



# CHAPTER 21

## Managing Subscriber Accounts

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### Creating Subscriber Accounts Overview

Anyone who has an account on Cisco Unity is a subscriber. You create regular and external (AMIS, Bridge, Internet, or VPIM) subscriber accounts by using either the Cisco Unity Bulk Import wizard or the Cisco Unity Administrator.

If you are planning to create subscriber accounts for administrators to use when accessing the Cisco Unity Administrator, first review the [“About the Accounts That Can Be Used to Administer Cisco Unity”](#) section on page 2-1, and then return to this chapter.

#### Creating Regular Subscriber Accounts

See the following sections in this chapter:

- [Issues to Consider Before Creating Regular Subscriber Accounts, page 21-2](#)—Describes the issues that you must consider before creating subscriber accounts.
- [Site-Specific Issues to Consider, page 21-5](#)—Contains topics on how Cisco Unity handles Active Directory accounts, considerations for securing passwords, where Cisco Unity stores subscriber account information, and more.
- [Using the Cisco Unity Bulk Import Wizard to Create Multiple Subscriber Accounts, page 21-9](#)—Provides basic information about using the Cisco Unity Bulk Import wizard to create regular subscriber accounts, either by importing user data into Cisco Unity from Active Directory or from a CSV file.
- [Using the Cisco Unity Administrator to Create Individual Subscriber Accounts, page 21-25](#)—Provides information about using the Cisco Unity Administrator to create a regular subscriber account by adding a new user to Active Directory or by importing existing user data from Exchange.
- [Using Integrated Mailbox Configuration to Create Individual Subscriber Accounts, page 21-27](#) (*For integrations with Cisco Unified Communications Manager only*)—Provides information about using the Integrated Mailbox Configuration to create individual Cisco Unity subscriber accounts.
- [Issues to Consider After Creating Subscriber Accounts, page 21-28](#)—Lists the tasks to consider after you have created Cisco Unity subscriber accounts.

After subscriber accounts have been created, review the following sections, as applicable:

- [Modifying Subscriber Accounts, page 21-29](#)
- [Deleting Subscriber Accounts, page 21-29](#)

### Creating External Subscriber Accounts

See the following task lists, as applicable:

- To create AMIS subscriber accounts, see the “Setting Up Cisco Unity to Use AMIS” section in the “AMIS Networking” chapter in the *Networking Guide for Cisco Unity*.
- To create Internet subscriber accounts, see the “Creating Internet Subscriber Accounts” section in the “Internet Subscribes” chapter in the *Networking Guide for Cisco Unity*.
- To create Bridge subscriber accounts, see the “Task List: Setting Up Cisco Unity and the Bridge for Networking” section in the “Setting Up Cisco Unity and the Bridge for Networking” chapter in the *Networking Guide for Cisco Unity Bridge*.
- To create VPIM subscriber accounts, see the “Setting Up Cisco Unity to Use VPIM Networking” section in the “VPIM Networking” chapter in the *Networking Guide for Cisco Unity*.

The guides are available at

[http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products\\_feature\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html).

## Issues to Consider Before Creating Regular Subscriber Accounts

This section lists—in order—the issues that you must consider before creating subscriber accounts. If you are creating subscriber accounts that you want to use to administer Cisco Unity, you should review the “[About the Accounts That Can Be Used to Administer Cisco Unity](#)” section on page 2-1 in addition to the information that follows.

### 1. Cisco Unity Configuration and Permissions

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

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

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- Step 1** On the Cisco Unity server desktop, double-click the **Cisco Unity Tools Depot** icon.
- Step 2** In the left pane of the Tools Depot window, in the Diagnostic Tools directory, double-click **SysCheck**.
- Step 3** On the Welcome to the Cisco Unity Configuration Wizard page, click **Select Configuration Tests**, and click **Next**.
- Step 4** Uncheck the 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:
- Follow the advice offered in the Resolution column to correct each configuration or permissions error.
  - Return to the Completing the Check Unity Configuration Wizard page, and click **Finish**.
  - Repeat [Step 2](#) through [Step 7](#) until no errors are reported.
- Step 8** Click **Finish**.
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## 2. Licenses

Confirm that you have the Cisco Unity user licenses that are required for the type of subscriber accounts that you plan to create. You can view the number of licenses purchased, and the number that are used and unused on your system, from the System > Licensing page in the Cisco Unity Administrator. If you need additional licenses, contact your reseller. If you need to upgrade your licenses, see the “Adding Cisco Unity User Licenses” section in the “Adding Features to the Cisco Unity System” chapter of the *Reconfiguration and Upgrade Guide for Cisco Unity*. (The guide is available at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html).)

## 3. Account Policies

Account policies govern subscriber passwords and account lockouts for all Cisco Unity subscriber accounts. There are two account policies that you can set up to secure how subscribers access Cisco Unity:

- See the “[Managing Account Policy Settings](#)” chapter to set up system-wide phone password and lockout policies that apply to phone access.
- See the “Authentication for Cisco Unity Applications” chapter of the *Security Guide for Cisco Unity* for information on setting up system-wide logon, password, and lockout policies that apply when subscribers access the Cisco Unity Administrator (if it is configured to use Anonymous authentication) and the Cisco Personal Communications Assistant (PCA). The *Security Guide for Cisco Unity* is available at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html).

Each account policy has default settings that you can modify in the Cisco Unity Administrator.

## 4. Enhanced Phone Security

You can set up Cisco Unity subscriber accounts to use a secure logon method when subscribers access Cisco Unity by phone. See the “Determining Whether to Offer Enhanced Phone Security” section in the “Authentication for Cisco Unity Applications” chapter of the *Security Guide for Cisco Unity* for information on enhanced phone security, if desired. If you choose to set up enhanced phone security, then you must also create a new class of service or modify an existing one for the subscribers who will be using enhanced phone security (see the next task). (The guide is available at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html).)

## 5. Classes of Service

A class of service (COS) defines limits and permissions for subscribers who use Cisco Unity. For example, a COS:

- Controls access to the Cisco Unity Administrator and to features such as Text to Speech e-mail.
- Controls how subscribers interact with Cisco Unity. For example, a COS dictates the maximum length of subscriber messages and greetings, whether subscribers can choose to be listed in directory assistance, whether subscribers use a secure logon method to access Cisco Unity by phone, and whether subscribers can send messages to a public distribution list.
- Specifies the restriction table used to control the phone numbers that subscribers can use for fax delivery, message notification, call transfer, and other tasks.

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 on 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, see the “[Managing Classes of Service](#)” chapter.

## 6. Restriction Tables

Restriction tables in the Cisco Unity Administrator allow you to control the phone numbers that subscribers and administrators can use for:

- Transferring calls
- Recording and playback by phone from Cisco Unity applications, when the phone is the designated recording and playback device in the Media Master (the Media Master is available in the Cisco Unity Administrator, the Cisco Unity Assistant, the Cisco Unity Inbox, and ViewMail).
- Delivering faxes to a fax machine
- Sending message notifications
- Sending AMIS messages
- System transfers

Each class of service specifies a restriction table for call transfers, one for message notification, and one for fax deliveries. Cisco Unity comes with predefined restriction tables, which you can modify. See the [“Managing Restriction Tables”](#) chapter for details.

### 7. 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. The class of service associated with a subscriber account dictates whether that subscriber can use Cisco Unity to send messages to public distribution lists. See the [“Managing Distribution Lists”](#) chapter for details.

### 8. Subscriber Templates

In the Cisco Unity Administrator, you can specify settings for a group of subscribers by using a subscriber template. The settings from the template you choose are applied to all subscriber accounts as the accounts are created. See the [“Managing Subscriber Templates”](#) for details.

### 9. Change the Locale ID of the MAPI Profile for the Cisco Unity Server

If either of the following statements is true, use the Advanced Settings tool to change a registry key so that the Locale ID of the MAPI profile for the Cisco Unity server matches the language that subscribers use locally:

- You are planning to create new user mailboxes at the same time that you create Cisco Unity subscriber accounts. (This option is available in the Cisco Unity Administrator and in the Cisco Unity Bulk Import wizard.)
- Mailboxes already exist, but users will not have used Microsoft Outlook (or another MAPI client) to access their mailboxes by the time that you create Cisco Unity subscriber accounts for them.

Typically, local language settings for a MAPI client determine the language in which a program such as Microsoft Outlook displays the names for the Inbox, Sent Items, and other message folders. However, under the circumstances described above, the folder names do not appear in the language specified locally, but appear in the language specified by the Locale ID setting of the MAPI profile for the Cisco Unity server instead.

For details on setting up this functionality to avoid this problem, see Advanced Settings tool Help. The setting is called Messaging—Set the Locale ID of the MAPI Profile. Consider creating subscribers in batches according to the language setting that they will use in their MAPI clients. Then change the registry setting as applicable before creating each group of subscribers.

### 10. Subscriber Mailboxes Homed in Exchange 2007

If mailboxes for Cisco Unity subscribers will be homed in Exchange 2007, you must create Active Directory accounts and Exchange mailboxes before you create subscriber accounts. This is true for all methods of creating subscriber accounts.

### 11. Bridge Networking Option

If your installation includes the Bridge Networking option, confirm that the following tasks have been completed so that Cisco Unity subscribers will be able to send messages to and receive messages from subscribers on the Octel servers with which Cisco Unity communicates:

- The Active Directory schema has been extended as required for networking with the Cisco Unity Bridge.
- On the Configuration > Settings page in the Cisco Unity Administrator, the Display Fields Required for Cisco Unity Bridge Networking on Subscribers Profile Page check box has been checked.

