



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 in much the same way that they manage other types of messages on Cisco Unity, 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 delivered to a fax machine, forward it 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 .txt, .tif, and .dcx. 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 conversation or the ActiveAssistant 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 licensed 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 licensed feature selected.

Refer to the following sections in this chapter for more information:

- [Fax Server Integration Architecture, page 9-2](#)—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 9-4](#)—This section outlines the setup steps for integrating a fax server with Cisco Unity.

Fax Server Integration Architecture

Cisco Unity uses Exchange for address directory information and for message storage; therefore, 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 the *Cisco Unity System Requirements, and Supported Hardware and Software* document at

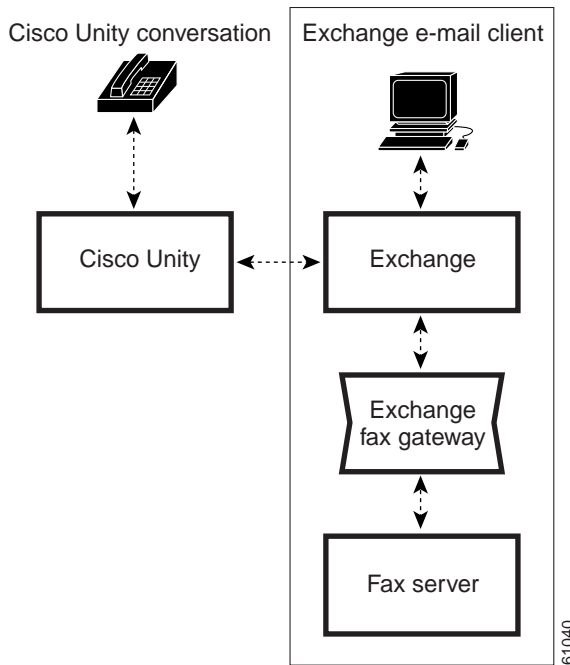
http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/sysreq/index.htm.

Exchange and the Exchange fax gateway provide the means for Cisco Unity and the fax server to communicate. The 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 communicates with Exchange to access and send fax messages, and never interacts directly with the fax server.

Figure 9-1 shows how Cisco Unity, the e-mail client, and the fax server interact with Exchange.

Figure 9-1 Fax Server Integration Architecture



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]. This format is required by the fax gateway. Exchange checks all the gateways in the site for the one registered to handle faxes. The fax gateway then forwards the message to the fax server, which then faxes the message through a fax port.

Fax Server Administration

The fax server program 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 within the control of 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 fax gateway allows subscribers to send and receive fax messages by using Outlook (or another Exchange e-mail client).

The way in which subscribers view the contents of fax messages from their computers depends on the fax program. For example, programs that are designed to work with Outlook may 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 programs that are not designed to work with Outlook, 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 for Outlook 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. Refer to your fax server documentation for additional information.

1. Install the fax cards, fax server software, and dedicated fax lines.

The fax cards, fax server software, and fax lines must be installed on the fax server, not on the Cisco Unity server. The phone lines used for faxes are typically DID lines or analog lines (depending on the requirements of the fax server software), and they must be connected to the fax ports on the fax server. Refer to your fax server documentation for a list of supported boards and integration methods.

2. Install the Exchange fax gateway.

The location of the fax gateway depends on how Cisco Unity is set up. If the Cisco Unity server is the only Exchange server in the site, install the gateway on the Cisco Unity server. Otherwise, install the gateway on any Exchange server in the site (typically, the gateway is not installed on the fax server).

3. Set up inbound fax routing.

The fax server program must be able to associate a phone number with a subscriber Exchange mailbox.

4. Test the gateway and inbound fax routing.

Send a fax from a fax machine to the fax server to confirm that the gateway works and that the fax message gets routed to the Exchange mailbox of the recipient. Test the gateway for outgoing fax messages by using Cisco Unity or an e-mail client. If you use an e-mail client to send a fax message, use the address format [FAX:Name@FaxNumber]. Be sure to include the brackets in the address.

5. In the Cisco Unity Administrator, enter Class of Service Licensed Feature settings.

Set FaxMail for those subscribers who access fax messages. Set both FaxMail and text-to-speech e-mail for those subscribers who have e-mail messages delivered to a fax machine. 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 licensed features, then reassign subscribers to the COS as appropriate. See the [“Class of Service Licensed Features Settings” section on page 11-12](#) for more information.

Note that the order in which Cisco Unity and the fax server are installed makes no difference because Cisco Unity does not interact directly with the fax server. The Cisco Unity installation program does not require that a fax server be specified, and there is no place within the Cisco Unity Administrator to specify a fax server.

