



SMTP Networking

Early Notice of Removal of SMTP Networking Option in Cisco Unity 4.0(5)

Beginning with Cisco Unity 4.0(5), the SMTP Networking feature will be removed from the product. Customers who need to network Cisco Unity servers that access separate directories will instead use VPIM Networking. Both SMTP Networking and VPIM Networking use SMTP as the mechanism for exchanging messages, but the message format differs. SMTP Networking uses a proprietary message format, while the message format in VPIM Networking adheres to the VPIM industry standard. In addition, VPIM Networking provides some additional functionality that is not available in SMTP Networking, and by removing the redundant networking option, Cisco will be able to focus its resources on enhancements to VPIM Networking.

Customers who are currently using SMTP Networking and who plan to upgrade to 4.0(5) will have to migrate to VPIM Networking. To migrate from SMTP Networking to VPIM Networking before upgrading to 4.0(5), see the [“Migrating from SMTP Networking to VPIM Networking”](#) section on page 6-24.

Note that VPIM Networking is a licensed feature and is currently supported only with Microsoft Exchange 2000 and Exchange 2003.

In addition to VPIM Networking, customers will also still be able to set up Internet subscriber accounts for messaging with individuals who do not use Cisco Unity, but who have computers connected to the Internet.

Overview: SMTP Networking

With SMTP Networking, subscribers on the local Cisco Unity server can send voice messages to individuals who do not have mailboxes on the local Exchange network. Messages are sent over the Internet or any TCP/IP network. The recipients can be:

- Subscribers on a different Cisco Unity server that accesses a directory other than the directory on the local Cisco Unity server. For installations with multiple Cisco Unity servers, this means that the Cisco Unity servers can be in one of the following configurations:
 - Separate Active Directory forests
 - Separate Exchange 5.5 organizations
 - Separate Exchange 5.5 sites in the same organization, but with no installation of Exchange 5.5 message and directory replication connectors (also called site connectors)



Note If site connectors are installed, you can use Digital Networking instead of SMTP Networking.

- Individuals who do not use Cisco Unity or Exchange, but who have computers connected to the Internet or to any TCP/IP network.

Subscriber accounts created for use with SMTP Networking are called Internet subscriber accounts. SMTP Networking can be combined with Digital Networking or any of the other networking options. For example, if the Cisco Unity servers in your organization are networked together such that they access a common directory (and thus can make use of the Digital Networking option), you can still add Internet subscriber accounts for contractors working at home, and also set up an SMTP delivery location on one of the Cisco Unity servers for messaging with a field sales office where the Cisco Unity server accesses a separate directory.

No special permissions are required for SMTP Networking beyond those required for Cisco Unity itself. For detailed information about the permissions required by Cisco Unity, refer to the Permissions Wizard Help, which is available in Tools Depot on the Cisco Unity server.

In this chapter, you will find procedures for setting up SMTP Networking, followed by detailed discussions of the concepts and terminology you need to understand. See the following sections:

- [Setting Up Cisco Unity to Use SMTP Networking, page 3-2](#)—This section describes the prerequisites for setting up SMTP Networking and provides a task list containing a high-level view of all of the tasks you need to complete for the setup, and the order in which they should be completed.
- [Procedures: Setting Up Cisco Unity to Use SMTP Networking, page 3-4](#)—This section contains all of the procedures necessary to set up Cisco Unity for SMTP Networking.
- [SMTP Networking Concepts and Definitions, page 3-16](#)—This section explains SMTP Networking concepts in detail. You may want to read this section prior to completing the setup procedures.
- [SMTP Networking Reference, page 3-25](#)—This section contains tables that define the fields in the Cisco Unity Administrator related to SMTP Networking setup.
- [Notable Behavior, page 3-27](#)—This section provides information about notable behavior related to SMTP Networking.

Setting Up Cisco Unity to Use SMTP Networking

Prerequisites

Before starting the setup, verify that the following prerequisites have been met.

- Cisco Unity is already installed on the server(s), and they are connected to the network as appropriate for your installation.
- Cisco Unity and Exchange meet the requirements as described in the “SMTP Networking Requirements” section in *Cisco Unity Networking Options Requirements (With Microsoft Exchange)*, available at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/sysreq/netrq.htm.

For installations with multiple Cisco Unity servers that access that same directory, you should first set up the servers for Digital Networking as described in the “[Digital Networking](#)” chapter before setting up SMTP Networking and/or creating Internet subscribers. After the Cisco Unity servers have been set up for Digital Networking, verify the following settings:

- Verify that the addressing search scope is set to either the dialing domain or the global directory on all of the networked servers so that Cisco Unity subscribers, no matter what server they are associated with, can address messages to SMTP delivery locations and/or Internet subscribers. See the “[Setting the Addressing Search Scope](#)” section on page 2-9 for details.
- If you want outside callers to be able to reach Internet subscribers from the automated attendant (for example, from the opening greeting) or directory assistance:
 - Verify that the Cisco Unity server(s) on which the Internet subscribers will be created are in the same dialing domain as the Cisco Unity server that outside callers call into. See the “[Customizing the Primary Location](#)” section on page 2-8 for details on creating the dialing domain, and the “[Dialing Domains](#)” section on page 2-14 for background information.
 - Verify that the automated attendant and directory handler(s) search scopes are set to the dialing domain scope. See the “[Setting the Directory Handler Search Scope](#)” section on page 2-9 and the “[Setting the Automated Attendant Search Scope](#)” section on page 2-9.

Task List: Setting Up Cisco Unity to Use SMTP Networking

Use this task list to set up SMTP Networking. If some or all of the remote message recipients use Cisco Unity, do these tasks on the local and on the remote systems. The cross-references take you to detailed procedures for the setup.

1. Make decisions about your numbering plan and gather information needed to configure SMTP Networking. See the “[Making Design Decisions and Gathering Needed Information](#)” section on page 3-4.
2. If the network to which Cisco Unity is connected consists entirely of Exchange 5.5 servers, install the Exchange 5.5 Internet Mail Service (if it is not already installed). For performance reasons, you should install the Internet Mail Service on a server other than the Cisco Unity server. However, if necessary, it can be installed on the Cisco Unity server (if Exchange 5.5 is also on the Cisco Unity server). Refer to your Exchange documentation for more information.
3. Verify network and SMTP connectivity between Exchange servers in the local and remote sites. See the “[Verifying Connectivity Between the Exchange Servers](#)” section on page 3-4.
4. If some or all of the remote message recipients use Cisco Unity, install the Voice Connector. See the “[Setting Up the Voice Connector for SMTP Networking](#)” section on page 3-5.
5. Customize the primary location profile settings. See the “[Customizing the Primary Location](#)” section on page 3-8.
6. If none of the remote message recipients use Cisco Unity, skip to Step 7.
If some or all of the remote message recipients use Cisco Unity, create delivery location(s) on the local server that correspond to the remote Cisco Unity server(s). See the “[Creating SMTP Delivery Locations](#)” section on page 3-8.
7. Create Internet subscriber accounts on the local Cisco Unity server for each remote message recipient, as needed. See the “[Creating Internet Subscriber Accounts](#)” section on page 3-9.

Procedures: Setting Up Cisco Unity to Use SMTP Networking

This section contains all of the procedures necessary to set up Cisco Unity for SMTP Networking.

Making Design Decisions and Gathering Needed Information

Before you begin setting up SMTP Networking, be sure to plan for the following, and gather the applicable information:

- Review your numbering plan strategy to determine the numbers to assign to Dial IDs on the primary location and SMTP delivery location(s).
- Decide if you want subscribers to use blind addressing, or if you want to create Internet subscriber accounts.
- Decide on which Exchange servers (in both the local and remote location) to install the Voice Connector. Write down the server name, domain name, and the IP address of each Exchange server.

Verifying Connectivity Between the Exchange Servers

The processing of messages between the local and remote Cisco Unity servers occurs on the Exchange servers on which the Voice Connector is installed. Use the following procedures to verify that the Exchange servers have network and SMTP connectivity.

To Verify Network Connectivity Between the Exchange Servers

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- Step 1** On the Exchange server on which the Voice Connector will be installed (Server 1), open a command prompt window.
- Step 2** Enter **ping <IP address>** where <IP address> is the IP address of the remote Exchange server on which the Voice Connector will be installed (Server 2).
- If you receive no reply, troubleshoot the network connectivity problem until the problem is resolved. Then continue with [Step 3](#).
- Step 3** Enter **ping <Domain name>** where <Domain name> is the domain name of Server 2. Then enter **ping <Server name>** where <Server name> is the name of Server 2.
- If you received a reply when pinging the IP address in [Step 2](#), but no replies when pinging the domain name and server name, see the “[Resolving Names with IP Addresses](#)” section on [page 3-5](#). When the problem(s) are resolved, continue with [Step 4](#).
- Step 4** Repeat [Step 2](#) and [Step 3](#) on Server 2, entering the IP address, domain name, and server name of Server 1.
- Step 5** When you successfully receive replies to all IP address, domain name, and server name pinging, thus verifying that you have basic network connectivity, continue with the following “[To Verify SMTP Connectivity Between the Exchange Servers](#)” procedure.
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To Verify SMTP Connectivity Between the Exchange Servers

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- Step 1** In a command prompt window on the Exchange server on which the Voice Connector will be installed (Server 1), enter **telnet <Server name> 25**, where <Server name> is the name of the remote Exchange server on which the Voice Connector will be installed (Server 2).
- Step 2** If there is a response from the remote Exchange server, enter **ehlo**. The remote Exchange server should respond with a list of SMTP commands.
- Step 3** If the telnet test was successful, enter **quit** to end the telnet session.
- Step 4** Verify that SMTP connectivity works in the opposite direction by repeating [Step 1](#) through [Step 3](#) on the remote Exchange server.