## 12. Site-Specific Issues

Review the “[Site-Specific Issues to Consider](#)” section on page 21-5. Information presented in the section may affect the tools, tasks, and methods that you use to create subscriber accounts.

# Site-Specific Issues to Consider

This section contains several topics that may be important considerations for your particular site. Information presented in these topics may affect the tools, tasks, and methods you use to create subscriber accounts. Review the following sections, as applicable:

- [How Cisco Unity Handles Active Directory Accounts for the Subscriber Accounts That You Create, page 21-5](#)
- [Ensuring That Subscribers Are Assigned Unique and Secure Phone Passwords, page 21-6](#)
- [Ensuring That Subscribers Are Assigned Unique and Secure Active Directory Passwords, page 21-7](#)
- [Where Cisco Unity Data Is Stored, page 21-8](#)
- [Importing User Data from Other Routing Groups, page 21-8](#)
- [Setting Up Regular Cisco Unity Subscribers to Use Bridge Networking, page 21-8](#)

## How Cisco Unity Handles Active Directory Accounts for the Subscriber Accounts That You Create

Each regular Cisco Unity subscriber account is associated with an Active Directory domain account and an Exchange mailbox in which Cisco Unity stores voice messages. When you create Cisco Unity subscribers using the Cisco Unity Administrator or by importing a CSV file using the Cisco Unity Bulk Import wizard, Cisco Unity can optionally create the associated Active Directory account for each subscriber. (If mailboxes for Cisco Unity subscribers will be homed in Exchange 2007, you do not have this option. You must create Active Directory accounts and Exchange mailboxes before you create Cisco Unity subscriber accounts.) If you let Cisco Unity automatically create Active Directory accounts, the password on the Active Directory accounts is the same for every Cisco Unity subscriber account that was created using the same Cisco Unity template. A subscriber who knows another subscriber’s alias and the Active Directory password in the template could access messages for the other subscriber using the Cisco Unity Inbox or an e-mail client, impersonate the user through the Cisco Unity Inbox, or change settings for the other subscriber using Cisco Personal Communications Assistant.

If Cisco Unity is configured for Unified Messaging, the Active Directory accounts must be enabled because they are required for authentication.

If all of the following are true, we recommend that you disable the Active Directory accounts associated with Cisco Unity subscribers:

- Cisco Unity is configured for Voice Messaging.
- Subscribers will only access voice messages using the telephone.

- Subscribers will not access Cisco Personal Communications Assistant or the Cisco Unity Administrator.

**Caution**

If you need Active Directory accounts to be enabled and you are creating the accounts automatically when you create Cisco Unity subscribers, see the [“Ensuring That Subscribers Are Assigned Unique and Secure Active Directory Passwords”](#) section on page 21-7.

If you use either the Cisco Unity Administrator or the Cisco Unity Bulk Import wizard to create subscriber accounts and the associated Active Directory accounts, and you want the Active Directory accounts to be disabled, do the following procedure before you create Cisco Unity subscribers.

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**To Create Disabled Active Directory Accounts When You Create Cisco Unity Subscribers**


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- Step 1** On the Cisco Unity server desktop, double-click the **Cisco Unity Tools Depot** icon.
  - Step 2** In the left pane of Tools Depot, expand Administrative Tools, and double-click **Advanced Settings Tool**.
  - Step 3** In the Unity Settings list of the Advanced Settings Tool, click **Administration - Disable AD accounts Created by Unity**.
  - Step 4** In the New Value list, click **1**, and then click **Set**.
  - Step 5** When prompted, click **OK**.
  - Step 6** Click **Exit**.
  - Step 7** Close Tools Depot.
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## Ensuring That Subscribers Are Assigned Unique and Secure Phone Passwords

To help protect Cisco Unity from unauthorized access and toll fraud, every subscriber should be assigned a unique phone password. Additionally, each password should be eight or more characters long and non-trivial.

Simply changing the phone password on the Subscribers > Subscriber Template > Passwords page in the Cisco Unity Administrator before you create subscriber accounts does not ensure that subscribers are assigned unique passwords. This is because the template might not be used to assign passwords, and when it is used, each subscriber account that you create is assigned the same password.

Consider the following options to ensure that each subscriber is assigned a unique and secure password at the time that you create the account, or immediately thereafter.

**Assigning Unique and Secure Phone Passwords When You Create Subscriber Accounts**

Use one of the following methods to assign a unique and secure phone password to each subscriber account that you create:

- Use the Cisco Unity Bulk Import wizard to import user data contained in a CSV file. Include the optional column header `DTMF_PASSWORD` in the CSV file to overwrite the template password for each subscriber.
- Use the Cisco Unity Administrator to add a subscriber one at a time. Use a different template for each subscriber that you create, specifying a unique and secure phone password in each template. Alternatively, you can use one template for all subscribers, but specify a unique and secure password

before each subscriber account that you add. To avoid recording and distributing the passwords, tell subscribers to use the Cisco Unity Assistant to change their initial phone passwords. (The Cisco Unity Assistant does not require that subscribers enter the old phone password to change it.)

### Assigning Unique and Secure Phone Passwords After Creating Subscriber Accounts

After you have created subscriber accounts by using either the Cisco Unity Administrator or the Cisco Unity Bulk Import wizard, use the Cisco Unity Bulk Import wizard to assign a unique phone password to each subscriber account that you created. To avoid recording and distributing the passwords, tell subscribers to use the Cisco Unity Assistant to change their initial phone passwords. (The Cisco Unity Assistant does not require that subscribers enter the old phone password to change it.)

## Ensuring That Subscribers Are Assigned Unique and Secure Active Directory Passwords

Subscribers use an Active Directory password to access the Cisco Unity Administrator (when it is configured to use Anonymous authentication) and the Cisco PCA. To protect Cisco Unity from unauthorized access, each subscriber should be assigned a unique Active Directory password. Additionally, each password should be eight or more characters long and non-trivial.

Simply changing the Active Directory password on the Subscribers > Subscriber Template > Passwords page in the Cisco Unity Administrator before you create subscriber accounts does not ensure that subscribers are assigned unique passwords. This is because the template might not be used to assign passwords, and when it is used, each subscriber account that you create will be assigned the same password.

Consider the following options to ensure that each subscriber is assigned a unique and secure password at the time that you create the account, or immediately thereafter.

### Assigning Unique and Secure Active Directory Passwords When You Create Subscriber Accounts

Use one of the following methods to assign a unique and secure Active Directory password to each subscriber account that you create:

- Do not use the Cisco Unity Administrator or the Cisco Unity Bulk Import wizard to create new Active Directory accounts. Instead, first create an Active Directory account for each subscriber by using Active Directory Users and Computers, and assign each user a unique and secure password as you go. You can then use the Cisco Unity Administrator or the Cisco Unity Bulk Import wizard to create Cisco Unity subscriber accounts.



**Note** If mailboxes for Cisco Unity subscribers will be homed in Exchange 2007, you cannot use Cisco Unity Administrator or the Cisco Unity Bulk Import wizard to create new Active Directory accounts at the same time that you create subscriber accounts. You must create Active Directory accounts and Exchange mailboxes before you create Cisco Unity subscriber accounts.

- Use the Cisco Unity Administrator to add subscribers one at a time. Use a different template for each subscriber that you create, specifying a unique and secure Active Directory password in each template. Alternatively, you can use one template for all subscribers, but specify a unique and secure password before each subscriber account that you add. If you use the same template for all subscribers, you will need to record the passwords that you assign to each subscriber in a secure place so that you can distribute them later. (Cisco Unity stores only the last value saved.)

Before you specify a template password, review the password policy for the Active Directory domain to make sure that the minimum length and complexity requirements do not conflict with the password that you specify in the template. Cisco Unity will not add a subscriber account when the length of the password on the subscriber template is less than the minimum length for passwords in the Active Directory domain.

### Assigning Unique and Secure Active Directory Passwords After Subscriber Accounts Have Been Created

After you have created subscriber accounts, use one of the following methods to assign each account a unique and secure Active Directory password:

- Use Active Directory Users and Computers to change the existing password for each user.
- Ask subscribers to change their own passwords. Subscribers can change their Cisco PCA passwords in Windows by pressing Ctrl-Alt-Delete and then clicking Change Password. (If the Cisco Unity server is on a different domain than the one that subscribers typically access, subscribers will also need to specify the domain name for the Cisco Unity server.)

Note that subscribers may assume that their phone and Cisco PCA passwords are the same. As a result, they may think that they are changing both passwords when Cisco Unity prompts them to change their phone password during first-time enrollment. For this reason, you may find that many subscribers do not change their Cisco PCA passwords in Windows, even though you request that they do so.

## Where Cisco Unity Data Is Stored

Cisco Unity stores information about subscriber accounts in a SQL Server database on the Cisco Unity server. In addition, a small subset of subscriber account information is also stored in Active Directory. During installation, the Active Directory schema is extended to store subscriber account information.

For additional information on how data is stored in Cisco Unity, see the *White Paper: Cisco Unity Data and the Directory (All Versions with Microsoft Exchange)*, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products\\_white\\_paper09186a00800875c5.shtml](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_white_paper09186a00800875c5.shtml).

## Importing User Data from Other Routing Groups

Although you can use the Cisco Unity Bulk Import wizard or the Cisco Unity Administrator to import user data from other Exchange routing groups, you should do so only if there is a high-bandwidth connector between the groups that can support message streaming.

