



CHAPTER 5

Setting Up Features and Functionality That Are Controlled by Class of Service

In Cisco Unity Connection, some of the features that are available to users with voice mailboxes are controlled by class of service (COS), including features for which you need user licenses. You can update the settings in a COS to enable or disable features and functionality at any time. The changes that you make affect all COS members.



Note

When a COS includes access to a feature that requires individual licenses, you can offer the feature to the members of the COS only if enough licenses are available.

See the following sections for information and procedures for setting up features and functionality that are controlled by COS:

- [Access to Voice Messages from the Cisco Unified Personal Communicator, page 5-2](#)
- [Alternate Extensions, page 5-2](#)
- [Call Screening and Call Holding, page 5-3](#)
- [Cisco Unity Assistant, page 5-3](#)
- [Cisco Unity Inbox and RSS Feeds, page 5-4](#)
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Access to Voice Messages from the Cisco Unified Personal Communicator

To enable Cisco Unity Connection users to play, sort, and delete voice messages from within the Cisco Unified Personal Communicator application, complete the following tasks in the order presented:

1. Configure the applicable servers, assign Connection users to a COS in Cisco Unity Connection Administration that offers the feature, and set up the client applications, as described in the *Installation Guide for Cisco Unified Personal Communicator*, available at http://www.cisco.com/en/US/products/ps6844/tsd_products_support_series_home.html.
2. *Optional but recommended:* Configure the Connection server to provide a secure IMAP connection, as described in the “[Securing Cisco PCA and IMAP Email Client Access to Cisco Unity Connection](#)” chapter of the *System Administration Guide for Cisco Unity Connection*.
3. For information on configuring the Cisco Unified Personal Communicator to access Connection voice messages, refer users to the *User Guide for Cisco Unified Personal Communicator* at http://www.cisco.com/en/US/products/ps6844/tsd_products_support_series_home.html, or the Cisco Unified Personal Communicator Help.

Alternate Extensions

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While you specify alternate extensions for individual users on their account pages, COS settings allow you to determine whether users can view and/or manage alternate extensions, and whether they can use the Cisco Unity Assistant to manage a set of their own alternate extensions. Consider allowing users to specify their own set, so that you can reduce the number of requests to enter extensions for user mobile phones, home phones, and other phones. When you enable users to manage their own alternate extensions, they can specify up to five alternate extensions in addition to those already specified for them by you.

Do the following procedure to specify whether users can view and manage administrator-defined alternate extensions, or manage their own set of alternate extensions. To learn how alternate extensions work and why you use them, see the “[Alternate Extensions](#)” section on page 4-56.

To Specify Whether COS Members Can View and/or Manage Alternate Extensions in the Cisco Unity Assistant

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| Step 1 | In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one. |
| Step 2 | On the Edit Class of Service page, under Alternate Extensions, check either or both of the following check boxes: <ul style="list-style-type: none"> • Allow Users to View Administrator-Defined Alternate Extensions • Allow Users to Manage Their User-Defined Alternate Extensions |
| Step 3 | Click Save . |
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Call Screening and Call Holding

The Call Transfer settings in a COS specify whether users can use the Cisco Unity Assistant or the Cisco Unity Personal Call Transfer Rules web tool (as applicable) to change call screening and call holding options. (If users are enabled to use personal call transfer rules, they find screening and holding options in the Cisco Unity Personal Call Transfer Rules web tool, not the Cisco Unity Assistant.)

Screening and holding options allow users to specify how Cisco Unity Connection handles calls that are transferred from the automated attendant or a directory handler to user phones. The options that are potentially available to users differ depending on how you set up call transfers to work for each user account. (See the [“Call Transfer, Call Screening, and Call Holding”](#) section on page 4-6 for information on how call transfers work.)

Do the following procedure to specify whether users can manage their call screening and holding options.

To Specify Whether COS Members Can Manage Call Screening and Call Holding Options

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| Step 1 | In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one. |
| Step 2 | On the Edit Class of Service page, under Call Transfer, check one or both of the following check boxes: <ul style="list-style-type: none">• Allow Users to Change Call Screening Options• Allow Users to Change Call Holding Options |
| Step 3 | Click Save . |
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Cisco Unity Assistant

The Cisco Unity Assistant is a web tool available on the Cisco Personal Communications Assistant (PCA) website. The Cisco Unity Assistant allows users to personalize their Connection settings—including their greetings and message-delivery options—and to set up message-notification devices and to create private lists.

