

Users

Users in Cisco Unity Connection are the user accounts that determine who can access the system and which system features and resources they can use (other than the ones already controlled by the associated class of service). Unity Connection supports the following types of users:

Users With Voice Mailboxes	Includes the users who need to send or receive voice messages and use other Unity Connection features, such as personal call transfer rules and Web Inbox or Messaging Inbox depending on the class of service assigned to the user.
	A user account that is set up with a voice mailbox has a phone extension and is counted as a voicemail licensed user.
Users Without Voice Mailboxes	Includes the users who do not need to send or receive voice messages but need to administer the system. You can determine the tasks that the administrators can do by assigning any of the predefined roles to the user.
	An account that is set up without a voice mailbox does not have a phone extension and is not counted as a voicemail licensed user.

Default Users

By default, Unity Connection creates the following user accounts, which you use when setting up the system.

Administrator	Administrator user account has the highest level of administrative privileges tem Administrator role) and is used to access Cisco Unity Connection inistration. The alias and password for this account are specified during llation. This account is configured as a user without a voice mailbox.	
	Caution The default Administrator account can be deleted. However, be sure that you have assigned the System Administrator role to at least one other user before you delete this account.	

Operator	The Operator user account is the message recipient for the Operator call handler. When calls to the operator go unanswered, callers can leave a message, depending on the call transfer settings for the Operator call handler. You should assign someone to monitor the mailbox for the Operator user account or reconfigure the Operator call handler to send messages to a different user or a distribution list. This account cannot be deleted.
Undeliverable Messages Mailbox	By default, the Undeliverable Messages Mailbox user account is the only member of the Undeliverable Messages distribution list, which receives notification of undeliverable messages. You should assign someone to monitor this mailbox or add a user to the Undeliverable Messages distribution list to monitor and reroute (as appropriate) any messages that are delivered to the list. This account cannot be deleted.
Unity Connection Messaging System	The Unity Connection Messaging System user account is configured as a user without a voice mailbox. It acts as a surrogate sender of messages from outside callers. Thus, messages from outside callers are identified as coming from the Unity Connection Messaging System mailbox. This account cannot be deleted.



The default user accounts are not included in your user license count.

Finding Users

Cisco Unity Connection Administration allows you to find users based on search criteria that you enter. You can enter all or part of a name, extension, and/or user alias (ID) to find a user.

As a best practice, do not use wildcards such as * in search strings. If you want to find a user, use **Begins With**, **Contains**, or **Ends With** to match part of a string, or leave the search string blank to return all results. Unity Connection attempts to match wildcard characters within the field you are searching; if no objects contain such characters in that field, no results are returned.

You can use the **Search Limits** fields on the search page to limit the results that are displayed to a particular partition in which user extensions are configured, or to a particular location if the directory contains users from other digitally-networked Unity Connection locations. When you search for users and limit the results by partition, you can also choose whether to display only users whose primary extension is in the partition, or users whose primary extension and any alternate extensions appear in the partition. If you choose to display the primary extension and any alternate extensions, multiple records may display for a single user in the search results.

You can use the navigation buttons at the bottom of the search results table to move between pages, and use the **Rows Per Page** setting to display 25, 50, 100, 150, 200, or 250 rows per page. Unity Connection saves your **Rows Per Page** setting so that on subsequent sign-ins you receive the same number of results per page for this search page.

To Find a User Account

- Step 1 In Cisco Unity Connection Administration, select Users.
- Step 2 On the Search Users page, in the Search Results table, select the user alias to display the user account.

If you do not see the user alias listed in the Search Results table, continue with Step 3.

- Step 3 In the Find Users Where search fields, indicate whether to search by Alias, extension, First Name, Last Name, or Display Name. You can further refine your search by setting additional parameters, such as Begins With or Ends With. Enter the applicable characters to search for, and select Find.
- **Step 4** To limit the search results by partition or location, do the following:
 - a. In the Limit Search To list, select Partition or Location.
 - b. In the Where Name Is list, select the name of the partition or location in which you want to find the user

When limiting the search to a partition, select whether to display only primary extensions in the partition or both primary and alternate extensions in the partition.



