

MiCollab Advanced Messaging Faxtext for RightFax Administration Guide

For version 9.1 and above

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Preface

This guide explains how to set up a Faxtext application. Faxtext is an advanced feature that can be installed on any system incorporating both a MiCollab Advanced Messaging (MiCollab AM) System Server and a RightFax Enterprise Fax Server.

This guide is written for Mitel-certified administrators and technicians who are familiar with MiCollab Advanced Messaging (MiCollab AM) procedures and terminology, the **MiCollab AM Admin** and MiCollab AM **Configuration** utility, Enterprise Fax Manager, and the Microsoft Windows® operating system.

References

A catalog of technical documentation is included on the MiCollab AM Installation Media. If you are installing any advanced applications, such as Networking and Fax Server applications, you should refer to the appropriate technical documentation for application and installation information.

Documentation

The technical documentation is produced in the PDF format and requires the PDF reader to view it. The MiCollab AM Documentation Library includes the following documents and resources:

- **Administration Documentation.** Available as a PDF only. Contains the following:
 - **Administration Guides.** Available as a PDF only. Contains administrative guides for administrators about how to manage and configure the messaging system.
 - **Quick Reference Cards (QRC).** Contains shortcuts and quick instructions telling subscribers how to access and use the messaging system.
 - **User Guides.** Available as a PDF only. Contains user guides for subscribers about accessing the messaging system and checking and sending messages.
- **Server Documentation.** Available as a PDF only. Contains the following:
 - **Developer Resources.** Contains programming guides and API references for developers for integrating the server clients and web applications with MiCollab AM.
 - **Installation and Configuration.** Available as a PDF only. Contains installation and configuration guides for server administrators about how to install and configure the messaging system.
 - **Integration Technical Notes (ITN).** Contains a set of guides that describe the integration methods and instructions for a variety of phone systems to work with MiCollab AM. The ITNs are generally used by resellers or administrators who are experienced with MiCollab AM and familiar with the integration procedures and terminology.
 - **Spare Parts Documentation.** Contains a set of guides that describe the instructions for installing and configuring hardware parts to work with MiCollab AM. These documents are

written for Mitel-certified MiCollab AM technicians who are experienced with MiCollab AM and familiar with the procedures and terminology.

- **Software Release Notice (SRN).** This notice introduces the new features, capabilities, and hardware/software requirements for the corresponding MiCollab AM version.

Documentation Updates

Documentation updates may be available from the following sources:

- Mitel-certified technicians can view or download documents and program files from our partner web site: www.mitel.com

Help

The primary source of information about MiCollab AM is the online help available within any of its administrative utilities. You can access **Help** by clicking the **Help** button in the dialog box or window in which you are working.

Document Conventions

The following conventions are used in this document:

- **Key Names.** Names of keys on the keyboard are shown in a box.

Example: **Enter**

When two keys must be pressed simultaneously, they are joined by a + sign.

Example: **Alt** + **Tab**

- **Reference to Document** Titles of other documents are shown in italics.

Example: See the *System Installation and Configuration Guide*.

- **User Interface (UI) Element Names.** Names of UI elements such as dialog boxes, windows, screens, menu items, tabs, buttons, and icons are shown in bold.

Example: On the **Startup** screen, click the **Start** icon.

- **User Input.** Information required to be typed is shown in italics.

Example: Type the password *voicemail*.

- **Warning, Caution, Important, and Notes.** Text for the contents that require attention are shown as follows:

WARNING A warning paragraph advises you of circumstances that can result in the loss of data, harm to the MiCollab AM System Server platform, or personal harm.

CAUTION Failure to follow these recommendations can result in unauthorized access to the system and consequent loss of data.

IMPORTANT An important paragraph gives decision-making information or informs you of the order in which tasks need to be completed.

NOTE A note gives additional information, provides an explanation, or indicates an exception to the information in the preceding text.

For more related documents, refer to the following list of references:

Table 1. References

Document Type	Document Title
Server Documentation	<i>System Installation and Configuration Guide</i>
Server Documentation	<i>RightFax Integration Guide</i>

Faxtext Overview

Faxtext enables a company to provide information, such as product literature and technical bulletins, to anyone who has access to a Dual Tone Multi Frequency (DTMF) telephone and a standard fax machine.

Callers can dial the MiCollab AM system, specify a single document or a range of documents, enter the number of the fax machine they are using, and receive the documents by fax almost immediately. An industry term for this feature is "fax on demand".

With Faxtext, a company can provide a range of information to its customers by fax machine, 24 hours a day. Faxtext offers these features:

- Immediate document delivery during the same call the document is requested
- Document delivery to any fax machine, by callback
- Support of formatted text, graphics, and tables to give your documents the most professional appearance possible by fax
- Control over operating costs by limiting some callers to same-call delivery (RightFax only)
- Easy installation, examination, and deletion of faxes from the server console using FaxUtil (RightFax only)
- Maintaining of all pending Fax actions if service is interrupted (due to a power failure, for instance)
- Queuing of fax delivery requests to prevent the number of fax ports from limiting the system's ability to handle fax traffic
- Automatic resending of undelivered faxes, configurable by the system administrator
- Manual resending of undeliverable faxes

Faxtext Application and MiCollab AM

A Faxtext application requires a MiCollab AM System Server integrated through a Telephony Gateway to a RightFax Fax Server. The Fax Server provides all of the fax processing for a MiCollab AM system, managing the system's fax ports. When a caller retrieves or requests a fax as part of a MiCollab AM session, the System Server and the Fax Server coordinate their efforts to handle both voice and fax signals as part of the same call.