Do the following procedure to enable users to access the Cisco Unity Assistant. For steps on configuring the browsers on user workstations to access any of the Cisco PCA web tools, see the [“Configuring an Internet Browser to Access the Cisco PCA”](#) section in the “Setting Up Access to the Cisco Personal Communications Assistant” chapter of the *User Workstation Setup Guide for Cisco Unity Connection*.

To Enable COS Members to Access the Cisco Unity Assistant

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| Step 1 | In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one. |
| Step 2 | On the Edit Class of Service page, under Features, check the Allow Users to Use the Cisco Unity Assistant check box. |
| Step 3 | Click Save . |
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Cisco Unity Inbox and RSS Feeds

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As a convenience to users who are not always able to check messages by phone, you can enable users to access the Cisco Unity Inbox or RSS Feeds on their computers.

The Cisco Unity Inbox is a web tool available on the Cisco Personal Communications Assistant (PCA) website. For steps on configuring the browsers on user workstations to access any of the Cisco PCA web tools, see the “[Configuring an Internet Browser to Access the Cisco PCA](#)” section in the “Setting Up Access to the Cisco Personal Communications Assistant” chapter of the *User Workstation Setup Guide for Cisco Unity Connection*.

RSS Feeds allow users to retrieve voice messages by using an RSS reader. For details on configuring the Connection server for RSS Feeds, see the “[Configuring Access to RSS Feeds of Voice Messages](#)” section in the “Messaging” chapter of the *System Administration Guide for Cisco Unity Connection*.

Do the following procedure to enable users to access the Cisco Unity Inbox and RSS Feeds.



Note

You can offer the Cisco Unity Inbox and RSS Feeds to members of the COS only if enough licenses are available.

To Enable COS Members to Access the Cisco Unity Inbox and RSS Feeds

- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Licensed Features, check the **Allow Users to Use the Cisco Unity Inbox and RSS Feeds** check box.
- Step 3** Click **Save**.

Deleted Message Access

You specify whether users can access the messages that they delete, or whether messages are permanently deleted at the time that users delete them. If you have concerns about storing deleted messages on the server, you may want to consider preventing users from accessing deleted messages.

Do the following procedure to specify whether users can access deleted messages.

To Enable or Disable Access to Deleted Messages

- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Message Options, check or uncheck the **Delete Messages Without Saving to Deleted Items Folder** check box, as follows:
 - To allow users to access deleted messages, uncheck the check box.
 - If you want messages permanently deleted when users delete them, check the check box.
- Step 3** Click **Save**.

Directory Listing

You specify whether users in a COS can choose to be listed in directory assistance. Directory assistance is the audio listing that users and outside callers use to reach users and to leave messages for them.

Do the following procedure to allow users to choose (by using the Cisco Unity Assistant) whether to be listed in directory assistance.

To Allow COS Members to Choose Whether to Be Listed in Directory Assistance

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Directory Listing, check the **Allow Users to Choose to Be Listed in the Directory** check box.
- Step 3** Click **Save**.
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Greeting Length

Do the following procedure to specify how long the recorded greeting of a user can be.

To Specify Maximum Length of User Greetings

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Greetings, enter the maximum length for greetings (in seconds).
- Step 3** Click **Save**.
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IMAP Client Access to Voice Messages

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As a convenience to users who are not always able to check messages by phone or from the Cisco Unity Inbox, you can enable users to use an IMAP client application on their computers to access their voice messages. Access to messages is limited according to the option you select:

Allow Users to Access Message Bodies	Users can access the entire voice message.
Allow Users to Access Message Bodies Except on Private Messages	<p>Users can access the entire voice message, unless the message is marked private. For private messages, they can access only the message header. (Secure messages can never be accessed in an IMAP client.)</p> <p>This option also ensures that private messages are never saved as WAV files to locations outside of the Cisco Unity Connection server.</p>
Allow Users to Access Message Headers Only	Users can access message headers only.

Do the following procedure to enable IMAP client access to voice messages for members of a particular class of service. See the “[Configuring IMAP Settings](#)” chapter of the *System Administration Guide for Cisco Unity Connection* for instructions on configuring the Connection server, user accounts, and user workstations for IMAP client access.

Note that you can offer IMAP client access to voice messages to members of the COS only if enough licenses are available.