If any of the telnet tests fails, there is a basic SMTP connectivity problem that must be resolved before proceeding with the SMTP Networking setup.

If the telnet tests succeeded, continue with the SMTP Networking setup. See the [“Setting Up the Voice Connector for SMTP Networking”](#) section on page 3-5.

Resolving Names with IP Addresses

Both Exchange servers require some mechanism for name resolution. While any method or combination of methods may be used, two common ways to accomplish name resolution are through Domain Name System (DNS), and by using HOSTS files.

If the Exchange servers are in a network that uses DNS, the servers should have a host address resource (A) record and mail exchange (MX) record in DNS. If the A and MX records for the servers have not already been added, do so now before continuing. Refer to the Microsoft Windows documentation for more information about adding A and MX records in DNS.

A HOSTS file is a text file that contains the mappings of IP addresses to host and domain names. The HOSTS file is located in the C:\WINNT\System32\Drivers\Etc directory. If either Exchange server is in a network that does not use DNS, you will need to edit the HOSTS file to add host and domain entries for the other Exchange server.

Whether using DNS or HOSTS files, you will need to know the fully-qualified domain name of each Exchange server on which the Voice Connector is installed. This is the name displayed in the Windows System Control Panel on the Network Identification tab in the Full Computer Name field.

If you made changes to DNS or HOSTS files, verify the network and SMTP connectivity again before continuing with the rest of the SMTP Networking setup. To verify connectivity, do the preceding [“To Verify Network Connectivity Between the Exchange Servers”](#) and [“To Verify SMTP Connectivity Between the Exchange Servers”](#) procedures.

Setting Up the Voice Connector for SMTP Networking

There are two Voice Connector installation programs included on Cisco Unity DVD 1 and CD 1, and separate setup procedures:

- When the Cisco Unity partner server is Exchange 5.5 (when your network consists only of Exchange 5.5 servers), set up the Voice Connector for Exchange 5.5.

- When the Cisco Unity partner server is Exchange 2000 or Exchange 2003 (when your network consists only of Exchange 2000 or Exchange 2003 servers or a mixture of Exchange 5.5 servers and Exchange 2000 or Exchange 2003 servers), set up the Voice Connector for Exchange 2000. Voice Connector for Exchange 2000 version 11.0(1) or later can be installed on either an Exchange 2000 or an Exchange 2003 server.

As applicable, see the [“Setting Up the Voice Connector for Exchange 5.5” section on page 3-6](#) or the [“Setting Up the Voice Connector for Exchange 2000” section on page 3-7](#).

The Voice Connector installation program does not prompt with a choice of languages for the installation; it always installs in English. To run the Voice Connector installation program by using one of the localized versions (FRA, DEU, or JPN) instead of English, see the [“Running the Voice Connector Setup Program in Another Language” section on page 3-29](#).

Setting Up the Voice Connector for Exchange 5.5

Install the Voice Connector on an Exchange 5.5 server that is in the same Exchange site as the Exchange partner server. Although the Voice Connector can be installed on the Cisco Unity server (if Exchange 5.5 is also on the server), this is not recommended for performance reasons. Following are additional requirements:

- For SMTP Networking, the Voice Connector must be installed on the same Exchange server as the Exchange Internet Mail Service.
- Install only one instance of the Voice Connector in the Exchange site.
- If the Exchange server on which the Voice Connector will be installed is running Windows NT 4.0, the Microsoft Active Directory Services Client Extension (DSClient) for Windows NT 4.0 must be installed on the server prior to installing the Voice Connector. The DSClient requires Windows NT 4.0 Service Pack 6a. For information on downloading and installing the DSClient from the Microsoft website, refer to the following Microsoft Knowledge Base articles:
 - 288358—HOW TO: Install the Active Directory Client Extension
 - 295166—INFO: Advanced Installation of Directory Services Client for Windows NT 4.0
 - 295168—INFO: Files Installed by Directory Services Client Extension for Windows NT 4.0
 - 289105—INFO: Support for ADSI on Windows NT 4.0
 - 216290—INFO: Determining Which Version of ADSI Is Installed

To Install the Voice Connector for Exchange 5.5

As a best practice, back up the Exchange server before installing the Voice Connector.

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- Step 1** Log on to the Exchange server on which you are installing the Voice Connector.
- Step 2** Disable any virus-scanning services on the Exchange server.
- Step 3** Uninstall any previous versions of the Voice Connector. See the [“Uninstalling the Cisco Unity Voice Connector” section on page 8-6](#).
- Step 4** If you are installing the Voice Connector from Cisco Unity DVD 1 or CD 1, insert the disc in the computer, and browse to the **VoiceConnector-Ex55** directory.
- Step 5** If you downloaded the Voice Connector files from the Software Center website, browse to the directory in which the files were extracted.
- Step 6** Double-click **Install.exe** and then click **Next**.

- Step 7** In the Address Types dialog box, check **Voice** (and also select any other features that are being used in your network).
 - Step 8** Click **Next** twice.
 - Step 9** When setup is complete, click **Finish** to exit Setup and restart the server.
 - Step 10** Enable virus-scanning services on the server.
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Setting Up the Voice Connector for Exchange 2000

Install Voice Connector version 11.0(1) or later on any Exchange 2000 or Exchange 2003 server that is not part of an Exchange cluster (Microsoft does not support third-party connectors on an Exchange cluster server). Although the Voice Connector can be installed on the Cisco Unity server (if Exchange 2000 or Exchange 2003 is also on the server), this is not recommended for performance reasons.

If the Exchange server on which the Voice Connector will be installed is in a different routing group than the Exchange servers on which Cisco Unity subscribers are homed, routing group connectors must be configured between the routing groups.

To Install the Voice Connector for Exchange 2000

Uninstall any previous versions of the Voice Connector. See the [“Uninstalling the Cisco Unity Voice Connector”](#) section on page 8-6.

As a best practice, back up the Exchange server before installing the Voice Connector.

- Step 1** Log on to the Exchange server on which you are installing the Voice Connector.
 - Step 2** Disable any virus-scanning services on the Exchange server.
 - Step 3** If you are installing the Voice Connector from Cisco Unity DVD 1 or CD 1, insert the disc in the computer, and browse to the **VoiceConnector-Ex2000** directory.

If you downloaded the Voice Connector files from the Software Center website, browse to the directory in which the files were extracted.
 - Step 4** Double-click **Install.exe** and then click **Next**.
 - Step 5** In the Address Types dialog box, check **Voice** (and also select any other features that are being used in your network).
 - Step 6** Click **Next** twice.
 - Step 7** When setup is complete, click **Finish** to exit Setup and restart the server.
 - Step 8** Enable virus-scanning services on the server.
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Note

In order to view Voice Connector properties in Exchange System Manager, Microsoft Windows Script Host version 5.6 or later must be installed on the Exchange server. Continue with the following [“To Determine if the Microsoft Windows 2000 Script Host Should Be Updated”](#) procedure. (Also note that if the Exchange server uses an earlier version of Windows Script Host, the Voice Connector will function properly, but you will not be able to view Voice Connector properties in the Exchange System Manager.)

To Determine if the Microsoft Windows 2000 Script Host Should Be Updated

- Step 1** On the Exchange server on which the Voice Connector has been installed, browse to **Winnt\System32**.
- Step 2** Right-click the file **Wshom.ocx**, and select **Properties**.
- Step 3** Click the **Version** tab.
- Step 4** In the Item Name list, click **Product Version** to view the version in the Value box.
- Step 5** If the version is earlier than 5.6, the Windows Script Host needs to be updated in order for the Voice Connector properties to be displayed in Exchange System Manager.

To update the Windows Script Host, go to the downloads page on the Microsoft website, and do a keyword search for Windows Script Host. Follow the installation instructions.

Customizing the Primary Location

You need to customize the primary location if you are configuring Cisco Unity for networking with another Cisco Unity server in another directory. If your organization has multiple Cisco Unity servers networked together via Digital Networking, the primary location must be configured on all of the networked servers as well. In particular, the SMTP Domain Name must be entered on the primary locations of all of the other networked Cisco Unity servers. Otherwise, SMTP Networking will not work for the subscribers on the other networked Cisco Unity servers.

If you only have one Cisco Unity server and are just creating Internet subscribers and not setting up SMTP Networking between Cisco Unity servers, customizing the primary location is optional (although as a best practice, it is recommended even in this circumstance).

See the [“Primary Location Profile Settings”](#) section on page 7-1 for details about the settings.

