Setting Up Cisco Unity and the Bridge for Networking

In this chapter, you will find a task list and procedures for setting up Bridge Networking for the first time. If you already have Bridge Networking configured in previous versions of Cisco Unity and the Bridge, see the task list and procedures in the "Upgrading from Bridge 2.x to Bridge 3.x" chapter or the "Upgrading from Cisco Unity 4.0(3) or Later with Bridge 3.x" chapter, as applicable.

If you are unfamiliar with Bridge Networking, you should first read the "About Bridge Networking" chapter and then review this chapter before beginning the setup. Planning is essential to a successful setup.

Prerequisites

Before starting the setup, verify that the following prerequisites have been met. (Detailed information about the prerequisites can be found in the "Overview of Mandatory Tasks for Installing the Cisco Unity Bridge" chapter of the *Cisco Unity Bridge Installation Guide*, available at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/bridge30/big/ex/index.htm.)

- System and networking requirements for the Bridge have been met.
- The Active Directory schema has been extended for Bridge Networking.
- The required hardware and software have been installed on the Bridge server.
- A license file has been obtained and installed on the Bridge server.
- The Bridge server has been connected to the phone system, and a hunt group has been created on the phone system for the analog extensions used for the Bridge.

The starting point for the task lists assumes that Cisco Unity has been installed on the bridgehead server as described in the applicable *Cisco Unity Installation Guide*, available at: http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html.

For Installations with Multiple Cisco Unity Servers Networked Together

For installations with multiple Cisco Unity servers networked together, you should first set up the servers for Digital Networking as described in the "Digital Networking" chapter of the applicable *Networking in Cisco Unity Guide*.

After the Cisco Unity servers have been set up for Digital Networking, verify the following settings before starting the Bridge Networking setup:

- Verify that the addressing search scope is set to either the dialing domain or the global scope on all the networked servers, so that Cisco Unity subscribers, no matter which server they are associated with, can address messages to Bridge delivery locations and/or Bridge subscribers. Refer to the "Setting the Addressing Search Scope" section in the "Digital Networking" chapter.
- If you want outside callers to be able to reach Bridge subscribers from the automated attendant (for example, from the opening greeting) or directory assistance:
  - Verify that the Cisco Unity server(s) on which the Bridge subscribers will be created are in the same dialing domain as the Cisco Unity server that outside callers call into. Refer to the "Dialing Domains" and "Customizing the Primary Location" sections in the "Digital Networking" chapter.
  - Verify that the automated attendant and directory handler(s) search scopes are set to the dialing domain scope. Refer to the "Setting the Directory Handler Search Scope" and the "Setting the Automated Attendant Search Scope" sections in the "Digital Networking" chapter.

Note The *Networking in Cisco Unity Guide* is available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html.

Task List: Setting Up Cisco Unity and the Bridge for Networking

Use this task list to set up networking between Cisco Unity and the Bridge for the first time. The cross-references take you to detailed procedures related to each item in the list.

Make Design Decisions

1. Make decisions about your Cisco Unity numbering plan, and gather information needed to configure Cisco Unity and the Bridge for networking. See the "Making Design Decisions and Gathering Needed Information" section on page 2-4.

Prepare the Network

2. Make changes as needed to provide basic network connectivity between the Bridge server and the server(s) that route incoming and outgoing SMTP messages to and from your Exchange network.See the "Resolving Names and IP Addresses" section on page 2-6.
3. If needed, grant permissions to the Bridge server to relay e-mail through the Exchange SMTP virtual server. See the "Granting Permissions to the Bridge Server to Relay E-Mail Through the Exchange SMTP Virtual Server" section on page 2-7.
4. If needed, configure an SMTP connector to route messages directly to the Bridge. See the "Using an SMTP Connector to Route Messages Directly to the Bridge" section on page 2-7.
5. Install the Voice Connector on an Exchange 2000 or Exchange 2003 server. See the "Setting Up the Voice Connector for Bridge Networking" section on page 2-8.

Configure the Cisco Unity Server Designated as the Bridgehead

6. Run ConfigMgr.exe to enable and create components necessary for the server to function as the bridgehead server. See the "Designating the Bridgehead Server" section on page 2-10.
7. Set Bridge options. See the "Setting Bridge Options" section on page 2-11.

8. Configure the subscriber template that will be used for the auto-creation of Bridge Subscribers. See the "Configuring the Subscriber Template That Will Be Used for Auto-Created Bridge Subscribers" section on page 2-11.
9. Create Bridge delivery location(s). See the "Creating and Configuring Bridge Delivery Locations" section on page 2-12.

Create New or Modify Existing Subscriber Accounts for Testing Purposes

10. Create a few new subscriber accounts (or modify a few existing Cisco Unity subscriber accounts) for testing purposes. See the "Creating New or Modifying Existing Subscriber Accounts for Testing Purposes" section on page 2-15.

Configure the Bridge Server

11. Configure settings on the Bridge server, and test the configuration. See the "Configuring the Bridge and Testing the Configuration" section on page 2-16.

Configure the Octel Servers

12. Configure the Octel servers. See the "Configuring the Octel Servers" section on page 2-23 for some high-level information (refer to the Octel product documentation for details).

Test the Setup

13. Test the Octel analog network to verify that the Bridge can communicate with each of the configured Octel nodes. See the "Testing the Octel Analog Network" section on page 2-23.
14. Test the complete setup to verify that Cisco Unity can exchange voice and directory messages with the Octels. See the "Testing the Setup" section on page 2-25.

    If you are unable to send and receive messages, see the "Troubleshooting Bridge Networking" chapter for information that can help you find and fix the problem.

Finish the Setup

15. If you have not already done so, create a delivery location for each Octel node with which Cisco Unity will communicate. See the "Finishing the Creation and Configuration of Bridge Delivery Locations" section on page 2-26.
16. As applicable, add the legacy serial number and mailbox ID to each existing Cisco Unity subscriber account, or create new Cisco Unity subscribers with the serial and mailbox numbers. See the "Adding the Serial Number and Mailbox ID to Cisco Unity Subscriber Accounts" section on page 2-26.
17. Configure the serial number and mailbox number to be used for messages from unidentified callers. See the "Setting the Serial Number and Mailbox ID for Unidentified Callers" section on page 2-28.
18. Optionally, create Bridge subscribers on the Cisco Unity server designated as the bridgehead. See the "Creating Bridge Subscriber Accounts" section on page 2-28.
19. Optionally, change the Active Directory location in which automatically created Bridge subscribers are created. See the "Changing the AD Location in Which Automatically Created Bridge Subscribers Are Created (Optional)" section on page 2-37.

Enable Optional Features

20. Optionally, if all of the Cisco Unity servers are at version 4.0(4) or later, extend identified subscriber messaging to include Bridge subscribers. See the "Extending Identified Subscriber Messaging to Include Bridge Subscribers (Cisco Unity 4.0(4) or Later)" section on page 2-40.

21. Optionally, if all of the Cisco Unity servers are at version 4.0(4) or later, enable the Bridge server to send delivery receipts to Cisco Unity subscribers when the extended-absence greeting for an Octel subscriber is enabled and the mailbox is accepting messages. See the "Enabling the Bridge Server to Send Extended-Absence Delivery Receipts (Cisco Unity 4.0(4) or Later)" section on page 2-44.
22. Optionally, if the Bridge server is at version 3.0(6) or later, enable the Bridge server to accept requests to push remote mailbox information. See the "Enabling the Bridge to Accept Requests to Push Mailbox Information (Bridge 3.0(6) and Later)" section on page 2-45.

Monitor Message Traffic Flow and Adjust Settings

23. After Cisco Unity and the Bridge are configured, and messaging between Cisco Unity and Octel subscribers is working correctly, see the "Monitoring and Maintaining Bridge Networking" chapter for information on monitoring message traffic flow, and for tips on adjusting settings that control the number of ports on the Bridge server that will be used for calls to the Octel nodes.

Making Design Decisions and Gathering Needed Information

Before you begin setting up Cisco Unity and the Bridge for networking, be sure to gather the appropriate information. Following is a check list of the information that you will need. For detailed information on planning a migration, refer to the *Cisco Unity Bridge Design Guide*, available at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/design/bdg/index.htm.

- Develop a migration strategy to determine whether the Octel servers will require reprogramming.
- Determine the placement and number of Bridge servers.
- Review your numbering plan strategy to determine:
  - Dial IDs on primary location(s)
  - Dial IDs on Bridge delivery location(s)
  - Prefixes on Bridge delivery location(s)
  - Remote mailbox lengths on Bridge delivery location(s)
  - Serial numbers and mailbox numbers for Cisco Unity subscribers migrating from Octel, or for existing Cisco Unity subscribers
  - Primary and alternate extensions for Cisco Unity subscribers
  - Primary and alternate extensions for Bridge subscribers
- Decide whether you want Bridge subscribers to be created automatically on a usage basis, or whether you want to create Bridge subscribers manually before subscribers begin using the system.
- Write down the fully qualified domain name (FQDN) and IP address of the Bridge server(s).
- Determine the server(s) that will handle outgoing SMTP messages to the Bridge. Depending on your network, this could be an Exchange server or another server configured to relay SMTP messages to addresses outside of your Exchange network.
- Decide on which Exchange server(s) to install the Voice Connector. Write down the FQDN and IP address of the Exchange server(s).
- Write down the FQDN and IP address of the server(s) that handle incoming SMTP messages from the Bridge. Depending on your network, this could be an Exchange server or another server configured to relay SMTP messages to your Exchange network.
- Decide which Cisco Unity server will be designated the bridgehead server.

- Write down the name, serial number, and phone number for each Octel node.
- Review the following pages on the Cisco Unity Administrator. You may want to make note of the information that you will need to enter on the pages.
  - Primary Locations > Profile
  - Primary Location > Addressing Options
  - Call Management > Directory Handler > Search Options
  - Bridge Delivery Location > Profile
  - Bridge Delivery Location > Prefixes
  - Bridge Delivery Location > Subscriber Creation Options
  - Bridge Options > Subscriber Creation Options
  - Bridge Options > Unknown Caller
  - Subscriber Template settings, Subscriber COS settings, and Subscriber settings (for Cisco Unity subscribers, Bridge subscribers, and auto-created Bridge subscribers)
- Review the following pages on the Bridge Administrator. You may want to make note of the information you will need to enter on the pages.
  - System Settings
  - Digital Networking
  - Unity Nodes
  - Octel Nodes

Determining the Domain Name

In order for messages to be exchanged between the Bridge and Cisco Unity, the same domain name (for example "voice@domain.com") will need to be configured, as follows:

- On the Unity node profile on the Bridge server.
- On the SMTP Domain Name field on the Network > Primary Location page in the Cisco Unity Administrator.
- In the recipient policy for the Voice Connector Exchange mailbox.

Consult with the Exchange administrator for your organization to determine an appropriate domain name to use.

Optional: Gathering or Confirming Octel Node Serial Numbers (Bridge 3.0(6) or Later)

After the Bridge server is connected to the phone system, you can use the GetSN command-line utility to retrieve or confirm the serial number of a remote Octel node. The utility makes a call to the phone number that you provide and attempts to retrieve the serial number of the remote node. To collect multiple serial numbers, you can run the utility as part of a batch file.

Retrieving an Octel Node Serial Number by Using GetSN

Step 1 On the Bridge server, stop the Unity Bridge service if it is running.

Step 2 Open a command prompt window.

Step 3 Set the working drive to that on which the Bridge software is installed.

Step 4 Enter **cd \bridge\starfish\bin** to change to the directory where GetSN.exe is located.

Step 5 Run GetSN with the following command line:

GetSN <Phone Number>

Commas can be used in the dial string to specify a pause. For example, to dial a 9 and then pause before dialing the number 5552900, enter:

GetSN 9,5552900

The resulting output includes the call trace as well as the serial number, if it can be determined from the call.