If you select to display both the primary extension and any alternate extensions, multiple records may display for a single user in the search results.

Step 5 In the Search Results table, select the user alias to display the user account.

Creating User Accounts

Before creating user accounts, you must configure user templates and class of service that want to use to create the accounts. After creating a user account, the changes made to the associated user template does not apply to the account. For more information on user templates or class of service, see <User Attributes> chapter.

You can use either of the following methods to create users in Unity Connection:

- Creating Users Manually: Allows to manually create each user through Search Users page. For information, see Creating User Accounts Manually, page 4-3.
- Importing Users from Cisco Unified Communications Manager: Allows you to import users from Cisco Unified Communications Manager to Unity Connection using AXL. For information, see Importing Users from Cisco Unified Communications Manager 5.x and later, page 4-5.
- Importing Users from LDAP Directory: Allows you to import users from LDAP directory to Unity Connection. For information, see Importing Users using LDAP Directory, page 4-6.
- Creating Users through Bulk Administration Tool (BAT): Allows you to create multiple users using BAT at the same time. For information, see Creating User Accounts using BAT, page 4-6.

Creating User Accounts Manually

Users with voice mailboxes are end users and the users without voice mailboxes are system administrators. Before you add user accounts individually, you need to select and define a template and class of service (COS) for each type of account you need to add. For administrator accounts, you also need to select the roles that are assigned to each account. To learn more about the tasks you should do before adding a user account, see the "User Attributes" chapter.

In case of end users, the default voicemail PINs and web application passwords are applied to each user account that you create. These PINs and passwords are either the defaults set for the default Voicemail User Template during installation, or defaults that are set on the Change Password page for the user

template that you select when creating the accounts. You need to give these PINs and passwords to users so that they can sign in to the Unity Connection conversation and to the Cisco Personal Communications Assistant (PCA). To increase system security, you need to instruct users to change both PIN and password as soon as possible and you need to enforce PIN and password complexity rules.

When you create administrator accounts, consider the following security issues:

- By default, the user without a voice mailbox template specifies the System Administrator role, which is the administrator role with the highest privileges.
- A default web application password is applied to each administrative account that you create. If you use the default Administrator Template to create a new account, keep in mind that the default password associated with that account is a randomly-generated string. Therefore, make sure to first enter a new default password for the template to replace the randomly-generated string or change the password for each new account that you create it based on the default Administrator Template. To increase system security, you must instruct administrators to change the password as soon as possible and you must enforce password complexity rules also.
- If system administrators in your organization require voice mailboxes, you must set up separate accounts for each system administrator. This means that you must create a user account without voice account for signing in to Unity Connection Administration to do administrative tasks and a separate user account with a voice mailbox for sending and receiving voice messages.

Do the following procedure to add a user account with or without a voice mailbox.



The information in this section is not applicable for adding end user accounts in Cisco Business Edition. Instead, see the "Creating User Accounts Manually" section on page 4-3.

To Add a User Account

Step 1 In Cisco Unity Connection Administration, select **Users**.

The Search Users page appears displaying the currently configured user accounts.

- Step 2 On the Search Users page, select **Add New**. The New User page appears. (For information on each field, select **Help > This Page**.)
- Step 3 In the User Type list, do either of the following:
 - Select User With Mailbox to create an end user account.
 - Select User Without Mailbox to create an administrator account.
- **Step 4** In the Based on Template list, do either of the following:
 - Select VoiceMailUserTemplate for end user account.
 - Select **AdministratorTemplate** for administrator account.
- **Step 5** Enter the required information in the fields.

Note that the SMTP Address field is optional which means that if you do not enter a value, Unity Connection uses the alias to form the SMTP address. However, the SMTP address cannot include non-ASCII characters. Thus, if the user alias contains non-ASCII characters, you must provide an acceptable SMTP address.

- **Step 6** Select **Save**. The Edit User Basics page appears.
- Step 7 Enter the additional information as applicable and select **Save**.