To Customize the Primary Location

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- Step 1** In the Cisco Unity Administrator, go to the **Network > Primary Location > Profile** page.
 - Step 2** Enter a meaningful name for the location.
 - Step 3** Enter a Dial ID. The Dial ID identifies this location to Cisco Unity.
 - Step 4** Record a voice name for the location.
 - Step 5** Enter the SMTP Domain Name. This is the right half of an e-mail address after the @ symbol (for example, london.cisco.com). Do not enter the @ symbol; Cisco Unity automatically inserts it. If some or all of the remote message recipients use Cisco Unity, the Domain Name entered here must match the Domain Name for the corresponding SMTP delivery location on the remote Cisco Unity server.
 - Step 6** Click the **Save** icon.
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Creating SMTP Delivery Locations

Do the following procedure if some or all of the remote message recipients use Cisco Unity. Create an SMTP delivery location on your local Cisco Unity server for each remote Cisco Unity server to which subscribers will send messages.

When multiple Cisco Unity servers are networked together such that they access a common directory, you need to create the SMTP delivery location(s) on only one Cisco Unity server in the network. The location data is stored in the directory and will replicate to the other Cisco Unity servers.

To Create SMTP Delivery Locations

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- Step 1** In the Cisco Unity Administrator, go to the **Network > Delivery Locations > Profile** page.
- Step 2** Click the **Add** icon.
- Step 3** Enter a meaningful name for the location.
- Step 4** Enter the Dial ID, which identifies the location in Cisco Unity, and which subscribers use for blind addressing messages to recipients at this delivery location.
- See the “[Guidelines for Assigning Dial IDs and Extensions](#)” section on page 7-2 for detailed information about choosing a Dial ID. The Dial ID that you enter here must match the Dial ID of the corresponding primary location on the remote Cisco Unity server.
- Step 5** Select **SMTP** as the Destination Type for the location.
- Step 6** Click **Add**.
- Step 7** Record a voice name for the location.
- Step 8** Enter the Domain Name. This is the right half of an e-mail address after the @ symbol (for example, london.cisco.com). Do not enter the @ symbol; Cisco Unity automatically inserts it. The Domain Name that you enter here must match the Domain Name of the corresponding primary location on the remote Cisco Unity server.
- Step 9** Click the **Save** icon.
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Creating Internet Subscriber Accounts

You can create Internet subscriber accounts by using the Cisco Unity Bulk Import wizard or the Cisco Unity Administrator. See the following sections:

- [Before Creating Internet Subscriber Accounts, page 3-10](#)
- [Using the Cisco Unity Bulk Import Wizard to Create Multiple Internet Subscriber Accounts, page 3-11](#)
- [Using the Cisco Unity Administrator to Create Internet Subscriber Accounts, page 3-14](#)
- [After Creating Internet Subscriber Accounts, page 3-15](#)

Before Creating Internet Subscriber Accounts

This section lists—in order—the issues that you must consider before creating Internet subscriber accounts.

1. Cisco Unity Configuration and Permissions

If you are unsure whether the account that you are using has sufficient rights and permissions to create Internet subscribers, or whether Cisco Unity is properly configured to work with your message store, use the following procedure to run the SysCheck diagnostic tool.

To Check Cisco Unity Setup and Permissions by Using the Cisco Unity SysCheck Tool

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- Step 1** On the Cisco Unity server desktop, double-click the **Cisco Unity Tools Depot** icon.
 - Step 2** In the left pane of the Tools Depot window, in the Diagnostic Tools directory, double-click **SysCheck**.
 - Step 3** On the Welcome to the Cisco Unity Configuration Wizard page, click **Select Configuration Tests**, and click **Next**.
 - Step 4** Uncheck the check boxes for the message stores that are not connected to Cisco Unity.
 - Step 5** Click **Test**.
 - Step 6** In the Test Results box, click the link provided to view the test results.
 - Step 7** If no errors are reported, proceed to [Step 8](#). Otherwise, do the following sub-steps:
 - a. Follow the advice offered in the Resolution column to correct each configuration or permissions error.
 - b. Return to the Completing the Check Unity Configuration Wizard page, and click **Finish**.
 - c. Repeat [Step 2](#) through [Step 7](#) until no errors are reported.
 - Step 8** Click **Finish**.
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2. Classes of Service

A class of service (COS) defines limits and permissions for subscribers who use Cisco Unity. For example, a COS dictates the maximum length of subscriber messages and greetings. Although most COS settings are not applicable to Internet subscribers, they still must be members of a COS. In the Cisco Unity Administrator, a COS is specified in each subscriber template; thus, a subscriber is assigned to the COS that is specified in the template upon which the Internet subscriber account is based. Cisco Unity includes predefined classes of service, which you can modify. You can also create new classes of service. For details, refer to the “Class of Service Settings” chapter in the *Cisco Unity System Administration Guide*.

3. Restriction Tables

Each COS specifies a restriction table for call transfers, one for message notification, and one for fax deliveries. Cisco Unity applies the restriction table associated with the COS of a subscriber, and displays an error message if the phone number is not allowed. Cisco Unity comes with predefined restriction tables, which you can modify.

Although most restriction table settings do not apply to Internet subscribers because they cannot log on to Cisco Unity or use the Cisco Personal Communications Assistant (PCA), administrators can enter call transfer numbers for Internet subscribers. For security purposes, you should modify the restriction table used for transfers in the COS to which Internet subscribers belong, as necessary. For details, refer to the “Restriction Tables” chapter in the *Cisco Unity System Administration Guide*.

4. Public Distribution Lists

Public distribution lists are used to send voice messages to multiple subscribers at the same time. Cisco Unity assigns new subscribers to the public distribution lists that are specified in the template on which the Internet subscriber account is based. For details, refer to the “Public Distribution List Settings” chapter in the *Cisco Unity System Administration Guide*.

5. Subscriber Templates

In the Cisco Unity Administrator, you can specify settings for a group of Internet subscribers by using a subscriber template. Subscriber templates contain settings that are applicable for subscribers of a particular type, such as a department. The settings from the template you choose are applied to Internet subscriber accounts as they are created. Cisco Unity comes with a default subscriber template, which you can modify, and you can create an unlimited number of additional templates. For more details, refer to the “Subscriber Template Settings” chapter in the *Cisco Unity System Administration Guide*.

Internet subscribers correspond to contacts in Active Directory and to custom recipients in Exchange 5.5. The contacts/custom recipients are listed in the address book for Microsoft Outlook (or other e-mail client), unless they are explicitly hidden. You may prefer that the associated contacts/custom recipients do not appear in the Outlook address book at all, or you may want to alter how contacts appear in the Outlook address book. See the “Determining How Internet Subscribers Appear in the Outlook Address Book” section on page 3-23 for details.

**Note**

The *Cisco Unity System Administration Guide* is available at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity40/sag/sag404/ex/index.htm.

Using the Cisco Unity Bulk Import Wizard to Create Multiple Internet Subscriber Accounts

The Cisco Unity Bulk Import wizard allows you to create multiple Internet subscriber accounts at once by importing user data directly from the Exchange 5.5 directory or Active Directory, or by importing user data from a comma-separated value (CSV) file. CSV is a common text file format for moving data from one data store to another.

As long as the user data contained in the CSV file is formatted correctly, you can use it to create new contacts or custom recipients at the same time that you create Internet subscriber accounts. (If Cisco Unity uses an Exchange 2000 server as its partner server, a contact is created in Active Directory. If Cisco Unity uses an Exchange 5.5 server as its partner server, a custom recipient is created in the Exchange 5.5 directory.) Alternatively, the Cisco Unity Bulk Import wizard allows you to use a CSV file to create Internet subscriber accounts with existing contact or custom recipient data.

To create Internet subscriber accounts by importing user data directly from Exchange, see the “To Create Internet Subscriber Accounts by Using the Cisco Unity Bulk Import Wizard” procedure on page 3-13. Otherwise, use the following procedure to prepare your CSV file. Refer to the Cisco Unity Bulk Import wizard Help to find additional information about using the wizard to create Internet subscriber accounts, or about the required and optional column headers for your CSV file.

To Prepare a CSV File for Creating Internet Subscriber Accounts

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- Step 1** Save the data which you will use to create Cisco Unity accounts as a CSV file.
- As a best practice, do not include more than 7,500 records in a single CSV file, as you may encounter unexpected results when the Cisco Unity Bulk Import wizard imports the data.
- Step 2** Copy the CSV file to the Cisco Unity server or to a directory that you can browse to from the server.

- Step 3** Open the CSV file in a spreadsheet application or another application with which you can edit and reorganize the data. Do the following:
- Confirm that the data is separated by commas, and no tabs, spaces, or semicolons separate the data in the file.
 - If any data includes a space, quotes, or commas, contain it within quotes.

- Step 4** Rearrange the data so that the columns are in the same order as the column headers that you will add in [Step 5](#). The order of the column headers does not matter, though it is a good practice to set up your CSV file as indicated here.