Step 6 Restart the Unity Bridge service.

Preparing the Network

Resolving Names and IP Addresses

The Bridge server and the Exchange (or relay) servers that handles incoming and outgoing SMTP messages 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.

Whether you use DNS or HOSTS files, you will need to know the fully qualified domain name (FQDN) and IP address of the Bridge server and the Exchange (or relay) server that handles incoming SMTP messages. You may also need the FQDN and IP address of the Exchange server on which the Voice Connector will be installed. The FQDN is displayed in the Windows System Control Panel on the Network Identification tab in the Full Computer Name field.

If your organization uses DNS:

- Add a host address resource (A) record and a mail exchange (MX) record in DNS for the Bridge server.
- Verify that an A and MX record exist in DNS for the Exchange server (or relay server) that handles incoming SMTP messages. If the records are not in DNS, add them before continuing with the setup.

Refer to the Microsoft Windows or applicable operating system documentation for more information about adding A and MX records in DNS.

If your organization does not use DNS, you can use HOSTS files for name resolution. A HOSTS file is a text file that contains the mappings of IP addresses to host and domain names. On Microsoft Windows systems, the HOSTS file is located in the C:\WINNT\System32\Drivers\Etc directory. Edit the HOSTS files as follows:

- On the Exchange (or relay) server that handles outgoing SMTP messages, add an entry to the HOSTS file with the FQDN and IP address of the Bridge server.

- On the Bridge server, add an entry to the HOSTS file with the FQDN and IP address of the Exchange (or relay) server that handles incoming SMTP messages.

Additionally, verify that the server that handles incoming SMTP messages is able to route messages to the Exchange server on which the Voice Connector will be installed. Refer to your Exchange documentation for more information.

Granting Permissions to the Bridge Server to Relay E-Mail Through the Exchange SMTP Virtual Server

Depending on your network, you may need to explicitly grant permissions to the Bridge server in order for it to relay e-mail through the Exchange SMTP virtual server.

To Grant Permissions to the Bridge Server to Relay E-Mail Through the Exchange SMTP Virtual Server

Step 1 On the Exchange server that will receive incoming messages from the Bridge, on the Windows Start menu, click **Programs > Microsoft Exchange > System Manager**.

Step 2 In the tree on the left, expand **Servers\<Server name>\Protocols\SMTP**.

Step 3 Right-click **Default SMTP Virtual Server** and select **Properties**.

Step 4 Click the **Access** tab.

Step 5 Click **Relay**.

Step 6 Click **Only the List Below**.

Step 7 Click **Add**.

Step 8 Click **Single Computer**, and enter the IP address of the Bridge server.

Step 9 Click **OK**.

Step 10 Verify that the **Allow All Computers Which Successfully Authenticate to Relay, Regardless of the List Above** check box is checked.

Step 11 Click **OK** twice to close the Properties dialog box.

Step 12 Close the Exchange System Manager.

Using an SMTP Connector to Route Messages Directly to the Bridge

Depending on your Exchange organization, all messages routed from Exchange may be redirected to a corporate relay or secure server before being routed to any other destination outside of Exchange. In some cases, these servers may not be configured to allow routing of messages addressed to the Bridge. If this is your situation, an SMTP Connector (not to be confused with the SMTP Default Virtual Server) can be configured in Exchange to send messages that are addressed to the Bridge directly to the Bridge server, bypassing any alternate routing that may be configured.

To Configure an SMTP Connector to Route Messages Directly to the Bridge

Step 1 On the Exchange server that will send outgoing SMTP messages to the Bridge, on the Windows Start menu, click **Programs > Microsoft Exchange > System Manager**.

Step 2 In the tree on the left, in the applicable Routing Group, expand **Connectors**.

Step 3 Right-click **Connectors** and click **New > SMTP Connector**.

Step 4 Enter a Name (for example, the Bridge server name) for the connector.

Step 5 Click **Forward All Mail Through This Connector to the Following Smart Hosts**, and enter the IP address of the Bridge server enclosed in square brackets (for example, enter **[10.10.10.255]**).

Step 6 Click **Add**.

Step 7 Select the server on which the Voice Connector will be installed, and click **OK**.

Step 8 Click the **Address Space** tab.

Step 9 Click **Add**.

Step 10 Select **SMTP**, and click **OK**.

Step 11 In the E-mail Domain field, enter the fully qualified domain name (FQDN) of the Bridge server.

This is the name displayed in the Windows System Control Panel on the Bridge server on the Network Identification tab in the Full Computer Name field.

Step 12 Enter a Cost of **1**, and click **OK**.

Step 13 Click **OK**, and close the Exchange System Manager.

Setting Up the Voice Connector for Bridge Networking

Although there are two Voice Connector installation programs included with Cisco Unity, the Voice Connector for Exchange 2000 (which also works with Exchange 2003) is the only one supported for messaging with the Bridge.

Install the Voice Connector 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 (when Exchange 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.

The Voice Connector service is automatically configured to log on as the LocalSystem account. The account that the service logs on as should not be changed.

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 1-35.

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 on the Cisco Unity server (which can only be done when Exchange is also on the server), disable the Cisco Security Agent service, if applicable.

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-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 5 Double-click **Install.exe** and then click **Next**.

Step 6 In the Address Types dialog box, check the **Bridge** check box (and also select any other features that are being used in your network).

Step 7 Click **Next** twice.

Step 8 When setup is complete, click **Finish** to exit Setup and restart the server.

Step 9 Enable virus-scanning and the Cisco Security Agent services, if applicable.

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

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. 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.

Do the following procedure to determine the version of Microsoft Windows 2000 Script Host.

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 click **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, update Windows Script Host so the Voice Connector properties can be displayed in Exchange System Manager. (Go to the downloads page of the Microsoft website, and do a keyword search for Windows Script Host. Follow the installation instructions.)

To Verify the Voice Connector Installation

To verify that the Voice Connector for Exchange 2000 installed properly, verify that the Voice Connector service is running, and that the Voice Connector mailbox has been created.

Step 1 Open the Services applet on the Exchange server on which the Voice Connector is installed. (On the Windows Start menu, click **Programs > Administrative Tools > Services**.)

Step 2 Verify that the Status for the **Exchange 2000 Voice Connector (<Server name>)** service is Started, and that the Startup Type is set to Automatic.

Step 3 Exit the Services applet.

Step 4 Open Exchange System Manager on the Exchange server on which the Voice Connector is installed. (On the Windows Start menu, click **Programs > Microsoft Exchange > Exchange System Manager**.)

Step 5 In the tree in the left pane, expand the **Servers** container. If the organization properties at the top of the tree have been set such that administrative groups are displayed in the tree, the Servers container is nested within the administrative group container.

Step 6 Within the Servers container, expand the **<Server Name>\First Storage Group\Mailbox Store (<Server Name>)** container for the server on which the Voice Connector is installed.

Step 7 In the expanded tree, click **Mailboxes**.

In the right pane, you should see the mailbox for "Exchange 2000 Voice Connector (<Server name>)" or "AvExchangeIVC_<Server name>." (The name changes from "AvExchangeIVC_<Server name>" to "Exchange 2000 Voice Connector (<Server name>)" after you run Cleanup Agent.)

Step 8 Exit Exchange System Manager.

Configuring the Cisco Unity Server Designated as the Bridgehead

Designating the Bridgehead Server

In installations with multiple Cisco Unity servers networked together, one Cisco Unity server is designated the bridgehead server and is set up for networking with the Bridge. To designate a Cisco Unity server as a bridgehead server, you run the ConfigMgr.exe utility with the Create Bridge Account option. ConfigMgr.exe installs and configures components required by the bridgehead server, as follows:

- Configures the server to automatically start and stop the CsBridgeConnector service.
- Configures the UnityDb SQL database to track changes to Cisco Unity subscribers in the network so that the CsBridgeConnector service can process the changes and send them to the Bridge server(s).
- Creates the default Bridge Subscriber Template, which is used for auto-created Bridge Subscribers.
- Configures the Cisco Unity Administrator to allow the creation of Bridge delivery locations and Bridge subscribers.
- Configures the Cisco Unity Administrator to enable the link to the Network > Bridge Options pages.
- Creates the UOmni mailbox where the Voice Connector will deliver directory messages from the Bridge server for the CsBridgeConnector service to process. Note that the UOmni mailbox is homed on the Exchange server that the Cisco Unity bridgehead server is connected to (which is the Exchange server that was selected in the Cisco Unity Server Message Store Configuration wizard during setup).

To Designate the Bridgehead Server

Step 1 On the Cisco Unity server, browse to the directory in which Cisco Unity is installed (the default location is CommServer).

Step 2 Double-click **ConfigMgr.exe**. The ConfigMgr dialog box appears.

Step 3 Click **Create Bridge Account**.

Step 4 Click **OK** in the dialog box that displays after the configuration has completed.

Step 5 Close the ConfigMgr dialog box.

Setting Bridge Options

Set the Bridge options only on the Cisco Unity bridgehead server. For detailed information about the Bridge Option settings, see the "Bridge Options Subscriber Creation Settings" section on page 9-6.

To Set Bridge Options

Step 1 In the Cisco Unity Administrator, go to the **Network > Bridge Options > Subscriber Creation Options** page.

Step 2 Select the subscriber template that will be used for auto-created Bridge subscribers.

We recommend that you use the default {Bridge Subscriber} Template.

Step 3 As applicable, check or uncheck the check boxes that allow the automatic creation, deletion, and modification of Bridge subscriber objects based on directory information that is received from the Bridge.

If you are unsure about enabling this functionality, leave the check boxes checked; they can be changed later if necessary.

Do not synchronize the directories at this time because the Bridge server has not yet been configured.

Configuring the Subscriber Template That Will Be Used for Auto-Created Bridge Subscribers

To Configure the Subscriber Template That Will Be Used for Auto-Created Bridge Subscribers

Step 1 In the Cisco Unity Administrator, go to any **Subscribers > Subscriber Templates** page.

Step 2 Click the **Find** icon, and double-click the template selected in Step 2 of the "To Set Bridge Options" procedure on page 2-11.

Step 3 Review the settings on the template, and make changes as applicable. Be sure to confirm that the check box called Show Subscriber in E-Mail Server Address Book is checked or unchecked as applicable for your installation.

Step 4 Click the **Save** icon.

Creating and Configuring Bridge Delivery Locations

Create a Bridge delivery location on the Cisco Unity bridgehead server for each Octel node with which Cisco Unity will communicate. If the Octel network has a large number of nodes, you may prefer to configure only a few delivery locations at this time and proceed with the rest of the setup. After verifying that messaging works correctly between Cisco Unity and the Octel nodes for which delivery locations have been configured, you can create the rest of the delivery locations.

Typically, there is a one-to-one correspondence of Bridge delivery locations and Octel nodes. However, it is possible (though rare) that an Octel server may be configured to have mailboxes with different lengths. In this case, you must create separate Bridge delivery locations that have the same Octel Node Serial Number but with a different number in the Remote Mailbox Length field.

If there are multiple Bridge servers, divide the delivery locations and corresponding Octel nodes among the Bridge servers. For example, on Bridge server 1 you create Octel nodes called New York and Boston, and on Bridge server 2 you create Octel nodes called London and Paris. On the Cisco Unity bridgehead server, you then create four delivery locations that correspond to the four Octel nodes. For the New York and Boston delivery locations, you enter the fully qualified domain name of Bridge server 1, and for the London and Paris delivery locations, you enter the fully qualified domain name of Bridge server 2.