Importing Users from Cisco Unified Communications Manager 5.x and later

You can use either of the following methods to import users from Cisco Unified CM using AXL server:

- Importing Users through AXL, page 4-5
- Considerations While Importing Data From LDAP Directory Integrated with Cisco Unified CM, page 4-6

Importing Users through AXL

Unity Connection requires an Administrative XML Layer (AXL) server to access the Cisco Unified Communications Manager database, therefore, you must configure an AXL server for the Cisco Unified CM server from which you want to import the users. AXL is an Application Programming Interface (API) that provides a mechanism for inserting, retrieving, updating, and removing data from the database.

Prior to importing users, you must do the following on the Cisco Unity Connection server:

- Edit or add a user template. In the Phone System field for the template, select the Cisco Unified CM server from which you are importing users.
- Configure an AXL server for the Cisco Unified CM server from which you are importing users. For
 details on configuring AXL servers, see the Cisco Unified Communications Manager AXL Servers,
 page 7-3 section.

You use the Users > Import Users page in Cisco Unity Connection Administration to create multiple user with voicemail accounts from Cisco Unified CM users. For more information see, "Using Import Users and Synch Users Functionalities" section on page 4-6.



Cisco Unified CM users must have a Primary Extension defined otherwise the users do not appear on the Users > Import Users page in Cisco Unity Connection Administration.

When user accounts are created using this method, Unity Connection takes the user Alias, Extension, First Name, Last Name, and all the other available data from the end user table of Cisco Unified CM and fills the remaining information from the user template that you specify. The data from the fields that are taken from Cisco Unified CM cannot be modified using Unity Connection Administration. The method that you can use to update the data in Unity Connection depends on whether Cisco Unified CM is integrated with an LDAP directory:

- If Cisco Unified CM is not integrated with an LDAP directory: You must change the data in Cisco Unified Communications Manager Administration and then use the Synch Users page in Unity Connection Administration to manually refresh information from Cisco Unified CM for voicemail users that were created using the Import Users page.
- If Cisco Unified CM is integrated with an LDAP directory: You must update the data in the LDAP directory, resynchronize the Cisco Unified CM database with the LDAP directory, and then use the Synch Users page in Unity Connection Administration to manually refresh information from Cisco Unified CM for voicemail users that were created using the Import Users page.

Considerations While Importing Data From LDAP Directory Integrated with Cisco Unified CM

An alternative of creating users by importing data from Cisco Unified Communications Manager is to integrate Unity Connection with an LDAP directory and then import user data from the LDAP directory as described in the "LDAP" chapter. Note the following:

- If you import users from Cisco Unified CM and if Cisco Unified CM is integrated with the LDAP directory, Unity Connection does not automatically have access to LDAP synchronization or authentication. If you want Unity Connection users to authenticate against the LDAP directory, you must integrate Unity Connection with the LDAP directory, too.
- If you import users from Cisco Unified CM, updates to Cisco Unified CM data do not automatically replicate to the Unity Connection server, so you must use the Synch Users page in Cisco Unity Connection Administration to manually synchronize Unity Connection user data with Cisco Unified CM user data from time to time. If you integrate Unity Connection with an LDAP directory, you can define a synchronization schedule that specifies when data in the Unity Connection database is automatically resynchronized with data in the LDAP directory.
 - Note that when you add users to the LDAP directory, you still need to manually import them into Unity Connection; automatic synchronization only updates the Unity Connection database with new data for existing users, not new data for new users.
- When you integrate Unity Connection with an LDAP directory, you can configure Unity Connection to authenticate passwords for web applications against the LDAP database. When you import data from Cisco Unified CM, you must maintain passwords for Unity Connection web applications in Unity Connection and for Cisco Unified CM web applications in Cisco Unified CM.

Importing Users using LDAP Directory

You can use Import Users functionality to import users from the LDAP directory to Unity Connection server. For more information on configuring LDAP, see the "LDAP" chapter.

Creating User Accounts using BAT

Cisco Unity Connection provides the Bulk Administration Tool that allows you to create, update, and delete multiple user accounts or contacts at the same time by importing information contained in a comma separated value (CSV) file. In addition, it allows you to export information about users or contacts from Cisco Unity Connection to a CSV file.

For information on how to create users using BAT, see the Bulk Administration Tool, page 19-2 section.

