Statistic | Description | Can trigger alert |
|-----------------------------------|--|-------------------|
| Total Database commands processed | Total number of API commands performed by the database since the Database module was last started. | No |
| Time last Database command took | The length of time for the last database command to be processed. | Yes |
| User ID of last Database command | The NT user account used for the last database command. | No |
| Current File I/O operation | The current file activity by thread. | No |
| Last File I/O command | The last file I/O API command performed on the database by thread. | No |
| Number of File I/O open failures | The total number of failed file open commands by thread since the database module was started | Yes |
| Number of File I/O read failures | The total number of failed file read commands by thread since the database module was started | Yes |
| Number of File I/O write failures | The total number of failed file write commands by thread since the database module was started | Yes |
| Client File I/O type | This statistic is reserved for future use. | No |
| Total File I/O bytes read | The total number of bytes read from files by thread | No |

Table F2 Statistics available for the Database category (Continued)

| Statistic | Description | Can trigger alert |
|-----------------------------------|---|-------------------|
| Total File I/O bytes written | The total number of bytes written to files by thread | No |
| Total File I/O commands processed | The total number of API commands performed for file I/O since the Database module was last started. | No |
| Time last File I/O command took | The length of time for the last file I/O command to be processed. | Yes |

Workserver Statistics

Table F3 Statistics available for the Workserver category

| Statistic | Description | Can trigger alert |
|-----------------------------|--|-------------------|
| Information version | A version number indicating the level of information being displayed for the WorkServer. | No |
| Newest activity index | The total number of activities since the RightFax WorkServer module was last started. Activities can be viewed using FaxStat.exe (described on page 279). | No |
| Archival requests processed | The total number of fax archive functions since the WorkServer module was started. | No |

Table F3 Statistics available for the Workserver category (Continued)

| Statistic | Description | Can trigger alert |
|--|---|-------------------|
| Conversion requests processed | The total number of fax conversions since the WorkServer module was started. | No |
| CVL conversion requests processed | The total number of CVL things since the WorkServer module was started. | No |
| Delete requests processed | The total number of deleted faxes since the WorkServer module was started. | No |
| File route requests processed | The total number of faxes routed to network directories since the WorkServer module was started. | No |
| OCR requests processed | The total number of faxes that have been converted to text since the WorkServer module was started. | No |
| Overlay requests processed | The total number of overlay forms generated since the WorkServer module was started. | No |
| Print requests processed | The total number of printed faxes since the WorkServer module was started. | No |
| Postscript conversion requests processed | The total number of fax conversion using Postscript since the WorkServer module was started. | No |

Table F3 Statistics available for the Workserver category (Continued)

| Statistic | Description | Can trigger alert |
|--------------------------------------|---|-------------------|
| Network broadcast requests processed | The total number of network messaging events using Postscript since the WorkServer module was started. | No |
| InterConnect requests processed | The total number of faxes routed to other RightFax servers on the network via InterConnect since the WorkServer module was started. | No |
| Time running | The length of time since the WorkServer service was last started. | No |
| Activity records | The total number of activity records currently stored by the RightFax WorkServer module. Activities can be viewed using FaxStat.exe (described on page 279). | No |
| Last request | The last work request processed by the WorkServer | No |
| Time for last command | The length of time required to complete the last command | Yes |
| Queues being serviced | The services that are being managed by the selected WorkServer. | No |

Table F3 Statistics available for the Workserver category (Continued)

| Statistic | Description | Can trigger alert |
|-------------------------------|---|-------------------|
| Activity | The time and description of the specified WorkServer activity number. | No |
| Time spent on current command | The length of time that the WorkServer has spent processing the current command | Yes |

Gateway Statistics

Table F4 Statistics available for the Gateway category

| Statistic | Description | Can trigger alert |
|-----------------------|--|-------------------|
| Information version | A version number indicating the level of information being displayed for the gateway. | No |
| Gateway type | The type of e-mail system that the gateway supports. | No |
| Newest activity index | The total number of activities since the RightFax Gateway module was last started. Activities can be viewed using FaxStat.exe (described on page 279). | No |
| Activity records | The total number of activity records currently stored by the RightFax Gateway module. Activities can be viewed using FaxStat.exe (described on page 279). | No |

Table F4 Statistics available for the Gateway category (Continued)

| Statistic | Description | Can trigger alert |
|------------------|--|-------------------|
| Time running | The length of time since the E-mail Gateway service was last started. | No |
| Events processed | The total number of events processed by the fax server since the Gateway module was started. | No |
| Activity | The time and description of the specified activity number. | No |

Local BoardServer Statistics

Table F5 Statistics available for the Local BoardServer category

| Statistic | Description | Can trigger alert |
|---------------------|---|-------------------|
| Information version | A version number indicating the level of information being displayed for the local BoardServer. | No |
| Time running | The length of time since the local BoardServer service was last started. | No |
| Num channels | Total number of fax channels supported by the local BoardServer. | No |
| Send queue depth | Total number of faxes currently waiting to be transmitted. | Yes |
| Send pages depth | Total number of fax pages currently waiting to be transmitted. | Yes |