## Setting Up Regular Cisco Unity Subscribers to Use Bridge Networking

If your installation includes the Bridge Networking option, in order for Cisco Unity subscribers to be able to send messages to and receive messages from subscribers on the Octel servers with which Cisco Unity communicates, each Cisco Unity subscriber account must be configured with an Octel serial number and a remote mailbox number. This allows the remaining Octel subscribers to address messages by using the same number that they used before the subscriber migrated to Cisco Unity.

The combination of serial number and mailbox number uniquely identifies a subscriber within an Octel analog network. For each serial number, the legacy mailbox number must be unique within the global directory. If you are creating Cisco Unity subscriber accounts for users who previously existed on an Octel system, use the serial number of the Octel server that the subscriber migrated from and the mailbox

number that the subscriber had on the Octel system. If you are creating Cisco Unity subscriber accounts for new users who were never subscribers on an Octel system, choose a serial number and a mailbox number that is not already in use.

You can add the serial number and mailbox number as you create subscriber accounts by using either the Cisco Unity Bulk Import wizard or the Cisco Unity Administrator. You can also use these same tools to add the serial and mailbox numbers to existing subscriber accounts.

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 by going to the Network > Bridge Options > Synchronization Options page to send directory data to the Bridge, or delete and then add back in the Unity Node on the Bridge. Subsequently, if you add more subscribers with the same serial number, Cisco Unity automatically sends the directory information to the Bridge.

Adding the serial and mailbox numbers to Cisco Unity subscriber accounts is just one of the steps required to properly configure Bridge Networking. For more information, see the applicable *Networking Guide for Cisco Unity Bridge*, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products\\_feature\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html).

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

The Cisco Unity Bulk Import wizard allows you to create multiple subscriber accounts at once either by importing user data directly from Active Directory or by importing user data contained in a comma-separated value (CSV) file.

### Importing User Data Directly from a Message Store Directory

When you use the Cisco Unity Bulk Import wizard to import user data directly from the message store directory, Cisco Unity uses the mailbox data and Active Directory account information to create the Cisco Unity subscriber account.

However, Cisco Unity does not enable Active Directory accounts if they are disabled at the time that you import mailbox data from Exchange.

This is important because Active Directory credentials are required to access the Cisco Personal Communications Assistant (PCA), the Cisco Unity Administrator, and to use the phone as a recording and playback device for the Media Master. To allow subscribers to access these applications, enable Active Directory accounts before you use the Cisco Unity Bulk Import wizard to import data from the message store directory.

Finally, the Cisco Unity Bulk Import wizard requires each regular subscriber to have a DTMF\_ACCESS\_ID that callers can use to reach the subscriber. Typically, the DTMF\_ACCESS\_ID is the same as the subscriber extension. Before running the Cisco Unity Bulk Import wizard, print out a list of the user names that you plan to import, and specify a DTMF\_ACCESS\_ID for each user. The ID must be unique among all extensions on the local Cisco Unity server and within the dialing domain, if there is one. Save this list to use when you enter any missing DTMF\_ACCESS\_IDs during the import process.

If your installation includes the Bridge Networking option, in order for Cisco Unity subscribers to be able to send messages to and receive messages from subscribers on the Octel servers with which Cisco Unity communicates, each Cisco Unity subscriber account must be configured with an Octel serial

number and a remote mailbox number. Before running the Cisco Unity Bulk Import wizard, gather the serial and mailbox numbers for the subscriber accounts that you will be creating. During the import process, you enter the numbers in the REMOTE\_NODE\_ID and LEGACY\_MAILBOX columns in the displayed grid on the Select Data to Import dialog box. Note that the Cisco Unity numbering plan is independent of the numbering plan on the Octel system; therefore, the numbers that you enter for LEGACY\_MAILBOX and DTMF\_ACCESS\_ID for each subscriber may or may not be the same. For more information about REMOTE\_NODE\_ID and LEGACY\_MAILBOX, see the Cisco Unity Bulk Import wizard Help.

When you are ready to create subscribers by importing user data directly from the message store directory, see the [“Running the Cisco Unity Bulk Import Wizard”](#) section on page 21-23.

## Importing User Data From a CSV File

CSV is a common text file format for moving data from one data store to another. In particular, importing from a CSV file is helpful when you want to create subscriber accounts based on user data from voice messaging systems that run on different operating systems, or that have different database structures than Cisco Unity. As long as the user data contained in the CSV file is formatted as indicated in this section, you can use it with the Cisco Unity Bulk Import wizard to create subscriber accounts with or without existing Exchange mailboxes and Active Directory accounts.

### Using the Create New Mailboxes and Windows Accounts Option

If the users in your CSV file do not already have Exchange mailboxes and Active Directory accounts, you can create them at the same time that you create Cisco Unity subscriber accounts. (If mailboxes for Cisco Unity subscribers will be homed in Exchange 2007, you do not have this option. You must create Active Directory accounts and Exchange mailboxes before you create Cisco Unity subscriber accounts.) The Cisco Unity Bulk Import wizard creates the mailbox in the message store and on the server that you specify on the pages of the wizard. The Active Directory account is created in the domain and organizational unit (OU) that you specify.

**Note**

In some cases, you may want the Active Directory accounts that Cisco Unity creates to be disabled. For more information, see the [“How Cisco Unity Handles Active Directory Accounts for the Subscriber Accounts That You Create”](#) section on page 21-5.

Note that if a user already exists with the same alias as the subscriber that you want to create, the Cisco Unity Bulk Import wizard notifies you that it cannot create the subscriber or the Exchange mailbox. This may happen if your CSV file contains a user that already has an Exchange mailbox. To create the subscriber account in such cases, use the Use Existing Mailboxes and Windows Accounts option to import the mailbox data for the user instead.

**Note**

If you have not done so already, consider password security if you plan to create new Active Directory accounts at the same time that you create subscribers. See the [“Ensuring That Subscribers Are Assigned Unique and Secure Active Directory Passwords”](#) section on page 21-7 for details.

### Using the Existing Mailboxes and Active Directory Accounts Option

When you create subscriber accounts for users with existing Exchange mailboxes, Cisco Unity uses the mailbox data and Active Directory account information to create the Cisco Unity subscriber account. However, Cisco Unity does not enable Active Directory accounts if they are disabled at the time that you import mailbox data from Exchange.

This is important because subscribers whose Active Directory account is disabled cannot access the Cisco Personal Communications Assistant (PCA) or the Cisco Unity Administrator, or use the phone as a recording and playback device for the Media Master. To avoid this problem, enable Active Directory accounts before you use the Cisco Unity Bulk Import wizard to import data from your CSV file.

The first row in your CSV file must contain column headers that identify the type of data in each column; information in the subsequent rows must contain the data that you want to import. Column headers must be in uppercase, separated by commas, and spelled as shown in the tables in the following sections:

- [Required Column Headers, page 21-11](#)
- [Optional Column Headers, page 21-13](#)

In addition, make sure that commas separate the data in each row in your CSV file, including the column headers in the first row. Do not use a tab, spaces, or a semicolon to separate values in the file. Finally, if any data includes a space, quotes, or commas, contain it within quotes.

#### Required Column Headers

The required column headers for regular subscribers are shown in [Table 21-1](#). Note that the column headers are shown in the order in which they should appear in your CSV file.



#### Note

When you select the Use Existing Mailboxes and Windows Accounts option, the only required column headers for a CSV file are ALIAS and DTMF\_ACCESS\_ID. If left unspecified in the CSV file, the subscriber first names, last names, and display names are imported from directory. Otherwise, the Cisco Unity Bulk Import wizard overwrites the directory with the first names, last names, and/or display names when they are specified in the CSV file.

**Table 21-1** Required CSV Headers for Regular Subscribers

Column Header	Description
LAST_NAME	Subscriber last name. Enter any combination of letters, digits, spaces, apostrophes, and dashes, up to a maximum of 32 characters.
FIRST_NAME	Subscriber first name. Enter any combination of letters, digits, spaces, apostrophes, and dashes, up to a maximum of 32 characters.
DTMF_ACCESS_ID <i>(when you select the Use Existing Mailbox and Windows Account option, only this column header and ALIAS are required)</i>	The number that callers dial to reach a subscriber. This value corresponds to the Extension field on the Subscribers > Subscribers > Profile Page page in the Cisco Unity Administrator. Enter any combination of digits from 0 to 9, up to a maximum of 40 digits. Do not include any spaces. Note that the value must be unique among all extensions on the local Cisco Unity server and within the dialing domain, if there is one.