IMPORTANT The terms "RightFax Enterprise Fax Server", "MiCollab AM Enterprise Fax Server", and "Fax Server" refer to the same program unless specifically noted. "FaxUtil" (RightFax) and "Fax Manager" (MiCollab AM) are names referring to the same user client program. With RightFax, the Fax Admin utility is now called Enhanced Fax Manager.

With Faxtext enabled, the MiCollab AM System Server now can use the Fax action in its call processors. This action allows callers to request one or more documents to be faxed to them; the argument it takes

and the design of the MiCollab AM application around it determine how and where the document will be transmitted.

The following applies to legacy RightFax fax servers only:

- You can set up your Faxtext application for same-call delivery, callback delivery, or some combination of the two.
 - In same-call delivery, a voice prompt instructs callers to press the Start button on their fax machines once they have finished requesting documents. Immediately afterward, the System Server transfers the call to an open fax port and instructs the Fax Server to transmit the requested information through that port. From the caller's standpoint, the fax begins printing immediately.
 - In callback delivery, the System Server asks callers for the number of a fax machine to receive the requested information. When the caller has supplied a number, the Fax Server queues the new fax and sends it to the specified number as quickly as possible.
- Determining the hard drive size in the hardware platform is important to the planning of a Faxtext application for RightFax. The storage required for a Faxtext library depends on the number of pages and amount of graphics the library will contain. For help with determining the hard drive size, refer to the section titled *Document Storage Requirements* in the *RightFax Integration Guide*.
- RightFax users with FaxUtil installed on their workstations can enter fax documents into a Faxtext library directly from any Windows-based program. This feature uses the RightFax driver.

Configuring a Faxtext Application

Before configuring a Faxtext application, both the MiCollab AM and the RightFax fax servers must be installed and running smoothly with the Telephony Gateway. Refer to the *RightFax Integration Guide* for instructions.

Configuring a Faxtext application involves the following steps, each of which is covered in this section:

- Updating the System Server's call processors to provide access to the document library
- Installing or creating the Faxtext cover page
- Authorizing subscribers to add documents to the library

Updating Call Processors

The first step in creating a Faxtext application is to modify the System Server's call processors to give your callers menu options for receiving fax documents. These menu options make use of the Fax action, an action only available to systems with Faxtext enabled. The Fax action causes the MiCollab AM and the RightFax system to send out a fax document whose unique ID number is specified in the **Number** field. For example, if the master document index is stored as number 4265 and you want to fax it to any caller who presses **1**, you would configure the call processor as shown in the following figure.

The screenshot shows the 'Call Processor Mailbox - Demonstration System' window. It contains various configuration fields and two tables of call processor actions.

Configuration Fields:

- Number: 1006
- Sponsor: (empty)
- Language: Default
- Max Msg Length (sec): 2700
- Timeout (sec): 3
- Max No Match Retries: 0
- Max Mismatch Retries: 0
- Use Speech Recognition Timeout Rules: ☐
- Log System Port Usage: ☐
- Two-Part Greeting: ☐
- Use Answer Mode Operator: ☒
- Always Confirm Names: ☐
- Name: FAX INFORMATION LINE
- Next Call Processor: (empty)
- CP: (empty)
- Go To Answer Mode: ☐
- Switch Section: Asterisk Asterisk Section
- Node: (empty)
- No ASR Call Processor CP: (empty)

Call Processor Actions:

View: DTMF Only

Key	Action	Arguments
TO	Blind Transfer	0
0	Blind Transfer	0
1	Fax	4265
2	Undefined	
3	Undefined	
4	Undefined	
5	Undefined	
6	Undefined	
7	Undefined	

Key	Action	Arguments
8	Fax	XXXX
9	Undefined	
A	Undefined	
B	Undefined	
	Undefined	
	Undefined	
	Undefined	
	Access Messages	
	Undefined	

Two callouts are present:

- A blue callout pointing to the '1' key action: 'This Fax action sends a specific document, in this example the index.'
- A blue callout pointing to the '8' key action: 'This Fax action allows callers to enter any number in the 8000 series.'

Figure 1. Sample Call Processor with Fax Action Specified

Announcement: *"Thank you for calling our fax information line. If you know your document number and are calling from a fax machine, you may enter the number at any time. For an index of documents, press **1**. If you are not calling from a fax machine, please stay on the line."*

To allow the caller to enter any document number in the 8000 series, you would specify XXXX in the **Number** field, as shown for key 8 in Figure 1.

Table 2 shows the valid template characters for a Fax action that can be used in the **Number** field. Two additional characters, L and Q, are available with Faxtext.