For additional detailed information about the delivery location settings, see the following sections:

- Bridge Delivery Locations Profile Settings, page 9-1
- Bridge Delivery Locations Prefixes, page 9-5
- Bridge Delivery Locations Subscriber Creation Settings, page 9-5

You can create Bridge delivery locations by using the Cisco Unity Administrator or the Cisco Unity Bulk Import wizard. See the following sections:

- Using the Cisco Unity Administrator to Create Bridge Delivery Locations, page 2-12
- Using the Cisco Unity Bulk Import Wizard to Create Bridge Delivery Locations, page 2-13

Using the Cisco Unity Administrator to Create Bridge Delivery Locations

You can create Bridge delivery locations one at a time by using the Cisco Unity Administrator.

To Create Bridge Delivery Locations by Using the Cisco Unity Administrator

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. See the "Guidelines for Assigning Dial IDs and Extensions" section on page 11-2 for detailed information about choosing a Dial ID.

Step 5 Select **Bridge** as the Destination Type for the location.

Step 6 Enter the Octel Node Serial Number of the Octel server that corresponds to this Bridge delivery location. This number must match the Serial Number of one of the Octel Nodes configured on the Bridge server.

Step 7 Enter the Bridge Server Full Computer Name of the Bridge server that will be configured to send messages to and receive messages from the Octel server that corresponds to this Bridge delivery location.

To determine the fully qualified domain name of the Bridge server, do the following sub-steps:

a. On the Windows Start menu on the Bridge server, click **Settings > Control Panel**.

b. Double-click **System**.

c. Click the **Network Identification** tab. The fully qualified domain name of the Bridge server is listed on this tab as the Full Computer Name.

Step 8 Enter a value for the Remote Mailbox Length. This should be the length of the subscriber mailboxes on the remote Octel server that corresponds to this Bridge delivery location.

Step 9 Click **Add**.

Step 10 Record a voice name for the location.

Step 11 Optionally, go the **Delivery Location > Prefixes** page and enter prefixes as needed.

Step 12 Go to the **Delivery Location > Subscriber Creation** page, and configure settings for auto-created Bridge subscribers that are associated with the delivery location.

Using the Cisco Unity Bulk Import Wizard to Create Bridge Delivery Locations

The Cisco Unity Bulk Import wizard allows you to create or modify multiple delivery locations at once by importing data in a CSV file. If you have already created delivery locations, you can run Cisco Unity Bulk Import to export the data about the delivery locations to a CSV file.

Use the following procedure to prepare your CSV file. To learn more about preparing a CSV file for use with the Cisco Unity Bulk Import wizard—including information on the required and optional column headers for your CSV file—refer to the Cisco Unity Bulk Import wizard Help.

To Prepare a CSV File for Creating Bridge Delivery Locations

Step 1 Create a CSV file in a spreadsheet application (or another applicable application) on the Cisco Unity server, or in a directory that you can browse to from the server.

Step 2 Enter the required column headers in the first row. Column headers must be in uppercase, separated by commas, and spelled as indicated below:

DTMF_ACCESS_ID, DISPLAY_NAME, BRIDGE_SERVER_ADDRESS, REMOTE_NODE_ID, MAILBOX_LENGTH

Step 3 If desired, add optional column headers to the first row. Be sure to separate the column headers with commas.

Step 4 Add the data for the delivery locations in the subsequent rows. When finished:

- Confirm that each row contains the applicable data corresponding to each column header.
- Confirm that the data is separated by commas, and that no tabs, spaces, or semicolons separate the data in the file.
- If any data includes a space, quotes, or commas, contain it within quotes.
- Note that each row does not have to contain data in the optional columns.

Step 5 Save the file as a CSV file.

Step 6 Continue with the following "To Create Bridge Delivery Locations by Using the Cisco Unity Bulk Import Wizard" procedure.

To Create Bridge Delivery Locations by Using the Cisco Unity Bulk Import Wizard

Step 1 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.

Step 2 On the Cisco Unity server, on the Windows Start menu, click **Programs > Cisco Unity > Cisco Unity Bulk Import**.

Step 3 On the Welcome page, click **Next**.

Step 4 On the Select Import Operation, in the Locations section, click **CSV File**, and then click **Next**.

Step 5 On the Select Location Operation page, click **Create New Locations**, and then click **Next**.

Step 6 On the Type of Locations page, click **Bridge**, and then click **Next**.

Step 7 On the Files page, specify the name and location of the input file.

Step 8 Specify the name and location of the output file, or use the default location and file name, which is based on the input file. For example, if the input file is C:\Temp\Bridge_Locations.csv, the default output file will be C:\Temp\Bridge_Locations.out.csv.

Step 9 Click **Next** to proceed to the Valid Location Data page, which displays a table with validated rows of data from the input CSV file. If you do not want to import a row of data, uncheck the check box in the first column of the row.

If errors were found in any of the rows, you can click the Errors link at the bottom of the page to open the output CSV file to correct the errors, or you can ignore the errors for now and proceed with the import.

Step 10 Click **Next** to start the import process and display the Creating Locations page, which provides status information about the import.

Step 11 When the delivery locations are created, click **Next** to display the Cisco Unity Bulk Import Wizard Finished page, which displays summary information.

Step 12 If you had import errors, continue with the following "To Correct Errors That Occurred When Importing Delivery Location Data from a CSV File" procedure.

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

Step 1 Browse to the directory location of the output file that you specified during the import. (The default location and file name is based on the input file. For example, if the input file is C:\Temp\Bridge_Locations.csv, the default output file will be C:\Temp\Bridge_Locations.out.csv.)

This file contains all of the records that were not imported.

Step 2 Use a text editor to open the output file.

Step 3 Correct any records in the output file by using the error information listed in the Results column of the file.

Step 4 When you have finished editing the output file, save it as a CSV file with a new name.

Step 5 Run the Cisco Unity Bulk Import wizard again with the new CSV file.

Step 6 Repeat this procedure until all delivery locations are created without error.

Modifying Existing Delivery Locations by Using the Cisco Unity Bulk Import Wizard

If you want to use the Cisco Unity Bulk Import wizard to make modifications to existing delivery locations, you will need to create a CSV file for the modifications. We recommend that you run the Cisco Unity Bulk Import wizard to export your existing delivery location data to a CSV file, and then edit the CSV file to use for the modification.

Note that the DTMF_ACCESS_ID column is used as the primary key to find the existing delivery location, and therefore it cannot be modified by the Cisco Unity Bulk Import wizard.

Creating New or Modifying Existing Subscriber Accounts for Testing Purposes

If you have a large number of Cisco Unity subscribers to add or modify for Bridge Networking, you may choose at this point to add or modify only a few subscriber accounts, to test the configuration. Do the following "To Create Subscribers for Testing Bridge Networking" procedure, which calls attention to the settings that are of interest for networking with the Bridge.

Note that for synchronization between Cisco Unity and the Bridge to occur automatically, there must be at least one Cisco Unity subscriber configured with the Unity Node Serial Number for each Unity node that will be configured on the Bridge.

For detailed information about the creation and modification of subscriber accounts, see the following sections:

- Adding the Serial Number and Mailbox ID to New Cisco Unity Subscriber Accounts, page 2-26
- Adding the Serial Number and Mailbox ID to Existing Cisco Unity Subscriber Accounts, page 2-26

For information about subscriber templates, classes of service, and all other details that you need to consider before creating Cisco Unity subscribers, refer to the "Creating Subscriber Accounts" chapter of the *Cisco Unity System Administration Guide*, available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html.

To Create Subscribers for Testing Bridge Networking

Step 1 In the Cisco Unity Administrator, go to the **Configuration > Settings** page.

Step 2 Check the **Display Fields Required for Cisco Unity Bridge Networking on Subscribers Profile** Page check box.

Step 3 Click the **Save** icon.

Step 4 Go to the **Subscribers > Subscribers > Profile** page.

Step 5 If creating new subscriber accounts, do the following sub-steps. If modifying existing subscriber accounts, skip to Step 6.

a. Click the **Add** icon.

b. Enter the applicable information on the Add Subscriber page. For testing Bridge Networking, be sure to enter correct values for the Unity Node Serial Number and the Legacy Mailbox ID.

c. Click **Add**.

d. Record a voice for the subscriber.

e. Change any of the other subscriber settings as applicable, and click the **Save** icon.

f. Repeat Step a through Step e to create additional subscriber accounts.

Step 6 If modifying existing subscriber accounts, do the following sub-steps:

a. Click the **Find** icon, select an option from the Find By list, click **Find**, and select the applicable subscriber from the list to view the subscriber Profile settings.

b. Confirm that the subscriber has a recorded voice name.

c. For testing Bridge Networking, be sure to enter correct values for the Unity Node Serial Number and the Legacy Mailbox ID.

d. Change any of the other subscriber settings as applicable, and click the **Save** icon.

e. Repeat Step a through Step d as needed to modify other subscriber accounts.

Configuring the Bridge Server

Configuring the Bridge and Testing the Configuration

See the following sub-sections:

Accessing the Tools Used for Configuring the Bridge

The primary tool that you will use to configure the Bridge is the web-based Bridge Administrator. You use the Bridge Administrator to configure all settings on the Bridge server, as well as to create, modify, and delete Unity and Octel nodes.

A command line utility, the Cisco Unity Bridge Bulk Node utility, is available for download from the Cisco Unity Tools website at http://www.CiscoUnityTools.com. With the Bulk Node utility, you can create, modify, and delete Unity or Octel nodes on the Bridge server by using information from a comma-separated value (CSV) file. For details on the Bulk Node utility, refer to the Readme.htm file that is included with the utility.

The procedures in the following "Configuring the Bridge" section provide instructions for using the Bridge Administrator to configure required settings and to create Unity and Octel nodes. You can access the Bridge Administrator locally or remotely by using Internet Explorer:

- To access the Bridge Administrator from a local server, in Internet Explorer, enter http://Localhost, or use the shortcut on the desktop or on the Programs menu.
- To access the Bridge Administrator from a remote server, in Internet Explorer, enter http://machinename, where machinename is the name of the Cisco Unity Bridge server.

Configuring the Bridge

When setting up Cisco Unity and the Bridge, be sure to complete the following tasks before configuring the Bridge:

1. Configure the Cisco Unity bridgehead server for Bridge Networking.
2. Configure the serial number and mailbox ID for existing Cisco Unity subscribers.

If you set things up in this order, directory synchronization between Cisco Unity and the Bridge happens automatically. However, if the above steps are not complete prior to configuring the Bridge, you must manually synchronize the directories when the setup is complete.

Most of the pages in the Bridge Administrator have default settings. In most cases, the default settings are appropriate when configuring the Bridge for the first time. The following procedures include steps for all settings that are required for configuring the Bridge. Do the following procedures in the order listed:

- To Configure the System Settings Page, page 2-17
- To Configure the Digital Networking Page, page 2-17
- To Configure the Unity Nodes Page(s), page 2-18
- To Configure the Octel Node Page(s), page 2-18
- To Add Password Protection to the Bridge Administrator, page 2-19

To Configure the System Settings Page

Step 1 On the Configuration menu in the Bridge Administrator, click **System Settings**.

Step 2 In the Attempts On Bad Connection box, enter the number of times that the server will call a line with a bad connection before it returns the message as non-deliverable.

Step 3 In the Name Aging box, enter the number of days that the server will retain a usage-based directory entry that has not been referenced before deleting the entry.

If you want to disable name aging, enter **0**.

Step 4 Accept the default settings for Queued Call Threshold and Max Ports Per Node.

Step 5 Set the Call Tracing Level to **Verbose**.

Step 6 Click **Save**.

To Configure the Digital Networking Page

Step 1 On the Configuration menu in the Bridge Administrator, click **Digital Networking**.

Step 2 If the Bridge server will be sending SMTP messages to an ESMTP e-mail host that acts as a relay server, enter the IP address or fully qualified domain name of the e-mail host.