Table 21-1 Required CSV Headers for Regular Subscribers (continued)

Column Header	Description
<b>ALIAS</b> <i>(when you select the Use Existing Mailbox and Windows Account option, only this column header and DTMF_ID are required)</i>	<p>The Cisco Unity Bulk Import wizard searches for the Exchange mailbox that matches the alias entered here. The matching Exchange mailbox will be associated with the subscriber account.</p> <p>If you do not specify an alias here, the Exchange alias for the created account will be derived from a rule specified in the subscriber template, by using a combination of first and last name. Typically, you enter an alias here in order to override the alias generation rule (for example, when there are users who need to have aliases that do not follow the convention, such as when there is a naming conflict).</p> <p>Enter any combination of letters, digits, periods, underscores, or dashes, up to a maximum of 64 characters. The first 20 characters of the alias must be unique (they must not exactly match the first 20 characters of any other new or existing alias in the directory).</p>
<b>LEGACY_MAILBOX</b> <i>(required only when using the Bridge Networking option for messaging with Octel subscribers)</i>	<p>The number used to identify a Cisco Unity subscriber on a node in an Octel analog network. This number is required for all Cisco Unity subscribers who will be messaging with subscribers on an Octel system via the Cisco Unity Bridge. Without a LEGACY_MAILBOX number, a Cisco Unity subscriber cannot send messages to or receive messages from Octel subscribers.</p> <p>When you create Cisco Unity subscriber accounts for users who are migrating from Octel, enter the mailbox number that the subscriber had on the Octel system. This allows the remaining Octel subscribers to address messages by using the same number that they used before the subscriber was migrated.</p> <p>For existing Cisco Unity subscribers (including subscribers who have already migrated from Octel in a previous version of Cisco Unity and the Bridge), you can run the Cisco Unity Bulk Import wizard to add the LEGACY_MAILBOX number to each subscriber account. Enter the number that Octel subscribers dial to address messages to the Cisco Unity subscriber (excluding the location Dial ID or prefix).</p> <p>Enter any combination of digits from 0 to 9. Do not include any spaces. Typical mailbox numbers contain 3 to 10 digits (although the Cisco Unity Bulk Import wizard accepts a maximum of 64 digits). Note that the LEGACY_MAILBOX and the DTMF_ACCESS_ID do not have to be the same number.</p> <p>When using this column, you must also include the REMOTE_NODE_ID column. The combination of the REMOTE_NODE_ID and LEGACY_MAILBOX uniquely identifies a subscriber within an Octel analog network. If a record contains data in one column but not the other, the Cisco Unity Bulk Import wizard logs an error, and the subscriber account is not created.</p> <p>For each REMOTE_NODE_ID, the LEGACY_MAILBOX value must be unique within the global directory. If the Cisco Unity Bulk Import wizard detects a duplicate REMOTE_NODE_ID and LEGACY_MAILBOX pair in the CSV file, or if an existing Cisco Unity subscriber has a matching REMOTE_NODE_ID and LEGACY_MAILBOX, the Cisco Unity Bulk Import wizard logs an error, and the subscriber account is not created.</p>

**Table 21-1** Required CSV Headers for Regular Subscribers (continued)

Column Header	Description
REMOTE_NODE_ID <i>(required only when using the Bridge Networking option for messaging with Octel subscribers)</i>	<p>In an Octel analog network, the serial number of the node with which the Cisco Unity subscriber is associated. This number is required for all Cisco Unity subscribers who will be messaging with subscribers on an Octel system via the Cisco Unity Bridge. Without a REMOTE_NODE_ID number, a Cisco Unity subscriber cannot send messages to or receive messages from Octel subscribers.</p> <p>When you create Cisco Unity subscriber accounts for users who are migrating from Octel, enter the serial number of the Octel node that the subscriber is migrating from.</p> <p>For existing Cisco Unity subscribers (including subscribers who have already migrated from Octel in a previous version of Cisco Unity and the Bridge), you can run the Cisco Unity Bulk Import wizard to add the REMOTE_NODE_ID to each subscriber account. Enter the serial number of a Unity Node that has been configured in the Bridge Administrator.</p> <p>Enter any combination of digits from 0 to 9. Do not include any spaces. Typical serial numbers contain 4 or 5 digits (although the Cisco Unity Bulk Import wizard accepts a maximum of 64 digits).</p> <p>When using this column, you must also include the LEGACY_MAILBOX column. The combination of the REMOTE_NODE_ID and LEGACY_MAILBOX uniquely identifies a subscriber within an Octel analog network. If a record contains data in one column but not the other, the Cisco Unity Bulk Import wizard logs an error, and the subscriber account is not created.</p> <p>For each REMOTE_NODE_ID, the LEGACY_MAILBOX value must be unique within the global directory. If the Cisco Unity Bulk Import wizard detects duplicate REMOTE_NODE_ID and LEGACY_MAILBOX values in the CSV file, or if an existing Cisco Unity subscriber has a matching REMOTE_NODE_ID and LEGACY_MAILBOX, the Cisco Unity Bulk Import wizard logs an error, and the subscriber account is not created.</p>

### Optional Column Headers

There are a number of optional column headers that you can include in your CSV file, as shown in [Table 21-2](#). Most optional column headers correspond to subscriber settings defined in the subscriber template, including class of service (COS), call transfer, and message notification settings. When data for a particular subscriber setting is not included in the CSV file, the Cisco Unity Bulk Import wizard uses settings in the subscriber template that you choose when you run the Cisco Unity Bulk Import wizard. For this reason, you should review the settings in the subscriber template that you will use to create the accounts before adding any of the optional column headers to your CSV file.

Use [Table 21-2](#) to learn more about the optional column headers that you can include in the CSV file. Unless otherwise indicated, all optional column headers can be used to define any type of subscriber account.

Table 21-2 Optional CSV File Column Headers

Optional Column Header	Description
<p>ALIAS</p> <p><b>Note</b> This column header is optional only if you choose to create new directory objects at the same time that you create subscriber accounts. The column header is required when you create subscriber accounts with existing directory objects.</p>	<p>The Cisco Unity Bulk Import wizard searches for the directory objects (Exchange mailbox and Active Directory account for regular subscribers, contact or custom recipient for AMIS, Bridge, Internet, and VPIM subscribers) that match the alias entered here. The matching directory objects will be associated with the subscriber account.</p> <p>If you do not specify an alias here, the alias for the created account will be derived from a rule specified in the subscriber template, using a combination of first and last name. Typically, you enter an alias here in order to override the alias generation rule (for example, when there are users who need to have aliases that do not follow the convention, such as when there is a naming conflict).</p> <p>Enter any combination of letters, digits, periods, underscores, or dashes, up to a maximum of 64 characters. The first 20 characters of the alias must be unique (they must not exactly match the first 20 characters of any other new or existing alias in the directory).</p>
<p>ALTERNATE_EXTENSION_1</p>	<p>In addition to the “primary” extension that you assign subscribers, you can also assign alternate extensions. The extensions that you add are appended to the Administrator-Defined Alternate Extensions table on the Subscribers &gt; Alternate Extension page in the Cisco Unity Administrator.</p> <p>Consider the following when you enter alternate extensions:</p> <ul style="list-style-type: none"> <li>• You can enter an extension up to 40 characters in length. (SIP integrations can use up to 40 alphanumeric characters.)</li> <li>• Each extension must be unique, up to the dialing domain level, if applicable.</li> <li>• Enter digits 0 through 9. Do not use spaces, dashes, or parentheses.</li> <li>• For SIP integrations, you can also enter a valid alias for a SIP URL. For example, if the URL is SIP:aabade@cisco.com, enter aabade. Do not use spaces.</li> </ul>
<p>AUDIO_SPEED</p>	<p>Defines the speed of message playback.</p> <ul style="list-style-type: none"> <li>• 0—Low speed.</li> <li>• 100—Medium speed (default value).</li> <li>• 200—Fast speed.</li> </ul>
<p>AUDIO_VOLUME</p>	<p>Indicates the volume for message playback.</p> <ul style="list-style-type: none"> <li>• 0—Low volume.</li> <li>• 50—Medium volume (default value).</li> <li>• 100—High volume.</li> </ul>
<p>CALLERS_LANGUAGE</p>	<p>The language of the Cisco Unity conversation that callers hear when they call a subscriber.</p> <p>Enter any combination of letters and digits, up to a maximum of four characters.</p>
<p>CONVERSATION_NAME</p>	<p>The Cisco Unity conversation that the subscriber hears when retrieving messages.</p> <p>Enter any combination of letters and digits, up to a maximum of 64 characters.</p>

Table 21-2 Optional CSV File Column Headers (continued)

Optional Column Header	Description
COS_OBJECT_NAME	<p>The name of the subscriber class of service (COS) of which the subscriber will be a member. The COS must already exist in the Cisco Unity Administrator.</p> <p>Enter any combination of letters, digits, and braces, up to a maximum of 128 characters.</p> <p>Enter the name of the COS as it appears in the Cisco Unity Administrator.</p>
DELIVERY_LOCATION_ID <i>(AMIS, Bridge, and VPIM subscribers only)</i>	<p>The dial ID of a delivery location that the external subscriber will be associated with. This value corresponds to the Dial ID field on the Network &gt; Delivery Locations &gt; 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.</p> <p>Enter any combination of digits from 0 through 9, up to a maximum of 64 digits.</p>
HIDE_IN_ADDRESS_BOOK	<p>Specify whether you want to prevent subscribers from appearing in the Outlook address book. When you prevent subscribers from appearing in Outlook address books, Exchange will still deliver e-mail messages addressed to them, but the number of messages may be reduced because other subscribers cannot use the Outlook address book to address messages to them.</p> <p>When a value is entered in this column, the Cisco Unity Bulk Import wizard overwrites the values in the following fields:</p> <ul style="list-style-type: none"> <li>• The Show Subscriber in E-Mail Server Address Book field on the Subscribers &gt; Subscriber &gt; Profile page in the Cisco Unity Administrator.</li> <li>• The Hide From Exchange Address Lists field on the Exchange Advanced tab for each user in Active Directory Users and Computers.</li> </ul> <p>Enter 0 or 1:</p> <ul style="list-style-type: none"> <li>• 0—Display subscriber in the Outlook address book.</li> <li>• 1—Hide subscriber from the Outlook address book.</li> </ul>
DISPLAY_NAME	<p>Specifies the display name for the subscriber. The format selected here should be consistent with the Exchange name generation rule for existing Exchange mailboxes.</p> <p>When no display name is specified, it is constructed in one of the following ways, as applicable:</p> <ul style="list-style-type: none"> <li>• The first and last names as specified in the message store.</li> <li>• The first and last names as specified in the rule in the subscriber template that is selected during the import.</li> </ul> <p>Enter any combination of letters, digits, spaces, periods, commas, apostrophes, or other characters—including dashes, up to a maximum of 64 characters.</p>