Table 2. Valid characters for a Fax action template

Character	Description
0–9	Any digit from 0 through 9 can be used to select a specific document.
L	Allows callers to request multiple fax documents and receive them during the same call. This character follows a document number or template and tells MiCollab AM to add the specified document to a fax list and go to the next specified call processor. To receive all of the selected documents, a caller must then press a key configured with the Fax action but with nothing specified in the Number field; the system then transmits all the faxes in the list, clears the list, and disconnects. Since MiCollab AM advances to the next call processor once the action is complete, the number of call processors in the Faxtext sequence regulates how many documents a caller can retrieve in a single call.
Q	Follows a document number or template and specifies that the fax should be sent using callback delivery. (Callback delivery automatically allows multiple document requests.)
X	Allows digits entered by a caller to be used in a document number. Normally, the number of Xs in a template must match the length of your document numbers; for example, if your documents have four-digit numbers, you should use XXXX as a template.
I	Tells MiCollab AM to ignore a digit entered by the caller.

By arranging and configuring call processors within your System Server, you can determine how your callers retrieve Faxtext documents:

- The system can send the documents to the fax machine a caller is using in the same call (*same-call delivery*) or to a different number as a separate call (*callback delivery*).
- The system can lead a caller through a defined chain of document requests or provide a hierarchy of menus that the caller can browse through for as long as necessary.

The examples on the following pages show how to configure call processors for all of these options. You can also refer to Appendix A to see more examples as part of a sample Faxtext application.

Hierarchical Menu Selection with Same-Call Delivery

For this example, assume that you have created a hierarchical menu tree that allows callers to select from categories of documents, with the documents delivered using same-call delivery.

When using same-call delivery, it is important to inform callers that they must be calling from their fax machine in order to receive a fax. A sample initial call processor announcement might say:

*"Welcome to the Acme Manufacturing Company fax information line. To receive a fax from this service, you must be calling from your fax machine. For product information, press **1**; for technical bulletins on our Widget product line, press **2**; for technical bulletins on our Super Widget product line, press **3**."*

Pressing **1** at this announcement would execute a Go to CP action to call processor 1006, shown in the following figure.

Call Processor Mailbox - Demonstration System

Number: 1006

Sponsor: []

Language: Default

Max Msg Length (sec): 2700

Timeout (sec): 3

Max No Match Retries: 0

Max Mismatch Retries: 0

☐ Use Speech Recognition Timeout Rules

☐ Log System Port Usage

☐ Two-Part Greeting

☒ Use Answer Mode Operator

☐ Always Confirm Names

Name: PRODUCE INFORMATION

Next Call Processor

CP: []

☐ Go To Answer Mode

Switch

Section: Asterisk Asterisk Section

Node: []

No ASR Call Processor

CP: []

Call Processor Actions

View: DTMF Only

Key	Action	Arguments
T0	Go To Answer Mode	
0	Blind Transfer	0
1	Fax	5344
2	Fax	5394
3	Fax	5420
4	Undefined	
5	Undefined	
6	Undefined	
7	Undefined	

Key	Action	Arguments
8	Undefined	
9	Go To Answer Mode	
A	Undefined	
B	Undefined	
C	Undefined	
D	Undefined	
*	Undefined	
#	Access Messages	
Fax	Undefined	

Figure 2. Call Processor Configured for Same-Call Delivery

Announcement: *"For a product brochure on Widget Model A, press **1**; for a product brochure on Widget Model B, press **2**; for a product brochure on the Super Widget, press **1**. For other options, press **9**."*

If a caller presses **2** in mailbox 1006 to receive the product brochure on Widget Model B, MiCollab AM plays the following prompt:

"At the tone, press the Start button on your fax machine."

The system then transfers the call to the fax port prepared to send the fax. When the fax port answers, it plays a tone signaling the caller to press the Start button. When the document has been delivered, the fax port disconnects from the line.

Same-Call Delivery and Multiple Document Requests

In this example, the call processor is set up to allow callers to request several documents and have them delivered using same-call delivery.

As mentioned earlier, it is important that the initial call processor tell callers that they must be calling from their fax machine, as follows:

*"Welcome to the Acme Manufacturing Company fax information line. To receive a fax from this service, you must be calling from your fax machine. For product information, press **1**; for technical bulletins on our Widget product line, press **2**; for technical bulletins on our Super Widget product line, press **3**. To receive an index of documents available by fax from Acme, press **9**."*

Pressing **1** at this announcement would execute a Go to CP action to the call processor in [Figure 3](#).

Call Processor Mailbox - Demonstration System

Number: 1006
Sponsor:
Language: Default
Max Msg Length (sec): 2700
Timeout (sec): 5
Max No Match Retries: 0
Max Mismatch Retries: 0
☐ Use Speech Recognition Timeout Rules
☐ Log System Port Usage
☐ Two-Part Greeting
☒ Use Answer Mode Operator
☐ Always Confirm Names

Name: PRODUCE BROCHURE
Next Call Processor
CP:
☐ Go To Answer Mode
Switch
Section: Asterisk Asterisk Section
Node:
No ASR Call Processor
CP:

Call Processor Actions
View: DTMF Only

Key	Action	Arguments
T0	Go To Answer Mode	
0	Blind Transfer	0
1	Fax	5344L
2	Fax	5394L
3	Fax	5420L
4	Undefined	
5	Blind Transfer	XXXXL
6	Undefined	
7	Undefined	

Key	Action	Arguments
8	Undefined	
9	Undefined	
A	Undefined	
B	Undefined	
C	Undefined	
D	Undefined	
*	Undefined	
#	Fax	
Fax	Undefined	