If you are unsure, do not enter anything in the ESMTP Server field at this point. After configuring the rest of the mandatory fields, there are instructions for testing network connectivity that will help you determine if you need to enter an address here.

Step 3 In the Bridge Server Full Computer Name box, enter the fully qualified domain name of the Bridge server. To determine the fully qualified domain name of the Bridge server, do the following sub-steps:

a. On the Windows Start menu on the Bridge server, click **Settings > Control Panel**.

b. Double-click **System**.

c. Click the **Network Identification** tab. The fully qualified domain name of the Bridge server is listed on this tab as the Full Computer Name.

The name that you enter here must match the name entered in the Cisco Unity Administrator on the delivery locations page(s) configured for this Bridge server in the Bridge Server Full Computer Name field.

Step 4 In the SMTP Port field, do not change the default (which is 25) unless you are certain that the server to which the Bridge will be sending SMTP messages uses a different port.

Step 5 Click **Save**.

Step 6 Restart the Digital Networking service on the Bridge server.

To Configure the Unity Nodes Page(s)

Step 1 On the Configuration menu in the Bridge Administrator, click **Unity Nodes**.

Step 2 Click **Add**.

Step 3 In the Serial Number box, enter the serial number of the Unity node. In some cases, this is the serial number of an Octel server that has migrated to Cisco Unity. In other cases, this is the serial number that has been agreed upon to represent Cisco Unity on the Octel analog network. In either case, this serial number must be configured in the node profile on each Octel server in the network. The serial number must match the serial number that has been assigned to at least one Cisco Unity subscriber in the network.

Step 4 In the Name box, enter the name of the node.

Step 5 In the Unity Bridgehead Server Name box, enter the server name of the Cisco Unity bridgehead server with which the Bridge communicates.

Step 6 In the Unity SMTP Mail Suffix box, enter the SMTP e-mail address of the recipient policy of the mail system supporting Cisco Unity (for example, enter mail.companya.com).

Step 7 Select the codec used to encode all voice messages sent from the Bridge to Cisco Unity subscribers with this Unity Node.

All recorded voice names from the Bridge to the Cisco Unity bridgehead server will be sent by using the codec specified on the first Unity Node listed on the Unity Nodes page. We recommend that the same codec setting be used for all Unity Node profiles.

Step 8 Click **Save**.

Step 9 Repeat Step 2 through Step 8 for each serial number that the Bridge and Cisco Unity bridgehead server represent.

To Configure the Octel Node Page(s)

Step 1 On the Configuration menu in the Bridge Administrator, click **Octel Nodes**.

Step 2 Click **Add**.

Step 3 In the Serial Number box, enter the Octel analog networking serial number of the Octel server that this node corresponds to. The Serial Number should also match the number that was entered in the Cisco Unity Administrator in the Octel Node Serial Number field on the Delivery Locations page that corresponds to this Octel Node.

Step 4 In the Name box, enter the name of the node.

Step 5 In the Phone Number box, enter the phone number that the server dials to send messages to the remote node.

Step 6 Optionally, in the Extension box, enter an extension number if it must be dialed to reach the remote node.

Step 7 Optionally, in the Dial Sequence box, enter a dial sequence if one is required to call the remote node. At a minimum, this box must contain at least the default value **N**.

Step 8 Click **Save**.

Step 9 Repeat Step 2 through Step 8 for each Octel node in the network.

Adding Password Protection to the Bridge Administrator

Although the Bridge server itself is password protected, you may also want to add password protection to the Bridge Administrator.

To Add Password Protection to the Bridge Administrator

Step 1 Log on to the Bridge server platform by using the Administrator account.

Step 2 On the Windows Start menu, click **Programs > Administrative Tools > Internet Service Manager**.

Step 3 In the tree, click the server name.

Step 4 Right-click **Default Web Site** and select **Properties**.

Step 5 Click the **Directory Security** tab. In the Anonymous Access and Authentication section, click **Edit**.

Step 6 Select **Integrated Windows Authentication**, and uncheck the **Anonymous Access** check box.

Step 7 Click **OK** twice and close the Internet Service Manager.

Step 8 In Windows Explorer, browse to the **\Starfish\Asp** directory.

Step 9 Right-click the **\Starfish\Asp** directory and select **Properties**.

Step 10 Click the **Security** tab.

Step 11 Select **Everyone**. Uncheck the **Allow Inheritable Permissions From Parent** check box and click **Remove**.

Step 12 Click **Add** to add users or groups to the Access Control List (ACL). Click **OK** when finished.

Step 13 In the Permissions list, select **Full Control** for the person(s) you want to have access.

Caution Be sure to give Full Control in the Permissions list to the account that you will use to do upgrades; if the account used to do upgrades does not have Full Control, the Bridge setup program will fail.

Step 14 Click **OK** and close Windows Explorer.

Testing Networking and SMTP Connectivity

Do the following procedures in the order listed to test the configuration:

- To Verify Network Connectivity, page 2-20
- To Verify SMTP Connectivity, page 2-20
- To Send a Test Message to the Voice Connector, page 2-21

To Verify Network Connectivity

Use the following procedure to verify network connectivity from the Bridge server to the server that will receive SMTP messages that are destined for Cisco Unity.

Step 1 On the Bridge server, open a command prompt window.

Step 2 Enter **ping <Domain Name>** where <Domain Name> is the name that you entered on the Unity SMTP Mail Suffix field on the Unity Nodes page.

Step 3 You should receive a reply from the server.

Step 4 If the test is successful, continue with the "To Verify SMTP Connectivity" procedure on page 2-20.

If the test failed, this indicates a name resolution problem. As a first choice for fixing the name resolution problem, we recommend that you use DNS. Add a host address resource (A) record and a mail exchange (MX) record in DNS by using the name in the Unity SMTP Mail Suffix field and the IP address of the Exchange (or relay) server that handles incoming SMTP messages. If using DNS is not an option, add an entry to the HOSTS file on the Bridge server with the name in the Unity SMTP Mail Suffix field and the IP address of the Exchange (or relay) server that handles incoming SMTP messages.

Step 5 When the name resolution problem is fixed, continue with the "To Verify SMTP Connectivity" procedure on page 2-20.

To Verify SMTP Connectivity

Step 1 Open a command window on the Bridge server.

Step 2 Enter **telnet <Address> <Port>**. In this command:

- <Address> is the address that you entered in the ESMTP Server field on the Digital Networking page, or if you did not enter an address in the ESMTP Server field, <Address> is the address that you entered in the Unity SMTP Mail Suffix field on the Unity Nodes page.
- <Port> is the number from the SMTP Port field on the Digital Networking page. The default value is 25.

You should see a response similar to the following:

```
220 server1.mail.companya.com Microsoft ESMTP MAIL Service, Version: 5.0.2195.5329
ready at Sun, 17 Nov 2002 10:21:24 -0800
```

The response should be from the fully qualified domain name of the responding SMTP server (in the above example, "server1.mail.companya.com").

Step 3 If the test is successful, enter **quit** to end the telnet session. Continue with the "To Send a Test Message to the Voice Connector" procedure on page 2-21.

If the test fails, this indicates there is a problem with the port. There could be a firewall blocking the port, or the SMTP server is not using the port. Check the settings on the destination SMTP server, and if needed, change the SMTP Port number that is specified on the Digital Networking page in the Bridge Administrator. Do not proceed to the next test until this issue has been resolved.

To Send a Test Message to the Voice Connector

Use telnet to send a test message from the Bridge to Exchange and verify that the message appears in the queue for the Voice Connector. Repeat this test for each Unity SMTP Mail Suffix that is configured on the Bridge server.

Step 1 On the Exchange server on which the Voice Connector is installed, open Exchange System Manager. (On the Windows Start menu, click **Programs > Microsoft Exchange > System Manager**.)

Step 2 Expand the **Connectors** container in the tree in the left pane until you see Exchange 2000 Voice Connector (<Computer Name>), where <Computer Name> is the name of the computer on which the Voice Connector is installed. (If you have multiple routing groups installed, the Connectors container will be within a Routing Group container.)

Step 3 Right-click **Exchange 2000 Voice Connector (<Computer Name>)**, and select **Stop**. The Voice Connector must be stopped before sending the test message.

Step 4 On the Bridge server, on the Windows Start menu, click **Run**.

Step 5 Enter **telnet** and click **OK**. This opens a telnet command prompt window.

Tip Because the backspace character is not supported in the telnet window, you may want to enter each command in Notepad, copy it, and then right click in the telnet window to paste the command. The commands require that you enter text that you have already entered in fields in the Bridge Administrator. You may want to copy the text that you entered in the Bridge Administrator fields and paste the text to ensure that you do not make a typing error.

Step 6 Enter **set local_echo**.

Step 7 Enter **open <Address> <Port>**. In this command:

- <Address> is the address that you entered in the ESMTP Server field on the Digital Networking page, or if you did not enter an address in the ESMTP Server field, <Address> is the address that you entered in the Unity SMTP Mail Suffix field on the Unity Nodes page.
- <Port> is the number from the SMTP Port field on the Digital Networking page. The default value is 25.

If a connection is successfully established, you will see a response similar to the following:

```
220 server1.mail.companya.com Microsoft ESMTP MAIL Service, Version:
5.0.2195.5329 ready at Sun, 17 Nov 2002 10:21:24 -0800
```

Step 8 Enter **ehlo <FQDN>**, where <FQDN> is the Bridge Server Full Computer Name entered on the Digital Networking page. The server responds with a list of options that it supports.

Step 9 Enter **mail from: <Extension>@<FQDN>**, where <Extension> can be any number, and <FQDN> is the Bridge Server Full Computer Name entered on the Digital Networking page. This simulates the format of the "from" field of messages that the Bridge sends to the Voice Connector.

Step 10 Enter **rcpt to: IMCEAOMNI-AvVoiceMessage@<Mail suffix>**, where <Mail suffix> is the Unity SMTP Mail Suffix that you entered on the Unity Nodes page. This is the "to" address that the Bridge uses when sending messages to the Voice Connector.

Step 11 Enter **data**. You should see a response similar to the following:

354 Start mail input; end with <CRLF> <CRLF>

Step 12 Enter **test**, or any text that you prefer as the content of the test message. Press Enter.

Step 13 Enter **.** (a period). Press Enter, and you should see a response similar to the following:

250 2.6.0 <FQDN> Queued mail for delivery

Step 14 Enter **quit**, and close the command prompt window.

Step 15 On the Exchange server on which the Voice Connector is installed, use Exchange System Manager to see whether the test message arrived in the Voice Connector queue. Depending on your network configuration and whether the Bridge and Exchange servers are in the same location, you may need to wait several minutes for the message to arrive. The exact steps to follow to view the queue depend on whether the server is running Exchange 2000 or Exchange 2003, as follows:

If the Voice Connector is installed on Exchange 2003, skip to Step 17.

If the Voice Connector is installed on Exchange 2000, expand **Queues** within the Exchange 2000 Voice Connector (<Computer Name>) container in the tree in the left pane.

Step 16 Right-click **MTS-OUT**, and select **Enumerate 100 Messages**. If the message is displayed in the right pane, then the Unity SMTP Mail Suffix is correct. Skip to Step 21.

Step 17 For Exchange 2003, expand the **Servers** container, and then expand the server on which the Voice Connector is installed.

Step 18 Within the server container, click **Queues**. You should see AvExchangeIVC<Server name> listed in the pane on the right.

Step 19 Double-click **AvExchangeIVC<Server Name>**, and in the queue window that is displayed, click **Find Now**.

Step 20 If the message is displayed in the list, then the Unity SMTP Mail Suffix is correct. If the message is not there, then see the "Troubleshooting Tips" section below for information on resolving the problem.

