

# Reference: Bridge Settings on the Cisco Unity Server

When setting up Cisco Unity and the Bridge for networking, you enter information in both the Cisco Unity Administrator and in the Bridge Administrator. This chapter provides details about the Bridge Networking settings in the Cisco Unity Administrator. See the following sections for more information:

- Bridge Delivery Locations Profile Settings, page 9-1
- Bridge Delivery Locations Prefixes, page 9-5
- Bridge Delivery Locations Subscriber Creation Settings, page 9-5
- Bridge Options Subscriber Creation Settings, page 9-6
- Bridge Options Synchronization Settings, page 9-8
- Bridge Options Unknown Caller Settings, page 9-10

Also see the "Primary Location Settings" chapter.

#### **Bridge Delivery Locations Profile Settings**

Delivery locations are Cisco Unity objects that contain the addressing information that Cisco Unity needs to send messages to and receive messages from other voice messaging systems—which may or may not be Cisco Unity systems. You create a delivery location that corresponds to each remote messaging system with which the local Cisco Unity server communicates.

When creating a delivery location, you specify Bridge as the Destination Type. The Destination Type determines which fields are displayed on the delivery locations page.

Use the following tables to learn more about the profile settings for delivery locations.

Table 9-1 Profile Settings Applicable to All Types of Delivery Locations

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

Table 9-1 Profile Settings Applicable to All Types of Delivery Locations (continued)

Field	Considerations
Dial ID	Enter the ID that identifies the location to Cisco Unity. Enter numbers only, up to a maximum of ten digits. The default minimum length is three digits.
	Although the minimum length for Dial IDs can be reduced by using the Advanced Settings Tool, one- and two-digit Dial IDs may conflict with private distribution list IDs during an address search. When a subscriber addresses a message by entering a one- or two-digit number, Cisco Unity first searches for a matching private distribution list. If a match is found, the search stops. Therefore, when a subscriber addresses a message by entering a location Dial ID (to narrow down the search scope to a particular location), if the number entered matches a private distribution list ID, the conversation offers only the private distribution list as a destination. If subscribers do not address messages to other locations by first entering a Dial ID, there is no conflict, and the minimum length for Dial IDs can be reduced to accommodate complex dial plans.
	When sending messages to a remote location, subscribers can dial a number that is made up of the Dial ID and the Remote mailbox number of the recipient.
	When setting up SMTP networking with a Cisco Unity server in a different directory, the ID that you enter here must match the Dial ID of the primary location at the corresponding remote Cisco Unity server.
	The following policies are recommended:
	• Establish a fixed length for Dial IDs and if possible, a fixed length for extensions.
	• Assign unique Dial IDs. Dial IDs should not be the same as other Dial IDs or extensions.
	• Assign Dial IDs that have at least three-digits.
	• Use a different numbering range for Dial IDs than for extensions.
	• If you use variable-length Dial IDs, the first digits of each ID should be unique with respect to other Dial IDs.
	• Even if the Dial ID will never be used by subscribers when they address messages, enter a number that does not conflict with extensions, such as 001 or 002.
Recorded Name	Record a name for the delivery location. The subscriber conversation plays this recorded name in a number of places. For example, assume that the setting Include Locations in Searches on the Network > Primary Location > Addressing Options page is enabled. When subscribers address a message by spelling the name, the recorded name for this delivery location is played in the message addressing search results along with subscriber names. (For example: "There are two matches. For Chris Newton, press 1. For New York, press 2.")
	To record the name here, use the Media Master control bar. (Note that the Media Master is not available across a firewall that blocks DCOM communications.) Use the Options menu in the Media Master control bar to set recording and playback devices, if applicable, and to use other sound files.

Table 9-1 Profile Settings Applicable to All Types of Delivery Locations (continued)

Field	Considerations
Destination Type	<i>Display only</i> . Indicates the type of delivery location. The Destination Type is specified when the delivery location is created, and it cannot be changed. The Destination Type is one of the following:
	• SMTP—Indicates that the delivery location corresponds to a remote Cisco Unity server that accesses a directory different than the local Cisco Unity server. Messages between the local and remote Cisco Unity servers are encoded in a proprietary format and delivered over the Internet or a private TCP/IP network by using the standard Simple Mail Transfer Protocol (SMTP).
	<ul> <li>AMIS—Indicates that the delivery location corresponds to an AMIS-compliant voice messaging system. Messages are sent by using the industry-standard Audio Messaging Interchange Specification analog (AMIS-a) protocol.</li> </ul>
	<ul> <li>Bridge—Indicates that the delivery location corresponds to an Octel node in an Octel analog network. Messages are exchanged between Cisco Unity and the Octel system by using the Cisco Unity Bridge. Cisco Unity sends messages to the Bridge in Voice Profile for Internet Mail (VPIM) format with proprietary extensions. The Bridge converts the message format and sends it to the appropriate Octel server by using the Octel Analog Networking protocol.</li> </ul>
	VPIM—Indicates that the delivery location corresponds to a VPIM-compliant voice messaging system. Messages are sent by using the industry-standard VPIM protocol over the Internet or a private TCP/IP network.