Figure 3. Call Processor Configured for Same-Call Delivery

Announcement: *"You can select any number of product brochures by entering the document number or pressing the associated key as instructed in this menu. When you are finished choosing brochures, press the pound key and they will be sent to your fax machine. For a product brochure on Widget Model A, press **1**; for a product brochure on Widget Model B, press **2**; for a product brochure on the Super Widget, press **3**."*

MiCollab AM stores fax documents marked with an L in a list, then invokes the call processor specified in the Next Call Processor box. Since this box is empty in the call processor in [Figure 3](#), MiCollab AM will continue to reinvoke the same call processor, adding faxes to the list, until the caller presses the pound (#) key. The

key has a Fax action with nothing specified in the Number field, which causes the system to send all faxes in the list.

When a caller presses # at the previous announcement, MiCollab AM plays the following prompt:

"At the tone, press the START button on your fax machine."

MiCollab AM then transfers the call to a fax port, and the original port goes onhook. When the documents have been delivered, the Fax Server disconnects the line and clears the fax list.

If a caller presses # without selecting any documents, MiCollab AM prompts, *"No faxes have been marked for sending."* Control passes to the call processor in the originating call processor's Next Call Processor box; if the box is blank, control returns to the originating call processor.

If the caller hangs up at the call processor announcement without pressing # or before the documents are delivered, MiCollab AM clears the list and abandons any incomplete deliveries.

Index Selection with Callback Delivery

This example describes an application where documents are available using index selection and delivered using callback delivery. The initial call processor might resemble [Figure 4](#).

NOTE When offering a document index through a single key, be sure to select a key that does not represent the first digit of a document number. The 1 key, used in this example, is used for the document index and does not start any document number in the Acme numbering plan.

Call Processor Mailbox - Demonstration System

Number: 1000

Sponsor:

Language: Default

Max Msg Length (sec): 2700

Timeout (sec): 2

Max No Match Retries: 0

Max Mismatch Retries: 0

☐ Use Speech Recognition Timeout Rules

☐ Log System Port Usage

☐ Two-Part Greeting

☒ Use Answer Mode Operator

☐ Always Confirm Names

Call Processor Actions

View: DTMF Only

Key	Action	Arguments
T0	Go To Answer Mode	
0	Fax	
1	Fax	XXXXQ
2	Fax	9000Q
3	Fax	XXXXQ
4	Fax	XXXXQ
5	Fax	XXXXQ
6	Fax	XXXXQ
7	Fax	XXXXQ

Key	Action	Arguments
8	Fax	XXXXQ
9	Fax	XXXXQ
A	Undefined	
B	Undefined	
C	Undefined	
D	Undefined	
*	Undefined	
#	Access Messages	
Fax	Undefined	

Figure 4. Call Processor Configured for Callback Delivery

Announcement: *"Welcome to the Acme Manufacturing Company fax information line. For an index of documents available by fax from Acme, press 1. If you know the document number of the fax you want to receive, please enter it now."*

Assume that a caller has entered 5420 to receive the Super Widget product brochure (the caller knew that the number for this brochure was 5420 by looking at the index). MiCollab AM prompts the caller to enter a fax machine telephone number and asks for confirmation after the caller has entered the number.

After the number has been confirmed, MiCollab AM prompts the caller to enter an extension or telephone number to identify the fax. The caller responds to this prompt by entering the appropriate extension or direct-dial telephone number. This information is placed on the fax cover page (in the <TONAME> field) and in the header as the destination number. MiCollab AM repeats the above prompts if any timeouts occur. See the following section for a sample Faxtext cover page.

MiCollab AM then prompts, *"Your fax will be delivered shortly,"* sends the fax request to the Fax Server, and sends control to the next call processor, 1001.

In the next call processor, the caller can select another document for delivery. MiCollab AM does not repeat the questions asking for the fax machine telephone number and the caller's extension or telephone number for identification because it has this information already.

Installing a Faxtext Cover Page

When MiCollab AM sends out a batch of Faxtext documents, it precedes them with a cover page that tells the recipient what documents are in the batch. This cover page is based on a stock cover page file called either Faxtext.pcl or Faxtext.doc; the MiCollab AM Installation Media contains standardized versions of these files, or you can create a cover page that suits your specific needs.

To use the stock cover page, copy the file Faxtext.pcl or Faxtext.doc from the MiCollab AM Installation Media into the Fax Server's cover page directory, usually D:\RightFax\Fcs.

To create your own cover page, refer to the RightFax Fax Server documentation. This documentation covers a number of ways you can create your own custom versions.

IMPORTANT The Fax Server must have a cover page file called Faxtext.pcl or Faxtext.doc in its cover page directory (\RightFax\Fcs). If this file is missing, callers will not receive their requested documents. However, be sure to copy only one version of the file (.pcl or .doc) into the cover page directory to ensure that MiCollab AM retrieves and uses the correct version.