To Enable IMAP Client Access to Voice Messages for COS Members

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Licensed Features, check the **Allow Users to Access Voice Mail Using an IMAP Client** check box.
- Step 3** Choose one of the following options:
- **Allow Users to Access Message Bodies**
 - **Allow Users to Access Message Bodies Except on Private Messages**
 - **Allow Users to Access Message Headers Only**
- Step 4** Click **Save**.
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Live Reply

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When live reply is enabled, users who are listening to messages by phone can reply to a message by having Cisco Unity Connection call the sender. You can use COS settings to specify whether users can live reply only to messages from other users, or to messages from both users and unidentified callers (unidentified callers are outside callers or users who are forwarded to Connection but who cannot be identified by the calling extension).

Users can live reply to a message by using the touchtone conversation or the voice-recognition conversation. Consider informing users when you enable this feature, because even when it is enabled, the live reply option is not mentioned in the main Connection phone menus for some phone conversation types. (It is, however, mentioned in the *User Guide for the Cisco Unity Connection Phone Interface*.)

Note the following considerations for live reply to users:

- Connection dials the extension of the user who left the message only when the Transfer Incoming Calls to User's Phone setting for the user who left the message is set to ring an extension or another number.



Note

The Transfer Incoming Calls to User's Phone field is on the Call Transfer page.

- The call transfer settings for the user who left the message dictate what Connection does when the user phone is busy, and whether Connection screens the call.

- If a user attempts to live reply to a message but the sender is unavailable to take the call, a reply message left for the sender is only correctly identified as having been sent by the user if the user called from his or her own extension or an alternate extension. This is because Connection releases the live reply call to the phone system, and the user is no longer logged on to Connection when leaving the reply message.

Note the following considerations for live reply to unidentified callers:

- Connection uses the calling number provided by the phone system in the Automatic Number Identification (ANI) string. To initiate the live reply, Connection checks the ANI digits against the transfer restriction table associated with the class of service of the user. If the number is allowed, Connection returns the call by performing a release transfer to the phone system.
- You can configure a prefix that Connection prepends to the ANI string, and the minimum length of the ANI string before the prefix is applied; you can use this, for example, to prepend a trunk access code to all numbers of a sufficient length, or to provide additional information that the phone system may need to process the number. Any other formatting that must be done to generate a proper dial string must be performed by the phone system. For instructions, see the “[Dial Prefix Settings for Live Reply to Unidentified Callers](#)” section in the “Changing Conversation Settings for All Users” chapter of the *System Administration Guide for Cisco Unity Connection*.

Do the following procedure to enable live reply for users in a COS.

To Enable Live Reply for COS Members

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Message Options, check either or both of the following check boxes:
- **Users Can Reply to Messages from Other Users by Calling Them**
 - **Users Can Reply to Messages from Unidentified Callers by Calling Them**
- Step 3** Click **Save**.
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Message Recording Length

Do the following procedure to specify the maximum recording length for messages that users who are assigned to a COS can leave for other users. The default setting is 300 (5 minutes).



Note

The maximum length for messages that are left by outside callers is set on the Message Settings page for each user account. See the “[Outside Caller Options](#)” section on page 4-9 for details.

To Specify Maximum Recording Length for User Messages

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Message Length, enter the maximum recording length in seconds.

Step 3 Click **Save**.

Personal Call Transfer Rules

By using the Personal Call Transfer Rules web tool, Cisco Unity Connection users can create call transfer rules that forward and screen direct and indirect calls according to any or all of the following criteria:

- Identity of caller
- Time of day
- Meeting schedule

Connection users can specify that calls are forwarded to voice mail, to another phone number, or to a series of destinations (which must include at least one phone number and which can include SMS and SMTP notification devices).

See the following sections:

- [About the Personal Call Transfer Rules Web Tool, page 5-8](#)
- [Enabling and Disabling the Personal Call Transfer Rules Feature, page 5-9](#)

Optionally, you can configure Connection so that users can base personal call transfer rules on their Exchange calendar and contacts. See the [“Access to Exchange Calendars and Contacts” section on page 4-61](#) for more information and a task list.

