CHAPTER 12

Integrating a Fax Server with Cisco Unity

Overview: Fax Server Integration

Integrating a fax server with Cisco Unity allows subscribers to manage their fax messages as follows:

- Subscribers can hear new fax messages announced with other messages when they call and log on to Cisco Unity. During message playback for a fax message, subscribers hear the message summary and any voice annotation but not the contents of the fax message.
- Subscribers can have a fax message forward a fax message to another subscriber, or reply with a voice message if the fax message is from another subscriber.
- Subscribers can receive notification of new fax messages, along with other types of messages, by phone or pager.
- Subscribers can have their e-mail messages delivered to a fax machine. If there are attachments to an e-mail message, Cisco Unity renders only those attachments with the file extensions specified during setup. Other types of attachments are removed, and Cisco Unity lists the file names at the end of the fax message.

As with other message settings, subscribers use the Cisco Unity phone conversation or the Cisco Unity Assistant to set their fax message settings. For subscribers to have phone access to their faxes, they must be in a class of service (COS) that has the FaxMail feature selected. In addition, those subscribers who will have their e-mail messages delivered to a fax machine must be in a COS that has the Text-To-Speech feature selected.

See the following sections in this chapter for more information:

- Fax Server Integration, page 12-1—This section describes how Cisco Unity and the fax server communicate, how the fax server routes inbound and outbound fax messages, and how subscribers view and address fax messages from their e-mail clients.
- Integrating a Fax Server, page 12-2—This section outlines the setup steps for integrating a fax server with Cisco Unity.

Fax Server Integration

Cisco Unity supports fax servers that can install an Exchange gateway and have dedicated fax lines set up to the fax ports on the fax server. A list of officially supported fax servers that you can use with Cisco Unity can be found in *Cisco Unity System Requirements, and Supported Hardware and Software*, available on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_pre_installation_guides_list.html.

Cisco Unity communicates with Exchange to access and send fax messages, and never interacts directly with the fax server. Exchange, and the fax gateway if used by the fax server, provide the means for Cisco Unity and the fax server to communicate. If utilized, a fax gateway is registered with Exchange to handle any message that includes FAX at the beginning of the message address. The gateway transfers outgoing fax messages from Exchange to the fax server and converts the messages to a format that the fax server recognizes. Similarly, the gateway transfers and converts incoming fax messages.

Cisco Unity recognizes faxes in a subscriber Exchange mailbox by the message class. Most fax servers that support Exchange use generic message classes such as IPM.FAX or IPM.Note.Fax, although some also use proprietary classes. You select the message classes that you want Cisco Unity to recognize during setup.

When a subscriber who has called and logged on to Cisco Unity wants a fax or e-mail message delivered to a fax machine, Cisco Unity sends the message to Exchange by using the address format [FAX:Name@FaxNumber]. Exchange checks all the gateways in the site for the one registered to handle faxes. The fax gateway (if present) then forwards the message to the fax server. The fax server faxes the message through a fax port.

If attachments are included with a fax or e-mail message sent to a fax machine, Cisco Unity sends only those attachments that match the list of file name extensions that were selected during setup. Most fax products support .dcx, .tif, and .txt files, and you can add other file extensions as needed that are supported by your fax gateway and fax server. If an attachment is not able to be sent to the fax machine, the file name is printed at the bottom of the message.

Fax Server Administration

The fax server, not Cisco Unity, is responsible for routing inbound fax messages to a subscriber mailbox, and for managing and logging inbound and outbound fax messages. Additional functionality such as generating reports, and providing cover pages and least-cost routing are controlled by the fax server, not Cisco Unity. The Cisco Unity Administrator is not used in any way to administer the fax server or the services provided by the fax server.

Sending and Receiving Faxes with an E-Mail Client

The way in which subscribers view the contents of fax messages from their computers depends on the fax server program. For example, some programs display icons to distinguish fax messages from regular e-mail messages, and they may provide a viewer to display the contents of fax messages. Alternatively, in other programs, fax messages may appear in e-mail messages as attached .tif files, which subscribers can open in a tif viewer.

The way in which subscribers address fax messages they send from their computers also depends on the fax program. For example, some programs make it easy for subscribers to use the correct address format by providing a form on which to enter the recipient name and fax phone number.

Cisco Unity and ViewMail play no role in how subscribers send or receive fax messages from their computers.

Integrating a Fax Server

If you already have a fax server installed and set up, skip the tasks below that do not apply.

1. Install the fax server by using the fax server manufacturer documentation.

The fax server software, fax cards (if used), and fax lines must be installed on the fax server, not on the Cisco Unity server. If the Cisco Unity server is the only Exchange server in the site, and your fax server uses a fax gateway, you can install the gateway on the Cisco Unity server.

2. Set up inbound fax routing.
   a. On the Cisco Unity desktop, double-click the Cisco Unity Tools Depot icon.
   b. In the left pane of the Tools Depot window, under Administrative Tools, double-click Third Party Fax Administration.
   c. Select your fax server from the drop-down list, then confirm the message classes and file extensions allowed. Add other file extensions supported by the fax gateway if needed.
   d. Click Apply.
   e. Restart the Cisco Unity server for the changes to take effect.
3. In the Cisco Unity Administrator, enter Restriction Table settings.

   Modify the Default Fax Restriction Table, or create a new one, as needed. See the "Creating and Modifying Restriction Tables" section on page 25-3 for more information.
4. In the Cisco Unity Administrator, enter Class of Service Feature settings.

   Set FaxMail for those subscribers who access fax messages. Set both FaxMail and Text-To-Speech E-mail for those subscribers who want e-mail messages delivered to a fax machine. Also specify the restriction table used to control the phone numbers subscribers can use for fax delivery. Depending on how Cisco Unity subscriber accounts are set up, you may want to create a new class of service (COS) with one or both of these features, then reassign subscribers to the COS as appropriate. See the "Class of Service Features Settings" section on page 14-9 for more information.
5. Test fax inbound routing to a subscriber.

   Send a fax from a fax machine to the fax server and confirm that the fax message gets routed to the mailbox of the intended recipient.