Table 21-2 Optional CSV File Column Headers (continued)

Optional Column Header	Description
DOMAIN_LOCATION <i>(regular subscribers only)</i>	<p>Specifies the Windows NT 4.0 domain name in which the alias in the NT40_ALIAS column can be found. Use this column if you are creating subscriber accounts for users who have both a Windows NT 4.0 account and an Active Directory account, or if your organization is in the process of moving users from Windows NT 4.0 to Active Directory, or from one Active Directory domain to a new domain.</p> <p>In addition, you need to specify the alias in the column NT40_ALIAS so that the Cisco Unity Bulk Import wizard can find the Windows NT 4.0 account information to associate with the subscriber. Without associated Windows domain accounts, the subscriber accounts that you create will not have access to the Cisco Unity Administrator or the Cisco Personal Communications Assistant (PCA), and cannot use the phone as the recording and playback device for the Media Master.</p> <p>Enter any combination of letters, up to a maximum of 15 letters.</p>
DTMF_ACCESS_ID <i>(optional for Internet subscribers only; required for regular, AMIS, Bridge, and VPIM subscribers)</i>	<p>The number that callers dial to reach a subscriber. This is also the extension that subscribers on the local Cisco Unity server use to address messages to AMIS, Bridge, Internet, or VPIM subscribers.</p> <p>This value corresponds to the Extension field on the Subscribers &gt; Subscribers &gt; Profile page in the Cisco Unity Administrator.</p> <p>Enter any combination of digits from 0 through 9, up to a maximum of 40 digits. Do not include any spaces. Note that the value must be unique among all extensions on the local Cisco Unity server and within the dialing domain, if there is one.</p>
DTMF_PASSWORD	<p>The password that governs how subscribers initially log on to Cisco Unity by phone.</p> <p>This value corresponds to the Password field on the Subscribers &gt; Subscriber &gt; Passwords page in the Cisco Unity Administrator.</p> <p>By default, subscriber templates use 12345 as the default phone password for all subscribers unless you change it in the template or change it here. To help protect Cisco Unity from unauthorized access and toll fraud, the password should be changed. (Note that if your system is a new installation, this task may have already been done, because the installer is prompted to change the default phone password for the {Default Subscriber} template during installation. However, if your system was upgraded from a Cisco Unity version prior to 4.0(4), the installer was not prompted to change the password during installation.)</p> <p>Enter any combination of digits from 0 through 9, up to a maximum of 20 digits. As a best practice, specify a long—eight or more digits—and non-trivial password. (Requirements for password complexity are set on the Subscribers &gt; Account Policy &gt; Phone Password Restrictions page in the Cisco Unity Administrator.)</p>
LIST_IN_DIRECTORY	<p>Determines whether the subscriber is listed in the phone directory.</p> <ul style="list-style-type: none"> <li>• 0—Turns directory listing off.</li> <li>• 1—Turns directory listing on.</li> </ul>
MAX_MSG_LENGTH	<p>Indicates the maximum length of voice mail messages (in seconds) that unidentified callers can leave.</p> <p>Enter any value from 0 to 999 seconds.</p>

Table 21-2 Optional CSV File Column Headers (continued)

Optional Column Header	Description
MWI_EXTENSION_1	<p>The message waiting indicator (MWI) extension, if different from phone extension for the subscriber.</p> <p>Enter any combination of digits from 0 through 9 for the extension , and “,” (comma) or “;” (semi-colon) for pause, for a maximum of 40 characters.</p>
NOTES	<p>The Cisco Unity Bulk Import wizard ignores a column with this header. The Cisco Unity Bulk Import wizard does not support more than one NOTES column in a CSV file.</p> <p>Enter any comments that you may have for this record. Enter any combination of letters, characters, and digits, for a maximum of 255 characters.</p>
NT40_ALIAS	<p>Specifies the Windows NT 4.0 alias. Use this column if you are creating subscriber accounts for users who have both a Windows NT 4.0 account and Windows 2000 account, or if your organization is in the process of moving users from Windows NT 4.0 to Windows 2000, or from one Active Directory domain to a new domain.</p> <p>In addition, you need to specify the domain name in the column DOMAIN_LOCATION so that the Cisco Unity Bulk Import wizard can find the Windows NT 4.0 account information to associate with the subscriber. Without associated Windows domain accounts, the subscriber accounts that you create will not have access to the Cisco Unity Administrator or to the Cisco Personal Communications Assistant (PCA), and cannot use the phone as the recording and playback device for the Media Master.</p> <p>Enter any combination of letters and digits, up to a maximum of 40 characters.</p>
PAGER1_NUMERIC_AFTER_DIAL_DIGITS <i>(regular subscribers only)</i>	<p>The extra digits that Cisco Unity dials after the phone number for a message notification. The extra digits are shown on the pager display.</p> <p>This column corresponds to the Extra Digits field for the Pager device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator.</p> <p>Enter any combination of digits from 0 through 9, up to a maximum of 32 digits.</p>
PAGER1_NUMERIC_DIAL_DELAY <i>(regular subscribers only)</i>	<p>Specifies the number of seconds to wait before dialing the extra digits specified in the PAGER1_NUMERIC_AFTER_DIAL_DIGITS column. Use this option if the automatic call progress detection of your phone system is not reliable (for example, if you experience noisy phone lines and unusual ringing patterns).</p> <p>This column corresponds to the Seconds to Wait Before Dialing Extra Digits field for the Pager device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator.</p> <p>Enter any value from 0 to 100 seconds.</p>
PAGER1_NUMERIC_DISABLE	<p>Disables the numeric pager device. This column corresponds to the Status field for the Pager device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator.</p> <p>Enter 1.</p> <p>After you create the subscriber accounts, you can enable the pager in the Cisco Unity Administrator, or you can tell subscribers to do so in the Cisco Unity Assistant.</p>

Table 21-2 Optional CSV File Column Headers (continued)

Optional Column Header	Description
PAGER1_NUMERIC_PHONE_NO <i>(regular subscribers only)</i>	<p>The phone number, including trunk access code, of the numeric pager to be used for message notifications.</p> <p>This column corresponds to the Phone Number field for the Pager device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator. Message notifications to this device are disabled during import and must be enabled in the Cisco Unity Administrator or by the subscriber in the Cisco Unity Assistant.</p> <p>Enter any combination of digits from 0 through 9, and the following dialing characters, up to a maximum of 40 characters:</p> <ul style="list-style-type: none"> <li>• , (comma) to insert a one-second pause.</li> <li>• # and * to correspond to the # and * keys on the phone.</li> </ul>
PAGER1_TEXT_AFTER_DIAL_DIGITS <i>(regular subscribers only)</i>	<p>Specifies a phone number if the subscriber has a text-compatible cell phone and wants text pager notifications to include a “From” or “Return Call” phone number. Typically, this field contains the number of the Cisco Unity server that the subscriber calls to check messages.</p> <p>The From phone number appears in the last line of any text pager notification. A subscriber can press the Return Call button on many text-compatible cell phones to dial the phone number. The cell phone must support automatic callback in order to use this feature.</p> <p>This column corresponds to the From: (Phone Number) field for the Text Pager 1 device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator.</p> <p>Enter any combination of digits, up to a maximum of 32 digits.</p>
PAGER1_TEXT_DISABLE	<p>Disables the text pager device. This column corresponds to the Status field for the Text Pager 1 device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator.</p> <p>Enter 1.</p> <p>After you create the subscriber accounts, you can enable the pager in the Cisco Unity Administrator, or you can tell subscribers to do so in the Cisco Unity Assistant.</p>
PAGER1_TEXT_SMTP_ADDRESS <i>(regular subscribers only)</i>	<p>Specifies the e-mail address of the text pager, text-compatible cell phone, or another e-mail account (such as a home e-mail address) to which message notifications will be sent.</p> <p>This column corresponds to the To: (E-Mail Address) field for the Text Pager 1 device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator. Message notifications to this device are disabled during import and must be enabled in the Cisco Unity Administrator or by the subscriber in the Cisco Unity Assistant.</p> <p>Enter any combination of letters, digits, colons, ampersands, dashes, periods, and underscores, up to a maximum of 128 characters.</p>

Table 21-2 Optional CSV File Column Headers (continued)