For example, the columns of data in this sample are sorted so that the last name of the user is followed by the first name, and then by the remote address (the example data below varies whether you use the VOICE or the SMTP format):

```
Abade,Alex,VOICE:123_5678
Bader,Kelly,VOICE:123_4789
Campbell,Terry,VOICE:123_8521
Cho,Li,VOICE:123_3214
```

Or

```
Abade,Alex,SMTP:aabade@cisco.com
Bader,Kelly,SMTP:kbader@cisco.com
Campbell,Terry,SMTP:tcampbell@cisco.com
Cho,Li,SMTP:lcho@cisco.com
```



Note The examples in this procedure illustrate how to set up a CSV file so that the Cisco Unity Bulk Import wizard creates Internet subscriber accounts and new contacts or custom recipients at the same time. If you choose to create new Internet subscriber accounts with existing contacts or custom recipient data, you must also include the ALIAS column header and data in your CSV file.

- Step 5** Enter the required column headers above the first row of data. Column headers must be in uppercase, separated by commas, and spelled as indicated below:
- ```
LAST_NAME,FIRST_NAME,REMOTE_ADDRESS
```
- Step 6** If desired, add optional column headers to the first row, and the corresponding data that you want to import in the subsequent rows below. As you do so, confirm that:
- Column headers and data are separated by commas. Note that each row does not have to contain data for each optional column header.
  - Any data that includes a space, quotes, or commas is contained within quotes.
- Step 7** If your CSV file contains columns of data that you do not want to import, delete the columns. Alternatively, you can title one column **NOTES**. The Cisco Unity Bulk Import wizard ignores data beneath any NOTES column header, but the wizard does not support more than one NOTES column in a CSV file.
- Step 8** Confirm that each row contains the applicable data corresponding to each column header.
- Step 9** Save the file as a CSV file.
- Step 10** Continue with the following [“To Create Internet Subscriber Accounts by Using the Cisco Unity Bulk Import Wizard”](#) procedure.

**Note**

Before you run the Cisco Unity Bulk Import wizard, disable virus-scanning services and intrusion-detection software on the Cisco Unity server, if applicable. Otherwise, the Cisco Unity Bulk Import wizard may run slowly. See the Cisco Unity Bulk Import wizard Help for procedures.

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**To Create Internet Subscriber Accounts by Using the Cisco Unity Bulk Import Wizard**

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- Step 1** On the Cisco Unity server, on the Windows Start menu, click **Programs > Cisco Unity > Cisco Unity Bulk Import**.
- Step 2** Follow the on-screen instructions.
- To learn more about the options presented in the dialog boxes that appear as the wizard proceeds, click **Help**.
- Step 3** When prompted to choose the type of subscriber that you want to create, click **Internet**.
- Step 4** Click **Next**, and proceed through the wizard. If the wizard reports any errors, you can:
- Click **OK** to continue with the import, and fix the errors later.
  - Fix the errors. See the [“Correcting Import Errors”](#) section on page 3-13 for details.
- Step 5** After the Internet subscriber accounts are created, click **Finish**.
- Step 6** If you had import errors, but in [Step 4](#) you chose to correct them later, see the [“Correcting Import Errors”](#) section on page 3-13.
- If you had no import errors, or if all errors have now been corrected, see the [“After Creating Internet Subscriber Accounts”](#) section on page 3-15.
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## Correcting Import Errors

The error log file contains data that the Cisco Unity Bulk Import wizard could not import. The Cisco Unity Bulk Import wizard reports the first error it detects in any user mailbox or row in a CSV file. After you correct that error, the wizard may detect additional errors in the same mailbox or row when the data is imported again. Thus, you may need to repeat the correction process—running the Cisco Unity Bulk Import wizard and correcting an error—several times to find and correct all errors.

The output log file contains all the records that were not imported. You can save it as a CSV file, and use it when you run the Cisco Unity Bulk Import wizard again. Note that each time you run the Cisco Unity Bulk Import wizard, the error and output log files are overwritten (unless you specify new names for the files).

To correct import errors, use one of the following procedures: [“To Correct Errors That Occurred When Importing Data from a CSV File,”](#) or [“To Correct Errors That Occurred When Importing Data from the Message Store.”](#)

---

**To Correct Errors That Occurred When Importing Data from a CSV File**

---

- Step 1** Browse to the directory location of the error log file you specified during the import. (The default location and file name is C:\Error.log.)
- Step 2** Use a text editor to open the error log file. You will use the error codes in the file to make corrections.

- Step 3** Browse to the directory location of the output log file you specified during the import. (The default location and file name is C:\Output.log.)
  - Step 4** Use a text editor to open the output log file.
  - Step 5** Correct any records in the output file that are listed as errors in the error log file.
  - Step 6** When you have finished editing the output log file, save it as a CSV file with a new name.
  - Step 7** Run the Cisco Unity Bulk Import wizard again with the CSV file that you saved in [Step 6](#).
  - Step 8** Repeat this procedure until all Internet subscriber accounts are created without error, and then proceed to the [“After Creating Internet Subscriber Accounts”](#) section on page 3-15.
- 

#### To Correct Errors That Occurred When Importing Data from the Message Store

---

- Step 1** Browse to the directory location of the error log file you specified during the import. (The default location and file name is C:\Error.log.)
  - Step 2** Use a text editor to open the error log file. You will use the error codes in the file to make corrections.
  - Step 3** When importing data from Exchange 5.5, open the **Microsoft Exchange Administrator**. When importing data from Exchange 2000, open **Active Directory Users and Computers**.
  - Step 4** Double-click a mailbox that contains an error to see the properties.
  - Step 5** Enter corrections in the applicable boxes in the mailbox.
  - Step 6** Click **OK**.
  - Step 7** Repeat [Step 4](#) through [Step 6](#) for each mailbox listed in the error log file.
  - Step 8** Run the Cisco Unity Bulk Import wizard again.
  - Step 9** Repeat this procedure until all Internet subscriber accounts are created without error, and then proceed to the [“After Creating Internet Subscriber Accounts”](#) section on page 3-15.
- 

## Using the Cisco Unity Administrator to Create Internet Subscriber Accounts

By using the Cisco Unity Administrator, you can create an Internet subscriber account by adding a new account, or by importing existing account data for a user from Exchange. When you add a new Internet subscriber account, Cisco Unity creates a contact or custom recipient. (If Cisco Unity uses an Exchange 2000 server as its partner server, a contact is created in Active Directory. If Cisco Unity uses an Exchange 5.5 server as its partner server, a custom recipient is created in the Exchange 5.5 directory.)

To create an Internet subscriber account, do one of the following procedures: [“To Create an Internet Subscriber Account by Adding a New Contact or Custom Recipient,”](#) or [“To Create an Internet Subscriber Account by Importing Existing User Data.”](#)

#### To Create an Internet Subscriber Account by Adding a New Contact or Custom Recipient

---

- Step 1** In the Cisco Unity Administrator, go to the **Subscribers > Subscribers > Profile** page.
- Step 2** Click the **Add** icon.
- Step 3** Click **New Subscriber**, and then select **Internet** from the list.
- Step 4** Enter the First Name and Last Name.

- Step 5** Enter the Extension of the Internet subscriber on Cisco Unity. This is the number that other Cisco Unity subscribers use when addressing a message to the Internet subscriber you are about to create.
- Step 6** Select the Subscriber Template to use.
- Step 7** Enter the SMTP Address in the applicable format.
- Step 8** Click **Add**.
- Step 9** On the subscriber record, customize settings as applicable, and then click the **Save** icon.
- 

#### To Create an Internet Subscriber Account by Importing Existing User Data

---

- Step 1** In the Cisco Unity Administrator, go to the **Subscribers > Subscribers > Profile** page.
- Step 2** Click the **Add** icon.
- Step 3** Select **Import Existing Exchange User**.
- Step 4** Click **Select**.
- Step 5** Select **Internet**.
- Step 6** In the Find By list, indicate whether to search by first name, last name, or Exchange alias. When Cisco Unity is connected to an Exchange 2000 server, you can also indicate the domain for the search.
- Step 7** Enter the applicable name or alias. You also can enter \* to display a list of all users, or enter one or more characters followed by \* to narrow your search.
- Step 8** Click **Find**.
- Step 9** On the list of matches, click the name of the user to import.
- Step 10** Enter the applicable information on the Add Subscriber page.
- Step 11** Click **Add**.
- Step 12** On the subscriber record, customize settings as applicable, and then click the **Save** icon.
- 

## After Creating Internet Subscriber Accounts

After creating Internet subscriber accounts, consider the following:

- It takes a few minutes for a newly-created Internet subscriber to be available to receive messages.
- You can make changes to the settings for individual Internet subscriber accounts in the Cisco Unity Administrator. For details, refer to the “Subscriber Settings” chapter in the *Cisco Unity System Administration Guide*. The *Cisco Unity System Administration Guide* is available at [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_unity/unity40/sag/sag404/ex/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity40/sag/sag404/ex/index.htm).  
When you want to modify settings for multiple subscribers at once, you can (re)run the Cisco Unity Bulk Import wizard. To learn more, refer to the Cisco Unity Bulk Import wizard Help.
- When a subscriber leaves the organization or otherwise no longer needs a Cisco Unity account, you can delete the Internet subscriber account. See the “Deleting Internet Subscribers” section on page 3-22 for details.