Table 9-2 Profile Settings Specific to Bridge Delivery Locations

Field	Considerations
Bridge Server Full Computer Name	Enter the fully qualified domain name of the Bridge server used for messaging with the Octel node represented by this delivery location. This is the name displayed on the Bridge server in the Windows System Control Panel on the Network Identification tab in the Full Computer Name field. The name entered here must also match the name entered in the Bridge Server Full Computer Name field on the Digital Networking page in the Bridge Administrator.
Octel Node Serial Number	Enter the serial number of the Octel node that corresponds to this delivery location. This number must match the serial number of one of the nodes displayed on the Octel Nodes page in the Bridge Administrator. The number entered here must also match the serial number of a corresponding Octel node.
	The Octel Node Serial Number and the Remote Mailbox Length as a pair must be unique within the global directory. In the rare case that this is needed, you can create more than one Bridge delivery location with the same Octel Node Serial Number but with different Remote Mailbox Length values.

Table 9-2 Profile Settings Specific to Bridge Delivery Locations (continued)

Field	Considerations
Remote Mailbox Length	Enter the number of digits required for mailboxes as specified in Octel for the node that corresponds to this delivery location.
	You create at least one Bridge delivery location for each remote Octel node in the Octel analog network. 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.
	For example, assume that an Octel server with the serial number 45678 has been configured to allow mailboxes of length 4 and 5. When configuring the Cisco Unity bridgehead server, you create two Bridge delivery locations with the Octel Node Serial Number 45678; one delivery location has the Remote Mailbox Length set to 4, and the other has the Remote Mailbox Length set to 5.
	If you specify a prefix (or prefixes) for the location, then the value that you entered for the remote mailbox length is used to determine the recipient mailbox number. To determine the mailbox number when addressing a message, Cisco Unity starts at the end of the entered number, and keeps including digits until the number of digits equals the remote mailbox length.
Encrypt Incoming Private Messages	Check this check box to encrypt incoming private voice messages that are sent by subscribers at this delivery location.
	Private voice messages are not encrypted and secure until they reach the Exchange server on which the Voice Connector is installed.
	Default: Check box not checked.
Decrypt Outgoing Private Messages	Check this check box to decrypt outgoing private secure voice messages sent to subscribers at this delivery location.
	Enabling the decryption of outgoing private secure messages for a delivery location allows voice messages marked private and secure to be delivered from this location to subscribers at other locations. These voice messages are decrypted when they leave the Voice Connector, and therefore are no longer secure after that point. When a subscriber receives a decrypted private secure voice message, the message is marked and played as a private message.
	Default: Check box not checked.

### **Bridge Delivery Locations Prefixes**

Use the following table to learn more about the delivery location prefixes page.

Table 9-3 Network > Delivery Locations > Prefixes Page

Field	Considerations
Prefixes Assigned to This Location	Enter a prefix or prefixes for the Octel node that corresponds to this delivery location. Prefixes are optional, but you may enter as many prefixes as required by your numbering plan. Enter numbers only, up to a maximum of 21 digits. The minimum length is 1 digit. Each prefix must be unique with respect to other prefixes within the global directory.
	When Octel subscribers send messages to subscribers on other nodes in the Octel analog network, they enter a network address as the message destination. A network address consists of a node prefix, which identifies the remote server, and the mailbox number of the recipient. In many cases, the prefix is the same as either the area code where the destination node is located, or the prefix(es) defined in the phone system dialing plan. This allows subscribers to use the same number when addressing a network message as they do when calling.
	In Cisco Unity, prefixes are optional, depending on your numbering plan. Prefixes are not needed when Cisco Unity subscribers can send messages to Octel subscribers by entering the dial ID of the location followed by the recipient mailbox number.
Assigned Location Prefixes	This displays prefixes that are in use for all delivery locations.

### **Bridge Delivery Locations Subscriber Creation Settings**

Use the following table to learn more about the creation settings for auto-created Bridge subscribers associated with the delivery location.