Table F5 Statistics available for the Local BoardServer category (Continued)

| Statistic | Description | Can trigger alert |
|--------------------|---|-------------------|
| Availability index | The relative availability of the server's fax boards. The higher the number, the more available the server for sending faxes. RightFax uses this value when an outgoing fax number has two equally weighted dialing rules that send it to two different servers. In such a case, RightFax sends the fax via the server with the highest availability index. | Yes |
| Channel type | Displays whether the specified channel uses a loop-start or DID line. | No |
| Capabilities | Displays whether the specified channel is set to send faxes, receive faxes, or both. | No |
| Routing code | The routing code of the fax currently being received on the specified channel. | No |
| State | The current sending or receiving state of the specified channel. | No |
| Current page | The page number of the fax currently being sent or received on the specified channel. | No |
| Total pages sent | The total number of fax pages sent on the specified channel since the BoardServer was last started. | No |

Table F5 Statistics available for the Local BoardServer category (Continued)

| Statistic | Description | Can trigger alert |
|--------------------------------|---|--------------------------|
| Total pages received | The total number of fax pages received by the specified channel since the BoardServer was last started. | No |
| Total calls answered | The total number of incoming calls picked up by the specified channel since the BoardServer was last started. | No |
| Total calls placed | The total number of outgoing calls placed by the specified channel since the BoardServer was last started. | No |
| Total hang ups | The total number of incoming calls on the specified channel that received a transmission error due to hang up since the BoardServer was last started. | No |
| ROM ID | The ROM ID of the fax board used by the specified fax channel. | No |
| Current remote ID | The remote ID of the currently sending or receiving phone line. | No |
| Is currently sending | Indicates whether the specified fax channel is currently sending a fax. | No |
| Is currently doing TeleConnect | Indicates whether the specified fax channel is currently doing TeleConnect. | No |
| Is currently receiving | Indicates whether the specified fax channel is currently receiving a fax. | No |

Table F5 Statistics available for the Local BoardServer category (Continued)

| Statistic | Description | Can trigger alert |
|-----------------------------------|---|--------------------------|
| Is currently doing Docs on Demand | Indicates whether the specified fax channel is currently doing Docs-on-Demand. | No |
| Group threshold left | The number of fax pages remaining before a fax grouping will be sent. | No |
| Group faxes | The current number of faxes that are grouped for sending but have not yet reached the required number of pages. | No |
| Pages in call | Specifies the total number of fax pages queued to be sent during the current call. | No |
| Current rate | Specifies the transmission baud rate of the current call. | No |
| Current compression | Specifies the data compression type being used for the currently sent or received fax. | No |
| Estimated minutes left | The estimated number of minutes remaining for the specified channel to send the current fax. | No |
| Send info phone number | The sending phone number associated with the outbound fax currently being sent by the specified channel. | No |
| Send info user ID | The RightFax user ID associated with the outbound fax currently being sent by the specified channel. | No |

Table F5 Statistics available for the Local BoardServer category (Continued)

| Statistic | Description | Can trigger alert |
|------------------------|---|--------------------------|
| Send info pages in fax | The number of pages in the outbound fax currently being sent by the specified channel. | No |
| Send info pages done | The number of pages that have already been transmitted for the fax currently being sent by the specified channel. | No |
| Send info to name | The intended recipient's name associated with the outbound fax currently being sent by the specified channel. | No |
| Send info to company | The intended recipient's company name associated with the outbound fax currently being sent by the specified channel. | No |
| Send info bill code 1 | The first billing code value associated with the outbound fax currently being sent by the specified channel. | No |
| Send info bill code 2 | The second billing code value associated with the outbound fax currently being sent by the specified channel. | No |
| Send info secure CSID | The required CSID of the receiving phone line associated with the outbound fax currently being sent by the specified channel. | No |

Table F5 Statistics available for the Local BoardServer category (Continued)

| Statistic | Description | Can trigger alert |
|--------------------------------------|---|--------------------------|
| Send info unique ID | The unique RightFax ID associated with the outbound fax currently being sent by the specified channel. | No |
| Current operation | The operation currently being performed by the specified channel. | No |
| Number of queued transmission checks | The number of Doc Plus faxes that need to have their status queried. | No |
| Activity counters start date | The start date that was set for the "all-time" statistics. | No |
| All time pages sent | The total number of fax pages that have been sent since the activity counter start date. | No |
| All time send attempts | The total number of fax transmission attempts since the activity counter start date. | No |
| All time pages received | The total number of fax pages that have been received since the activity counter start date. | No |
| All time faxes received | The total number of faxes that have been received since the activity counter start date. | No |
| All time pages sent remotely | The total number of fax pages that have been sent via remote fax servers since the activity counter start date. | No |