# SMTP Networking Concepts and Definitions

The following sections explain SMTP Networking concepts in detail:

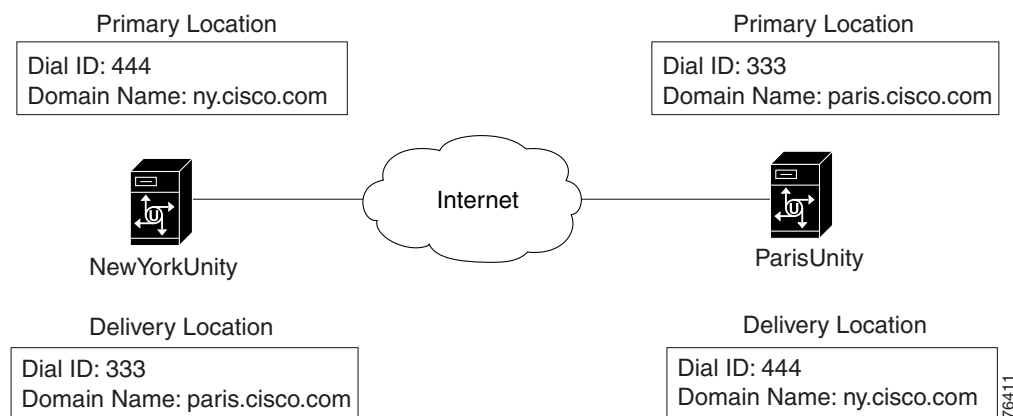
- [Locations and SMTP Networking, page 3-16](#)
- [Voice Connector and SMTP Networking, page 3-17](#)
- [Message Addressing Options, page 3-18](#)
- [Blind Addressing and SMTP Networking, page 3-18](#)
- [Internet Subscribers, page 3-19](#)
- [Determining How Internet Subscribers Appear in the Outlook Address Book, page 3-23](#)
- [Considerations for Networked Cisco Unity Servers, page 3-24](#)

## Locations and SMTP Networking

The Cisco Unity objects called locations play a key role in messaging between Cisco Unity servers that access separate directories. Each Cisco Unity server is associated with a location referred to as the default or primary location, which is created during installation and which cannot be deleted. When setting up SMTP Networking, you give the primary location a new name and a Dial ID, enter a Domain Name, and customize other properties as applicable.

As [Figure 3-1](#) illustrates, you create an SMTP delivery location on the local Cisco Unity server to correspond to each remote Cisco Unity server. The Dial ID and Domain Name that you enter on the delivery location must match the corresponding Dial ID and Domain Name for the primary location on the remote Cisco Unity server and vice versa. With the Dial IDs and Domain Names, Cisco Unity has the information it needs to exchange messages with remote Cisco Unity servers.

**Figure 3-1 Relationship Between Primary and SMTP Delivery Locations**



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## Voice Connector and SMTP Networking

Cisco Unity makes use of the standard Exchange SMTP Connector to provide messaging among Cisco Unity servers that access separate directories, and to individuals who do not use Cisco Unity. (In Exchange 5.5, the SMTP Connector is called the Internet Mail Service.) The SMTP Connector provides the ability to send and receive messages through the Internet to computers that support SMTP, which means that messages can be sent to both Exchange and non-Exchange mail servers.

The Cisco Unity Voice Connector allows Cisco Unity systems to send and receive SMTP mail while preserving the Cisco Unity-specific attributes in the voice messages. These attributes allow Cisco Unity to handle messages as voice messages. The Voice Connector is registered with Exchange to handle messages with the VOICE address type, so all messages to remote recipients must have VOICE in the address.

When a subscriber sends a voice message to someone at another location, the Voice Connector converts the voice message to MIME. The Exchange SMTP Connector can then send the message with all associated information.

On the receiving Cisco Unity server, because the message address type is VOICE, Exchange gives the message to the Voice Connector to handle. The Voice Connector converts the MIME message back to a voice message. When the message is delivered to the recipient Exchange mailbox, it is identified as a voice message, and Cisco Unity lights the MWI lamp on the recipient phone. The recipient can access the message just like any other voice message, by using the phone, ViewMail for Microsoft Outlook, or the Cisco Unity Inbox.

There are two versions of the Voice Connector. The version that you use depends on your Exchange network:

- When your network consists only of Exchange 5.5 servers, you install the Voice Connector for Exchange 5.5.
- When your network consists only of Exchange 2000 or Exchange 2003 servers, or a mixture of Exchange 2000 or Exchange 2003 and Exchange 5.5 servers, you install the Voice Connector for Exchange 2000.

**Note**

---

The Voice Connector for Exchange 2000 can be installed on an Exchange 2000 or Exchange 2003 server.

---

**Caution**

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If your network consists of both Exchange 5.5 and Exchange 2000 or Exchange 2003 servers, do not use the Exchange 5.5 Administrator to manage the Voice Connector for Exchange 2000. Use the Exchange 2000 or Exchange 2003 System Administrator to manage the Voice Connector. To avoid system errors, use the Exchange 5.5 Administrator to configure Exchange 5.5 objects, and use the applicable MMC snap-in to configure Exchange 2000 or Exchange 2003 objects.

---

For more information about the SMTP Connector, refer to your Exchange documentation.

See the [“Setting Up the Voice Connector for SMTP Networking”](#) section on page 3-5 for information about setting up the Voice Connector.

## Message Addressing Options

Cisco Unity provides two methods for addressing messages to subscribers and to others who do not have mailboxes on the local Exchange network:

- **Blind addressing**—Allows subscribers on the local Cisco Unity server to send messages to subscribers on a remote Cisco Unity server even though the recipient extension, name, and recorded name are not in the directory. Even though Cisco Unity cannot provide voice name confirmation (hence the term “blind addressing”), the message is addressed and sent. The subscribers on the remote Cisco Unity server receive voice messages. See the [“Blind Addressing and SMTP Networking” section on page 3-18](#) for more information.
- **Internet subscribers**—Allows messaging to recipients on computers that may or may not be using Cisco Unity. Subscribers on the local Cisco Unity server address messages to Internet subscribers the same way that they address messages to regular subscribers—by extension or spelled name. See the [“Internet Subscribers” section on page 3-19](#) for more information.

## Blind Addressing and SMTP Networking

Blind addressing allows subscribers on the local Cisco Unity to send voice messages to subscribers on a remote Cisco Unity server even though the recipient extension, name, and recorded name are not in the directory. One of the steps to setting up blind addressing is to adjust the Blind Addressing setting on the Primary Location > Addressing Options page. You also create an SMTP delivery location that corresponds to each remote Cisco Unity server with which the local Cisco Unity server communicates.

When addressing a message with blind addressing, subscribers dial a number that consists of the Dial ID of the SMTP delivery location and the extension of the recipient on the remote Cisco Unity server. Note that the extension must be the primary extension for the recipient; alternate extensions do not work with blind addressing. Before addressing the message, Cisco Unity parses the number that the subscriber entered and searches for a matching delivery location. If Cisco Unity does not find a matching location, it reports the error to the sender and does not address the message. If a matching delivery location is found, Cisco Unity addresses the message without verifying that the remote extension exists. However, Cisco Unity does provide voice name confirmation that the delivery location exists before addressing the message (assuming a voice name was recorded for the delivery location).

For example, assume the primary and SMTP delivery locations have been set up as illustrated in [Figure 3-1 on page 3-16](#). A subscriber on the New York Cisco Unity server presses 3335067 on the phone to address a message to Chris Durand in Paris, whose extension is 5067. Cisco Unity searches the directory and finds that there is a delivery location with the Dial ID 333.

The 333 delivery location contains the domain name paris.cisco.com, so the Voice Connector constructs the To address SMTP:IMCEAVOICE-333\_5067@paris.cisco.com. In order for Chris Durand to receive the message, the primary location on the Paris Cisco Unity server must have 333 as the Dial ID and paris.cisco.com as the Domain Name. Additionally, the primary extension for Chris must be 5067 (alternate extensions are not supported with blind addressing).



### Note

Internet Mail Connector Encapsulated Addressing (IMCEA) is used to route messages to the Voice Connector. IMCEA is an Exchange feature that allows for messages to be classified into different address types by using SMTP. Each address type is routed within the Exchange Organization to a connector that can support it. The Voice Connector is registered with Exchange to handle messages with the VOICE address type.

## Subscriber Experience with Blind Addressing

Because blind-addressed messages are sent and received as voice messages:

- Subscribers can address messages by using the phone, ViewMail for Microsoft Outlook, or the Cisco Unity Inbox. To address a message by using ViewMail and the Cisco Unity Inbox, subscribers enter the blind address in the following format (the underscore and the brackets are required): [VOICE:<Location Dial ID>\_<Extension>]
- Cisco Unity lights the MWI lamp on the recipient phone.
- Recipients can listen to the messages by using the phone, ViewMail, or the Cisco Unity Inbox.
- Recipients can reply to the messages.
- Urgent messages are received as urgent messages.
- Private messages are received as private.
- Requests for return receipts are honored.