Step 21 Right-click the message, and select **Delete (No NDR)**. For Exchange 2003, close the queue window.

Caution You must delete the test message before starting the Voice Connector because the header of the message is not in the expected format.

Step 22 Right-click **Exchange 2000 Voice Connector (<Computer Name>)**, and select **Start**.

Step 23 Close Exchange System Manager.

Troubleshooting Tips

If the message does not appear in the Voice Connector queue, check the following:

- Verify that the Unity SMTP Mail Suffix on the Unity Nodes page is correct. Your network configuration and the recipient policies configuration determine the Unity SMTP Mail Suffix. Use Exchange System Manager to view the properties of the recipient policies. Look at the filter rule of the tested recipient policy to see if it could be excluding the Voice Connector.
- Try sending a test message by using the SMTP e-mail address of another recipient policy.

- As a last resort, try creating another recipient policy for the Voice Connector to use.

Caution Consult the Exchange administrator for your organization before changing settings for a recipient policy or creating a new recipient policy. Changes to the recipient policies and/or the SMTP connector could result in problems routing other SMTP mail for the organization.

Configuring the Octel Servers

If the Bridge is joining the Octel network as a new Octel node, information about the new node must be programmed on each existing Octel server. If the Bridge replaces an existing Octel server and serial number, some programming of the existing Octel servers is usually still required. For example, you may need to change the phone number for the existing node profile to that of the Bridge server, or change the primary transmission node from digital to analog. Additionally, in order for NameNet to function properly, schedules for administration calls need to be configured on the Octel servers. Refer to the applicable Octel documentation for detailed information.

Testing the Octel Analog Network

Before sending test messages between Cisco Unity and the remote voice messaging system(s), as a best practice, first verify that the Bridge can communicate with each of the configured Octel nodes. Testing the Octel analog network separately allows you to more quickly identify and fix any problems that you may encounter. To do the tests, you will use the Bridge Analog Network And Node Analyzer (BANANA).

BANANA is a stand-alone application that runs on the Bridge server. It is designed to assist with monitoring and troubleshooting analog communication between the Bridge and the Octel nodes in the analog network. It also provides detail and summary information of call activity.

BANANA contains an administration application called the BANANA admin that allows you to control how BANANA:

- Generates test calls to the Octel systems that are networked with the Bridge server.
- Extracts information from the call traces on the Bridge server and presents different views of the data.
- Monitors the call traces for error conditions, and logs warnings or errors to the Windows Event Viewer.

With the BANANA admin, you can also install and configure the BANANA service to do the tasks listed above at configurable intervals.

Caution The drive on which you plan to install BANANA requires at least 1 GB of free disk space.

Do the following procedures to install BANANA and initiate test calls. Refer to the BANANA Help file for information about other functionality provided by BANANA.

To Install BANANA

Step 1 Disable virus scanning services and the Cisco Security Agent service, if applicable.

Step 2 Insert the Cisco Unity Bridge compact disc in the CD-ROM drive, and browse to the **BANANA** directory.

Step 3 Double-click **setup.exe**.

Step 4 Click **OK** at the welcome screen.

Step 5 If applicable, change the directory where BANANA will be installed.

Step 6 Click the **Installation** button.

Step 7 If applicable, change the program group where BANANA will appear.

Step 8 Click **Continue**.

Step 9 If a Version Conflict message box is displayed warning that a file being copied is not newer than the file on your system, click **Yes** to keep the existing file.

Step 10 When the installation is done, click **OK**.

Step 11 Enable virus-scanning and the Cisco Security Agent services, if applicable

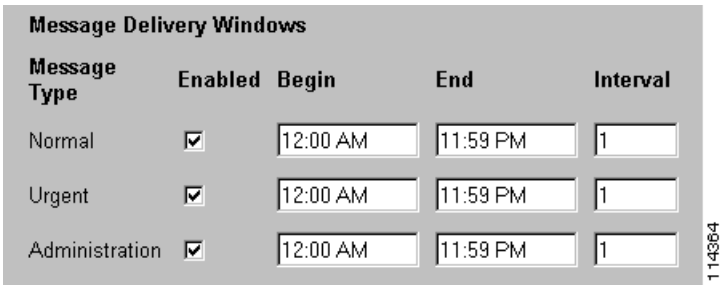
Note The most up-to-date version of BANANA is available at http://www.CiscoUnityTools.com. When you start BANANA, it checks the CiscoUnityTools website to see if a newer version is available, and if so, prompts you about upgrading.

To Adjust the Message Delivery Window Settings

Step 1 In the Bridge Administrator, click **Octel Nodes**.

Step 2 In the Node list, click an Octel node that you want to be tested, and click **Edit**.

Step 3 On the Octel Node page in the Message Delivery Windows section, adjust the schedule according to following illustration, so that the Bridge will not wait to initiate calls to the Octels to deliver normal, urgent, and administrative messages.



Note that BANANA makes only administrative calls when testing the Octel analog network. However, if you adjust the normal and urgent schedules as shown, you do not have to remember to adjust the schedule if you also send test messages from Cisco Unity subscribers to Octel subscribers.

Step 4 Click **Save**.

Step 5 Repeat Step 2 through Step 4 for each Octel node that you want to test.

To Initiate Test Calls to the Octel Nodes

Step 1 On the Bridge server on the Windows Start menu, click **Programs > BANANA > BANANA admin**. The BANANA admin main window displays.

Step 2 Configure the log and output folder locations.

Step 3 Specify the Octel nodes to be included when placing test calls.

Step 4 Place the test calls.

Step 5 Process the call data, and view the results.

Refer to the BANANA Help for details.

Testing the Setup

Before beginning this procedure, create test subscriber accounts on Cisco Unity and on each Octel node for which a delivery location has been configured. Be sure to record voice names for the subscribers. See the "Creating New or Modifying Existing Subscriber Accounts for Testing Purposes" section on page 2-15 for instructions.

To Test the Setup

Step 1 If you have not already done so, set the Message Delivery Window settings so that the Bridge does not wait to initiate calls to the Octels to deliver normal, urgent, and administrative messages, as described in the "To Adjust the Message Delivery Window Settings" section on page 2-24.

Step 2 Verify message flow from Cisco Unity to Octel. Log on to Cisco Unity and send a test message to an Octel subscriber on each Octel node. Verify that the recipient receives the message.

Step 3 Verify message flow from Octel to Cisco Unity. On each Octel node, log on and send a test message to a Cisco Unity subscriber. Verify that the recipient receives the message.

Step 4 Verify directory message flow from Cisco Unity to the Bridge, as follows:

a. Add a test Cisco Unity subscriber account with a serial number and legacy mailbox ID on a Cisco Unity server in the network.

b. Verify that shortly after creation, the subscriber is listed in the applicable Unity Node Directory listing of each Bridge server, with a Legacy Mailbox as defined on Cisco Unity.

Step 5 Verify directory message flow from the Bridge to Cisco Unity, as follows:

a. Enter the mailbox of a subscriber on a remote Octel server in the applicable Octel Node Directory on the Bridge (use a mailbox for which a Bridge Subscriber has not yet been created on the Cisco Unity bridgehead server).

b. Verify that the name information for the subscriber is retrieved by the Bridge via an administrative call to the Octel server.

c. Verify that the name of the remote Octel subscriber is added to the applicable Octel Node Directory on the Bridge server that is associated with the mailbox you entered.

d. Verify that, shortly thereafter, a Bridge Subscriber is automatically created on the Cisco Unity bridgehead server with the settings that you have configured for the associated delivery location.

Step 6 Change the Message Delivery Window settings back to their configuration prior to the test.

Finishing the Setup

Finishing the Creation and Configuration of Bridge Delivery Locations

If you have already created all Bridge delivery locations, skip to the "Adding the Serial Number and Mailbox ID to Cisco Unity Subscriber Accounts" section on page 2-26.

Otherwise, create a delivery location on the Cisco Unity bridgehead server for each Octel node with which Cisco Unity will communicate. See the "Creating and Configuring Bridge Delivery Locations" section on page 2-12 for detailed information. When finished, continue with the next section, "Adding the Serial Number and Mailbox ID to Cisco Unity Subscriber Accounts."

Adding the Serial Number and Mailbox ID to Cisco Unity Subscriber Accounts

In order for Cisco Unity subscribers to be able to send messages to and receive messages from subscribers on the remote voice messaging systems with which Cisco Unity communicates, each Cisco Unity subscriber account must be configured with a serial number and legacy mailbox ID. These numbers are used to identify a Cisco Unity subscriber when communicating with the Octel analog network via the Bridge.

Adding the Serial Number and Mailbox ID to New Cisco Unity Subscriber Accounts

You use either the Cisco Unity Bulk Import wizard or the Cisco Unity Administrator to create new Cisco Unity subscriber accounts with the serial number and mailbox ID.

For detailed information about creating subscriber accounts, refer to the "Creating Subscriber Accounts" chapter of the *Cisco Unity System Administration Guide*, available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html.

Adding the Serial Number and Mailbox ID to Existing Cisco Unity Subscriber Accounts

You can manually add the serial number and mailbox ID to existing subscriber accounts one at a time by using the Cisco Unity Administrator, or you can do so in bulk by using the Subscriber Information Dump and the Cisco Unity Bulk Import wizard, as described in the following procedure.

To Add the Octel Serial Number and Mailbox ID to Existing Cisco Unity Subscriber Accounts

Step 1 In the Cisco Unity Administrator, go to the **Configuration > Settings** page.

Step 2 Check the **Display Fields Required for Cisco Unity Bridge Networking on Subscribers Profile** Page check box.

Step 3 On the Cisco Unity server desktop, double-click the **Cisco Unity Tools Depot** icon.

Step 4 In the left pane of Tools Depot, expand the **Administration Tools** tree and double-click **Subscriber Information Dump**. The Subscriber Information Dump dialog box opens.

Step 5 Select **Full Subscribers Only** from the Subscribers to Dump list.

Step 6 Indicate the output file name and location.

Step 7 Use the default settings for the Separate Data With and Use Quotes Around fields. (By default, these fields are set respectively to "Commas" and "When the Data Includes a Comma.")

Step 8 **Cisco Unity 4.0(3) without SR1:** Check the **Alias**, **Primary Extension**, and **All Alternate Extensions** check boxes in the Data to Include in Output File list.

Cisco Unity 4.0(3) with SR1, 4.0(4), and later: Check the **Alias** and **Primary Extension** check boxes in the Data to Include in Output File list.

Step 9 Click **Start**.

When the output is complete, a message box opens with the number of errors encountered in the process. Click **OK** to view the error log, or **Cancel** if no errors were encountered.

Step 10 Exit the Subscriber Information Dump and Tools Depot.

Step 11 Make a copy the output CSV file.

Caution Making a copy of the data before it is modified is always a best practice. But in Cisco Unity 4.0(3) (without SR1), when the subscribers have alternate extensions, you will need a copy of the output file in order to add back the alternate extensions because they may get deleted when the legacy mailbox and remote node ID are added to the subscriber accounts. This problem, described in CSCed12363, has been resolved in Cisco Unity 4.0(3) with SR1, Cisco Unity 4.0(4), and later. Continue with Step 12 to add the legacy mailbox and remote node ID. If you are running Cisco Unity 4.0(3) without SR1, and the subscriber alternate extensions were deleted, Step 25 in this procedure explains how to add the alternate extensions back.

Step 12 Open the output CSV file in a text editor or spreadsheet application.

Step 13 In the first row of the file, delete the column header **PRIMARY_EXTENSION**, and in its place, enter **LEGACY_MAILBOX**.

Step 14 At the end of the first row of the file, enter a comma and a new column header: **REMOTE_NODE_ID**. Be sure to separate the column headers with a comma.