Table F5 Statistics available for the Local BoardServer category (Continued)

| Statistic | Description | Can trigger alert |
|----------------------------------|--|-------------------|
| All time send attempts remotely | The total number of fax transmission attempts via remote fax servers since the activity counter start date. | No |
| All time pages received remotely | The total number of fax pages that have been received from remote fax servers since the activity counter start date. | No |
| All time faxes received remotely | The total number of faxes that have been received from remote fax servers since the activity counter start date. | No |

All BoardServers Statistics

Table F6 Statistics available for the All BoardServers category

| Statistic | Description | Can trigger alert |
|-------------------------|--|-------------------|
| Information version | A version number indicating the level of information being displayed for the BoardServers. | No |
| Number of board servers | The total number of BoardServer modules (local and remote) being accessed by the server. | No |
| Board server name | The computer name of the specified BoardServer. | No |
| Pipe name | The pipe used to communicate with the specified Boardserver. | No |

Table F6 Statistics available for the All BoardServers category (Continued)

| Statistic | Description | Can trigger alert |
|---------------------------|---|-------------------|
| Image directory | The directory used for storing fax images by the specified BoardServer. | No |
| Binary transfer directory | The directory used for storing binary images by the specified BoardServer. | No |
| Send queue depth | Total number of faxes currently waiting to be transmitted. | Yes |
| Send pages depth | Total number of fax pages currently waiting to be transmitted. | Yes |
| Number of channels | The total number of hardware channels on the specified BoardServer. | No |
| Is server down | Indicates whether the specified BoardServer service stopped. | Yes |
| Down time | The time at which the specified BoardServer service was stopped. | Yes |
| Down error | The error code that was generated when the specified BoardServer went down. | No |
| Is server local | Specifies whether the specified BoardServer is local or remote. | No |
| Unique ID | The unique RightFax ID for the specified BoardServer. | No |

Table F6 Statistics available for the All BoardServers category (Continued)

| Statistic | Description | Can trigger alert |
|-------------------------------|--|-------------------|
| Availability index | The relative availability of the specified BoardServer's fax boards. The higher the number, the more available the server for sending faxes. RightFax uses this value when an outgoing fax number has two equally weighted dialing rules that send it to two different servers. In such a case, RightFax sends the fax via the server with the highest availability index. | Yes |
| Availability index time stamp | The time at which the Availability index was last reported. | No |

RPC Server Statistics

Table F7 Statistics available for the RPC Server category

| Statistic | Description | Can trigger alert |
|---------------------|--|-------------------|
| Information version | A version number indicating the level of information being displayed for the RPC server. | No |
| Last command | The last file I/O API command performed on the RPC server. | No |
| Open failures | The total number of file open failures since the RPC server was started. | Yes |

Table F7 Statistics available for the RPC Server category (Continued)

| Statistic | Description | Can trigger alert |
|-----------------------|--|-------------------|
| Read failures | The total number of file read failures since the RPC server was started. | Yes |
| Write failures | The total number of file write failures since the RPC server was started. | Yes |
| Bytes read | The total number of bytes read since the RPC server was started. | No |
| Bytes written | The total number of bytes written since the RPC server was started. | No |
| Commands processed | The total number of API commands performed since the RPC server was started. | No |
| Time for last command | The length of time required to complete the last command. | Yes |
| Time running | The length of time since the RPC Server service was last started. | No |

Paging Server Statistics

Table F8 Statistics available for the Paging Server category

| Statistic | Description | Can trigger alert |
|----------------------|---|-------------------|
| Information version | A version number indicating the level of information being displayed for the Paging server. | No |
| Time running | The length of time since the Paging service was last started. | No |
| Send queue depth | Total number of pages waiting to be transmitted. | Yes |
| Pages sent via modem | Total pages sent via modem since the Paging service was started. | No |
| Pages sent via SMTP | Total pages sent via SMTP since the Paging service was started. | No |
| SMTP failures | Total number of failed SMTP connections since the Paging service was started. | Yes |
| Last SMTP fail code | The error code that was generated for the last failed SMTP connection. | Yes |
| Modem page failures | Total number of failed modem transmissions since the Paging service was started. | Yes |
| Last modem fail code | The error code that was generated for the last failed modem transmission. | Yes |
| Current SMTP server | The computer name or IP address of the current SMTP server. | No |

Table F8 Statistics available for the Paging Server category (Continued)

| Statistic | Description | Can trigger alert |
|------------------------------|---|-------------------|
| Last modem error description | The error message that was generated for the last failed modem transmission. | No |
| Last SMTP error description | The error message that was generated for the last failed SMTP connection. | No |
| Pages sent via SMS | Total pages sent via SMS since the Paging service was started. | No |
| SMS failures | Total number of failed SMS connections since the Paging service was started. | Yes |
| Last SMS fail code | The error code that was generated for the last failed SMS connection. | Yes |
| Current SMS server | The computer name or IP address of the current SMS (Push Proxy Gateway) server. | No |
| Last SMS error description | The error message that was generated for the last failed SMS connection. | No |

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