Because your Cisco Unity server does not have access to the names, extensions, recorded voice names and e-mail addresses of the subscribers at other locations, subscribers will encounter some limitations with blind addressing, as follows:

- When addressing a message, the sender does not get voice name confirmation. Cisco Unity cannot verify that the entered number is correct, so subscribers may inadvertently address a message to the wrong person or to a non-existent extension. However, subscribers will receive a non-delivery receipt (NDR) if the entered number turns out to be invalid.
- When addressing a message, the sender cannot use spelled-name mode; the delivery location Dial ID and extension of the recipient must be entered.
- Blind addresses cannot be added to distribution lists.
- When the recipient checks messages, the message is not identified as coming from another subscriber, but from an unidentified caller. (However, if there is an Internet subscriber on the receiving Cisco Unity server that corresponds to the sending subscriber, the message is identified as being from the Internet subscriber. See the [“Internet Subscribers That Correspond to Remote Cisco Unity Subscribers”](#) section on page 3-20.)

## Internet Subscribers

Internet subscribers are a representation in Cisco Unity of users who do not have mailboxes on the local Exchange network. Instead, messages for Internet subscribers are sent to an e-mail address that you specify when you create the Internet subscriber account. Internet subscribers are created in Cisco Unity to enable Cisco Unity subscribers to find them in the directory and send messages as they would to any other subscriber. If the remote message recipients do not use Cisco Unity, they receive voice messages as e-mails with attached WAV files. If they use Cisco Unity, and the Voice Connector has been installed, they receive voice messages.

Internet subscribers are represented as custom recipients in Exchange 5.5 and as mail-enabled contacts in Active Directory. You create and manage Internet subscriber accounts in much the same way that you do regular subscriber accounts. For example, you can set call transfer settings for Internet subscribers.

Other than receiving messages (and possibly calls), Internet subscribers do not have access to other Cisco Unity features, and some sections of the Cisco Unity Administrator are disabled for Internet subscribers. Internet subscribers:

- Cannot log on to Cisco Unity by phone to check or send messages.

- Cannot log on to Cisco Unity by phone—or use the Cisco Unity Assistant—to adjust personal settings, so their recorded names and greetings can only be recorded or changed in the Cisco Unity Administrator. (Note that in version 3.1 and earlier, the Cisco Unity Assistant was known as the ActiveAssistant, or AA.)
- Cannot use ViewMail for Microsoft Outlook or the Cisco Unity Inbox. (Note that in version 3.1 and earlier, the Cisco Unity Inbox was known as the Visual Messaging Interface or VMI.)
- Cannot own private lists.
- Cannot set up or receive message notifications.
- Cannot receive message waiting indications.

## Internet Subscribers That Correspond to Remote Cisco Unity Subscribers

If your organization uses multiple Cisco Unity servers that access separate directories, you can create Internet subscriber accounts on the local server that correspond to subscribers on the remote Cisco Unity server(s). Similarly, the remote Cisco Unity server(s) can create Internet subscriber accounts that correspond to the subscribers on your local server.

In effect, you manually duplicate the subscriber directory of the remote Cisco Unity server on the local server, and vice versa. Such a setup provides the benefits listed in the [“Subscriber Experience with Internet Subscribers”](#) section on page 3-22. Additionally, because the messages are sent and received as voice messages:

- Cisco Unity lights the MWI lamp on the recipient phone.
- Recipients can listen to the messages by using the phone, ViewMail, or the Cisco Unity Inbox.
- Urgent messages are received as urgent messages.
- Private messages are received as private.
- Requests for return receipts are honored.

Creating Internet subscriber accounts on both the local and remote servers avoids the limitations of blind addressing. You may decide to do this in the following circumstances:

- When subscribers want voice name confirmation when addressing messages to subscribers on the remote Cisco Unity server.
- When the recipients at the remote location need to be included on public or private distribution lists that are created on the local Cisco Unity server.
- When unidentified callers need to be able to call the local Cisco Unity server to leave a message for a subscriber associated with another Cisco Unity server. You may want to do this, for example, to provide a way for customers to avoid long distance charges when leaving a message for a sales representative who is associated with a remote Cisco Unity server.

Because of the administrative overhead of setting up and maintaining many Internet subscriber accounts, you may prefer a combination of blind addressing for most employees, and Internet subscriber accounts only for a few select subscribers. For example, you might want to set up Internet subscriber accounts for the senior sales staff of each location, but have other employees use blind addressing.

In order to set up Internet subscriber accounts that correspond to remote Cisco Unity subscribers, you need to create the applicable SMTP delivery locations (see [Figure 3-2 on page 3-22](#)). When you create the Internet subscriber accounts, give them SMTP addresses in the following format:

VOICE:<Delivery Location Dial ID>\_<Primary Extension>

For example, if the SMTP address is VOICE:123\_5678:

- VOICE indicates that the remote message recipient uses Cisco Unity. Messages with the VOICE address type are processed by the Voice Connector on both the sending and receiving systems.
- 123 is the Dial ID of the SMTP delivery location on the local Cisco Unity server. A mandatory underscore (\_) follows the Dial ID.
- 5678 is the primary extension of the subscriber on the remote Cisco Unity server (alternate extensions are not supported).

**Note**

The Voice Connector uses the domain name from the specified delivery location to form an address for the Internet subscriber. If the address that you enter here contains a domain name, it is ignored when the message is addressed.

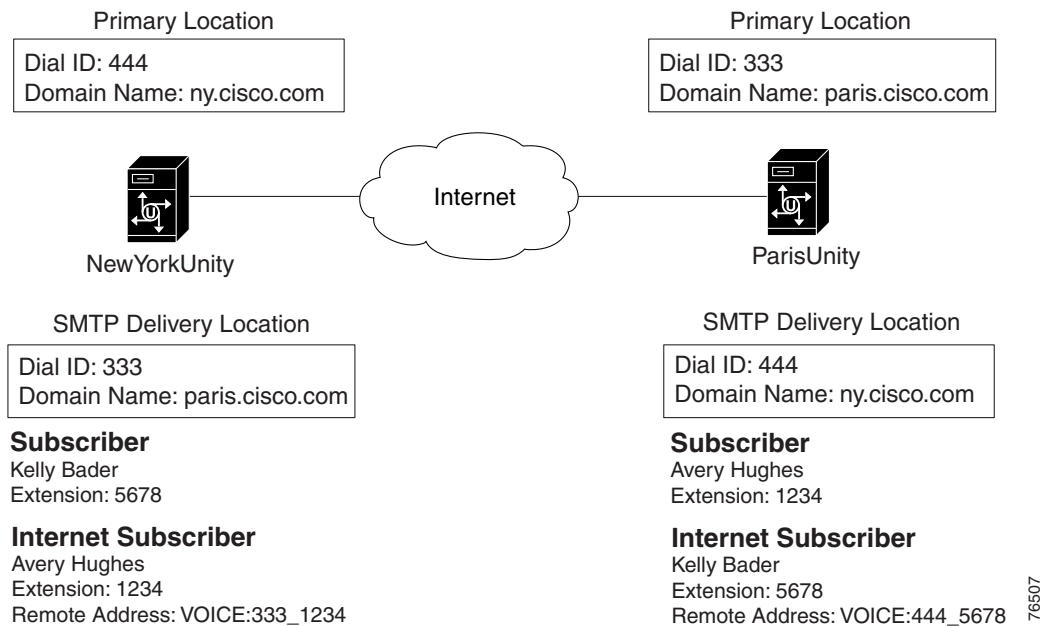
Carefully consider the Dial IDs that you assign to primary and delivery locations. At any time after the Internet subscriber accounts have been created, if the Dial ID of a primary location is changed:

- The Dial ID of the remote SMTP delivery location on the remote Cisco Unity server(s) must be updated to match the new primary location Dial ID.
- The SMTP addresses for all associated Internet subscribers must be updated manually one at a time. There is no utility to help with this change.

See [Figure 3-2](#). In this example, on the New York Cisco Unity server, Kelly Bader addresses a message to Avery Hughes by dialing 1234. Cisco Unity does a directory lookup to obtain the address, and determines this is an Internet subscriber. The message is addressed to VOICE:333\_1234 and is handed off to Exchange. Because of the VOICE address type, Exchange gives the message to the Voice Connector. The Voice Connector converts the message to MIME, and then searches for a delivery location 333. It finds the SMTP delivery location, and changes the To address to SMTP:IMCEAVOICE-333\_1234@paris.cisco.com. It also changes the From address to SMTP:IMCEAVOICE-444\_5678@ny.cisco.com. Then the Voice Connector sends the message back to Exchange, which sends it through the SMTP gateway.

On the receiving side, Exchange gives the message to the Voice Connector for processing. The Voice Connector converts the MIME message back to a voice message, and then searches for a subscriber with the primary extension 1234 associated with the primary location 333. It finds Avery Hughes, and changes the To address appropriately so that Exchange can deliver the message. The Voice Connector uses the From address and searches for a matching Internet subscriber. It finds the Internet subscriber Kelly Bader, and changes the From address appropriately so that Cisco Unity can play the recorded voice name when Avery listens to the message. The Voice Connector hands the message back to Exchange, and the voice message is delivered to Avery.