Using Import Users and Synch Users Functionalities

You can use the Import Users functionality to import existing Cisco Unified CM users in Unity Connection. After importing users from Cisco Unified CM, you can use the Synch Users functionality to manually refresh the information you imported from Cisco Unified CM.



In Cisco Business Edition configurations, synchronization happens automatically. You are not required to manually synchronize the users.

You can also use Import Users functionality to import users from an LDAP directory.



A Cisco Unified CM or LDAP directory server must be integrated with Unity Connection before importing the users.

To Access the Import and Synch Users Tools

- Step 1 In Cisco Unity Connection Administration, expand Users.
- Step 2 Select Import Users or Synch Users, as applicable.

Editing User Account

After a Cisco Unity Connection user account has been created, you may need to adjust settings (for example, to reset a user PIN or password or to set up new notification devices for the user) or delete the account.

See the following sections:

- Editing Individual User Account, page 4-7
- Editing User Accounts in Bulk Edit Mode, page 4-8
- Editing User Accounts through BAT, page 4-9

Editing Individual User Account

You can edit settings for an individual user account from the pages available on the Edit menu in Cisco Unity Connection Administration.

Do the following procedure to edit individual user account settings.

To Edit a User Account

- **Step 1** In Cisco Unity Connection Administration, select **Users**.
- Step 2 On the Search Users page, select the alias of the user account that you want to edit.



If the user does not appear in the search results table, set the applicable parameters in the search fields at the top of the page, and select **Find**.

- Step 3 On the Edit User Basics page, change the applicable settings. When you have finished, select Save.
- **Step 4** On the Edit menu, select any of the following settings that you want to edit and select **Save**:
 - User Basics

- Password Settings
- Change Password
- Roles
- Message Waiting Indicators
- Transfer Rules
- Message Settings
- Caller Input
- Mailbox
- Phone Menu
- Playback Message Settings
- Send Message Settings
- Message Actions
- Greetings
- Post Greeting Recording
- Notification Devices
- Alternate Extensions
- Alternate Names
- Private Distribution Lists
- Unified Messaging Accounts
- Video Services Accounts
- SMTP Proxy Addresses



For information on each user settings, see the Settings for User Accounts and User Templates, page A-1 section.

Editing User Accounts in Bulk Edit Mode

Bulk Edit option on the Search Users page allows you to select large numbers of user accounts and quickly make the same changes to the selected user account at one time.

If you have multiple locations in your network and want to edit the data across the network in Bulk Edit mode, you need to configure remote access to other locations in your network before attempting a Bulk Edit operation. For more information on configuring location passwords, see the Connection Location Passwords, page 10-5 section of the Networking chapter.

The following procedure provides instructions for beginning a Bulk Edit operation.

To Edit User Account Information in Bulk Edit Mode

Step 1 In Cisco Unity Connection Administration, on the Search Users page, check the applicable user check boxes, and select **Bulk Edit**.

Step 2 On the Edit User Basics page, change settings as applicable.



Note

You can also set the **Bulk Edit Task Scheduling** field to schedule the Bulk Edit operation for a later date and/or time.

- Step 3 Select Submit.
- Step 4 If applicable, continue to change settings for these user accounts on the related pages available from the Edit menu. As you make changes on each page, select **Submit** before going on to the next page to make additional changes.

Editing User Accounts through BAT

BAT allows you to edit Unity Connection user accounts (with or without voice mailboxes) using the information contained in a comma separated value (CSV) file. For more information on using BAT tool and CSV file, see the Bulk Administration Tool, page 19-2 section.

Deleting User Accounts



In Cisco Business Edition, you delete Cisco Unity Connection user accounts in Cisco Unified CM Administration. (Use the applicable User Management page to find the user or application user, then delete.)

To learn more about deleting Unity Connection accounts in Cisco Unified CM Administration, see the online Help or the "End User Configuration" and "Application User Configuration" chapters of the applicable *Cisco Unified Communications Manager Administration Guide*. The guide is available at http://www.cisco.com/en/US/products/ps7273/prod_maintenance_guides_list.html.

When a user leaves the organization or otherwise no longer needs a Unity Connection account, delete the account in Cisco Unity Connection Administration.