Optional Column Header	Description
PUBLIC_DL	<p>Specifies the public distribution lists to which new subscribers are added.</p> <p>This column corresponds to the Subscribers &gt; Subscriber &gt; Distribution Lists page in the Cisco Unity Administrator. By default, subscriber templates assign new subscribers to the All Subscribers list. Use this column to add subscribers to distribution lists that are not already specified in the template; lists that you enter in this column do not overwrite any lists specified in the template.</p> <p>Enter any combination of letters, digits, spaces, periods, semicolons, commas, or most other characters—including apostrophes and underscores—up to 255 characters. Separate each public distribution list name with a semicolon.</p> <p>For example, you can enter “All Subscribers; Accounting Department.”</p>
SUBSCRIBER_TEMPLATE	<p>The subscriber template that you want to associate the subscribers with when they are created. Enter any combination of letters and digits, up to a maximum of 128 characters.</p>
SUBSCRIBERS_LANGUAGE	<p>The language that the subscriber hears when logging on to Cisco Unity by phone. Enter any combination of letters and digits, up to a maximum of four characters.</p>
TIME_EXPIRES	<p>Specifies the date that call transfer is turned off for the subscriber extension. If the value is 0 (zero), call transfer is turned on, and because there is no expiration date, it never turns off. If the value is a date in the past (for example, 01/01/80), call transfer is turned off.</p> <p>Enter a valid date in the format of mm/dd/yy, yy/mm/dd, or enter 0 (zero).</p>
TRANSFER_STRING	<p>Specifies the call transfer number for the subscriber. The value is usually the same as the DTMF_ACCESS_ID (so that Cisco Unity sends calls to the subscriber extension), though the value for the dialing transfer string can be left blank.</p> <p>This corresponds to the Transfer Incoming Calls to Subscriber’s Phone field on the Subscribers &gt; Subscribers &gt; Call Transfer page in the Cisco Unity Administrator.</p> <p>Enter any combination of digits from 0 through 9, up to a maximum of 40 digits, and the following dialing characters:</p> <ul style="list-style-type: none"> <li>• , (comma) to insert a one-second pause.</li> <li>• ; (semi-colon) to insert a pause.</li> </ul> <p>Transfer options apply to calls transferred from the automated attendant or a directory handler; they do not apply when an outside caller or another subscriber dials a subscriber extension directly.</p>
USE_BRIEF_PROMPTS	<p>Indicates whether the subscriber hears brief or full phone menus when accessing Cisco Unity over the phone.</p> <ul style="list-style-type: none"> <li>• 0—Turns brief menus on.</li> <li>• 1—Turns full menus on.</li> </ul>

Table 21-2 Optional CSV File Column Headers (continued)

Optional Column Header	Description
VMI_TEXT_SMTP_ADDRESS <i>(regular subscribers only)</i>	<p>Use to set up a text message notification so that Cisco Unity Inbox subscribers who do not use ViewMail for Outlook will receive an e-mail when a new voice message arrives. Enter the e-mail address of the subscriber text pager, text-compatible cell phone, or another e-mail account (such as a home e-mail address).</p> <p>This column corresponds to the To: (E-Mail Address) field for the Text for Cisco Unity Inbox device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator. Message notifications to this device are disabled during import and must be enabled in the Cisco Unity Administrator or by the subscriber in the Cisco Unity Assistant.</p> <p>Note that you can enter the URL for the Cisco Personal Communications Assistant (PCA) on the System &gt; Configuration page in the Cisco Unity Administrator, so that it is automatically included as a link in the body of the e-mail message that is sent to the subscriber. (Subscribers use the Cisco PCA to access their Cisco Unity Inboxes.)</p> <p>Enter any combination of letters, digits, colons, ampersands, dashes, periods, and underscores, up to a maximum of 128 characters.</p>
VMI_TEXT_AFTER_DIAL_DIGITS <i>(regular subscribers only)</i>	<p>Use to set up a text message notification so that Cisco Unity Inbox subscribers who do not use ViewMail for Outlook receive an e-mail when a new voice message arrives.</p> <p>Enter a phone number if the subscriber has a text-compatible cell phone and wants message notifications to include a return phone number. Typically, this field contains the number that the subscriber calls to check messages.</p> <p>This column corresponds to the To: (E-Mail Address) field for the Text for Cisco Unity Inbox device on the Subscribers &gt; Subscribers &gt; Message Notification page in the Cisco Unity Administrator. Message notifications to this device are disabled during import and must be enabled in the Cisco Unity Administrator or by the subscriber in the Cisco Unity Assistant.</p> <p>Note that you can enter the URL for the Cisco Personal Communications Assistant (PCA) on the System &gt; Configuration page in the Cisco Unity Administrator, so that it is automatically included as a link in the body of the e-mail message that is sent to the subscriber. (Subscribers use the Cisco PCA to access their Cisco Unity Inboxes.)</p> <p>Enter any combination of digits, up to a maximum of 32 characters.</p>
VOICE_NAME	<p>Specifies the full path to a WAV audio file containing the recorded voice name of the subscriber. The audio file should have been recorded in a codec playable on all Cisco Unity servers in the network; no codec checking or conversion is done during the import.</p> <p>Enclose the path in quotes if it contains any space characters.</p>
XFER_ANNOUNCE	<p>Defines whether Cisco Unity says “transferring call” when subscribers answer calls that were transferred from the automated attendant or a directory handler. For this to work, XFER_TYPE must be set to “supervised.”</p> <ul style="list-style-type: none"> <li>• 0—Turns announce off.</li> <li>• 1—Turns announce on.</li> </ul> <p>Screening options apply to calls transferred from the automated attendant or a directory handler; they do not apply when an outside caller or another subscriber dials a subscriber extension directly.</p>

Table 21-2 Optional CSV File Column Headers (continued)

Optional Column Header	Description
XFER_CONFIRM	<p>Defines whether Cisco Unity asks subscribers if they would like to take calls transferred from the automated attendant or a directory handler. For this to work, XFER_TYPE must be set to “supervised.”</p> <ul style="list-style-type: none"> <li>• 0—Turns confirm off.</li> <li>• 1—Turns confirm on.</li> </ul> <p>Screening options apply to calls transferred from the automated attendant or a directory handler; they do not apply when an outside caller or another subscriber dials a subscriber extension directly.</p>
XFER_HOLDING_MODE	<p>Determines whether the caller can be put on hold when an extension is busy. For this to work, XFER_TYPE must be set to “supervised.”</p> <ul style="list-style-type: none"> <li>• 0—Turns call holding off.</li> <li>• 1—Turns call holding on.</li> </ul> <p>Holding options apply to calls transferred from the automated attendant or a directory handler; they do not apply when an outside caller or another subscriber dials a subscriber extension directly.</p>
XFER_INTRODUCE	<p>Defines whether subscribers hear “call for &lt;the recorded voice name of the subscriber&gt;,” or “call for &lt;extension number&gt;,” when they answer calls transferred from the automated attendant or a directory handler. Used when two or more subscribers share a phone. For this to work, XFER_TYPE must be set to “supervised.”</p> <ul style="list-style-type: none"> <li>• 0—Turns introduce off.</li> <li>• 1—Turns introduce on.</li> </ul> <p>Screening options apply to calls transferred from the automated attendant or a directory handler; they do not apply when an outside caller or another subscriber dials a subscriber extension directly.</p>
XFER_RINGS	<p>When doing a supervised transfer, the number of rings to wait before activating the applicable call handler.</p> <p>Enter any digit from 1 to 9.</p>
XFER_SCREENING	<p>Sets call screening to off, on, or on with “memory” (the recorded name of the caller is added to the message). For this to work, XFER_TYPE must be set to “supervised.”</p> <ul style="list-style-type: none"> <li>• 0—Turns call screening off.</li> <li>• 1—Turns call screening on.</li> <li>• 2—Turns call screening on with memory.</li> </ul> <p>Screening options apply to calls transferred from the automated attendant or a directory handler; they do not apply when an outside caller or another subscriber dials a subscriber extension directly.</p>
XFER_TYPE	<p>Used in conjunction with RNA_ACTION to determine whether Cisco Unity monitors the progress of a call until the subscriber answers the phone.</p> <ul style="list-style-type: none"> <li>• 0—Unsupervised transfer; Cisco Unity does not monitor call progress.</li> <li>• 1—Supervised transfer; Cisco Unity monitors call progress.</li> </ul>

**Table 21-2** Optional CSV File Column Headers (continued)

Optional Column Header	Description
ZERO_KEY_RULE (regular subscribers only)	<p>Specifies the display name for the call handler to which calls to this subscriber are transferred when unidentified callers press “0” during the subscriber greeting. This allows calls to different groups of subscribers to be handled by different operators.</p> <p>Note that the Cisco Unity Bulk Import wizard checks to see whether the name is a valid call handler. Therefore, the call handler must have been created in the Cisco Unity Administrator before doing the import.</p> <p>Enter any combination of letters, digits, periods, spaces, dashes, or other characters—including underscores—up to a maximum of 128 characters.</p>

After reviewing [Table 21-1](#) and [Table 21-2](#), use the following procedure to prepare your CSV file.

#### To Prepare a CSV File for Creating Regular Subscriber Accounts

- 
- Step 1** Save the data that you will use to create Cisco Unity accounts as a CSV file.
- As a best practice, do not include more than 7,500 records in a single CSV file, as you may encounter unexpected results when the Cisco Unity Bulk Import wizard imports the data.
- Step 2** Copy the CSV file to the Cisco Unity server or to a folder 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 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.
- 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 and then by the DTMF\_ACCESS\_ID:
- ```
Abade,Alex,2001
Bader,Kelly,2002
```
- Step 5** Enter the required column headers above the first row of data. Column headers must be uppercase, separated by commas, and spelled as indicated in [Table 21-1](#).
- For example, the column headers for the sample data from [Step 4](#) would look like this:
- ```
LAST_NAME,FIRST_NAME,DTMF_ACCESS_ID
```
- Step 6** If applicable, add any of the optional column headers listed in [Table 21-2](#) to the first row, and the corresponding data that you want to import in the subsequent rows below. As you do so, confirm that:
- Column headers and data are separated by commas. Note that each row does not have to contain data for each optional column header.
  - Any data that includes a space, quotes, or commas is contained within quotes.
- Step 7** If your CSV file contains columns of data that you do not want to import, delete the columns. Alternatively, you can title one column NOTES. The Cisco Unity Bulk Import wizard ignores data beneath a NOTES column header, but the wizard does not support more than one NOTES column in a CSV file.