Figure 3-2 Internet Subscribers That Correspond to Remote Cisco Unity Subscribers



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## Deleting Internet Subscribers

Each Internet subscriber is associated with a directory object, which is either an Active Directory contact or an Exchange 5.5 custom recipient. When you delete Internet subscribers in the Cisco Unity Administrator, you are offered the option to delete the associated directory objects.

## Subscriber Experience with Internet Subscribers

Provided that Internet subscribers have extensions, are listed in the phone directory, and have had voice names and greetings recorded for them:

- Subscribers can address messages to Internet subscribers by using the phone, ViewMail, or the Cisco Unity Inbox.
- Contacts that correspond to Internet subscribers are included in Exchange address lists, which means that they are listed in the Outlook address book (unless the contact has been explicitly prevented from appearing there) and the Cisco Unity Inbox address book. Therefore, message addressing to Internet subscribers—either by using Outlook or the Cisco Unity Inbox—is the same as for regular subscribers.
- When using the phone, subscribers can address messages to Internet subscribers by spelled-name mode (if enabled on the system) or by extension.
- Subscribers get voice name confirmation when addressing a message to an Internet subscriber.
- Internet subscribers can be added to distribution lists.
- If the remote message recipient does not use Cisco Unity, the subscriber who sent the message will receive a reply as an e-mail with a WAV attachment. If the remote message recipient uses Cisco Unity, the reply will be a voice message.

Extensions are optional for Internet subscribers whereas they are mandatory for regular subscribers. If an extension has not been assigned to an Internet subscriber:

- The Internet subscriber cannot be listed in the phone directory.
- Unidentified callers will be unable to leave messages for the Internet subscriber.
- When addressing messages to the Internet subscriber, subscribers are limited to spelled-name mode, provided that the Internet subscriber has a recorded voice name. If neither an extension nor a voice name has been set, messages cannot be addressed to the Internet subscriber.

## Determining How Internet Subscribers Appear in the Outlook Address Book



### Note

If the extension address for an Internet subscriber begins with “SMTP,” and thus the Internet subscriber does not represent a remote Cisco Unity subscriber, e-mail can be sent to the associated contact. However, if the extension address for an Internet subscriber begins with “VOICE,” and thus the Internet subscriber corresponds to a remote Cisco Unity subscriber, e-mail sent to the Internet subscriber will be rerouted to the Voice Connector, which will return the message as non-deliverable.

To discourage people from inadvertently sending e-mail messages to Internet subscribers, you can prevent the associated contact (or custom recipient) from appearing in the Outlook address book. Alternatively, you can change how the display name for the contact appears in the Outlook address book so that subscribers can distinguish the contact from a user account. In this way, you can reduce the number of e-mail messages inadvertently sent to contacts and simplify addressing for those who send voice messages to Internet subscribers at the same time.

If you prefer that the associated contacts for subscribers do not appear in the Outlook address book at all, see the [“Preventing Contacts From Appearing in the Outlook Address Book”](#) section on page 3-23.

Alternatively, if you want to alter how contacts appear in the Outlook address book, see the [“Modifying How Contacts Appear in the Outlook Address Book”](#) section on page 3-24.

## Preventing Contacts From Appearing in the Outlook Address Book

Either before or after you create Internet subscriber accounts, you can prevent the associated contact (or custom recipient) from appearing in the Outlook address book by hiding the contacts from Exchange address lists. When you do so, Exchange will still deliver e-mail messages addressed to an existing user account (if one exists) and to the contact. However, the number of e-mail messages sent to the contact may be reduced because subscribers cannot inadvertently pick the contact from the Outlook address book when addressing messages to them.

The method by which you prevent subscribers from appearing in Outlook address books varies depending on your version of Exchange:

### Cisco Unity with Exchange 5.5

To prevent subscribers from appearing in Outlook address books, you can use either the Cisco Unity Administrator, Bulk Edit, or Microsoft Exchange 5.5 Administrator:

- To do so in the Cisco Unity Administrator, uncheck the Show Subscriber In E-Mail Server Address Book check box on the Profile page for the subscriber template that you plan to use when creating Internet subscribers, or on individual subscriber Profile pages after you have created the subscriber accounts.
- To do so by using the Bulk Edit utility, refer to the Bulk Edit utility Help.

- To do so in the Microsoft Exchange 5.5 Administrator, double-click a recipient, and then check the Hide From Address Book check box on the Advanced tab.

### Cisco Unity with Exchange 2000 and Exchange 2003

To prevent subscribers from appearing in Outlook address books, you can use the Cisco Unity Administrator, the Cisco Unity Bulk Import wizard, Bulk Edit, or Windows Active Directory for Users and Computers:

- To do so in the Cisco Unity Administrator, uncheck the Show Subscriber In E-Mail Server Address Book check box on the Profile page for the subscriber template that you plan to use when creating Internet subscribers, or on individual subscriber Profile pages after you have created the subscriber accounts.
- To do so by using the Cisco Unity Bulk Import wizard or the Bulk Edit utility, refer to the Help for each tool.
- To do so in Windows Active Directory for Users and Computers, select View > Advanced Features to see the Exchange Advanced property page for a user, and then check the Hide From Exchange Address Lists check box on the Exchange Advanced tab.

## Modifying How Contacts Appear in the Outlook Address Book

As an alternative to preventing a contact (or custom recipient) from appearing in the Outlook address book altogether, you may want to alter the display name for the contact so that subscribers can distinguish the contact from the user account. For example, you could append “ - Voice mail” to the display name of each Internet subscriber, and the names would appear in the Outlook address book as follows:

```
Abade, Alex
Abade, Alex - Voice mail
Bader, Kelly
Bader, Kelly - Voice mail
Campbell, Terry
Campbell, Terry - Voice mail
Cho, Li
Cho, Li - Voice mail
```

In this way, subscribers can easily determine which address is appropriate to use when they send voice messages to Internet subscribers. Additionally, when subscribers use the Outlook address book to address a message to a contact, they can be confident that the address is formatted correctly.

## Considerations for Networked Cisco Unity Servers

A small subset of subscriber and distribution list data is stored in the directory, as is all location data. In organizations with multiple Cisco Unity servers networked together such that they access a common directory, the Cisco Unity-specific data replicates to all Cisco Unity servers in the network. Therefore, all Cisco Unity servers on the network have the information that subscribers need to address messages to a remote Cisco Unity server that is not on the network.

Because of directory replication, SMTP delivery locations and Internet subscriber accounts need to be created on only one Cisco Unity server in the network. If allowed by the primary location addressing options on each server, all subscribers, no matter which Cisco Unity server they are associated with, can

send messages to an SMTP delivery location or to an Internet subscriber created on another server. The Cisco Unity server configured for SMTP Networking acts as the “bridgehead” server for the other Cisco Unity servers in the network.

## SMTP Networking Reference

This section contains tables that define the fields in the Cisco Unity Administrator related to SMTP Networking setup, and briefly explains the options for correctly entering information in the fields.

### SMTP Delivery Location Profile Settings

SMTP delivery locations are Cisco Unity objects that contain the addressing information that Cisco Unity needs to send messages to a remote Cisco Unity server that is on a separate network. You create an SMTP delivery location that corresponds to each remote Cisco Unity server with which the local Cisco Unity server will communicate.

Use the following tables to learn more about the delivery location profile settings for an SMTP location.

**Table 3-1** Profile Settings Applicable to All Types of Delivery Locations

| Field | Considerations                                                                                                            |
|-------|---------------------------------------------------------------------------------------------------------------------------|
| Name  | This displays the name of the delivery location. To change the name, enter a new name here, and then click the Save icon. |

Table 3-1 Profile Settings Applicable to All Types of Delivery Locations (continued)

| Field         | Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dial ID       | <p>Enter the ID that identifies the location to Cisco Unity. Enter numbers only, up to a maximum of ten digits. The default minimum length is three digits.</p> <p>Although the minimum length for Dial IDs can be reduced by using the Advanced Settings Tool, one- and two-digit Dial IDs may conflict with private distribution list IDs during an address search. When a subscriber addresses a message by entering a one- or two-digit number, Cisco Unity first searches for a matching private distribution list. If a match is found, the search stops. Therefore, when a subscriber addresses a message by entering a location Dial ID (to narrow down the search scope to a particular location), if the number entered matches a private distribution list ID, the conversation offers only the private distribution list as a destination. If subscribers do not address messages to other locations by first entering a Dial ID, there is no conflict, and the minimum length for Dial IDs can be reduced to accommodate complex dial plans.</p> <p>When sending messages to a remote location, subscribers can dial a number that is made up of the Dial ID and the extension (or the remote mailbox number) of the recipient.</p> <p>When setting up SMTP networking with a Cisco Unity server in a different directory, the ID that you enter here must match the Dial ID of the primary location at the corresponding remote Cisco Unity server.</p> <p>The following policies are recommended:</p> <ul style="list-style-type: none"> <li>• Establish a fixed length for Dial IDs and if possible, a fixed length for extensions.</li> <li>• Assign unique Dial IDs. Dial IDs should not be the same as other Dial IDs or extensions.</li> <li>• Assign Dial IDs that have at least three-digits.</li> <li>• Use a different numbering range for Dial IDs than for extensions.</li> <li>• If you use variable-length Dial IDs, the first digits of each ID should be unique with respect to other Dial IDs.</li> </ul> |
| Recorded Name | <p>Record a name for the delivery location. The subscriber conversation plays this recorded name when the setting Include Locations in Searches on the Network &gt; Primary Location &gt; Addressing Options page is enabled. When subscribers address a message, the recorded name for this delivery location is played in the message addressing search results along with subscriber names. (For example: “There are two matches. For Chris Newton, press 1. For New York, press 2.”) Additionally, the subscriber conversation plays this recorded name when subscribers address messages by using blind addressing to this delivery location.</p> <p>To record the name here, use the Media Master control bar. (Note that the Media Master is not available across a firewall that blocks DCOM communications.) Use the Options menu in the Media Master control bar to set recording and playback devices, if applicable, and to use other sound files.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