Note the following considerations for deleting an account:

- All messages in the Unity Connection voice mailbox for the user are automatically deleted.
 However, if Unity Connection and Exchange mailbox synchronization (single inbox) is configured
 for the user, Unity Connection voice messages are not deleted from the corresponding Exchange
 mailbox (the single-inbox feature is available in Unity Connection).
- If a user account is referenced by other objects in Unity Connection (for example, if the user is set to be a recipient of messages left in an interview handler or if a call handler is set to transfer incoming calls to the user phone), you are not allowed to delete the user account until you have changed settings on the other objects to remove references to the user account you want to delete. If you try to delete a user account without first changing settings on objects that reference the user account, the delete operation fails.
- An administrator is prohibited from deleting his or her own account from Unity Connection Administration.

- When you delete the account of a user with a voice mailbox, that user is automatically deleted from the All Voice Mail Users distribution list.
- If the account for a user has a voice mailbox and if the mailbox store for that voice mailbox is disabled (for example, because the mailbox store is being backed up), the user account cannot be deleted.
- If the user account that you are deleting is for a user who is listed as a caller in a personal call transfer rule of another user, the user is removed from the rule and no notice is sent to the user who set up the rule. In addition, if you search for dependencies prior to deleting user accounts, the presence of those users in personal call transfer rules are not reported.

The behavior is different when Unity Connection or Cisco Business Edition is integrated with an LDAP directory:

- If Unity Connection is integrated with an LDAP directory, you must delete the user both in the LDAP directory and in Unity Connection. If you delete the user only in Unity Connection, the LDAP user is unaffected. If you delete the user only in the LDAP directory, in Unity Connection Administration, the Status area on the Edit User Basics page for that user indicates that the Unity Connection user is inactive. The status cannot be changed manually, but after 48 hours, the user is automatically converted to a regular Unity Connection user, and the message in the Status area no longer appears.
 - Unity Connection functionality is mostly unaffected by the deletion of an LDAP user. However, if you use LDAP authentication for Unity Connection web applications or for IMAP access to Unity Connection voice messages, the user cannot access Unity Connection web applications for the 48 hours after the LDAP user is deleted and before the Unity Connection user is converted to a regular Unity Connection user. After 48 hours, you must enter a new web application password for the user in Unity Connection Administration.
- If Cisco Business Edition is integrated with an LDAP directory, you must start by deleting the LDAP
 user that corresponds with the Unity Connection user. When Cisco Unified CM data is next
 synchronized with the LDAP directory, the user is deleted from the Cisco Unified CM database.
 When the user no longer appears in Cisco Unified CM Administration, you can use Unity
 Connection Administration to delete the user from the Unity Connection database.



If LDAP synchronization is not enabled and if you do not manually synchronize Cisco Unified CM data with the LDAP directory, the deletion of an LDAP user is never replicated to the Cisco Unified CM database, and the corresponding Unity Connection user cannot be deleted.

See the following procedures:

To Delete User Accounts Manually

- **Step 1** In Cisco Unity Connection Administration, select **Users > Users**.
- Step 2 On the Search Users page, check the check box next to the user account that you want to delete.



Note

If the user does not appear in the search results table, set the applicable parameters in the search fields at the top of the page, and select **Find**.

Step 3 Select **Show Dependencies** to search for any database objects that have dependencies on the user you want to delete.

- **Step 4** From the dependencies search results, follow links to the affected objects and reassign the dependency to another user.
- **Step 5** Select **Tools > Show Dependency Results**.
- Step 6 On the Show Dependency Results page, select Display Previous Results.
- Step 7 Repeat Step 4 through Step 6 until all dependencies have been reassigned.
- Step 8 Select Users > Users.
- Step 9 On the Search Users page, check the check box next to the user account that you want to delete.
- Step 10 Select Delete Selected.
- Step 11 In the dialog box that opens, asking you to confirm the deletion, select **OK**.



You can also use BAT to delete multiple users at the same time. For more information, see the Bulk Administration Tool, page 19-2 section.