The Faxtext Cover Page Included with MiCollab AM

The stock cover page included with MiCollab AM is called either Faxtext.pcl or Faxtext.doc and can be used without changes. The cover page uses the following five embedded codes to provide information specific to each fax:

- **<TONAME>** for the telephone extension or room number the caller enters
- **<TOFAXNUM>** for the telephone number of the destination fax machine
- **<NOTETEXT>** lines that MiCollab AM automatically replaces with a list of the Faxtext documents the caller has requested

- The following example shows the layout of the Faxtext cover page.

Faxtext Cover Sheet

TO: These documents were requested by someone at your location. Please deliver to the person whose telephone extension or room number is:
<TNAME>

Fax Number: <TOFAXNUM>

Requested Documents:

[illegible]

Date and time of transmission: <WHENFAXED>
Number of pages including this cover sheet: <NUMPAGESC>

Configuring a Faxtext Application 16

Authorizing Subscribers for Document Input

Before your Faxtext library goes into full service, you should decide who will be allowed to help build it. You may choose to input all of the library's documents yourself, or you can delegate some of this work to subscribers. In the latter case, you will need to authorize the subscribers to input library documents.

To authorize a subscriber to input Faxtext library documents:

- 1 At the Fax Server's own console or a connected administrative workstation, start the Enterprise Fax Manager.
- 2 From the **View** menu, select **Users**.
- 3 In the user list, double-click the button next to the name of the subscriber you want to authorize.
- 4 In the **Edit User** dialog box, select the **Can Edit/Add Library Docs** setting.
- 5 Click **OK** to apply the change.

NOTE You can also enable the **Can Edit/Add Library Docs** setting from the **MiCollab AM Admin** utility. To do so, open the subscriber mailbox of the person you want to authorize, select the **Fax** tab, and then select the **Can Edit/Add Library Docs** setting from the **User Permissions/Attributes** group.

Creating and Managing a Document Library

After the MiCollab AM system is configured to support Faxtext, the only remaining step in setting up Faxtext is to create the library of documents that the system will be able to deliver. Maintaining the library involves the same basic tasks as building it:

- Categorizing and numbering documents
- Entering documents
- Removing documents
- Creating an index
- Updating index lists

The following sections discuss how to organize a library. For instructions on the other tasks, refer to the RightFax documentation.

Categorizing and Numbering Documents

Each Faxtext document is referred to by a number, since the only characters a caller can enter directly are digits. To make this arrangement as easy as possible for callers to use, be sure to establish guidelines for organizing your document library before you create it; after the library is in place, continue observing those guidelines as you expand the library.

To organize the Faxtext library:

- 1 Determine the different categories of information that the Faxtext library will contain, such as product literature and technical bulletins.
- 2 Break your categories into finer subdivisions if possible.
- 3 Develop a numbering plan for the documents and assign each category to a range of document numbers.

Faxtext document numbers can range from one to ten numeric characters (0–9). Typically, you will want to use a fixed length of numbers in your numbering scheme. To make your library documents easy to retrieve, use as few digits as possible but make sure to plan for your library's future growth.

- 4 Assign a unique number to each document based on the category to which the document belongs.

Organization is the key to managing your library efficiently. A sample organizational breakdown might be as follows:

General Information	2000-2999
Product Information	5000-5999
Widgets	5300-5399
Super Widgets	5400-5499
Technical Bulletins	6000-6999
Widget repair	6200-6299
Widget upgrades	6300-6399

The sample library number scheme has several advantages. The organization looks professional and is logical to anyone using the Faxtext library, and it makes managing the library easier.

Document Selection Methods

A Faxtext library can contain any number of documents, from just a few to a large number. Regardless of the size of the library, your system should be designed so callers can retrieve the documents they want quickly and easily.

Two basic document selection methods can be configured:

- Hierarchical menu structure listing categories of documents, subcategories, and finally individual selections.
- Direct document selection based on a numbered index.

A typical hierarchical menu structure might have the following announcement:

*"Welcome to the Acme Manufacturing fax information line. For product information, press **1**; for technical bulletins on our Widget product line, press **2**; for technical bulletins on our Super Widget product, press **3**."*

If a caller presses **1** in the previous menu, a menu similar to the following might be spoken:

*"For a product brochure on Widget Model A, press **1**; for a product brochure on Widget Model B, press **2**; for a product brochure on the Super Widget, press **3**."*

If the caller presses **3** in this menu, the Super Widget brochure would be delivered.

The hierarchical menu selection method rapidly becomes unwieldy as the number of documents in the library increases. Fortunately, a simple solution to this problem exists: Create an index that lists the documents available in the Faxtext library. Callers can then select a desired document by entering a unique document number, without having to go through a series of menus.

NOTE When you create an index, you will be typing it up as a document in a word processor or similar program and then printing that document to save it on the Fax Server as a compressed TIFF image.

Be sure to save the original document so that you can update it later. See "Creating Library Documents," later in this book, for more information about creating indexes and Faxtext documents.

The document index can be published, along with a telephone number, in company literature or advertising. In addition, you can include the index in the Faxtext library and offer to fax the index in your caller dialogue. The initial fax menu announcement might be similar to the following:

*"Welcome to the Acme Manufacturing fax information line. For an index of documents available by fax, press **1**. If you know the index number of the document that you would like to receive, please enter it now."*

In this example, pressing **1** would cause the document index to be faxed to the caller. Entering an index number would cause the corresponding document to be sent. The document index might look similar to the sample shown in Figure 6.