**Table 3-1 Profile Settings Applicable to All Types of Delivery Locations (continued)**

| Field            | Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Destination Type | <p><i>Display only.</i> Indicates the type of delivery location. The Destination Type is specified when the delivery location is created, and it cannot be changed. The Destination Type is one of the following:</p> <ul style="list-style-type: none"> <li>• <b>SMTP</b>—Indicates that the delivery location corresponds to a remote Cisco Unity server that accesses a directory different than the local Cisco Unity server. Messages between the local and remote Cisco Unity servers are encoded in a proprietary format and delivered over the Internet or a private TCP/IP network by using the standard Simple Mail Transfer Protocol (SMTP).</li> <li>• <b>AMIS</b>—Indicates that the delivery location corresponds to an AMIS-compliant voice messaging system. Messages are sent by using the industry-standard Audio Messaging Interchange Specification analog (AMIS-a) protocol.</li> <li>• <b>Bridge</b>—Indicates that the delivery location corresponds to an Octel node in an Octel analog network. Messages are exchanged between Cisco Unity and the Octel system by using the Cisco Unity Bridge. Cisco Unity sends messages to the Bridge in Voice Profile for Internet Mail (VPIM) format with proprietary extensions. The Bridge converts the message format and sends it to the appropriate Octel server by using the Octel Analog Networking protocol.</li> <li>• <b>VPIM</b>—Indicates that the delivery location corresponds to a VPIM-compliant voice messaging system. Messages are sent by using the industry-standard VPIM protocol over the Internet or a private TCP/IP network.</li> </ul> |

**Table 3-2 Profile Settings Specific to SMTP Delivery Locations**

| Field       | Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Domain Name | <p>Enter the Internet-addressable SMTP domain name for the Cisco Unity server that corresponds to this delivery location. This is the right half of an e-mail address after the @ symbol (for example, london.cisco.com). Do not enter the @ symbol; Cisco Unity automatically inserts it.</p> <p>This field must match the SMTP Domain Name in the corresponding remote primary location. When subscribers on the local Cisco Unity server address messages to subscribers on the remote Cisco Unity server, the Voice Connector obtains the Domain Name to construct the To address in the following format:</p> <p>SMTP:IMCEAVOICE:&lt;Delivery Location Dial ID&gt;_&lt;Extension&gt;@&lt;DomainName&gt;</p> |

## Notable Behavior

This section describes notable behavior of SMTP Networking and Internet subscribers.

- [Internet Subscribers Are Not Identified](#), page 3-28
- [Call Transfer Settings and Internet Subscribers](#), page 3-28
- [Running the Voice Connector Setup Program in Another Language](#), page 3-29

## Internet Subscribers Are Not Identified

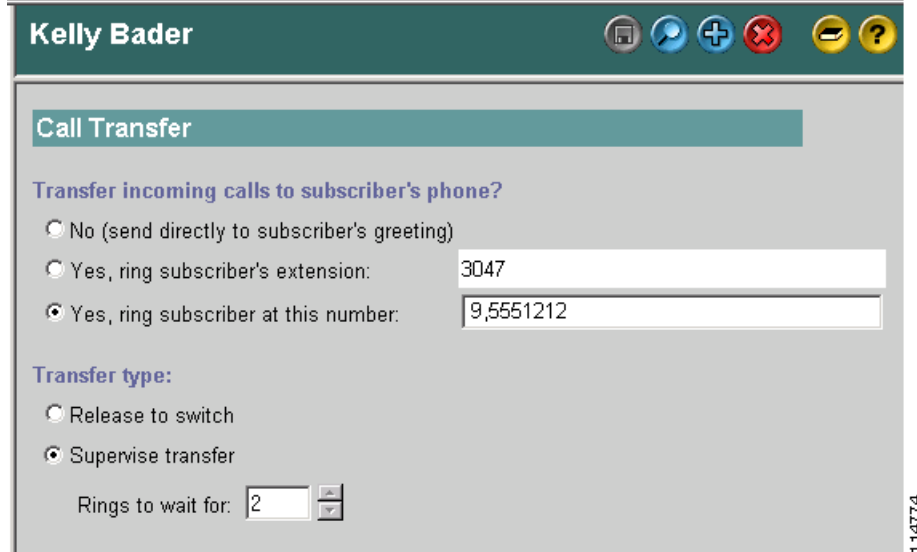
When a person who has a corresponding Internet subscriber account calls a Cisco Unity subscriber and leaves a message, Cisco Unity does not identify the message as being from the Internet subscriber. In this case, when the phone system forwards the call to Cisco Unity, the message is handled as though it came from an unidentified caller. This means that:

- Cisco Unity does not play the internal greeting of the subscriber when the caller leaves a message.
- Cisco Unity does not play the recorded voice name of the Internet subscriber when the called subscriber listens to the message.
- Cisco Unity does not allow the called subscriber to reply to the message.

## Call Transfer Settings and Internet Subscribers

In installations with multiple Cisco Unity servers networked via Digital Networking, the number that Cisco Unity uses for call transfers to a subscriber is the only number replicated among the Cisco Unity servers; none of the other settings on the Subscriber > Call Transfer page in the Cisco Unity Administrator are replicated. For example, in [Figure 3-3](#), call transfers are set to ring the subscriber at the number 9,5551212. The only call transfer setting that is replicated to other Cisco Unity servers is the call transfer number 9,5551212. If the setting was “Yes, ring subscriber’s extension” instead, the number 3047 would be replicated.

**Figure 3-3** Only the Call Transfer Number Is Replicated



When the call transfer setting is set to “No (send directly to subscriber’s greeting),” the call transfer number is automatically set to the subscriber extension (3047 in the example above), which is replicated to the other networked Cisco Unity servers.

Call transfers to Internet subscribers created on other Cisco Unity servers are always handled by the phone system (release to switch)—rather than by Cisco Unity (supervised transfer)—even if the subscribers are set up for supervised transfers (as in the above example). The release to switch call transfers happen when:

- A caller enters the extension of an Internet subscriber from the automated attendant (for example from the opening greeting), and the Internet subscriber account is on another Cisco Unity server.
- A caller spells the name of an Internet subscriber from a directory handler, and the Internet subscriber account is on another Cisco Unity server.

On a release to switch transfer, Cisco Unity dials the call transfer number configured for the Internet subscriber and hangs up, leaving the phone system to handle the call. Note the following limitations with release to switch transfers:

- The Internet subscriber call screening, call holding, and announce features are ignored.
- The call transfer setting “No (Send Directly to Subscriber's Greeting)” is ignored. Cisco Unity dials the Internet subscriber extension and hangs up. If the subscriber extension is a valid extension on the phone system that Cisco Unity is integrated with, then the subscriber phone rings. If the subscriber extension is not a valid phone extension, what happens to the call after that depends on the phone system and how it is configured. If you do not configure the phone system to handle calls to the subscriber extensions, the caller may be disconnected.

## Running the Voice Connector Setup Program in Another Language

The Voice Connector installation program does not prompt with a choice of languages for the installation; it always installs in English. To run the Voice Connector installation program by using one of the localized versions (FRA, DEU, or JPN) instead of English, do the following procedure.

### To Run the Voice Connector Setup Program in Another Language

- 
- Step 1** From the Cisco Unity installation DVD or CD 1, copy the entire VoiceConnector-Ex2000 or VoiceConnector-Ex55 directory (depending on which Voice Connector is required for your installation) to your hard disk.
  - Step 2** In this local directory, browse to the **LocalizedFiles\ENU** directory.
  - Step 3** Rename the CiscoUnity\_VoiceConnector.dll and SetupRes.dll files. (For example, rename the files CiscoUnity\_VoiceConnector\_ENU.dll and SetupRes\_ENU.dll.)
  - Step 4** Copy the files CiscoUnity\_VoiceConnector.dll and SetupRes.dll from the LocalizedFiles\<>XXX> directory (where <XXX> is your language of choice) to the Localized\ENU directory.
  - Step 5** Run **Install.exe** from the VoiceConnector-Ex2000 or VoiceConnector-Ex55 directory on your hard disk. The installation program should be presented in the language you chose.



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**Note** Only the installation program will be in this language; currently, the Event Log messages, logging, properties, and configuration settings are not localized.

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■ Notable Behavior