Moving or Migrating Users Between Locations in Cisco Unity Connection

Occasionally, you may need to move one or more user accounts from one Unity Connection server or cluster to another, for load balancing or other reasons. Or, you may need to migrate many or all of the users from one server or cluster to another. In this chapter, the server or cluster from which you move users is referred to as the source location, and the server or cluster to which you move the users is referred to as the target location.

See the following sections:

- Moving One or Several Users Between Networked Unity Connection Locations, page 4-11
- Migrating Users Between Unity Connection Locations, page 4-12



The information in this chapter is not applicable to Cisco Business Edition.

Moving One or Several Users Between Networked Unity Connection Locations



The information in this section is not applicable to Cisco Business Edition.

To move users with voice mailboxes between Cisco Unity Connection locations (where a location represents either a server or cluster on the network), you use Cisco Object Backup and Restore Application Suite (COBRAS) Hot Mode. Hot Mode moves the user profile information and the user mailbox (including all new and saved voice messages, but not including deleted voice messages, receipts, faxes or email messages) from the source location to the target location. In the process, information about the moved users is modified on both the source and target locations, and when

replication is complete, all locations in the site or organization are appropriately updated. To use Hot Mode, both the source and target locations must be running Unity Connection, and the locations must be networked via intrasite or intersite networking.

Hot Mode is designed to be used on a single user or a small group of users at a time. Compared to COBRAS Briefcase Mode, Hot Mode has the advantage of preserving relationships between objects (for example, the private distribution lists of a user and personal call transfer rules that reference the user being moved are updated automatically to point to the new location). However, Hot Mode moves can be slow. If you need to move large groups of users or migrate servers and are not concerned about preserving such relationships, consider using the COBRAS Briefcase Mode method explained in the "Migrating Users Between Unity Connection Locations" section on page 4-12. If you are concerned about preserving such relationships, split large groups of users into small batches when using Hot Mode.

To use Hot Mode, download the latest version of COBRAS, and view training videos and Help at http://www.ciscounitytools.com/Applications/General/COBRAS/COBRAS.html.



Before moving users, read the COBRAS help file and the COBRAS Hot Mode for Unity Connection to Unity Connection help file carefully and thoroughly.

Migrating Users Between Unity Connection Locations



The information in this section is not applicable to Cisco Business Edition.

If the source or target server is running different versions of Unity Connection or if the locations are not networked via intrasite or intersite networking, you use Briefcase Mode in the Cisco Object Backup and Restore Application Suite (COBRAS) tool to move users with voice mailboxes. Rather than moving all pertinent objects from one location to another and cleaning up the original location automatically, Briefcase Mode requires that you copy information from the source location, remove the objects, and then restore them on the target location.

When migrating users in Briefcase Mode, you can choose whether to copy the user voice names and voice messages.

Task List for Migrating Users Using COBRAS Briefcase Mode

Use the following high-level task list to migrate users in Briefcase Mode:

1. Download the latest version of COBRAS, and view training videos and Help at http://www.ciscounitytools.com/Applications/General/COBRAS/COBRAS.html.



Before migrating users, read the COBRAS help file and the COBRAS Briefcase Mode help file carefully and thoroughly.

- 2. Back up the source and target locations using the Disaster Recovery System. The source backup is not used to restore data on the target location; you should take back up of each location so you can revert to the previous state of the location if necessary. For more information, see the *Install*, *Upgrade*, and *Maintenance Guide Release 10.x*.
- **3.** Use COBRAS Briefcase Mode to export the users to be moved from the source location. See the COBRAS Briefcase Mode help file for instructions.

4. If the source and target locations are connected via any type of networking, delete the users to be moved from the source location. To delete accounts one at a time, see the "Deleting User Accounts" section on page 4-9.



If the source and target are connected via any type of networking, it is critical that you delete the users and verify that the deletion has completed on all networked locations before importing the users on the target location.

- **5.** Use COBRAS Briefcase Mode to import users on the target location. See the COBRAS Briefcase Mode help file for instructions.
- **6.** If you did not delete the original user accounts from the source location in Task 4., delete them now. To delete accounts one at a time, see the "Deleting User Accounts" section on page 4-9.

Moving or Migrating Users Between Locations in Cisco Unity Connection