Table 9-4 Network > Delivery Locations > Subscriber Creation Page

Field	Considerations
If the Octel Text Name Has No Comma	Indicate how Octel text names that do not contain commas should be parsed into first and last names for auto-created Bridge subscribers. Select one of the following:
	Treat as FirstName LastName
	Treat as LastName FirstName
	In Cisco Unity, the first and last names of subscribers are stored as distinct fields in the directory, which allows directory lookups to be configured by either the last or the first name. However, Octel subscriber names are stored as one single name. When the Bridge sends a request to create a new Bridge subscriber, the CsBridgeConnector service parses the single Octel text name by the rule you have selected here.
	For example, when Treat as FirstName LastName is selected, the Octel text name "Terry Campbell" is parsed such that "Terry" is the first name, and "Campbell" is the last name.
	When Treat as LastName FirstName is selected, the Octel text name "Bader Kelly" is parsed such that "Kelly" is the first name, and "Bader" is the last name.
	Default: Treat as LastName FirstName.

Table 9-4 Network > Delivery Locations > Subscriber Creation Page (continued)

Field	Considerations
Mapping Octel Text Names to Cisco Unity Bridge Subscriber Names	Indicate how Octel text names should be mapped to the display names for auto-created Bridge subscribers. Select one of the following.
	<ul> <li>Map Octel Text Names Directly to Cisco Unity Bridge Subscriber Names: Click this option to have the display names for Bridge subscribers be the same as their corresponding Octel text names.</li> </ul>
	• Custom Mapping: Click this option and enter a rule that defines how Octel text names are mapped to Bridge subscriber display names. Enter the tokens <firstname>, <lastname>, or <textname> in any combination along with any additional text. Always precede <firstname>, <lastname>, or <textname> with a space, comma, or semi-colon if not at the beginning of the rule, and always succeed one of these tokens with a space, comma or semi-colon unless it comes at the end of the rule. In other words, you must enter a space, comma, or semi-colon separator between tokens and additional text, except at the beginning or end of a rule.</textname></lastname></firstname></textname></lastname></firstname>
	For example, assume that the Octel text name is "Bader, Kelly."
	- The rule <textname> produces the display name Bader, Kelly.</textname>
	- The rule <firstname> <lastname> produces the display name Kelly Bader.</lastname></firstname>
	<ul> <li>The rule <textname> (Voice mail) produces the display name Bader, Kelly (Voice mail).</textname></li> </ul>
	Unless hidden, Bridge subscriber display names are shown in the address books for Microsoft Outlook and the Cisco Personal Communications Assistant. To help prevent others from sending e-mail to Bridge subscribers, you may want to append a term such as "(Voice mail)" to the names of Bridge subscribers.
	Default: Map Octel Text Names Directly to Cisco Unity Bridge Subscriber Display Names.
Include Location Dial ID in Primary Extension on Auto-Created Bridge Subscribers	Check the box to have the primary extension consist of the delivery location dial ID added to the beginning of the remote mailbox number when the CsBridgeConnector service creates Bridge subscribers.

## **Bridge Options Subscriber Creation Settings**

Bridge options subscriber creation options are applied to all Bridge subscribers automatically created by Cisco Unity when it receives an Add User request from the Bridge.

Use the following table to learn more about Bridge subscriber creation options settings.

Table 9-5 Network > Bridge Options > Subscriber Creation Options Page

Field	Considerations
Subscriber Template	Select the template on which to base new Bridge subscriber accounts. The template affects most subscriber settings.
	By default, the predefined {Bridge Subscriber} Template will be used for auto-created Bridge subscribers, but you may select another template. By default, Bridge subscribers created by using the {Bridge Subscriber} Template are not added to the All Subscribers distribution list and are not listed in the Cisco Unity phone directory.
Allow Automatic Creation of Bridge Subscribers	Check the box to allow the CsBridgeConnector service to automatically create a Bridge subscriber and associated Active Directory contact when an Add-New-Subscriber request is received from the Bridge.
	When the box is unchecked, Add-New-Subscriber requests that do not match existing Bridge subscribers are discarded without processing.
	This setting supersedes the Allow Automatic Modification of Bridge Subscriber Names and Allow Automatic Modification of Bridge Subscriber Recorded Voice Name settings. If the Allow Automatic Creation of Bridge Subscribers box is checked, and an Add-New-Subscriber request is received that does not match a remote address of an existing Bridge Subscriber, then the Bridge Subscriber will be created based on the text name and voice name (if applicable) received in the request, regardless of the Modification settings below.
	Default: Check box not checked.
Allow Automatic Deletion of Bridge Subscribers	Check the box to allow the CsBridgeConnector service to automatically delete a Bridge subscriber and associated Active Directory contact when a Delete-Subscriber request is received from the Bridge.
	When the box is unchecked, Delete-Subscriber requests received from the Bridge are discarded without processing.
	Default: Check box not checked.
Allow Automatic Modification of Bridge Subscriber Names (First, Last, Display)	Check the box to allow the CsBridgeConnector service to automatically modify the first, last and display name for a Bridge subscriber and associated Active Directory contact when a Change-Text-Name request is received from the Bridge. Additionally, the CsBridgeConnector service will modify the first, last and display name for a Bridge subscriber and associated Active Directory contact when an Add-New-Subscriber request is received from the Bridge that matches an existing Bridge subscriber.
	When the box is unchecked, Change-Text-Name requests and Add-New-Subscriber requests that match existing Bridge subscribers are discarded without processing.
	Default: Check box not checked.