You can mix the hierarchical menu and index selection methods in a single system. For example, you might want to offer a menu of your most commonly requested documents, plus a menu choice to receive the index. This configuration allows frequently requested information to be selected with a single key, with the index providing quick access to additional information.

Acme Manufacturing Facts by FAX	
This index lists the information available by fax from Acme Manufacturing. To have this information sent to you, call (206) 555-3794 from any touch-tone telephone and follow the spoken instructions. Use the index number(s) to select the fax(es) that you wish to receive.	
Product Information	Index Number
Widget Model A	5304
Widget Model B	5344
Super Widget Model C	5420
Technical Bulletins	
Repair of Widget Bushings	6220
Moisture Protection	6230
Converting Model A to Model B	6390

Figure 6. Sample Fax Index Document

You can also put a limited index on your fax cover page so that callers requesting documents from menu selections would automatically get an index of other available documents when the fax is delivered. For example, the cover page of a commonly requested fact page on a product can show the index numbers of more detailed documents on that product or informational documents on other products.

NOTE If you choose to use an index, but you still want the index document itself to be available by a single keypress in the same call processor, do not use that key's number as the first digit in any of your document numbers. If you do, MiCollab AM will be unable to deliver any documents whose numbers begin with that digit.

You can create indexes for your Faxtext library with any Windows-based desktop publishing, word processing, or spreadsheet program; simply create an index document in one of these programs, then print it as a fax. You should update the index lists in your Faxtext library whenever you add or delete a document or change a document number.

A Faxtext library can be integrated with other MiCollab AM applications by configuring call processors appropriately. For additional examples of configuring a Faxtext application, refer to [Configuring a Faxtext Application](#).

Creating Library Documents

The RightFax documentation explains how to create and store library documents. You may find the following information helpful in ensuring that your library documents are high quality.

NOTE Be aware that the Fax Server will neither send nor receive any documents if there is less than 50 megabytes of free disk space available on the Fax Server platform. You can check the space available through the Windows Explorer utility on the platform's Start menu.

Enhancing the Appearance of Fax Documents

You can improve the appearance of fax documents in three ways: by designing the document for faxing, by choosing the best resolution, and by using the best equipment available. The following sections discuss all three of these topics.

Designing Documents for Faxing

Document design and content affect the final appearance and the perceived quality of your fax documents. Generally speaking, placing too much detail in graphics and using small, tightly packed text on a fax are counterproductive. The relatively low resolution of Group 3 faxes makes any highly detailed image or small text look grainy and blurred.

Fax documents look better if they contain large, relatively simple graphics and logos and larger typefaces. A two-page document using a larger typeface and simpler drawings looks much better and is easier to read than a document with too much information on one page. Remember, too, that fax machines can skip over empty space on a page when printing; a two-page fax with the same number of words and drawings as contained on a one-page fax will not take much longer to transmit.

Selecting the Resolution

To allow fax documents to transmit in a reasonable amount of time, an international organization called CCITT has established basic, worldwide standards for fax transmission. The resolution of the most commonly used standard, Group 3, is set to 200 dpi horizontally and either 100 or 200 dpi vertically.

The 100-dpi vertical resolution is commonly called normal mode, while the 200-dpi vertical resolution is called fine mode. Faxing a document in fine mode takes about twice as long as faxing the same document in normal mode, and

any document you enter by fax in fine mode will take about twice as much disk space as it would in normal mode.

Consider the following points when selecting which mode you will use:

- Fine-mode faxes can look far better than normal-mode faxes, especially when the image contains a large amount of graphics or if the graphic component of the image is highly detailed. However, you will need to take extra care when installing fine-mode documents to attain the level of quality possible with this mode, especially if you are entering the document into MiCollab AM using a fax machine.
- Sending large numbers of faxes in fine mode will make your fax delivery calls longer. You may need to purchase additional fax lines to provide an adequate level of service to your callers. Long-distance fax delivery calls will also cost more.
- You can place both fine-mode and normal-mode documents in a Faxtext library. However, since the Fax Server will use its default mode setting for all of them, you should decide on a mode to use for Faxtext and use that mode for any documents you enter by fax. If you print a document to a PCL file from a Windows-based program, you can use those files at either resolution without any loss of detail.
- You might want to standardize on normal mode for the Faxtext library, then advise your marketing staff to use fine mode for materials such as product brochures and collateral sheets. Standardizing on normal mode for the library ensures that callers can choose more than one document and receive them in the same delivery, whether same call or callback, without the possibility of distortion.

Getting the Best Results with Your Fax Equipment

Faxing a document into MiCollab AM preserves the appearance of the document, including graphics, fonts, and layout. The scanner built into a fax machine converts the image into a digital data stream of Group 3 fax data.

If you plan to use a fax machine, make sure that it is in good working order and that it includes a high-quality scanner. Also, make sure that the scanner and the document image are free of dirt, which could cause specks or streaks on the scanned image.

Troubleshooting Faxtext

When encountering a problem with an application, you should always check the Windows application event log first before taking any action. The event log might provide information that will help you isolate the problem. Also, try any solutions in the following sections that pertain to your problem. If none of these measures is effective, contact Customer Support for additional assistance.