Step 15 In each row of subscriber data in the REMOTE_NODE_ID column, enter a comma and the serial number. For example:

```
ALIAS,LEGACY_MAILBOX,REMOTE_NODE_ID
aabade,2001,55115
kbader,2002,55115
tcampbell,2003,55115
lcho,2004,55115
```

Step 16 Save and close the file.

Step 17 Disable any virus-scanning services on the Cisco Unity server.

Step 18 On the Windows Start menu, click **Programs > Cisco Unity > Cisco Unity Bulk Import**, and click **Next** on the Cisco Unity Bulk Import wizard welcome page.

Step 19 Accept the default, CSV file, and click **Next**.

Step 20 Specify where the log files should be saved, and click **Next**.

Step 21 On the Choose Subscriber Type dialog box, click either **Unified Messaging** or **Voice-Mail Only**, as applicable to your installation.

Step 22 On the Select Subscriber Import Option dialog box, click **Modify Existing Cisco Unity Subscribers**.

Step 23 On the Select the CSV File dialog box, browse to the CSV file containing the subscriber data.

Step 24 Follow the on-screen prompts to finish the import.

Step 25 **Cisco Unity 4.0(3) without SR1:**

If the alternate extensions for the subscribers were deleted, do the following sub-steps to add them back:

a. Create another CSV file that has the column headers **ALIAS** and **ALTERNATE_EXTENSION_1**.

b. Populate this file with the subscriber aliases and alternate extensions obtained from Subscriber Information Dump. Include only one alternate extension for each row of data in the CSV file.

c. Repeat Step 18 through Step 24 to run the Cisco Unity Bulk Import wizard again to modify the accounts. After the Cisco Unity Bulk Import wizard has finished making the modifications, the subscriber alternate extensions have been added back.

d. If subscribers have more than one alternate extension, repeat the sub-steps for each additional alternate extension. (That is, create a second CSV file for the second set of alternate extensions, a third CSV file for the third set of alternate extensions, and so on.)

Step 26 Enable any virus-scanning services.

Setting the Serial Number and Mailbox ID for Unidentified Callers

The following procedure describes how to set the serial number and mailbox ID for unidentified callers (also referred to as unknown callers). The numbers that you enter here will be used for messages from unidentified callers to Bridge subscribers. For more information about these settings, see the "Bridge Options Unknown Caller Settings" section on page 9-10.

To Set the Serial Number and Mailbox ID for Unidentified Callers

Step 1 In the Cisco Unity Administrator on the bridgehead server, go to the **Network > Bridge Options > Unknown Caller** page.

Step 2 Enter a number in the Legacy Mailbox ID field.

Step 3 Enter a serial number in the Node ID field.

Step 4 Click the **Save** icon.

Creating Bridge Subscriber Accounts

There are several approaches and tools available for creating Bridge subscribers on the Cisco Unity server, or creating permanent directory entries on the Bridge server, which results in auto-created Bridge subscribers.

See the following sections for more information:

- Before Creating Bridge Subscriber Accounts, page 2-29
- Approaches to Creating Bridge Subscribers, page 2-30
- Using the Cisco Unity Bulk Import Wizard to Create Multiple Bridge Subscriber Accounts, page 2-31

Before Creating Bridge Subscriber Accounts

This section lists—in order—the issues that you must consider before creating Bridge subscriber accounts. Bridge subscribers can be created only on a Cisco Unity bridgehead server. Do the following tasks on the Cisco Unity bridgehead server where you will be adding the Bridge subscribers.

1. **Cisco Unity Configuration and Permissions**

If you are unsure whether the account that you are using has sufficient rights and permissions to create subscribers, or whether Cisco Unity is properly configured to work with your message store, use the following "To Check Cisco Unity Setup and Permissions by Using the Cisco Unity SysCheck Tool" procedure.

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

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 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**.

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 Bridge 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 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 Bridge subscribers because they cannot log on to Cisco Unity or use the Cisco Personal Communications Assistant (PCA), administrators can enter call transfer numbers for Bridge subscribers. For security purposes, you should modify the restriction table used for transfers in the COS to which Bridge 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 subscriber account is based. For details, refer to the "Public Distribution List Settings" chapter in the *Cisco Unity System Administration Guide*.

Public distribution lists correspond to distribution groups in Active Directory. The distribution lists are listed in the address book for Microsoft Outlook (or other e-mail client), unless they are explicitly hidden. To help prevent e-mail from being sent to Bridge subscribers, you may want to create lists that contain only Bridge subscribers, and hide these distribution lists from the Outlook address book. The option to hide distribution lists is available on the Subscribers > Public Distribution Lists > Profile page in the Cisco Unity Administrator. Additionally, you may also want to exclude Bridge subscribers from the All Subscribers distribution list or any other distribution list that contains regular subscribers.

5. **Subscriber Templates**

In the Cisco Unity Administrator, you can specify settings for a group of 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 subscriber accounts as the accounts 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*.

Bridge subscribers correspond to contacts in Active Directory. The contacts 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 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 Bridge Subscribers Appear in the Outlook Address Book" section on page 1-29 for details.

You may want to use the {Bridge Subscriber} template. By default, Bridge subscribers created with the {Bridge Subscriber} template are not added to any distribution lists and are not listed in the Cisco Unity phone directory. By default, the {Bridge Subscriber} template is used for automatically created Bridge subscribers.

Note The *Cisco Unity System Administration Guide* is available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html.

Approaches to Creating Bridge Subscribers

This section summarizes the general approaches to creating Bridge subscribers on the Cisco Unity bridgehead server.

Approach A: Creating Bridge Subscribers in Cisco Unity

If you want the extensions that you assign to Bridge subscribers to fit in with your numbering plan, create the Bridge subscriber accounts in Cisco Unity. See the following sections:

- Using the Cisco Unity Bulk Import Wizard to Create Multiple Bridge Subscriber Accounts, page 2-31
- Using the Cisco Unity Administrator to Create Bridge Subscriber Accounts, page 2-34

Note that the Bridge subscribers will be subject to name aging deletion (if enabled), and the recorded voice names for the Bridge subscribers will be retrieved from the Octel system the first time a Cisco Unity subscriber sends each Bridge subscriber a message. For more details, see the "Creating Bridge Subscribers in Cisco Unity" section on page 1-23.

Approach B: Creating Permanent Directory Entries on the Bridge Server

If you want the Bridge subscribers to always have recorded voice names and not be subject to name aging deletion, create permanent directory entries on the Bridge server. See the following sections:

- Using the Bridge Administrator to Create Permanent Directory Entries, page 2-35
- Using the Cisco Unity Bridge Mailbox Import Tool to Create Permanent Directory Entries, page 2-35

The Bridge retrieves the text and voice names from the Octel system for the directory entries and passes this information to Cisco Unity so that it is used when the Bridge subscribers are created. Each auto-created Bridge subscriber will be assigned an extension that consists of the delivery location dial ID followed by the remote mailbox number. For more details, see the "Creating Permanent Directory Entries on the Bridge Server" section on page 1-23.

Approach C: Creating Bridge Subscribers and Then Creating Corresponding Permanent Directory Entries

If you want the benefits of both approaches, first create the Bridge subscribers on the Cisco Unity server, and then create corresponding directory entries on the Bridge server. When set up this way, the Bridge subscribers will have the extensions that you assign, they will not be subject to name aging deletion, and the Bridge subscriber accounts will automatically be updated with the text and voice names retrieved from the Octel system. For more details, see the "Creating Bridge Subscribers and Then Creating Corresponding Permanent Directory Entries" section on page 1-24.

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

The Cisco Unity Bulk Import wizard allows you to create multiple subscriber accounts at the same time 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 Active Directory contacts at the same time that you create Bridge subscriber accounts, or you can use it to create Bridge subscriber accounts with existing Active Directory contact data.

If you choose to create Bridge subscriber accounts with existing Active Directory contact data, note that the e-mail addresses for the imported contacts are overwritten with extension addresses that are used for addressing voice messages to the remote voice messaging systems. Thus, the imported objects can no longer be used for outbound message addressing to remote e-mail addresses.

Use the following procedure to prepare your CSV file. To learn more about preparing a CSV file for use with the Cisco Unity Bulk Import wizard—including information on the required and optional column headers for your CSV file—refer to the Cisco Unity Bulk Import wizard Help.

To Prepare a CSV File for Creating Bridge Subscriber Accounts

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 bridgehead 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 the characters 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 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, the extension (DTMF_ACCESS_ID), and then by the remote mailbox number (REMOTE_USER_ID):

```
Abade,Alex,2001,3000
Bader,Kelly,2002,3100
Campbell,Terry,2003,3200
Cho,Li,2004,3300
```