Table 9-5 Network > Bridge Options > Subscriber Creation Options Page (continued)

Field	Considerations
Allow Automatic Modification of Bridge Subscriber Recorded Voice Name	Check the box to allow the CsBridgeConnector service to automatically modify the recorded voice name for a Bridge subscriber when a Change-Spoken-Name request is received from the Bridge.
	Also allows the CsBridgeConnector service to automatically modify the recorded voice name for a Bridge subscriber when an Add-New-Subscriber request is received from the Bridge that matches an existing Bridge subscriber.
	When the box is unchecked, Add-New-Subscriber requests that match existing Bridge subscribers and Change-Spoken-Name requests and are discarded without processing.
	Default: Check box not checked.

### **Bridge Options Synchronization Settings**

The Bridge synchronization options allow you to control the scope when synchronizing the subscriber directory on the Bridge with the subscriber directory on Cisco Unity. Additionally, this page provides an option for forcing a full synchronization.

Use the following table to learn more about Bridge synchronization options settings.

Table 9-6 Network > Bridge Options > Bridge Synchronization Options Page

Field	Considerations
Unity Node IDs	Displays a list of the serial numbers that have been defined on Cisco Unity subscribers.  These are the serial numbers of nodes that the Cisco Unity bridgehead and Bridge servers represent in the Octel analog network.
Cisco Unity Bridge Servers: Select	Check the box next to each Bridge server address to which Cisco Unity subscriber information should be sent. Verify that the Bridge server(s) to which directory information will be sent is configured with a Unity Node for each serial number listed in the Unity Node ID table.

Table 9-6 Network > Bridge Options > Bridge Synchronization Options Page (continued)

Field	Considerations
Synchronize	Click this button to force a full synchronization of subscriber data on Cisco Unity with the subscriber directory on the selected Bridge server(s).
	For directory data about newly-created subscribers to be automatically sent to the Bridge, you first create the subscribers in Cisco Unity, and then create corresponding Unity Node(s) on the Bridge. If you do the reverse and create a Unity Node on the Bridge before creating any subscribers with the same serial number, you will have to force a synchronization. You can click Synchronize to force a full synchronization of the entire selected Bridge server, or you can delete and then add back the Unity Node on the Bridge server to force a synchronization of a specific Unity Node.
	During normal operation, Cisco Unity automatically synchronizes subscriber information with the Bridge on a regular basis. When a subscriber account is added, deleted, or modified, Cisco Unity sends the account information to the Bridge. The Bridge makes this information available to other Octel nodes when they make an administrative call to retrieve the voice and text names of Cisco Unity subscribers.
	You may want to force synchronization if the Cisco Unity server, the Bridge, or the network connection to the Bridge has been down for a long period of time, and if there have been numerous changes to subscriber information in Cisco Unity.
	Directory synchronization does not impact messaging. Subscribers can still send and receive messages when the directories are not synchronized.
	The time necessary for a full synchronization depends on many factors, such as the network connection to the Bridge, the size of the directory, whether subscribers have recorded voice names, and the codec used to record the voice names. (Voice name data is large in comparison with the other subscriber information that is sent to the Bridge.)
	To get an idea of how long full synchronization from Cisco Unity to the Bridge may take, here are a few examples obtained during testing:
	<ul> <li>1000 subscribers with 5-second voice names recorded with the G.711 codec—approximately 5 hours</li> </ul>
	• 1000 subscribers with no recorded voice names—approximately 3 minutes
	• 1000 subscribers with 2.5-second voice names recorded with the G.711 codec—approximately 2.5 hours
	• 1000 subscribers with 2.5-second voice names recorded with the G.729a codec—approximately 1 hour

## **Bridge Options Unknown Caller Settings**

Table 9-7 Network > Bridge Options > Unknown Caller Page

Field	Considerations
Legacy Mailbox ID	Enter the mailbox number to be used for messages left for Bridge subscribers from unidentified callers. For messages to be delivered to an Octel node, Octel analog networking requires that the message sender has a mailbox number and a serial number. Enter any combination of digits from 0 to 9. Do not include any spaces. Typical mailbox numbers contain 3 to 10 digits (although a maximum of 64 digits is accepted).
Node ID	Select from the list or enter the serial number to be used for messages left for Bridge subscribers from unidentified callers. Choose a serial number from among those assigned to Unity Node(s) on the Bridge server(s).  Enter any combination of digits from 0 to 9. Do not include any spaces. Typical serial numbers contain 4 or 5 digits (although a maximum of 64 digits is accepted).