Before you call Customer Support, be sure that you have verified the following:

- You have the version number and system serial number for your MiCollab AM software on hand.
- Your software license has the appropriate fax options enabled.
- The **Licensing** tab in the **MiCollab AM Configuration** utility shows that the appropriate fax options have been enabled.
- You have notes on any related messages in the Windows event log.
- The configuration of the Fax Server is correct.

MiCollab AM Error Prompts

MiCollab AM provides a number of voice error messages that you might encounter in a Faxtext application. These error messages occur in response to a fax request from a call processor. The prompts and the circumstances when they occur are listed below:

"I'm sorry, the fax you requested is not available."

MiCollab AM plays this prompt if the fax document does not exist in the document library. Control returns to the originating call processor or to the next call processor, if one is configured.

"I'm sorry, your fax request cannot be processed at this time. Please try again later."

MiCollab AM plays this message if unexpected errors occur in communicating with the Fax Server (the most likely reasons are that the Fax Server is shut down or that a LAN protocol error has occurred). Control returns to the originating call processor or to the next call processor, if one is configured.

"I'm sorry, a fax cannot be delivered to NNN-NNNN. Please enter your fax machine telephone number followed by the pound sign key, or press the star key to quit."

MiCollab AM plays this message if the fax machine telephone number, entered by the caller, is invalid or not allowed by the MiCollab AM dialing plan. To allow calls to that number, revise the templates in the **Dialing** tab on the MiCollab AM Admin utility's System Configuration screen. For information on the dialing plan, refer to the System Server's online help for the **Dialing** tab.

NOTE This prompt applies only to Faxtext delivery requests made at the MiCollab AM System Server; the Fax Server's dialing plan has no effect on the problem.

"I'm sorry, there are no fax lines available right now. Please call back later."

MiCollab AM plays this prompt if a fax line is not available for same-call delivery because all lines are in use. Since it is configured for same-call delivery, MiCollab AM will not queue the request for callback delivery. Control returns to the originating call processor.

If this prompt occurs frequently, check the configuration of the Fax Server's loop start ports. Also, check the WorkServer Configuration on the Fax Server platform to verify that you have enough WorkServers set up for your needs.

Fax Problems and Solutions

Basic problems that you might encounter in a fax application are listed below, as well as their solutions.

Callback Delivery Does Not Work

In this situation, documents set up for callback delivery are not being faxed.

- The call processor mailbox might not be properly configured for callback delivery. To use callback delivery, the letter Q must be specified in the appropriate key's Number field. Refer to "Configuring a Faxtext Application," earlier in this book, for more information.
- If using a RightFax fax server, make sure that the fax lines are set up correctly. In the Control Panel, open the RightFax BoardServer and check the DID (Direct Inward Dialing) and channel settings. See the *RightFax Administration Guide* for details.
- Make sure that the fax ports are properly connected to the telephone system. A connection might be loose or have become disconnected accidentally.
- You cannot make callback deliveries with DID fax lines. DID fax lines can only receive incoming calls.

Same-Call Delivery Does Not Work

In this situation, a document set up for same-call delivery is not being delivered.

- Make sure that the fax ports are properly connected to the telephone system. A connection might be loose or disconnected.
- You might also want to make sure the strapping on the fax linecards it is correct. Also, make sure that the cards are firmly seated. Refer to the Brooktrout Analog Fax Linecard spare parts document.
- Telephone lines for fax ports should not be configured for hunting or forwarding.
- The person may not have called MiCollab AM from a fax machine. Make sure the initial announcement to the document library tells callers that they must be calling from their fax machine.
- The person may be calling from an older fax machine that cannot receive a fax unless it detects a fax tone at the beginning of the call. Such machines are rare, but a few of them are in use; if you suspect that a caller is using one, suggest trying the call again at a different fax machine.

Appendix A: A Sample Faxtext Application

This appendix provides a sample Faxtext application that you might find helpful when designing your own application. Step-by-step instructions are not provided.

The sample application was designed according to the following criteria:

- The Faxtext library must be accessible 24 hours a day to any caller.
- The system must have the capacity to handle up to 500 documents.
- All document numbers are five digits, numbered between 40000 and 99999.
- Callers can retrieve up to three documents from the library by calling from a fax machine, or by calling from a telephone and entering a fax machine telephone number.
- The telephone system handles transfers to the operator at night in an appropriate manner.

Mailbox Configuration Windows

The call processor mailboxes that make up the Faxtext application are shown on the following pages.

Mailbox 5000 is used to separate callers wishing same-call delivery from those wishing callback delivery. Mailbox 5010 provides same-call delivery. Mailbox 5020 provides callback delivery.

This section does not include a sample of the answer-mode call processor, since system design varies. To enable the Faxtext function shown here, the answer-mode call processor would include a **Go to CP 5000** action. This sample application returns control to the answer-mode call processor by means of the **Go to Ans Mode** action.

Faxtext Caller Definition

Call Processor Mailbox - Demonstration System

Number: 5000

Sponsor: ...

Language: Default

Max Msg Length (sec): 2700

Timeout (sec): 4

Max No Match Retries: 0

Max Mismatch Retries: 0

☐ Use Speech Recognition Timeout Rules

☐ Log System Port Usage

☐ Two-Part Greeting

☒ Use Answer Mode Operator

☐ Always Confirm Names

Name: FAX CALLER DEFINITION

Next Call Processor

CP: ...