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,DTMF_ACCESS_ID,REMOTE_USER_ID
```

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

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 every row does not have to contain data for any optional column header(s).
- Any data that includes a space, quotes, or commas is contained within quotes.

Step 7 To associate the Bridge subscribers in the CSV file with a delivery location, you can either choose from the list of defined delivery locations presented by the Cisco Unity Bulk Import wizard during the import, or you can add the DELIVERY_LOCATION_ID column to the CSV file.

The DELIVERY_LOCATION_ID column contains the dial ID of a delivery location with which the external subscriber will be associated. This value corresponds to the Dial ID field on the Network > Delivery Locations > Profile Page in the Cisco Unity Administrator. If this column header is omitted, or

if a row does not contain a value, the delivery location that the Cisco Unity Bulk Import wizard prompts for is used as a default. You can import external subscribers for multiple delivery locations by using one CSV file.

Step 8 To help prevent others from sending e-mail to Bridge subscribers, you may want to include the HIDE_IN_ADDRESS_BOOK column header, and enter a **1** (one) in each row of subscriber data.

A value of 1 indicates that subscribers will be hidden from the e-mail address book; a value of 0 indicates that subscribers will be displayed.

Step 9 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 10 Confirm that each row contains the appropriate data corresponding to each column header.

Step 11 Save the file as a CSV file.

Step 12 Continue with the following "To Create Bridge Subscriber Accounts by Using the Cisco Unity Bulk Import Wizard" procedure.

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

Step 1 Disable virus-scanning services and intrusion-detection software on the bridgehead Cisco Unity server, if applicable. Otherwise, the Cisco Unity Bulk Import wizard may run slowly. Refer to the Cisco Unity Bulk Import wizard Help for procedures.

Step 2 On the bridgehead Cisco Unity server, on the Windows Start menu, click **Programs > Cisco Unity > Cisco Unity Bulk Import**.

Step 3 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 4 When prompted to choose the type of subscriber that you want to create, click **Bridge**.

Step 5 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 CSV Import Errors" section on page 2-34 for details.

Step 6 When the subscriber accounts are created, click **Finish**.

Step 7 If you had import errors, but in Step 5 you chose to correct them later, see the "Correcting CSV Import Errors" section on page 2-34.

If you had no import errors, or if all errors have now been corrected, see the "After Creating Subscriber Accounts" section on page 2-37.

Correcting CSV Import Errors

The error log file contains data that the Cisco Unity Bulk Import wizard could not import. The wizard reports the first error it detects in a row in a CSV file. When you have corrected that error, the wizard may detect additional errors in the same 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, do the following procedure.

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

Step 1 Browse to the directory that contains 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 subscriber accounts are created without error, and then proceed to the "After Creating Subscriber Accounts" section on page 2-37.

Using the Cisco Unity Administrator to Create Bridge Subscriber Accounts

By using the Cisco Unity Administrator, you can create Bridge subscriber accounts one at a time. When you add a new Bridge subscriber account, Cisco Unity creates a contact in Active Directory.

To create a Bridge subscriber account, do the following procedure.

To Add a New Bridge Subscriber by Using the Cisco Unity Administrator

Step 1 In the Cisco Unity Administrator, go to the **Subscribers > Subscribers > Profile** page.

Step 2 Click the **Add** icon.

Step 3 Click **New** and select **Bridge** from the list.

Step 4 Enter the First Name and Last Name.

Step 5 Enter the Extension of the Bridge subscriber on Cisco Unity. This is the number that Cisco Unity subscribers use when addressing a message to this Bridge subscriber.

Step 6 Select the Subscriber Template to use.

Step 7 Enter the Remote Mailbox Number, which is the number that the remote voice messaging system uses to route messages to this Bridge subscriber.

Step 8 Select the Delivery Location with which the subscriber is associated.

Step 9 Click **Add**.

Step 10 On the subscriber record, customize settings as applicable, and then click the **Save** icon.

Using the Bridge Administrator to Create Permanent Directory Entries

You can use the Bridge Administrator to create permanent directory entries one at a time. The Bridge retrieves the text and voice names from the Octel system for the directory entries. This data is passed to Cisco Unity and is used to create the corresponding Bridge subscriber accounts and Active Directory contacts automatically. The permanent directory entries and the Bridge subscriber accounts created in this way are not subject to name aging.

Like any auto-created Bridge subscribers, these subscriber accounts are created with the subscriber template specified on the Bridge Subscriber Creation Options page in the Cisco Unity Administrator. By default, the predefined {Bridge Subscriber} template is used.

To Add a New Bridge Subscriber by Using the Bridge Administrator

Step 1 If necessary, access the Cisco Unity Bridge server as described in the "Accessing the Bridge for Administration" section on page 10-1.

Step 2 On the Configuration menu, click **Octel Nodes**.

Step 3 Select the Octel node to which you want to add directory entries, and click **Edit**.

Step 4 On the Octel Node page, click **Directory**.

Step 5 On the Directory List page, click **Add**.

Step 6 On the Directory Entry page, enter the subscriber mailbox number in the Mailbox Number box.

Step 7 Optionally, enter the subscriber name in the Name box. If you enter a name here, it will be overwritten by the name retrieved from the Octel node.

Step 8 Click **Save**.

The Bridge server makes an administrative call to the Octel node to obtain the text and recorded voice name for the directory entry and the corresponding Bridge subscriber. Note that if corresponding Bridge subscriber accounts have already been created for the directory entries, the existing Bridge subscriber accounts are updated with the text and voice names retrieved from the Octel system.

Using the Cisco Unity Bridge Mailbox Import Tool to Create Permanent Directory Entries

The Cisco Unity Bridge Mailbox Import tool (MBUpload.exe) is a console application on the Bridge server that allows you to create, modify, or delete multiple permanent directory entries at once 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.

The Bridge retrieves the text and voice names from the Octel system for the directory entries. This data is passed to Cisco Unity and is used to create the corresponding Bridge subscriber accounts and Active Directory contacts automatically. The permanent directory entries and the Bridge subscriber accounts created in this way are not subject to name aging.

Like any auto-created Bridge subscribers, these subscriber accounts are created with the subscriber template specified on the Bridge Subscriber Creation Options page in the Cisco Unity Administrator. By default, the predefined {Bridge Subscriber} template is used.

Note that if corresponding Bridge subscriber accounts have already been created for the directory entries, the existing Bridge subscriber accounts are updated with the text and voice names retrieved from the Octel system.

To Prepare a CSV File for Use with MBUpload

Step 1 Save the data which you will use to create the directory entries as a CSV file. At a minimum, you need the serial numbers and remote mailbox numbers for the subscribers; text names are optional because they will be retrieved from the Octel server.

Step 2 Copy the CSV file to the Bridge 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. Confirm that the data is separated by commas in the file.

Step 4 Rearrange the data as necessary. Each directory entry should appear on a separate line. Although the CSV file does not contain column headers, the columns must contain the following data in the order listed below:

a. Serial number of the system where the mailbox resides.

b. Remote mailbox number.

c. <Reserved for future use; this column must remain empty.> Note, however, that you must still enter a comma as if there was data in the column.

d. Action to perform: enter **A** to add, **C** to change, or **D** to delete.

e. Text Name. Note that this column is optional, because the text name will be retrieved from the Octel server.

For example, the file may look like the following:

```
12345,4001,,A,Alex Abade
12345,4002,,A,Kelly Bader
12345,4003,,A,Terry Campbell
12345,4004,,A,
12345,4005,,A,
```

Confirm that each row contains the applicable data, and save the file as a CSV file.

Step 5 Continue with the "To Run MBUpload" procedure.

To Run MBUpload

Step 1 On the Bridge server, open a command prompt window.

Step 2 Set the working drive to that on which the Bridge software is installed.

Step 3 Enter **cd \bridge\starfish\bin** to change to the directory where MBUpdate.exe is located.

Step 4 Run MBUpload with the following command line:

MBUpload [/I:<InFile>] [/O:<OutFile>] <DB Path>

Note the following:

- <InFile>—Optional. Specifies the input CSV file name. The file can reside in any directory that is accessible to MBUpload.exe. If a value for InFile is not specified, the default file MBUploadIn.csv in the working directory is used. If the path contains spaces, put quotation marks around them.
- <OutFile>—Optional. Specifies the output file which will contain exception reports. If a value for OutFile is not specified, the default file MBUploadOut.csv in the working directory is used. As MBUpload processes each record, it copies the row from the InFile to the OutFile and appends "Successful" if the operation was a success. If the path contains spaces, put quotation marks around them.
- <DB Path>—Required. Specifies the full path name to the Bridge database file. The path is usually D:\Bridge\Starfish\DB\Starfish.MDB. If the path contains spaces, put quotation marks around it.

For example, to specify the Input.csv and Output.csv in the C:\CSVfiles directory, enter:

MBUpload /I:C:\CSVfiles\Input.csv /O:C:\CSVfiles\Output.csv D:\Bridge\starfish\db\starfish.mdb

To use the default MBUploadIn.csv and MBUploadOut.csv, enter:

MBUpload D:\Bridge\starfish\db\starfish.mdb

After Creating Subscriber Accounts

After creating Bridge subscriber accounts, consider the following:

- It takes a few minutes for the newly-created subscriber account to be available to receive messages.
- You can make changes to subscriber settings for individual accounts in the Cisco Unity Administrator. For details, refer to the "Subscriber Settings" chapter in the applicable version of the *Cisco Unity System Administration Guide*, available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html.
- When you want to modify unique subscriber settings—such as primary or alternate extensions—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 subscriber account.

  See the "Deleting Bridge Subscribers" section on page 1-27 for details.

Changing the AD Location in Which Automatically Created Bridge Subscribers Are Created (Optional)

By default, all automatically created Bridge subscribers are placed in the Active Directory container that was specified in the Message Store Configuration wizard during Setup. If you want to have auto-created Bridge subscribers created in a different location, you can configure Cisco Unity to use any properly configured container or organizational unit. Separating the auto-created contacts from other AD objects

allows you to more easily monitor and control these objects. However, we do not recommend that you attempt to change the container used for subscriber creation unless you are familiar with Active Directory objects and permissions.

If you choose to change the container for auto-created contacts, note the following:

- New Bridge subscribers that are created manually by using the Cisco Unity Administrator will still be created in the default AD container that was selected in the Message Store Configuration wizard.
- Existing Bridge subscribers that have been manually created will not be relocated to the container selected for auto-created contacts. However, if an automatic modification or deletion is initiated for one of these accounts, Cisco Unity will update the account properly in the default container.
- If auto-created Bridge subscribers have already been created in the current container, or you wish to move existing manually created Bridge subscribers, you can move the existing contacts to the new container by using Active Directory Users and Computers.

Use the task list that follows to set up the container or organizational unit and to configure Cisco Unity to use it when automatically creating Bridge subscribers:

1. Identify the Active Directory location in which the auto-created contacts will be created. This can be an object of the class Container or Organizational Unit (OU). To create a new container, use a tool such as ADSI Edit. Or, to create a new OU, see the "To Create a New Organizational Unit" procedure on page 2-38.
2. Set applicable permissions for the Cisco Unity service account on the Active Directory container or OU that you selected in Task 1. To set up permissions by using the Permissions wizard, see the "To Set Permissions on the AD Location by Using the Permissions Wizard" procedure on page 2-38. Or, to manually set the specific permissions required on the container, see the "To Set Permissions on the AD Location by Using Active Directory Users and Computers" procedure on page 2-39.
3. Obtain the distinguished name of the container or OU. See the "To Obtain the Distinguished Name of the Container or Organizational Unit" procedure on page 2-39.
4. Use the Advanced Settings tool to change the container in which auto-created Bridge subscribers will be created. See the "To Change the AD Location in Which Automatically Created Bridge Subscribers Are Created" procedure on page 2-40.

To Create a New Organizational Unit

Step 1 On the Windows Start menu, click **Programs > Administrative Tools > Active Directory Users and Computers.**

Step 2 In the console tree, right-click any node or folder, and click **New > Organizational Unit**.

Step 3 Enter a name for the organizational unit, and click **OK**.

To Set Permissions on the AD Location by Using the Permissions Wizard

Step 1 On the Cisco Unity server, double-click the **Cisco Unity Tools Depot** icon on the desktop.

Step 2 In the left pane of the Tools Depot window, expand **Administration Tools**.

Step 3 Double-click **Permissions Wizard**.

Step 4 Click **Next** without changing any options until you arrive at the Set Active Directory Containers for Import page.

Step 5 Click **Add** and select the applicable container or organizational unit, or a parent of the container or OU.

Note The Permissions wizard only has the ability to grant permissions—it does not remove any permissions. Following this procedure will add the necessary permissions on the container or OU that you select, but will not remove permissions that are already granted on other containers for Cisco Unity.

Step 6 Click **Next** and follow the prompts to complete the Permissions wizard.

To Set Permissions on the AD Location by Using Active Directory Users and Computers

Step 1 On the Windows Start menu, click **Programs > Administrative Tools > Active Directory Users and Computers**.

Step 2 Click **View > Advanced Features** (if it is not already selected).

Step 3 Right-click the container or OU in which the auto-created contacts are to be created, and click **Properties**.

Step 4 Click the **Security** tab.

Step 5 Click **Add**.

Step 6 Select from the list the account that Cisco Unity directory services log on as (typically this is UnityDirSvc).

Step 7 Click **Add**, then click **OK**.

Step 8 Click **Advanced**.

Step 9 Select the permission entry for the account that you selected in Step 6, and then click **View/Edit**.

Step 10 In the Apply Onto list, select **This Object Only** (if it is not already selected).

Step 11 In the Allow column of the Permissions list, check the **Create Contact Objects** check box, and click **OK**.

Step 12 Click **View/Edit**.

Step 13 In the Allow column of the Permissions list, check the **Read All Properties**, **Write All Properties** check box, and click **List Contents**.

Step 14 Click **OK** twice, and exit Active Directory Users and Computers.

To Obtain the Distinguished Name of the Container or Organizational Unit

Step 1 On the Windows Start menu, click **Programs > Administrative Tools > Active Directory Users and Computers**.

Step 2 Right-click the container or OU in which the auto-created contacts are to be created, and click **Properties**.

Step 3 Click the **Object** tab. The fully qualified domain name of the object is displayed in the dialog box. For example, if the fully qualified domain name is ecsbu-paris.cisco.com/Unity-Bridge:

- If the object is a Container, the distinguishedName is CN=Unity-Bridge,DC=ecsbu-paris,DC=cisco,DC=com.

- If the object is an Organizational Unit, the distinguishedName is OU=Unity-Bridge,DC=ecsbu-paris,DC=cisco,DC=com.

To Change the AD Location in Which Automatically Created Bridge Subscribers Are Created

Step 1 On the Cisco Unity server desktop, double-click the **Cisco Unity Tools Depot** icon.

Step 2 In the left pane, under Administrative Tools, double-click **Advanced Settings Tool**.

Step 3 In the Unity Settings pane, click **Networking – Change AD Location Where Bridge Contacts Are Created**.

Step 4 In the New Value box, enter the distinguished name of the container to use.

Step 5 Click **Set**.

Step 6 Click **Exit**.

Step 7 Stop and restart the CsBridgeConnector service on the Cisco Unity bridgehead server(s). You do not need to restart Cisco Unity to enable the change.

Extending Identified Subscriber Messaging to Include Bridge Subscribers (Cisco Unity 4.0(4) or Later)

If all of your Cisco Unity servers are running version 4.0(4) or later, you can extend identified subscriber messaging to include Bridge subscribers. (Note that this is optional.)

When a person on a remote voice messaging system who has a corresponding Bridge subscriber account calls a Cisco Unity subscriber and leaves a message, by default Cisco Unity will not identify the message as being from the Bridge subscriber. For Cisco Unity to identify callers whose calling number matches the extension or alternate extension of a Bridge subscriber, identified subscriber messaging (ISM) must be extended to include Bridge subscribers. See the following sections as applicable to your installation.

- Installation with Multiple Cisco Unity Servers Networked via Digital Networking, page 2-40
- Single-Server Installations, page 2-41

Installation with Multiple Cisco Unity Servers Networked via Digital Networking

In installations with multiple Cisco Unity servers networked via Digital Networking, enabling ISM to include Bridge subscribers requires the following:

1. The Cisco Unity servers must be connected to the same phone system or phone system network as described in the “Dialing Domains” section of the “Digital Networking” chapter in the *Networking in Cisco Unity Guide* (Release 4.0(4) or later), available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html.
2. The Cisco Unity servers must be configured to be in the same dialing domain, as described in the “Customizing the Primary Location” section on page 2-41.
3. The automated attendant search scope on each server must be set to the dialing domain as described in the “Setting the Automated Attendant Search Scope” section on page 2-42.

4. The applicable permissions must be set on each server, as described in the "Setting Permissions on Active Directory Containers Used for Importing Subscribers" section on page 2-42.
5. Identified subscriber messaging on each server must be enabled as described in the "To Enable Identified Subscriber Messaging" section on page 2-43.
6. Identified subscriber messaging on each server must be extended to include Bridge subscribers as described in the "To Extend Identified Messaging" section on page 2-43.

Single-Server Installations

In installations with only one Cisco Unity server, enabling ISM to include Bridge subscribers requires the following:

1. The server must be configured with a dialing domain name, as described in the "Customizing the Primary Location" section on page 2-41.
2. The applicable permissions must be set, as described in the "Setting Permissions on Active Directory Containers Used for Importing Subscribers" section on page 2-42.
3. Identified subscriber messaging must be enabled as described in the "To Enable Identified Subscriber Messaging" section on page 2-43.
4. Identified subscriber messaging must be enabled for Bridge subscribers as described in the "To Extend Identified Messaging" section on page 2-43.

Customizing the Primary Location

If your installation consists of multiple Cisco Unity servers networked via Digital Networking, you may have already customized the primary location.

For detailed information about the settings, see the "Primary Location Profile Settings" section on page 11-1.

To Customize the Primary Location

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 For the Dialing Domain name:

- If your installation consists of only one Cisco Unity server, and if you plan to enable identified subscriber messaging to include Bridge subscribers, enter a dialing domain name.
- If your installation consists of multiple Cisco Unity servers networked via Digital Networking, and if this server is integrated with the same phone system as other networked Cisco Unity servers, you may have already added this server to a dialing domain. If not, enter the dialing domain name, or select it from the available list. The list contains names of dialing domain names already configured on at least one other Cisco Unity server in the network.

  Note that the dialing domain name is case sensitive and must be entered exactly the same on all of the servers. To ensure that all servers are correctly added to the same dialing domain, enter the dialing domain name on one Cisco Unity server and wait for the name to replicate to the other

Cisco Unity servers. By doing so, you also confirm that replication is working correctly among the servers. The time that it takes for the primary location data from other Cisco Unity servers to be reflected on the local server depends on your network configuration and replication schedule.

Step 6 Click the **Save** icon.

Setting the Automated Attendant Search Scope

If your installation consists of multiple Cisco Unity servers networked via Digital Networking, the auto attendant search scope must be set

To Set the Automated Attendant Search Scope

Step 1 On the Cisco Unity server desktop, double-click the **Cisco Unity Tools Depot** icon.

Step 2 In the left pane, under Administrative Tools, double-click **Advanced Settings Tool**.

Step 3 In the Unity Settings pane, click **Networking—Set Auto Attendant Search Scope**.

Step 4 In the New Value list, click **1**, and then click **Set** so that Cisco Unity searches for subscribers within the dialing domain.

Step 5 When prompted, click **OK**.

You do not need to restart Cisco Unity to enable the change.

Step 6 Click **Exit**.

Setting Permissions on Active Directory Containers Used for Importing Subscribers

If you will be importing contacts from two or more containers (for all of the Cisco Unity servers combined), the Cisco Unity message store services account on each Cisco Unity server must be granted SendAs permission on every container from which contacts will be imported on every Cisco Unity server in the forest. Otherwise, identified subscriber messaging may not work between Cisco Unity servers. For example, if CiscoUnityServer1 will import contacts from Container1 and Container2, and if CiscoUnityServer2 will import contacts from Container3 and Container4, Cisco Unity message store services account on each Cisco Unity server must have SendAs permission for all four containers.

To Set the Appropriate Permissions

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, expand **Administration Tools**.

Step 3 Double-click **Permissions Wizard**.

Step 4 Do one of the following:

- Choose a common parent container.
  - Click **Next** without changing any options until you reach the Set Active Directory Container for Import page.
  - Choose all of the containers from which contacts will be imported by choosing a common parent container.

- Choose all of the containers from which contacts will be imported by running Permissions Wizard more than once on each server. Every time you run Permissions Wizard:
  - Click **Next** without changing any options until you reach the Set Active Directory Container for Import page.
  - Choose a different container each time.
- Choose the same Active Directory account for the Cisco Unity message store services account.
  - Click **Next** without changing any options until you reach the Choose the Account to Own Cisco Unity Message Store Services page.
  - Choose the same Active Directory account for the Cisco Unity message store services account on every Cisco Unity server.

Step 5 Repeat Step 1 through Step 4 on each Cisco Unity in the forest.

Enabling Identified Subscriber Messaging

Note If the system is using failover, you must make this change on both the primary and secondary servers because the setting is stored in the registry.

To Enable Identified Subscriber Messaging

Step 1 In the Cisco Unity Administrator, go to the **System > Configuration Settings** page.

Step 2 In the Identified Subscriber Messaging section, uncheck the **Subscribers Are Identified as Message Senders Only if They Log On** check box.

Identified subscriber messaging for subscribers on the same Cisco Unity server is enabled when the check box is unchecked. By default, the box is unchecked.

Step 3 Click the **Save** icon.

Extending Identified Subscriber Messaging

After identified subscriber messaging has been enabled, you must extend it to include Bridge subscribers.

To Extend Identified Messaging

Step 1 On the Cisco Unity server desktop, double-click the **Cisco Unity Tools Depot** icon.

Step 2 In the left pane, under Administrative Tools, double-click **Advanced Settings Tool**.

Step 3 In the Unity Settings pane, click **Networking – Enable Identified Subscriber Messaging (ISM) for AMIS, Bridge, and VPIM Subscribers**.

Step 4 In the **New Value** list, click **1**, then click **Set**.

Step 5 When prompted, click **OK**.

Step 6 Click **Exit**.

Step 7 Restart Cisco Unity for the registry setting to take effect.

Enabling the Bridge Server to Send Extended-Absence Delivery Receipts (Cisco Unity 4.0(4) or Later)

For Cisco Unity subscribers to receive delivery receipts, when the extended-absence greeting for an Octel subscriber is enabled and the mailbox is accepting messages, you need to modify a configuration setting on the Bridge server. See one of the following procedures as applicable for your version of the Bridge:

- To Enable the Bridge to Send Extended-Absence Delivery Receipts (Cisco Unity 4.0(4) or Later with Cisco Unity Bridge 3.0(6)), page 2-44
- To Enable the Bridge to Send Extended-Absence Delivery Receipts (Cisco Unity 4.0(4) or Later with Cisco Unity Bridge 3.0(5)), page 2-44

To Enable the Bridge to Send Extended-Absence Delivery Receipts (Cisco Unity 4.0(4) or Later with Cisco Unity Bridge 3.0(6))

Step 1 On the Configuration Menu in the Bridge Administrator, click **Digital Networking**.

Step 2 Check the **Enable Extended Absence Notifications** check box.

Step 3 Click **Save**.

To Enable the Bridge to Send Extended-Absence Delivery Receipts (Cisco Unity 4.0(4) or Later with Cisco Unity Bridge 3.0(5))

Step 1 On the Bridge server, make a backup copy of the file **<Bridge Path>\Vpim\Vpim.cfg**.

Step 2 Open the file **<Bridge Path>\Vpim\Vpim.cfg** with Notepad.

Step 3 Search for **EnableExtAbsenceNotifications**. You should see text similar to:

```
[config]
POP3_SERVER_ID=
ESMTP_SERVER_ID=
InetRecvProtocol=1
POP3_POLL_INTERVAL_MS=600000
OUTDIAL_INTERVAL_MS=600000
CALLX_IN_POLL_INTERVAL_MS=30000
PROXY_MAILBOX_MESSAGE=IMCEAOMNI-AvVoiceMessage
PROXY_MAILBOX_DIRECTORY=IMCEAOMNI-AvVoiceAddress
EnableExtAbsenceNotifications=0
SMTP_PORT=25
```

Step 4 Go to the line containing **EnableExtAbsenceNotifications=0**, and change the **0** to a **1**.

Step 5 Save and close the file.

Step 6 Restart the Digital Networking service for the setting to take effect:

a. On the Windows Start menu, click **Programs > Administrative Tools > Services**.

b. In the right pane, right-click **Digital Networking**, and click **Restart**.

c. Close the Services console.

Enabling the Bridge to Accept Requests to Push Mailbox Information (Bridge 3.0(6) and Later)

Some remote systems provide the capability to push name information to other nodes; version 3.0(6) of the Bridge provides the capability to accept this mailbox information and use it to update the Bridge directory and the Bridge subscriber directory in Cisco Unity.

By default, the Bridge will reject an attempt by the remote node to push mailbox information (but the call will proceed and the remote node will be able to continue with any additional tasks). When the accept remote push functionality is enabled, the Bridge will accept all administrative name push requests from any remote node, and will process the directory information even if the recorded voice name is not included in the transmission. If the mailbox information sent by the remote node does not match any existing mailbox in the Bridge directory, a new usage-based entry is added to the directory. If the information pertains to a mailbox that already exists in the Bridge directory, the Bridge will modify the directory entry; if the text name is blank or no recorded name is transmitted, the corresponding field will be removed from the directory entry.

Note Before enabling this feature, you should be familiar with the voice messaging system models, versions, configuration, and subscriber population of each remote node that may push mailbox information to the Bridge. Ensure that any increased call processing and directory activity related to acceptance of non-solicited mailbox information by the Bridge does not delay or block message delivery or result in a larger Bridge subscriber directory than your Cisco Unity and Cisco Unity Bridge deployment was designed to support. Refer to the documentation for the particular model of each remote voice messaging system for additional information on support for and mechanisms used in pushing mailbox information via Octel analog networking.

To Enable the Bridge to Accept Requests to Push Mailbox Information

Step 1 On the Configuration Menu in the Bridge Administrator, click **System Settings**.

Step 2 Check the **Accept Remote Push** check box.

Step 3 Click **Save**.