About the Personal Call Transfer Rules Web Tool

Personal Call Transfer Rules is a web tool available on the Cisco Personal Communications Assistant (PCA) website. In addition to allowing users to create call transfer rules, it offers the following additional features to Cisco Unity Connection users:

Personal contacts list	<p>Connection users can set up a directory of personal contacts that supplements the information in the Connection directory. Connection uses the personal contacts list to forward incoming calls, and also to place outgoing calls when the Connection user uses the speech recognition conversation.</p> <p>Note Users manage their personal contacts list in the Cisco Unity Assistant web tool.</p>
Caller groups	<p>Connection users can organize callers into groups so that they can apply one rule to multiple callers without having to recreate the rule multiple times. Caller groups can contain other Connection users, system contacts, or personal contacts.</p>
Personal destinations	<p>In addition to notification devices, Connection users can create a directory of contact phone numbers to which Connection can direct incoming calls, according to rules that users set up.</p>

Destination groups	Connection users can create groups of personal destinations and notification devices. When transferring a call to a destination group, Connection forwards the call to each destination in the group in the order listed until the phone is answered, the caller hangs up, or the last destination in the group is reached. Connection users can specify the ordering of destinations in the series, and the number of rings that Connection waits for the phone to be answered at each destination.
Call transfer rule tester	The call transfer rule tester is used by users and administrators to see how Connection would forward an incoming call based on an actual rule.
Transfer All rule	The Transfer All rule is a single rule that forwards all calls to a specific destination for a specified time. This rule can be created and activated only by phone.
Forward all calls to Cisco Unity Connection	Connection users can forward all calls to Connection in order to automatically apply personal call transfer rules to incoming calls, rather than having the call ring the primary extension.

To learn more about how users can use personal call transfer rules and the web tool, see [“The Cisco Unity Personal Call Transfer Rules Web Tool”](#) chapter of the *User Guide for the Cisco Unity Connection Personal Call Transfer Rules Web Tool*.

Enabling and Disabling the Personal Call Transfer Rules Feature

Do the following procedure to enable or disable the personal call transfer rules feature for users in a COS.

To Enable or Disable Personal Call Transfer Rules for COS Members

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Features, do one of the following:
- To enable personal call transfer rules, check the **Allow Users to Use Personal Call Transfer Rules** check box.
 - To disable personal call transfer rules, uncheck the **Allow Users to Use Personal Call Transfer Rules** check box.
- Step 3** Click **Save**.
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Private Distribution Lists

COS settings allow you to specify the maximum number of lists that are available to users, and the maximum number of members that users can add to each list when they use the Cisco Unity Connection conversation or the Cisco Unity Assistant to manage their lists.

See the following sections:

- [Maximum Number of Private Lists Available to Users, page 5-10](#)
- [Maximum Number of Members Per Private List, page 5-10](#)

Maximum Number of Private Lists Available to Users

You can set the maximum number of lists—up to 99—available to each user who is assigned to the COS.

While both the Cisco Unity Connection conversation and the Cisco Unity Assistant use this COS setting to determine when a user has reached the maximum number of lists, each application calculates differently the number of lists that a user owns:

- When a user uses the phone to create a new list by adding members, the Cisco Unity Connection conversation counts the number of private lists that have members, and then compares the total to the value in this setting to determine whether the user has reached the list limit. Lists with no members (empty lists) are not included in the total number of lists that a user owns, even if the lists have recorded names or text names.
- When a user uses the Cisco Unity Assistant to create a new list, the Cisco Unity Assistant counts the number of lists that have a recorded voice name, a text name, or members, and then compares the total to the value in this setting to determine whether the user has reached the list limit. Lists with no members are included in the total number as long as they have recorded names or text names.

This means that if a user belongs to a COS that allows 15 lists, and the user has 12 private lists with members and two lists with recorded names but no members, the user can potentially create more lists by phone than in the Cisco Unity Assistant before reaching the list limit:

- When the user uses the Cisco Unity Connection conversation, the user reaches the list limit either by adding members to the two empty lists and creating one new list, or by creating three new lists. If the user reaches the limit by creating three new lists, the user cannot add members to the two empty lists until two lists are deleted.
- When the user uses the Cisco Unity Assistant, the user reaches the list limit by creating one new list. Despite reaching the list limit, the user can add members to the two empty lists.

Do the following procedure to change the maximum number of private lists that are available to users in a COS.

To Change the Maximum Number of Private Lists Available to COS Members

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| Step 1 | In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one. |
| Step 2 | On the Edit Class of Service page, under Private Distribution Lists, enter a number from 1 to 99 in the Maximum Lists Per User field. |
| Step 3 | Click Save . |
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Maximum Number of Members Per Private List

Do the following procedure to specify the maximum number of members—up to 999—that users who are assigned to a COS can add to a private list.

To Change the Maximum Number of Members Per Private List

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|---------------|---|
| Step 1 | In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one. |
| Step 2 | On the Edit Class of Service page, under Private Distribution Lists, enter a number from 1 to 999 in the Maximum Members Per List field. |

Step 3 Click **Save**.