- Step 8** Confirm that each row contains the applicable data corresponding to each column header.
- Step 9** Save the file as a CSV file.
- Step 10** Continue with the procedure in the [“Running the Cisco Unity Bulk Import Wizard”](#) section on page 21-23.
- 

## Running the Cisco Unity Bulk Import Wizard

Do the procedure in this section to use the Cisco Unity Bulk Import wizard to create multiple subscriber accounts. Do so only after you have reviewed the following sections:

- [Issues to Consider Before Creating Regular Subscriber Accounts](#), page 21-2
- [Importing User Data Directly from a Message Store Directory](#), page 21-9 (as applicable)
- [Importing User Data From a CSV File](#), page 21-10 (as applicable)

For best results, note the following:

- Do not attempt to create more than 7,500 new subscriber accounts at once. If you have more than 7,500 users for whom you want to create Cisco Unity subscriber accounts, run the Cisco Unity Bulk Import wizard multiple times.
- After the wizard has created a subscriber account for a particular user, it will not process the data for that user when it is run again.
- You can create only one type of subscriber account each time that you run the Cisco Unity Bulk Import wizard.
- The Cisco Unity Bulk Import wizard can import user data from only one message store directory at a time.

When the Cisco Unity Bulk Import wizard initially loads the Exchange user data or the records in your CSV file, it examines the data for errors. If an error is found, the wizard notifies you and logs the error in the error.log file. You can choose either to ignore the error and correct it later, or you can correct the error, and start the wizard again. After it creates subscriber accounts, the wizard displays a dialog box that reports the results of loading the data, including the number of records found, the number of records successfully loaded, and the number of records that still have errors.

Use the following procedure to use the Cisco Unity Bulk Import wizard to create regular subscriber accounts, and to manage any errors that the wizard discovers in the process.



### Note

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

---

### To Create Regular Subscribers by Using the Cisco Unity Bulk Import Wizard

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- Step 1** On the Cisco Unity server, on the Windows Start menu, click **Programs > Cisco Unity > Cisco Unity Bulk Import**.
- Step 2** Follow the on-screen instructions presented on each page of the wizard.
- To learn more about the options presented in the dialog boxes that appear as the wizard proceeds, click **Help**.

- Step 3** When prompted to choose the type of subscriber that you want to create, click **Unified Messaging** or **Voice-Mail Only**.
- Step 4** Click **Next**, and proceed through the wizard. If the wizard reports any errors, you can:
- Click **OK** to continue with the import, and fix the errors later.
  - Fix the errors. See the [“Correcting Import Errors”](#) section on page 21-24 for details.
- Step 5** If you are importing user data directly from the message store directory, confirm that there is a `DTMF_ACCESS_ID` specified for each user on the Select Data to Import page.
- Enter the applicable data in the grid if a `DTMF_ACCESS_ID` is not specified for a user:
- Enter digits only.
  - Typically, the `DTMF_ACCESS_ID` is the same as the subscriber extension. Therefore, the data you enter should be consistent with the extension numbering plan used in your organization.
  - The ID must be unique among all extensions on the local Cisco Unity server and within the dialing domain, if there is one.
- Step 6** When the subscriber accounts are created, click **Finish**.
- Step 7** If you had import errors, but in [Step 4](#) you chose to correct them later, see the [“Correcting Import Errors”](#) section on page 21-24.
- If you had no import errors, or if all errors have now been corrected, see the [“Issues to Consider After Creating Subscriber Accounts”](#) section on page 21-28.
- 

## Correcting Import Errors

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

The output log file contains all of 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 that you run the Cisco Unity Bulk Import wizard, the error and output log files are overwritten (unless you specify a new name for the files each time you run it).

To correct import errors, use one of the two procedures below.

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

---

- Step 1** Go to the directory location of the error log file you specified during the import. (The default location and file name is `C:\Error.log`.)
- Step 2** Use a text editor to open the error log file. You will use the error codes in the file to make corrections.
- Step 3** When importing data from Exchange, open **Active Directory Users and Computers**.
- Step 4** Double-click a mailbox that contains an error to see the properties.
- Step 5** Enter corrections in the applicable boxes in the mailbox.
- Step 6** Click **OK**.

- Step 7** Repeat [Step 4](#) through [Step 6](#) for each mailbox listed in the error log file.
- Step 8** Run the Cisco Unity Bulk Import wizard again.
- Step 9** Repeat this procedure until all subscriber accounts are created without error, and then proceed to the [“Issues to Consider After Creating Subscriber Accounts”](#) section on page 21-28.
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#### To Correct Errors That Occurred When Importing Data from a CSV File

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- Step 1** Go to the directory location of the error log file you specified during the import. (The default location and file name is **C:\Error.log**.)
- Step 2** Use a text editor to open the error log file. You will use the error codes in the file to make corrections.
- Step 3** Go to the directory location of the output log file you specified during the import. (The default location and file name is **C:\Output.log**.) This file contains all the records that were not imported.
- 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 [“Issues to Consider After Creating Subscriber Accounts”](#) section on page 21-28.
- 

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

By using the Cisco Unity Administrator, you can create a regular subscriber account by either adding a new user to Active Directory or by importing existing user data from Exchange.

### Adding Subscriber Accounts

If the subscriber that you want to create does not already have an Exchange mailbox, you can use the Cisco Unity Administrator to create an Exchange mailbox, an Active Directory domain account, and the new subscriber account at the same time. (If mailboxes for Cisco Unity subscribers will be homed in Exchange 2007, you do not have this option. You must create Active Directory accounts and Exchange mailboxes before you create Cisco Unity subscriber accounts.) Mailboxes are created on the server that you specified during Cisco Unity installation. Active Directory accounts are created in the domain and organizational unit (OU) that you specified during Cisco Unity installation.

**Note**

In some cases, you may want the Active Directory accounts that Cisco Unity creates to be disabled. For more information, see the [“How Cisco Unity Handles Active Directory Accounts for the Subscriber Accounts That You Create”](#) section on page 21-5.

---

If you are not satisfied with this location, you can move the mailboxes as needed after the subscriber accounts have been created, or you can create the Active Directory account and Exchange mailbox first, and then use the Cisco Unity Administrator to import the user data into Cisco Unity. The user object created for the subscriber in Active Directory contains attributes specific to Cisco Unity.

Note that if a user already exists with the same alias as the subscriber that you want to create, the Cisco Unity Administrator notifies you that it cannot create the subscriber or the Exchange mailbox. This may happen if you choose to add a subscriber that already has an Exchange mailbox. To create the subscriber account in such cases, import the mailbox data for this user instead. You can use the Import Existing Exchange User option in the Cisco Unity Administrator to import the mailbox data for this user instead.

**Note**

If you have not done so already, consider password security if you plan to create new Active Directory accounts at the same time that you create subscribers. See the [“Ensuring That Subscribers Are Assigned Unique and Secure Active Directory Passwords”](#) section on page 21-7 for details.

To create a regular Cisco Unity subscriber, do the procedure below.

**To Create a Regular Subscriber Account by Adding a New User in Exchange**

- Step 1** In the Cisco Unity Administrator, go to the **Subscribers > Subscribers > Profile** page.
- Step 2** Click the **Add** icon.
- Step 3** Select **New Exchange Subscriber**.
- Step 4** On the Add Subscriber page, enter the applicable information.
- Step 5** Click **Add**.
- Step 6** On the subscriber record, customize settings as applicable, and then click the **Save** icon.

## Importing Existing User Data from the Message Store

If the subscriber that you want to create already has an Exchange mailbox, you can use the Cisco Unity Administrator to create a subscriber account by importing the mailbox data from Exchange. Cisco Unity-specific attributes are written to the existing directory user object when the subscriber is created.

When you use the Cisco Unity Administrator to import user data directly from the message store, Cisco Unity uses the mailbox data to create the Cisco Unity subscriber account. Cisco Unity does not enable Active Directory accounts if they are disabled at the time that you import mailbox data from Exchange.

This is important because subscribers whose Active Directory account is not enabled cannot access the Cisco Personal Communications Assistant (PCA) or the Cisco Unity Administrator, or use the phone as a recording and playback device for the Media Master. To avoid this problem, enable Active Directory accounts before you use the Cisco Unity Administrator to import data from the message store directory.

You can use the following procedure to import existing user data from Active Directory.

**To Create a Regular Subscriber Account by Importing Existing User Data**

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

## Using Integrated Mailbox Configuration to Create Individual Subscriber Accounts

When Cisco Unity is integrated with Cisco Unified Communications Manager (CM) (formerly known as Cisco Unified CallManager) (version 4.1 or later), Cisco Unified CM administrators can create regular individual Cisco Unity subscriber accounts (referred to as voice mailboxes in Cisco Unified CM) from either the Directory Number Configuration page or the User Configuration page of the Cisco Unified Communications Manager Administration console. Cisco Unity subscriber accounts are then created directly in SQL by using browser-encrypted secure transmission of credentials across the network.