☐ Go To Answer Mode

Switch

Section: Asterisk Asterisk Section

Node: ...

No ASR Call Processor

CP: ...

Call Processor Actions

View: DTMF Only

Key	Action	Arguments
T0	Go To Answer Mode	
0	Blind Transfer	0
1	Go To Call Processor	5010
2	Go To Call Processor	5020
3	Undefined	
4	Undefined	
5	Undefined	
6	Undefined	
7	Undefined	

Key	Action	Arguments
8	Undefined	
9	Undefined	
A	Undefined	
B	Undefined	
C	Undefined	
D	Undefined	
*	Go To Answer Mode	
#	Undefined	
Fax	Undefined	

OK

Cancel

View References...

Help...

Figure 7. Fax Caller Definition Window

*"You have reached the Acme Manufacturing fax information line. If you are calling from your fax machine, press **1** now. If you want information delivered to a fax machine that you specify, please press **2**. If you do not have a fax machine or want to return to the main system menu, press the star key."*

This menu separates people who are calling from their fax machines from those who need the documents sent to a fax machine they specify (using callback delivery).

Faxtext Same-Call Document Delivery Menu 5010

Call Processor Mailbox - Demonstration System

Number: 5010

Sponsor:

Language: Default

Max Msg Length (sec): 2700

Timeout (sec): 4

Max No Match Retries: 0

Max Mismatch Retries: 0

☐ Use Speech Recognition Timeout Rules

☐ Log System Port Usage

☐ Two-Part Greeting

☒ Use Answer Mode Operator

☐ Always Confirm Names

Name: FAX SAME CALL DELIVERY

Next Call Processor

CP:

☐ Go To Answer Mode

Switch

Section: Asterisk Asterisk Section

Node:

No ASR Call Processor

CP:

Call Processor Actions

View: DTMF Only

Key	Action	Arguments
T0	Go To Call Processor	5010
0	Fax	0
1	Fax	4000L
2	Fax	4001L
3	Fax	XXXXL
4	Fax	XXXXL
5	Fax	XXXXL
6	Fax	XXXXL
7	Fax	XXXXL

Key	Action	Arguments
8	Fax	XXXXL
9	Fax	XXXXL
A	Undefined	
B	Undefined	
C	Undefined	
D	Undefined	
*	Go To Answer Mode	
#	Undefined	
Fax	Undefined	

OK

Cancel

View References...

Help...

Figure 8. Fax Same-Call Document Delivery Menu 5010

Enable the two-part greeting in the call processor window and record announcements similar to the following:

Part 1. "Please select your documents, or press the star key at any time to return to the main menu."

Part 2. "If you know the five-digit document number of the document you wish to receive, enter it at any time. To receive an index of documents, press **1**. To receive troubleshooting tips for the 10 most common installation problems, press **1**. To receive your selected fax documents, press the pound key. This menu will repeat."

This menu allows the caller to select documents for same-call delivery.

When all documents are selected, the caller presses the pound key on his fax machine. MiCollab AM then sends the caller the requested fax documents.

If the caller presses the star key, MiCollab AM returns to the answer-mode call processor.

Faxtext Callback Document Delivery Menu 5020

Call Processor Mailbox - Demonstration System

Number: 5020

Sponsor: ...

Language: Default

Max Msg Length (sec): 2700

Timeout (sec): 4

Max No Match Retries: 0

Max Mismatch Retries: 0

☐ Use Speech Recognition Timeout Rules

☐ Log System Port Usage

☐ Two-Part Greeting

☒ Use Answer Mode Operator

☐ Always Confirm Names

Name: FAX SAME CALL DELIVERY

Next Call Processor

CP: ...

☐ Go To Answer Mode

Switch

Section: Asterisk Asterisk Section

Node: ...

No ASR Call Processor

CP: ...

OK

Cancel

View References...

Help...

Call Processor Actions

View: DTMF Only

Key	Action	Arguments
TO	Go To Call Processor	5010
0	Fax	0
1	Fax	4000Q
2	Fax	4001Q
3	Fax	XXXXQ
4	Fax	XXXXQ
5	Fax	XXXXQ
6	Fax	XXXXQ
7	Fax	XXXXQ

Key	Action	Arguments
8	Fax	XXXXQ
9	Fax	XXXXQ
A	Undefined	
B	Undefined	
C	Undefined	
D	Undefined	
*	Go To Answer Mode	
#	Undefined	
Fax	Undefined	

Figure 9. Fax Callback Document Delivery Menu

Enable the two-part greeting in the call processor window and record announcements similar to the following:

Part 1. "Please select your documents, or press the star key to return to the main menu."

Part 2. "If you know the five-digit document number of the document you wish to receive, enter it at any time. To receive an index of documents, press **1**. To receive troubleshooting tips for the 10 most common installation problems, press **2**. This menu will repeat."

This menu allows the caller to select documents for callback delivery.

After the first document is selected, MiCollab AM prompts the caller for a fax machine telephone number, then informs the caller that the fax will be delivered shortly. Fax delivery begins immediately.

The caller continues document selection. When finished, the caller can press the star key to return to the main menu or hang up to receive the documents.