Recorded Name and Length

For each COS, you specify whether users are allowed to record their own voice names, and how long a recorded name can be.

Hearing a name recorded in the voice of the user can help callers distinguish between users who have similar names. When allowed to record their voice names, users can use either the Cisco Unity Connection phone conversation or the Cisco Unity Assistant to make the recording, and they are prompted to complete the task during first-time enrollment.



Note

Connection does not prevent users from completing the enrollment process if they do not record a name.

When Connection users have no recorded name, Connection uses Text to Speech to play the user name (either the display name or the concatenated first and last name, depending on which name is entered in Connection Administration). However, recorded names can give callers an extra level of assurance that they are reaching the person or mailbox they intended to reach. If you are considering preventing users from recording their own names, we recommend that you have user names recorded by someone, to assist callers in understanding names.

Do the following procedure to specify whether users can record their names, and the recorded name length.

To Specify Whether COS Members Can Record Their Names, and the Length for a Name

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Recorded Name, check the **Allow Recording of Voice Name** check box.
- Step 3** In the Maximum Length field, enter the maximum length in seconds.
- Step 4** Click **Save**.
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Restriction Tables

For each COS, you specify the restriction table that is used for call transfers and message notifications. The restriction table that you specify can be the same for both, or different for each.

To learn more about how restriction tables work, see the “[Managing Restriction Tables](#)” chapter of the *System Administration Guide for Cisco Unity Connection*.

Do the following procedure to specify the restriction tables that control the numbers that users can use for call transfers and message notifications.

To Specify a Restriction Table for Call Transfers and Message Notifications

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Restriction Tables, do the following:
- In the Outcalling list, click the restriction table that you want used for message notifications.
 - In the Transfer list, click the restriction table that you want used for call transfers.
- Step 3** Click **Save**.
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Secure Messages

You determine how Cisco Unity Connection handles message security for messages that are sent by members of the COS. You can specify that:

- Messages are always marked secure.
- Messages are marked secure only when users mark them secure by pressing the applicable key from the Special Delivery Options phone menu.
- Messages are never marked secure.
- Messages are marked secure only when users mark them private (this is the default).

Note that users are always able to mark a message private when they send it—regardless of the option you specify. See the “[Securing User Messages: Controlling Access and Distribution](#)” chapter of the *System Administration Guide for Cisco Unity Connection* to learn more about the message security options available in Connection.

Do the following procedure to specify how Connection handles message security for the messages that are sent by members of the COS.

To Specify Message Security for COS Members

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- Step 1** In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one.
- Step 2** On the Edit Class of Service page, under Message Options, select from the following options in the **Require Secure Messaging** list:
- **Always**—Messages are always marked secure.
 - **Never**—Messages are never marked secure.
 - **Ask**—Messages are marked secure only when users mark them secure by choosing the secure message option from the Special Delivery Options phone menu.
 - **Private**—Messages are marked secure only when users mark them private from the Special Delivery Options phone menu.
- Step 3** Click **Save**.
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Sending Messages to System Distribution Lists

Do the following procedure to specify whether users can send messages to system distribution lists.

To Specify Whether COS Members Can Send Messages to System Distribution Lists

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| Step 1 | In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one. |
| Step 2 | On the Edit Class of Service page, under Message Options, check or uncheck the Allow Users to Send Messages to System Distribution Lists check box. |
| Step 3 | Click Save . |
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Voice Recognition

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Access to the voice-recognition conversation allows users to interact with Cisco Unity Connection by saying commands rather than by using keys on the phone. To enable users to use it, complete the following tasks in the order presented:

1. Assign users or a user template to a class of service that offers a license to access the voice-recognition feature and enables users to use it. Do the following [“To Allow COS Members a License to Access and Use the Voice-Recognition Feature”](#) procedure.
2. Specify that each user account or template is assigned to the voice-recognition conversation. See the [“Touchtone and Voice-Recognition Conversations”](#) section on page 4-12 for instructions.

Note that you can offer voice recognition to members of the COS only if enough licenses are available.

To Allow COS Members a License to Access and Use the Voice-Recognition Feature

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| Step 1 | In Cisco Unity Connection Administration, find the COS that you want to change, or create a new one. |
| Step 2 | On the Edit Class of Service page, under Licensed Features, check the Allow Access to Advanced Features check box, and then check the Allow Users to Use Voice Recognition check box. |
| Step 3 | Click Save . |
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