When subscriber accounts are created by using the Integrated Mailbox Configuration application, the accounts contain the minimum setup data that is provided by the Cisco Unity subscriber template that is chosen. If any customization of the subscriber account is necessary beyond what this template provides, you complete the customization by using the Cisco Unity Administrator. Note that after the accounts are created, there is no automatic synchronization of subscriber data between Cisco Unity and Cisco Unified CM. Any changes to subscriber accounts that exist in both systems, and that must be kept synchronized, will need to be made manually in both systems.

For information on setting up the Cisco Unity Cisco Unified CM Integrated Mailbox Configuration Wizard, or on using the Integrated Mailbox Configuration application, see the applicable *Cisco Unified Communications Manager Administration Guide* (available at [http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html)), and the Integrated Mailbox Configuration Help.

# Issues to Consider After Creating Subscriber Accounts

After creating subscriber accounts, consider the following:

- Add individual subscribers to public distribution lists, as needed. For example, assign subscribers to screen those messages left in Cisco Unity that are not associated with a specific recipient, such as those left to the Unaddressed Messages distribution list or for the Opening Greeting call handler. See the [“About Message Handling” section on page 8-3](#).
- If you are interested in preventing subscribers from appearing in the Outlook address book, see the [“Preventing Subscribers from Appearing in Outlook Address Books” section on page 21-28](#).
- Set up the client applications that subscribers will use to access Cisco Unity from their computers. For details on setting up subscribers to use the Cisco PCA, the Cisco Unity Assistant, Cisco Unity Inbox, and ViewMail, see the [“Setting Up Subscriber Workstations” chapter](#).
- Train new subscribers and operators to use Cisco Unity. See the [“Subscriber Orientation” chapter](#) for a task list you can use to acquaint subscribers with Cisco Unity.
- When a subscriber leaves the organization or otherwise no longer needs a Cisco Unity account, you can delete the subscriber account. See the [“Deleting Subscriber Accounts” section on page 21-29](#).
- To modify subscriber accounts, see the [“Modifying Subscriber Accounts” section on page 21-29](#).

## Preventing Subscribers from Appearing in Outlook Address Books

Either before or after you create Cisco Unity subscriber accounts, you can prevent the subscribers from appearing in Outlook address books. In particular, you may wish to do so for Voice Messaging subscribers. For example, depending on your installation, the Voice Messaging subscribers may already have Active Directory accounts and Exchange mailboxes on your local network that they use for e-mail. Therefore, when Cisco Unity subscriber accounts are created for them, the Exchange address lists will contain duplicate listings—the existing user account that is used for e-mail and a new user account that is used only for voice mail. Both listings are included in the Outlook address book. This means that people may inadvertently send e-mail messages to the Voice Messaging account, which should be used only for addressing voice messages.

To discourage people from inadvertently sending e-mail messages to a Voice Messaging account, you can prevent subscribers from appearing in the Outlook address book altogether. When you prevent subscribers from appearing in Outlook address books, Exchange will still deliver e-mail messages addressed to them, but the number of messages may be reduced because other subscribers cannot use the Outlook address book to address messages to them. This can prevent the mailboxes of Voice Messaging subscribers from filling up with messages that they cannot access and delete.

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

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

## Modifying Subscriber Accounts

If you want to change settings for multiple subscribers at once, there are two methods for you to choose from:

- Use the Bulk Edit utility to modify a subscriber setting that is shared by multiple subscriber accounts. For example, you might use this tool to change a setting so that a group of subscribers will no longer be listed in the phone directory, or to associate a group of subscribers with a particular class of service. Bulk Edit is available in the Tools Depot. (To access Tools Depot, double-click the Cisco Unity Tools Depot icon on the Cisco Unity server desktop. Note that not all subscriber settings are available for modification in Bulk Edit.)
- (Re)run the Cisco Unity Bulk Import wizard when you want to modify unique subscriber settings—such as phone passwords or extensions—for multiple subscribers at once. See Cisco Unity Bulk Import wizard Help. (To access the Cisco Unity Bulk Import wizard, on the Windows Start menu, click Programs > Cisco Unity > Cisco Unity Bulk Import. Note that not all subscriber settings are available for modification with the Cisco Unity Bulk Import wizard.)

If you want to change settings for an individual subscriber, you can also use the Cisco Unity Administrator.

Some of the settings that you enter on the subscriber pages of the Cisco Unity Administrator can also be changed by subscribers. Subscribers can customize some of their own settings either by accessing the Cisco Unity Assistant or by using the subscriber phone conversation.

## Deleting Subscriber Accounts

Before deleting a regular subscriber account, review the following information:

- [How to Delete a Subscriber Account, page 21-29](#)
- [What Happens When a Regular Subscriber Account Is Deleted, page 21-31](#)

For information on deleting external subscriber accounts, see the following resources, as applicable:

- To delete AMIS subscriber accounts, see the “Deleting AMIS Subscribers” section in the “AMIS Networking” chapter in the *Networking Guide for Cisco Unity*.
- To delete Internet subscriber accounts, see the “Deleting Internet Subscribers” section in the “Internet Subscribers” chapter in the *Networking Guide for Cisco Unity*.
- To delete Bridge subscriber accounts, see the “Deleting Bridge Subscribers” section in the “About Bridge Networking” chapter in the *Networking Guide for Cisco Unity Bridge*.
- To delete VPIM subscriber accounts, see the “Deleting VPIM Subscribers” section in the “VPIM Networking” chapter in the *Networking Guide for Cisco Unity*.

The guides are available at

[http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products\\_feature\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html).

## How to Delete a Subscriber Account

When a subscriber leaves the organization or otherwise no longer needs a Cisco Unity account, delete the account in the Cisco Unity Administrator. It is important that you delete the subscriber account in the Cisco Unity Administrator before you delete the associated account in Active Directory, so that Cisco Unity can do the following tasks:

- Delete the subscriber from other Cisco Unity accounts, handlers, or call routing rules that send calls to the subscriber.
- Reassign to another subscriber (or distribution list) any call handlers that the subscriber owned or was the message recipient of.
- Reassign to another subscriber (or distribution list) any public distribution lists that the subscriber owned, and remove the subscriber from all public distribution lists.
- Reassign to a call handler any After Message Action, After Interview Action, or After Exit Action settings that were previously configured to send callers to the subscriber.

Cisco Unity reassigns these entities to the subscriber, distribution list, or call handler that is configured in the Substitute Objects fields on the System > Configuration > Settings page. By default, the Example Administrator is configured as the Substitute Recipient and Substitute Owner, and the Goodbye call handler is configured as the Substitute After Message Call Handler and Substitute Exit Call Handler. We recommend that you review the settings for these fields periodically, and update them if you wish to use different substitute objects, so that these entities can be properly reassigned any time a subscriber account is deleted.


**Caution**


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If you attempt to delete a subscriber account that is currently configured as a Substitute Owner or Substitute Recipient, you will be warned that the subscriber is currently being used as a substitute value, and that you should select another substitute before continuing with the deletion. Likewise, if you attempt to delete a subscriber account when any of the substitute object values are empty (because you have previously deleted the subscriber or call handler that was configured as a substitute), you will be warned that one or more substitute objects has not been configured, and you will be asked whether you want to continue with the deletion. In both cases, you are allowed to ignore the warnings and continue with the deletion of the subscriber account, even when the subscriber account is the owner or recipient of entities in Cisco Unity. If you continue with the deletion, the result can be corruption of the Cisco Unity database.

---

When you delete a subscriber who was assigned to review the messages sent to any of the following Cisco Unity entities, make sure that you assign another subscriber or a public distribution list to replace the deleted subscriber; otherwise, messages may be lost.

- Unaddressed Messages distribution list (because the Example Administrator is by default the only member of this distribution list)
- System Event Messages distribution list (because the Example Administrator is by default the only member of this distribution list)
- Operator call handler
- Opening Greeting call handler
- Goodbye call handler
- Example Interview call handler

To identify call handlers that are associated with improperly deleted accounts, run the Unresolved References report. See the “Unresolved References Report” section in the “Reports” chapter of the *Maintenance Guide for Cisco Unity* for more information. The *Maintenance Guide for Cisco Unity* is available at

[http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html).

Use the following procedure to delete a subscriber account in the Cisco Unity Administrator.

### To Delete a Subscriber Account

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- Step 1** In the Cisco Unity Administrator, go to the **System > Configuration > Settings** page.
- Step 2** Confirm that Substitute Objects are assigned appropriately. If the subscriber account you are going to delete is listed in any of the fields as a Substitute Object, reassign the value to another subscriber or distribution list.
- Step 3** Go to any **Subscribers > Subscribers** page, and search for the subscriber account that you are going to delete. (For detailed instructions on searching for a subscriber account, see the [“To Find a Subscriber Record” procedure on page 1-11.](#))
- Step 4** From the subscriber page, click the **Delete** icon.
- Step 5** Click **Delete**.
- 

## What Happens When a Regular Subscriber Account Is Deleted

When you delete a Cisco Unity subscriber account, Cisco Unity removes all data associated with the subscriber account from a SQL Server database on the Cisco Unity server.

In addition, Cisco Unity removes the small subset of subscriber account information that is stored in Active Directory.

Note that deleting the Cisco Unity account does not delete the Active Directory account (if there is one) or the Exchange mailbox for that subscriber. As needed, the Active Directory account can be deleted separately after the subscriber account is deleted in the Cisco Unity Administrator.

The Bulk Subscriber Delete tool in the Cisco Unity Tools Depot can be used to delete multiple subscriber accounts. The tool also includes the option to delete the associated Active Directory accounts and mark the Exchange mailboxes for deletion. Read the Help file carefully before using this tool.

